



National Highways Authority of India

(Ministry of Road Transport & Highways)

Government of India

(International Competitive Bidding)

BIDDING DOCUMENT

Item Rate (percentage) Basis

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate (percentage) basis

Volume I

[June, 2026]

The Regional Office

National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam Chalasani Nagar,
Ranigarithota Krishnalanka, Vijayawada- 520 013 (AP)

NATIONAL HIGHWAYS AUTHORITY OF INDIA

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

Bidding Document – Item Rate Basis

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NATIONAL HIGHWAYS AUTHORITY OF INDIA

VOLUME – I
Conditions of Contract

NATIONAL HIGHWAYS AUTHORITY OF INDIA

Bidding Document – Item Rate Contract

International Competitive Bidding

CONDITIONS OF CONTRACT

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

VOLUME - I

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NATIONAL HIGHWAYS AUTHORITY OF INDIA

INVITATION FOR BIDS (IFB)

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Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

**National Highways Authority of India
Regional Office, Vijayawada (AP)**

NIT NO. NHAI/RO-VJA/PIU-RJY/Solar Highway Lighting/2026-27

Date: 08.06.2026

Invitation for Bids (IFB)

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

(International Competitive Bidding)

1. The National Highways Authority of India, hereinafter called “The Employer” hereby invites bids (Technical and Financial) on item rate (percentage) basis through e-tendering from eligible bidders for **Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis** in the Project Highway as detailed in the Table below: -

Sl. No.	Section	No. of locations	Estimated Cost (Rs. In Crore)	Bid Security(Rs. In Crore)	Completion Period
1	Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis	63	11.71 (excluding GST)	0.23 (2%)	4 Months + (60 months for Defect Liability Period)

2. Eligibility of bidders will be assessed on post qualification basis. The Authority has adopted a single stage two part system (referred to as the "Bidding Process") for selection of the Bidder for award of the Project. Under this process, the bid shall be invited under two parts. Eligibility and qualification of the Bidder will be first examined based on the details submitted under first part (Technical Bid) with respect to eligibility and qualifications criteria prescribed in the Bidding Document. (The “Bidder”, which expression shall, unless repugnant to the context, include the members of the Joint Venture). The Financial Bid under the second part shall be opened of only those Bidders whose Technical Bids are responsive to eligibility and qualifications requirements as per the Bidding Document.
3. Bidders have to pay a sum of **Rs. 10,000/- (Rupees Ten Thousand only) (non-refundable)** towards payment of cost of Bid Documents to "National Highways Authority of India" in Authority's designated bank account and also upload online payment receipt of the same. Details of designated bank account are as under:



S. No.	Particulars	Details
1.	Name of Beneficiary	National Highways Authority of India
2.	Name of Bank	Canara Bank
3.	Account No.	33431010005577
4.	IFSC Code	CNRB0013343

- It is mandatory for all applicants to have Class-III Digital Signature Certificate (in the name of person who will sign the application) (with both Signing and Encryption Certificate) from any of the licensed certifying agency ("CAs") [Bidders can see the list of licensed CAs from the link www.cca.gov.in] to participate in e-tendering of the Authority.

Authorized Signatory holding Power of Attorney or person executing/delegating such Power of Attorney shall only be the Digital Signatory. In other cases, the BID shall be considered non – responsive.

- The complete BID document can be viewed /downloaded from official portal of e-procurement portal of NHAI <https://etenders.gov.in> **08.06.2026** (from 1800 Hrs. IST) to **27.07.2026** (upto 1800 Hrs. IST). Bid must be submitted online at <http://etenders.gov.in> portal on or before **27.07.2026** (upto 1800 Hrs. IST).
- All the documents shall be submitted physically in original by the Lowest Bidder before issuance of LOA by the Authority except the Financial Bid comprising Priced BOQ along with total Bid Price which shall be exclusive of GST which is required to be filled online only in the prescribed format provided on e-tendering website. Bidders (including individual or any of its Joint Venture Members) failing to submit the original documents required as per above shall be unconditionally debarred from bidding in NHAI projects for a period of 5 years. Also, the scan copy of all the documents are required to be submitted online on E- procurement portal of NHAI. The documents shall be prepared and scanned in different files (in PDF or JPEG format such that file size is not more than 30 MB) and uploaded during the on-line submission of BID.
- The bid must be accompanied by Bid Security of the amount specified in the above payable at **Vijayawada** and drawn in favour of National Highways Authority of India. Bid Security will have to be in any one of the forms as specified in Clause 17 of ITB (Instructions to Bidders).
- The Bid must be delivered to **Shri R.K. Singh, Chief General Manager (Tech) & Regional Officer - Vijayawada, physically in original by the Bidder after declaration of Bid Evaluation Result by the Authority** in manner specified in ITB at address given below except the Priced BOQs which shall be filled online only in the format provided at e-procurement website:

Shri R.K. Singh
CGM (T) & Regional Officer
Regional Office
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)



Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

Tele: 0866 - 2483910
Fax: 0866 - 2474496
Email : rovijayawada@nhai.org

9. The original documents shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “**BID for Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis**” and shall clearly indicate the name and address of the Bidder.
10. Bids received online shall be opened on **28.07.2026** (upto 1800 Hrs. IST). Bid through any other mode shall not be entertained. Please note that the National Highways Authority of India reserves the right to accept or reject all or any of the BIDs without assigning any reason whatsoever.
11. The Bidder or its representative is **invited to attend a pre-bid meeting** which will take place at **Regional Office, Vijayawada** on **01.07.2026 at 1200 hrs.**
12. The Financial Bid of bidders whose Technical bids have been determined responsive and who meets the eligibility and qualification criteria including the required bid capacity will be opened on the date to be intimated later.
13. For any clarification, the office of the undersigned may be contacted.

Shri R.K. Singh
CGM (T) & Regional Officer
Regional Office
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)
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Fax: 0866 - 2474496
Email : rovijayawada@nhai.org



Section I

Procedure under E-

Tendering&

Instructions to Bidders

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PROCEDURE UNDER E-TENDERING **INSTRUCTIONS TO BIDDERS**

(Note: Instructions to Bidders (ITB), Section I of Vol. I stands modified to the extent required as per these instructions).

DEFINITIONS

- a) **National Informatics Centre (NIC):** A service provider to develop and customize the software and facilitate the process of e-tendering on bid service provider model.
- b) **NHAI e-Procurement Portal:** An e-tendering portal of National Highways Authority of India (“NHAI” or “Authority”) introduced for the process of e-tendering which can be accessed on <https://etenders.gov.in>.

BRIEF DESCRIPTION OF BIDDING PROCESS:

Eligibility of bidders will be assessed on post qualification basis. The Authority has adopted a single stage two part system (referred to as the "Bidding Process") for selection of the Bidder for award of the Project. Under this process, the bid shall be invited under two parts. Eligibility and qualification of the Bidder will be first examined based on the details submitted under first part (Technical Bid) with respect to eligibility and qualifications criteria prescribed in the Bidding Document. The Financial Bid under the second part shall be opened of only those Bidders whose Technical Bids are responsive to eligibility and qualifications requirements as per the Bidding Document.

1) ACCESSING/PURCHASING OF BID DOCUMENTS:

- 0) It is mandatory for all the Bidders to have class-III Digital Signature Certificate (DSC) (in the name of Authorized Signatory / Firm or Organisation / Owner of the Firm or Organisation) from any of the licensed Certifying Agency (Bidders can see the list of licensed CAs from the link www.cca.gov.in) to participate in e-tendering of NHAI.

DSC should be in the name of the authorized signatory as authorized in Power of Attorney or person executing / delegating Power of attorney in favour of Authorized Signatory as per Qualification Form No. 12 of Section IX of Volume III of this Bid Document. It should be in corporate capacity (that is in Bidder capacity / in case of JV in the Lead Member capacity, as applicable). The Bidder shall submit documents in support of the class III DSC.

Authorized Signatory holding Power of Attorney or person executing/delegating such Power of Attorney shall only be the Digital Signatory. In other cases, the BID shall be considered **non – responsive**.



- (ii) To participate in the bidding, it is mandatory for the Bidders to get registered their firm with e-procurement portal of NHAI <https://etenders.gov.in> to have user ID & password which has to be obtained free of cost. Following may kindly be noted:
 - (a) Registration with e-procurement portal of NHAI should be valid at least up to the date of submission of BID.
 - (b) BIDs can be submitted only during the validity of registration.
- (III) If the firm is already registered with e-tendering service provider of NHAI, and validity of registration is not expired the firm is not required a fresh registration.
- (iv) The complete BID document can be viewed / downloaded by the Bidder from e-procurement portal of NHAI <http://etenders.gov.in> from **08.06.2026** (from 1800 Hrs. IST) to **27.07.2026** (upto 1800 Hrs. IST).
- (v) To participate in e- bidding, Bidders have to pay a sum of **Rs. 10,000 /- (Rupees Ten Thousand only) (non-refundable) towards cost of Bid Documents** to "National Highways Authority of India" in Authority's designated bank account (mentioned in IFB) and also upload online payment receipt of the same.
- (vi) The amendments/clarifications to the BID document, if any, will be posted on the NHAI e-Tendering Portal (<https://etenders.gov.in>).

2. PREPARATION & SUBMISSION OF BIDS:

1. The Bid shall be prepared and submitted as per Clause 21 of Instructions to Bidders, Section I of Vol. I. **All the documents shall be submitted physically in original by the Lowest Bidder before issuance of LOA by the Authority except the Financial Bid comprising the Priced BOQs along with total Bid Price which is exclusive of GST which is required to be filled online only in the prescribed format provided on e-tendering website.** Bidders failing to submit the original documents required as per above shall be unconditionally debarred from bidding in NHAI projects for a period of 5 years. Also, all the documents are required to be submitted online on E-procurement portal of NHAI. The documents shall be prepared and scanned in different files (in PDF or JPEG format such that file size is not more than 30 MB) and uploaded during the on-line submission of BID.
2. The Bidder shall submit his Bid online following the instruction appearing on the screen.
3. Bid must be submitted online through e-procurement portal of NHAI <https://etenders.gov.in> using the digital signature of authorised representative of the Bidder on or before **27.07.2026** (upto 1800 Hrs. IST).
4. A Bidder is required to submit, along with its technical BID, a self- certification that the item offered meets the local content requirement for 'Class – I local Supplier' / 'Class – II local Supplier', as the case may be. The self-certification shall also have details of the location(s) at which the local value addition is made. In case, bidder has not submitted the aforesaid certification the bidder will be treated as 'Non- Local Supplier'.



In the above pretext, the Class – I Local Supplier, Class – II Local Supplier and the Non- Local Supplier are defined as under:

(i) ‘Class – I local Supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for ‘Class – I local Supplier’ under this Bid Document. The ‘local content’ requirement to categorize a supplier as ‘Class – I local Supplier’ is minimum 50%.

(ii) ‘Class – II local Supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for ‘Class – II local Supplier’ under this Bid Document. The ‘local content’ requirement to categorize a supplier as ‘Class – II local Supplier’ is minimum 20%.

(iii) ‘Non - local Supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for ‘Class – II local supplier’ under this Bid Document.

(iv) ‘Local content’ means the amount of value added in India which shall be the total value of item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent

In case of procurement for a value in excess of Rs. 10 crores, the ‘Class – I local supplier’ / ‘Class – II local supplier’ shall provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

3. MODIFICATION / SUBSTITUTION / WITHDRAWAL OF APPLICATIONS / BIDS:

- i. The Bidder may modify, substitute or withdraw its e- Bid after submission prior to the Bid Due Date. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date & Time.
- ii. Any alteration / modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the NHAI shall be disregarded.
- iii. For modification of e-Bid, Bidder has to detach its old Bid from e- tendering portal and upload / resubmit digitally signed modified Bid.
- iv. For withdrawal of Bid, Bidder has to click on withdrawal icon at e- tendering portal and can withdraw its e-Bid.
- v. Before withdrawal of a Bid, it may specifically be noted that after withdrawal of a Bid for any reason, Bidder cannot re-submit the Bid.

4. OPENING AND EVALUATION OF BIDS

- i. Opening and evaluation of Bids will be done through online process.
- ii. The NHAI shall on-line open Technical BIDs on **28.07.2026 at 1800 hours IST**, in the



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presence of the authorized representatives of the Bidders, who choose to attend. The NHAI will subsequently examine and evaluate the BIDs in accordance with the provisions of Instructions to Bidders (ITB), Section I of Vol. I.

- iii. The Financial Bid of bidders whose Technical bids have been determined responsive and who meets the eligibility and qualification criteria including the required bid capacity will be opened through online process on the date to be intimated later in presence of the bidders or their representatives who choose to attend on the date intimated to such bidders.
- iv. Financial Bids of the bidders whose bid capacity has already been exhausted on account of award of packages prior to this proposal will not be opened for further evaluation.



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National Highways Authority of India

Section-I - INSTRUCTIONS TO BIDDERS (ITB)

A. General

1. Scope of Bid

- 1.1 The National Highways Authority of India (NHAI) hereinafter called "the Employer" invites bids on post-qualification basis for the construction of works (as defined in these documents, hereinafter referred to as "the Works") detailed in the table given in the IFB.
- 1.2 The work consists of Bill of Quantities mentioned in Section VI.
- 1.3 The Works under this Contract **“Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis”** shall be carried out in accordance with the bidding document constituting the contract.
- 1.4 Availability of the Project Area:
 - i. The Employer shall provide the right-of-way for road and other appurtenant works to the contractor as per details in Schedule A in Section VIII. However, the contractor shall have to make his own arrangements for the land required by him for borrow areas, quarries, site offices, installation of HMP, crusher, concrete batching plant, casting yard, testing laboratories, labour camps, other camps, etc.
- 1.5 The Selected Bidder is required to complete the works within the period stipulated in IFB from the date of the commencement of the Works.
- 1.6 The Employer shall engage a Supervision Consultant or any other person to act as Engineer for the project. There will also be a Project Director of the Employer acting as the Employer’s representative.

2. Source of Funds

- 2.1 The expenditure on these Works will be met by National Highways Authority of India.

3. Eligible Bidders

- 3.1 Eligibility of bidders is based on bidder meeting the pass/fail criteria regarding their general and particular experience, financial position, personnel and equipment capabilities, test reports and other relevant information as demonstrated by the applicant’s responses on the forms attached in Section IX (Volume 3).
- 3.2 This invitation for bids is open to bidders meeting the following requirements:-



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- a) The bidder may be a natural person, private entity or government-owned legal entity- subject to ITB Sub-Clause 3.5. However, bids from joint venture are not allowed.
- (b) Deleted.
- (c) a bidder (including all subcontractors of a bidder) shall not be affiliated with a firm or entity
 - (i) which has provided consulting services during the preparatory stages of the works or of the project of which the Works form a part, (details given in Sub Clause 3.6),or
 - (ii) which has been hired (or is proposed to be hired) as Engineer for the Contract.
- (d) a bidder or its constituents shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive or coercive practices or debarment issued by the NHAI in accordance with Sub Clause 39.
- (e) For determining the eligibility of Bidder from a country which shares a land border with India the following shall apply:

(i) Any Bidder from a country which shares a land border with India will be eligible to bid, only if the Bidder is registered with the Competent Authority, specified in Annexure-I of Order (Public Procurement No. 1) issued by Ministry of Finance, Department of Expenditure Public Procurement Division vide F. No. 6/18/2019-PPD, dated 23rd July 2020, which shall form an integral part of Agreement (Copy enclosed).

(ii) **“Bidder from a country which shares a land border with India”** means:

- a) An entity incorporated, established or registered in such a country, or
- b) A subsidiary of an entity incorporated, established or registered in such a country; or
- c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d) An entity whose beneficial owner is situated in such a country; or
- e) An Indian (or other) agent of such an entity; or
- f) A natural person who is a citizen of such a country; or
- g) A Consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

(iii). **Beneficial owner for the purpose of (ii) above means:**

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person, has a controlling ownership interest or who exercises control through other means.

Explanation:

- a) “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company.
- b) “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholding agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or one or more juridical person: has ownership of



entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individual;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

(iv). An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

(v) The Selected Bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of “contractor from a country which shares a land border with India” shall be as in Clause 2.2.1(d)(ii) above.

Certificate regarding Compliance:

A certificate on the letterhead of the Bidder shall be required to be submitted by the bidders certifying the following:

“I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from a country or, if from such a country, has been registered with the Competent Authority as defined in Public Procurement Order no. F.no.6/18/2019- PPD dated 23rd July 2020. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered.”

It may be noted that in case the above certification is found to be false, this would be a ground for immediate rejection of Bid/termination and further legal action in accordance with law.

Validity of Registration:

In respect of Bid Document, registration should be valid at the time of submission of bids and at the time of acceptance of bids. If the Bidder was validly registered at the time of acceptance, registration shall not be a relevant consideration during contract execution.

3.3 Bidder shall not have a conflict of interest as prescribed in Clause 6.



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- 3.4 The Bidder, should **neither be a non-performing party on the date of opening of tender nor on the date of issue of Letter of Acceptance (LoA)**. The Bidder, shall be deemed to be a non-performing party, if it attracts any or more of the following conditions in any of its ongoing or completed project:
- (i) Fails to set up institutional mechanism and procedure as per contract.
 - (ii) Fails to mobilize key construction equipment within a period of 4 months from the Appointed Date;
 - (iii) Fails to complete or has missed any milestone and progress not commensurate with contiguous unencumbered project length/ROW available even after lapse of 6 months from respective project milestone/Schedule Completion date, unless Extension of Time has been granted due to Authority's Default or Force Majeure;
 - (iv) Fails to achieve progress commensurate with funds released from Escrow Account (Equity + Debt + Grant) in BOT or HAM project and variation is more than 25% in the last 365 days;
 - (v) Fails to achieve the target progress or complete the project as per schedule agreed at the time of sanctioning of funds under One Time Funds Infusion (OTFI) or relaxations to contract conditions to improve cash flow solely on account of Concessionaire's failure/default;
 - (vi) Fails to complete rectification (excluding minor rectifications) as per time given in non-conformity reports (NCR) in design/completed works/maintenance or reported in Inspection Reports issued by Quality Inspectors deployed by the Authority or Officers of the Authority.
 - (vii) Fails to complete minor rectifications exceeding 3 instances in a project as per time given in non-conformity reports (NCR) in design/ completed works/ maintenance;
 - (viii) Fails to fulfil its obligations to maintain a highway in a satisfactory condition in spite of two rectification notices issued in this regard;
 - (ix) Damages/ penalties recommended by Independent/ Authority's Engineer during O&M Period and remedial works are still not taken up;
 - (x) Fails to complete Punch list items even after lapse of time for completion of such items excluding delays attributable to the Authority;
 - (xi) Occurrence of minor failure of structures/highway due to construction defect wherein no casualties are reported (casualties include injuries to human being/animals);
 - (xii) Occurrence of major failure of structures/highway due to construction defect wherein no casualties are reported (casualties include injuries to human being/animals);
 - (xiii) Occurrence of major failure of structures/highway due to construction defect leading to loss of human lives besides loss of reputation etc. of the authority;
 - (xiv) Fails to make premium payments excluding the current instalment in one or more projects;
 - (xv) Fails to achieve financial closure in two or more projects within the given or extended period (which shall not be more than six months in any case);
 - (xvi) Fails to submit the Performance Security within the permissible time period in more than one project;
 - (xvii) Rated as an unsatisfactory performing entity/non-performing entity by an independent third-party agency and so notified on the website of the Authority;
 - (xviii) Failed to perform for the works of Expressways, National Highways, ISC & EI works in the last 2 (two) years, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitral award against the Bidder, including individual or any of its Consortium Member, as the case may be;
 - (xix) Expelled from the contract or the contract terminated by the Ministry of Road Transport & Highways



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or its implementing agencies for breach by such Bidder, including individual or any of its Consortium Member; Provided that any such decision of expulsion or termination of contract leading to debarring of the Bidder from further participation in bids for the prescribed period should have been ordered after affording an opportunity of hearing to such party.

(xx) Fails to start the works or causes delay in maintenance & repair/overlay of the project.

The Bidder, including individual shall give the list of the projects of Expressways, National Highways, ISC and EI works of Ministry of Road Transport & Highways or its implementing agencies (NHAI/ NHIDCL/State PWDs) and the status of above issues in each project as on the bid submission date and undertake that they do not attract any of the above categories (Ref. Sr. No.6, Section –IX QUALIFICATION INFORMATION FORM-9).

The Bidder may provide

- (i) details of all their on-going projects along with updated stage of litigation, if so, against the Authority / Governments; and
- (ii) details of updated on-going process of blacklisting if so, under any contract with Authority / Government;

The Authority reserves the right to reject an otherwise eligible Bidder on the basis of the information provided under this clause 3.4. The decision of the Authority in this case shall be final.

In case, any debarred/declared non-performer firm submits the bid, the same will be ignored. In case such firm is lowest (L-1), next lowest firm shall be considered as L-1.

3.5 Government-owned enterprises in the Employer's country shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the Employer.

3.6 The detail of Technical Consultants engaged by the Employer on the contract package:-

Sl. No.	Name of Works	Name of Design Consultants engaged for project preparation
1	Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis	NA

3.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

4 Eligible Materials, Equipment and Services

4.1 At the Employer's request, the bidder having offered the lowest evaluated bid may be required to provide evidence of the origin of materials, equipment and services to the satisfaction of the Employer.



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- 4.2 For purposes of Sub Clause 4.1, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured and from which the services are provided.

5 Qualification of the Bidder

- 5.1 The evaluation and qualification criteria shall be as set out in Section IX. Evaluation of the bidder's technical proposal will include an assessment of the bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling and material sourcing in sufficient details and fully in accordance with the requirement of Bid Document.

- 5.2 To establish its qualifications to perform the contract in accordance with the evaluation and qualification criteria (Section IX) the Bidder shall provide the following information requested in the corresponding information sheets included in Section IX (Qualification Information Forms).

- (i) Bidder's Information
- (ii) Deleted.
- (iii) Financial Capabilities
- (iv) Annual Construction Turnover duly audited and similar construction experience.
- (v) Value of all existing commitments of all business activities of the bidder with project-wise break-up.
- (vi) Evidence of capability of executing the work by submitting Test Reports.
- (vii) Evidence of availability of key equipment.
- (viii) Evidence of availability of required key personnel in site organization proposed for the administration and execution of the contract.
- (ix) Proposals of the bidders to sub-contract works.
- (x) Deleted.
- (xi) Work programme-supported with details.
- (xii) Project specific credit line.
- (xiii) Affidavit

- 5.3 Deleted

5.4 Disqualification

- 5.4.1 Even if a bidder meets the above criteria, he shall be subject to disqualification if he or any of the constituent partners is found to have:
- (a) made misleading or false representations in the forms, statements and attachments submitted and included in the application; or
 - (b) records of poor performance during the last 5 years, as on the date of submission of bids, such as abandoning the work, rescission of contract for reasons which are attributable to non-performance of the bidder, inordinate delays in completion, consistent history of litigation resulting in awards against the bidder or any of the constituents, or financial failure due to bankruptcy, etc. The rescission of a contract of Joint Venture on account of reasons other than non-performance, such as the most experienced partner (Lead Partner) of joint venture pulling out, court directions



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leading to break-up of Joint Venture before start of the work, which are not attributable to poor performance of the bidder, will, however, not affect the post-qualification of the individual partner; or

- (c) shown very poor performance in implementation of the works of NHAI and determined non-performing by NHAI; or
- (d) been debarred by Ministry of Road Transport & Highways or its implementing agencies for the works of Expressways, National Highways, ISC and EI works, and the bar subsists as on the date of submission of bids, would not be eligible to submit the BID.

5.4.2 In case of a proprietary firm or partnership firm, the following are the disqualifications in case of failure to disclose information by partners or the proprietor.

- i. if, any of the partners or the proprietor is debarred by NHAI or any other agency of Government of India or any of the State Governments;
- ii. if, any of the partners or the proprietor has a criminal history or has been convicted by any court of law for any of the offenses under any Indian laws;
- iii. if, any criminal proceeding is pending in any court of law in Indian against any of the partners or a proprietor and if any such proceeding culminates into conviction in last five years.

5.5 Debarment / Blacklisting

Notwithstanding the above, the Employer may debar or blacklist any of the bidder(s) for their misleading or false representations in the forms, statements etc. for the period to be decided by the Employer.

5.6 All Orders of Ministry of Finance/DPIIT/any other Government agencies, as applicable and prevalent on the date of LOA, shall be applicable.

5.7 Entities of countries which have been identified by Ministry of Road Transport & Highways as not allowing Indian companies to participate in their Government procurement for any item related to Ministry of Road Transport & Highways shall not be allowed to participate in Government procurement in India for all items related to Ministry of Road Transport & Highways, except for the list of items published by the Ministry of Road Transport & Highways permitting their participation.

6 Conflict of Interest

6.1 All Bidders found to be in conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to;

- 6.1.1 they have controlling shareholders in common; or



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- 6.1.2 they receive or have received any direct or indirect subsidy from any of them; or
- 6.1.3 they have the same legal representative for purposes of this Bid; or
- 6.1.4 they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- 6.1.5 a Bidder participates in more than one Bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However this does not limit the inclusion of the same subcontractor in more than one Bid; or
- 6.1.6 a Bidder participated as a consultant in the preparation of the design or technical specifications of the Contract that is the subject of the Bid; or
- 6.1.7 a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract.

7 Cost of Bidding

- 7.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

8 Site Visit

- 8.1 The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.
- 8.2 The bidder and any of its personnel or agents will be granted permission by the Employer to enter its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs and expenses incurred as a result of the inspection.



B. Bidding Document

9 Contents of Bidding Document

- 9.1 The Bidding Document consist of Volume I, II, III, IV and V which include all the Sections indicated below and should be read in conjunction with any Addenda issued in accordance with Clause 11:

Volume I		Invitation for Bids
	Section I	Instructions to Bidders & Procedure under E-Tendering
	Section II	General Conditions of Contract-Part I
	Section III	Conditions of Particular Application-Part II
Volume II	Section IV	Technical Specifications
Volume III	Section V	Form of Bid and Appendix to Bid.
	Section VI	Bill of Quantities
	Section VII	Form of Bid Security, Form of Performance Security/ Additional Performance Security, Form of Advance Payment Security, Form of Agreement.
	Section VIII	Schedules for Supplementary Information
	Section IX	Form for Qualification Criteria Information and Qualification

- 9.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in rejection of the Bid. Pursuant to Clause 26 and 30, bids which are not substantially responsive to the requirements of the Bidding Document will be rejected.

10 Clarification of Bidding Document

- 10.1 A prospective Bidder requiring any clarification of the Bidding Document may notify the Employer in writing or by e-mail (scanned copy) at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification provided that such request is received prior to holding of Pre-Bid Meeting in accordance with Clause 19. Copies of the Employer's response will be posted on the NHA website (www.nhai.org) and NHA e-Tendering Portal (<https://etenders.gov.in>) including a description of the enquiry but without identifying its source.
- 10.2 The Bidder is requested to submit any questions in writing or by e-mails so as to reach the Employer not later than one week before the meeting.



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- 10.3 The Employer shall endeavour to respond to the questions raised or clarifications sought by the Bidders. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification.
- 10.4 The Authority may also on its own motion, if deemed necessary, issue interpretations & clarifications to all Bidders. All clarifications & interpretations issued by the Authority shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

11 Amendment of Bidding Document

- 11.1 At any time prior to the Bid Due Date, the Employer may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend the Bidding Document by issuing addenda.
- 11.2 Any addendum thus issued shall be part of the Bidding Document pursuant to Sub Clause 9.1, and shall be posted on the NHAI website (www.nhai.org) and e-Tendering Portal (<https://etenders.gov.in>).
- 11.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the Bid Due Date, pursuant to Clause 22.



C. Preparation of Bids

12 Language of Bid

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

13 Documents comprising the Bid

- 13.1 The Bids shall be submitted in two parts and shall comprise the following:-

Part-I Technical Bid

- i) Bid Security, in accordance with Clause 17
- ii) Power of Attorney for signing of Bid, authorizing the signatory of the Bid to commit the Bidder as per Format provided at Qualification Form No. 12 of Section IX of Volume III, in accordance with Sub Clause 20.2
- iii) Deleted
- iv) Form of Bid and Appendix to Bid duly filled in and signed by Authorised Signatory on each page
- v) Completed Schedules as required, in accordance with Clause 5 and Section VIII of Volume III
- vi) Qualification information, in accordance with Clause 5 and Section IX of Volume III
- vii) Deleted.
- viii) Copy of Memorandum and Articles of Association, and if a partnership then a copy of its partnership deed
- ix) Complete Audited Annual Accounts for last five years of the Bidder
- x) Bidder shall comply with the provisions of office Memorandum No. 13030/09/2008-vig dated 28.01.2013 issued by NHAI (copy enclosed) i.e. Model Agreement furnished



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herewith for Integrity Pact (IP) shall be submitted by the Bidder with the Bid Document Bid duly signed by Authorised signatory & shall be part of the Contract Agreement;

- xi) Copy of online receipt towards payment of cost of Bid document of **Rs. 10,000/- (Rupees Ten Thousand Only)** to “**National Highway Authority of India**” in designated bank account mentioned in IFB.
- xii) An undertaking from the person having PoA for signing of Bid referred to in Sub. Clause-(ii) above that they agree and abide by the Bid documents uploaded by NHAI and amendments uploaded, if any
- xiii) Any other material/information required to be submitted in accordance with these Instructions to Bidders (ITB).
- xiv) Certificate regarding Compliance with Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017, as per format given in Section IX of Volume III shall be submitted by the Bidder with the Bid Document Bid duly signed by Authorised signatory & shall be part of the Contract Agreement.

The Technical Bid shall be bound and all pages serially numbered.

Part-II Financial Bid:

Self-Certification

Self- certification by the Bidder that its Bid meets the Local Content requirement for ‘Class – I Local supplier’/ ‘Class – II Local supplier’, as the case may be. The Self-certification shall also have details of the location(s) at which the local value addition is made. In case, bidder do not submit the aforesaid Certification, the bidder will be summarily treated as ‘Non Local Supplier’.

In case of procurement for a value in excess of Rs. 10 crores, the ‘Class – I Local supplier’ / ‘Class – II Local supplier’ shall have to provide a Certificate from the Statutory Auditor or Cost Auditor of the Company (in case of Companies) or from a practicing Cost Accountant or practicing Chartered Accountant (in respect of Suppliers other than Companies) giving the percentage of Local Content upon Construction of the Project.

Priced bill of quantities to be uploaded by bidder along with percentage (%) format given in the bid document.

Technical bid shall also be submitted online on e-tendering website.

- 13.2 The documents listed under Section V, VI, IX, and VII of Sub Clause 9.1 shall be filled in, without exception, in the given format.



- 13.3 All the documents shall be submitted physically in original by the Lowest Bidder before issuance of LOA by the Authority except the Financial Bid comprising Priced BOQ along with total Bid Price which shall be exclusive of GST which is required to be filled online only in the prescribed format provided on e-tendering website. Bidders failing to submit the original documents required as per above shall be unconditionally debarred from bidding in NHAI projects for a period of 5 years.
- 13.4 The following documents are deemed to be part of the Bid. However, these are not required to be submitted:

Volume I		Invitation for Bids
	Section I	Instructions to Bidders & Procedure under E- Tendering
	Section II	General Conditions of Contract-Part I
	Section III	Conditions of Particular Application-Part II
Volume II	Section IV	Technical Specifications

14. Bid Price

- 141 Unless stated otherwise in the Bidding Document, the Contract shall be for the whole Works as described in the Bidding Document, based on the priced Bill of Quantities.
- 142 **The bidder shall quote Bid Price which shall be exclusive of GST** in appropriate format enclosed as part of tender document on e-tender portal of NHAI. Bidders will be required to quote a single percentage above/below the overall estimated amount. This percentage would be applicable for all the items of work in the contract for working out the rates for each item of work.
- 143 DELETED
- 144 All duties, taxes and other levies except GST payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to the Bid Due Date, shall be included in the rates and prices and the total Bid price submitted by the Bidder and the evaluation and comparison of bids by the Employer shall be made accordingly.
- 145 The rates quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Particular Application (no adjustment on any account will be admissible for contracts upto 18 month period).

15 Currencies of Bid and Payment

- 151 The rates or prices shall be quoted by the Bidder entirely in **Indian Rupees**



152 All payments including advances, if any, shall be made in **Indian Rupees**.

16. Bid Validity

161 Bids shall remain valid for a period of 120 days (one hundred twenty days) after the Bid Due Date specified in Clause 22. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

162 In exceptional circumstances, prior to expiration of the original bid validity period, the Employer may request the Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. A Bidder may refuse the request without forfeiting its bid security. A Bidder agreeing the request shall not be required or permitted to modify its Bid but shall be required to extend the validity of its Bid Security twenty- eight (28) days beyond the deadline of the extended bid validity period.

17. Bid Security

17.1 The Bidder shall furnish as part of its BID, a BID Security in the form of Insurance Surety Bond (issued by Insurance Company authorized by Insurance Regulatory and Development Authority of India) in the form set forth in Section VII, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (including e-Bank Guarantee) in the form set forth in Section VII issued by nationalised bank, or a Scheduled Bank in India having a net worth of at least Rs. 1,000 crore (Rs. one thousand crore), in favour of the Employer and having a validity period of not less than 180 (one hundred eighty) days from the BID Due Date, inclusive of a claim period of 60 (sixty) days, and may be extended as may be mutually agreed between the Employer and the Bidder from time to time. The Insurance Surety Bond shall be verified from the specific portal created for this purpose. The Bank Guarantee (including e-Bank Guarantee) shall be transmitted through SFMS Gateway to NHAI's Bank. In case the Bank Guarantee / e-Bank Guarantee is issued by a foreign bank outside India, confirmation of the same by any nationalised bank in India is required. For the avoidance of doubt, Scheduled Bank shall mean a bank as defined under Section 2(e) of the Reserve Bank of India Act, 1934. A scanned copy of the Insurance Surety Bond, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee / e-Bank Guarantee shall be uploaded on e-procurement portal while applying to the tender.

Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organization or the concerned Ministry or Department or Startups as recognized by Department for Promotion of Industry Policy & Promotion (DIPP) is exempted from submission of Bid Security as per Revised Rule – 170 of General Financial Rules – 2017. However, in place of Bid Security, the Bidders require to sign a Bid Security Declaration (Format Enclosed as Annexure) accepting that if they withdraw or modify their bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, or to submit a Performance Security before the deadline defined in this Bid Document, then the bidder will be suspended for participation in the tendering process for I-



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20 the works of MORTH / NHAI / NHIDCL and works under other centrally sponsored schemes, for a period of as decided by NHAI

172 Deleted.

173 Deleted.

174 Any Bid not accompanied by an acceptable bid security shall be summarily rejected by the Employer as non-responsive.

175 The Bid Security of the unsuccessful Bidders will be returned as promptly as possible but not later than 28 days after issuing LOA to the Selected Bidder.

