

**National Highways & Infrastructure Development  
Corporation Limited**



**REQUEST FOR PROPOSALS (RFP)**

for

**Selection of Consultants**

for

**Authority's Engineer for**

***“Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On NH-127B (Length: 19.282 km)”.***

**Client: National Highways & Infrastructure Development  
Corporation Limited (NHIDCL)  
Government of India**

**October - 2020**

## **Table of Contents**

<b>RFP</b>	<b>Description</b>	<b>Page No.</b>
Section 1	Letter of Invitation	3-15
Section 2	Selection Procedures	16-47
	Option B: Quality and cost Based Selection	
	QCBS: Instructions to Consultants	16
	QCBS: Data Sheet	17-47
Section 3	Technical Proposal - Standard Forms	48-62
Section 4	Financial Proposal - Standard Forms	63-75
Section 5	Terms of Reference	76-119
Section 6	Standard Forms of Contract	120-150
Section 7	Eligible Source Countries of Japanese ODA Loans	151
Section 8	Integrity Pact	152-158
Annexure-V	Format for Monthly Progress Reports	159-214

## SECTION-1

### Letter of Invitation to Consultants

#### A. INTRODUCTION

To

All short listed Consultants (As listed at Para 3 below).

1. The National Highways & Infrastructure Development Corporation Limited (hereinafter referred as “NHIDCL/Employer/Client/Authority”) invites proposals from the short-listed Consultancy firms (hereinafter referred as Bidders/Consultants/Applicants) for engaging an Authority’s Engineer (AE) on the basis of International Competitive Bidding for **“Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)”** (hereinafter called “the Project”). The Government of India (hereinafter called “Borrower”) is receiving financing from Japan International Cooperation Agency (JICA) toward the cost of the Project under the Scheme “North East Road Network Connectivity Improvement Project (Phase 3)”.

Consultancy Package	NH No.	State	Project Stretch	Project Length (km)	Assignment period (months)
NHIDCL/D-P-Bridge/E-170621/2018/AE	NH-127B	Assam/ Meghalaya	<b>Design, Engineering, Procurement, Supply And Construction for-</b> Construction of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 20km)	19.282 km	141 months  (Construction Period 93 months & Maintenance Period 48 months)

2. More details on the services are provided in the **Terms of Reference**.
3. NHIDCL had earlier invited Expression of Interest (EOI) dated 28.03.2019 from the interested Consultants and received proposals from 05 firms by due date and time (11.04.2019 upto 5.00 pm). Following firms have been shortlisted based on the eligibility in consultation with JICA, which are now invited to participate in the competitive bidding process for engagement as Authority’s Engineer (AE):
  - (i) M/s AECOM Asia Company Limited in association with PADECO Co. Ltd.
  - (ii) M/s Systra S.A.
  - (iii) M/s AO Institute Stroyproekt JSC (Lead Member) in consortium with AO Lenstroy JSC (Associate Member) and Rodic Consultants Private Ltd. (Associate Member).

## **Section 1. Letter of Invitation**

4. While submitting the proposal, the short listed firms are not permitted to transfer this invitation to any other firm and change in structure of Sole/JV/ Associate member adopted at the EOI stage by the bidders/applicant is not allowed for the purpose of this RFP. Proposals submitted/ uploaded by any firm other than above mentioned shortlisted firms shall not be considered.
5. A firm will be selected under QCBS (Quality and Cost-Based Selection) and procedures described in this RFP, in accordance with the applicable Guidelines for the Employment of Consultants under Japanese ODA Loans as mentioned in this RFP. The selected AE shall be intimated to the JICA and to the Contractor.
6. The RFP includes the following documents:
  - Section 1 - Letter of Invitation
  - Section 2 - Instructions to Consultants (including Data Sheet)
  - Section 3 - Technical Proposal - Standard Forms
  - Section 4 - Financial Proposal - Standard Forms
  - Section 5 - Terms of Reference
  - Section 6 - Standard Forms of Contract
  - Section 7 - Eligible Source Countries of Japanese ODA Loans
  - Section 8 - Integrity Pact Format
7. Please inform us in writing at the address below, upon receipt:
  - (a) That you have received the Letter of Invitation; and
  - (b) Whether you will be submitting proposal in same configuration as participated during EOI.

**Dy. General Manager (Technical),**  
**National Highways & Infrastructure Development Corporation Limited**  
**Address:** 3<sup>rd</sup> Floor, PTI Building, 4 Parliament Street, New Delhi - 110001  
**Facsimile:** +91-11-2371-1103  
**E-mail:** [kc.bhatt@gov.in](mailto:kc.bhatt@gov.in)

8. The RFP Document has been uploaded on CPP Portal (<https://eprocure.gov.in>) and NHIDCL website ([www.nhidcl.com](http://www.nhidcl.com)). Technical proposal is to be submitted online. In addition, hard copy of the documents in original (other than financial proposals), as mentioned at Clause 10.1(v) of Data Sheet are to be submitted at the address mentioned at Para 7 above. It may please be ensured that the Financial Proposal is to be uploaded on CPP Portal (<https://eprocure.gov.in>) only. Bidder should have clean record with respect to litigation/in-solvency<sup>#</sup> on the bid due date. A declaration to that effect should be accompanied with the bid proposal.

*(# If the Bidder (any of the partners in case of JV) shall not be in Corporate Insolvency Resolution Process (CIRP)/National Company Law Tribunal (NCLT)/CDR/SDR process and shall not be in a default on any debt obligations on the Bid Due Date).*

**Section 1. Letter of Invitation**

9. The short-listed Consultancy firms may download the RFP document from the official website of the Employer (NHIDCL) w.e.f. 07.10.2020 **at 1800 hrs.** The short listed consultancy firm who downloads the RFP document from the website will be required to pay the non-refundable fee of Rs. 5,900/- (inclusive of GST) towards cost of RFP at the time of submission of the bid online either through RTGS/NEFT/Other digital mode in the given Bank account details of NHIDCL on or before the 05.11.2020 (1500 hrs). Proof of the payment receipt (RTGS/NEFT/Other online mode) must be submitted online along with the bid document.

**Name- MD-NHIDCL**

**Account no- 90621010002610**

**IFSC Code - SYNB0009062**

**Name of Bank- Canara Bank (erstwhile Syndicate Bank)**

10. As part of the Standard Operating Procedure for adoption of Integrity Pact, **Shri Subhash Chandra, IAS (Retd.)** has been appointed as Independent External Monitor (IEM) in NHIDCL vide OM dated 27.08.2020, as per approval of the Central Vigilance Commission and Ministry of Road Transport & Highways, Govt. of India. The contact details are as under:

B-9, Tower 10, New Moti Bagh Complex,

New Delhi - 110 021.

Mobile: +91-9717790920

E-mail: subhash59@hotmail.com

11. Details on the proposal's submission date, time and address are provided in Clause 12.6 of the **Instructions to Consultants (ITC)**.

12. Not used.

13. The Applicant/Bidder, by submitting its Application pursuant to this RFP, shall be deemed to have acknowledged that without prejudice to the <NHIDCL> any other right or remedy hereunder or in law or otherwise, the Applicant shall be debarred from participating in the future projects of the <NHIDCL> in the following situations

- (a) If an Applicant withdraws its Proposal during the period of its validity as specified in this RFP and as extended by the Applicant from time to time.
- (b) In the case of a Selected Applicant, if the Applicant fails to sign the Agreement.

14. Deleted

**Section 1. Letter of Invitation**

15. In case the financial figures and values of services provided are in foreign currency current market exchange rate (*State Bank of India BC Selling rate as on last date of submission of the bid*) will be applied for the purpose of conversion of amount in foreign currency into Indian Rupees.
16. The Bidder including individual or any of its Joint Venture Member should, in the last 2 years, have neither failed to perform for the consultancy services pertaining to Expressways, National Highways, ISC (Inter State Connectivity) & EI (Economic Importance) works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder including individual or any of its Joint Venture Member. Consultants (sole firm or lead firm and any of the JV partners) who do not fulfill the aforesaid condition as on last date of submission of proposal, need not apply as their RFP proposal will not be entertained.
17. Not Used.
18. The two parts of the Proposal (Technical and financial proposal) must be submitted on-line with all pages numbered serially, along with an index of submission as per procedure under e-tendering. *However, the financial proposal should be submitted only through the BOQ on CPP Portal.*
19. Employer will be at liberty to keep the credentials submitted by the Consultants at bidding stage, in public domain and the same may be uploaded by Employer on Employer's web-site. Consultants should have no objection if Employer uploads the information pertaining to their credentials as well as of their key personnel.
20. Not used.
21. Not used.
22. Not used.
23. Not Used.
24. It is the NHIDCL policy that the consultants observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the NHIDCL-
  - (a) Defines, for the purpose of this paragraph, the terms set forth below as follows:
    - (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;

**Section 1. Letter of Invitation**

- (ii) “Fraudulent practice” means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
  - (iii) “Collusive practices” means a scheme or arrangement between two or more consultants with or without the knowledge of the Client, designed to establish prices at artificial, non-competitive levels;
  - (iv) “Coercive practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
- (b) Will reject a proposal for award if it determines that the Consultant recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question;
  - (c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract; and
  - (d) Will have the right to require that a provision be included requiring consultants to permit the Employer to inspect their accounts and records relating to the performance of the contract and to have them audited by authorized representatives of Employer.
25. Consultants, their JV partner, their Sub-Consultants, and their associates shall be under a declaration of ineligibility for adopting corrupt and fraudulent practices. Further, more, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.
26. Not used.
27. Not Used.

**B. PREPARATION OF PROPOSAL**

28. Bidders are requested to submit proposal in Two Parts strictly using the formats enclosed herewith in 02 separate folders and put together in one single folder while submitting its bid through online. The two parts shall be:

Part 1: Technical Proposal and

Part 2: Financial Proposal (financial quote to be uploaded only on CPP Portal).

The proposal shall be written in the English language. All pages of the Proposal shall be signed by an authorized representative. The representative’s authorization shall be confirmed by written Power of Attorney duly notarized

## Section 1. Letter of Invitation

to be submitted with the proposal. In case of JV or inclusion of Associate Company, a MoU indicating the specific Projects, input and role of each Partner etc. shall be submitted with the proposal.