176 The Bid Security of the Selected Bidder will be returned when the Selected Bidder has furnished the required performance security and signed the agreement.

177 The Bid Security may be forfeited

a) if a Bidder withdraws its Bid during the period of bid validity except as provided in Sub Clause 16.2;

b) if a Bidder does not accept the correction of its Bid price, pursuant to Clause 31;

c) if the Selected Bidder fails to;

i) furnish the required Performance Security in accordance with Clause 38; or

ii) sign the Contract in accordance with Clause 37.

18. Alternative Bids

18.1 Bidders shall submit Bids, which comply with the requirements of the Bidding Document, including the conditions of contract, basic technical design as indicated in the Drawings and Specifications. Conditional bids or alternative bids shall not be considered further in the process of evaluation and the bid will be declared non-responsive.

19. Pre- Bid Meeting(s)

19.1 The bidder or its designated representative is invited to attend a pre-bid meeting which will take place at National Highways Authority of India, Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520 013 on **01.07.2026 at 1200 hrs.**

19.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

19.3 The bidder is requested to submit questions in writing to reach the Employer not later one week before the meeting.



194 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be posted on the NHAI e-Tendering Portal (<https://etenders.gov.in>). Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum/corrigendum pursuant to Clause 11 and not through the minutes of the pre-bid meeting.

195 Non attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

20. Format and Signing of Bid

201 The bidder shall prepare only one Original of the documents comprising the Bid as described in Clause 13 of these Instructions to Bidders and shall submit it after declaration of Bid Evaluation result by the Authority.

202 The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a Power of Attorney for signing of Bid, authorising the signatory of the Bid to commit the Bidder as per Format provided in Qualification Form No. 12 of Section IX of Volume III and shall be attached to the Bid. The name and position held by each person signing authorization must be typed or printed below the signature. All pages of the Bid, except for unamended printed literature shall be signed or initialed by the person signing the Bid.

203 The Bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Bidder, in which case all such corrections shall be signed or initialed by the person or persons signing the Bid.

204 All witnesses and sureties shall be persons of status and probity and their full names, occupations and addresses shall be printed below their signatures.



D. Submission of Bids

21. Marking of Bids

The bidder shall submit the Bid in two parts, the Technical Bid and the Financial Bid on CPPP Portal i.e. NHAI's e-tendering portal <https://etenders.gov.in>.

Technical Bid:

- i) Documents listed at (i) to (xiv) of Part-I of Sub Clause 13.1.

Financial Bid:

'Financial Bid' shall contain the following:

Financial Bid comprising the Priced Bill of Quantities (BOQs) listed at Part-II of Sub Clause 13.1 and percentage (%) format given in the bid document. Bidders will be required to quote a single percentage above/ below the overall estimated amount in the percentage (%) format. This percentage will be applicable for all the items of work in the combined for working out the rates for each item of work. **Financial Bid shall be submitted online only in the format provided on e-tendering portal <http://etenders.gov.in> on or before 1800hrs IST on 27.07.2026.**

21.2 The Lowest Bidder shall be required to submit original of documents listed below (before issue of LOA by the Authority):

- i) Bid Security, in accordance with Clause 17
- ii) Original Power of Attorney for signing of Bid, authorizing the signatory of the Bid to commit the Bidder as per Format provided at Qualification Form No. 12 of Section IX of Volume III, in accordance with Sub Clause 20.2
- iii) Deleted.
- iv) Form of Bid and Appendix to Bid duly filled in and signed by Authorised Signatory on each page
- v) Deleted.
- vi) Copy of online receipt towards payment of cost of Bid document of Rs. 10,000/- (Rupees Ten Thousand Only) to "National Highway Authority of India" in designated bank account mentioned in IFB.
- vii) An undertaking from the person having PoA for signing of Bid referred to in Sub. Clause-(ii) above that they agree and abide by the Bid documents uploaded by NHAI and amendments uploaded, if any
- viii) Certificate regarding Compliance with Restrictions under Rule 144 (xi) of the General



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Financial Rules (GFRs), 2017, as per format given in Section IX of Volume III shall be submitted by the Bidder with the Bid Document. Bid duly signed by Authorised signatory & shall be part of the Contract Agreement.

While submitting Bid Security and Performance Security via Account Payee demand draft, Fixed Deposit Receipt or Banker's cheque, it is to be ensured by the bidder that Account Payee demand draft or Banker's cheque are submitted physically latest within 5 working days of the Bid Due Date (upto 18:00 hours) to the following address placed in a sealed envelope and bearing the identification **“Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis”** Address: National Highways Authority of India, Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520 013. Else the bid submitted will be rejected.

These documents shall be placed in an envelope, which shall be sealed. The envelope containing Original Documents shall

- a) be addressed to the Employer at the following address:

Shri R.K. Singh,
CGM (T) & Regional Officer
Regional Office
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)
Tele: 0866 - 2483910
Fax: 0866 - 2474496
Email : rovijayawada@nhai.org

- b) bear the following identification:

Bid for Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate (percentage) basis.

Bid Reference Number: ***.

- c) indicate the name and address of the Bidder.



Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

- 21.3 If all envelope are not sealed and marked as above, the Employer will assume no responsibility for the misplacement of the contents of the envelope submitted and consequent losses, if any, suffered by the Bidder.
- 21.4 All the documents shall be submitted physically in original by the Lowest Bidder before issuance of LOA by the Authority except the Financial Bid comprising Priced BOQ along with total Bid Price which shall be exclusive of GST which is required to be filled online only in the prescribed format provided on e-tendering website. Bidders failing to submit the original documents required as per above shall be unconditionally debarred from bidding in NHAI projects for a period of 5 years. Also, the scan copy of all the documents are required to be submitted online on E-procurement portal of NHAI. The documents shall be prepared and scanned in different files (in PDF or JPEG format such that file size is not more than 30 MB) and uploaded during the on-line submission of BID.
- 22. Bid Due Date**
- 22.1 Bids comprising of the documents listed at clause 13.1 (Part I) shall be submitted online through e-procurement portal <https://etenders.gov.in> on or **before 1800 hrs IST on 27.07.2026**. Documents listed at clause 21.2 (Part I) shall be physically submitted by the Lowest Bidder before issue of LOA by the Authority.
- 22.2 The Employer may, at his discretion, extend the Bid Due Date in accordance with Clause 11, in which case all rights and obligations of the Employer and the Bidders previously subject to the original Bid Due Date shall thereafter be subject to the Bid Due Date as extended.
- 23. Late Bids**
- 23.1 CPPP Portal i.e. NHAI's e-tendering portal <https://etenders.gov.in> shall not allow submission of any Bid after the prescribed date and time at clause 22.1.
- 24. Modification/ Substitution/ Withdrawal of Bids**
- 24.1 A Bidder may modify, substitute or withdraw its bid prior to the **Bid Due Date of 27.07.2026 (upto 1800 hrs IST)**. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date & Time. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date.
- 24.2 DELETED.
- 24.3 DELETED.
- 24.4 No Bid shall be withdrawn or modified in the interval between the Bid Due Date and the expiration of the period of bid validity specified by the Bidder or any extension thereof.



Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

- 245 For modification of e-BID, Bidder has to detach its old BID from e-procurement portal and upload / resubmit digitally signed modified BID. For withdrawal of BID, Bidder has to click on withdrawal icon at e-procurement portal and can withdraw its e-BID. Before withdrawal of a BID, it may specifically be noted that after withdrawal of a BID for any reason, Bidder cannot re-submit e-BID again.



E. Bid Opening and Evaluation

25 Opening of Technical Bids

- 251 The Employer will open the Technical Bids received online and announce the names of (i) bidders, (, in the presence of bidders or their representatives who choose to attend on the date and time mentioned in the IFB. In the event of specified date of bid opening being declared as a holiday for the Employer, the Technical Bids will be opened at the appointed time and location on the next working day.
- 252 DELETED.
- 253 DELETED.
- 254 The Bidders or their representatives who are present shall sign attendance sheet evidencing their attendance.
- 255 The Financial Bid filled online by the Bidder on e-tendering website shall not be opened at this stage.
- 256 The Employer shall prepare besides the record of bid opening, minutes of the Bid opening, including the information disclosed to those present in accordance with Sub Clause 25.3 hereof.

26. Examination of Technical Bids and Determination of Responsiveness of Technical Bids

- 26.1 Prior to evaluation of Technical Bids, the Employer will determine whether the bid is accompanied by the required Bid Security.
- 26.2 If the Bid Security furnished does not conform to the amount and validity period as specified in the Invitation for Bid and has not been furnished in the form specified in Clause 17, the bid shall be rejected by the Employer as non- responsive as per Clause 17 and the Technical Bid and Financial Bid shall not be opened.
- 26.3 Subject to confirmation of the Bid Security by the issuing bank or issuing insurance company, as the case may be, the Technical Bid accompanied with valid Bid Security will be taken up for further evaluation. In case, the Bank/ insurance company does not confirm the Bid Security, the bid shall be rejected as non-responsive and no further evaluation will be carried out.
- 26.4 The Technical Bid will further be examined to determine whether the bid meets the eligibility and qualification criteria, has the required available bid capacity, is accompanied by the requisite certificates, undertaking and other relevant information specified in the bid documents and is substantially responsive to the requirement of the Bidding Document and provides any clarification for ascertaining the correctness of the information/details that the Employer may require pursuant to Clause 28.



- 26.5 If the Technical Bid is not substantially responsive, it will be rejected by the Employer and will not subsequently be made responsive by correction or modification or withdrawal of the non- conforming deviation or reservation.
- 26.6 The Employer shall inform the Bidders in writing, whose Technical Bid is found to be responsive, the date, time and place of opening of Financial Bid. In the event of the specified date being declared a holiday for the Employer, the Financial Bid will be opened at the appointed time and location on the next working day.
- 26.7 The Financial Bid of those bidders whose Technical Bid is determined to be non-responsive or not substantially responsive pursuant to this Clause 26 will not be opened.

27. Opening of Financial Bids

- 27.1 The Employer shall inform the venue and time of online opening of the Financial Bids to the technically responsive Bidders through e-procurement portal and e-mail. The Employer will open the 'Financial Bid' online only of those bidders whose Technical Bid has been determined to be substantially responsive in accordance with Clause 26, and who have the required available bid capacity, in presence of the bidders or their representatives who choose to attend on the date intimated to such bidders. In the event of specified date of Financial Bid opening being declared a holiday for Employer, the 'Financial Bids' shall be opened at the appointed time and location on the next working day.
- 27.2 Financial Bids of the bidders whose bid capacity has already been exhausted on account of award of packages prior to this proposal will not be opened for further evaluation. The names of the bidders whose Technical Bid is found to be substantially responsive, the bid prices, the total amount of each bid, and such other details, as the Employer may consider appropriate will be announced by the Employer at the opening of the Financial Bid. Any bid price, which is not read out and recorded at the bid opening will not be taken into account in Bid Evaluation.
- 27.3 The bidders or their representatives who are present shall sign attendance sheet evidencing their attendance.
- 27.4 The Employer shall prepare besides the record of bid opening, minutes of the Financial Bid opening.

28 Clarification of Bids

- 28.1 To assist in the examination, evaluation, and submission of the Bids and qualification of the Bidders, the Employer may, at its discretion ask any Bidder for a clarification of its Bid. Any clarification submitted by a bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification shall be in writing or by email and the response of the Bidder shall first be submitted by email and later on to be submitted physically along with bid documents i.e. after declaration of Bid Evaluation Result by the Authority. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with Clause 31.



29 Deviations, Reservations, and Omissions

During the evaluation of the bids, the following definitions apply:

- (a) “Deviation” is a departure from the requirements specified in the Bidding Document;
- (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
- (c) “Omission” is the failure to submit part or all of the information or documentation required in the Bidding Document.

30. Examination of Financial Bids and Determination of Responsiveness of Financial Bids

30.1 The Employer will determine responsiveness of each Financial Bid with respect to Priced Bill of Quantities, Technical Specifications, Drawings and other relevant requirement of Bidding Document.

30.2 A substantially responsive Financial Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that

- (a) if accepted, would;
 - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the contract; or
 - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the bidder's obligations under the proposed Contract; or

- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Financial Bids.

30.3 If the Financial Bid is not substantially responsive to the requirements of the Bidding Document, it will be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

31. Correction of Errors

31.1 Financial Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Arithmetic errors will be rectified on the following basis:-

- i) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern;

31.2 The amount stated in the Financial Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and shall be considered as binding



upon the Bidder. If the Bidder does not accept the corrected amount of Bid, its bid will be disqualified, and the bidder will be suspended in accordance with Clause 17.

32. Evaluation and Comparison of Financial Bids

- 32.1 The Employer will evaluate and compare only those Financial Bids which are determined to be substantially responsive in accordance with Clause 30 and qualified for award of Contract in accordance with Clause 5.
- 32.2 In evaluating the Financial Bids, the Employer will determine for each Financial Bid the evaluated Bid Price by adjusting the Bid Price as follows:-
- a) making any correction for errors pursuant to Clause 31;
 - b) making appropriate adjustments to reflect any price modifications offered in accordance with Clause 24.
- 32.3 The estimated effect of the price adjustment provision under Clause 70 of the Conditions of Particular Application applied during the period of implementation of the Contract, shall not be taken into account in Bid evaluation
- 32.4 If the Bid of the successful Bidder is seriously unbalanced in relation to the Employer's estimate of the cost of the items of the Works to be performed under the Contract, the Employer may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 38 be increased up to an additional 5 (five) per cent at the expense of the successful bidder to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.
- 32.5 A bid, which contains several items in the Bill of Quantities which are unrealistically priced low and which could not be substantiated satisfactorily by the bidder, may be rejected as non- responsive.

33. Process to be Confidential

- 33.1 Information relating to the examination, evaluation, comparison and post qualification of bids and recommendations of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on contract award is communicated to all bidders.
- 33.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of its Bid.



F. Award of Contract

34 Award

34.1 Subject to Clause 35, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Document and who has offered the lowest Evaluated Bid Price pursuant to Clause 32, provided that such bidder has been determined to be (i) eligible in accordance with the provisions of Clause 3; and (ii) qualified in accordance with the provisions of Clause 5. The bidder shall be declared as the selected Bidder (the “Selected Bidder”) in pursuance to the procedure defined hereunder:

- (i) Among all the responsive bidder, the lowest bidder will be termed as L1. If L1 is ‘Class -I Local Supplier’, the contract will be awarded to L1.
- (ii) If L1 is not ‘Class – I local supplier’, the lowest bidder among the ‘Class – I local supplier’, will be invited to match L1 price subject to Class – I local supplier’s quoted price falling within the margin of purchase preference, and the contract will be awarded to such ‘Class – I local supplier’ subject to matching the L1 price.
- (iii) In case such lowest eligible ‘Class – I local supplier’ fails to match the L1 price, the ‘Class – I local supplier’ with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the ‘Class – I local supplier’ within the margin of purchase preference matches the L1 price, the contract shall be awarded to the L1 bidder.

‘Margin of purchase preference’ means the maximum extent to which the price quoted by a ‘Class – I local supplier’ may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20%.

34.2 In the event that two or more Bidders quote the same BID Price (the "Tie BIDs"), the Employer shall identify the Selected Bidder by draw of lots, which shall be conducted, with prior notice, in the presence of the Tie Bidders who choose to attend.

35. Employer's Right to accept any Bid and Reject any or all Bids

35.1 Notwithstanding Clause 34, the Employer reserves the right to accept or reject any bid and to annul the bidding process and reject all bids, at any time prior to award of Contract, without there by incurring any liability to bidders or any obligation to inform the bidders of the grounds for the Employer's action. In case of annulment, all bids submitted and specifically bid securities shall be promptly returned to the bidders.

36. Notification of Award

36.1 Prior to the expiration of the period of bid validity, the Employer will notify the Selected Bidder in writing that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called "the Letter of Acceptance") shall name the sum



which the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (here in after and in the Conditions of Contract termed "the Contract Price").

- 36.2 The notification of award will constitute the formation of the Contract.

37 Signing of the Contract

- 37.1 At the same time that the Employer notifies the Selected Bidder that its bid has been accepted, the Employer will direct him to submit the Performance Security and attend the Employer's office on a date determined by the Employer for signing the Form of Agreement.
- 37.2 Within 28 (twenty-eight) days of the date of signing the Contract Agreement, the Selected Bidder shall, if required, have the same engrossed, have the correct amount of stamp duty adjudicated by the Inspector General of Registrations, New Delhi and return the same duly signed and executed on behalf of the Selected Bidder to the Employer.
- 37.3 Deleted.

38 Performance Security

- 38.1 Within 30 (thirty) days of receipt of Letter of Acceptance, the Selected Bidder shall furnish to the Authority in the form of Insurance Surety Bond in the format at Section - VII, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or irrevocable and unconditional Bank Guarantee (including e-Bank Guarantee) from a Bank in the form set forth in Section VII (the "Performance Security") for an amount equal to 5% (five percent) of its Bid Price. In case of bids mentioned below, the Selected Bidder, along with the Performance Security, shall also furnish to the Authority in the form of Insurance Surety Bond (issued by Insurance Company authorized by Insurance Regulatory and Development Authority of India in the format at Section - VII), Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or an irrevocable and unconditional Bank Guarantee (including e- Bank Guarantee) from a Bank in the same form given at Appendix-VII towards an Additional Performance Security (the "Additional Performance Security") for an amount calculated as under:
- (i) If the Bid Price offered by the Selected Bidder is lower than 15% but upto 25% of the Estimated Project Cost, the Additional Performance Security shall be calculated @50% of the difference in the (i) Estimated Project Cost (as mentioned in Bid Document)-15% of the Estimated Project Cost and (ii) the Bid Price offered by the selected Bidder.
- (ii) If the Bid Price offered by the Selected Bidder is lower than 25% of the Estimated Project Cost, the Additional Performance Security shall be calculated @ 5% of the Estimated Project Cost plus 100% of the difference in the (i) Estimated Project Cost -25% of the Estimated Project Cost and (ii) the Bid Price offered by the Selected Bidder.
- (iii) This Additional Performance Security shall be treated as part of the Performance Security.
- (iv) The Selected Bidder shall ensure that the Performance Security and/or Additional Performance Security shall be submitted by the Selected Bidder only and the same shall not be issued on behalf of the Selected Bidder from facility sanctioned to a third party (i.e. third-party Performance Security and / or Additional Performance Security shall not be accepted by the



Authority).

38.2 Deleted

38.3 Deleted,

38.4 The Performance Security shall remain valid until a date 60 days after the expiry of the Defects Liability Period. The Additional Performance Security shall be valid until 28 (twenty-eight) days after completion of Works.

38.5 For avoidance of any doubt, in case of failure of submission of Performance Security and Additional Performance Security, if any, within the additional 60 days' time period, the award shall be deemed to be cancelled/ withdrawn and the Bid Security shall be encashed and the proceeds thereof appropriated by the Authority. Thereupon all rights, privileges, claims and entitlements of the Contractor under or arising out of the Award shall be deemed to have been waived by, and to have ceased with the concurrence of the Contractor, and the Award shall be deemed to have been withdrawn by the Authority.

38.6 The Selected Bidder has the option to provide 50% of the Performance Security and 50% of the Additional Performance Security, if any, within 30 (thirty) days of receipt of Letter of Acceptance, in any case before signing of the Contract Agreement and the remaining Performance Security and Additional Performance Security, if any, shall be submitted within 30 days of signing of the agreement.

38.7 In the event the Selected Bidder fails to provide the remaining Performance Security and Additional Performance Security, if any, as prescribed herein, it may seek extension of time for a further period upto 60 days by paying the Damages upfront along with the request letter seeking the extension. The Damages shall be the sum calculated at the rate of 0.01% (zero point zero one per cent) of the Bid Price offered by the Selected Bidder for each day until the Performance Security and Additional Performance Security, if any, is provided in full as prescribed herein. The damages at full rate as given above shall be applicable even if a part of the Performance Security and the Additional Performance Security is provided.

38.8 The agreement will be executed within 10 days of receipt of 50% Performance Security and 50% of Additional Performance Security, if any, as per sub-clause 38 above.

39 Corrupt or Fraudulent Practices

39.1 The Employer will reject a proposal for award if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question. The Employer will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by National Highways Authority of India if it at any time determines that the firm has engaged in corrupt, fraudulent practices, coercive practice, undesirable practice or restrictive practices, as the case may be in competing for the contract, or during



execution.

- 39.1.1 “corrupt practice” means behaviour on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
- 39.1.2 “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.
- 39.1.3 “coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person’s participation or action in the Bidding Process.
- 39.1.4 “undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- 39.1.5 “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.
- 39.2 Furthermore, Bidders shall be aware of the provision stated in Sub Clause 26.2 and Sub Clause 63.5 of the “Conditions of Contract, Part-II: Conditions of Particular Application”.

40 One Bid per Bidder

Each bidder shall submit only one bid per contract package. A bidder who submits or participates in more than one bid for a contract package will be disqualified.

41 MISCELLANEOUS

- 41.1 The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.
- 41.2 The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
- (a) suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
 - (b) consult with any Bidder in order to receive clarification or further information;
 - (c) retain any information and/ or evidence submitted to the Authority by, on behalf of, and/ or in relation to any Bidder; and/ or



(d) independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.

41.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.



Section II

General Conditions of Contract – Part I

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National Highways Authority of India

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

SECTION II

Conditions of Contract

Part I: GENERAL CONDITIONS

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PART I - GENERAL CONDITIONS

Definitions and Interpretation

1.1 Definitions	In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires: (a) (i) “Employer” means the person named as such in Part II of these Conditions and the legal successors in title to such person, but not (except with the consent of the Contractor) any assignee of such person. (ii) “Contractor” means the person whose tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person. (iii) “Subcontractor” means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successors in title to such person, but not any assignee of any such person. (iv) “Engineer” means the person appointed by the Employer to act as Engineer for the purposes of the Contract and named as such in Part II of these Conditions. (v) “Engineer’s Representative” means a person appointed from time to time by the Engineer under Sub-Clause 2.2. (b) (ii) “Contract” means these Conditions (Parts I and II), the Specification, the Drawings, the Bill of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed). (iii) “Specification” means the specification of the Works included in the Contract and any modification thereof or addition thereto made under Clause 51 or submitted by the Contractor and approved by the Engineer. (iv) “Drawings” means all drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Engineer. (v) “Bill of Quantities” means the priced and completed bill of quantities forming part of the Tender. (vi) “Tender” means the Contractor’s priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.
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	(vii) “Letter of Acceptance” means the formal acceptance by the Employer of the Tender. (viii) “Contract Agreement” means the contract agreement (if any) referred to in Sub-Clause 9. 1. (ix) “Appendix to Tender” means the appendix comprised in the form of Tender annexed to these Conditions. (c) (i) “Commencement Date” means the date upon which the Contractor receives the notice to commence issued by the Engineer pursuant to Clause 41. (ii) “Time for Completion” means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44) calculated from the Commencement Date. (d) (i) “Tests on Completion” means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the Works or any Section or part thereof are taken over by the Employer. (ii) “Taking-Over Certificate” means a certificate issued pursuant to Clause 48. (e) (ii) “Contract Price” means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract. (iii) “Retention Money” means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 60.2(a) (iv) “Interim Payment Certificate” means any certificate of payment issued by the Engineer other than the Final Payment Certificate (v) “Final Payment Certificate” means the certificate of payment issued by the Engineer pursuant to Sub-Clause 60.8. (f) (ii) “Works” means the Permanent Works and the Temporary Works or either of them as appropriate. (iii) “Permanent Works” means the permanent works to be executed (including Plant) in accordance with the Contract. (iv) “Temporary Works” means all temporary works of every kind (other than Contractor’ Equipment) required in or about the execution and completion of
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	the Works and the remedying of any defects therein. (v) “Plant” means machinery, apparatus and the like intended to form or forming part of the Permanent Works. (vi) “Contractor’s Equipment” means all appliances and things of whatsoever nature (other than Temporary Works) required for the execution and completion of the Works and the remedying of any defects therein, but does not include Plant, materials or other things intended to form or forming part of the Permanent Works. (vii) “Section” means a part of the Works specifically identified in the Contract as a Section. (viii) “Site” means the places provided by the Employer where the Works are to be executed and any other places as may be specifically designated in the Contract as forming part of the Site. (g) (ii) “cost” means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges properly allocable thereto but does not include any allowance for profit. (iii) “day” means calendar day. (iv) “foreign currency” means a currency of a country other than that in which the Works are to be located. (v) “writing” means any hand-written, type-written, or printed communication, including telex, cable and facsimile transmission. (vi) “Good Industry Practice” means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced contractor engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Contractor in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner; (vii) “Force Majeure” is defined in Clause 73 [Force Majeure].
1.2 Headings and Marginal Notes	The headings and marginal notes in these Conditions shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.
1.3 Interpretation	Words importing persons or parties shall include firms and corporations and any organization having legal capacity.
1.4 Singular and Plural	Words importing the singular only also include the plural and vice versa where the context requires
1.5 Notices, Consents,	Wherever in the Contract provision is made for the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing

Approvals Certificates and Determinations	and the words “notify”, “certify” or “determine” shall be construed accordingly. Any such consent, approval, certificate or determination shall not unreasonably be withheld or delayed.
	Engineer and Engineer’s Representative
2.1 Engineer’s Duties and Authority	(a) The Engineer shall carry out the duties specified in the Contract. (b) The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required, under, the terms of his appointment by the Employer, to obtain the specific approval of the Employer before exercising any such authority, particulars of such requirements shall be set out in Part II of these Conditions. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer. (c) Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.
2.2 Engineer’s Representative	The Engineer’s Representative shall be appointed by and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 2.3.
2.3 Engineer’s Authority to Delegate	The Engineer may from time to time delegate to the Engineer’s Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor. Any communication given by the Engineer’s Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that: (a) any failure of the Engineer’s Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof, and (b) if the Contractor questions any communication of the Engineer’s Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.
2.4 Appointment of Assistants	The Engineer or the Engineer’s Representative may appoint any number of persons to assist the Engineer’s Representative in the carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer’s Representative.

2.5 Instructions in Writing	Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and such confirmation is not contradicted in writing within 7 days by the Engineer, it shall be deemed to be an instruction of the Engineer. The provisions of this Sub-Clause shall equally apply to instructions given by the Engineer's Representative and any assistants of the Engineer or the Engineer's Representative appointed pursuant to Sub-Clause 2.4
2.6 Engineer to Act Impartially	Wherever, under the Contract, the Engineer is required to exercise his discretion by: (a) giving his decision, opinion or consent, (b) expressing his satisfaction or approval, (c) determining value, or (d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 67.
2.7 Determinations	Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 2.7 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances. The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars within 28 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 53.
	Assignment and Subcontracting
3.1 Assignment of Contract	The Contractor shall not, without the prior consent of the Employer (which consent, notwithstanding the provisions of Sub- Clause 1.5, shall be at the sole discretion of the Employer), assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by (a) a charge in favour of the Contractor's bankers of any monies due or to become due under the Contract, or (b) assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.
4.1 Subcontracting	The Contractor shall not subcontract the Works except where otherwise provided by the Contract.

	However, the Contractor shall be allowed for: (a) the provision of labour, (b) the purchase of materials which are in accordance with the standards specified in the Contract, or (c) the subcontracting of any part of the Works for which the Subcontractor is named in the Contract.
4.2 Assignment of Subcontractors' Obligations	In the event of a Subcontractor having undertaken towards the Contractor in respect of the goods, materials, Plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.
	Contract Documents
5.1 Language/s and Law	There is stated in Part II of these Conditions: (a) the language or languages in which the Contract documents shall be drawn up, and (b) the country or state the law of which shall apply to the Contract and according to which the Contract shall be construed. If the said documents are written in more than one language, the language according to which the Contract shall be construed and interpreted is also stated in Part II of these Conditions, being therein designated the "Ruling Language".
5.2 Priority of Contract Documents	The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows: (1) The Contract Agreement (if completed); (2) The Letter of Acceptance; (3) The Tender; (4) Part II of these Conditions; (5) Part I of these Conditions; and (6) Any other document forming part of the Contract.
6.1 Custody and Supply of Drawings and Documents	The Drawings shall remain in the sole custody of the Engineer, but two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Employer or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Defects Liability Certificate, the Contractor shall return to the Engineer all Drawings, Specification and other documents provided under the Contract. The Contractor shall supply to the Engineer four copies of all Drawings, Specification and other documents submitted by the Contractor and approved by the Engineer in

	accordance with Clause 7, together with a reproducible copy of any material which cannot be reproduced to an equal standard by photocopying. In addition, the Contractor shall supply such further copies of such Drawings, Specification and other documents as the Engineer may request in writing for the use of the Employer, who shall pay the cost thereof.
6.2 One Copy of Drawings to be Kept on Site	One copy of the Drawings, provided to or supplied by the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorised by the Engineer in writing.
6.3 Disruption of Progress	The Contractor shall give notice to the Engineer, with a copy to the Employer, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.
6.4 Delays and Cost of Delay of Drawings	If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-Clause 6.3, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine: (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.
6.5 Failure by Contractor to Submit Drawings	If the failure or inability of the Engineer to issue any drawings or instructions is caused in whole or in part by the failure of the Contractor to submit Drawings, Specification or other documents which he is required to submit under the Contract, the Engineer shall take such failure by the Contractor into account when making his determination pursuant to Sub-Clause 6.4.
7.1 Supplementary Drawings and Instructions	The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.
7.2 Permanent Works Designed by Contractor	Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall submit to the Engineer, for approval: (a) such drawings, specifications, calculations and other information as shall be necessary to satisfy the Engineer as to the suitability and adequacy of that design, and (b) operation and maintenance manuals together with drawings of the Permanent Works as completed, in sufficient detail to enable the Employer to operate, maintain, dismantle, reassemble and adjust the Permanent Works incorporating that design. The Works shall not be considered to be completed for the purposes of taking over in accordance with Clause 48 until such operation and maintenance manuals, together with drawings on completion, have been submitted to and approved by the Engineer.
7.3 Responsibility Unaffected by Approval	Approval by the Engineer, in accordance with Sub-Clause 7.2, shall not relieve the Contractor of any of his responsibilities under the Contract.

	General Obligations
8.1 Contractor's General Responsibilities	The Contractor shall, with due care and diligence, design (to the extent provided for by the Contract), execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall give prompt notice to the Engineer, with a copy to the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.
8.2 Site Operations and Methods of Construction	The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise (agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.
9.1 Contract Agreement	The Contractor shall, if called upon so to do, enter into and execute the Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed to these Conditions with such modification as may be necessary.
10.1 Performance Security	Within 30 (thirty) days of receipt of Letter of Acceptance, the Selected Bidder shall furnish to the Authority in the form of Insurance Surety Bond in the format at Section - VII, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or irrevocable and unconditional Bank Guarantee (including e-Bank Guarantee) from a Bank in the form set forth in Section VII (the "Performance Security") for an amount equal to 5% (five percent) of its Bid Price. In case of bids mentioned below, the Selected Bidder, along with the Performance Security, shall also furnish to the Authority in the form of Insurance Surety Bond (issued by Insurance Company authorized by Insurance Regulatory and Development Authority of India in the format at Section - VII), Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or an irrevocable and unconditional Bank Guarantee (including e-Bank Guarantee) from a Bank in the same form given at Appendix-VII towards an Additional Performance Security (the "Additional Performance Security") for an amount calculated as under: (i) (A) If the Bid Price offered by the Selected Bidder is lower than 15% but upto 25% of the Estimated Project Cost, the Additional Performance Security shall be calculated @50% of the difference in the (i) Estimated Project Cost (as mentioned in Bid Document)-15% of the Estimated Project Cost and (ii) the Bid Price offered by the selected Bidder. (B) If the Bid Price offered by the Selected Bidder is lower than 25% of the Estimated Project Cost, the Additional Performance Security shall be calculated @ 5% of the Estimated Project Cost plus 100% of the difference in the (i) Estimated Project Cost - 25% of the Estimated Project Cost and (ii) the Bid Price offered by the Selected Bidder. (ii) Deleted.