### Part 1: Technical Proposal

- (a) Bidders are expected to examine all terms and conditions included in the documents. Failure to act or to provide all requested information will be at Bidders own risk and may result in rejection of your proposal.
  - (b) During preparation of the Technical proposal Bidders may give particular attention to the following:
    - i. The man-months for the assignment shall be that stated in the Terms of Reference. The same shall be considered for the purpose of evaluation as well as award. In case the man months of TOR are amended in view of Client's own initiative or in response to clarification sought by any Bidder, the man months so amended and published shall be considered for the purpose of evaluation as well as award.
    - ii. The Consultants should prefer to field as many of their permanent staff as possible. The permanent staff would be considered those already employed with the firm prior to one year from the month during which this Tender Notice is issued. Applicant shall submit the details of the period of employment of the proposed personnel with the firm.
    - iii. A good working knowledge of the language specified in the data sheet is essential for key professional staff on this assignment. Reports must be in the language (s) specified in the data sheet.
29. Your Technical Proposal must provide the following information, using but not limited to the formats attached.
- i. A brief description of the firm's organization and an outline of recent experience of the Consultants and, in the case of Joint Venture, for each partner, on assignments of a similar nature. The information which you shall provide on each assignment should indicate, inter-alia, the profiles of the staff provided, duration, contract amount and firm's involvement. The details of assignments on hand shall also be furnished by the Consultant and their JV partner, separately.
  - ii. Any comments or suggestions on the ToR and a description of the methodology (work plan) which the firm proposes to execute the services, illustrated with bar charts of activities.
  - iii. Site Appreciation: limited to four A4 size pages in 1.5 space and 12 font including photographs, if any;
  - iv. Proposed methodology for the execution of the services illustrated with bar charts of activities, including any change proposed in the methodology of

**Section 1. Letter of Invitation**

services indicated in the TOR, and procedure for quality assurance: Maximum;

- v. The proposed methodology should be accompanied by the consultant’s initial view, key challenges they foresee and potential solutions. It should also include details on adoption of superior technology along with proof: limited to six A4 size pages in 1.5 spaces and 12 font including photographs;
- vi. The proposal shall indicate as to whether the firm is having the facilities for carrying out the following field activities or these are proposed to be outsourced to specialized agencies.
  - Surface defects detection and roughness measurement using Network
  - Survey Vehicle
  - Pavement strength measurement using FWD
  - Bridge inspection using Mobile Bridge Inspection Unit
  - Road signs inspection using Retro Reflectometer
- vii. Proposed Quality Audit Methodology including Quality Assurance Plan
- viii. In case the Consultant envisages outsourcing any or all of the above services to the expert agencies, the details of the same indicating the arrangement made with the agencies need to be furnished. These agencies would however, be subject to approval of the client to ensure quality input by such agencies before award of the work. For out-sourced services, proposed firms/consultants should have such experience on similar projects.
- ix. The composition of the proposed staff team, the tasks which shall be assigned to each and their timing;
- x. Requirement for submission of CVs.
  - a. The CVs of following Key Expert in the format as per TACH 6 is to be furnished for a Standalone Bridge Project:

<p><b>1. Project Management Team</b>                      (i) Team Leader cum Sr. Br. Engineer                      (ii) Deputy Team Leader Sr. Br. Eng.</p> <p><b>2. Contract/Cost/Planning Team</b>                      (i) Sr. Contract Expert</p> <p><b>3. QA/QC Team</b>                      (i) Chief QA/QC Expert</p> <p><b>4. Safety Team</b>                      (i) Chief Safety Expert</p> <p><b>5. Social &amp; Environment Team</b>                      (i) Chief Social &amp; Env. Expert</p> <p><b>6. Design Team / Highway Team</b>                      Not used</p>	<p><b>7. Bridge Team (Fdn./Sub-Structure)</b>                      (i) Chief Bridge Engineer</p> <p><b>8. Superstructure (Extradosed) Sub-Team</b>                      (i) Chief Bridge Engineer</p> <p><b>9. Superstructure (Viaduct/VOP) Design Team</b>                      (i) Chief Bridge Engineer</p> <p><b>10. Operation &amp; Maintenance Team</b>                      (i) Chief O&amp;M Expert</p> <p><b>11. Execution Team/ Main Bridge Team</b>                      (i) Chief Resident Engineer</p> <p><b>12. Viaduct Team</b>                      (i) Chief Resident Engineer</p>
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It may please be ensured that the format is strictly followed and the information furnished therein is true and correct. The CV must indicate the

## Section 1. Letter of Invitation

work in hand and the duration till which the person will be required to be engaged in that assignment. The Firm shall ensure that details furnished in the CV by the personnel are correct. If any information is found incorrect, at any stage, action including termination and debarment from future NHIDCL projects for a minimum period of 2 years may be taken by NHIDCL on the personnel and the Firm.

- b. Key information should include years with the firm and degree of responsibility held in various assignments. In CV format, at summary, the individual shall declare his qualification & total experience (in years) against the requirements specified in TOR for the position (Ref. of TOR). If any information is found incorrect, at any stage, action including termination and debarment from future NHIDCL projects upto 2 years may be taken by NHIDCL on the personnel and the firm.
- c. CVs of Key Expert having intermittent inputs will be considered only if the assignments on hand as on **7 days** before due date of proposal including those for which LOA has been received from the Client or for which Consultant has been declared as H1 are such that the Key Expert is able to proportionately devote the given man months for this project.
- d. All the CVs which are to be evaluated should be complete in all respects including signing and certification by the individual and the firm.
- e. Minimum 75% marks required. CV of Key Expert will be evaluated CV of proposed Team Leader should score at least 75% marks. If not, the proposal shall not be considered further.
- f. If any CV score less than 75% marks, whatever marks it score will be carried forward for maximum 3 nos. Key Expert for determining the total score of the firm. However, if the Key Expert does not fulfill the minimum academic qualification (TOR of RFP), the overall score of his CV will be evaluated as zero. If the Key Expert does not fulfill the minimum qualification related to experience (TOR of RFP), then zero marks will only be assigned for that sub criteria, but the marks obtained by the CV of the Key Expert will be carried forward for maximum 6 nos. Key Expert for determining the total score of the firm. In case, a firm is H-1, then all such Key Expert (whose CV scores less than 75% or who does not fulfill the minimum qualification) will have to be replaced by the firm before signing the contract. The reduction in remuneration of such replacements shall be 10% for each replacement. In case more than 6 CVs scores less than 75% marks or Team leader scores less than 75% marks, the proposal shall be considered non-responsive.
- g. In case CV of a person is turned out to be fake/incorrect/inflated during the assignment, the consultancy firms shall have to refund the salary and perks drawn including interest @12% per annum in respect of the person apart from other consequences to NHIDCL. In addition to above, 10% of the salary and perks to be refunded shall be recovered from the Firm as penalty. In the event the penalty is not paid by the Consultancy Firm, the same shall be recovered from encashment of performance security of the firm.

**Section 1. Letter of Invitation**

- h. It is also clarified that any key personnel, if debarred during the period between receipt of bid and award of the contract and is required to be replaced as per the provisions of the RFP, then the replacement shall not be considered as part of replacement by the Authority's Engineer and hence no deduction in remuneration shall be affected. However, in this case the original CV will be considered for evaluation purpose
  - xi. Deployment Schedule for each Key Expert should be formulated and incorporated in the Technical Proposal which will be reviewed on quarterly basis.
  - xii. Estimates of the total time effort (person x months) to be provided for the services, supported by bar chart diagrams showing the time proposed (person x months) for each professional staff and sub professional staff.
  - xiii. Any additional information.
30. The technical proposal must NOT include any financial information.
- Part 2: Financial Proposal (other than the financial quote which is to submitted on the CPP Portal using the Form of BOQ available on CPP Portal.)
31. Not used.
32. The Financial Proposal should include the local all direct taxes (including social security), duties, fees, levies and other charges imposed under the applicable law, on the consultants, the sub-consultants, and their personnel (other than nationals or permanent residents of the government's country) other than GST (Goods and Service Tax); unless the Data Sheet specifies otherwise.
33. Consultants may express the price of **their services in [foreign and/or local] currency.**

34. Deleted.

**C. SUBMISSION, RECEIPT AND OPENING OF PROPOSALS**

**PREPARATION & SUBMISSION OF APPLICATIONS:**

- (I). Detailed RFP may be downloaded from E-tendering portal of Employer and the Application may be submitted online following the instructions appearing on the screen.
- (II). The following shall be the form of various documents in the Application to be submitted online:
  - (i) Technical Proposal {Only Electronic Form (to be uploaded on the E tendering portal of Employer)}
  - (a) Power of Attorney for signing the Application

## Section 1. Letter of Invitation

- (b) If applicable, the Power of Attorney for Lead Member of JV;
  - (c) Copy of Memorandum of Understanding between JV partners, if applicable;
  - (d) Copy of Memorandum of Understanding with Associate, if applicable.
  - (e) Firms credentials as per format prescribed in Section - 3, Technical Proposal - Standard Forms to be submitted through online only.
  - (f) Technical proposal as per format prescribed in Section - 3, Technical Proposal - Standard Forms to be submitted through online only.
  - (ii) Financial proposal as per format prescribed in section - 4 of RFP
  - (iv) Demand Draft towards cost of RFP of Rs.5,900/- (Rupees Five thousand nine hundred only) online as detailed in Cl. 9 of LOI.
  - (iv) Bidders have to comply with the OM No. 13030/09/2008-vig dated 28<sup>th</sup> January, 2013 (copy enclosed) regarding Integrity pact.
- (III) The successful bidder shall submit the original documents specified above at "C" (Submission, Receipt and Opening Of Proposals), point no.(II) (i) (a), (b), (c) & (d) above together with their respective enclosures to the Authority before signing of the Agreement.
- i) The Applicant shall upload scanned copies of the Technical Proposal and Financial Proposal as specified in point nos. C (II) (i) ,(ii), (iii) & (iv) above on the E-tendering portal of Employer before **15:00 hours** Indian Standard Time on the Bid due date i.e. on 05.11.2020. Financial Proposal is to be submitted On-line only and no hard submission is to be made.

### **D. Modification / Substitution/ Withdrawal of bids: Ref. DS 13**

### **E. OPENING APPLICATIONS:**

- (i) Opening of Proposals will be done through CPP Portal online. The Financial Proposal shall be opened after the result of technical proposal is evaluated and declared online.
- (ii) For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered nonresponsive. The Employer will open the Technical Proposal at **16.30 hours** Indian Standard Time on the Application due date on 06.11.2020 and in the presence of the Applicants who choose to attend and evaluate the Applications in accordance with the provisions set out in the RFP.
- (iii) The Financial Proposal will be opened of the short listed applicants who qualify for financial opening as per RFP. The date of opening of Financial Proposal will be notified on a later date on the CPP Portal & NHIDCL web-site.

**Section 1. Letter of Invitation**

**F. PROPOSAL EVALUATION**

(i) A two-stage procedure shall be adopted for evaluating the proposals.

(ii) Deleted

**Technical Proposal**

(iii) The Evaluation Committee appointed by the Employer shall carry out its evaluation applying the evaluation criteria and point system specified in the data sheet. Each responsive proposal shall be attributed a technical score (ST.) Only those Applicants whose Technical proposal score 75 marks or more out of 100 shall qualify for further consideration. However, if the number of such pre-qualified applications is less than two, the Employer may, in its sole discretion, pre-qualify the applicant(s) whose technical score is less than 75 marks.

**Financial Proposal**

(iv) After the evaluation of Technical Proposals is completed and the shortlist of firms is finalized, the Employer may notify those consultants whose proposals were not considered as per conditions of RFP. The Employer shall simultaneously notify the shortlisted firms indicating the date and time set for opening of the Financial Proposals.

(v) The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant, the technical scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the public opening.

(vi) The Evaluation Committee will determine whether the submitted Financial Proposals are complete (i.e. whether they have included cost of all items of the corresponding proposals; if not, then the cost towards such missing items will be considered as NIL, but the Consultant shall, however, be required to carry out such obligations without any additional compensation.) and without computational error. In case under such circumstances, if Client feels that the work cannot be carried out within the overall cost as per the submitted financial proposal, such proposals shall be considered non responsive.