	This Additional Performance Security shall be treated as part of the Performance Security. The Selected Bidder shall ensure that the Performance Security and/or Additional Performance Security shall be submitted by the Selected Bidder only and the same shall not be issued on behalf of the Selected Bidder from facility sanctioned to a third party (i.e. third party Performance Security and / or Additional Performance Security shall not be (iii) accepted by the Authority)
10.2 Period of Validity of Performance Security	The Performance Security shall remain valid until a date 60 days after the expiry of the Defects Liability Period. The Additional Performance Security shall be valid until 28 (twenty-eight) days after completion of the Works and remedied any defects therein in accordance with the Contract. No claim shall be made against such security after the issue of the Defects Liability Certificate in accordance with Sub-Clause 62.1 and such security shall be returned to the Contractor within 14 days of the issue of the said Defects Liability Certificate.
10.3 Claims under Performance Security	Prior to making a claim under the performance security the Employer shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made.
10.4 Submission of Performance Security in Parts	The Selected Bidder has the option to provide 50% of the Performance Security and 50% of the Additional Performance Security, if any, within 30 (thirty) days of receipt of Letter of Acceptance, in any case before signing of the Contract Agreement and the remaining Performance Security and Additional Performance Security, if any, shall be submitted within 30 days of signing of this agreement.
10.5 Damages for Delay	In the event the Selected Bidder fails to provide the remaining Performance Security and Additional Performance Security, if any, as prescribed herein, it may seek extension of time for a further period upto 60 days by paying the Damages upfront along with the request letter seeking the extension. The Damages shall be the sum calculated at the rate of 0.01% (zero point zero one per cent) of the Bid Price offered by the Selected Bidder for each day until the Performance Security and Additional Performance Security, if any, is provided in full as prescribed herein. The damages at full rate as given above shall be applicable even if a part of the Performance Security and the Additional Performance Security is provided.
11.1 Inspection of Site	The Employer, at the request of Contractor, shall have made available to the Contractor, before the submission by the Contractor of the Tender, such data to support the BOQ as have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof. The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender, as to: (a) the form and nature thereof, including the sub-surface conditions, (b) the hydrological and climatic conditions, (c) the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein, and (d) the means of access to the Site and the accommodation he may require,

	and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender. The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned.
12.1 Sufficiency of Tender	The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.
12.2 Not Foreseeable Physical Obstructions or Conditions	If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.
13.1 Work to be in accordance with Contract	Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the Engineer's instructions on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer (or his delegate).
14.1 Programme to be Submitted	The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.
14.2 Revised	If at any time it should appear to the Engineer that the actual progress of the Works

Programme	does not conform to the programme to which consent has been given under Sub-Clause 14.1, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.
14.3 Cash Flow Estimate to be Submitted	The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.
14.4 Contractor not Relieved of Duties or Responsibilities	The submission to and consent by the Engineer of such programmes or the provision of such general descriptions or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.
15.1 Contractor's Superintendence	The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer. If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.
16.1 Contractor's Employees	The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein. (a) only such technical assistants as are skilled and experienced in their respective callings and such foremen and leading hands as are competent to give proper superintendence of the Works, and (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract
16.2 Employer at Liberty to Object	The Employer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Employer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Employer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Employer. Any person so removed from the Works shall be replaced as soon as possible.
17.1 Setting-out	The Contractor shall be responsible for: (a) the accurate setting-out of the Works in relation to original points, lines and levels

	of reference given by the Engineer in writing, (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and (c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities. If, at any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer, in which case the Engineer shall determine an addition to the Contract Price in accordance with Clause 51 and shall notify the Contractor accordingly, with a copy to the Employer. The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting-out the Works.
18.1 Boreholes and Exploratory Excavation	If, at any time during the execution of the Works, the Engineer requires the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be the subject of an instruction in accordance with Clause 51, unless an item or a Provisional Sum in respect of such work is included in the Bill of Quantities.
19.1 Safety, Security and Protection of the Environment	The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein: (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons, (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.
19.2 Employer's Responsibilities	If under Clause 31 the Employer shall carry out work on the Site with his own workmen he shall, in respect of such work: (a) have full regard to the safety of all persons entitled to be upon the Site, and (b) keep the Site in an orderly state appropriate to the avoidance of danger to such persons. If under Clause 31 the Employer shall employ other contractors on the Site he shall require them to have the same regard for safety and avoidance of danger
20.1 Care of Works	The Contractor shall take full responsibility for the care of the Works and materials and

	Plant for incorporation therein from the Commencement Date until the date of issue of the Taking-Over Certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that: (a) if the Engineer issues a Taking-Over Certificate for any Section or part of the Permanent, Works the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate, when the responsibility for the care of that Section or part shall pass to the Employer, and (b) the Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49
20.2 Responsibility to Rectify Loss or Damage	If any loss or damage happens to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clause 20.4, the Contractor shall, at his own cost, rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.
20.3 Loss or Damage Due to Employer's Risks	In the event of any such loss or damage happening from any of the risks defined in Sub-Clause 20.4, or in combination with other risks, the Contractor shall, if and to the extent required by the Engineer, rectify the loss or damage and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.
20.4 Employer's Risks	The Employer's risks are: (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, (b) rebellion, revolution, insurrection, or military or usurped power, or civil war, (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof, (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works, (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract, (g) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and (h) any operation of the forces of nature against which an experienced contractor could

	not reasonably have been expected to take precautions.
21.1 Insurance of Works and Contractor's Equipment	The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure: (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost (the term "cost" in this context shall include profit), (b) an additional sum of 15 per cent of such replacement cost, or as may be specified in Part II of these Conditions, 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 (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.
21.2 Scope of Cover	The insurance in paragraphs (a) and (b) of Sub-Clause 21.1 shall be in the joint names of the Contractor and the Employer and shall cover: (a) the Employer and the Contractor against all loss/theft or damage from whatsoever cause arising, other than as provided in Sub-Clause 21.4, from the start of work at the Site until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and (b) the Contractor for his liability: (i) during the Defects Liability Period for loss/theft or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and (ii) for loss/theft or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.
21.3 Responsibility for Amounts not Recovered	Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities under Clause 20.
21.4 Exclusions	There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by: (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, (b) rebellion, revolution, insurrection, or military or usurped power, or civil war, (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof, or (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

22.1 Damage to Persons and Property	The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of: (a) death of or injury to any person, or (b) loss of or damage to any property (other than the Works), which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause 22.2.
22.2 Exceptions	The “exceptions” referred to in Sub-Clause 22.1 are: (a) the permanent use or occupation of land by the Works, or any part thereof, (b) the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land, (c) 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 the Contract, and (d) death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, his agents servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the injury or damage.
22.3 Indemnity by Employer	The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the exceptions defined in Sub-Clause 22.2.
23.1 Third Party Insurance (including Employer’s Property)	The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 22, insure, in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exceptions defined in paragraphs (a), (b) and (c) of Sub-Clause 22.2.
23.2 Minimum Amount of insurance	Such insurance shall be for at least the amount stated in the Appendix to Tender.
23.3 Cross Liabilities	The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insured.
24.1 Accident or Injury to Workmen	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 any Subcontractor, other than death or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which

	the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.
24.2 Insurance Against Accident to Workmen	The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Employer, when required, such policy of insurance and the receipt for the payment of the current premium.
25.1 Evidence and Terms of Insurances	The Contractor shall provide evidence to the Employer prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the Employer.
25.2 Adequacy of Insurances	The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premiums.
25.3 Remedy on Contractor's Failure to Insure	If the Contractor fails to effect and keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Sub-Clause 25.1, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor
25.4 Compliance with Policy Conditions	In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.
26.1 Compliance with Statutes, Regulations	The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provisions of: (a) any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and (b) the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor in accordance with Sub-Clause 22.3.

27.1 Fossils	All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site shall, as between the Employer and the Contractor, be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall, immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with the same. If, by reason of such instructions, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine any extension of time to which the Contractor is entitled under Clause 44, and shall notify the Contractor accordingly, with a copy to the Employer.
28.1 Patent Rights	The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractor's Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.
28.2 Royalties	Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works.
29.1 Interference with Traffic and Adjoining Properties	All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with: (a) the convenience of the public, or (b) the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor may, at its cost, interrupt and divert the traffic if such interruption and diversion is necessary for the efficient progress of Works and conforms to Good Industry Practice. Further, such interruption and diversion shall be undertaken by the Contractor only with the prior written approval of the Engineer which approval shall not be unreasonably withheld. For the avoidance of doubt, all the cost related to the traffic diversion shall be borne by the Contractor and Employer shall not pay any extra cost. The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters insofar as the Contractor is responsible therefore.
30.1 Avoidance of Damage to Roads	The Contractor shall use every reasonable means to prevent any of the roads or bridge communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his Subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, Plant, Contractor's Equipment or Temporary Works from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be

	occasioned to such roads and bridges.
30.2 Transport of Contractor's Equipment or Temporary Works	Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.
30.3 Transport of Materials or Plant	If, notwithstanding Sub-Clause 30.1, any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any law or regulation the hauler of such materials or Plant is required to indemnify the road authority against damage the Employer shall not be liable for any costs, charges or expenses in respect thereof or in relation thereto. In other cases the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto. Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, due to any failure on the part of the Contractor to observe and perform his obligations under Sub-Clause 30.1, then the amount, determined by the Engineer, after due consultation with the Employer and the Contractor, to be due to such failure shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided also that the Employer shall notify the Contractor whenever a settlement is to be negotiated and, where any amount may be due from the Contractor, the Employer shall consult with the Contractor before such settlement is agreed.
30.4 Waterborne Traffic	Where the nature of the Works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this Clause shall be construed as though "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.
31.1 Opportunities for Other Contractors	The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to: (a) any other contractors employed by the Employer and their workmen (b) the workmen of the Employer, and (c) the workmen of any duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works.
31.2 Facilities for Other Contractors	If however, pursuant to Sub-Clause 31.1 the Contractor shall, on the written request of the Engineer:

	(a) make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible, (b) permit the use, by any such, of Temporary Works or Contractor's Equipment on the Site, or (c) provide any other service of whatsoever nature for any such, the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer
32.1 Contractor to Keep Site Clear	During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.
33.1 Clearance of Site on Completion	Upon the issue of any Taking-Over Certificate the Contractor shall clear away and remove from that part of the Site to which such Taking-Over Certificate relates all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.
34.1 Engagement of Staff and Labour	The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
35.1 Returns of Labour and Contractor's Equipment	The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Contractor's Equipment as the Engineer may require.
	Materials, Plant and Workmanship
36.1 Quality of Materials, Plant and Workmanship	All materials, Plant and workmanship shall be: (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and (b) Subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance. labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer. The Contractor shall be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the

	Specifications, for the tests. The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed. The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 53.6 and Sub- Clause 2.7. The Contractor shall pay these amounts to the Employer.
36.2 Cost of Samples	All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.
36.3 Cost of Tests	The cost of making any test shall be borne by the Contractor if such test is: (a) clearly intended by or provided for in the Contract, or (b) particularised in the Contract (in cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.
36.4 Cost of Tests not Provided for	If any test required by the Engineer which is: (a) not so intended by or provided for, (b) (in the cases above mentioned) not so particularised, or (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested, shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause 36.5 shall apply
36.5 Engineer's Determination where Tests not Provided for	Where, pursuant to Sub-Clause 36.4, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine: (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.
37.1 Inspection of Operations	The Engineer, and any person authorised by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.
37.2 Inspection and Testing	The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the materials and Plant to be supplied under the Contract. If materials or Plant are being manufactured, fabricated or prepared in workshops or places other than those of the Contractor, the Contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshops or places. Such inspection or testing shall not release the Contractor from any obligation under the Contract.
37.3 Dates for Inspection And Testing	The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give

	the Contractor not less than 24 hours notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of the Engineer. The Contractor shall forthwith forward to the Engineer duly certified copies of the test readings. If the Engineer has not attended the tests, he shall accept the said readings as accurate.
37.4 Rejection	If, at the time and place agreed in accordance with Sub-Clause 37.3, the materials or Plant are not ready for inspection or testing or if, as a result of the inspection testing referred to in this Clause, the Engineer determines that the materials or Plant are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Employer by the repetition of the tests shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer and may be deducted from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.
37.5 Independent Inspection	The Engineer may delegate inspection and testing of materials or Plant to an independent inspector. Any such delegation shall be effected in accordance with Sub-Clause 2.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.
38.1 Examination of Work before Covering up	No part of the Works shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any such part of the Works which is about to be covered up or put out of view and to examine foundations before any part of the Works is placed thereon. The Contractor shall give notice to the Engineer whenever any such part of the Works or foundations is or are ready or about to be ready for examination and the Engineer shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such part of the Works or of examining such foundations
38.2 Uncovering and Making Openings	The Contractor shall uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 38.1 and is found to be executed in accordance with the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect of such of uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. In any other case all costs shall be borne by the Contractor.
39.1 Removal of Improper Work,	The Engineer shall have authority to issue instructions from time to time, for: (a) the removal from the Site, within such time or times as may be specified in the

Materials or Plant	instruction, of any materials or Plant which, in the opinion of the Engineer, are not in accordance with the Contract, (b) the substitution of proper and suitable materials or Plant, and (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of (i) materials, Plant or workmanship, or (ii) design by the Contractor or for which he is responsible, is not, in the opinion of the Engineer, in accordance with the Contract.
39.2 Default of Contractor in Compliance	In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and maybe deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.
	Suspension
40.1 Suspension of Work	The Contractor shall, on the instructions of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is: (a) otherwise provided for in the Contract, (b) necessary by reason of some default of or breach of contract by the Contractor or for which he is responsible, (c) necessary by reason of climatic conditions on the Site, or (d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof (save to the extent that such necessity arises from any act or default by the Engineer or the Employer or from any of the risks defined in Sub-Clause 20.4), Sub-Clause 40.2 shall apply.
40.2 Engineer's Determination following Suspension	Where, pursuant to Sub-Clause 40.1, this Sub-Clause applies the Engineer shall after due consultation with the Employer and the Contractor, determine (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension, and shall notify the Contractor accordingly, with a copy to the Employer
40.3 Suspension lasting more than 84 Days	If the progress of the Works or any part thereof is suspended on the instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 84 days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of Sub-Clause 40.1, the Contractor may give notice to the Engineer

	requiring permission, within 28 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 51 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Employer and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 69.1, whereupon the provisions of Sub-Clauses 69.2 and 69.3 shall apply.
	Commencement and Delays
41.1 Commencement of Works	The Contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.
42.1 Possession of Site and Access Thereto	Save insofar as the Contract may prescribe: (a) the extent of portions of the Site of which the Contractor is to be given possession from time to time (b) the order in which such portions shall be made available to the Contractor, and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of (c) so much of the Site, and (d) such access as, in accordance with the Contract, is to be provided by the Employer as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14, if any, and otherwise in accordance with such reasonable proposals as the Contractor ' shall, by notice to the Engineer with a copy to the Employer, make. The Employer will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with such programme or proposals, as the case may be.
42.2 Failure to Give Possession	If the Contractor suffers delay and/or incurs costs from failure on the part of the Employer to give possession in accordance with the terms of Sub-Clause 42. 1, the Engineer shall, after due consultation with the Employer and the Contractor, determine: (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer
42.3 Rights of Way and Facilities	The Contractor shall bear all costs and charges for special or temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purposes of the Works.

43.1 Time for Completion	The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the Appendix to Tender, shall be completed in accordance with the provisions of Clause 48, within the time stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be), calculated from the Commencement Date, or such extended time as may be allowed under Clause 44.
44.1 Extension of Time for Completion	In the event of: (a) the amount or nature of extra or additional work (unless an adjustment to the Time for Completion has been agreed) or other substantial change in the quantity of an item of work included in the Contract, (b) any cause of delay referred to in these Conditions, (c) exceptionally adverse climatic conditions, (d) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other Contractors or (e) other special circumstances or Force Majeure which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible, being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer.
44.2 Contractor to Provide Notification and Detailed Particulars	Provided that the Engineer is not bound to make any determination unless the Contractor has (a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and (b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.
44.3 Interim Determination of Extension	Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in a decrease of any extension of time already determined by the Engineer.

45.1 Restriction on Working Hours	Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognised days of rest without the consent of the Engineer, except when work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts.
46.1 Rate of Progress	If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor considers that it is necessary to do any work at night or on locally recognised days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Employer in additional supervision costs, such costs shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.
47.1 Liquidated Damages for Delay	If the Contractor fails to comply with the Time for Completion in accordance with Clause 48, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by Clause 43, then the Contractor shall pay to the Employer the relevant sum stated in the Appendix to Tender as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default) for every day or part of a day which shall elapse between the relevant Time for Completion and the date stated in a Taking-Over Certificate of the whole of the Works or the relevant Section, subject to the applicable limit stated in the Appendix to Tender. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities Under the Contract.
47.2 Reduction of Liquidated Damages	If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.
48.1 Taking-Over Certificate	When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a

	written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Works. The Engineer shall, within 21 days of the date of delivery of such notice, either issue to the Contractor, with a copy to the Employer, a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of -Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.
48.2 Taking Over of Sections or Parts	Similarly, in accordance with the procedure set out in Sub-Clause 48.1, the Contractor may request and the Engineer shall issue a Taking-Over Certificate in respect of: (a) any Section in respect of which a separate Time for Completion is provided in the Appendix to Tender, (b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and, otherwise than as provided for in the Contract, occupied or used by the Employer, or (c) any part of the Permanent Works which the Employer has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure)
48.3 Substantial Completion of Parts	If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.
48.4 Surfaces Requiring Reinstatement	Provided that a Taking-Over Certificate given in respect of any Section or part of the Permanent Works before completion of the whole of the Works shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such Taking-Over Certificate shall expressly so state
49.1 Defects Liability Period	In these Conditions the expression “Defects Liability Period” shall mean the defects liability period named in the Appendix to Tender, calculated from: (a) the date of completion of the Works certified by the Engineer in accordance with Clause 48, or (b) in the event of more than one certificate having been issued by the Engineer under Clause 48, the respective dates so certified, and in relation to the Defects Liability Period the expression “the Works” shall be construed accordingly.
49.2 Completion of Outstanding	To the intent that the Works shall, at or as soon as practicable after the expiration of the Defects Liability Period, be delivered to the Employer in the condition required by the

Work and Remedying Defects	Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall: (a) complete the work, if any, outstanding on the date stated in the Taking-Over Certificate as soon as practicable after such date, and (b) execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Defects Liability Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.
49.3 Cost of Remedying Defects	All work referred to in Sub-Clause 49.2 (b) shall be executed by the Contractor at his own cost if the necessity thereof is, in the opinion of the Engineer, due to: (a) the use of materials, Plant or workmanship not in accordance with the Contract, (b) where the Contractor is responsible for the design of part of the Permanent works, any fault in such design, or (c) he neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract. If, in the opinion of the Engineer, such necessity is due to any other cause, he shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer
49.4 Contractor's Failure to Carry Out Instructions	In case of default on the part of the Contractor in carrying out such instruction within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.
50.1 Contractor to Search	If any defect, shrinkage or other fault in the Works appears at any time prior to the end of the Defects Liability Period, the Engineer may instruct the Contractor, with copy to the Employer, to search under the directions of the Engineer for the cause thereof. Unless such defect, shrinkage or other fault is one for which the Contractor is liable under the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount in respect of the costs of such search incurred by the Contractor, which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer. If such defect, shrinkage or other fault is one for which the Contractor is liable, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case remedy such defect, shrinkage or other fault at his own cost in accordance with the provisions of Clause 49.
	Alterations, Additions and Omissions
51.1 Variations	The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he, with due approval of

	the Employer shall instruct the Contractor to do and the Contractor shall do any of the following: (a) increase or decrease the quantity of any work included in the Contract, (b) omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor), (c) change the character or quality or kind of any such work, (d) change the levels, lines, position and dimensions of any part of the Works, (e) execute additional work of any kind necessary for the completion of the Works, or (f) change any specified sequence or timing of construction of any part of the Works. No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 52. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.
51.2 Instructions for Variations	The Contractor shall not make any such variation without an instruction of the Engineer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.
52.1 Valuation of Variations	All variations referred to in Clause 51 and any additions to the Contract Price which are required to be determined in accordance with Clause 52 (for the purposes of this Clause referred to as “varied work”), shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Employer and the Contractor, suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.
52.2 Power of Engineer to Fix Rates	Provided that if the nature or amount of any varied work relative to the nature or amount of the whole of the Works or to any part thereof, is such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such varied work, rendered inappropriate or inapplicable, then, after due consultation by the Engineer with the Employer and the Contractor, a suitable rate or price shall be agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such other rate or price as is, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine

	provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60. Provided also that no varied work instructed to be done by the Engineer pursuant to Clause 51 shall be valued under Sub-Clause 52.1 or under this Sub-Clause unless, within 14 days of the date of such instruction and, other than in the case of omitted work, before the commencement of the varied work, notice shall have been given either: (a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or (b) by the Engineer to the Contractor of his intention to vary a rate or price.
52.3 Variation exceeding 15 Percent	Deleted
52.4 Day work	The Engineer may, if in his opinion it is necessary or desirable, issue an instruction that any varied work shall be executed on a day work basis. The Contractor shall then be paid for such varied work under the terms set out in the day work schedule included in the Contract and at the rates and prices affixed thereto by him in the Tender. The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before ordering materials, shall submit to the Engineer quotations for the same for his approval. In respect of such of the Works executed on a day work basis, the Contractor shall, during the continuance of such work, deliver each day to the Engineer an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and Contractor's Equipment used thereon or therefor other than Contractor's Equipment which is included in the percentage addition in accordance with such day work schedule. One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor. At the end of each month the Contractor shall deliver to the Engineer a priced statement of the labour, materials and Contractor's Equipment, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer considers that for any reason the sending of such lists or statements by the Contractor, in accordance with the foregoing provision, was impracticable he shall nevertheless be entitled to authorise payment for such work, either as day work, on being satisfied as to the time employed and the labour, materials and Contractor's Equipment used on such work, or at such value therefor as shall, in his opinion, be fair and reasonable.
	Procedure for Claims
53.1 Notice of Claims	Notwithstanding any other provision of the Contract, if the Contractor intends to claim for any extension of Time for Completion and/ or any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer describing the event or circumstance giving rise to the claim, with a copy to the Employer, within 28 days after the Contractor became aware, or should have

	become aware, of the event or circumstance.. If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply. The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
53.2 Contemporary Records	Upon the happening of the event referred to in Sub-Clause 53.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make. Without necessarily admitting the Employer's liability, the Engineer shall, on receipt of a notice under Sub-Clause 53.1, inspect such contemporary records and may instruct the Contractor to keep any further contemporary records as are reasonable and may be material to the claim of which notice has been given. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Sub-Clause and shall supply him with copies thereof as and when the Engineer so instructs.
53.3 Substantiation of Claims	Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect: (a) this fully detailed claim shall be considered as interim; (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer. Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period. Within the above defined period of 42 days, the Engineer shall proceed in accordance with Sub-Clause 2.7 to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry), and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.
53.4 Failure to Comply	If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67.3 assessing the claim considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub- Clauses 53.2 and 53.3).

53.5 Payment of Claims	Each Payment Certificate shall include such additional payment for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate. The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 60 such amount in respect of any claim as the Engineer, after due consultation with the Employer and the Contractor, may consider due to the Contractor provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment in respect of such part of the claim as such particulars may substantiate to the satisfaction of the Engineer. The Engineer shall notify the Contractor of any determination made under this Sub- Clause, with a copy to the Employer.
53.6 Employer's Claims	If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Liability Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due for electricity, water and gas, Employer's equipment and free-issue material, or for other services requested by the Contractor. The notice shall be given as soon as practicable and no longer than 28 days after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Liability Period shall be given before the expiry of such period. The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 2.7 to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Liability Period. This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.
	Contractor's Equipment, Temporary Works and Materials
54.1 Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works	All Contractor's Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent of the Engineer. Provided that consent shall not be required for vehicles engaged in transporting any staff, labour, Contractor's Equipment, Temporary Works, Plant or materials to or from the Site.
54.2 Employer not Liable for Damage	The Employer shall not at any time be liable, save as mentioned in Clauses 20 and 65, for the loss of or damage to any of the said Contractor's Equipment, Temporary Works or materials
54.3 Customs	The Employer will use his best endeavours in assisting the Contractor, where required,

Clearance	in obtaining clearance through the Customs of Contractor's Equipment, materials and other things required for the Works.
54.4 Re-export of Contractor's Equipment	In respect of any Contractor's Equipment which the Contractor has imported for the purposes of the Works, the Employer will use his best endeavours to assist the Contractor, where required, in procuring any necessary Government consent to the re-export of such Contractor's Equipment by the Contractor upon the removal thereof pursuant to the terms of the Contract.
54.5 Conditions of Hire of Contractor's Equipment	With a view to securing, in the event of termination under Clause 63, the continued availability, for the purpose of executing the Works, of any hired Contractor's Equipment, the Contractor shall not bring on to the Site any hired Contractor's Equipment unless there is an agreement for the hire thereof (which agreement shall be deemed not to include an agreement for hire purchase) which contains a provision that the owner thereof will, on request in writing made by the Employer within 7 days after the date on which any termination has become effective, and on the Employer undertaking to pay all hire charges in respect thereof from such date, hire such Contractor's Equipment to the Employer on the same terms in all respects as the same was hired to the Contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by him for the purpose of executing and completing the Works and remedying any defects therein, under the terms of the said Clause 63.
54.6 Costs for the Purpose of Clause 63	In the event of the Employer entering into any agreement for the hire of Contractor's Equipment pursuant to Sub-Clause 54.5, all sums properly paid by the Employer under the provisions of any such agreement and all costs incurred by him (including stamp duties) in entering into such agreement shall be deemed, for the purpose of Clause 63, to be part of the cost of executing and completing the Works and the remedying of any defects therein.
54.7 Incorporation of Clause in Subcontracts	The Contractor shall, where entering into any subcontract for the execution of any part of the Works, incorporate in such subcontract (by reference or otherwise) the provisions of this Clause in relation to Contractor's Equipment, Temporary Works or materials brought on to the Site by the Subcontractor.
54.8 Approval of Materials not Implied	The operation of this Clause shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.
	Measurement
55.1 Quantities	The quantities set out in the Bill of Quantities are the estimated quantities for the Works, and they 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.
56.1 Work to be Measured	The Engineer, shall except as otherwise stated, ascertain and determine by measurement the value of the Works in accordance with the Contract and the Contractor shall be paid that value in accordance with Clause 60. The Engineer shall, when he requires any part of the Works to be measured, give reasonable notice to the Contractor's authorised agent, who shall: (a) forthwith attend or send a qualified representative to assist the Engineer in making such measurement, and

	(b) supply all particulars required by the Engineer. Should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of such part of the Works. For the purpose of measuring such Permanent Works as are to be measured by records and drawings, the Engineer shall prepare records and drawings as the work proceeds and the Contractor, as and when called upon to do so in writing, shall, within 14 days, attend to examine and agree such records and drawings with the Engineer and shall sign the same when so agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within 14 days of such examination, lodges with the Engineer notice of the respects in which such records and drawings are claimed by him to be incorrect. On receipt of such notice, the Engineer shall review the records and drawings and either confirm or vary them.
57.1 Method of Measurement	The Works shall be measured net, notwithstanding any general or local custom, except where otherwise provided for in the Contract.
57.2 Breakdown of Lump Sum Items	For the purposes of statements submitted in accordance with Sub- Clause 60.1, the Contractor shall submit to the Engineer, within 28 days after the receipt of the Letter of Acceptance, a breakdown for each of the lump sum items contained in the Tender. Such breakdowns shall be subject to the approval of the Engineer.
	Provisional Sums
58.1 Definition of “Provisional Sum”	“Provisional Sum” means a sum included in the Contract and so designated in the Bill of Quantities for the execution of any part of the Works or for the supply of goods, materials, Plant or services or for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Engineer. The Contractor shall be entitled to only such amounts in respect of the work, supply or contingencies to which such Provisional Sums relate as the Engineer shall determine in accordance with this Clause. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.
58.2 Use of Provisional Sums	In respect of every Provisional Sum the Engineer shall have authority to issue instructions for the execution of work or for the supply of goods, materials, Plant or services by: (a) the Contractor, in which case the Contractor shall be entitled to an amount equal to the value thereof determined in accordance with Clause 52, and (b) a nominated Subcontractor, as hereinafter defined, in which case the sum to be paid to the Contractor therefor shall be determined and paid in accordance with Sub-Clause 59.4.
58.3 Production of Vouchers	The Contractor shall produce to the Engineer all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of Provisional Sums, except where work is valued in accordance with rates or prices set out in the Tender.

	Nominated Subcontractors
59.1 Definition of “Nominated Subcontractors”	All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials, Plant or services for which Provisional Sums are included in the Contract, who may have been or be nominated or selected or approved by the Employer or the Engineer, and all persons to whom by virtue of the provisions of the Contract the Contractor is required to subcontract shall, in the execution of such work or the supply of such goods, materials, Plant or services, be deemed to be subcontractors to the Contractor and are referred to in this Contract as “nominated Subcontractors”.
59.2 Nominated Subcontractors; Objection to Nomination	The Contractor shall not be required by the Employer or the Engineer, or be deemed to be under any obligation, to employ any nominated Subcontractor against whom the Contractor may raise reasonable objection, or who declines to enter into a subcontract with the Contractor containing provisions: (a) that in respect of the work, goods, materials, Plant or services the subject of the subcontract, the nominated Subcontractor will undertake towards the Contractor such obligations and liabilities as will enable the Contractor to discharge his own obligations and liabilities towards the Employer under the terms of the Contract and will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and (b) that the nominated Subcontractor will save harmless and indemnify the Contractor from and against any negligence by the nominated Subcontractor, his agents, workmen and servants and from and against any misuse by him or them of any Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.
59.3 Design Requirements to be Expressly Stated	If in connection with any Provisional Sum the services to be provided include any matter of design or specification of any part of the Permanent Works or of any Plant to be incorporated therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Subcontract. The nominated Subcontract shall specify that the nominated Subcontractor providing such services will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities.
59.4 Payments to Nominated Subcontractors	For all work executed or goods, materials, Plant or services supplied by any nominated Subcontractor, the Contractor shall be entitled to: (a) the actual price paid or due to be paid by the Contractor, on the instructions of the Engineer, and in accordance with the subcontract; (b) in respect of labour supplied by the Contractor, the sum, if any, entered in the Bill of Quantities or, if instructed by the Engineer pursuant to paragraph (a) of Sub-Clause 58.2, as may be determined in accordance with Clause 52; and in respect of all other charges and profit, a sum being a percentage rate of the actual price paid or due to be paid calculated, where provision has been made in the Bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the Contractor against that item or, where no such provision has been made, at the rate inserted by the Contractor in the Appendix to Tender and repeated where provision

	for such is made in a special item provided in the Bill of Quantities for such purpose
59.5 Certification of Payments to Nominated Subcontractors	Before issuing, under Clause 60, any certificate, which includes any payment in respect of work done or goods, materials, Plant or services supplied by any nominated Subcontractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, less retentions, included in previous certificates in respect of the work or goods, materials, Plant or services of such nominated Subcontractor have been paid or discharged by the Contractor. If the Contractor fails to supply such proof then, unless the Contractor: (a) satisfies the Engineer in writing that he has reasonable cause for withholding or refusing to make such payments, and (b) produces to the Engineer reasonable proof that he has so informed such nominated Subcontractor in writing, the Employer shall be entitled to pay to such nominated Subcontractor direct, upon the certificate of the Engineer, all payments, less retentions, provided for in the nominated Subcontract, which the Contractor has failed to make to such nominated Subcontractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or to become due from the Employer to the Contractor. Provided that, where the Engineer has certified and the Employer has paid direct as aforesaid, the Engineer shall, in issuing any further certificate in favour of the Contractor, deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay the issue of the certificate itself when due to be issued under the terms of the Contract.
	Certificates and Payment
60.1 Monthly Statements	The Contractor shall submit to the Engineer after the end of each month six copies, each signed by the Contractor's representative approved by the Engineer in accordance with Sub-Clause 15.1, of a statement, in such form as the Engineer may from time to time prescribe, showing the amounts to which the Contractor considers himself to be entitled up to the end of the month in respect of: (a) the value of the Permanent Works executed, (b) any other items in the Bill of Quantities including those for Contractor's Equipment, Temporary Works, day works and the like, (c) the percentage of the invoice value of listed materials, all as stated in the Appendix to Tender, and Plant delivered by the Contractor on the Site for incorporation in the Permanent Works but not incorporated in such Works, (d) adjustments under Clause 70, and (e) any other sum to which the Contractor may be entitled under the Contract or otherwise
60.2 Monthly Payments	The Engineer shall, within 28 days of receiving such statement, deliver to the Employer an Interim Payment Certificate stating the amount of payment to the Contractor which the Engineer considers due and payable in respect of such statement, subject: (a) firstly, to the retention of the amount calculated by applying the Percentage of Retention stated in the Appendix to Tender, to the amount to which the Contractor is

	entitled under paragraphs (a), (b), (c) and (e) of Sub-Clause 60.1 until the amount so retained reaches the Limit of Retention Money stated in the Appendix to Tender, and (b) secondly, to the deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Employer. Provided that the Engineer shall not be bound to certify any payment under this Sub-Clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the Appendix to Tender. Notwithstanding the terms of this Clause or any other Clause of the Contract no amount will be certified by the Engineer for payment until the performance security, if required under the Contract, has been provided by the Contractor and approved by the Employer.
60.3 Payment of Retention Money	(a) Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor. (b) Upon the expiration of the Defects Liability Period for the Works the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor. Provided that, in the event of different Defects Liability Periods having become applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period" shall, for the purposes of this Sub-Clause, be deemed to mean the expiration of the latest of such periods. Provided also that if at such time there shall remain to be executed by the Contractor any work instructed, pursuant to Clauses 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work of so much of the balance of the Retention Money as shall, in the opinion of the Engineer, represent the cost of the work Remaining to be executed.
60.4 Correction of Certificates	The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which shall have been issued by him and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.
60.5 Statement at Completion	Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of Statement at Completion with supporting documents showing in detail, in the form approved by the Engineer: (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate, (b) any further sums which the Contractor considers to be due, and (c) an estimate of amounts which the Contractor considers will become due to him under the Contract. The estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2.
60.6 Final Statement	Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62. 1, the Contractor shall submit to the Engineer for consideration six copies of a draft final statement with supporting documents showing in detail, in the form

	approved by the Engineer: (a) the value of all work done in accordance with the Contract, and (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise. If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed (for the purposes of these Conditions referred to as the “Final Statement”). If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, which are not in dispute. The dispute may then be settled in accordance with Clause 67.
60.7 Discharge	Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.8 has been made and the performance security referred to in Sub-Clause 10.1, if any, has been returned to the Contractor.
60.8 Final Payment Certificate	Within 28 days after receipt of the Final Statement, and the written discharge, the Engineer shall issue to the Employer (with a copy to the Contractor) a Final Payment Certificate stating: (a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise, and (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be
60.9 Cessation of Employer’s Liability	The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking- Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.5.
60.10 Time for Payment	The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall, subject to Clause 47, be paid by the Employer to the Contractor within 15 days after such Interim Payment Certificate has been delivered to the Employer, or, in the case of the Final Payment Certificate referred to in Sub-Clause 60.8, within 45 days, after such Final Payment Certificate has been delivered to the Employer. In the event of the failure of

	the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest at the rate stated in the Appendix to Tender upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise.
61.1 Approval only by Defects Liability Certificate	Only the Defects Liability Certificate, referred to in Clause 62, shall be deemed to constitute approval of the Works.
62.1 Defects Liability Certificate	The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to, the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 49 and 50, have been completed to the satisfaction of the Engineer. Provided that the issue of the Defects Liability Certificate shall not be a condition precedent to payment to the Contractor of the second portion of the Retention Money in accordance with the conditions set out in Sub-Clause 60.3.
62.2 Unfulfilled Obligations	Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Defects Liability Certificate which remaining performed at the time such Defects Liability Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties to the Contract.
63.1 Default of Contractor	If the Contractor is deemed by law unable to pay his debts as they fall due, or enters into voluntary or involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or becomes insolvent, or makes an arrangement with, or assignment in favour of, his creditors, or agrees to carry out the Contract under a committee of inspection of his creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of his assets, or if, under any law or regulation relating to reorganization, arrangement or readjustment of debts, proceedings are commenced against the Contractor or resolutions passed in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over a substantial part of the assets of the Contractor, or if any act is done or event occurs with respect to the Contractor or his assets which, under any applicable law has a substantially similar effect to any of the foregoing acts or events, or if the Contractor has contravened Sub-Clause 3.1, or has an execution levied on his goods, or if the Engineer certifies to the Employer, with a copy to the Contractor, that, in his opinion, the Contractor: (a) has repudiated the Contract, (b) without reasonable excuse has failed (i) to commence the Works in accordance with Sub-Clause 4.1.1 or (ii) to proceed with the Works, or any Section thereof, within 28 days

	after receiving notice pursuant to Sub-Clause 46. 1, (c) has failed to comply with a notice issued pursuant to Sub- Clause 37.4 or an instruction issued pursuant to Sub-Clause 39.1 within 28 days after having received it, (d) despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the Contract, or (e) has contravened Sub-Clause 4.1, then the Employer may, after giving 14 days' notice to the Contractor, enter upon the Site and the Works and terminate the employment of the Contractor without thereby releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and authorities conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor's Equipment, Temporary Works and materials as he or they may think proper.
63.2 Valuation at Date of Termination	The Engineer shall, as soon as may be practicable after any such entry and termination by the Employer, fix and determine ex parte, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify: a) What amount (if any) had, at the time of such entry and termination, been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract, and (b) the value of any of the said unused or partially used materials, any Contractor's Equipment and any Temporary Works.
63.3 Payment after Termination	If the Employer terminates the Contractor's employment under this Clause, he shall not be liable to pay to the Contractor any further amount (including damages) in respect of the Contract until the expiration of the Defects Liability Period and there after until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum (if any) as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount exceeds the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Employer the amount of such excess and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.
63.4 Assignment of Benefit of Agreement	Unless prohibited by law, the Contractor shall, if so instructed by the Engineer within 14 days of such entry and termination referred to in Sub-Clause 63. 1, assign to the Employer the benefit of any agreement for the supply of any goods materials or services and/or for the execution of any work for the purposes of the Contract, which the Contractor may have entered into.
64.1 Urgent Remedial Work	If, by reason of any accident, or failure, or other event occurring to, in, or in connection with the Works, or any part thereof, either during the execution of the Works, or during

	the Defects Liability Period, any remedial or other work is, in the opinion of the Engineer, urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work, the Employer shall be entitled to employ and pay other persons to carry out such work as the Engineer may consider necessary. If the work or repair so done by the Employer is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof.
65.1 No Liability for Special Risks	The Contractor shall be under no liability whatsoever in consequence of any of the special risks referred to in Sub-Clause 65.2, whether by way of indemnity or otherwise, for or in respect of: (a) destruction of or damage to the Works, save to work condemned under the provisions of Clause 39 prior to the occurrence of any of the said special risks, (b) destruction of or damage to property, whether of the Employer or third parties, or injury or loss of life
65.2 Special Risks	The special risks are: (a) the risks defined under paragraphs (a), (c), (d) and (e) of Sub Clause 20.4, and (b) the risks defined under paragraph (b) of Sub-Clause 20.4 insofar as these relate to the country in which the Works are to be executed
65.3 Damage to Works by Special Risks	If the Works or any materials or Plant on or near or in transit to the Site, or any of the Contractor's Equipment, sustain destruction or damage by reason of any of the said special risks, the Contractor shall be entitled to payment in accordance with the Contract for any Permanent Works duly executed and for any materials or Plants destroyed or damaged and, so far as may be required by the Engineer or as may be necessary for the completion of the Works, to payment for: (a) rectifying any such destruction or damage to the Works, and (b) replacing or rectifying such materials or Contractor's Equipment, and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 (which shall in the case of the cost of replacement of Contractor's Equipment include the fair market value thereof as determined by the Engineer) and shall notify the Contractor accordingly, with a copy to the Employer.
65.4 Projectile, Missile	Destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, munitions, or explosive of war, shall be deemed to be a consequence of the said special risks.
65.5 Increased Costs arising from Special Risks	Save to the extent that the Contractor is entitled to payment under any other provision of the Contract, the Employer shall repay to the Contractor any costs of the execution of the Works (other than such as may be attributable to the cost of reconstructing work condemned under the provisions of Clause 39 prior to the occurrence of any special

	risk) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof. The Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer.
65.6 Outbreak of War	If, during the currency of the Contract, there is an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall, unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavours to complete the execution of the Works. Provided that the Employer shall be entitled, at any time after such outbreak of war, to terminate the Contract by giving notice to the Contractor and, upon such notice being given, the Contract shall, except as to the rights of the parties under this Clause and Clause 67, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.
65.7 Removal of Contractor's Equipment on Termination	If the Contract is terminated under the provisions of Sub-Clause 65.6, the Contractor shall, with all reasonable dispatch, remove from the Site all Contractor's Equipment and shall give similar facilities to his Subcontractors to do so.
65.8 Payment if Contract Terminated	If the Contract is terminated as aforesaid, the Contractor shall be paid by the Employer, insofar as such amounts or items have not already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition: (a) the amounts payable in respect of any preliminary items referred to in the Bill of Quantities, so far as the work or service comprised therein has been carried out or performed, and a proper proportion of any such items which have been partially carried out or performed; (b) the cost of materials, Plant or goods reasonably ordered for the Works which have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials, Plant or goods becoming the property of the Employer upon such payments being made by him; (c) a sum being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure has not been covered by any other payments referred to in this Sub-Clause; (d) any additional sum payable under the provisions of Sub-Clauses 65.3 and 65.5; (e) such proportion of the cost as may be reasonable, taking into account payments made or to be made for work executed, of removal of Contractor's Equipment under Sub-Clause 65.7 and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost; and (f) the reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

	Provided that against any payment due from the Employer under this Sub-Clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Contractor's Equipment, materials and Plant and any other sums which, at the date of termination, were recoverable by the Employer from the Contractor under the terms of the Contract. Any sums payable under this Sub-Clause shall, after due consultation with the Employer and the Contractor, be determined by the Engineer who shall notify the Contractor accordingly, with a copy to the Employer.
	Release from Performance
66.1 Payment in Event of Release from Performance	If any circumstance outside the control of both parties arises after the issue of the Letter of Acceptance which renders it impossible or unlawful for either or both parties to fulfill his or their contractual obligations, or under the law governing the Contract the parties are released from further performance, then the parties shall be discharged from the Contract, except as to their rights under this Clause and Clause 67 and without prejudice to the rights of either party in respect of any antecedent breach of the Contract, and the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65 if the Contract had been terminated under the provisions of Clause 65.
67.1 Engineer's Decision	If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or other termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. No later than the eighty-fourth day after the day on which he received such reference the Engineer shall give notice of his decision to the Employer and the Contractor. Such decision shall state that it is made pursuant to this Clause. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided, in an amicable settlement or an arbitral award. If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the Eighty-fourth day after the day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which he received notice of such decision, or on or before the seventieth day after the day on which the said period of 84 days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4, no arbitration in respect thereof may be commenced unless such notice is given. If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute

	has been given by either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor.
67.2 Amicable Settlement	Where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 67.1, the parties shall attempt to settle such dispute amicably before the commencement of arbitration. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, even if no attempt at amicable settlement thereof has been made.
67.3 Arbitration	Any dispute in respect of which: (a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-Clause 67. 1, and (b) amicable settlement has not been reached within the period stated in Sub-Clause 67.2, shall be finally settled, unless otherwise specified in the Contract, under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed under such Rules. The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certificate or valuation of the Engineer related to the dispute. Neither party shall be limited in the proceedings before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision pursuant to Sub- Clause 67.1. No such decision shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator/s on any matter whatsoever relevant to the dispute. Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works
67.4 Failure to Comply with Engineer's Decision	Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related decision has become final and binding, either party may, if the other party fails to comply with such decision, and without prejudice to any other rights it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clauses 67.1 and 67.2 shall not apply to any such reference.
	Notices
68.1 Notice to Contractor	All certificates, notices or instructions to be given to the Contractor by the Employer or the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the Contractor's principal place of business or such other address as the Contractor shall nominate for that purpose.
68.2 Notice to Employer and Engineer	Any notice to be given to the Employer or to the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the respective addresses nominated for that purpose in Part II of these Conditions.
68.3 Change of Address	Either party may change a nominated address to another address in the country where the Works are being executed by prior notice to the other party, with a copy to the

	Engineer, or the Engineer may do so by prior notice to both parties.
	Default of Employer
69.1 Default of Employer	In the event of the Employer: (a) failing to pay to the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10, within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, (b) interfering with or obstructing or refusing any required approval to the issue of any such certificate, (c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or (d) giving notice to the Contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual obligations, the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer. Such termination shall take effect 14 days after the giving of the notice.
69.2 Removal of Contractor's Equipment	Upon the expiry of the 14 days' notice referred to in Sub-Clause 69.1, the Contractor shall, notwithstanding the provisions of Sub-Clause 54.1, with all reasonable dispatch, remove from the Site all Contractor's Equipment brought by him thereon.
69.3 Payment on Termination	In the event of such termination the Employer shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 65, but, in addition to the payments specified in Sub-Clause 65.8, the Employer shall pay to the Contractor the amount of any loss or damage to the Contractor arising out of or in connection with or by consequence of such termination.
69.4 Contractor's Entitlement to Suspend Work	Without prejudice to the Contractor's entitlement to interest under Sub-Clause 60.10 and to terminate under Sub-Clause 69.1, the Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work. If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Engineer shall, after due consultation with the Employer and the Contractor, determine: (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer
69.5 Resumption of Work	Where the Contractor suspends work or reduces the rate of work, having given notice in accordance with Sub-Clause 69.4, and the Employer subsequently pays the amount due, including interest pursuant to Sub-Clause 60.10, the Contractor's entitlement under Sub-Clause 69.1 shall, if notice of termination has not been given, lapse and the

	Contractor shall resume normal working as soon as is reasonably possible.
	Changes in Cost and Legislation
70.1 Increase or Decrease of Cost	There shall be added to or deducted from the Contract Price such sums in respect of rise or fall in the cost of labour and/or materials or any other matters affecting the cost of the execution of the Works as may be determined in accordance with Part II of these Conditions.
70.2 Subsequent Legislation	If, after the date 28 days prior to the latest date for submission of tenders for the Contract there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under Sub-Clause 70.1, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price-and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.
	Currency and Rates of Exchange
71.1 Currency Restrictions	If, after the date 28 days prior to the latest date for submission of tenders for the Contract, the Government or authorised agency of the Government of the country in which the Works are being or are to be executed imposes currency restrictions and/or transfer of currency restrictions in relation to the currency or currencies in which the Contract Price is to be paid, the Employer shall reimburse any loss or damage to the Contractor arising therefrom, without prejudice to the right of the Contractor to exercise any other rights or remedies to which he is entitled in such event.
72.1 Rates of Exchange	Where the Contract provides for payment in whole or in part to be made to the Contractor in foreign currency or currencies, such payment shall not be subject to variations in the rate or rates of exchange between such specified foreign currency or currencies and the currency of the country in which the Works are to be executed.
72.2 Currency Proportions	Where the Employer has required the Tender to be expressed in a single currency but with payment to be made in more than one currency and the Contractor has stated the proportions or amounts of other currency or currencies in which he requires payment to be made, the rate or rates of exchange applicable for calculating the payment of such proportions or amounts shall, unless otherwise stated in Part II of these Conditions, be those prevailing, as determined by the Central Bank of the country in which the Works are to be executed, on the date 28 days prior to the latest date for the submission of tenders for the Contract, as has been notified to the Contractor by the Employer prior to the submission of tenders or as provided for in the Tender.
72.3 Currencies of Payment for Provisional Sums	Where the Contract provides for payment in more than one currency, the proportions or amounts to be paid in foreign currencies in respect of Provisional Sums shall be determined in accordance with the principles set forth in Sub-Clauses 72.1 and 72.2 as and when these sums are utilised in whole or in part in accordance with the provisions of Clauses 58 and 59.
	Force Majeure

73.1 Definition of Force Majeure	In this Clause, —Force Majeure means an exceptional event or circumstance: (a) which is beyond a Party’s control, (b) which such Party could not reasonably have provided against before entering into the Contract, (c) which, having arisen, such Party could not reasonably have avoided or overcome, and (d) which is not substantially attributable to the other Party. Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied: (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, (ii) rebellion, terrorism, sabotage by persons other than the Contractor’s Personnel, revolution, insurrection, military or usurped power, or civil war, (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor’s Personnel, (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor’s use of such munitions, explosives, radiation or radio-activity, and (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.
73.2 Notice of Force Majeure	If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure. The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them. Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.
73.3 Duty to Minimise Delay	Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure. A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.
73.4 Consequences of Force Majeure	If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 73.2, and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub- Clause 53.1 to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 44.1, and (b) if the event or circumstance is of the kind described in sub- paragraphs (i) to (iv) of

	Sub-Clause 73.1 and, in the case of sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub- Clause 21.1. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 2.7 to agree or determine these matters.
73.5 Force Majeure Affecting Sub-Contractor	If any Sub-Contractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.
73.6 Optional Termination, Payment and Release	If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 73.2, or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 65.7 Upon such termination, the Engineer shall determine the value of the work done and issue a Payment Certificate which shall include: (a) the amounts payable for any work carried out for which a price is stated in the Contract; (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal; (c) other Costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works; (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.
73.7 Release from Performance	Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance: (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 73.6 if the Contract had been terminated under Sub-Clause 73.6.

Section III

Conditions of Particular Application – Part II

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National Highways Authority of India

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

SECTION III		
PART II: CONDITIONS OF PARTICULAR APPLICATION		
The Clause numbers mentioned hereinafter refer to the corresponding Clauses of the General Conditions of Contract – Part I (Section II) to which a Condition of Particular Application relates:		
Sub-Clause 1.1 Definitions in association with Sri infotech (IE)	(a) (i) The Employer is the National Highways Authority of India, Government of India. (a) (iv) The ‘Engineer’ is	
	Name of the NH section	Name of the Independent Engineer (IE)/ Supervision Consultant (SC)
	Annaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A	1) M/s. MSV International Inc in Association with Sri Infotech
	Add the following words at the end of sub-para (b) (v): The word “Tender” is synonymous with “Bid” and the words “Appendix to Tender” with “Appendix to Bid” and the words “Tender Documents” with “Bid Documents” or “Bidding Documents”. Substitute the words “Sub-Clause 60.2 (a)” at the end of sub para (e) (ii) by the words “Sub-Clause 60.4”. Substitute the words “Sub-Clause 60.8” at the end of sub para (e) (iv) by the words “Sub-Clause 60.11” “	
Sub-Clause 2.1 Engineer’s Duties and Authority	Delete from Sub-Clause 2.1(b) the last sentence” Provided further that any requisite approval shall be deemed to have been given by the employer for any such authority exercised by the Engineer “With reference to Sub-Clause 2.1(b), the following provisions shall also apply: The Engineer shall obtain prior permission from and specific approval of the Employer before taking any of the following actions specified in Part I: (i) consenting to the subcontracting of any part of the Works under Clause 4; (ii) certifying additional cost determined under Clause 12; (iii) ordering suspension of work under Clause 40. (iv) issuing the Notice to commence the work under Clause 41. (v) determining an extension of time under Clause 44; (vi) issuing a variation under Clause 51 for the following: -	

	(i) <u>Variation in individual BOQ Items:</u> (ii) <u>New items (Non-BOQ items):</u> Before issuing orders to execute new items of work (non BOQ items), 'Engineer' shall obtain technical approval from Employer. (iii) The overall variation shall be exclusive of applicable price adjustment, if any. (iv) All variation (individual items and overall variations) shall be approved by the Employer. (vii) fixing new rates or prices under Clause 52. Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer".
Sub-Clause 5.1 Language and Law	(a) The Contract Documents shall be drawn up in English language and all correspondence, drawings and documents and any written matter relating to the contract shall be in English only. (b) This Contract shall be governed and construed in accordance with the law in force in India.
Sub-Clause 5.2 Priority of Contract Documents	Delete the documents listed as (1) to (6) and substitute as below: (1) the Contract Agreement (2) the Letter of Acceptance; (3) the Tender (4) the Conditions of Particular Application; (5) the General Conditions of Contract; (6) the Technical Specifications; (7) the Drawings; (8) the priced Bill of quantities (9) any other document forming part of the Contract.

Sub-Clause 6.6 Drawings	Add the following as Sub-Clause 6.6: The Contractor shall carry out design to the extent as specified in the Contract. The typical drawings have been provided in the Contract for reference. The Contractor shall provide design calculations and fabrication drawings for temporary works (such as form work, staging, centering, scaffolding, specialized construction, handling and launching facilities and the like), material list for structural fabrication as well as detailed drawings for anchorage and temporary support details for pre-stressing cables as well as bar bending and cutting schedules for reinforcement etc. shall be prepared by the Contractor at his own cost and forwarded in triplicate to the Engineer at least four weeks in advance of actual constructional requirements. The Engineer will scrutinize and return one copy of the same for the Contractor's use with amendments, if any, noted in red ink within two weeks of submission. Such approval shall not relieve the Contractor of any of his responsibilities in connection with temporary works. The Contractor will supply four copies of the approved drawings for the Engineer's use. The cost of preparing all such items of work shall be deemed to have been included in the respective rates/prices quoted by the Contractor in the Bill of Quantities.
Sub-Clause 6.7 As built Drawings	Add the following as Sub-Clause 6.7: On the completion of works, the Contractor shall arrange to furnish to the Employer two (2) bound sets of all "As Built" drawings for every component of the Works at his own cost, all such copies being on Polyester film of quality to be approved by the Engineer or his Representative. The Taking-Over Certificate of the Works, as per the provisions of Clause 48 hereof, shall not be issued by the Engineer in the event of the Contractor's failure to furnish the aforesaid "As Built" drawings for the entire Works.
Sub-Clause 8.3 Obligations relating to Local Content	Add the following as Sub-Clause 8.3: The Contractor [Class I Local Supplier/ Class II Local Supplier/ Non Local Supplier] undertakes to ensure minimum Local Content in the Project Highway of at least [50%/20%] duly complying with the provisions of Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India Order No. P-45021/2/2017-PP (BE- II) dated September 16, 2020, as amended or modified till Bid Due Date and the provisions under Rule 144(xi) of GFR, 2017.
Sub-Clause 11.2 Access to Data	Add the following as Sub-Clause 11.2: "Data made available by the Employer in accordance with Sub-Clause 11.1

	shall be deemed to include data listed elsewhere in the Contract as open for inspection at the address stipulated in the Appendix to Bid.
Sub-Clause 14.1 Program to be Submitted	Substitute Sub-Clause 14.1 by the following: The Contractor shall within 28 (twenty eight) days of the date of receipt of the Letter of Acceptance, submit to the Engineer for his consent six copies of a programme, for the execution of the work. The programme shall conform and satisfy the requirement of Technical Specifications given at Section IV. Unless otherwise agreed, the programme shall generally be based on the programme submitted with the Bid and shall include: (i) A detailed method statement defining the Contractor's methodology for construction backed with his proposals for construction equipment planning and deployment duly supported with broad output calculations and details of the quality control procedures proposed to be adopted, justifying his capability of achieving the completion of work in accordance with the stipulated period of completion. The method statement shall conform and satisfy the requirement of Technical Specifications given at Section IV. (ii) A bar chart showing the quantities of principal work items to be performed each month together with the mechanical equipment, materials and labour which shall be deployed on such activities. The programme shall not be unbalanced and shall be based on the achievement outputs calculated and demonstrated in the method statement submitted vide sub-para (i) above. An 'S' curve illustrating anticipated cumulative turnover and the anticipated cumulative progress shall be superimposed upon the bar chart. (iii) A CPM/PERT analysis of all major activities from commencement of works to completion. (iv) A separate time based monthly programme indicating the Contractor's proposals for the purchase, long term lease, or hire of equipment throughout the duration of the Contract. (v) A quality assurance plan (QAP) covering all aspects of the work to be adopted for this work to ensure the desired quality. Quality Assurance Plan (QAP) for this project shall be prepared and formulated as a summary of the quality related activities required meeting the terms of the Agreement and in accordance with IRCSP:112-201 The procedure shall conform to and satisfy the requirement of Clause 105 of Technical Specifications given at Section IV. QAP shall be submitted to the Engineer for his consent. If the work programme submitted by the Contractor is deemed in any way incomplete or unacceptable by the Engineer/Employer, the Contractor shall be given 15 days to revise and resubmit it to the Engineer's satisfaction

Sub-Clause 14.3 Cash Flow Estimate to be Submitted	“The time within which the detailed cash flow estimate shall be submitted shall be 28 days.”
Sub-Clause 15.2 Language Ability of Contractor’s Representative	Add the following as Sub-Clause 15.2: “If the Contractor’s authorized representative is not, in the opinion of the Engineer, fluent in the language specified in the Appendix to Bid, the Contractor shall have available on Site at all times a competent interpreter to ensure the proper transmission of instructions and information.”
Sub-Clause 15.3 Review Meetings and Contractor’s Representative	Add the following as Sub-Clause 15.3: “The Contractor shall ensure that his Project Manager or Senior Site Representative attends all the periodic review meetings notified by the Engineer/Employer/Employer’s representative”.
Sub-Clause 16.3 Language Ability of Superintendence Staff	Add the following as Sub-Clause 16.3: “A reasonable proportion of the Contractor’s superintendence staff including his authorized representative shall have a working knowledge of English or the Contractor shall have available on Site at all times a sufficient number of competent interpreters to ensure the proper transmission of instructions and information.”
Sub-Clause 16.4 Employment of Local Personnel	Add the following as Sub-Clause 16.4: “The Contractor is encouraged to employ staff and labour with appropriate qualifications and experience from sources within India.”
Sub-Clause 17.2 Notice to Engineer	Add the following as Sub-Clause 17.2: “The Contractor shall give to the Engineer not less than 48 (forty eight) hours’ notice of his intention to set out or give levels for any part of the Works so that timely arrangement may be made for checking or issuing instructions. He shall indicate therein by which date the information, if any is required by him.”
Sub-Clause 18.1 Boreholes & Exploratory Excavations	Substitute Sub-Clause 18.1 by the following: “If, at any time during the execution of the Works, the Engineer requires the Contractor to make boreholes or to carry out exploratory excavations in excess of the requirements specified elsewhere in the contract then such requirement shall be the subject of an instruction In accordance with Clause 51, unless an item or a provisional sum in respect of such work is included in the Bill of Quantities.

Sub-Clause 19.1 Safety, Security and Protection of Environment	Add the following as sub-paras (d), (e) and (f) to Sub-Clause 19.1. (d) Ensure that all lights provided by the Contractor shall be screened so as not to interfere with any signal light on the railways or with any traffic or signal lights of any local or other authority. (e) Ensure that during continuance of the contract, the Contractor and his Sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made thereunder, regulations, notifications and bye- laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. He shall ensure that air emissions, surface discharges and effluents from the Site shall not exceed the values, if any, indicated in the Technical Specifications given at Section IV and shall in no case exceed the values prescribed by Applicable Law. Salient features of some of the major laws that are applicable are given below: <u>The Water (Prevention and Control of Pollution) Act, 1974</u> This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. Pollution means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms. <u>The Air (Prevention and Control of Pollution) Act, 1981</u> This provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment. <u>The Environment (Protection) Act, 1986</u> This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property. <u>The Public Liability Insurance Act, 1991.</u> This provides for public
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	liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government. Take all reasonable steps to implement the environmental mitigation measures provided for in the 'Environmental Management Plan' [Part 1(b) of Contract Agreement] in accordance with objective, procedures, and other provisions set forth therein and shall not take any action which would prevent or interfere with such implementation. Further, he shall adhere to all environmental requirements of the contract.
Sub-Clause 20.4 Employer's Risks.	Amend Sub-Clause 20.4 to read as follows: The Employer's risks are (a) insofar as they directly affect the execution of the works in the country where the Permanent Works are to be executed: (i) war and hostilities (whether war be declared or not), invasion, act of foreign enemies; (ii) rebellion, revolution, insurrection, or military or usurped power, or civil war; (iii) ionizing radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof; (iv) pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds; riot, commotion or disorder, unless solely restricted to the employees of the contractor or of his sub contractors and arising from the conduct of the works; (b) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract. (c) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible; and (d) any operation of the forces of nature (insofar as it occurs on the Site) which an experienced contractor: (i) could not have reasonably foreseen, or (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:

	(A) prevent loss or damage to physical property from occurring by taking appropriate measures, or (B) Insure against such loss or damage.
Sub-Clause 21.1 Insurance of Works and Contractor's Equipment	Add the following as sub para (d) to Sub-Clause 21.1: (d) The insurance shall be issued by an insurance company which has been determined by the Contractor to be acceptable to the Employer.
Sub-Clause 21.2 Scope of Cover	Amend sub para (a) of Sub-Clause 21.2 by substituting the words “from the start of work at the Site” by the words “from the first working day after the Commencement Date”. Add the following as sub-para (c) to Sub-Clause 21.2 : It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times during the period of the Contract.
Sub-Clause 21.4 Exclusions	Amend the text of Sub-Clause 21.4 to read as follows: There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by the risks listed under Sub-Clause 20.4 sub-para (a) (i) to (iv).
Sub-Clause 21.5 War Risk Insurance	Add the following as Sub-Clause 21.5: If the Contractor receives instructions from the Employer to insure against War Risk, such insurance, if available, shall be effected, at the cost of the Employer, with an insurance company acceptable to the Employer and shall be in the joint names of the Contractor and the Employer.
Sub-Clause 25.1 Evidence and Terms of Insurances	Amend Sub-Clause 25.1 by inserting the words “as soon as practicable after the respective insurances have been taken out but in any case” before the words “prior to the start of work at the Site”
Sub-Clause 25.5 Source of Insurance	“The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to, the insurance referred to in Clause 21, 23 and 24) with insurers from India, which have been determined to be acceptable to the Employer.
Sub-Clause 26.2 Inspections and Audit by Employer	Add the following as Sub-Clause 26.2: The Contractor shall permit Employer or its representative to inspect the Contractor's accounts and records relating to the performance of the Contract and to have them audited by auditors appointed by Employer.

Sub-Clause 29.1 Interference with Traffic and Adjoining Properties	In sub-para (b) of Sub-Clause 29.1 add the words “railway and any other right of way” after the words “private roads”. Add the following as sub-paras (c), (d) and (e) after sub-para (b) of Sub-Clause 29.1 : (c) “If any equipment (floating or otherwise) belonging to or hired by the Contractor or any Sub-contractor or any person employed by the Contractor or by any Sub-contractor or any materials or things therein or therefrom sink from any cause whatsoever, it shall immediately be reported by the Contractor to the competent authorities and the Engineer or his Representative, and Contractor shall forthwith, at his cost raise and remove any such equipment, materials or things or otherwise deal with the same as the Engineer may direct. The fact that such sunken equipment, materials or things are insured or have been declared a total loss or do not represent any further value shall not absolve the Contractor from his obligations under this Clause to raise and remove the same. Until such sunken equipment or materials or things have been raised and removed, the Contractor shall set such buoys and display at night such lights and do all such things for the safety as may be required by the competent authorities or by the Engineer’s Representative. In the event of the Contractor not carrying out the obligations imposed on him by this Clause, the Employer may cause to set buoys and display at night, lights on such equipment and raise and remove the same without prejudice to the right of the Employer to hold the Contractor liable and all expenses and consequences thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from him as a debt by the Employer or may be deducted by the Employer from any moneys due or which may become due to the Contractor.” (d) “In case, any operation connected with traffic necessitated diversion, obstruction or closure of any road, railway or any other Right of Way, the approval of the Engineer or the Engineer’s Representative and the concerned authorities shall be obtained well in advance by the Contractor.” (e) The Contractor shall so conduct his operations as to have under construction no greater length or amount of work than he can carry out efficiently with due regard to the convenience of the public. The Contractor shall maintain the existing road in its normal condition suitable for the season of the year, from the time he commences the work on Site until the completion of the works. Within 56 days of the date of receipt of the Letter of Acceptance, the Contractor shall submit a programme for the approval of the Engineer describing in detail how he intends to pass traffic through the Works in general, and at bridge Sites in particular.
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Sub-Clause 30.2 Transport of Contractor's Equipment or Temporary Works	Add the following paragraph at the end of Sub-Clause 30.2: "If it is found necessary for the Contractor to move one or more loads of heavy constructional plant and equipment, materials or pre-constructed units or parts of units of work over roads, highways, bridges on which such oversized and overweight items are not normally allowed to be moved, the Contractor shall obtain prior permission from the concerned authorities. Payments for complying with the requirements, if any, for protection of or strengthening of the roads, highways or bridges shall be made by the Contractor and such expenses shall be deemed to be included in his Contract Price".
Sub-Clause 34.2 Compliance with Labour Regulations	Add the following as Sub-Clause 34.2 "During continuance of the contract, the Contractor and his Sub- contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications / bye-laws / acts / rules / regulations including amendments, if any, on the part of the Contractor, the Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub-contractor shall in no case shall be treated as the employees of the Employer at any point of time. Salient features of some major Labour Laws applicable to establishments engaged in Construction of Civil Works are given in Annexure A-1 for reference purpose. The contractor and sub contractor shall comply with the safety and welfare provisions as detailed in Annexure A-II.
Sub-Clause 35.1 Returns of Labour and Contractors Equipment.	Add the following at the end of Sub-Clause 35.1 For Contractors Labour Regulations, refer to Sub-Clause 34.2.
Sub-Clause 36.6 Methodology	Add the following as Sub-Clause 36.6 At least 14 days in advance of his programmed commencement of each item of

	work, the Contractor shall furnish for the Engineer's consent and under intimation to the Employer, the methodology he intends to adopt for executing the item, providing full details of the method of working, equipment to be deployed and measures to be adopted for ensuring quality of construction and safety.
Sub-Clause 37.4 Rejection	Add the following after Sub-Clause 37.4: "If the contractor persistently causes testing referred to in this Clause to be repeated, it will be considered to be a failure on behalf of the contractor to comply with a notice issued pursuant to this clause by the Engineer."
Sub-Clause 41.1 Commencement of work.	Substitute Sub-Clause 41.1 by the following : "The Contractor shall commence the Works on Site within the period stated in the Appendix to Bid after receipt by him of a Notice to this effect from the Engineer/Employer, to be issued within 90 days after signing of the agreement. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay. The requirement to 'commence the works at Site' shall be fulfilled if:- a) a programme has been submitted in accordance with Sub-Clause 14.1 Conditions of Particular Application; b) the Contractor's authorised Representative vide Sub-Clause 15.1 with full supporting staff are in position at Site; Equipment, Plant, material and labour for the work programmed for execution in the first two months, have been mobilised at the Site."
Sub-Clause 45.1 Restriction on Working Hours	Delete Sub-Clause 45.1 and substitute: "Subject to any provision to the contrary contained in the Contract, the Contractor shall have the option to work continuously by day and by night and on locally recognized holidays, days of rest, provided that the contractors makes suitable arrangements for the same and inform the Engineer well in advance. Provided further that the rates and prices entered by the contractors in the Priced Bill of Quantities shall include all costs and charges whatsoever involved in working out side normal hours or holidays and on rest days. For working by night suitable light arrangement for sufficient illumination shall be made.
Sub-Clause 48.5 Prevention from Testing	Add the following as Sub-Clause 48.5 : If the Contractor is prevented from carrying out the Tests on Completion by a cause for which the Employer or the Engineer or other Contractors employed by the Employer are responsible, the Employer shall be deemed to have taken over the Works on the date when the Tests on Completion would have been completed but for such prevention. The Engineer shall issue a Taking-Over Certificate accordingly. Provided always that the Works shall not be deemed to have been taken over if they are not substantially completed in accordance with

	the Contract. If the Works are taken over under this Sub-Clause, the Contractor shall nevertheless carry out the Tests on Completion during the Defects Liability Period. The Engineer shall require the Tests to be carried out by giving 14 days' notice. Any additional costs to which the Contractor may be put, in making the Tests on Completion during the Defects Liability Period, shall be added to the Contract Price.
Sub-Clause 49.5 Extension of Defects Liability Period	Add the following as Sub-Clause 49.5 : The Employer shall be entitled subject to Sub-Clause 53.6 (Employer's Claims) to an extension of the Defects Liability Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, a Defects Liability Period shall not be extended by more than twelve months.
Sub-Clause 51.2 Instructions for Variations	Delete the following sentence from Sub Clause 51.2 "Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities".
Sub-Clause 52.1 Valuation of Variation	Substitute the words "if, in the opinion of the Engineer, the same shall be applicable" in the fourth and fifth line by the following: "Subject to provisions of Sub Clause 52.2". Substitute the words "the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable," in the seventh and eighth line by the following: "the rates and prices in the Contract, after application of tender premium/discount, shall be used as the basis for valuation so far as may be reasonable,"
Sub-Clause 52.2 Power of Engineer to Fix Rates	Add the following paragraphs at the end of Sub-Clause 52.2: Provided further that no change in the rate or price for any item contained in the BOQ shall be considered unless the actual quantity of work executed under the item exceeds due to any reason the quantity set out in the BOQ by more than 25% and if the cost of additional quantity at the BOQ rate exceeds by 1 per cent of initial Contract Price, the Engineer shall fix the new rate to allow for the change in the quantity subject to restrictions under Sub- Clause 2.1, duly applying tender premium/discount while fixing such rates. The new rate fixed by the Engineer shall be applicable only to the quantity exceeding 1.25 times the BOQ quantity. Provided further that no change in the rate for any item contained in the BOQ shall be considered in case of any decrease in the actual

	quantity of work executed. <u>Note: Rate or price of any item contained in the BOQ is the rate given in the priced bill of quantities duly applying percentage</u>
Sub-Clause 54.5 Conditions of Hire of Contractor's Equipment	Delete Sub-Clause 54.5
Sub-Clause 54.6 Cost for the purpose of Clause 63	Delete Sub-Clause 54.6
Sub Clause 54.7 Incorporation of Clause in Subcontracts	Delete Sub-Clause 54.7
Sub-Clause 54.9 Contractor request for material & equipment.	Add the following as Sub-Clause 54.9 : No material, plant or equipment would be supplied by Employer. The Contractor would be fully responsible for all materials, plants and equipment required for the construction.
Sub-Clause 55.2 Omissions of Quantities	Add the following as Sub-Clause 55.2 : Items of the Works provided in the Bill of Quantities for which no rate or price has been entered in the Contract shall be considered as included in other rates and prices in the Contract and will not be paid for separately by the Employer.
Sub-Clause 57.1 Method of Measurement of Works	Add the following paragraph at the end of Sub-Clause 57.1 : “The Engineer/Engineer's Representative shall be responsible for ensuring that all measurements are taken as per specifications and drawings for the Works and are recorded in the measurement book of the Employer. The Engineer/Engineer's Representative (Team Leader) should ensure that he has verified the measurements of not less than 50% of value in each bill and countersign the measurement books accordingly.”
Clause 60 Certificates and Payment	Delete Sub-Clauses 60.1 to 60.10 and substitute by the following Sub-Clauses 60.1 to 60.13:

Sub-Clause 60.1 Monthly Statements	“The Contractor shall submit a statement in 3 copies to the Engineer by the 7th day of each month, signed by the authorized representative of the Contractor, for the work executed up to the end of the previous month in a tabulated form, approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled. The statement shall include the following items, as applicable, which shall be taken into account in the sequence listed: (a) the estimated value of permanent Works executed up to the end of the month in question determined in accordance with Sub-Clause 56.1, at base unit rates or prices of priced bill of quantities duly applying percentage above/below quoted in the Financial bid on the total estimated amount; (b) the actual value certified for payment for the permanent Works executed up to the end of the previous month, (c) the estimated value of the permanent Works for the month in question, obtained by deducting (b) from (a); (d) the value of any variations executed upto the end of the month in question, less the amount certified in the previous Interim Payment Certificate, pursuant to Clause 52 and 2.1; (e) any credit or debit for the month in question in respect of materials and Plant for permanent Works under the conditions set forth in Sub-Clause 60.3; (f) amounts reflecting changes in cost and legislation, pursuant to Clause 70; (g) any amount to be withheld under the retention provisions of Sub-Clause 60.4; (h) any amount to be deducted as repayment of the Advance under the provisions of Sub-Clause 60.6; (i) amounts to be deducted for all taxes in accordance with Clause 73 thereof
Sub-Clause 60.2 Monthly Payments	Within 5 days of receipt of the monthly statement from the Contractor in pursuant to Sub-Clause 60.1, the Engineer shall broadly determine the amount due to the Contractor and shall, accordingly, recommend to the Employer for release to the Contractor up to a maximum of 75% of net payment as part payment against the monthly statement, pending certificate of IPC by the Engineer. Within 2 days of the receipt of recommendation of the Engineer, the Employer shall make payment to the Contractor. The said statement shall be approved or amended by the Engineer in such a way that, in his opinion, it reflects the amount due to the Contractor in accordance with the Contract, after deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Employer. In cases where there is a difference of opinion as to the value of any item, the Engineer’s view shall prevail. Within 21 days’ of the receipt of the monthly statement referred to in Sub-Clause

	60.1, the Engineer shall determine the amount due to the Contractor and shall deliver to the Employer and the Contractor, an Interim Payment Certificate, certifying the amounts due to the Contractor after adjusting the payment already released to the Contractor against the said statement. Notwithstanding the terms of this Sub-Clause or any other clause of the Contract, no amount will be certified by the Engineer for payment until the performance security has been provided by the Contractor and approved by the Employer.
Sub-Clause 60.3 Materials and Plant For the Permanent Works	Deleted
Sub-Clause 60.4 Retention Money	A retention amounting to 5 (five) per cent of the amount due, determined in accordance with the procedure set out in Sub-Clause 60.1 shall be made by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money as stated in the Appendix to Bid. The Contractor may, at his option, replace the retention amount with an unconditional bank guarantee from the bank or Insurance Surety Bond from Insurance Company acceptable to the Employer at the following stages: (a) After the amount reaches half the value of the limit of Retention Money as stated in the appendix to bid. (b) After the amount reaches the maximum limit of the retention money as stated in the appendix to bid.
Sub-Clause 60.5 Payment of Retention Money	Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one half of the Retention Money (or Bank Guarantee/ Insurance Surety Bond, which replaced Retention Money) or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works, only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works shall be certified by the Engineer for payment (or release of Bank Guarantee/ Insurance Surety Bond) to the Contractor. The Contractor may substitute the remaining retention money with an on-demand bank guarantee/ Insurance Surety Bond in a form and from a source, acceptable to the Employer. Upon expiration of 365 days after the Defects Liability Period of the Works or final payment by the employer pursuant to Sub-Clause 60.12, whichever is earlier, the other half of the Retention Money(or Bank Guarantee/ Insurance Surety Bond which replaced Retention Money) shall be certified by the Engineer for payment or release of bank guarantee to the Contractor. Provided that, in the event of different Defects Liability Periods being applicable to the different Sections or parts of the Permanent Works pursuant to Clause 48, the expression “expiration of the Defects Liability Period” shall, for the purpose of this Sub-Clause, be deemed to mean the expiration of the latest of such periods.