(vii) The lowest financial proposal (FM) will be given a financial score (SF) of 100 points. The financial scores of other proposals will be computed as follows:

$$SF = 100 \times FM / F \text{ (F= amount of financial proposal)}$$

(viii) Proposals will finally be ranked according to their combined technical (ST) and financial (SF) scores as follows:

$$S = ST \times Tw + SF \times Fw$$

Where S is the combined score, and Tw and Fw are weightages assigned to Technical Proposal and Financial Proposal that shall be 80 and 20 respectively.

## Section 1. Letter of Invitation

- (ix) The selected Authority's Engineer shall be the first Ranked Applicant (H-1, having the highest combined score). In the event the proposals of two or more consultants have the same scores in the final ranking, the proposal with the highest technical score should be ranked first.

### **G. AWARD OF CONTRACT**

The Client shall issue letter of award to selected Consultant and ask the Consultant to provide Performance Security as in Para H below. If the selected Consultant fail to provide performance security within the prescribed time or the Consultant fail to sign the Contract Agreement within prescribed time, the Client may invite the 2<sup>nd</sup> highest ranking bidder Consultant and follow the procedure outlined in Para H and I of this Letter of Invitation.

### **H. PERFORMANCE SECURITY**

- (i) The successful consulting firm shall have to submit a Bank Guarantee (BG) for an amount of **10% of the Contract Value** within **15 days of issue of LOA**. The BG shall be valid for a period of [143 months] i.e. upto 2 months beyond the expiry of the Contract period of [141 months]. The BG shall be in the format specified in Appendix H of draft contract form and furnished from a Nationalized Bank, IDBI or ICICI/ICICI Bank/Foreign Bank/EXIM Bank /Any Scheduled Commercial Bank approved by RBI having a net worth of not less than 1000 crore as per latest Annual Report of the Bank. In the case of a Foreign Bank (issued by a Branch in India) the net worth in respect of Indian operations shall only be taken into account. In case of Foreign Bank, the BG issued by Foreign Bank should be counter guaranteed by any Nationalized Bank in India. In case of JV, the BG shall be furnished on behalf of the JV and not individually by the members. Further, in case where the bid of the successful consulting firm is less than 85% of the average of all bids received, the successful consulting firm shall have to submit an Additional Performance Security (APS) in the form of a Bank Guarantee for 30% of the differential value between the successful bid and average of all the bids received. The BG shall be valid for a period of [143 months] months i.e. upto 2 months beyond the expiry of the Contract of [141 months] months. The other requirements of APS are same as those of Performance Security. BG has to be submitted in favour of Managing Director, NHIDCL, 3<sup>rd</sup> floor, PTI building, 4-Parliament Street, New Delhi-110 001.
- (ii) In the event the Consultant fails to provide the security within 15 days of date of LOA, it may seek extension of time for a period of 15 (Fifteen) days on payment of damages for such extended period in a sum of calculated at the rate of 0.1% (Zero Point One Percent) of the contract price for each day until the performance security is provided. For the avoidance of doubt the agreement shall be deemed to be terminated on expiry of additional 15 days time period.
- (iii) Notwithstanding anything to the contrary contained in this Agreement, the Parties agree that in the event of failure of the Consultant to provide the Performance Security in accordance with the provisions of Clause H (i) within the time specified therein or such extended period as may be provided by the

## **Section 1.Letter of Invitation**

Authority, in accordance with the provisions of Clause H (ii) and thereupon all rights, privileges, claims and entitlements of the Consultant under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Consultant, and LoA shall be deemed to have been withdrawn by mutual agreement of the Parties. Authority may take action debar such firm for future projects for a period of 1-2 years.

### **I. Signing of Contract Agreement**

After having received the performance security and verified it, the Client shall invite the selected bidder for signing of Contract Agreement on a date and time convenient to both parties within 15 days of receipt of valid Performance Security.

35. Bidder to note that, as per Government of India policy and Ministry of Road Transport & Highway (MoRT&H) directions, for evaluation of Bids, No objection certificate(NOC) from Ministry of External Affairs (MEA)&Ministry of Home Affairs (MHA) shall be sought for the firm (Bidder) of foreign origin i.e. based outside India, by NHIDCL.
36. RFP submission must be received not later than 1500 hrs on 05.11.2020 in the manner specified in the RFP document at the address given below.

#### **Address of Employer's representative:**

**Dy. General Manager (Technical),  
National Highways & Infrastructure Development Corporation Limited  
Address : 3<sup>rd</sup> Floor, PTI Building, 4 Parliament Street, New Delhi - 110001  
Telephone :(+91)-11-2346-1626  
E-mail :kc.bhatt@gov.in**

## SECTION-2

### QCBS - Instructions to Consultants

The Instructions to Consultants governing this selection process are given in this RFP document and in the “Instructions to Consultants, Option B - QCBS, Section 2” of the Standard Request for Proposals (version 1.1) published by JICA in October 2012. Those Instructions to Consultants are available on the JICA’s web site shown below:[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/index.html](https://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/index.html)

at the following link:

[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/c8h0vm0000aoesst-att/consul.pdf](https://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/c8h0vm0000aoesst-att/consul.pdf)

A copy of those Instructions is not attached to this RFP.

## QCBS - Data Sheet

Paragraph Reference	
1.(b)	The Applicable Guidelines are those published in April , 2012.
1. (x)	Add the following at the end of this Sub-Clause A Sub-consultant may also be called as an Associate Consultant.
2.1	<b>Amount of the Loan Agreement:JPY 25,483 million</b> (For Tranche-1 for Phase 3 comprising one Civil Contract Package of Dhubri – Phulbari bridge on NH-127 B in the State of Assam and in the State of Meghalaya). <b>Signed date of the Loan Agreement:October 29, 2018</b> <b>Name of Project:</b> North East Road Network Connectivity Improvement Project under JICA Loan ID:276,Phase 3.
2.2	<b>Name of the Client:</b> National Highways & Infrastructure Development Corporation Limited (NHIDCL)
2.3	<b>Name of the assignment:</b> Services of the <b>“Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)”</b> .
2.4	A pre-proposal conference will be held: <b>Yes ✓</b> <u>Time and Date:at 15.00Hrs IST on 16.10.2020</u> At: National Highways & Infrastructure Development Corporation Limited (NHIDCL) HQ, 3 <sup>rd</sup> Floor, Press Trust of India Building, 4, Parliament Street, New Delhi-110001. <hr/> <b>The Client’s representative is: Mr. W BLAH</b> Executive Director, NHIDCL HQ, New Delhi. <b>Address:</b> 3 <sup>rd</sup> Floor, PTI Building, 4 Parliament Street, New Delhi - 110001 Telephone: +91-11-2346-1611 E-mail:ed5@nhidcl.com
2.5	Deleted
4.1(c)	(i)This sub-para is modified as below: (c) will recognize a Consultant as ineligible to be awarded a contract funded with Japanese ODA Loans if the Consultant (sole firm or lead firm and any of the JV partners or any Sub-consultant, who has a direct contract with the Consultant) <b>has been barred by MoRTH/NHIDCL/NHAI</b> or any other state government PWD or road development corporations in India, or debarred under the cross debarment decision by the <u>Multilateral Development Banks</u> or by the World Bank Group or by JICA (A list of debarred firms and individuals is available at the World Bank’s website: <a href="http://www.worldbank.org/debar">www.worldbank.org/debar</a> ) and the bar subsists as on the date of Application.

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	(ii) Also refer LOI – Cl. 24 to Cl. 25.
<b>5.1</b>	Add the following at the end of this Sub-Clause: While submitting the proposal, the short listed firms are not permitted to transfer this invitation to any other firm and change in structure of Sole/JV/ Associate member adopted at the EOI stage by the bidders/applicant is not allowed for the purpose of this RFP. Proposals submitted / uploaded by any firm other than above mentioned shortlisted firms shall not be considered.
<b>6.3</b>	(a) Proposals shall be submitted in the following language: <b>English</b> (b) All the personnel shall have working knowledge of English and all the reports etc shall be written in English.
<b>7.1</b>	Proposals must remain <b>valid 120 days</b> after the submission deadline date.
<b>7.8(a)</b>	Not Applicable
<b>7.8(b)</b>	The price of the financial proposal shall be adjusted by the following factor, as stated in Section-6 of Special Conditions of Contract, Cl. 6.2(c).
<b>8.1</b>	Clarifications may be requested by 15.10.2020 <b>upto 1700Hrs</b> , and clarifications will be uploaded on the websites mentioned at Para 8 of the Letter of Invitation (LOI). Therefore, no written hard copies of response will be sent to the Consultants.
<b>8.2</b>	Addendum to the RFP will be uploaded on the websites mentioned at Para 8 of the Letter of Invitation (LOI). Therefore, no written hard copies of the Addendum will be sent to the Consultants.
<b>10.0</b>	Deleted
<b>10.1</b>	Deleted
<b>10.1 (i)</b>	Deleted
<b>10.1 (iv)</b>	Deleted
<b>10.1 (v)</b>	A scanned copy of all the above documents is to be uploaded on CPP Portal ( <a href="https://eprocure.gov.in">https://eprocure.gov.in</a> ) in addition to that, hard copy of the following documents, in original, is to be submitted at the address mentioned at Para 7 of the Letter of Invitation (LoI) by due date and time of submission: <ul style="list-style-type: none"><li>a) Technical Proposal submission form (as per Form TECH-1)</li><li>b) Power of Attorney (on stamp paper and duly notarized*) of the person submitting the Proposal on behalf of the Consultant;</li><li>c) If applicable, the Power of Attorney for Lead Member of JV;</li><li>d) If the Consultant is a joint venture: Letter of Intent to form a Joint Venture in the format of Memorandum of Understanding between JV partners; or, if a JV is already formed, “a certified copy of the JV agreement”;</li><li>e) If the Consultant includes associate: Consent letter from Associate Partner;</li><li>f) Cost of RFP of Rs. 5900/- (Rupees Five thousand nine hundred only) inclusive of GST to be</li></ul>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<p>deposited online either through RTGS/NEFT/Other digital mode in the given Bank account details of NHIDCL . <b>Refer LOI, Cl.9.</b></p> <p>g) Deleted</p> <p>h) The Consultant shall comply with the provisions of Office Memorandum No. RW/NH-37010/4/2010/PIC-EAP(Printing) dated 22.02.2016 and its subsequent amendments issued by MoRTH /NHIDCL regarding Integrity Pact (IP) and the Integrity Pact (Format as per Section-8 of this RFP) duly signed by Authorized signatory shall be submitted by the Consultant with the RFP &amp; shall be part of the Contract Agreement; and</p> <p>i) Deleted.</p>
<p><b>10.2</b></p>	<p>Add the following at the end of this Sub-Clause: The authorized signatory holding Power of Attorney shall be the Digital Signatory for uploading the requisite documents on CPP Portal (<a href="https://eprocure.gov.in">https://eprocure.gov.in</a>).</p>
<p><b>11.1 (i)</b></p>	<p>This sub-para is modified as below: The Financial proposal shall be prepared and uploaded on CPP Portal only using the Form of BOQ available on CPP Portal. Number of man-months for each position shall be fixed as mentioned in the BOQ. The BOQ has the provision of entering the amount in INR, JPY, USD or EURO. Exchange rate of <b>RBI 28days prior to Bid Date</b> shall be considered for comparing the financial proposal in equivalent INR. Payment to the consultant shall be made in the same currency as quoted by consultant as per the provisions of the RFP.</p> <p>The applicable anticipated expenses (including Expatriates) is as follows:</p> <ol style="list-style-type: none"> <li>(1) A per diem allowance in respect of Experts of the Consultant for every day in which the Experts shall be absent from their home Country shall be considered to be included in the remuneration and shall NOT be paid separately;</li> <li>(2) cost of necessary international and local air travel of Experts by the most appropriate means of transport and the most direct practicable route (inclusive of Miscellaneous Travel Expenses, if any);</li> <li>(3) land transportation including vehicle rental;</li> <li>(4) cost of international or local communications such as the use of telephone and facsimile required for the purpose of the Services;</li> <li>(5) cost, rental and freight of any equipment required to be provided by the Consultants for the purposes of the Services;</li> <li>(6) cost of printing and dispatching of the reports to be produced for the Services;</li> <li>(7) miscellaneous administrative and support costs including office operations, support personnel and translation; and</li> </ol> <p>The Financial effects of all above items should be included in the financial proposal based on the no. of International Key Expert offered by the firm.</p>
<p><b>11.1 (ii)</b></p>	<p>This sub-para is modified as below: The Financial proposal shall be prepared and uploaded on CPP Portal only using the Form of BOQ available on CPP Portal. Amount for provisional sums and Contingency amount shall be as below: Amount for provisional sums: - NIL <b>Contingency amount:-INR Twenty million.</b></p>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

<p><b>11.2</b></p>	<p>(a)“Information of the Consultant’s tax liabilities in the Client’s country can also be found at <a href="http://www.incometaxindia.gov.in">www.incometaxindia.gov.in</a> and <a href="http://www.cbec.gov.in">www.cbec.gov.in</a>”.</p> <p>(b) NHIDCL shall reimburse only Goods and Service Tax. Consultant has to assess all other taxes and should inbuilt them in their financial proposal. These taxes (other than Goods and service tax) should not be provided/paid separately. Consultants are requested to consult Tax Consultants for details. The GST will be paid based on actual and on submission of Tax paid documents.</p> <p>(c) Goods &amp; Service tax as applicable shall be paid to the Consultant while making payment for services rendered based on actuals. The consultants shall deposit the same with the tax authorities and provide a proof of having done so within next 90 days in line with policy circulars issued by Employer. Employer shall pay only the Goods &amp; service tax. All other Taxes and duties, Fees, Charges etc. are to be borne by Consultant.</p>
<p><b>11.3</b></p>	<p>Proposal to be submitted in [foreign and/or local] currency.</p>
<p><b>12.0</b></p>	<p>Deleted</p>
<p><b>12.1</b></p>	<p>Deleted</p>
<p><b>12.3</b></p>	<p>Number of copies of the Technical Proposal: One (1) original The submission shall be done as per “C” (Submission, Receipt And Opening Of Proposals), point no.(II) and Para 10 &amp; 11 of ITC including Data Sheet.</p>
<p><b>12.4</b></p>	<p>The Financial proposal shall be prepared and uploaded on CPP Portal only using the Form of BOQ available on CPP Portal.</p>
<p><b>12.5</b></p>	<p>Technical and Financial Proposals shall be prepared and submitted/ uploaded as mentioned at para 10 and 11 of ITC including Data Sheet.</p> <p>- <b>Time: 1500 Hrs.</b> - <b>Date: 05.11.2020</b> (30 days from the date of Invitation)</p>
<p><b>12.6</b></p>	<p>Consultants must <b>submit the Original Hard copy</b> of the requisite documents to the Client at the following address in addition to the on-line submission: <u>At the address as stated in Clause 2.4 of this Data Sheet</u></p> <p>Proposals must be submitted no later than date and time stated in Clause 12.5 of the Data Sheet above.</p>
<p><b>13</b></p>	<p>This clause is modified as below: <b>Modification / Substitution/ Withdrawal of bids:</b></p> <p>(i) The Bidder may modify, substitute or withdraw its e-bid, prior to the Bid Due Date. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date.</p> <p>(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 Employer, shall be disregarded. Firms are not permitted to transfer this invitation to any other firm or change in structure of Sole/JV/ Associate member adopted at the EOI stage by the bidders/applicant is also now not allowed for the purpose of this RFP.</p>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<p>(iii) For modification of e-bid, bidder has to detach its old bid from e-tendering portal and upload / resubmit digitally signed modified bid.</p> <p>(iv) For withdrawal of bid, bidder has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.</p> <p>(v) 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.</p> <p>(vi) Financial proposal shall be opened after final concurrence of technical evaluation from JICA</p>																																										
<p><b>14.2</b></p>	<p><b>Criteria, sub-criteria, and point system for the evaluation are:</b></p> <p><b>(i) Criteria for Firm Experience and qualification:</b></p> <p style="text-align: right;"><b>Points</b></p> <table border="1"> <tr> <td>a)</td> <td>Year of establishment of the firm (For sole applicant or Lead Partner in JV)</td> <td>5</td> </tr> <tr> <td>b)</td> <td>Average Annual Turn-over of last 5 (five) financial years (For sole applicant /JV combine as applicable)</td> <td>10</td> </tr> <tr> <td>c)</td> <td>No. of Key Expert employed with the firm (Employed with firm for at least One year) -(For sole applicant /JV combine as applicable)</td> <td>10</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total points for criterion (i):</b></td> <td><b>25##</b></td> </tr> <tr> <td colspan="3"><b>## The weightage for criteria (ii) to be 20% of the evaluation criteria</b></td> </tr> </table> <p><b>(ii) Criteria for Adequacy of assignment of firm:</b></p> <table border="1"> <thead> <tr> <th>S. no.</th> <th>Criteria</th> <th>Max Mark</th> </tr> </thead> <tbody> <tr> <td><b>1</b></td> <td>Firm should have minimum experience of preparation of Detailed Project Report/ Feasibility Study cum Preliminary Design Report of Bridge Projects either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory-(in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b></td> <td style="text-align: center;"><b>15</b></td> </tr> <tr> <td></td> <td><b>1.1 Based on aggregate length</b></td> <td style="text-align: center;"><b>10</b></td> </tr> <tr> <td></td> <td><b>a) Minimum 20km<sup>s</sup></b></td> <td style="text-align: center;"><b>7</b></td> </tr> <tr> <td></td> <td><b>b) 1.0 marks for every additional 0.50 time project length</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td></td> <td><b>1.2 Based on number of projects of minimum one bridge of 500mtr with span length not less than 125mtr</b></td> <td style="text-align: center;"><b>5</b></td> </tr> <tr> <td></td> <td><b>a) 1 project</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td></td> <td><b>b) 0.5 marks for every additional project</b></td> <td style="text-align: center;"><b>2</b></td> </tr> <tr> <td><b>2</b></td> <td>The firm should have minimum experience of Project Supervision/ Independent Engineer/ Authority's Engineer of Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b></td> <td style="text-align: center;"><b>15</b></td> </tr> </tbody> </table>	a)	Year of establishment of the firm (For sole applicant or Lead Partner in JV)	5	b)	Average Annual Turn-over of last 5 (five) financial years (For sole applicant /JV combine as applicable)	10	c)	No. of Key Expert employed with the firm (Employed with firm for at least One year) -(For sole applicant /JV combine as applicable)	10	<b>Total points for criterion (i):</b>		<b>25##</b>	<b>## The weightage for criteria (ii) to be 20% of the evaluation criteria</b>			S. no.	Criteria	Max Mark	<b>1</b>	Firm should have minimum experience of preparation of Detailed Project Report/ Feasibility Study cum Preliminary Design Report of Bridge Projects either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory-(in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>15</b>		<b>1.1 Based on aggregate length</b>	<b>10</b>		<b>a) Minimum 20km<sup>s</sup></b>	<b>7</b>		<b>b) 1.0 marks for every additional 0.50 time project length</b>	<b>3</b>		<b>1.2 Based on number of projects of minimum one bridge of 500mtr with span length not less than 125mtr</b>	<b>5</b>		<b>a) 1 project</b>	<b>3</b>		<b>b) 0.5 marks for every additional project</b>	<b>2</b>	<b>2</b>	The firm should have minimum experience of Project Supervision/ Independent Engineer/ Authority's Engineer of Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>15</b>
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<b>1</b>	Firm should have minimum experience of preparation of Detailed Project Report/ Feasibility Study cum Preliminary Design Report of Bridge Projects either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory-(in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>15</b>																																									
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**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<b>Based on aggregate length</b>	
	<b>a) Minimum 20km<sup>§</sup></b>	<b>10</b>
	<b>b) 1.0 marks for every additional 0.5 times Project Length<sup>§</sup></b>	<b>5</b>
<b>3</b>	Firm should also have prepared one DPR/Feasibility Study cum Preliminary Design Report of Bridge either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lane for highway or Expressways or Rail cum Road bridge@ projects in a <b>Single Bridge Project</b> having span not less than 125mtr with minimum 20 % length <sup>§</sup> of the project over sea / creek / perennial river / estuary for highway or Expressway project for which RFP is invited (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>20</b>
	<b>3.1 Based on Project Completed</b>	<b>10</b>
	<b>a) One project having 20% of the bridge length (4km)</b>	<b>7</b>
	<b>b) 1 marks for every additional 2.0km of bridge length.</b>	<b>3</b>
	<b>3.2 Project having minimum. span length of 125mtr.</b>	<b>10</b>
	<b>a) 1 Bridge project</b>	<b>7</b>
	<b>b) 1 marks for every additional project</b>	<b>3</b>
<b>4</b>	Firm should also have experience of one Project Supervision as Independent Consultant/ Independent Engineer/ Authority Engineer/ Project Supervision Consultants for Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lane for highway or Expressways or Rail cum Road bridge@ projects in a <b>Single Bridge Project</b> having span length not less than 125mtr with minimum 20 % length <sup>§</sup> of the project over sea / creek / perennial river / estuary for highway or Expressway project for which RFP is invited (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>20</b>
	<b>a) One project having 20% of the bridge length (4km)</b>	<b>15</b>
	<b>b) 1 mark for every additional 1.0km length</b>	<b>5</b>
<b>5</b>	Experience of the firm as Independent Consultant/ Independent Engineer/ Authority's Engineer/ Project Supervision Consultants for any one Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge 2 / 4 / 6 lanes highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary during the last 10 years in Multi Development Bank (MDB)/WBG/JICA/ADB and any other multilateral/bilateral agency funded projects. <b>((For Sole applicant / JV combined, as applicable)</b>	<b>5</b>
	<b>a) 1 project</b>	<b>3</b>
	<b>b) 0.5 mark for every additional project.</b>	<b>2</b>
	<b>Total points for criterion (ii):</b>	<b>75##</b>
	<b>## The weightage for criteria (ii) to be 20% of the evaluation criteria</b>	
<p>Note:</p> <p>* Annual Turnover should be duly certified by statutory body like Chartered Accountant or Independent Auditors who are competent to do so as recognised by the State concerned.</p> <p>** Experience of 2-lane shall be considered with a multiplication factor of 0.75.</p> <p>*** Experience of 4-lane to be considered with a multiplication factor of 1.0.</p> <p># Experience of 6-lane and above to be considered with a multiplication factor of 1.5</p> <p>§ Project Length for each consultancy package shall be the design length of that package.</p> <p>@ Rail cum Road Bridge Projects either cable stayed or cable suspension or extra-dosed or pre-stressed with concrete superstructure shall be considered, other conditions remains same.</p>		

- (iii) **Key Experts' qualifications and competence for the assignment:**  
**(a) Professional Staff (International/National Expert)**  
**Total points for criterion (iii): 60 Points### (5 points for each Key experts)**  
**Total points for the above criteria (i), (ii) & (iii) :100 Points**

**Professional Staff (International# / National Expert)**

- 1. Project Management Team**
  - (i) Team Leader cum Sr. Bridge Engineer
  - (ii) Deputy Team Leader cum Sr. Bridge Engineer
- 2. Contract/Cost/Planning Team**
  - (i) Sr. Contract Expert
- 3. QA/QC Team**
  - (i) Chief QA/QC Expert
- 4. Safety Team**
  - (i) Chief Safety Expert
- 5. Social & Environment Team**
  - (i) Chief Social & Env. Expert
- 6. Not used**
- 7. Bridge Team (Fdn./Sub-Structure)**
  - (i) Chief Bridge Engineer
- 8. Superstructure (Extradosed) Sub-Team**
  - (i) Chief Bridge Engineer
- 9. Superstructure (Viaduct/VOP) Design Team**
  - (i) Chief Bridge Engineer
- 10. Operation & Maintenance Team**
  - (i) Chief O&M Expert
- 11. Execution Team/ Main Bridge Team**
  - (i) Chief Resident Engineer
- 12. Viaduct Team**
  - (i) Chief Resident Engineer

#: International Expert shall be considered those who have worked in at least 3 countries (which may include their home country) with minimum two years in each country.