**Sub-Clause 60.6
Advance Payment**

- (a) The Employer will make an interest bearing advance payment (rate of interest given in Appendix to Bid) to the Contractor exclusively for the costs of mobilization in respect of the Works upto an amount equivalent to 10 (Ten) percent of the Contract Price named in the Letter of Acceptance in two stages as provided in Appendix to Bid. Payment of such advance amount will be due under separate certification by the Engineer after (i) execution of the Form of Agreement by the parties hereto; (ii) submission by the Contractor of the performance security in accordance with Sub-Clause 10.1; and (iii) submission by the Contractor of an unconditional bank guarantee in a form and by a bank or Insurance Surety Bond from Insurance Company acceptable to the Employer in amount equal to the advance payment. The Bank guarantee/ Insurance Surety Bond may be split into not more than four separate Bank Guarantees/ Insurance Surety Bond and each having minimum value of 2.5% of the Contract Price. Such Bank Guarantee/ Insurance Surety Bond shall remain effective till date of completion of work, until the advance payment has been repaid pursuant to sub para (c) below, but the amount thereof shall be progressively reduced in accordance with the value of bank guarantees furnished by the Contractor and the amount repaid by him as indicated in Interim Payment Certificates issued in accordance with this Clause.
- (b) In addition to the advance mentioned in sub-para (a) above, the Employer will pay another interest bearing advance as provided in Appendix to Bid against key construction equipment required for the Works as per agreed construction programme and brought to Site, if so requested by the Contractor subject to the same terms and conditions specified in paragraph (a) above. The maximum of such advance shall be five percent of the Contract Price. This advance shall be further subject to the condition that (i) such equipment are considered by the Engineer to be necessary for the Works and (ii) these equipment have been verified to have been brought to site.
- (c) The advance payment under sub para (a) and (b) above shall be repaid through percentage deductions from the interim payments certified by the Engineer in accordance with this Clause. Deductions shall commence in the next Interim Payment Certificate either following that in which the total of all interim payments certified to the Contractor has reached 20 (Twenty) percent of the Contract Price less Provisional Sums or after 12 months from the date of commencement whichever period concludes earlier and shall be made at the rate of 25 (Twenty Five) percent of the amount of all Interim Payment Certificates until such time as the advance payment including interest has been repaid; always provided that the advance payment including interest shall be completely repaid prior to the time when 80 percent of the Contract Price has been certified for payment. Provided further that repayment of advance can be made prior to the above schedule at the option of the Contractor.
- (d) The advance shall be used by the Contractor exclusively for mobilization expenditures, including the acquisition of new Construction equipments, in connection with the Works. All withdrawals under Mobilization advance and equipment advance should be effected before the period stipulated in this regard in the Appendix to Bid. Should the Contractor misappropriate any portion of the advance, it shall become due and payable immediately, and no further advance will be made to the Contractor thereafter. The term “misappropriate” in the above context

	would mean include, renewal of or transfer of any of the mobilization advance so drawn for investment outside the project account. The contractor will submit a utilization certificate specifying the usage of the sums so drawn have been put to, supported by complete documentary evidence within 6 months from the date of release of such advances.
Sub-Clause 60.7 Correction of Certificates	The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which has been issued by him. Further, he shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.
Sub-Clause 60.8 Statement at Completion	Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of a Statement at Completion with supporting documents showing in detail, in the form approved by the Engineer:- (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate; (b) any further sums which the Contractor considers to be due to him; and (c) an estimate of amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2.
Sub-Clause 60.9 Final Statement	Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration six copies of a Draft Final Statement with supporting documents showing in detail, in the form approved by the Engineer, (a) the value of all work done in accordance with the Contract; and (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise. If the Engineer disagrees with or cannot verify any part of the Draft Final Statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the Draft Final Statement as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed (for the purposes of these Conditions referred to as the "Final Statement"). If following the discussions between the Engineer and the Contractor and any

	changes to the Draft Final Statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the Draft Final Statement, if any, which are not in dispute. The dispute shall then be settled in accordance with Clause 67. The Final Statement shall be the agreed upon settlement of the dispute.
Sub-Clause 60.10 Discharge	Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.11 has been made and the performance security referred to in Sub-Clause 10.1 has been returned to the Contractor.
Sub-Clause 60.11 Final Payment Certificate	Within 28 days after receipt of the Final Statement, and the written discharge, the Engineer shall deliver to the Employer (with a copy to the Contractor) a Final Payment Certificate stating: (a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise, and (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be.
Sub-Clause 60.12 Time of Payment and Interest	(a) The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall, subject to Clause 47, be paid by the Employer to the Contractor as follows: (i) in the case of Interim Payment Certificates, within 42 days after the Contractor's monthly statement has been submitted to the Engineer for certification, pursuant to Sub-Clause 60.1. Provided that if the Engineer's Interim Payment Certificate has not yet been issued within said 42 days, the Employer shall pay the amount shown in the Contractor's monthly statement and that any discrepancy shall be added to, or deducted from, the next payment to the Contractor; (ii) in the case of the Final Payment Certificate pursuant to Sub-Clause 60.11, within 84 days after the Final Statement and written discharge have been submitted to the Engineer for certification; (b) In the event of the failure of the Employer to make payment within the time stated, the Employer shall pay to the Contractor interest at the rate stated in the Appendix to Bid upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise.

Sub-Clause 60.13 Cessation of Employer's Liability	The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.8.
Sub-Clause 62.1 Defects Liability Certificate	Delete the following sentence from Sub-Clause 62.1 Provided that the issue of the Defects Liability Certificate shall not be a condition precedent to payment to the contractor of the second portion of the Retention Money in accordance with the conditions set out in Sub-Clause 60.3.
Sub-Clause 63.1 Default of Contractor	Delete Sub-Clause 63.1 and substitute by the following:- The Employer shall be entitled to terminate the contract if the contractor: (a) fails to carry out any obligation under the contract. (b) without reasonable excuse fails - (i) to commence the works in accordance with Sub-Clause 41.1 or (ii) to proceed with the works, or any section thereof, within 28 days after received notice pursuant to Sub-Clause 46.1. (c) has failed to comply with a notice issued pursuant to Sub- Clause 37.4 or an instruction issued pursuant to Sub-Clause 39.1 within 28 days after having received. (d) abandons the works or otherwise plainly demonstrates the intention not to continue performance of his obligation under the contract. (e) sub-contracts the works or assigns the contract without the specific prior written permission of the Engineer. (f) despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the contract, (g) deleted. (h) has failed to furnish the required securities or extension thereof in terms of the contract. (i) 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 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, In any of these events or circumstances, the Employer may, upon giving 14 days notice to the contractor, terminate the contract and expel the contractor

	from the site. However, in the case of sub- paragraphs (i), the Employer may by notice terminate the contract immediately. The Employer's election to terminate the contract shall not prejudice any other rights of the Employer, under the contract or otherwise. The contractor shall then leave the site and deliver any required goods, all contractor's documents, and other design documents made by or for him, to the Engineer. 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 sub-contract, and (ii) for the protection of life or property or for the safety of the works. After termination, 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 goods, contractor's documents and other design documents made by or on behalf of the contractor. 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.
Sub-Clause 63.3 Payment after Termination	Substitute Sub-Clause 63.3 with the following : If the Employer terminates the Contractor's employment under this Clause, he shall not be liable to pay to the Contractor any further amount in respect of the Contract until the Engineer shall determine the value of the work done up to the date of termination of contract, less payments received, less other recoveries due in terms of the Contract, less payment due, if any, under Clause 47, less taxes due to be deducted at source as per applicable laws, less the percentage indicated in the Appendix to Bid to apply to the value work not completed at BOQ rates plus the variations already approved by the Engineer and less cost of remedying of any defects in the works executed by the Contractor. If the Engineer determines that a sum is payable to the Contractor, he will then be entitled to receive such sum from the Employer. If the Engineer determines that a sum is due from the Contractor and payable to the Employer, it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.
Sub-Clause 63.5 Invocation of the Bank Guarantee/ Insurance Surety Bond	Add the following as Sub-Clause 63.5 Without prejudice to the generality of the provisions of the Agreements, if the contractor unsuccessfully challenges any action of the Employer before a Court of Law regarding invocation of the Bank Guarantee/ Insurance Surety Bond furnished under the Agreement or termination of the Agreement and any interim directions are obtained against the Employer, which are subsequently vacated by the Court, then the contractor shall be liable to pay:

	(a) in case of a Bank Guarantee/ Insurance Surety Bond interest @ 12% of the Bank Guarantee/ Insurance Surety Bond amount; or (b) in case of termination of the Agreement an amount equivalent to 1/2000 per day of the contract value. for the intervening period starting from the date of the interim directions till the final disposal of the case by the Court. Both the parties agree that the damages in Clause (b) is a genuine pre-estimate of the loss suffered by the Employer.
Sub-Clause 63.6 Corrupt or Fraudulent Practices	Add the following as Sub-Clause 63.6 : If in the judgment of the Employer, the Contractor has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract, then the Employer may, after having given 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 63 shall apply as if such termination had been made under Sub- Clause 63.1 For the purpose of this Sub-Clause : “Corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
Sub-Clause 63.7 Integrity Pact	Contractor shall comply with the provisions of NHAI/Policy Guidelines/Vigilance/2020 Policy Circular No.: 5.8 dated 29.12.2020 issued by NHAI (Employer) i.e. Model Agreement furnished herewith for Integrity Pact (IP) shall be part of the Contract Agreement.
Sub-Clause 65.2 Special Risks	Substitute Sub-Clause 65.2 with the following : The Special Risks are the risks defined under para (a), sub-paras (i) to (iv) of Sub-Clause 20.4.
Sub-Clause 67.1 Disputes Review Board	Substitute Clause 67.1 by the following: (i) In the event of 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”) either Party may

	call upon the Authority Engineer, to mediate and assist the Parties in arriving at an amicable settlement thereof. (i) 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. (ii) Dispute Resolution Board (DRB): Failing mediation by the Authority Engineer or without the intervention of the Authority Engineer, either Party may require such Dispute to be referred to the Dispute Resolution Board (“DRB”) in accordance with the procedure set forth in Schedule-S to the Contract Agreement. The decision(s) of the Dispute Resolution Board shall be binding on both parties who shall promptly give effect to unless and until the same is revised/modified, as hereinafter provided, in a Conciliation/Arbitral Tribunal.
Sub-Clause 67.2 Conciliation	Substitute Clause 67.2 by the following: If either the Authority or the Contractor is dissatisfied with any decision of the DRB, and/ or if the DRB is unable to resolve the dispute, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 67.3 but before resorting to such arbitration, the parties agree to explore conciliation by the Conciliation Committees of Independent Experts set up by the Authority in accordance with the procedure decided by the panel of such experts and notified by the Authority on its website including its subsequent amendments. In the event of the conciliation proceedings being successful, the parties to the dispute would sign the written settlement agreement and the conciliators would authenticate the same. Such settlement agreement would then be binding on the parties in terms of Section 73 of the Arbitration Act. In case of failure of the conciliation process even at the level of the Conciliation Committee, either party may refer the Dispute to arbitration in accordance with the provisions of Clause 67.3.
Sub-Clause 67.3 Arbitration	Substitute Sub-Clause 67.3 with the following: Any Dispute which is not resolved amicably by conciliation as provided in Clause 67.2 shall be finally settled by arbitration as set forth below: i. The Dispute shall be finally referred to Society for Affordable Resolution of disputes (hereinafter called as SAROD), a Society registered under Society's ACT 1860 vide Registration no. S/RŠ/SW1049/2013 duly represented by Authority and National Highways Builders Federation (NHBF). The dispute shall be dealt with in terms of Rules of SAROD. The detailed procedure for conducting Arbitration shall be governed by the Rules of SAROD and Provisions of Arbitration & Conciliation Act, 1996, as amended from time to time. The Dispute shall be governed by Substantive Law of India. ii. The appointment of Tribunal, Code of conduct for Arbitrators and fees and expenses of SAROD and Arbitral Tribunal shall also be governed by the Rules of SAROD as amended from time to time. iii. Subject to the provisions of THE LIMITATION ACT, 1963, as amended

	from time to time, Arbitration may be commenced during or after the Contract Period, provided that the obligations of Authority and the Contractor shall not be altered by reason of the Arbitration being conducted during the Contract Period. iv. The venue of Arbitration shall be New Delhi or a place selected by governing body of SAROD and the language for all documents and communications between the parties shall be English. v. The expenses incurred by each party in connection with the preparation, presentation, etc., of arbitral proceedings shall be shared by each party itself. 67.3.2 The arbitrators shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this Clause 67 shall be final and binding on the Parties as from the date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay. 67.3.3 The Contractor and the Authority agree that an Award may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated. 67.3.4 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. Further, the parties unconditionally acknowledge and agree that notwithstanding any dispute between them, each party shall proceed with the performance of its respective obligations, pending resolution of Dispute in accordance with this Article.
Sub-Clause 67.4 Failure to Comply with Recommendation	Deleted
Sub-Clause 67.5 Adjudication by Regulatory Authority, Tribunal or Commission	Added Sub-Clause 67.5 by the following: In the event of constitution of a statutory regulatory authority, tribunal or commission, as the case may be, with powers to adjudicate upon disputes between the Contractor and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 67.3, 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.
Sub-Clause 68.2 Notice to Employer and Engineer	For the purposes of this Sub-clause, the addresses are those specified in the Appendix to Bid.
Clause 69 Default of Employer	In Sub-Clause 69.1, 69.4, and 69.5, substitute "Sub-Clause 60.10" for "Sub-Clause 60.12."

Sub-Clause 69.1 Default of Employer	In Sub-Clause 69.1 (a), substitute the words “28 days” with “56days”. In the last para, substitute the words “14 days” with “28 days”.
Sub-Clause 69.2 Removal of Contractor’s Equipment’s	In Sub-Clause 69.2, substitute the words “14 days” with “28 days”.
Sub-Clause 69.3 Payment on Termination	In Sub-Clause 69.3, delete the text from “, but in addition to the payments specified. ” to the end of the Sub-Clause.
Clause 70 Changes in Cost and Legislation	Deleted
Sub-Clause 70.1 Price Adjustment	Sub-Clauses 70.1 substitute with the following: The amounts payable to the Contractor and valued at base rates and prices in the Interim Payment Certificates issued by the Engineer, pursuant to Sub-Clause 60.1, shall be adjusted in respect of the rise or fall in the index cost for labour, Contractor’s Equipment, Plant, materials, and other inputs to the Works, by the addition or subtraction of the amounts determined by the formulae prescribed in this Clause. Provided no price adjustment on any account will be admissible, if original Contract duration is 18 months or less.
Sub-Clause 70.2 Other Changes in Cost	Sub-Clauses 70.2 and substitute with the following: To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.
Sub-Clause 70.3 Price Adjustment Formulae	DELETED
Sub-Clause 70.4 Base, Current and Provisional Indices	The base cost indices or prices shall be those prevailing in the previous month prior to the closing date for submission of bids. Current indices or prices shall be those prevailing in the previous month to which a particular Interim Payment Certificate is related. If at any time the current indices are not available, provisional indices as determined by the Engineer will be used, subject to subsequent correction of the amounts paid to the Contractor when the applicable

	indices become available.
Sub-Clause 70.5 Limit of Price Adjustment	Deleted
Sub-Clause 70.6 Subsequent Legislation	If, after the date 28 days prior to the latest date for submission of tenders for the Contract, there occur changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under the preceding Sub-Clauses of this Clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost, shall not be separately paid or credited if the same shall already have taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Sub-Clause (1) to (5) of this Clause.
Sub-Clause 71.1 Currency Restrictions	Delete Sub-Clause 71.1
Sub-Clause 72.1 Rates of Exchange	Delete Sub-Clause 72.1
Sub-Clause 72.2 Currency Proportions	Delete Sub-Clause 72.2
Sub-Clause 72.3 Currencies of Payment for Provisional Sums	Delete Sub-Clause 72.3
Sub-Clause 73.1 Foreign Taxation	Additional Clauses The prices bid by the Contractor shall include all taxes, duties, and other charges imposed outside the Employer's country on the production, manufacture, sale, and transport of the Contractor's Equipment, Plant, materials, and supplies to be used on or furnished under the Contract, and on the services performed under the Contract.
Sub-Clause 73.2	The prices bid by the Contractor shall include all customs duties, import duties, business taxes, and income and other taxes local/state govt., octroi, royalty etc.,

Local Taxation	that may be levied in accordance with the laws and regulations being in force on the date 28 days prior to the latest date for submission of bids in the Employer's country on the Contractor's Equipment, Plant, materials, and supplies (permanent, temporary, and consumable) acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in the Employer's country on profits made by him in respect of the Contract. All taxes shall be deducted from Contractor's payment as per relevant legislation.
Sub-Clause 73.3 Personal Income Tax	The Contractor's staff and labour will be liable to pay personal income tax in the Employer's country in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.
Sub-Clause 73.4 Advance Deduction of Taxes	Advance deduction of taxes shall be made from each Interim Payment Certificate in accordance with the relevant provisions of all prevailing Acts and Regulations.
Sub-Clause 73.5 Customs and Security Requirements	The Contractor shall comply with all regulations for the time being imposed by the Customs and Port Security Authorities in respect of the passage of plant, vehicles, materials, and personnel through Customs barriers.
Clause 74 Joint Venture	a) Deleted.
Sub-Clause 75.1 Termination of Contract for Employer's Convenience	The Employer shall be entitled to terminate this Contract at any time for the Employer's convenience after giving 56 days' prior notice to the Contractor, with a copy to the Engineer. In the event of such termination, the Contractor a) shall proceed as provided in Sub-Clause 65.7; and b) shall be paid by the Employer as provided in Sub-Clause 65.8.
Sub-Clause 76.1 Details to be Confidential	The Contractor shall treat the details of the Contract as private and confidential, save insofar as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract, the same shall be referred to the Employer whose determination shall be final.
Sub-Clause 77.1 Contractor's Temporary Moorings	Should the Contractor for the purpose of the Contract desire to provide temporary mooring for his craft and floating plant, he will be allowed to do so in positions and manners approved by the Engineer. The Contractor shall not lay such moorings so as to interfere with traffic in the waterways and such moorings shall be removed if and when required by the Engineer and/or the Employer.
Sub-Clause 78.1	The Contractor shall provide and maintain upon the Works and the Site,

Life-saving Appliances and First-aid equipment	sufficient, proper and efficient life-saving appliances and first-aid equipment to the approval of the Engineer. The appliances and equipment shall be available for use at all times during the Contract Period.
Sub-Clause 79.1 Drawings and Photographs of the Works	The Contractor shall not disclose details of drawings furnished to him without the prior approval of the Engineer in writing. No photograph of the Works or any part thereof or equipment employed thereon shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his Sub-contractors without the prior approval of the Engineer in writing and no such photographs shall be published or otherwise circulated without the approval of the Engineer in writing.
Sub-Clause 80.1 The Apprentices Act, 1961	The Contractor shall duly comply with the provisions of the Apprentices Act, 1961, the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so, he shall be subject to all liabilities and penalties provided by the said Act and the said Rules.
Sub-Clause 81.1 Inspection of work and Review of progress by Employer.	The Employer or his representative may inspect and review the progress of works and may issue appropriate directions to the Engineer for taking necessary action. The Employer or his representative may also test check the quality and quantity of the materials brought to the site for incorporating in the permanent works and may also test check the quantity, quality and workmanship of the Work executed in the presence of the representatives of the Engineer and the Contractor.
Sub-Clause 81.2 Performance Appraisal.	The Employer or his representative shall carry out the performance appraisal of the Contractor through the Engineer in the format prescribed by the Employer.
Sub-Clause 82.1 Use of explosives	The Contractor shall not use explosives unless the use of explosives is so provided or ordered or authorized. The use of controlled blasting with blasting nets shall be permitted wherever so required in the opinion of the Engineer. The blasting nets shall be strong enough to withstand the impact of the blasted material and shall be got approved by the Engineer. The Contractor shall comply with the requirements of the following Sub-Clauses besides the law of the land as applicable.
Sub-Clause 82.2 Precautions for the use of explosives.	The Contractor shall at all times take every possible precaution and shall comply with appropriate laws and regulations relating to the importation, handling, transportation, storage and use of explosives and shall, at all times when engaged in blasting operations, post sufficient warning flagmen, to the full satisfaction of the Engineer.
Sub-Clause 82.3 Permission for use of explosives.	The Contractor shall at all times make full liaison with and inform well in advance and obtain such permission as is required from all Government Authorities, public bodies and private parties whatsoever concerned or affected or likely to be concerned or affected by blasting operations.

Sub-Clause 82.4 Storage of explosives	The Contractor shall pay all license fees and charges, which may be, required for storage of explosives or in respect of any other matter whatsoever.
Sub-Clause 82.5 Road closure during Blasting Operations	The road shall be closed for traffic during blasting and clearing operations for judiciously enough time till the road is fully cleared of all the blasted material. The blasting operations shall be fully coordinated with the Engineer, NHAI, Military, Police and Civil Authorities etc.
Sub-Clause 83.1 Noise and Disturbance	All Works shall be carried out without unreasonable noise and disturbance. The Contractor shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out the Works and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in regard or in relation to such liability. The precautions for safeguarding the Environment shall be the responsibility of the Contractor and to be complied in accordance with Clause 111 of Technical Specifications of MORTH "SPECIFICATIONS FOR ROAD AND BRIDGE WORKS" (FIFTH REVISION 2013)
Sub-Clause 84.1 Pollution.	Subject and without prejudice to any other provision of the Contract and the law of the land and its obligations as applicable, the Contractor shall take all reasonable precautions. a) in connection with rivers, streams, waterways, drains, water- courses, lakes, reservoirs and the like to prevent: i) Silting; ii) Erosion of their beds or banks; and iii) Pollution of the water so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life. b) in connection with underground water resources including percolating water to prevent: i) any interference with the supply to or obstruction from such sources; and ii) pollution of the water so as to affect adversely the quality thereof.
Clause 85.1 Maintenance of Right of Way	DELETED
Clause 85.2 Video Recording	DELETED

Annexure-AI**Salient features of some major Labour Laws applicable to establishments engaged in Construction of Civil Works**

- (i) Workmen Compensation Act, 1923
The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- (ii) Payment of Gratuity Act, 1972
Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death at the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- (iii) Employees' PF and Miscellaneous Provisions Act, 1952
The Act provides for monthly contributions by the employer plus workers @10 % or 8.33 %. The benefits payable under the Act are:
 - (a) Pension or family pension on retirement or death as the case may be.
 - (b) Deposit linked insurance on the death in harness of the worker.
 - (c) Payment of PF accumulation on retirement/death etc.
- (iv) Maternity Benefit Act, 1951
The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (v) Contract Labour (Regulation and Abolition) Act, 1970
The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided by the Principal Employer by Law. The principal employer is required to take Certificate of Registration and the Contractor is required to take a License from the designated Officer. The Act is applicable to the establishments or Contractor of principal employer if they employ 20 or more contract labour.
- (vi) Minimum Wages Act, 1948
The employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employment.
- (vii) Payment of Wages Act, 1936
It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (viii) Equal Remuneration Act, 1979
The Act provides for payment of equal wages for work of equal nature to Male and Female workers and not for making discrimination against Female employees in the matters of transfers, training and promotions etc.
- (ix) Payment of Bonus Act, 1965
The Act is applicable to all establishments employing 20 or more workmen. The Act provides for payments of annual bonus subject to a minimum of 8.33 % of wages and maximum of 20% of wages to employees drawing Rs. 3,500/- per month or less. The bonus to be paid to employees getting Rs. 2,500/- per month or above up to Rs.3,500/- per month

shall be worked out by taking wages as Rs.2,500/- per month only. The Act does not apply to certain establishments. The newly set up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of the Act.

(x) Industrial Disputes Act, 1947

The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

(xi) Industrial Employment (Standing Orders) Act, 1946

It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the employer on matters provided in the Act and get the same certified by the designated Authority.

(xii) Trade Unions Act, 1926

The Act lays down the procedure for registration of trade unions of workmen and employees. The trade unions registered under the Act have been given certain immunities from civil and criminal liabilities.

(xiii) Child Labour (Prohibition and Regulation) Act, 1986

The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of child labour is prohibited in Building and Construction Industry.

(xiv) Inter-State Migrant Workmen's (Regulation of Employment and Conditions of Service) Act, 1979

The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter-state migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home upto the establishment and back, etc

(xv) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996

All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay Cess at rate not exceeding 2% of the cost of construction as may be notified by the Government. The employer of the establishment is required to provide safety measures at the Building or Construction work and other welfare measures, such as Canteens, First-aid facilities, Ambulance, Housing accommodation for Workers near the workplace etc. The employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

(xvi) The Factories Act, 1948

The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

Annexure-III**Safety & Welfare Provisions for labour to be employed by the Contractor**

All necessary personal safety equipment as considered adequate by the Engineer shall be available for use of persons employed on the Site and maintained in a condition suitable for immediate use; and the Contractor shall take adequate steps to ensure proper use of such equipment by those concerned.

1. Safety Provisions:

The Contractor shall comply with all the precautions as required for the safety of the workmen.

- (i) All workmen at site shall be provided with safety helmets and yellow/orange jackets. Workmen required on site during night hours shall be provided with fluorescent yellow jackets with reflective lopes.
- (ii) Workers employed on mixing asphaltic materials, cement, lime mortars, concrete etc. shall be provided with protective footwear, protective goggles.
- (iii) Those engaged in handling any material, which is injurious to the eyes, shall be provided with protective goggles.
- (iv) Those engaged in welding works shall be provided with welder's protective eye-shield.
- (v) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (vi) Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except for such short period work as can be done safely from ladders. When a ladder is used, an extra labourer shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot-holds and hand-holds shall be provided on the ladder, which shall be given an inclination not steeper than 1/4 to 1.
- (vii) Scaffolding or staging more than 3.25 meters above the ground or floor, swung or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the support or structure.
- (viii) Working platforms, gangways, and stairways shall be so constructed that they do not sag unduly or unequally, and if the height of any platform or gangway or stairway is more than 3.25 meters above ground level or floor level, it shall have closely spaced boards, have adequate width and be suitably provided with guard rails as described in (ii) above.
- (ix) Every opening in the floor of a structure or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of one meter.
- (x) Safe means of access and egress shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 meters in length. The width between side rails in a rung ladder shall in no case be less than 30 cm for ladders up to and including 3 meters in length. For longer

ladders the width shall be increased at least 6 mm for each additional 30 cm of length. Spacing of steps shall be uniform and shall not exceed 30 cm.

- (xi) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accidents and shall be bound to bear the expenses of defending every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.
- (xii) Excavation and Trenching: All trenches, 1.5 meters or more in depth, shall at all times be supplied with at least one ladder for each 20 meters in length or fraction thereof. Ladders shall be extended from the bottom of the trench to at least 1 meter above the surface of the ground. The sides of a trench, which is 1.5 meters or more in depth shall be stepped back to provide a suitable slope, or be securely held by timber bracing so as to avoid the danger of side collapse. Excavated material shall not be placed within 1.5 meters of the edge of any trench or half the depth of the trench, whichever is more. Excavation shall be made from the top to the bottom. Under no circumstances shall undermining or undercutting be done.
- (xiii) When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that manhole covers are open and manholes are ventilated at least for an hour before workers are allowed to go into them. Manholes so open shall be cordoned off with suitable railing and provide warning signals or boards to prevent accidents to the public.
- (xiv) Demolition: Before any demolition work is commenced and also during the process of the work:
 - a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - b) No electric cable or apparatus, which is liable to be a source of danger other than a cable or apparatus used by operators, shall remain electrically charged:
 - c) All practical steps shall be taken to prevent danger to persons employed by the Employer, from risk of fire or explosion, or flooding. No floor, roof or other part of a building shall be so overloaded with debris or materials as to render it unsafe.
- (xv) When work is performed near any place where there is risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- (xvi) Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following:
 - (a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defects and shall be kept in good working order be regularly inspected and properly maintained.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from defects.
 - (c) For every hoisting machine and every chain hook, shackle, swivel and pulley block used in hoisting, lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting

machine and all gear referred to above shall be plainly marked with safe working load. In case of a hoisting machine or a variable safe working load, each safe working load and conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to in the paragraph above shall be loaded beyond safe working load except for the purpose of testing

- (xvii) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards; hoisting appliances shall be provided with such means as will reduce the risk of accident during descent of load to the minimum. Adequate precautions shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating mats, working apparel such as gloves, sleeves and boots, as may be necessary, shall be provided. Workers shall not wear any rings, watches and carry keys or other material which are good conductors of electricity.
- (xviii) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in a safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.
- (xix) These safety provisions shall be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work location. Persons responsible for ensuring compliance with the Safety Code shall be named therein by the Contractor.
- (xx) To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the Contractor shall be open to inspection by the Engineer or his Representative.
- (xxi) Notwithstanding anything contained in condition (i) to (xv) above, the Contractor shall remain liable to comply with the provisions of all acts, rules, regulations and bylaws for the time being in force in India and applicable in this matter.

The Contractor shall be responsible for observance, by his sub-contractors, of the foregoing provisions.

2. Labour Welfare Provisions:

(i) First Aid:

At every workplace, there shall be maintained in a readily accessible place first aid appliances including an adequate supply of sterilised dressings and sterilised cotton wool as prescribed in the Factory Rules of the State in which the work is carried on. The appliances shall be kept in good order and, in large work places, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

(ii) Accommodation for Labour:

The Contractor shall during the progress of the work provide, erect and maintain necessary temporary living accommodation and ancillary facilities for labour at his own expense to standards and scales approved by the Engineer.

(iii) Drinking Water:

In every workplace, there shall be provided and maintained at suitable places easily accessible to labour, a sufficient supply of cold water fit for drinking.

Where drinking water is obtained from an intermittent public water supply each workplace shall be provided with storage tanks where drinking water shall be stored.

Every water supply storage shall be at a distance of not less than 15 meters from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of any latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door, which shall be dust proof and waterproof.

A reliable pump shall be fitted to each covered well. The trap door shall be kept locked and opened only for cleaning or inspection, which shall be done at least once a month.

(iv) Washing and Bathing Places:

Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept in clean and drained condition.

(v) Scale of Accommodation in Latrines and Urinals:

There shall be provided within the precincts of every workplace, latrines and urinals in an accessible place, and the accommodation, separately for each for these, shall not be less than at the following scale:

	No. of Seats
a) Where number of persons does not exceed 50	2
b) Where number of persons exceed 50 but does not exceed 100	3
c) For additional persons per 100 or part thereof	3

In particular cases, the Engineer shall have the power to increase the requirement, wherever necessary.

(vi) Latrines and Urinals:

Except in workplaces provided with water-flushed latrines connected with a water borne sewage system, all latrines shall be provided with dry-earth system (receptacles) which shall be cleaned at least four times daily and at least twice during working hours and kept in a strictly sanitary condition. Receptacles shall be tarred inside and outside at least once a year.

If women are employed, separate latrines and urinals, screened from those for men and marked in the vernacular in conspicuous letters "For women only", shall be provided. Those for men shall be similarly marked "For men only". A poster showing the figure of a man and a woman shall also be exhibited at the entrance to latrines for each sex. There shall be adequate supply of water, close to latrines and urinals.

(vii) Construction of Latrines:

Inside walls shall be constructed of masonry or other non-absorbent material and shall be cement- washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for the purpose and kept available for inspection. Latrines shall have at least a thatched roof.

(viii) Disposal of Excreta:

Unless otherwise arranged for by the local sanitary authority, arrangement for proper disposal of excreta by incineration at the workplace shall be made by means of a suitable incinerator approved by the local medical health and

municipal or cantonment authorities. Alternatively, excreta may be disposed of by putting a layer of night soils at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn into manure).

The Contractor shall, at his own expense, carry out all instructions issued to him by the Engineer to effect proper disposal of soil and other conservancy work in respect of Contractor's work-purpose or employees on the site. The Contractor shall be responsible for payment of any charges, which may be levied by municipal or cantonment authority for execution of such work on his behalf.

(ix) Provisions of shelters during rest:

At every workplace, there shall be provided, free of cost, four suitable sheds, two for meals and two others for rest, separately for use of men and women labour. The height of each shelter shall not be less than 3 meters from floor level to lowest part of roof. Sheds shall be kept clean and the space provided shall be on the basis of at least 0.5 sq.m. per head.