**(b) Professional Staff (Other Expert)**

- 1. Contract/Cost/Planning Team**
  - (i) Sr. Contract Expert 2
  - (ii) Contract Expert 1
  - (iii) Sr. Quantity Surveyor 1
  - (iv) Quantity Surveyor 1
  - (v) Chief Legal Advisor
  - (vi) Chief Construction Planning Expert
  - (vii) Sr. programming & Scheduling Expert
  - (viii) Sr. document Controller
- 2. QA/QC Team**
  - (i) Chief QA/QC Expert 2
  - (ii) Sr. QA/QC Expert
- 3. Safety Team**
  - (i) Sr. Safety Expert
- 4. Social & Environment Team**

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<ul style="list-style-type: none"><li>(i) Sr. Social Expert</li><li>(ii) Social expert</li><li>(iii) Environment Specialist</li><li>(iv) Dolphin Expert</li><li>(v) HIV/STD Preventive Coordinator</li></ul> <p><b>5. Design Team / Highway Team</b></p> <ul style="list-style-type: none"><li>(i) Sr. Highway Engineer - 1</li><li>(ii) Sr. Highway Engineer - 2</li><li>(iii) Pavement Engineer</li><li>(iv) Drainage Engineer</li><li>(v) Electrical Engineer</li><li>(vi) Traffic Engineer</li></ul> <p><b>6. Bridge Team (Fdn./Sub-Structure</b></p> <ul style="list-style-type: none"><li>(i) Chief Bridge Engineer</li><li>(ii) Bridge Engineer</li><li>(iii) Sr. Geotechnical Engineer</li><li>(iv) Geotechnical Engineer</li><li>(v) Revetment Engineer</li><li>(vi) Hydrological Engineer</li></ul> <p><b>7. Superstructure (Extra-dosed) Sub-Team</b></p> <ul style="list-style-type: none"><li>(i) Sr. Bridge Engineer</li><li>(ii) Bridge Engineer</li></ul> <p><b>8. Superstructure (Viaduct/VOP) Design Team</b></p> <ul style="list-style-type: none"><li>(i) Bridge Engineer 1</li></ul> <p><b>9. Operation &amp; Maintenance Team</b></p> <ul style="list-style-type: none"><li>(i) O&amp;M Expert</li></ul> <p><b>10. Execution Team/ Main Bridge Team</b></p> <ul style="list-style-type: none"><li>(i) Sr. Resident Engineer</li><li>(ii) Site Engineer</li><li>(iii) Safety Engineer</li><li>(iv) QA/QC Engineer</li><li>(v) Material Engineer</li><li>(vi) Surveyor</li></ul> <p><b>11. Viaduct Team</b></p> <ul style="list-style-type: none"><li>(i) Sr. Resident Engineer</li><li>(ii) Site Engineer</li><li>(iii) Safety Engineer</li><li>(iv) QA/QC Engineer</li><li>(v) Material Engineer</li><li>(vi) Surveyor</li></ul> <p><b>12. Supporting Staff</b></p> <ul style="list-style-type: none"><li>(i) Office Manager</li><li>(ii) Secretary/Typist</li><li>(iii) Accountant</li><li>(iv) Office Assistant</li><li>(v) IT Specialist</li><li>(vi) CAD Operator</li><li>(vii) Site Inspector (Main Bridge)</li><li>(viii) Site Inspector (Viaduct)</li><li>(ix) Document Controller</li></ul> <p><b>Points### : The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three sub-criteria and relevant percentage weights referred at 14.2 (iii) QCBS, Datasheet, Paragraph references</b></p>
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**Section 2. QCBS- Instructions to Consultants – Data Sheet**

<p><b>above:</b></p> <p>1) General qualifications of Key Expert (KP) [25]</p> <p>2) Adequacy for the assignment of Key Personnel [65]</p> <p>3) Familiarity with the language and the conditions of India of KP [10]</p> <p style="text-align: center;"><b>Total weight: 100</b></p>		
<p><b>Detailed Evaluation Criteria with Ref. to 14.2(i) QCBS Datasheet, Paragraph reference above:-</b></p>		
<p><b>(i) Experience of the Consultant relevant to the assignment</b></p>		
<b>a)</b>	<b>Year of establishment of the firm (For sole applicant or Lead Partner in JV)</b>	<b>5</b>
	i) Minimum 5 Years from due date of submission of proposal	3
	ii) 0.25 marks for every additional complete year	2
<b>b)</b>	<b>Average Annual Turn-over of last 5 (five) financial years (For sole applicant /JV combine as applicable)</b>	<b>10</b>
	i) Minimum 10% of project cost	7
	ii) 1 marks for every additional 1% of project cost	3
<b>c)</b>	<b>No. of Key Expert employed with the firm (Employed with firm for at least One year) -(For sole applicant /JV combine as applicable)</b>	<b>10</b>
<b>C-1</b>	<b>Number of Key Expert having experience between 5 to 10 years</b>	<b>3</b>
	i) Minimum 50 Personnel	2.25
	ii) 0.25 marks for every additional 10 Key personnel	0.75
<b>C-2</b>	<b>Number of Key Expert having experience more than 10 years</b>	<b>4</b>
	i) Minimum 10 Personnel	3
	ii) 0.5 marks for every additional 5 Key Expert	1
<b>C-3</b>	<b>Number of Key Expert having minimum 3 year experience in WB/ ADB/ JICA Projects</b>	<b>3</b>
	i) Minimum 10 Personnel	2
	ii) 0.1 marks for every additional Key Expert	1
	<b>Total points for criterion (i):</b>	<b>25##</b>
	<b>## The weightage for criteria (ii) to be 20% of the evaluation criteria</b>	
<p><b>(ii) Criteria for Adequacy of assignment of firm:</b></p>		
<b>S. no.</b>	<b>Criteria</b>	<b>Max Mark</b>
<b>1</b>	Firm should have minimum experience of preparation of Detailed Project Report/ Feasibility Study cum Preliminary Design Report of Bridge Projects either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6#	<b>15</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	
	<b>1.1 Based on aggregate length</b>	<b>10</b>
	<b>a) Minimum 20km<sup>s</sup></b>	7
	<b>b) 1.0 marks for every additional 0.50 time project length</b>	3
	<b>1.2 Based on number of projects of minimum one bridge of 500mtr with span length not less than 125mtr</b>	<b>5</b>
	<b>a) 1 project</b>	3
	<b>b) 0.5 marks for every additional project</b>	2
<b>2</b>	The firm should have minimum experience of Project Supervision/ Independent Engineer/ Authority's Engineer of Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lanes for highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary in a single / multiple Contract of equal or more than the <b>aggregate length<sup>s</sup></b> of bridge minimum 20km and should have completed at least one bridge project of 500mtr with span length not less than 125mtr for which RFP invited is mandatory (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>15</b>
	<b>Based on aggregate length</b>	
	<b>a) Minimum 20km<sup>s</sup></b>	10
	<b>b) 1.0 marks for every additional 0.5 times Project Length<sup>s</sup></b>	5
<b>3</b>	Firm should also have prepared one DPR/Feasibility Study cum Preliminary Design Report of Bridge either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lane for highway or Expressways or Rail cum Road bridge@ projects in a <b>Single Bridge Project</b> having span not less than 125mtr with minimum 20 % <b>length<sup>s</sup></b> of the project over sea / creek / perennial river / estuary for highway or Expressway project for which RFP is invited (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>20</b>
	<b>3.1 Based on Project Completed</b>	10
	<b>a) One project having 20% of the bridge length (4km)</b>	7
	<b>b) 1 marks for every additional 2.0km of bridge length.</b>	3
	<b>3.2 Project having minimum. span length of 125mtr.</b>	10
	<b>a) 1 Bridge project</b>	7
	<b>b) 1 marks for every additional project</b>	3
<b>4</b>	Firm should also have experience of one Project Supervision as Independent Consultant/ Independent Engineer/ Authority Engineer/ Project Supervision Consultants for Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge of 2** / 4*** / 6# lane for highway or Expressways or Rail cum Road bridge@ projects in a <b>Single Bridge Project</b> having span length not less than 125mtr with minimum 20 % <b>length<sup>s</sup></b> of the project over sea / creek / perennial river / estuary for highway or Expressway project for which RFP is invited (in last 10 years) <b>(For Sole applicant / JV combined, as applicable)</b>	<b>20</b>
	<b>a) One project having 20% of the bridge length (4km)</b>	15
	<b>b) 1 mark for every additional 1.0km length</b>	5

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

<b>5</b>	Experience of the firm as Independent Consultant/ Independent Engineer/ Authority's Engineer/ Project Supervision Consultants for any one Bridge Project either Cable Stayed or Cable suspension or Extradosed or pre-stressed bridge 2 / 4 / 6 lanes highway or Expressways or Rail cum Road bridge@ projects over sea / creek / perennial river / estuary during the last 10 years in Multi Development Bank (MDB)/WBG/JICA/ADB and any other multilateral/bilateral agency funded projects. <b>((For Sole applicant / JV combined, as applicable))</b>	<b>5</b>		
	<b>a) 1 project</b>	<b>3</b>		
	<b>b) 0.5 mark for every additional project.</b>	<b>2</b>		
	<b>Total points for criterion (ii):</b>	<b>75##</b>		
	<b>## The weightage for criteria (ii) to be 20% of the evaluation criteria</b>			
<p>Note:</p> <p>* Annual Turnover should be duly certified by statutory body like Chartered Accountant or Independent Auditors who are competent to do so as recognised by the State concerned.</p> <p>** Experience of 2-lane shall be considered with a multiplication factor of 0.75.</p> <p>*** Experience of 4-lane to be considered with a multiplication factor of 1.0.</p> <p># Experience of 6-lane and above to be considered with a multiplication factor of 1.5</p> <p>\$ Project Length for each consultancy package shall be the design length of that package.</p> <p>@ Rail cum Road Bridge Projects either cable stayed or cable suspension or extra-dosed or pre-stressed with concrete superstructure shall be considered, other conditions remains same.</p>				
<p><b>(iii) Evaluation Criteria for assessment of Key Staff for the Assignment Ref. to 14.2(iii) QCBS Datasheet, Paragraph reference above:-</b></p>				
<b>1. Team Leader cum Sr. Bridge Engineer (International/National)</b>				
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
	I) Graduate and Post Graduate in Civil Engineering		<b>21</b>	<b>21</b>
	II) Additional Desirable Qualification as doctorate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering / Geotechnical Engineering/ Soil Mechanics/Foundation Engineering		<b>4</b>	<b>4</b>
<b>2</b>	<b>Adequacy for the Project</b>	<b>65</b>		
	<b>a) Professional Experience in Bridge projects:</b>		<b>10</b>	
	i) Aggregate minimum <b>20 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>7</b>
	ii) Additional 1 Mark for each additional 1 year in foreign country			<b>3</b>
	<b>b) Experience of construction supervision of Highway Bridge projects in similar capacity*</b>		<b>20</b>	
	i) 5 years or more			<b>10</b>
	ii) Additional 1 Mark for each additional year			<b>2</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

iii)	Minimum <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extra-dosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis			5
iv)	Additional 1 Marks for each additional bridge project			3
<b>c)</b>	Experience in <b>Design</b> of bridge projects		<b>10</b>	
i)	Experience in at least <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extra-dosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs. having span not less than 125 mtrs. each.</b>			8
ii)	Additional 0.5 Marks for each additional project			2
<b>d)</b>	Experience in <b>Construction</b> of <b>Bridge</b> projects in <b>similar capacity*</b> for either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with <b>minimum One span not less than 125 mtrs</b>		<b>10</b>	
i)	Minimum 2 projects (having experience of minimum one year in project)			7
ii)	Additional 1 marks for each additional project with minimum one year duration			3
<b>e)</b>	Experience in <b>Operation &amp; Maintenance</b> of Major Bridge projects in <b>similar capacity*</b>		<b>5</b>	
i)	Minimum 1 project (having experience of minimum one year in project)			4
ii)	Additional 1 marks for each additional project with minimum one year duration			1
<b>f)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		<b>5</b>	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
<b>g)</b>	<b>Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 1,750 Cr.</b>		<b>5</b>	
i)	Experience of 2 years in at least one Project			3
ii)	Additional 1 Mark for each additional project			2
<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>	<b>10</b>		
i)	<b>Experience in India</b>		<b>8</b>	
	Minimum 2 Years			6
	Additional 1 marks for each additional year			2
ii)	<b>Experience in North East Region</b>		<b>2</b>	
	Minimum 1 Years			1
	Additional 1 marks for additional year			1
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Age on bid due date: Not more than 60 years.</b>			

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

Note: \*Similar Capacity includes the following positions  
 i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/IE/AE).  
 ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision)  
 iii) In Government Organizations: Superintending Engineer (or equivalent) and above.

<b>2. Deputy Team Leader cum Sr. Bridge Engineer (International/National)</b>				
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate and Post Graduate in Civil Engineering		<b>21</b>	<b>21</b>
ii)	Additional Desirable Qualification as doctorate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering / Geotechnical Engineering/ Soil Mechanics/Foundation Engineering		<b>4</b>	<b>4</b>
<b>2</b>	<b>Adequacy for the Project</b>	<b>65</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		<b>10</b>	
i)	Aggregate minimum <b>15 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>7</b>
ii)	Additional 1 Mark for each additional 1 year in foreign country			<b>3</b>
<b>b)</b>	Experience of <b>construction supervision</b> of Highway Bridge projects in <b>similar capacity*</b>		<b>15</b>	
i)	5 years or more			<b>7</b>
ii)	Additional 1 Mark for each additional year			<b>3</b>
iii)	Minimum <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis			<b>3</b>
iv)	Additional 1 Marks for each additional bridge project			<b>2</b>
<b>c)</b>	Experience in <b>Design</b> of bridge projects		<b>10</b>	
i)	Experience in at least <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs having span not less than 125 mtrs each.</b>			<b>8</b>
ii)	Additional 0.5 Marks for each additional project			<b>2</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<b>d)</b>	Experience in <b>Construction of Bridge</b> projects in <b>similar capacity*</b> for either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary <b>with minimum One span not less than 125 mtrs</b>		<b>10</b>	
	i)	Minimum 2 projects (having experience of minimum one year in project)			<b>7</b>
	ii)	Additional 1 marks for each additional project with minimum one year duration			<b>3</b>
	<b>e)</b>	Experience in <b>Operation &amp; Maintenance</b> of Major Bridge projects in <b>similar capacity*</b>		<b>5</b>	
	i)	Minimum 1 project (having experience of minimum one year in project)			<b>3</b>
	ii)	Additional 1 marks for each additional project with minimum one year duration			<b>2</b>
	<b>f)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		<b>5</b>	
	i)	1 year			<b>3</b>
	ii)	Additional 0.50 Marks for each additional year			<b>2</b>
	<b>g)</b>	<b>Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 1,750 Cr.</b>		<b>10</b>	
	i)	Experience of 2 years in at least one Project			<b>6</b>
	ii)	Additional 1 Mark for each additional project			<b>4</b>
	<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>	<b>10</b>		
	<b>i)</b>	<b>Experience in India</b>		<b>8</b>	
		Minimum 2 Years			<b>6</b>
		Additional 1 marks for each additional year			<b>2</b>
	<b>ii)</b>	<b>Experience in North East Region</b>		<b>2</b>	
		Minimum 1 Years			<b>1</b>
		Additional 1 marks for additional year			<b>1</b>
		<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>					
<p>Note: *Similar Capacity includes the following positions</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/IE/AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision)</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>					
<b>3.</b>	<b>Senior Contract Expert (International/National)</b>				
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>	
<b>1</b>	<b>General Qualification</b>	<b>25</b>			
i)	Graduate in Civil Engineering		<b>21</b>	<b>21</b>	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	II)	Additional Desirable Qualification LLB or Diploma or Post Graduate in Construction Management or Certificate Course in Construction Management or Certificate Course in Contract Management or equivalent		4	4
<b>2</b>		<b>Adequacy for the Project</b>	<b>60</b>		
	<b>a)</b>	<b>Professional Experience in Contract Management of projects of Bridges &amp; Highways:</b>		<b>10</b>	
	i)	Aggregate minimum <b>15 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>7</b>
	ii)	Additional 1 Mark for each additional 1 year in foreign country			<b>3</b>
	<b>b)</b>	<b>Experience of working in similar capacity</b> on any International / National / State Highway or major bridge projects		<b>20</b>	
	i)	4 years or more			<b>10</b>
	ii)	Additional 1 Mark for each additional year max. 5 years			<b>4</b>
	iii)	<b>Contract Management of minimum Two large (ICB Contract more than Rs. 1,750 Cr.) Highway or major bridge Project on mode</b> including experience of handling of variation orders, claims of the Contractor and their disposal.			<b>4</b>
	iv)	Additional 1 Marks for each additional project			<b>2</b>
	<b>c)</b>	<b>Experience of handling Arbitration cases</b> in respect of Construction of Highway or major bridge projects <b>as Contract Specialist on any International/National Projects</b>		<b>10</b>	
	i)	2 Project			<b>8</b>
	ii)	Additional 0.5 Marks for each additional experience in International Projects project			<b>2</b>
	<b>d)</b>	<b>Experience of procurement specialist for bidding document preparation and tender assistance in more than Two Bridge Projects as Contract Specialist on any International/National Projects where value of ICB Contract is more than Rs. 1,750 Cr.</b>		<b>10</b>	
	i)	2 Project			<b>8</b>
	ii)	Additional 0.5 Marks for each additional experience in International Projects project			<b>2</b>
	<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		<b>5</b>	
	i)	1 year			<b>3</b>
	ii)	Additional 0.50 Marks for each additional year			<b>2</b>
	<b>f)</b>	<b>Experience in handling of Contract cases in Projects funded by Multilateral/ Bilateral Funding Agency(ies)</b>		<b>5</b>	
	i)	Experience of 2 years in at least one Project			<b>3</b>
	ii)	Additional 1 Mark for each additional project			<b>2</b>
<b>3</b>		<b>Familiarity with the language and the conditions of India including North East Region</b>	<b>15</b>		
	<b>i)</b>	<b>Experience in India</b>		<b>10</b>	
		Minimum 2 Years			<b>7</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	Additional 1 marks for each additional year			3
<b>ii)</b>	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
<b>4.</b>	<b>Chief QA &amp; QC Engineer (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		21	21
ii)	Additional Desirable Qualification Post Graduate Material Sc.Engineering or Geo-technical Engineering or Soil Mechanics & Foundation Engineering		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		15	
i)	Aggregate minimum <b>15 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			9
ii)	Additional 2 Mark for each additional 1 year in foreign country			6
<b>b)</b>	Experience in <b>Similar Capacity*</b> in <b>Construction/Construction Supervision</b> of Highway Bridge projects either <b>Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis</b>		20	
i)	5 years or more			12
ii)	Additional 2 Mark for each additional year			8
<b>c)</b>	<b>Experience in similar capacity* in handling of similar minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.</b>		10	
i)	<b>Minimum 2 project (having experience not less than one year in each project)</b>			7
ii)	Additional 0.5 Marks for each additional project			3
<b>d)</b>	Experience in <b>Operation &amp; Maintenance</b> of Major Bridge projects in <b>similar capacity*</b>		10	
i)	Minimum 1 project (having experience of minimum not less than one year in project)			7
ii)	Additional 1 marks for each additional project with minimum one year duration			3
<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	i)	1 year			3
	ii)	Additional 0.50 Marks for each additional year			2
<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>		<b>15</b>		
	i)	<b>Experience in India</b>		<b>10</b>	
		Minimum 2 Years			7
		Additional 1 marks for each additional year			3
	ii)	<b>Experience in North East Region</b>		<b>5</b>	
		Minimum 1 Years			3
		Additional 1 marks for additional year			2
		<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>					
<p>Note: *Similar Capacity includes the following positions</p> <p>i) On behalf of Consultant/Contractor: Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert</p> <p>ii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>					
<b>5.</b>	<b>Chief Safety Expert (International/National)</b>				
<b>Sr. No.</b>	<b>Description</b>		<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>		<b>25</b>		
	i)	Graduate in Civil Engineering		<b>21</b>	<b>21</b>
	ii)	Additional Desirable Qualification; Post Graduate in Highway Engineering / Transportation Engineering / Professional Certificate recognized by statutory body on Safety & Construction		<b>4</b>	<b>4</b>
<b>2</b>	<b>Adequacy for the Project</b>		<b>60</b>		
	a)	<b>Professional Experience in Bridge projects:</b>		<b>15</b>	
	i)	Aggregate minimum <b>15 years</b> of <b>professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>9</b>
	ii)	Additional 1 Mark for each additional 1 year in foreign country			<b>6</b>
	b)	Experience in <b>Similar Capacity*</b> in major Bridge projects <b>either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on basis over Sea/ Creek/ Perennial River/ Estuary.</b>		<b>15</b>	
	i)	5 years or more			<b>7</b>
	ii)	Additional 1 Mark for each additional year			<b>3</b>
	iii)	Experience in <b>Similar Capacity*</b> in Road and Bridge Safety Audits of Minimum <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail			<b>3</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	cum road bridge on Design, Engineering, Procurement, Supply And Construction basis			
iv)	Additional 1 Marks for each additional bridge project			2
c)	<b>Experience in Similar Capacity* in Road and Bridge identification and improvement of black spots in at least 2 Highway Projects.</b>		10	
i)	Minimum 2 Projects (Highways)			8
ii)	Additional 0.5 Marks for each additional in Bridge project			2
d)	<b>Experience in Similar Capacity* of preparation of Safety Management Plans for Construction of Bridge projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.</b>		10	
i)	Minimum 2 projects			7
ii)	Additional 1 marks for each additional project			3
e)	<b>Experience in Similar Capacity* in field of Road Safety Management Plans in Bridge projects</b>		5	
i)	Minimum 1 project			3
ii)	Additional 1 marks for each additional project with minimum one year experience			2
f)	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
3	<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
i)	<b>Experience in India</b>		10	
	Minimum 2 Years			7
	Additional 1.25 marks for each additional year			3
ii)	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1.25 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
Note: *Similar Capacity includes the following positions				
i) On behalf of Consultant/Contractor : Safety Expert/ Resident Engineer/Team Leader				
ii) In Government Organizations: Superintending Engineer (or equivalent) and above.				
<b>6.</b>	<b>Chief Social &amp; Environmental Expert (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