(x) Crèches:

At a place where women are ordinarily employed, there shall be provided at least one hut for use of children under the age of 6 years belonging to such women. Huts shall not be constructed to a standard lower than that of thatched roof, mud floor and wall with wooden planks spread over mud floor and covered with matting.

Huts shall be provided with suitable and sufficient openings, for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be a maidservant in attendance. Sanitary utensils shall be provided to the satisfaction of local medical, health a municipal or cantonment authorities. Use of huts shall be restricted to children, their attendants and mothers of children.

(xi) Canteen:

A cooked food canteen on a moderate scale shall be provided for the benefit of workers wherever it is considered necessary.

(xii) Planning, siting and erection of the above mentioned structures shall be approved by the Engineer or his Representative and the whole of such temporary accommodation shall at all times during the progress of the Works be kept tidy and in a clean and sanitary condition to the satisfaction of the Engineer or his Representative and at the Contractor's expense. The Contractor shall conform generally to sanitary requirements of local medical, health and municipal or cantonment authorities and at all times adopt such precautions as may be necessary to prevent soil pollution of the Site.

On completion of the Works, the whole of such temporary structures shall be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the whole of the site left clean and tidy, at the Contractor's expense, to the entire satisfaction of the Engineer.

(xiii) Anti-malarial precautions:

The Contractor shall, at his own expense, conform to all anti- malarial instructions given to him by the Engineer, including filling up any borrow pits which may have been dug by him.

(xiv) Awareness and Education of HIV/AIDS

The contractor shall provide/carryout HIV/AIDS awareness and training programme to its labour and management, at least twice per year during the construction period.

(xv) Child Labour Prohibition

The contractor shall not employ Child Labour for any works or in any manner under the Contract at any time. In the event that the Contractor uses child labour, the Employer shall terminate the Contract.

(xvi) Amendments:

The Employer may, from time to time, add to, or amend these Rules and issue such directions as it may be considered necessary for the proper implementation of these Rules or for the purpose of removing any difficulty, which may arise in the administration thereof.

Safety Code of Practice for working on slopes

1. The code is designed to promote the safety of all Department and Contract personnel while working on slopes at site where persons are at risk of falling by more than two meters.
2. No one may be allowed access to the site unless authorized by the engineer or the contractor
3. No person may work unaccompanied unless they are on a very gentle slope (less than 30 degree slope). All persons must leave the slope together to take refreshments, meals etc.
4. All fragile slopes should be clearly marked off and personnel informed of the dangers.
5. Extreme care must be exercised on slopes during adverse weather conditions as wind, rain; fog and darkness create their own hazards inherent in slope work. The site in-charge must assess the conditions with care before allowing access to the slopes. Only in emergencies may persons go on to the slopes in heavy rains or during hours of darkness. In such cases no person shall be allowed to go on the slopes unaccompanied.
6. All access equipment, ropes and tackle must be regularly inspected and maintained in good condition.
7. Where persons could fall over the edge of a slope, temporary guard rails or ropes are to be installed where practicable. All persons exposed to a risk of falling must be provided with a secure and well anchored safety line. Such a rope must be of sufficient strength to provide them with safe arrest in the event of a fall.
8. Care must be taken to prevent tools and loose objects falling from the slopes. Loose articles should be raised or lowered in a safe manner. They should not be carried up or down ladders unless, in the case of small items, which may be carried in a suitable shoulder bag.
9. Any scaffolding that is used must be composed of good quality materials. Scaffolding must be of appropriate capacity and correctly erected by competent workmen.
10. Ladders must be in good condition and adequate for the job. Ladders must extend one meter beyond the landing point and must be on a firm base, correctly pitched and lashed as soon as possible.
11. If there is any potential hazard to personnel below where the slope work is taking place, adequate temporary warning notices, barriers and "look out" persons need to be employed. Where appropriate standards traffic warning and control measures must be taken.
12. Appropriate protective clothing shall be issued, including, where necessary, protective helmets and boots with steel toe caps and slip resistant soles.

Section IV

Technical Specification

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TECHNICAL SPECIFICATIONS

4.1 PREAMBLE:

The Technical Specifications contained herein shall be read in conjunction with the other Bidding Documents as specified.

4.2 GENERAL REQUIREMENTS:

The Technical Specifications in accordance with which the entire work described hereinafter shall be executed and completed by the Contractor shall comprise of the following:

4.3 PART – I – GENERAL TECHNICAL SPECIFICATIONS:

Technical Specifications for Average 40 lux

Solar Street Light streetlight as per technical specs consists of solar photovoltaic module, battery with battery management system, MPPT charge controller.

A. LUMINAIRE:

The Solar Light luminaire shall have highly efficient white dimmable LEDs with lumen output of a minimum of 21000 Lumens, and a typical correlated color temperature ranging from 5500-6000K with CRI>70 and lenses with efficient bat wing optics designed for efficient light distribution for secondary roads. The Efficacy of Luminaire shall be of Minimum 175 Lumens / Watts. Wattage of Luminaire should not be More than 120W in Order to optimize required PV / Battery Sizing mention in technical specs. Life will be 50000 Burning hours life class. The Successful bidder shall submit LM 79 & LM 80 report of the luminaire and LED respectively. The LM79 report should be from a NABL accredited LAB. OEM Name should be embossed on the housing of luminaire. The Luminaire housing should be made of pressure die cast aluminum housing and should have protection of IP66 and IK10. The LEDs used should be High Power LEDs.

B. CHARGE CONTROLLER:

The Solar Streetlighting System should be provided with a highly efficient, microprocessor based MPPT charge controller with driver mounted on the same board to minimize power loss and increase efficiency. The Charge controller should have a minimum IP67 metal weatherproof housing with silicon potting and several layer of protections with IP67 connectors for all terminations related to battery, PV Panel and Luminaire. The Charge controllers with open termination points should not be used. The Charge controller should be a separate independent unit (not part of luminaire) for proper thermal management.

The Charge controller should meet minimum below mentioned parameters.

- Ambient operating temperature must range from -20°C to 60°C
- Should be able to take PV input of up-to 600Wp
- Should be able to drive load of up-to 150W.
- Charge controllers shall be compatible with LiFePO4 battery.
- Must have visual LED indications for easy fault diagnosis.
- The Controller Efficiency shall be more than 95% and shall have the following in-built protection features:
 - Battery and PV reverse polarity
 - Load open, over current and short circuit protection

- Battery over charge and over discharge
 - Over temperature protection with persistence time of 60 sec
 - Charging and discharging over temperature protection
- The charge controller should come with suitable hand-held device interface/GUI to monitor critical parameters related to load, panel and battery.
 - The charge controller should be able to perform onsite programming and configuration with interface such as GUI/Remote for wattage and dimming profile for flexibility and easy operation of the system.

SOLAR MODULE:

Supply of high-efficiency **540 Wp monocrystalline solar photovoltaic (PV) module** with advanced PERC, half-cut cell technology. Module should meet international standards for safety, durability, and performance.

Solar module should meet the below specifications

Parameter	Specification
Module Type	Monocrystalline, PERC, Half-cut cell technology
Cell Configuration	144 (12X12) half-cut cells
Open Circuit Voltage (Voc)	~49 – 51 V
Short Circuit Current (Isc)	~13.5 – 13.9 A
Maximum Power Voltage (Vmp)	~41 – 42 V
Maximum Power Current (Imp)	~12.8 – 13.2 A
Module Efficiency	≥ 20.8%
Temperature Coefficient (Pmax)	-0.35% / °C or better
Nominal Operating Cell Temp.	45 ± 2 °C
Glass	High-transmittance, anti-reflective tempered glass (3.2 mm)
Frame	Anodized aluminum alloy
Junction Box	IP68 rated, with bypass diodes
Cable & Connectors	UV-resistant cables with MC4 or equivalent connectors

BATTERY:

Battery sub-system shall be placed underground and should be IP68 certified Lithium Ferro Phosphate (LiFePO₄) battery. Lithium ferro phosphate battery integrates highly efficient technology to get long service lifetime, high performance in deep discharging. It can be used in wide range of ambient temperature and keep good performance of constant power input.

Supply of maintenance-free, rechargeable LiFePO₄ battery pack with IP68 certified Lithium Ferro Phosphate (LiFePO₄) battery suitable for placing underground. Battery should offer high energy density, long cycle life, and safe thermal/chemical stability.

Sizing of Battery to be calculated to consider two-night backup. Size should be minimum 25.6V 150AH Working to ensure no Blackout.

- Battery rating should be designed based for Min 24 Hours Backup.
- Battery should be highly efficient Lithium Ferro phosphate
- Battery should have IP68 ABS made housing for safe underground usage.
- Must have cable to IP67 connectors to connect with charge controller.
- Battery shall be able to work in operating temperature range:

Charge: 0 °C ~55 °C, ≤85%RH

Discharge: -20 °C ~60 °C, ≤85%RH

- The battery life cycle for LiFePO₄ shall be approx. 2000 Cycles.

To ensure the system performance and the reliability, the battery sub-system shall fully comply with suitable standards for Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications.

IP68 certification, safety certification UN38.3

Cell Certification: BIS IS 16046:2018, IEC 62133-2: 2017, UL 1642 , ROHS 2011/65/EU

Pole should be Hot deep Galvanized as per IS 2629, Foundation Bolt Threaded portion should be Galvanized and balance primer coated or Whole Foundation Bolt should be made by HT steel

Hot Roll Product of Non alloy Structural Steel grade S-355 Other parts MS as per IS 2062 also followed by BSEN 10025 specifications.

4.4 PART – II – SUPPLEMENTARY TECHNICAL SPECIFICATIONS

DELETED

4.5 TESTS

I: Table 1 BIS / IES Standards: The following Test Reports shall be submitted before execution of the work so as to avoid sub-standard work at site.

Type of Test	Standard
Safety of Luminaire for Road and Street Lighting	IEC60598-1:2014 ; IEC 60598-1:2014AMD1:2017
Photometry	LM79-08 from NABL accredited LAB
Safety of Power Converters used in solar Panel Equipment	IEC 62109-1
Performance Evaluation of Maximum Power Point Tracking (MPPT)	EN 50530
EMC immunity requirements	IEC 61547
Radio disturbance characteristics	CISPR 15
Safety of Lithium Ferro Phosphate Battery IP68	IEC 62133 & UL1642 & Safety Certificate UN38.3
Safety of Solar Panel Module	IEC 61730-1,2 & IEC 61215
Low Voltage Directive (LVD),2014/35/EU	EN 62493: 2015 EN 60598-1: 2015 + A1: 2018 EN 60598-2-3:2003 + A1:2011
Restriction of the use of certain Hazardous Substances in electrical and electronic equipment Directive (RoHS),2011/65/EU	EN50581:2012

4.6 Maintenance Procedures

The Contractor shall repair/rectify the defects and deficiencies within 30 days as notified by Engineer / NHAI.

4.7 Project Specific Provision

As the Project Road is a running highway in operation, therefore construction has to be done after approved traffic diversion plan and newly constructed pavement layer has to be opened to traffic after proper curing time only as per direction of Engineer in charge / Authority. All the cost related to the Traffic Diversion shall be borne by the Contractor and NHAI shall not pay any extra cost.

NATIONAL HIGHWAYS AUTHORITY OF INDIA

Bidding Document – Item Rate Contract

International Competitive Bidding

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

VOLUME - III

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Section V

Form of Bid and Appendix to Bid PAGE 1-4



Section V

A: FORM OF BID

(Clause 13 of Section I)

(The Appendix forms part of the Bid. Bidders are required to fill up all the blanks in the form of Bid and the Appendix thereto)

Name of the contract:

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

To

Shri R.K. Singh,
CGM (Tech) & Regional Officer
Regional Office
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)
Tele: 0866 - 2483910
Fax: 0866 - 2474496
Email : rovijayawada@nhai.org

Dear Sir,

1. Having examined the Bidding Document including Invitation to Bids, Instructions to Bidders, General Condition of Contract, Condition of Particular Application, Technical Specifications, Bill of Quantities, Drawings, Schedules, Annexures and Addenda for the execution of the above named Works, we, the undersigned, offer to execute and complete such Works and remedy any defects therein in conformity with the said Bidding Document for the total Bid Price as indicated in Financial Bid submitted online.
2. We acknowledge that the Appendix to Bid forms part of our Bid.
3. We undertake, if our Bid is accepted, to commence the Works on Site within the period stated in the Appendix to Bid hereto after receipt of an order of the Engineer's notice to commence, and to complete and deliver the sections and the whole of the Works comprised in the Contract within the period stated in the Appendix to Bid hereto.
4. If our Bid is accepted, we will furnish Performance Security (ies) in the form of Bank Guarantee(s) to be jointly and severally bound on us in accordance with the Conditions of Contract.
5. We agree to abide by this Bid for the period of one hundred and twenty (120) days after



the date of bid opening, and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

6. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this _____ day of _____ 20XX

Signature _____

Name of Authorised Signatory

in the capacity of _____ duly authorised¹ to sign Bid for and on behalf of _____

Address (in block capitals)

Name of Witness _____

Occupation of the Witness _____

Address of Witness

Signature of Witness _____

¹ Certified copy of Power of Attorney/Authorization for signature shall be furnished by the Contractor in accordance with Clause 20.2 of Instruction to Bidders (Section I) of Volume I and Qualification Form No. 12 of Section IX of Volume III.



B: APPENDIX TO BID

Sl. No.	Items	Conditions of Contract Clause/ Sub Clause	Particular Conditions for this Contract				
1.	Addresses	11.2	1. The Employer is: Name: CGM (Tech) & Regional Officer, National Highways Authority of India Address: Door No.41-29-45A, R.S.No.373/2A Near Kodandaramalayam Chalasani Nagar, Ranigarithota Krishnalanka, Vijayawada - 520 013 (AP) Name of authorized Representative: [***] 2. The Engineer is: <table><tr><th>Name of the NH section</th><th>Name of the Independent Engineer (IE)/ Supervision Consultant (SC)</th></tr><tr><td>Annavaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A</td><td>M/s. MSV International Inc in association with Sri infotech (IE)</td></tr></table>	Name of the NH section	Name of the Independent Engineer (IE)/ Supervision Consultant (SC)	Annavaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A	M/s. MSV International Inc in association with Sri infotech (IE)
Name of the NH section	Name of the Independent Engineer (IE)/ Supervision Consultant (SC)						
Annavaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A	M/s. MSV International Inc in association with Sri infotech (IE)						
2.	Language ability of Contractor’s Representative	15.2	English				
3.	Minimum amount of third party Insurance	23.2	Rupees Four million per occurrence, with number of occurrences unlimited.				
4.	Time for commencement of Works	41.1	30 days				
5.	Time of completion	43.1	04 Months				
6.	Amount of liquidated damages	47.1	1/2000 of contract price per day delay				
7.	Limit of liquidated damages	47.1	10% of contract price				
8.	Defects Liability Period	49.1	60 months				
9.	Limit of Retention Money	60.4	5% of contract price				
10.	Mobilization advance	60.6 (a)	(i) Payment of interest-bearing mobilization advance up to 5% of the contract price at commencement of work. (ii) Payment of additional interest bearing advance up to 5% of the contract price after the contractor has achieved a financial progress of 10% of the contract price. (iii) Rate of interest shall be 10% per annum.				



11.	Equipment advance	60.6 (b)	(i) Payment of interest bearing equipment advance up to 5% of the contract price against the new equipment purchased by the contractor on or after the date of issue of letter of acceptance, under its ownership, subject to production of proof of payment. No equipment advance shall be admissible on any other equipment where no purchase of equipment is involved (i.e. equipments already owned by the contractor) or equipments purchased under hire purchase scheme/ financing arrangement or on hired equipments, etc. (ii) Rate of interest shall be 10% per annum.				
12.	(a) Limiting Period of Withdrawal of Mobilization advance	60.6(d)	-				
	(b) Limiting Period of Withdrawal of Equipment advance	60.6 (d)	-				
13.	Rate of Interest upon unpaid sums	60.12 (b)	-				
14.	Recovery after Termination	63.3	20%				
15.	Integrity Pact	63.7	Contractor shall comply with the provisions of NHAI/Policy Guidelines/Vigilance/2020 Policy Circular No.: 5.8 dated 29.12.2020 issued by NHAI (Employer) i.e. Model Agreement furnished herewith for Integrity Pact (IP) shall be part of the Contract Agreement				
16.	Number of members of Dispute Review Board	67.1	Three				
17.	Member of Dispute Review Board (if not agreed) to be appointed by	67.1	Society for Affordable Redressal of Disputes				
18.	Number of Arbitrators	67.3	Three				
19.	Place of Arbitration	67.3	New Delhi				
20.	Members of the Arbitral Tribunal (if not agreed) to be appointed by	67.3	Society for Affordable Redressal of Disputes				
21.	Language of Arbitration	67.4	English				
22.	Fee of Arbitrators		Fee of Arbitrators shall be governed by NHAI Policy guidelines-2.1.71/2024 dated 01.02.2024 and subsequent amendments from time to time.				
23.	Notice to Employer and Engineer	68.2	The Engineer is –<table><tr><th>Name of the NH section</th><th>Name of the Independent Engineer (IE)/ Supervision Consultant (SC)</th></tr><tr><td>Annaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A</td><td>M/s. MSV International Inc in association with Sri infotech (IE)</td></tr></table>	Name of the NH section	Name of the Independent Engineer (IE)/ Supervision Consultant (SC)	Annaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A	M/s. MSV International Inc in association with Sri infotech (IE)
Name of the NH section	Name of the Independent Engineer (IE)/ Supervision Consultant (SC)						
Annaram - Diwancheruvu – Siddhantham section of NH- 16 & 216A	M/s. MSV International Inc in association with Sri infotech (IE)						

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis



			Name of Authorized Representative of Employer: Project Director, NHAI, PIU, Rajamahendravaram.
24.	Price Adjustment	70.3 (i)	-
		70.3(v)	-
		70.3(vi)	-



Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

Section VI

Bill of Quantities



SECTION-VI

BILL OF QUANTITIES/ PRICED BILL OF QUANTITIES

A. PREAMBLE

1. The Bill of Quantities/ Priced Bill of Quantities shall be read in conjunction with the Instruction to Bidders, Conditions of Contract, Technical Specifications, Drawings, Schedules, Annexures and Addenda.
2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices tendered in the Priced Bill of Quantities, except in so far as it is otherwise, provided under the Contract, include all constructional plant, labour, supervision, materials, all temporary works and false works, erection, maintenance, establishment and overhead charges, profit, taxes (excluding GST), duties and levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract and including remedy of any defects during the Defects Liability Period. The cost of all survey, soil Investigation, Detailed Design and proof Checking of all detail design of road works and proof checking of all structural designs to the extent as specified in Contract shall be paid by contractor within the scope of this contract.
4. The rates and prices shall be quoted entirely in Indian Rupee Currency.
5. A rate or price shall be entered as a single rate as Tender Premium % above/below on the amount in General Abstract. This percentage would be applicable for all the items of work in the contract for working out the rates for each item of work.
6. The whole cost of complying with the provisions of the Contract shall be deemed to have been included in the items provided in the priced Bill of Quantities.
7. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. Reference to the relevant sections of the contract documentation shall be made before entering rates or prices for item in the Bill of Quantities.
8. The method of measurement of completed work for payment shall be in accordance



with the provisions of MORT&H specification for Road and Bridge works fifth revision published by Indian Road Congress, New Delhi and latest IRC publications

9. Errors will be corrected by the Employer for any arithmetical errors pursuant to Clause 31 of the Instruction to Bidder, Section I, Volume-I.
10. Deleted
11. The Contractor shall not order materials directly against the quantities mentioned in BOQ and shall only base orders on the final working drawing and/or other instructions issued during the course of the Contract, after giving due consideration of the probable reuse of materials available at site and other dismantled materials that may accrue during execution of work.
12. The Clauses of the preamble shall apply to any additional or varied work which the Contractor may be required to execute under this Contract except specifically prescribed therein.
13. The bidder shall be deemed to have inspected and examined the nature and extent of partly completed works as described in the bidding document including the restoration of existing defects/damaged works.
14. Deleted
15. Existing top layers with significant damages, as directed by the Engineer, shall be got repaired/restored and measured under respective BOQ items. However, where the existing layers are not damaged expenses for required clearing and preparation of bed, to receive next layer, not covered in any of the BOQ item, shall be deemed to be incidental.
16. While starting the work, efforts required for removal/clearing of road blocks/materials at various locations shall be incidental to the work and no extra payment shall be considered for it.
17. Before handing over the completed work, the Contractor will ensure that the ROW of the complete project stretch is clear of all the debris and fairly level. This will be incidental to the work and no additional payment will be made.



B. ABBREVIATIONS

Abbreviations		For
Rs.	:	Indian Rupees
LS or SUM	:	Lump Sum
Nr.orNo.	:	Number
Lm or m or Rm or Rmt	:	Linear meter
KM.orkm.	:	Kilometer
hct.	:	Hectare
m ² orsq.m.	:	Square meter
m ³ or cum. or cum or Cum or cumt	:	Cubic meter
cc, c ³ or cum	:	Cubic centimeter
cum. km.	:	Cubic meter kilometer
KG or kg.	:	Kilogram
MT or Tone	:	Metric ton
HP	:	Horse Power
PS	:	Provisional Sum
IRC	:	Indian Roads Congress
MOST Specification/ Technical Specification	:	Refer Section - IV.
BIS	:	Bureau of Indian Standards
Prov.	:	Provisional
P.O.L. or POL	:	Petrol, Oil and Lubricants
Veh. month	:	Vehicle Month



**Priced Bill of
Quantities/
Bill of
Quantities**

ABSTRACT				
Name of work: Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.				
Sl. NO.	Description	Unit	Total Nos	Amount in Rs
1	Supply and Installation of 120W Solar LED based Solar Street Light system (Single arm) , 120Watt Solar LED based Lighting designed to achieve 40 Lux as per IRC Standards for optimal Lighting, 540 Watt Mono Crystalline Panels with 25 years warranty, 150-160 Ah 25.6 Volt lithium and prismatic battery with battery management system and MPPT Charger Controller, 9 meter GI Octagonal pole with 250mm bottom diameter 104mm top diameter and 4mm thick along with Fitting Accessories and Assembling including cost of foundation, Earthing for each pole and transportation charges etc complete for finished item of work, with 5 years DLP including theft/damaged covered after Installation / handover.	Each	195	29541525
2	Supply and Installation of 120W Solar LED based Solar Street Light system (Double arm) , 2 nos 120Watt Solar LED based Lighting designed to achieve 40 Lux as per IRC Standards for optimal Lighting, 2nos 540 Watt Mono Crystalline Panels with 25 years warranty, 2 nos 150-160 Ah 25.6 Volt lithium and prismatic battery with battery management system and MPPT Charger Controller, 9 meter GI Octagonal pole with 250mm bottom diameter 104mm top diameter and 4mm thick along with Fitting Accessories and Assembling including cost of foundation, Earthing for each pole and transportation charges etc complete for finished item of work, with 5 years DLP including theft/damaged covered after Installation / handover.	Each	335	87600825
	Total		530	117142350



BILL OF QUANTITIES							
S.No.	Accident Prone Area	NH	Chainage		Length (m)	No. of Solar poles proposed	Type of Solar
			From	To			
1	Bridge County	16	899.500	899.700	200	9	Double Arm
2	Reserve Forest Area	16	899.700	899.900	200	8	Double Arm
3	Reserve Forest Area	16	899.900	900.100	200	8	Double Arm
4	Reserve Forest Area	16	900.100	900.300	200	8	Double Arm
5	Reserve Forest Area	16	900.300	900.500	200	8	Double Arm
6	Reserve Forest Area	16	900.500	900.700	200	8	Double Arm
7	Reserve Forest Area	16	900.700	900.900	200	8	Double Arm
8	Reserve Forest Area	16	900.900	901.100	200	8	Double Arm
9	Reserve Forest Area	16	901.100	901.300	200	9	Double Arm
10	Diwancheruvu Fruits Market	16	901.300	901.500	200	9	Double Arm
11	Diwancheruvu Fruits Market	216A	901.570	901.770	200	9	Double Arm
12	Gammon Junction	216A	903.330	903.530	200	8	Double Arm
13	Delhi Public School, Diwancheruvu	216A	903.530	903.730	200	8	Double Arm
14	Shiva Temple, Diwancheruvu	216A	903.730	903.930	200	8	Double Arm
15	NHAI office	216A	903.930	904.130	200	8	Double Arm
16	Near Auto Nagar	216A	904.130	904.330	200	9	Double Arm
17	Reserve Forest Area	216A	904.625	904.825	200	8	Double Arm
18	Reserve Forest Area	216A	904.825	905.025	200	8	Double Arm
19	Reserve Forest Area	216A	905.025	905.225	200	8	Double Arm
20	Reserve Forest Area	216A	905.225	905.425	200	8	Double Arm
21	Reserve Forest Area	216A	905.425	905.625	200	8	Double Arm
22	Reserve Forest Area	216A	905.625	905.825	200	8	Double Arm
23	Reserve Forest Area	216A	905.825	906.025	200	8	Double Arm
24	HB Colony	216A	906.025	906.225	200	8	Double Arm
25	HB Colony	216A	906.225	906.300	75	4	Double Arm
26	Lalacheruvu	216A	907.100	907.300	200	8	Single Arm
27	Laxmi Hyundai Showroom	216A	907.300	907.500	200	8	Single Arm
28	Sri Ram Purram Road	216A	907.500	907.700	200	8	Single Arm
29	AV Apparao Road	216A	907.700	907.900	200	8	Single Arm
30	Rajahmundry	216A	907.900	908.100	200	8	Single Arm
31	Rajahmundry	216A	908.100	908.300	200	8	Single Arm
32	Rajahmundry	216A	908.300	908.500	200	8	Single Arm
33	Rajahmundry	216A	908.500	908.700	200	8	Single Arm
34	Delta Hospital	216A	908.700	908.900	200	8	Single Arm
35	Jawaharlal Nehru Road	216A	908.900	909.100	200	8	Single Arm
36	Best Price	216A	909.100	909.300	200	8	Single Arm
37	RTC Colony	216A	909.300	909.500	200	8	Single Arm



BILL OF QUANTITIES							
S.No.	Accident Prone Area	NH	Chainage		Length (m)	No. of Solar poles proposed	Type of Solar
			From	To			
38	RTC Colony	216A	909.500	909.700	200	8	Single Arm
39	V L Puram Road	216A	909.700	909.875	175	7	Single Arm
40	ITC	216A	909.875	910.275	400	16	Single Arm
41	Hukkumpeta	216A	911.400	911.600	200	8	Single Arm
42	Hukkumpeta	216A	911.600	911.775	175	7	Single Arm
43	Hukkumpeta	216A	911.775	911.975	200	16	Single Arm
44	Hukkumpeta	216A	911.975	912.175	200	16	Single Arm
45	Hukkumpeta	216A	912.175	912.375	200	16	Single Arm
46	Hukkumpeta	216A	912.375	912.475	100	5	Single Arm
47	Hukkumpeta	216A	912.325	912.525	200	8	Double Arm
48	Hukkumpeta	216A	912.525	912.725	200	8	Double Arm
49	Hukkumpeta	216A	912.725	912.925	200	8	Double Arm
50	Hukkumpeta	216A	912.925	913.125	200	8	Double Arm
51	Bommuru	216A	913.125	913.325	200	8	Double Arm
52	Bommuru	216A	913.325	913.525	200	8	Double Arm
53	Bommuru	216A	913.525	913.725	200	9	Double Arm
54	Dowleswaram	216A	915.675	915.875	200	8	Double Arm
55	Dowleswaram	216A	915.875	916.075	200	8	Double Arm
56	Dowleswaram	216A	916.075	916.275	200	8	Double Arm
57	Dowleswaram	216A	916.275	916.475	200	8	Double Arm
58	Dowleswaram	216A	916.475	916.675	200	8	Double Arm
59	Dowleswaram	216A	916.675	916.875	200	8	Double Arm
60	Dowleswaram	216A	916.875	917.075	200	8	Double Arm
61	Dowleswaram	216A	917.075	917.275	200	8	Double Arm
62	Dowleswaram	216A	917.275	917.475	200	8	Double Arm
63	Dowleswaram	216A	917.475	917.575	100	5	Double Arm
Total					12425	530	

Note:

1. The chainages mentioned above are tentative only and the exact locations of lighting shall be finalized in consultation with PD/IE.
2. Pole to pole spacing should be 25 m.



Section VII

**Form of Bid Security, Form of Bid
Security Declaration / Form of
Performance Security/ Additional
Performance Security, Form of Advance
Payment Security, Form of Agreement.**

PAGE 1-21

SECTION VII

- **FORM OF BID SECURITY**
- **FORM OF PERFORMANCE SECURITY/ ADDITIONAL
PERFORMANCE SECURITY**
- **FORM OF ADVANCE PAYMENT SECURITY**
- **FORM OF AGREEMENT**

SECTION VII

Bank Guarantee for BID Security (Refer Clauses 17.1)

B.G. No.

Dated:

1. In consideration of you, National Highways Authority of India, having its office at Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520013 (hereinafter referred to as the “Authority”, which expression shall unless it be repugnant to the subject or context thereof include its successors and assigns) having agreed to receive the BID of..... and having its registered office at (hereinafter referred to as the “Bidder” which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns), for the <Name of the Project> (hereinafter referred to as “the Project”) pursuant to the Bidding Document dated issued in respect of the Project and other related documents including without limitation the draft contract Agreement (hereinafter collectively referred to as “Bidding Documents”), we (Name of the Bank) having our registered office at and one of its branches at..... (hereinafter referred to as the “Bank”), at the request of the Bidder, do hereby in terms of Clause 17.1 of Section I (ITB), irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the Bidding Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. **** (Rupees ***** only) (hereinafter referred to as the “Guarantee”) as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.
2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Bank.
3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents including failure of the said Bidder to keep its BID open during the BID validity period as set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our

liability under this Guarantee shall be restricted to an amount not exceeding Rs. **** (Rupees **** only).

4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the BID Due Date inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.
5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.
6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
7. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the BIDs or the BID validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.
8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
9. We undertake to make the payment on receipt of your notice of claim on us

addressed to [name of Bank along with branch address] and delivered at our above branch which shall be deemed to have been duly authorised to receive the said notice of claim.

10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealised.
11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.
12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Guarantee for and on behalf of the Bank.
13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. ***** (Rupees *****only). The Bank shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 9 hereof, on or before [*** (indicate date falling 180 days after the BID Due Date)].
14. This guarantee shall also be operatable at our.....Branch at Vijayawada, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
15. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of NHAI, details of which is as under:

S. No.	Particulars	Details
1.	Name of Beneficiary	National Highways Authority of India
2.	Name of Bank	Canara Bank
3.	Account No.	33431010005577
4.	IFSC Code	CNRB0013343

Signed and Delivered by Bank

By the hand of Mr./Ms, its and authorised official.

(Signature of the Authorised Signatory)
(Official-Seal)

Surety Bond for Bid Security
(Refer Clause 17.1)

S.B. No.

Dated:

1. In consideration of you, National Highways Authority of India, having its office at Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520013, (hereinafter referred to as the "**Authority**", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of.....and having its registered office at.....(and acting on behalf of its Consortium) (hereinafter referred to as the "**Bidder**" which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns), for the <Name of the Project> (hereinafter referred to as "the Project") pursuant to the Bidding Document dated..... issued in respect of the Project and other related documents including without limitation the draft concession/contract agreement (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Surety Insurer) having our registered office at..... and one of its branches at..... (hereinafter referred to as the "Surety Insurer"), at the request of the Bidder, do hereby in terms of clause 17.1 of Section I (ITB), irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the Bidding Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. ****(Rupees ****only) (hereinafter referred to as the "Surety Bond") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder, if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.
2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Surety Insurer.
3. We, the Surety Insurer, do hereby unconditionally undertake to pay the amounts due and payable under this Surety Bond without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents including failure of the said Bidder to keep its Bid open during the Bid validity period as set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Surety Insurer under this Surety Bond. However, our liability under this Surety Bond shall be restricted to an amount not exceeding Rs. **** (Rupees ****only).

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4. This Surety Bond shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the Bid Due Date and a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Surety Insurer, and shall continue to be enforceable till all amounts under this Surety Bond have been paid.
 5. We, the Surety Insurer, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, Inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.
 6. The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the Surety Insurer or any absorption, merger or amalgamation of the Bidder or the Surety Insurer with any other person.
 7. In order to give full effect to this Surety Bond, the Authority shall be entitled to treat the Surety Insurer as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Surety Insurer under this Surety Bond from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the Bids or the Bid validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfillment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Surety Insurer shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Surety Insurer from its such liability.
 8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given in writing or made if addressed to the Surety Insurer and sent by courier or by registered post or by certified e-mail to the Surety Insurer at the address or e-mail set forth herein.
 9. We undertake to make the payment on receipt of your notice of claim on us addressed to name of Surety Insurer along with branch address and delivered at our above branch who shall be deemed to have been duly authorised to receive the said notice of claim.

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10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Surety Insurer and the Surety Bond herein contained shall be enforceable against the Surety Insurer, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Surety Insurer hereunder, be outstanding or unrealised.
 11. We, the Surety Insurer, further undertake not to revoke this Surety Bond during its currency except with the previous express consent of the Authority in writing.
 12. The Surety Insurer declares that it has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Surety Insurer.
 13. For the avoidance of doubt, the Surety Insurer's liability under this Surety Bond shall be restricted to Rs. **** (Rupees **** only). The Surety Insurer shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Surety insurer in accordance with paragraph 9 hereof, on or before [*** (indicate date falling 180 days after the Bid Due Date)].
 14. This Surety Bond shall also be operatable at our, branch at Vijayawada from whom, confirmation regarding the issue of this Surety Bond or extension/renewal thereof shall be made available on demand. In the contingency of this Surety Bond being invoked and payment hereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
 15. The Insurance Surety Bond shall be verified from the specific portal created for this purpose.

Signed and Delivered by Company

By the hand of Mr./Ms.....its.... and authorised official

(Signature of the Authorised Signatory)
(Official Seal)

Amount of Bid Security in figures and words in accordance with Sub-Clause 17.1 of Instructions to Bidders (Section I Volume-I)

FORM OF BID SECURITY DECLARATION

To

The CGM (Tech) & Regional Officer
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam,
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)

Name of the work:

I hereby submit a declaration that the bid submitted by the undersigned, on behalf of the bidder, [Name of the bidder], shall not be withdrawn or modified during the period of validity i.e., not less than 120 (on hundred twenty) days from the bid due date.

I, on behalf of the bidder, [Name of the bidder], also accept the fact that in case the bid is withdrawn or modified during the period of its validity or we do not accept the correction of bid price pursuant to Clause 31 or if we fail to sign the contract in case the work is awarded to us or we fail to submit a performance security before the deadline defined in this bid document, then [Name of the bidder] will be suspended for participation in the tendering process for the works of MORTH / NHAI / NHIDCL and works under other centrally sponsored schemes, for a period of as decided by NHAI.