I)	Civil Engineering / BSc in Sociology or Environment /Environmental Engineering or equivalent		21	21
II)	Additional Desirable Qualification; Post Graduation in Environmental/ Sociology/ Environmental Science or Environment Management or equivalent		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Social &amp; Environment Engineering fields:</b>		15	
i)	Aggregate minimum 15 years of professional experience in Bridge/Highway Construction Projects			9
ii)	Additional 1 Mark for each additional 1 year			6
<b>b)</b>	<b>Experience in Similar Capacity* in major Bridge projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.</b>		15	
i)	5 years or more			10
ii)	Additional 1 Mark for each additional year			5
<b>c)</b>	<b>Experience in Similar Capacity* in identification and improvement of Social&amp; Environment issues in at least 2 Highway / Bridge Projects .</b>		10	
i)	Minimum 2 Projects (Highways/Bridge)			8
ii)	Additional 0.5 Marks for each additional in Bridge project			2
<b>d)</b>	<b>Experience of preparation of Social &amp; Environment Management Plans for Construction of major Bridge /Highway project</b>		10	
i)	Minimum 2 projects			7
ii)	Additional 1 marks for each additional project			3
<b>e)</b>	<b>Experience in Similar Capacity* in field of Social &amp; Environment Management Plans in Bridge projects funded by Multilateral/ Bilateral Funding Agency (ies)</b>		5	
i)	Minimum 1 project			3
ii)	Additional 1 marks for each additional project with minimum one year experience			2
<b>f)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
<b>3</b>	<b>Familiarity with the language and the conditions of North East Region</b>	<b>15</b>	<b>15</b>	
	Minimum 2 Years			10
	Additional 1 marks for additional year			5
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
Note: *Similar Capacity includes the following positions				

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

i) On behalf of Consultant/Contractor : Chief Social / Environmental Expert/ Environmental Expert				
ii) In Government Organizations: Superintending Engineer (or equivalent) and above.				
<b>7.</b>	<b>Chief Bridge Engineer (Foundation/Sub Structure) (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		<b>21</b>	<b>21</b>
ii)	Additional Desirable Qualification : Post Graduate in Structural Engineering /Soil Foundation Engineering		<b>4</b>	<b>4</b>
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		<b>10</b>	
i)	Aggregate minimum <b>20 years</b> of <b>professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>7</b>
ii)	Additional 1 Mark for each additional 1 year in foreign country			<b>3</b>
<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary		<b>20</b>	
i)	5 years or more			<b>10</b>
ii)	Additional 1 Mark for each additional year			<b>4</b>
iii)	<b>Experience in Similar Capacity*in supervision of Major Bridge Project</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basisbasis with minimum bridge length of <b>500 mtrs having span not less than 125 mtrs.</b> )			<b>4</b>
iv)	Additional 1 Marks for each additional bridge project			<b>2</b>
<b>c)</b>	Experience in <b>Design</b> of bridge projects in <b>similar capacity*</b>		<b>10</b>	
i)	Experience in atleast <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs having span not less than 125 mtrs each) over Sea/ Creek/ Perennial River/ Estuary with well foundation and piles</b>			<b>8</b>
ii)	Additional 0.5 Marks for each additional project			<b>2</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

d)	Experience in <b>Similar Capacity* Supervision of Rehabilitation and repair of major Bridge</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary <b>with minimum two spans not less than 125 mtrs</b>		10	
i)	Minimum 2 projects (having experience of minimum one year in project)			8
ii)	Additional 1 marks for each additional project with minimum one year duration			2
e)	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
f)	<b>Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency (ies).</b>		5	
i)	Experience of 2 years in at least one Project			3
ii)	Additional 1 Mark for each additional project			2
3	<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
i)	<b>Experience in India</b>		10	
	Minimum 2 Years			7
	Additional 1 marks for each additional year			3
ii)	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
Note: *Similar Capacity includes the following positions				
i) On behalf of Consultant/Contractor : Sr. Bridge or Bridge Engineer / Project Manager (Bridge)/Bridge Expert				
ii) In Government Organizations: Superintending Engineer (or equivalent) and above.				
8.	<b>Chief Bridge Engineer (Super-Structure -Extradosed) (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		21	21
ii)	Additional Desirable Qualification : Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
a)	<b>Professional Experience in Bridge projects:</b>		10	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	i)	Aggregate minimum <b>20 years</b> of <b>professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			7
	ii)	Additional 1 Mark for each additional 1 year in foreign country			3
	<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr. with minimum span length of 125mtr each).		20	
	i)	5 years or more			10
	ii)	Additional 1 Mark for each additional year			4
	iii)	<b>Experience in Similar Capacity*in supervision of Major Bridge Project</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basisbasis with minimum bridge length of 500 mtrs having span not less than 125 mtrs.)			4
	iv)	Additional 1 Marks for each additional bridge project			2
	<b>c)</b>	Experience in <b>Design</b> of bridge projects		10	
	i)	Experience in <b>similar capacity*</b> atleast <b>2 Bridge Projects</b> of Extradosed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs (superstructure span length not less than 125 mtrs ) over Sea/ Creek/ Perennial River/ Estuary.</b>			8
	ii)	Additional 0.5 Marks for each additional project			2
	<b>d)</b>	Experience in <b>Similar Capacity* Supervision of Rehabilitation and repair of major Bridge</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.		10	
	i)	Minimum 2 projects (having experience of minimum one year in project)			8
	ii)	Additional 1 marks for each additional project with minimum one year duration			2
	<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
	i)	1 year			3
	ii)	Additional 0.50 Marks for each additional year			2
	<b>f)</b>	<b>Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</b>		5	
	i)	Experience of 2 years in at least one Project			3
	ii)	Additional 1 Mark for each additional project			2
<b>3</b>		<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
	i)	<b>Experience in India</b>		10	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	Minimum 2 Years			7
	Additional 1 marks for each additional year			3
<b>ii)</b>	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
Note: *Similar Capacity includes the following positions				
i) On behalf of Consultant/Contractor : Sr. Bridge or Bridge Engineer / Project Manager (Bridge)/Bridge Expert				
ii) In Government Organizations: Superintending Engineer (or equivalent) and above.				
<b>9.</b>	<b>Chief Bridge Engineer (Super-Structure -VD) (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		21	21
ii)	Additional Desirable Qualification : Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		<b>10</b>	
i)	Aggregate minimum <b>15 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			7
ii)	Additional 1 Mark for each additional 1 year in foreign country			3
<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges</b> (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge) with well foundation and piles over Sea/ Creek Perennial River/ Estuary with Minimum length of 500mtr.)		<b>20</b>	
i)	5 years or more			10
ii)	Additional 1 Mark for each additional year			4
iii)	<b>Experience in Similar Capacity*in supervision of Major Bridge Project</b> (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis <b>with minimum bridge length of 500 mtrs.</b> )			4
iv)	Additional 1 Marks for each additional bridge project			2

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

<b>c)</b>	Experience in <b>Design</b> of bridge projects		<b>10</b>	
i)	Experience in <b>similar capacity*</b> atleast <b>2 Bridge Projects</b> of pre-stressed box girder <b>over Sea/ Creek/ Perennial River/ Estuary</b>			<b>8</b>
ii)	Additional 0.5 Marks for each additional project			<b>2</b>
<b>d)</b>	Experience in <b>Similar Capacity* Supervision of Rehabilitation and repair of Bridge</b> either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary)		<b>10</b>	
i)	Minimum 2 projects (having experience of minimum one year in project)			<b>8</b>
ii)	Additional 1 marks for each additional project with minimum one year duration			<b>2</b>
<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		<b>5</b>	
i)	1 year			<b>3</b>
ii)	Additional 0.50 Marks for each additional year			<b>2</b>
<b>f)</b>	<b>Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</b>		<b>5</b>	
i)	Experience of 2 years in at least one Project			<b>3</b>
ii)	Additional 1 Mark for each additional project			<b>2</b>
<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>	<b>15</b>		
<b>i)</b>	<b>Experience in India</b>		<b>10</b>	
	Minimum 2 Years			<b>7</b>
	Additional 1 marks for each additional year			<b>3</b>
<b>ii)</b>	<b>Experience in North East Region</b>		<b>5</b>	
	Minimum 1 Years			<b>3</b>
	Additional 1 marks for additional year			<b>2</b>
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
Note: *Similar Capacity includes the following positions				
i) On behalf of Consultant/Contractor : Sr. Bridge or Bridge Engineer / Project Manager (Bridge)/Bridge Expert				
ii) In Government Organizations: Superintending Engineer (or equivalent) and above.				
<b>10.</b>	<b>Chief Resident Engineer (Main Bridge) - Execution Team (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		<b>21</b>	<b>21</b>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	II)	Additional Desirable Qualification : Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering		4	4
<b>2</b>		<b>Adequacy for the Project</b>	<b>60</b>		
	<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		<b>10</b>	
	i)	Aggregate minimum <b>20 years of professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			<b>7</b>
	ii)	Additional 1 Mark for each additional 1 year in foreign country			<b>3</b>
	<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over over Sea/ Creek/ Perennial River/ Estuary		<b>20</b>	
	i)	5 years or more			<b>10</b>
	ii)	Additional 1 Mark for each additional year			<b>4</b>
	iii)	<b>Experience in Similar Capacity*in supervision of Two Bridge Project</b> (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis <b>with minimum bridge length of 500 mtrs )</b>			<b>4</b>
	iv)	Additional 1 Marks for each additional bridge project			<b>2</b>
	<b>c)</b>	<b>Experience in Design of bridge projects in similar capacity*</b>		<b>10</b>	
	i)	Experience in atleast <b>2 Bridge Projects</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs having span not less than 125 mtrs each) over Sea/ Creek/ Perennial River/ Estuary with well foundation and piles</b>			<b>8</b>
	ii)	Additional 0.5 Marks for each additional project			<b>2</b>
	<b>d)</b>	<b>Experience in Similar Capacity* Supervision of Rehabilitation and repair of major Bridge</b> either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary <b>with minimum two spans not less than 125 mtrs</b>		<b>10</b>	
	i)	Minimum 2 projects (having experience of minimum one year in project)			<b>8</b>
	ii)	Additional 1 marks for each additional project with minimum one year duration			<b>2</b>
	<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		<b>5</b>	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
<b>f)</b>	<b>Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</b>		5	
i)	Experience of 2 years in at least one Project			3
ii)	Additional 1 Mark for each additional project			2
<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
<b>i)</b>	<b>Experience in India</b>		10	
	Minimum 2 Years			7
	Additional 1 marks for each additional year			3
<b>ii)</b>	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
<p>Note: *Similar Capacity includes the following positions</p> <p>i) On behalf of Consultant/Contractor : Sr. Bridge or Bridge Engineer / Project Manager (Bridge)/Bridge Expert</p> <p>ii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>				
<b>11.</b>	<b>Chief Residential Engineer (Viaduct) - Execution Team (International/National)</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Max. Points</b>	<b>Sub Points</b>	<b>Sub Points Break Up</b>
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
i)	Graduate in Civil Engineering		21	21
ii)	Additional Desirable Qualification : Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		10	
i)	Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			7
ii)	Additional 1 Mark for each additional 1 year in foreign country			3
<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge) with well foundation and piles over Sea/ Creek/ Perennial</b>		20	