For _____ [Name of the bidder]

(Signature, Name and Designation of the Authorized Signatory)

(Official Seal)

Date

Place

SECTION – VII

FORM OF BANK GUARANTEE
[Performance Security/Additional Performance Security]

To

CGM (Tech) & Regional Officer,
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada-520013(AP)

WHEREAS _____ [name and address of Contractor]

(hereafter called the “Contractor”) has undertaken, in pursuance of Letter of Acceptance (LOA) No.

_____ Dated _____ for <Name of the Project> (hereinafter called the “Contract”).

AND WHEREAS the Contract requires the Contractor to furnish the Performance Security/ Additional Performance Security} for due and faithful performance of its obligations, under and in accordance with the Contract, during the {Contract Period/Construction Period/ Defects Liability Period and Maintenance Period} in a sum of Rs..... cr. (Rupeescrore) (the “**Guarantee Amount**”¹).

AND WHEREAS we, through our branch at..... (the “Bank”) have agreed to furnish this Bank Guarantee (hereinafter called the “Guarantee”) by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor’s obligations during the {Contract Period/ Construction Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Contract, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Authority, under the hand of an officer not below the rank of General Manager, National Highways Authority of India, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Contract shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Contract and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by

¹ Guarantee Amount for Performance Security and Additional Performance Security shall be calculated as per Contract.

their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Contract or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Contract or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Contract and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Contract or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Contract.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on ****. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Contract.

12. This Guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.
13. This guarantee shall also be operatable at our Branch at Vijayawada, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
14. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of NHAI, details of which is as under:

S. No.	Particulars	Details
1.	Name of Beneficiary	National Highways Authority of India
2.	Name of Bank	Canara Bank
3.	Account No.	33431010005577
4.	IFSC Code	CNRB0013343

Signed and sealed this day of, 20..... at

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

FORM OF SURETY BOND
[Performance Security/Additional Performance Security]

To

Regional Officer,
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada-520013(AP)

WHEREAS _____ [name and address of Contractor] (hereafter called the "**Contractor**") has undertaken, in pursuance of Letter of Acceptance (LOA) No. _____ Dated _____ for <Name of the Project> (hereinafter called the "**Contract**").

AND WHEREAS the Contract requires the Contractor to furnish` an (Performance Security/Additional Performance Security) for due and faithful performance of its obligations, under and in accordance with the Contract, during the (Contract Period/Construction Period/ Defects Liability Period and Maintenance Period) in a sum of Rs.....cr. (Rupeescrore) (the "**Surety Bond amount**").

AND WHEREAS we,.....through our branch at (the "**Surety Insurer**") have agreed to furnish this **Surety Bond** by way of Performance security.

NOW, THEREFORE, the **Surety Insurer** hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The **Surety Insurer** hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the (Contract Period/Construction Period/ Defects Liability Period and Maintenance Period) under and in accordance with the Contract, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the **Surety Bond** Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Authority, under the hand of an officer not below the rank of General Manager, NHAI, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Contract shall be conclusive, final and binding on the **Surety Insurer**. The **Surety Insurer** further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Contract and its decision that the Contractor is in default shall be final and binding on the **Surety Insurer**, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this **Surety Bond**, the Authority shall be entitled to act as if the **Surety Insurer** were the principal debtor and any/Change in the constitution of the Contractor and/or the Surety Insurer, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the **Surety Insurer** under this **Surety Bond**.

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4. It shall not be necessary, and the **Surety Insurer** hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the **Surety Insurer** its demand under this **Surety Bond**.
 5. The Authority shall have the liberty, without affecting in any manner the liability of the **Surety Insurer** under this **Surety Bond**, to vary at any time, the terms and conditions of the Contract or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Contract or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Contract and/or the securities available to the Authority, and the **Surety Insurer** shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the **Surety Insurer** from its liability and obligation under this **Surety Bond** and the **Surety Insurer** hereby waives all of its rights under any such law.
 6. This **Surety Bond** is in addition to and not in substitution of any other **Surety Bond** or security now or which may hereafter be held by the Authority in respect of or relating to the Contract or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Contract.
 7. Notwithstanding anything contained hereinbefore, the liability of the **Surety Insurer** under this **Surety Bond** is restricted to the **Surety Bond** Amount and this **Surety Bond** will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the **Surety Insurer** under this **Surety Bond** all rights of the Authority under this **Surety Bond** shall be forfeited and the **Surety Insurer** shall be relieved from its liabilities hereunder.
 8. The **Surety Bond** shall cease to be in force and effect on **** Unless a demand or claim under this **Surety Bond** is made in writing before expiry of the **Surety Bond**, the **Surety Insurer** shall be discharged from its liabilities hereunder.
 9. The **Surety Insurer** undertakes not to revoke this **Surety Bond** during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this **Surety Bond** and the undersigned has full powers to do so on behalf of the **Surety Insurer**.
 10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the **Surety Insurer** at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer & the Authority that the envelope was so posted shall be conclusive.

-
11. This **Surety Bond** shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Contract.
12. This **Surety Bond** is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.
13. This Surety Bond shall also be operatable at our, branch at Vijayawada, from whom, confirmation regarding the issue of this Surety Bond or extension/renewal thereof shall be made available on demand. In the contingency of this Surety Bond being invoked and payment hereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
14. The Insurance Surety Bond shall be verified from the specific portal created for this purpose.

Signed and sealed this.....Day of.....,26.....at.....

SIGNED, SEALED AND DELIVERED

For and on behalf of the bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

SECTION – VII
FORM OF ADVANCE PAYMENT
Form for Guarantee for Advance Payment

Regional Officer,
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada-520013(AP)

WHEREAS:

- (A)[name and address of contractor] (hereinafter called the “**Contractor**”) has executed an agreement (hereinafter called the “**Agreement**”) with the National Highways Authority of India, Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520013, (hereinafter called the “**Authority**”) for the <Name of the Project> on Item Rate Basis, subject to and in accordance with the provisions of the Agreement.
- (B) In accordance with the provisions of the Conditions of Particular Application – Part II, Sub Clause 60.6 (“Mobilization Advance”), the Authority shall make to the Contractor an interest bearing advance payment (herein after called “**Advance Payment**”); and that the Advance Payment shall be made in two installments subject to the Contractor furnishing an irrevocable and unconditional guarantee by a scheduled bank of such installment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second} installment of the Advance Payment is Rs. ----- cr. (Rupees crore) and the amount of this Guarantee is Rs. - ----- cr. (Rupees crore) (the “**Guarantee Amount**”).
- (C) We, through our branch at (the “**Bank**”) have agreed to furnish this bank guarantee (*hereinafter called the “**Guarantee**”*) for the Guarantee Amount.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful repayment on time of the aforesaid instalment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Authority, under the hand of an officer not below the rank of General Manager in the National Highways Authority of India, that the Contractor has committed default in the due and faithful performance of all or any of its obligations for the repayment of the instalment of the Advance Payment under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or

body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Advance Payment or to extend the time or period of its repayment or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Advance Payment.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on ****. Unless a demand or claim under this Guarantee is made in writing on or before the aforesaid date, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.
12. This guarantee shall also be operatable at ourBranch at Vijayawada, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be

made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

13. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of NHAI, details of which is as under:

S. No.	Particulars	Details
1.	Name of Beneficiary	National Highways Authority of India
2.	Name of Bank	Canara Bank
3.	Account No.	33431010005577
4.	IFSC Code	CNRB0013343

Signed and sealed this day of, 20..... at

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by: (Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

¹ *an amount is to be inserted by the bank or financial institution representing the amount of the Advance Payment, and denominated in the currency(ies) of the Advance Payment as specified in the Contract.*

Annex-II: Form for Insurance Surety Bond for Advance Payment

To,

CGM (Tech) & Regional Officer,
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka,Vijayawada-520013(AP)

WHEREAS:

(A) [Name and address of contractor] (hereinafter called the "Contractor") has executed an agreement (hereinafter called the "Agreement") with the National Highways Authority of India at Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520013], (hereinafter called the "Authority") for the <Name of the Project> on Item Rate Basis, subject to and in accordance with the provisions of the Agreement.

(B) In accordance with the provisions of the Conditions of Particular Application – Part II, Sub Clause 60.6 ("Mobilization Advance"), the Authority shall make to the Contractor an interest bearing (herein after called "Advance Payment"); and that the Advance Payment shall be made in two installments subject to the Contractor furnishing an irrevocable and unconditional Insurance Surety Bond by Insurance Company of such instalment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second} installment of the Advance Payment is Rs. . . - - cr. (Rupees - - - crore) and the amount of this Insurance Surety Bond is Rs. --•--- cr. (Rupees ----- crore) (the "Guarantee Amount").

(C) We... through our branch at..... (the "Insurance Company" have agreed to furnish this Insurance Surety Bond (hereinafter called the "Guarantee") for the Guarantee Amount.

NOW, THEREFORE, the Insurance Company hereby, unconditionally, and irrevocably, guarantees and affirms as follows:

(1) The Insurance Company hereby unconditionally and irrevocably guarantees the due and faithful repayment on time of the aforesaid instalment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the authority, upon its mere first written demand, and without any demur, reservation, recourse, contest, or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

A letter from the Authority, under the hand of an officer not below the rank of [General Manager in the National Highways Authority of India], that the Contractor has committed default in the due and faithful performance of all or any of its obligations for the repayment of the instalment of the Advance Payment under and in accordance with the Agreement shall be conclusive, final, and binding on the Insurance Company. The Insurance Company further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Insurance Company, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal,

arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

- (2) In order to give effect to this Insurance Surety Bond, the Authority shall be entitled to act as if the Insurance Company were the principal debtor and any change in the constitution of the Contractor and/or the Insurance company, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Insurance Company under this Guarantee.
- (3) It shall not be necessary, and the Insurance Company hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Insurance Company its demand under this Guarantee.
- (4) The Authority shall have the liberty, without affecting in any manner the liability of the Insurance Company under this Guarantee, to vary at any time, the terms and conditions of the Advance Payment or to extend the time or period of its repayment or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Insurance Company shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Insurance Surety Bond from its liability and obligation under this Guarantee and the Insurance Company hereby waives all of its rights under any such law.
- (5) This Insurance Surety Bond is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Advance Payment.
- (6) Notwithstanding anything contained herein before, the liability of Insurance Company under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Insurance Company under this Guarantee all rights of the Authority under this Insurance Surety Bond shall be forfeited and the Insurance Company shall be relieved from its liabilities hereunder.
- (7) The Insurance Surety Bond shall cease to be in force and effect on***. Unless a demand or claim under this Guarantee is made in writing on or before the aforesaid date, the Insurance Company shall be discharged from its liabilities hereunder.
- (8) The Insurance Company undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Insurance Company.
- (9) Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Insurance Company at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope

containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

(10) This Insurance Surety Bond shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

Signed and sealed this day of20..... at.....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Insurance Company by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

(i) The Insurance Surety Bond should contain the name, designation, and code number of the officers) signing the Insurance Surety bond.

(ii) The Address, telephone number and other detail of the head of the Insurance Company as well as issuing branch should be mentioned on the covering letter of issuing branch.

SECTION – VII
FORM OF AGREEMENT

(Clause 37 of Section I, Volume-I)

THIS AGREEMENT made the _____ day of _____, 2016 between **National Highways Authority of India**, Regional Office, Door No.41-29-45A, R.S.No.373/2A, Near Kodandaramalayam, Chalasani Nagar, Ranigarithota, Krishnalanka, Vijayawada - 520013 (hereinafter called “the Employer”) of _____ the one part and M/s._____(Name of the Selected Bidder and Address of its Registered Office) (hereinafter called “the Contractor”) of the other part.

WHEREAS the Employer is desirous that certain works should be executed by the Contractor, viz [Name of the Project] hereinafter referred to as the “**Works**” and has accepted the bid by the Contractor for the execution and completion of such works and the remedying of any defects therein at a contract

price of Rs. _____ (Rupees _____).

AS WHEREAS the Contractor has accepted and agreed to undertake such Works and has furnished Performance Security pursuant to Sub-Clause 10.1 of the Condition of Particular Application – Part II (Section III, Vol. I)

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Contract Agreement;
 - (b) the Letter of Acceptance;
 - (c) the said Bid and Appendix to Bid;
 - (d) the Conditions of Particular Application (PartII);
 - (e) the General Conditions of Contract (PartI);
 - (f) the Technical Specifications;

-
- (g) the Drawings;
- (h) the Priced Bill of Quantities; and
- (i) other documents forming part of the contract.
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

Signed, sealed, and delivered by the said Employer and the Contractor in the presence of:

WITNESSES:

On behalf of National Highways Authority of India	On behalf of M/s.
1.	1.
2.	2.

Binding Signature of the Employer :

Binding Signature of the Contractor :

Section VIII

Schedules for Supplementary Information

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SECTION VIII

Schedules for Supplementary Information

Schedule- A	:	HANDING OVER OF SITE
Schedule- B	:	DETAILS OF KEY EQUIPMENT AND MACHINERY
Schedule- C	:	DETAILS OF KEY PERSONNEL PROPOSED FOR THE PROJECT
Schedule- D	:	PROPOSED SUBCONTRACTORS
Schedule- E	:	DELETED
Schedule- F	:	WORK PROGRAMME

SECTION VIII

SCHEDULE - A HANDING OVER OF SITE

<i>Time schedule</i>	<i>Length to be handed over (km)</i>
Within the time specified for commencement of work in the Appendix to bid in accordance with Sub Clause 41.1	NA

SECTION VIII

SCHEDULE - B

DETAILS OF KEY EQUIPMENT AND MACHINERY

Name of the Bidder :

MINIMUM PLANT AND EQUIPMENT TO BE OWNED/LEASED BY THE CONTRACTOR

Whereas it is entirely the responsibility of the Contractor to deploy sufficient construction plant and equipment to ensure compliance with its obligations under the Contract. This list constitutes the Employer's estimate of the minimum essential basic holding of construction plant and equipment which the contractor must own or have long term leasing arrangements :-

S. No.	Type of equipment	No. of plant and equipment
1	Vehicle Mounted Tower Ladder	2
2	Hydraulic Crane	2
3	Generator	2

T = Tonnes

T/hr = Tonnes per hour

- ◆ Any total system for crushing stone aggregate and feeding aggregate fractions in their required proportions into the plant to achieve the desired mix, if such is utilized by the contractor, must be capable of meeting all the requirements of the Specifications under stringent quality control.

Note : The contractors are requested to verify latest position in respect of "Duties on Contractor's equipment" from Department of Revenue, Ministry of Finance, Government of India. (Their attention is also invited to customs notifications wherein customs duty exemption for certain equipments subject to certain conditions, have been made available by Government of India).

SECTION VIII SCHEDULE - C

DETAILS OF KEY PERSONNEL PROPOSED FOR THE PROJECT@

Name of the Bidder :

For specific positions essential to contract implementation, bidders shall provide the name of candidates who qualify to meet the specified requirements stated for each position. The data on their experience shall be supplied in separate sheets for each candidate.

Sl. No.	Personnel	Minimum Qualification and Experience	Particular Experience (minimum requirement)	No. of Persons	Requirement
1.	Project Manager	Graduation in Electrical Engineering + 5 Years Exp.	3 years as Project Manager on Highway works including Lighting works	1	During execution
2.	Site Engineer cum Surveyor Engineer	Diploma in Civil Engineering + 5 years Exp. Or Graduation in Civil Engineering + 3 yrs. Exp.	3 years on highway construction / Highway lighting works	1	During execution
3.	Road safety expert	Graduate in civil engineering + 3 years experience in Road safety works during construction/ maintenance of roads	2 years experience in road safety	1	During execution
4.	Electrical Engineer	Diploma in Electrical Engineering + 5 years Exp. Or Graduation in Electrical Engineering + 3 yrs. Exp.	3 years on highway lighting works	1	During maintenance / DLP

The Contractor shall employ the technical personnel named above or other technical persons approved by the Engineer. These numbers as specified in the contract are minimum and contractor has to employ the adequate technical personnel required for execution of works. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated above. If the personnel stated above are not deployed on site by the Contractor within 15 days of issue of notice to proceed with the work, a penalty of Rs 2000/- per day per person shall be levied for next 30 days, beyond which it shall be treated as a breach of Contract and action will be taken as per Clause 63.1. The replacement of Project Manager will be approved by the Employer.

SECTION VIII

SCHEDULE - D

Deleted

SECTION VIII

SCHEDULE - E

Deleted

SECTION VIII

SCHEDULE - F

WORK

PROGRAMME

Name of the Bidder

Bidders shall submit work programme taking into consideration the work methods, backed with equipment planning and cash flow requirements etc. in sufficient details for assessing the bidder's capability to complete the work in accordance with the specification and time for completion.

This shall cover

- i) Site Organisation
- ii) Method Statement
- iii) Mobilization Schedule (Resources, equipment etc.)
- iv) Construction Schedule for completion of the work in accordance with the specifications and project completion time.
- v) Others

**SECTION VIII
SCHEDULE - G
INTEGRITY PACT FORMAT**

(To be executed on the plain paper and submitted along with Technical Bid /Tender documents for tenders having a value of Rs. 5 crore or more. To be signed by the bidder and same signatory competent/authorized to sign the relevant contract on behalf of the NHAI)

(_____Division)
Tender No. _____

INTEGRITY PACT

This integrity Pact is made aton this day of.....2026.
Between

THE NATIONAL HIGHWAYS AUTHORITY OF INDIA (NHAI), a statutory body constituted under the National Highways Authority of India Act, 1988, which has been entrusted with the responsibility of development, maintenance and management of National Highways, having its office at G- 5 & 6, Sector-10, Dwarka, New Delhi, hereinafter referred to as "The Principal", which expression shall, unless repugnant to the meaning of contract thereof, include its successors and permitted assigns)

AND

.....herein after referred to as "The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s)" and which expression shall unless repugnant to be meaning or context thereof include its successors and permitted assigns.

Preamble

Whereas, the Principal intends to award, under laid down organizational procedure, contract/s for *** **[Name of the Project] on item rate (percentage) basis**. The Principal values full compliance with all relevant laws of the land, rules of land, regulations, economic of resources and of fairness/ transparency in its relations with its Bidder(s) and for Contractor(s)/ Concessionaire(s)/ Consultant(s).

And Whereas in order to achieve these goals, the Principal will appoint an Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the Principles mentioned above.

And whereas to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact (hereafter referred to as "Integrity Pact") the terms and conditions of which shall also be read as integral part and parcel of the Tender documents and contract between the parties.

Now, therefore, in consideration of mutual covenants stipulated in this pact, the parties hereby agree as follows and this pact witnesses as under:

Article-1: Commitments of the Principal

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - a) No employee of the Principal, personally or through family members, will in connection with the Tender for, or the execution of a Contract, demand, take a promise for or accept, for self, or third person, any material of immaterial benefit which the person is not legally entitled to.
 - b) The Principal will, during the Tender process treat all Bidder(s) with equity and reason. The

Principal will in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

- c) The Principal will exclude all known prejudiced persons from the process.
- 2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act or any other Statutory Acts or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions as per its internal laid down Rules/Regulations.

Article - 2: Commitments of the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s).

The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contract, submission or non-submission or bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not commit any offence under the relevant IPC/PC Act and other Statutory Acts; further the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not use improperly, for purposes of completion or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any. Similarly, the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, details as mentioned in the 'Guidelines on Indian Agents of Foreign Suppliers' shall be disclosed by the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s). Further, all the payments made to the Indian Agent/Representative have to be Indian Rupees only.
- e) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract. He shall also disclose the details of services agreed upon for such payments.
- f) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not instigate third persons to

commit offences outlined above or be an accessory to such offences.

- g) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not bring any outside influence through any Govt. bodies/quarters directly or indirectly on the bidding process in furtherance of his bid.
- h) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) who have signed a Integrity pact shall not approach the court while representing the matter to IEMs and shall wait for their decision in the matter.

Article- 3 Disqualification from tender process and exclusion from future contracts.

- 1) If the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s), before award or during execution has committed a transgression through a violation of any provision of Article- 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s)/Concessionaire(s)/ Consultant(s) from the tender process.
- 2) If the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) has committed a transgression through a violation of Article-2 such as to put his reliability or credibility into question, the Principal shall be entitled to exclude including blacklist and put on holiday the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) for any future tenders/ contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case particularly taking into account the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) and the amount of the damage. **The exclusion will be imposed for a minimum period of 6 months and maximum period of 2 years.**
- 3) A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that "On the basis of facts available there are no material doubts".
- 4) The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute rights to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 5) The decision of the Principal to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) shall be final and binding on the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s), however, the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) can approach IEM(s) appointed for the purpose of this Pact.
- 6) On occurrence of any sanctions/ disqualification etc. arising out from violation of integrity pact, the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) shall not be entitled for any compensation on this account.
- 7) Subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) could be revoked by the Principal if the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system in his organization.

Article- 4: Compensation for Damages.

- 1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Article-3, the Principal shall be entitled to suspend the bidder for participation in the tendering process for the works of MoRTH/NHAI/NHIDCL and works under other Centrally Sponsored Schemes for a period of One Year from the bid due date of this work apart from any other legal right that may have accrued to the Principal.
- 2) In addition to 1 above, the Principal shall be entitled to take recourse to the relevant provisions of the contract related to Termination of Contract due to Contractor/ Concessionaire/Consultant's Default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor/ Concessionaire/ Consultant and/ or demand and recover liquidated and all damages as per the provisions of the contract/concession agreement against Termination.

Article- 5: Previous Transgressions

- 1) The Bidder declares that no previous transgressions occurred in the last 3 years immediately before signing of this Integrity Pact with any other Company in any country conforming to the anticorruption/ Transparency International (TI) approach or with any other Public Sector Enterprise/ Undertaking in India or any Government Department in India that could justify his exclusion from the tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Article-3 above for transgressions of Article-2 and shall be liable for compensation for damages as per Article-4 above.

Article - 6: Equal treatment of all Bidders/ Contractors/ Concessionaires/ Consultants/ Subcontractors.

- 1) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) undertake(s) to demand from all sub-contractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2) The Principal will enter into agreements with identical conditions as this one with all Bidders/ Contractors/ Concessionaires/ Consultants and subcontractors.
- 3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Article- 7: Criminal charges against violating Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s)/ Sub-contractor(s).

If the Principal obtains knowledge of conduct of a Bidder/ Contractor/ Concessionaire/ Consultant or subcontractor, or of an employee or a representative or an associate of a Bidder/ Contractor/ Concessionaire/ Consultant or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Article- 8: Independent External Monitor (IEM)

- 1) The Principal has appointed Smt. Gauri Kumar, IAS (Retd.) and Sh. Ashish Bhauguna, IAS (Retd.) and **Sh. Animesh Chauhan** (Ex-MD & CEO, Oriental Bank of Commerce) as Independent External

Monitor (IEM) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

- 2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman, NHAI.
- 3) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s). The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors.
- 4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality. The Monitor has also signed on 'Non-disclosure of Confidential Information' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, NHAI and recuse himself/herself from that case.
- 5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor/Concessionaire/Consultant. The parties offer to the Monitor the option to participate in such meetings.
- 6) As soon as the Monitor notices, or believes, to notice any transgression as given in Article-2, he may request the Management of the Principal to take corrective action, or to take relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 7) The Monitor will submit a written report to the Chairman, NHAI within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8) If the Monitor has reported to the Chairman, NHAI, a substantiated suspicion of an offence under relevant IPC/PC Act or any other Statutory Acts, and the Chairman, NHAI has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9) The word 'Monitor' would include both singular and plural.

Article- 9 Pact Duration

This Pact begins when both parties have legally signed it (in case of EPC i.e. for projects funded by Principal and consultancy services). It expires for the Contractor/ Consultant 12 months after his Defect Liability Period is over or 12 months after his last payment under the contract whichever is later and for all other unsuccessful bidders 6 months after this Contract has been awarded. (In case of BOT Projects) It expires for the concessionaire 24 months after his concession period is over and for all other unsuccessful Bidders 6 months after this Contract has been awarded. Any violation of the same would

entail disqualification of the bidder and exclusion from future dealings.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Chairman of NHAI.

Article - 10 Other Provisions

- 1) This pact is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- 2) Changes and supplements as well as termination notices need to be made in writing.
- 3) If the Bidder/Contractor/Concessionaire/Consultant is in a partnership or a Joint Venture partner, this pact must be signed by all partners or members.
- 4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) Issue like warranty/Guarantee etc. shall be outside the purview of IEMs.
- 6) In the event of any contradiction between the Integrity Pact and its Annexure, the clause in integrity pact shall prevail.
- 7) Any disputes/ differences arising between the parties with regard to term of this pact, any action taken by the Principal in accordance with this Pact or interpretation thereof shall not be subject to any Arbitration.
- 8) The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provision of the extent law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this pact at the place and date first done mentioned in the presence of following witnesses:-

(For & On behalf of the Principal)

(For & On behalf of
Bidder/Contractor/Concessionaire/Consulting

(Office Seal)

Place _____

Date _____

Witness 1:

(Name & Address) _____

Witness 2:

(Name & Address) _____

{COUNTERSIGNED and accepted by:

JV Partner}

Section IX

Form for Qualification Information

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Section - IX

Qualification Criteria

11. Qualification will be based on Bidder's meeting all the following minimum pass/fail criteria regarding their general and particular experience, financial position, personnel and equipment capabilities and other relevant information as demonstrated by the Bidder's responses in the forms attached to the Bid. Additional requirements for Joint Ventures are given in para 2 below. **The qualification, capacity and resources of proposed subcontractors will not be taken into account in determining the Bidder's compliance with the qualifying criteria.**

12. **Base Year and Escalation**

The base year shall be taken as 2025-26 (in case of Financial Year) or 2025 (in case of Calendar Year).

Following enhancement factors will be used for the cost of works executed and the financial figures to bring to a common base for the value of works completed in India.

<u>Year</u>	<u>Multiplying factor</u>
Year 1	1.00
Year 2	1.05
Year 3	1.10
Year 4	1.15
Year 5	1.20

Bidder should indicate actual figures of costs and amount for the works executed by them in the schedule without accounting for the above-mentioned factors.

Notwithstanding anything to the contrary contained herein, in the event that the Bid Due Date falls within three months of the closing of the latest financial year of a Bidder, it shall ignore such financial year for the purposes of its Bid and furnish all its information and certification with reference to the 3 (three) years or 1 (one) year, as the case may be, preceding its latest financial year. For the avoidance of doubt, financial year shall, for the purposes of a Bid hereunder, mean the accounting year followed by the Bidder in the course of its normal business.

In case the financial figure and value of completed works are in foreign currency, the above enhanced factors will not be applied. Instead, the foreign currency will be converted into equivalent Indian Rupees (INR) at the State Bank of India BC selling rate as on the date of submission.

13. Experience and Turnover

13.1. Experience

(a) The Bidder shall provide documentary evidence that it has been actively engaged in the **Solar Highway/Solar Street/Solar High Mast lighting / Solar Home Energy System / Solar Home Lighting System works** business during the last five years in the role of prime contractor or partner in joint venture or sub- contractor.

(b) Particular Construction Experience

The Bidder shall provide evidence that it has successfully completed or substantially completed within the last five years (commencing from the year [2021-22]), either of the following;

S. No.	Similar Work during last five years	Acceptance of Similar Work
i.	one similar completed work costing not less than amount equals to 80% each of estimated cost or	The Similar Work constitutes experience of Providing of Solar Highway/Solar Street/Solar High Mast lighting / Solar Home Energy System / Solar Home Lighting System works
ii.	two similar completed works costing not less than amount equals to 50% each of estimated cost or	The Similar Work constitutes experience of Providing of Solar Highway/Solar Street/Solar High Mast lighting / Solar Home Energy System / Solar Home Lighting System works
iii.	three similar completed works costing not less than amount equals to 40% each of estimated cost	The Similar Work constitutes experience of Providing of Solar Highway/Solar Street/Solar High Mast lighting / Solar Home Energy System / Solar Home Lighting System works

The Works may have been executed by the Bidder as prime contractor or proportionately as member of Joint Venture or nominated/ approved sub-contractor.

Substantially completed works means those works which are at least 90% completed as on the date of submission (i.e. gross value of work done up to the last date of submission is 90% or more of the original contract price) and continuing satisfactorily. For these, a Certificate from the employer shall be submitted along with the application incorporating clearly the name of the work, Contract value, billing amount, date of commencement of works, satisfactory performance of the Contractor and any other relevant information.

In case a project has been executed as a JV by two or more firms, weightage towards experience in the project would be given to the JV partners in proportion to their participation in the Joint Venture.

The escalation factors as mentioned in para 1.2 shall be applied on the cost of completion.

1.3.2. Turnover

The Bidder shall have generated a minimum average annual construction turnover during the last 3 years (commencing from the year [2023-2024]) equivalent to **Rs. 3.51 Crores³**.

1.3.3 Test Reports

The bidder shall provide documentary evidence that it has capability of executing the work by submitting following test reports along with bids. If any of following test reports is not submitted by any bidder along with bids shall be treated as technically non – responsive.

Type of Test	Standard
Safety of Luminaire for Road and Street Lighting	IEC60598-1:2014; IEC 60598-1:2014AMD1:2017
Photometry	LM79-08 from NABL accredited LAB
Safety of Power Converters used in solar Panel Equipment	IEC 62109-1
Performance Evaluation of Maximum Power Point Tracking (MPPT)	EN 50530
EMC immunity requirements	IEC 61547
Radio disturbance characteristics	CISPR 15
Safety of Lithium Ferro Phosphate Battery IP68	IEC 62133 & UL1642 & Safety Certificate UN38.3
Safety of Solar Panel Module	IEC 61730-1,2 & IEC 61215
Low Voltage Directive (LVD),2014/35/EU	EN 62493: 2015 EN 60598-1: 2015 + A1: 2018 EN 60598-2-3:2003 + A1:2011
Restriction of the use of certain Hazardous Substances in electrical and electronic equipment Directive (RoHS),2011/65/EU	EN50581:2012

14 Personnel capabilities

The Bidder shall supply general information on the management structure of the firm and shall make provision for suitably qualified personnel to fill the key positions as required during contract implementation and as suggested in Annex-I.

Requirement of minimum Key personnel with qualification and experience is given in Annex-I. The Bidder shall give an undertaking to provide personnel for these positions satisfying the qualification and experience requirements.

15 Equipment capabilities

The Bidder is required to own or have assured access through hire or lease to the key items of equipment required for implementation of the project. However, no equipment advance will be provided against hired/leased equipments. A minimum number of items of the plant and machinery required for the project are suggested in Annex-II. The Bidder shall give an undertaking in the prescribed format to provide all the plant and machinery required for the project.

16 Financial Capabilities

The Bidder shall demonstrate that it has access to or has available liquid assets (aggregate of

working capital, cash in hand and uncommitted bank guarantee), line of credit and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements, minimum estimated as **Rs. 1.17 Crore²** net of the Bidder's commitments for other contracts. To be furnished as per **Application Form 7A and 7B, if applicable (enclosed)**.

17. Deleted.

18. The complete audited Annual Accounts for the last five years shall be submitted. The Bidder must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability. If deemed necessary, the Employer shall have the authority to make inquiries with the Bidder's bankers.

19. **Litigation History**

The Bidder should provide accurate information about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. **A consistent history of awards against the Bidder will result in failure of the application.** Suppression of any information or material in this regard would be construed as a fundamental breach and Employer reserves its right to take appropriate action including cancellation of the bid etc. as may be deemed fit and proper by Employer at any time without requiring to give any notice to the Bidder in this regard.

1.10. **Disqualification**

1.10.1. Even if a bidder meets the above criteria, he shall be subject to disqualification if it or any of its constituent partners is found to have:

³ This amount should be 30% (thirty percent) of the Estimated Project Cost of the Project for which bids are being invited.

⁴ This amount should be 10% (ten percent) of the Estimated Project Cost of the Project for which bids are being invited

- (a) made misleading or false representations in the forms, statements and attachments submitted; or
 - (b) records of poor performance during the last 5 years, as on the date of submission of bids, such as abandoning the work, rescission of contract for reasons which are attributable to non-performance of the contractor, inordinate delays in completion, consistent history of litigation resulting in awards against the contractor or any of its constituents, or financial failure due to bankruptcy, etc. The rescission of a contract of Joint Venture on account of reasons other than non-performance, such as the Most Experienced Partner (Major Partner) of Joint Venture pulling out, Court directions leading to break-up of Joint Venture before start of the work, which are not attributable to poor performance of the contractor, will, however, not affect the pre-qualification of the individual partner; or
 - (c) shown very poor performance in implementation of the works of NHAI and determined non-performing by NHAI; or
 - (d) been debarred by NHAI as on the date of submission of bids.
- 1.10.2. In case of a proprietary firm, partnership firm or a joint venture, the following are the disqualifications in case of failure to disclose information by partners or the proprietor.
- (i) if, any of the partners or the proprietor is debarred by NHAI or any other Agency of Government of India or any of the State Governments;
 - (ii) if, any of the partners or the proprietor has a criminal history or has been convicted by any court of law for any of the offenses under any Indian laws;
 - (iii) if, any criminal proceeding is pending in any Court of law in India against any of the partners or the proprietor and if any such proceeding culminates into conviction in last five years.

1.11. Bid Capacity

The available bid capacity of the bidders will be assessed. The bidders to be eligible for award of work shall have the bidding capacity more than the total estimated cost of the Works i.e. **Rs. 11.71 Crores**. The available BID capacity will be calculated as per following, based on information mentioned at Qualification Form 11:

Assessed Available Bid Capacity = $(A * N * 2.5 - B + C)$, where

A = Maximum value of **Solar Highway/Solar Street/Solar High Mast lighting/Solar Home Energy System / Solar Home Lighting System works** excluding the amount of bonus received, if any, in respect of EPC Projects executed in any one year during the last five years (updated to the current price level of the year as per Clause 1.2) taking into account the completed as well as works in progress. The **EPC projects** include turnkey project/ Item rate contract/ Construction works;

B = Value (updated at current price level of the year as per table in Note below) of existing commitments, works for which the bidder has emerged as the winner of the bids or on-going works to be completed during the period of completion of the works for which BID is invited. For the sake of clarification, it is mentioned that works for which bidder has emerged as the winner of the bids but LOA has not been issued as on the day before opening the financial bids shall also be considered while calculating value of B.

C= The amount of bonus received, if any, in EPC Projects during the last 5 years (updated to the price level of the year indicated in table at Note-3 below)

N = Number of years prescribed for completion of the works for which the bids are invited i.e. 0.33.

Note:

- The Statement showing the value of all existing commitments, works for which the contractor has emerged as the winner of the bid as given by bidder, and ongoing works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Client or its Engineer-in-charge not below the rank of Executive Engineer or equivalent in respect of EPC Projects or Concessionaire / Authorised Signatory of SPV in respect of BOT Projects and verified by Statutory Auditor.
- The amount of bonus received, if any, in EPC Projects should be countersigned by the Client or its Engineer-in-charge not below the rank of Executive Engineer or equivalent in respect of EPC Projects.
- The factor for the year for updation to the price level is indicated as under:

Year	Year 1	Year 2	Year 3	Year 4	Year 5
Updation Factor	1.00	1.05	1.10	1.15	1.20

- The Bid capacity status of the bidder to be updated as on the day before opening the financial bids.

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2. Joint Ventures

- 2.1. Bids from Joint Venture are not allowed.
- 2.2. Deleted
- 2.3. Deleted
- 2.4. Deleted
- 2.5. Deleted
- 2.6. Deleted
- 2.7. Deleted

3. Public Sector Companies

Majority publicly owned enterprises domiciled in India may be eligible to qualify if, in addition to meeting all the above requirements, they are also:

- (a) Commercially oriented legal entities distinct from his Employer;
- (b) Financially autonomous, for which the Bidders must demonstrate with reference to requirements in their constitutions to provide separate audited accounts and return on capital, powers to raise loans and obtain revenues through sale of goods or services; and
- (c) Managerially autonomous.

4. Conflict of Interest

4.1 Association with the design or proof consultants

The Bidder must not be associated, nor have been associated for the project under consideration with the following Consultant:-

M/s ***** who have been associated in detailed engineering, design, specifications and preparation of Bidding Document and proof checking of the structures for the contract.

Any such association will result in the disqualification of the Bidder.

- 5. A firm shall submit only one bid in the bidding process as a Bidder. No firm can be a subcontractor while submitting a bid individually. A firm, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity. A Bidder who submits, or participates in, more than one bid will cause all the proposals in which the Bidder has participated to be disqualified.**

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QUALIFICATION INFORMATION FORMS

FORM- 1	:	General Information
FORM- 2	:	General Construction Experience Record
FORM- 3	:	Particular Construction Experience Record
FORM -3A	:	Details of Contracts of Similar Nature and Complexity
FORM- 4	:	Current Contract Commitments/works in progress
FORM - 4A	:	Summary Sheet for works of Similar Nature
FORM- 5	:	Personnel Capabilities
FORM- 6	:	Equipment Capabilities
FORM- 7	:	Financial Capabilities
FORM -7A	:	Financial Capabilities
FORM -7B	:	Bank Certificate
FORM- 8	:	Litigation/Arbitration History
FORM- 9	:	Information Regarding Current Litigation etc.
FORM -10	:	Affidavit
FORM -11	:	Information required to evaluate the BID Capacity under Clause 1.11
FORM -12	:	Format for Power of Attorney for signing of BID
FORM-13	:	Certificate regarding Compliance with Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

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QUALIFICATION INFORMATION FORM - 1

General Information

All individual firms are requested to complete the information in this form. Nationality information to be provided for all owners or Bidder who are partnerships or individually owned firms.

1.	Name of firm	
2.	Head Office Address	
3.	Telephone	Contact
4.	Fax	E-mail
5.	Place of incorporation / registration	Year of incorporation/ registration

Nationality of Owners^(*)		
	Name	Nationality
1.		
2.		
3.		

(*) To be completed by all owners of partnerships or individually owned firms.

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QUALIFICATION INFORMATION FORM - 1A

Structure and Organization

1.	The Bidder is	
	(a) An individual	
	(b) a proprietary firm	
	(c) a firm in partnership	
	(d) a Limited Company or Corporation	
2.	Attach the Organization Chart showing the structure of the organization including the name of the Directors and position of directors	
3.	No. of years of experience:	
	(a) As a Prime Contractor (contractor shouldering major responsibility)	
	i) in own country	
	ii) other countries (specify country)	
	(b) In a Joint Venture	
	i) in own country	
	ii) other countries (specify country)	
	(c) As Subcontractor (specify main Contractor)	
	i) in own country	
	ii) other countries (specify country)	
4.	For how many years has the firm been in business of similar works under its present name? What were the fields when the firm was established? Whether any new fields were added in the firm? And if so, when?	
5.	Was the firm ever required to suspend construction for a period of more than six months continuously after it started? If so, give name of project and reasons thereof.	
6.	Have the firm ever left the work awarded to it incomplete? (If so, give name of project and Reasons for not completing the work)	
7.	In which fields of Electrical engineering construction, do the firm claim specialization and interest	

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8.	Give details of the firm's soil and materials, testing laboratory, if any (include full range of equipments available; 'make', year and functional conditions details etc. including present status indicating their availability for the contract being applied for)	
9.	Give details of the firm's experience in using equipment and quality control in Solar Highway/Solar Street/Solar High Mast lighting/Solar Home Energy System/Solar Home Lighting System Works.	
10.	Give details of the firm's experience in mechanized Granular sub-base/base (Wet Mix Macadam) pavement construction	Deleted
11.	Give details of the firm's experience in laying of bituminous mix in layers	Deleted
12.	Give details of the firm's experience in construction of Bridge Works in Reinforced Cement Concrete	Deleted
13.	Give details of the firm's experience in construction of Bridge Works in Prestressed Cement Concrete	Deleted
14.	Give details of the firm's experience in construction of Bridge Works with open foundations	Deleted
15.	Give details of the firm's experience in construction of Bridge Works with pile foundations	Deleted
16.	Give details of the firm's experience in construction of Bridge Works with well foundations	Deleted
	Give details of the firm's experience in construction of flyovers and grade separated interchanges.	Deleted

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QUALIFICATION INFORMATION FORM - 2

General Construction Experience Record

Name of Bidder

All individual firms are requested to complete the information in this form with regard to the management of Works contracts generally. The information supplied shall be the annual turnover of the Bidder, in terms of the amounts billed to clients for each year for work in progress or completed.

A brief note on each contract should be appended, describing the nature of the work, duration and amount of contract, managerial arrangements, employer and other relevant details.

Bidders should not enclose testimonials, certificates, and publicity material with their application: they will not be taken into account in the evaluation of qualification.

A. Annual Turnover Data (From all sources)

Year (Financial Year / Calendar Year, whichever is applicable)	Turnover (INR)
[2021-22]	
[2022-23]	
[2023-24]	
[2024-25]	
[2025-26]	

B. Annual Turnover Data (From Solar Highway/Solar Street/Solar High Mast lighting/Solar Home Energy System/Solar Home Lighting System Works alone) (Ref. cl. 1.3.2 and 1.11)

Year (Financial Year / Calendar Year, whichever is applicable)	Turnover (INR)
[2021-22]	
[2022-23]	
[2023-24]	
[2024-25]	
[2025-26]	

Note : In case of turnovers in foreign currency, the figures are to be given in relevant currency and Figures in INR may be worked out in the following manner:

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QUALIFICATION INFORMATION FORM - 3

Name of Bidder

Particular Construction Experience Record

To qualify, the Bidders shall be required to pass the specified requirements applicable to this form, as set out in the “Qualification Criteria”.

On a separate page, using the format of Qualification Information Form - 3A, the Bidder is requested to list contract(s) of a similar nature, complexity, and requiring similar construction technology to the contract for which the Bidder wishes to qualify and which the Bidder has undertaken during the last seven years. The contract value should be based on the payment currencies of the contracts converted into the Indian rupees in the following manner:

The information is to be summarized, using Qualification Information Form - 3A, for each contract completed or under execution by the Bidder.

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QUALIFICATION INFORMATION FORM – 3A

Details of Contracts of Similar Nature and Complexity

Name of Bidder		
1.	Number of Contract	
	Name of Contract	
	Length of the highway/bridge under the Contract	
	Type of highway under the Contract (i.e. NH/SH/etc.)	
	Country	
2.	Name of Employer	
3.	Employer's address (Give telephone and fax. No.)	
4.	Nature of works and special features relevant to the Contract for which the Bidder wishes to qualify.	
5.	(tick one) Partner in a Joint Venture Sub-contractor Prime contractor 	
6. a)	Value of the total contract	
b)	Amount of share of the firm (attach proof)	
c).	Amount of work sub-contracted by the firm	
7.	Date of award	
8.	Date of Completion	
9.	Contract duration (years and months)	
10.	Specified requirements Give details of annual production record in respect of Solar Highway Lighting / Solar Street Lighting.	
11.	Name and professional qualifications of Bidder's Engineer-in-charge of the work:	
12.	Were there any penalties/fines/stop notice/compensation/liquidated damages imposed? (Yes or No) If yes, give amount and explanation:	

Note: A certificate of completion from the principal employer/Engineer must be enclosed.

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QUALIFICATION INFORMATION FORM - 4

DELETED

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QUALIFICATION INFORMATION FORM – 4A

Summary Sheet

EXPERIENCE AS PRIME CONTRACTOR OR AS PARTNER IN JV ON WORKS OF SIMILAR NATURE OVER THE LAST SEVEN YEARS

Name of Bidder

Project Name	Name of the Employer	Description of Work*	Contract No. & Date	Value of Contract	% & amount of share of firm	Date of issue of work order	Stipulated period & date of completion	Actual date of completion*	Remarks explaining reasons for delay in work completion, if any

*Attach certificate(s) from the Engineer(s)- in charge or a notarized self-certificate.

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QUALIFICATION INFORMATION FORM - 5

Personnel Capabilities

UNDERTAKING

I, the undersigned to hereby undertake that our firm M/s.

shall deploy proposed key personnel as given in Annex-I as required during contract implementation. I also undertake proposed key personnel for the key positions specified in Annex-I satisfying the qualification and experience requirements.

Signed by an Authorised Officer of the Firm

Title of Officer

Name of Firm

Seal of Firm

Date

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM - 6

Equipment Capabilities

UNDERTAKING

I, the undersigned to hereby undertake that our firm M/s.

shall deploy all plants and equipments required for implementation of the project as per technical specifications. I also undertake to either own or have assured access through hire or lease the key items of the equipments as specified in Annex-II.

Signed by an Authorised Officer of the Firm

Title of Officer

Name of Firm

Seal of Firm

Date

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM - 7

Financial Capability

Name of Bidder

Bidders should provide financial information to demonstrate that they meet the requirements stated in the Instructions to Bidders. Each Bidder shall complete this form. If necessary, use separate sheets to provide complete Banker's information. A copy of the complete audited Annual Accounts for the last five years should be attached.

Autonomous construction subdivisions of parent conglomerate business shall submit financial information related only to the particular activities of the sub division.

Banker	Name of Banker		
	Address of Banker		
	Telephone	Contact name and title	
	Fax	E-mail	

- *Summarize actual assets and liabilities for the previous five years.*
- *Foreign Bidders should summarize actual assets and liabilities for previous five years in relevant currency at the end of the period reported and figures converted into Indian rupees in the following manner may also be furnished:*

Year 1	Year 2	Year 3	Year 4	Year 5
---------------	---------------	---------------	---------------	---------------

Financial information in Indian rupees	Actual : Previous five years				
	5	4	3	2	1
1. Total assets					
2. Current assets					
3. Total Liabilities					
4. Net Worth					
5. Working Capital					
6. Current Liabilities					

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7. Profits before taxes					
Profit after taxes					

Specify proposed sources of financing such as liquid assets, unencumbered real estates. Lines of credit and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract.

Source of Financing	Amount
1.	
2.	
3.	
4.	

Attach complete audited financial statements for the last five years (for the individual Bidder or each partner of a joint venture)

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM – 7A

Financial Capability

Name of Bidder

Bidders should provide financial information to demonstrate that they meet the requirements stated in the Instructions to Bidders. Each Bidder shall complete this form. If necessary, use separate sheets to provide complete banker information. A copy of the complete audited Annual Accounts for the last five years should be attached.

Autonomous construction subdivisions of parent conglomerate business shall submit financial information related only to the particular activities of the subdivision.

Banker	Name of Banker	
	Address of banker	
	Telephone	Contact name and title
	Fax	E-mail

- *If more than one Banker is proposing to finance the project (s), the details in the above format may be appendix on all Bankers.*

The details of financial capability are as under:

Description	Amount (Rs. Lacs)
A. Source of funding	
1. Net Working Capital	
2. Lines of credit from Banks (Bank Certificate enclosed)	
3. Other Financial Means	
4. Own resources	
5. Available money Guarantees (Name and addresses of banks given)	
Total of A	
B. Liability during next 2 years	
1. Financial commitments for ongoing civil works	
2. Other commitments	
Total of B	

Note: *All the above items shall be supported by specific details/list of items/certified/balance sheet analyzed.*

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM – 7B

**FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF
OVERDRAFT/CREDIT FACILITIES**

BANK CERTIFICATE

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

If the contract for the work, namely [Name of the Project] is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of INR.....(in figures and words) to meet their working capital requirements for executing the above contract.

--Sd.--

Name of the Bank

Senior Bank Manager

Address of the Bank

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM - 8
Litigation/Arbitration History

Name of Bidder

Bidders should provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution.

Year	Award FOR or AGAINST Bidder	Name of client, cause of litigation/Arbitration and matter in dispute	Disputed amount (current value)	Actual Awarded Amount

QUALIFICATION INFORMATION FORM - 9

INFORMATION REGARDING CURRENT LITIGATION, DEBARRING EXPELLING OF BIDDER OR ABANDONMENT OF WORK BY BIDDER

1 (a) Has the Bidder or its constituent partners consistent history of litigation/arbitration awarded against him.Yes/No

(b) If yes, give details

2 (a) Has the Bidder or any of its constituent partners been debarred/expelled by an Agency in India, during the last 5 years as on the date of Bid, except on account of reasons other than non-performance, such as rescinding of joint venture due to most experienced partner of joint venture pulling out, court directions leading to breaking up of a joint venture before start of work.Yes/No

(b) If yes, give details

3 (a) Has the Bidder or any of its constituent partners abandoned any contract work in India during the last 5 yearsYes/No

(b) If yes, give details

4 (a) Has the Bidder or any of its constituent partners been declared bankrupt during the last 5 yearsYes/No

(b) If yes, give details, including present status Yes/No

5 Has the Bidder or any of its constituent partners been debarred by NHAI for as on the date of Bid.

6 (a) I/ We certify that in the last two years, we have neither failed to perform for the works of Expressways, National Highways, ISC & EI works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitral award against us, nor been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach on our part.

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

- 6 (b) I/ We certify that we do not fall in any of the categories of being a Non-Performing entity given at Clause 3.4 of Instructions to Bidders in the projects of Expressways, National Highways, ISC and EI works of Ministry of Road Transport & Highways or its implementing agencies and furnished the complete details.

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7(a) I/ We further certify that no investigation by a regulatory authority is pending either against us or our sister concern or against our CEO or any of our directors/managers/employees.

(b) I/ We further certify that no investigation by any investigating agency in India or outside is pending either against us or our sister concern or against our CEO or any of our directors/managers/employees.

A statement by the Bidder or any of their Associates disclosing material non-performance or contractual non-compliance in past projects, contractual disputes and litigation/ arbitration in the recent past is given below (attach extra sheets, if necessary) w.r.t. para 3.4

Name of the Bidder: _____

Sr. No.	Categories of Non-Performer	Name of Project(s)
(i)	Fails to set up institutional mechanism and procedure as per Contract.	
(ii)	Fails to mobilize key construction equipment within a period of 4 months from the Appointed Date.	
(iii)	Fails to complete or has missed any milestone and progress not commensurate with contiguous unencumbered project length /ROW available even after lapse of 6 months from respective project milestone/Schedule Completion date, unless Extension of Time has been granted due to Authority's Default or Force Majeure.	
(iv)	Fails to achieve progress commensurate with funds released from Escrow Account (Equity + Debt + Grant) in BOT or HAM project and variation is more than 25% in the last 365 days.	
(v)	Fails to achieve the target progress or complete the project as per schedule agreed at the time of sanctioning of funds under One Time Funds Infusion (OTFI) or relaxations to contract conditions to improve cash flow solely on account of Concessionaire's failure/default.	
(vi)	Fails to complete rectification (excluding minor rectifications) as per time given in non-conformity reports (NCR) in design/completed works/maintenance or reported in Inspection Reports issued by Quality Inspectors deployed by the Authority or Officers of the Authority.	
(vii)	Fails to complete minor rectifications exceeding 3 instances in a project as per time given in non-conformity reports (NCR) in design/completed works/maintenance.	
(viii)	Fails to fulfill its obligations to maintain a highway in a satisfactory condition in spite of two rectification notices issued in this regard.	

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(ix)	Damages/ penalties recommended by Independent/Authority's Engineer during O&M Period and remedial works are still not taken up.	
(x)	Fails to complete Punch list items even after lapse of time for completion of such items excluding delays attributable to the Authority.	
(xi)	Occurrence of minor failure of structures/highway due to construction defect wherein no casualties are reported (casualties include injuries to human being / animals).	
(xii)	Occurrence of major failure of structures/highway due to construction defect wherein no casualties are reported (casualties include injuries to human being/ animals).	
(xiii)	Occurrence of major failure of structures/highway due to construction defect leading to loss of human lives besides loss of reputation etc. of the authority.	
(xiv)	Fails to make premium payments excluding the current instalment in one or more projects.	
(xv)	Fails to achieve financial closure in two or more projects within the given or extended period (which shall not be more than six months in any case).	
(xvi)	Fails to submit the Performance Security within the permissible time period in more than one project.	
(xvii)	Rated as an unsatisfactory performing entity/ non-performing entity by an independent third-party agency and so notified on the website of the Authority.	
(xviii)	Failed to perform for the works of Expressways, National Highways, ISC & EI works in the last 2(two) years, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitral award against the Bidder, including individual or any of its Consortium Member, as the case may be.	
(xix)	Expelled from the contract or the contract terminated by the Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder, including individual or any of its Consortium Member; Provided that any such decision of expulsion or termination of contract leading to debarring of the Bidder from further participation in bids for the prescribed period should have been ordered after affording an opportunity of hearing to such party.	
(xx)	Fails to start the works or causes delay in maintenance & repair/overlay of the project.	

I/ We certify that the list is complete and covers all the projects of Expressways, National Highways, ISC and EI works of Ministry of Road Transport & Highways or its implementing agencies and that we do not fall in any of the above categories of being a Non-Performing entity.

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Note : If any information in this schedule is found to be incorrect or concealed, Bid will be summarily rejected.

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QUALIFICATION INFORMATION FORM - 10

AFFIDAVIT*

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s. _____ nor any of its constituent partners have abandoned any work on National Highways in India nor any contract awarded to us for such works has been rescinded, during last five years prior to the date of this application.
3. The undersigned also furnishes undertaking that we are not declared by any court of law as proclaimed offenders, also that we are not convicted under any law for the offences punishable under Indian Penal Code, TADA, POTA, Negotiable Instruments Act or any Labour/employee beneficial legislations.
4. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by Employer to verify this statement or regarding my (our) competence and general reputation.
5. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Employer.

Signed by an Authorised Officer of the Firm

Title of Officer

Name of Firm

Seal of Firm

Date

* To be given on Non-Judicial stamp paper of appropriate value duly signed by authorized notary.

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

QUALIFICATION INFORMATION FORM – 11

Information required to evaluate the BID Capacity under Clause 1.11:

To calculate the value of “A” and “C”

1. A table containing value of **Solar Highway/Solar Street/Solar High Mast lighting/Solar Home Energy System/Solar Home Lighting System works** in respect of Projects (Turnkey projects / Item rate contract/ Construction works) undertaken by the Bidder during the last 5 years is as follows (the amount of bonus received, if any, shall be indicated separately):

S. No.	Year	Value of Solar Highway/Solar Street/Solar High Mast lighting/Solar Home Energy System/Solar Home Lighting System works undertaken w.r.t. including bonus, if any (Rs. In Crores)	Amount of bonus (Rs. in Crores)	Net Value excluding bonus (Rs. in Crores)
1	[2021-22]			
2	[2022-23]			
3	[2023-24]			
4	[2024-25]			
5	[2025-26]			

2. Maximum value of projects that have been undertaken during the F.Y. _____ out of the last 5 years and _____ value excluding amount of bonus thereof is Rs.Crores (Rupees _____). Further, value updated to the price level of the year as per Clause 1.2 is as follows:

Rs.____Crores X____(Updation Factor as per Appendix) = Rs.____Crores (Rupees_____)

3. Amount of bonus received, if any, in EPC Projects during the last 5 years (updated to the price level of the year indicated in Appendix):

Sl. No.	F.Y. / Calendar Year	Amount of Bonus (Rs. in Crores)	Updation Factor	Updated Amount of Bonus (Rs. in Crores)
1	[2021-22]		1.20	
2	[2022-23]		1.15	
3	[2023-24]		1.10	
4	[2024-25]		1.05	
5	[2025-26]		1.00	
			Total (C)=	

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Date:

Place:

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.....

.....

Signature, name and designation
of Authorised Signatory

For and on behalf of

.....(*Name of the Bidder*)

.....

.....

Name of the Statutory Auditor's firm:
Seal of the audit firm: (Signature, name and
designation and Membership No. of
authorised signatory)

To calculate the value of “B”

A table containing value of all the existing commitments and on-going works to be completed during the next *** year is as follows:

Sl. No.	Name of Project /Work	Percentage of participation of Bidder in the project	Dater of start / appointed date of project/ Emerged as Winner of project	Construction period as per Agreement/ LOA	Value of contract as per Agreement /LOA	Value of work completed	Balance value of work to be complete d	Anticipate d date of completion	Balance value of work at [2026-27/2026] Price level
					Rs. in Crore	Rs. in Crore	Rs. in Crore		Rs. in Crore
1	2	3	4	5	6	7	8= (6-7)	9	10 (3x 8 x #)

Updation Factor as given under Clause 1.2.

The Statement showing the value of all existing commitments, **works for which the contractor has emerged as the winner of the bid as given by bidder** and ongoing works as well as the stipulated period of completion remaining for each of the works mentioned above is verified from the certificate issued that has been countersigned by the Client or its Engineer-in- charge not below the rank of Executive Engineer or equivalent in respect of EPC Projects **or** Concessionaire / Authorised Signatory of SPV in respect of BOT Projects. No awarded / ongoing works has been left in the aforesaid statement which has been awarded or **Emerged as Winner** to M/s..... individually or in Joint Venture, as on bid due date of this Bidding Document.

Date:

Place:

Verified by Statutory Auditor of the Bidder/Partner of Joint Venture

.....
.....
Signature, name and designation of
Authorised Signatory

For and on behalf of.....(Name
of the Bidder)

.....
.....
Name of the Statutory Auditor's firm:
Seal of the audit firm: (Signature, name
and designation and Membership No. of
authorised signatory)

QUALIFICATION INFORMATION FORM – 12

Format for Power of Attorney for signing of BID

(Refer Clause 20.2 of ITB)

Know all men by these presents, We (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr / Ms (name), son/daughter/wife of and presently residing at

....., who is presently employed with us and holding the position of , as our true and lawful attorney (hereinafter referred to as the

“Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our BID for the *** [Name of the Project] on item rate (percentage) basis or being developed by the National Highways Authority of India (the “Authority”) including but not limited to signing and submission of all applications, BIDs and other documents and writings, participate in Pre-BID and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the agreement and undertakings consequent to acceptance of our BID, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our BID for the said Project and/ or upon award thereof to us and/or until the entering into of the Contract Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF 2.....

For

(Signature, name, designation and address) of person
authorized by Board

Resolution (in case of Firm/ Company)/
partner in case of

Partnership firm

Witnesses:

1.

2.

Accepted

.....

.....(Signature)

(Name, Title and Address of the Attorney)

(Notarise

d) Person identified by me/ personally appeared
before me/

Atte
sted/Authenticated*(*Notary to
specify as
applicable)

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(Signature Name and Address of the Notary)

Seal of the Notary
Registration No. of the Notary
Date:.....

Notes:

- a. *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- b. *Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*
- c. *For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Appostille certificate.*

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QUALIFICATION INFORMATION FORM – 13

Certificate regarding Compliance with Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

The CGM (T) & Regional Officer
Regional Office
National Highways Authority of India
Door No.41-29-45A, R.S.No.373/2A
Near Kodandaramalayam
Chalasani Nagar, Ranigarithota
Krishnalanka, Vijayawada - 520 013 (AP)
Tele: 0866 - 2483910
Fax: 0866 - 2474496
Email : rovijayawada@nhai.org

Sub: BID for *** (Name of the Project) on item rate (percentage) basis

Dear Sir,

With reference to your Bidding document dated *** **\$, I/we, having examined the Bidding Documents and understood their contents, hereby undertake and confirm as follows:

I/We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries;

I certify that this Bidder is not from such a country or, if from such a country, has been registered with the Competent Authority .

I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered.

Yours faithfully,

Date:

(Signature of the Authorised signatory)

Place:

(Name and designation of the of the Authorised signatory)

Name and seal of Bidder/Lead Member

Notes:

{Where applicable, evidence of valid registration by the Competent Authority shall be attached}

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

In case the above certification is found to be false, this would be a ground for immediate rejection of Bid/termination and further legal action in accordance with law.

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Annex-I

LIST OF KEY PERSONNEL REQUIRED TO BE DEPLOYED ON THE CONTRACT WORK

Sl. No.	Name of Key Personnel	Designation	Qualification	Particular Experience (minimum requirement)	No. of Persons	Requirement
1.		Project Manager	Graduation in Electrical Engineering + 5 Years Exp.	3 years as Project Manager on Highway works including Lighting works	1	During execution
2.		Site Engineer cum Surveyor Engineer	Diploma in Civil Engineering + 5 years Exp. Or Graduation in Civil Engineering + 3 yrs. Exp.	3 years on highway construction / Highway lighting works	1	During execution
3.		Road safety expert	Graduate in civil engineering+3 years experience in Road safety works during construction/ maintenance of roads	2 years experience in road safety	1	During execution
4.		Electrical Engineer	Diploma in Electrical Engineering + 5 years Exp. Or Graduation in Electrical Engineering + 3 yrs. Exp.	3 years on highway lighting works	1	During maintenance / DLP

Skilled workers and operators

Minimum 5% shall have obtained certificate of proficiency from any institute.

@The Contractor shall employ the technical personnel named above or other technical persons approved by the Engineer. These numbers as specified in the contract are minimum and contractor has to employ the adequate technical personnel required for execution of works. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated above. If the personnel stated above are not deployed on site by the Contractor within 15 days of issue of notice to proceed with the work, a penalty of Rs 2000/- per day per person shall be levied for next 30 days, beyond which it shall be treated as a breach of Contract and action will be taken as per Clause 63.1. The replacement of Project Manager will be approved by the Employer.

Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

Annex-II

PLANT AND EQUIPMENT REQUIRED TO BE OWNED/TAKEN ON LEASE BY THE CONTRACTOR

S. No.	Type of equipment	No. of plant and equipment
1	Vehicle Mounted Tower Ladder	2
2	Hydraulic Crane	2
3	Generator	2

T=Tonnes

T/hr = Tonnes per hour

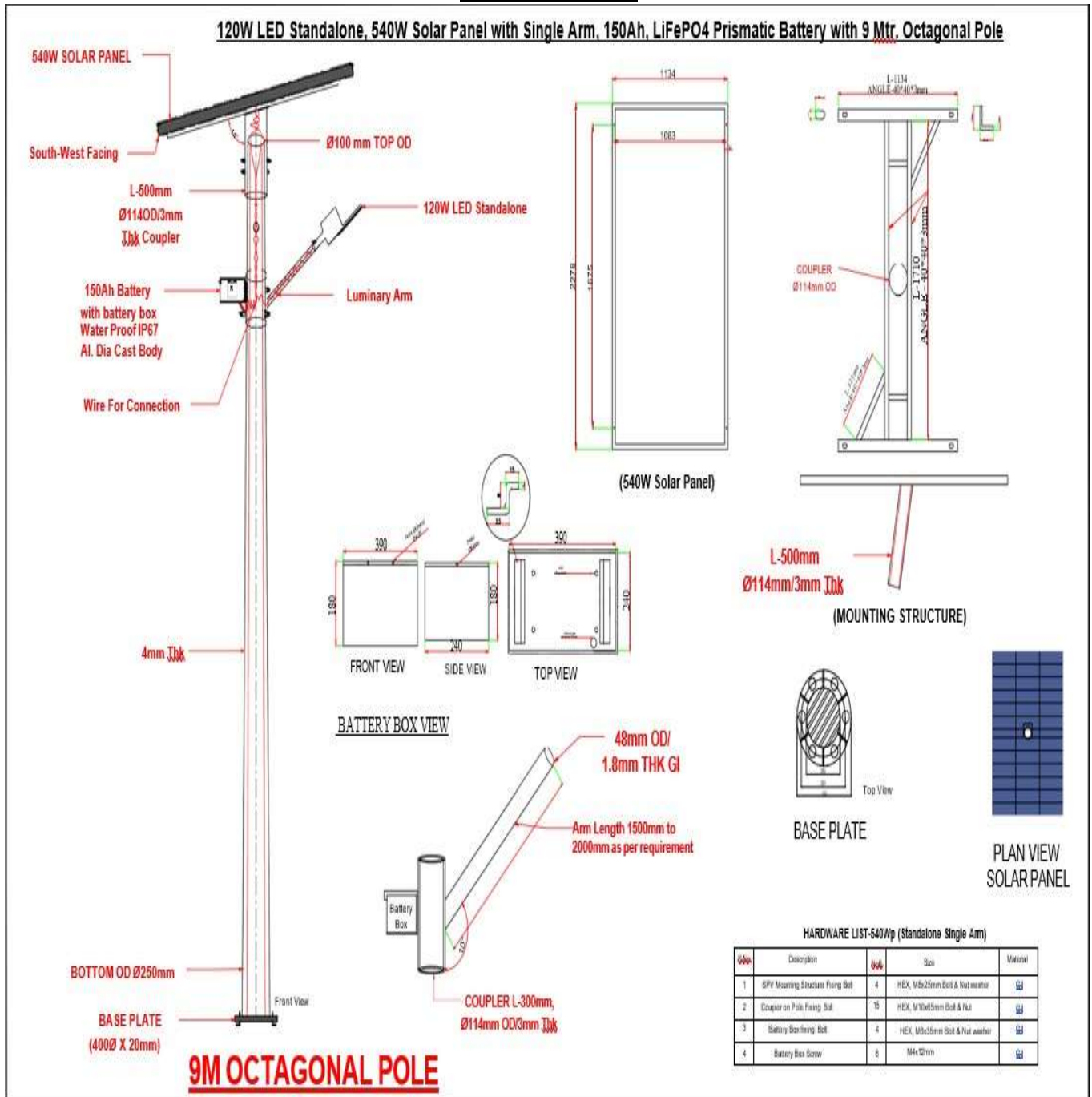
** Any total system for crushing stone aggregate and feeding aggregate fractions in their required proportions into the plant to achieve the desired mix, if such is utilized by the contractor, must be capable of meeting all the requirements of the Specifications under stringent quality control.*

Note: The contractors are requested to verify latest position in respect of “Duties on Contractor’s equipment” from Department of Revenue, Ministry of Finance, Government of India. (Their attention is also invited to customs notifications wherein customs duty exemption for certain equipments subject to certain conditions, have been made available by Government of India.

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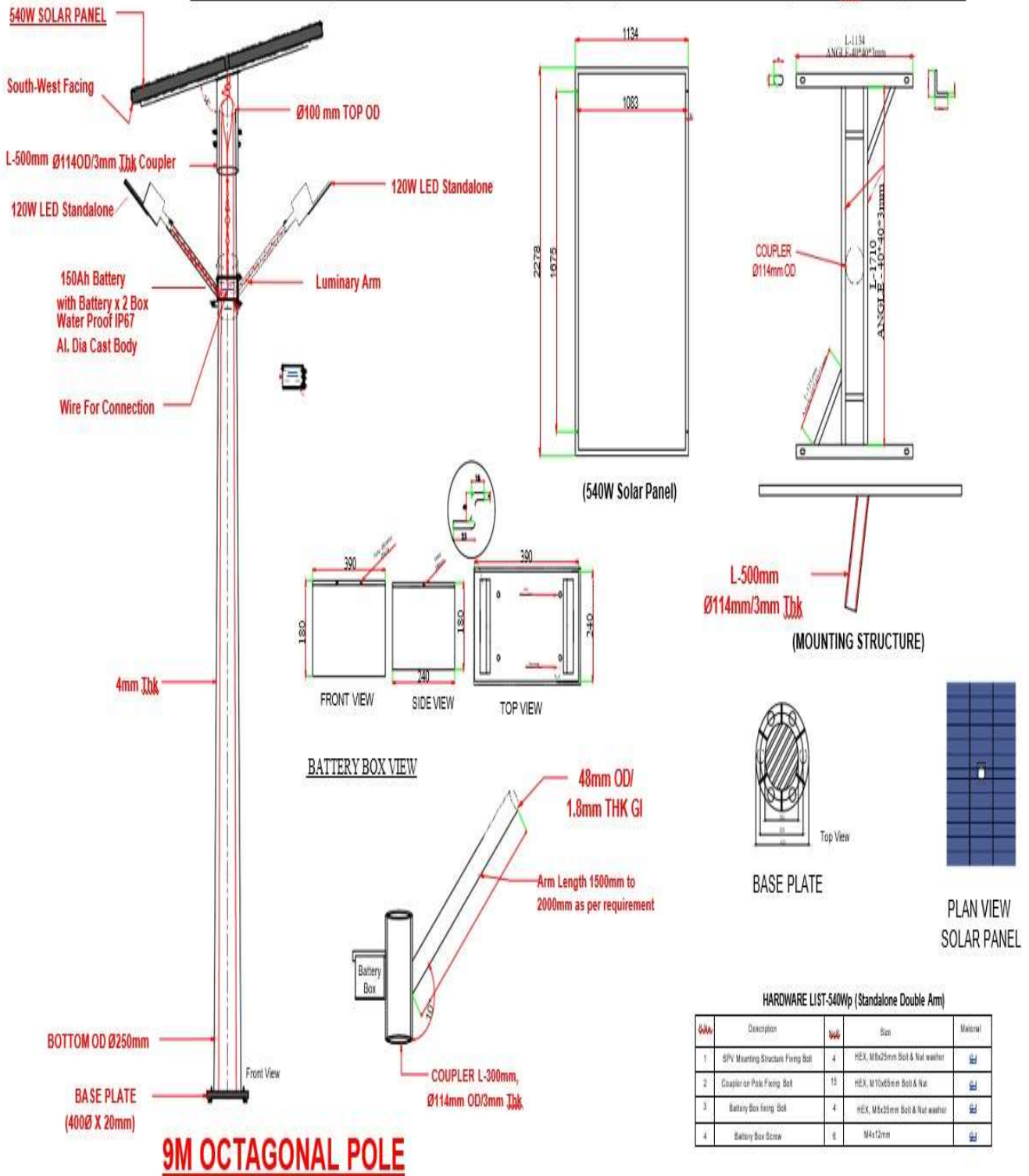
Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis.

TYPICAL DRAWING



Providing Solar Highway Lighting from Diwancheruvu Reserve Forest Area to Vemagiri at 63 no. of locations on Annavaram - Diwancheruvu – Siddhantham section of NH-16 & 216A in the State of Andhra Pradesh, as part of rectification of Accident spots on item rate(percentage) basis

120W LED Standalone, 540W Solar Panel with Double Arm, 150Ah, LiFePO4 Prismatic Battery with 9 Mtr. Octagonal Pole



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FOUNDATION