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	River/ Estuary with Minimum length of 500mtr.)			
i)	5 years or more			10
ii)	Additional 1 Mark for each additional year			4
iii)	<b>Experience in Similar Capacity*in supervision of Major Bridge Project</b> (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis <b>with minimum bridge length of 500 mtrs.</b> )			4
iv)	Additional 1 Marks for each additional bridge project			2
<b>c)</b>	Experience in <b>Design</b> of bridge projects		10	
i)	Experience in <b>similar capacity*</b> atleast <b>2 Bridge Projects</b> either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with <b>minimum bridge length of 500 mtrs) over Sea/ Creek/ Perennial River/ Estuary</b>			8
ii)	Additional 0.5 Marks for each additional length			2
<b>d)</b>	Experience in <b>Similar Capacity* Supervision of Rehabilitation and repair of Bridge</b> either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary)		10	
i)	Minimum 2 projects (having experience of minimum one year in project)			8
ii)	Additional 1 marks for each additional project with minimum one year duration			2
<b>e)</b>	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
<b>f)</b>	<b>Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</b>		5	
i)	Experience of 2 years in at least one Project			3
ii)	Additional 1 Mark for each additional project			2
<b>3</b>	<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
<b>i)</b>	<b>Experience in India</b>		10	
	Minimum 2 Years			7
	Additional 1 marks for each additional year			3
<b>ii)</b>	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Age on bid due date: Not more than 60 years.</b>			
<b>12.</b>	<b>Chief O &amp; M Expert (International/National)</b>			

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

Sr. No.	Description	Max. Points	Sub Points	Sub Points Break Up
<b>1</b>	<b>General Qualification</b>	<b>25</b>		
I)	Graduate in Civil Engineering		21	21
II)	Additional Desirable Qualification or Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering		4	4
<b>2</b>	<b>Adequacy for the Project</b>	<b>60</b>		
<b>a)</b>	<b>Professional Experience in Bridge projects:</b>		<b>10</b>	
i)	Aggregate minimum <b>15 years</b> of <b>professional experience</b> in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).			7
ii)	Additional 1 Mark for each additional 1 year in foreign country			3
<b>b)</b>	<b>Experience in Similar Capacity*in Design/Construction/Construction Supervision of Bridges</b> (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr.)		<b>15</b>	
i)	5 years or more			7
ii)	Additional 1 Mark for each additional year			3
iii)	<b>Experience in Similar Capacity*in supervision of Major Bridge Project</b> (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis <b>with minimum bridge length of 500 mtrs.</b> )			3
iv)	Additional 1 Marks for each additional bridge project			2
<b>c)</b>	Experience in Similar Capacity* in <b>Operation &amp; Maintenance</b> of Major Bridge projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr.		<b>10</b>	
i)	Minimum 1 project (having experience of minimum one year in project)			8
ii)	Additional 1 marks for each additional project with minimum one year duration			2
<b>d)</b>	Experience in <b>Similar Capacity* Supervision of Rehabilitation and repair of Bridge</b> either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary)		<b>10</b>	
i)	Minimum 2 projects (having experience of minimum one year in project)			7
ii)	Additional 1 marks for each additional project with minimum one year duration			3

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

e)	Experience in <b>Operation &amp; Maintenance</b> of Major Bridge projects in <b>similar capacity*</b>		5	
i)	Minimum 1 project (having experience of minimum one year in project)			4
ii)	Additional 1 marks for each additional project with minimum one year duration			1
f)	<b>Employment with the Firm (&lt; 1 year - 0)</b>		5	
i)	1 year			3
ii)	Additional 0.50 Marks for each additional year			2
g)	<b>Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 1,750 Cr.</b>		5	
i)	Experience of 2 years in at least one Project			3
ii)	Additional 1 Mark for each additional project			2
3	<b>Familiarity with the language and the conditions of India including North East Region</b>	15		
i)	<b>Experience in India</b>		10	
	Minimum 2 Years			7
	Additional 1 marks for each additional year			3
ii)	<b>Experience in North East Region</b>		5	
	Minimum 1 Years			3
	Additional 1 marks for additional year			2
	<b>Total:</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age on bid due date: Not more than 60 years.</b>				
<p>Note: *Similar Capacity includes the following positions</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/IE/AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision)</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>				
<b>The minimum technical score (St) required to pass is:75 Points</b>				
<p>Note:</p> <p>1. The cumulative score obtained by individual Key Expert shall be equated with maximum allocated marks (60) in accordance with QCBS Datasheet Paragraph ref 14.2(iii) above.</p> <p>2. If any information in the Technical Proposal is found incorrect, at any stage, action including termination may be taken by Employer on the personnel and the Firm.</p> <p>3.If the same CV is submitted by two or more firms in an assignment, zero marks shall be given for such CV. Key Expert has to certify in their CV that he has not consented to any other Consultant to propose their CV for any position for this assignment.</p> <p>4.The Key Positions stated should have either National / International Expertise* (those who have worked in at least 3 countries which may include their home country with minimum two years in each country). Additional 1(One) mark for having International Experience (other than home country) shall be accorded.</p> <p>5.If a CV score less than 75% marks, whatever marks it score will be carried forward for maximum 3 nos. Key Expert for determining the total score of the firm. However, if the Key Expert does not fulfill the minimum academic qualification (as mentioned in TOR of RFP), the overall score of his CV will be evaluated as zero. If the Key Expert does not fulfill the minimum qualification related to</p>				

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<p>experience (as mentioned in TOR of RFP), then zero marks will only be assigned for that sub criteria, but the marks obtained by the CV of the Key Expert will be carried forward for maximum 3 nos. Key Expert for determining the total score of the firm. In case more than 3 CV scores less than 75% marks or Team leader scores less than 75% marks, the proposal shall be considered non-responsive. During, interaction Key Expert will be required to produce certificate regarding qualification and experience.</p> <p>6. During interaction, a certification to the effect should be furnished by the Consultant that they have checked the qualifications and experiences details submitted by the Key Expert in their CVs and found to be correct. This certification should be made of all Key Expert after the certification by the candidate.</p>
<b>14.3</b>	<p>This sub-clause is modified as below: After the technical evaluation is completed, the Client may notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP, and their Financial Proposals shall not be opened.</p>
<b>14.4</b>	<p>After the evaluation of online submitted Technical Proposal, the list of technically responsive consultant is uploaded on the websites mentioned at Para 8 of the Letter of Invitation (LOI) with the date of the public opening of financial proposal. NHIDCL may also inform date of the public opening of financial proposal to the technically responsive consultant by mail, fax or post. Expected date (month/year) for public opening of Financial Proposals: DD.MM.YYYY (<b>shall be intimated later</b>) at: National Highways and Infrastructure Development Corporation Limited (NHIDCL), <b>3<sup>rd</sup> Floor, PTI Building, 4-Parliament Street, New Delhi – 110001</b></p>
<b>14.5</b>	<p>This sub-clause is modified as below: The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant, the technical scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the public opening. Copy of record shall be uploaded on the websites mentioned at Para 8 of the Letter of Invitation (LOI) and will also be sent to JICA.</p>
<b>14.6</b>	<p>This sub-clause is modified as below: The Evaluation Committee will determine whether the submitted Financial Proposals are complete (i.e. whether they have included cost of all items of the corresponding proposals; if not, then the cost towards such missing items will be considered as NIL, but the Consultant shall, however, be required to carry out such obligations without any additional compensation.) and without computational error. The single currency for price conversion is: <b>Indian Rupee</b> The source of official selling rates is: Reserve Bank of India The date of exchange rates for foreign currency market exchange rate (state Bank of India BC selling rate as 28 days prior to Bid due date) will be applied for purpose of conversion of amount in foreign currency into Indian rupees.</p>
<b>14.7</b>	<p>ETP in this clause stands for the Financial Price quoted by the Consultant and converted to single currency as per Clause 14.6.</p>
<b>14.8</b>	<p>Quality-Cost Ratio: <b>80:20</b> Add the following at the end of this sub-clause: In the event the proposals of two or more consultants have the same scores in the final ranking, the proposal with the highest technical score should be ranked first.</p>
<b>15.1</b>	<p>Expected date and address for contract interaction: Date: To be informed later to the selected (First Ranked, i.e. H-1) Consultant after Financial Evaluation. Address: <b>National Highways &amp; Infrastructure Development Corporation Limited (NHIDCL), 3<sup>rd</sup></b></p>

**Section 2. QCBS- Instructions to Consultants – Data Sheet**

	<b>Floor, PTI Building, 4-Parliament Street, New Delhi – 110001</b> <hr/>
<b>15.3</b>	Add the following at the end of this sub-clause: The second ranked Consultant (H-2) shall be kept in reserve and may be invited for Interaction in case the first ranked Consultant withdraws, or fails to comply with the requirements specified in this document.
<b>15.4</b>	Deleted
<b>15.5</b>	This sub-clause is supplemented as below: interaction shall commence with a discussion of the Technical Proposal, the proposed methodology (work plan), staffing.
<b>15.7</b>	Deleted.
<b>17.2</b>	Expected date for commencement of consulting services is DD.MM.YYYY; at: the Project site in Assam & Meghalaya. (shall be intimated later)

## SECTION-3

### Technical Proposal - Standard Forms

#### Notes on Technical Proposal - Standard Forms

Section 3. Technical Proposal – Standard Forms provides Technical Forms that the Client shall include in its Request for Proposals. Consultants shall fill out these Forms and include them in their proposals. As specified in this section, these forms are the Technical Proposal Submission Forms and other relevant Technical Proposal Forms.

The Acknowledgement of Compliance with the Guidelines for Employment of Consultants under Japanese ODA Loans shall be included in the Technical Proposal.

*Italicized notes provide guidance to the shortlisted Consultants for the preparation of their Technical Proposals; they should not appear on the Technical Proposals to be submitted.*

Refer to ITC 10.1 for Forms required and number of pages recommended.

## Table of Technical Forms

Form TECH – 1 :	Technical Proposal Submission Form.....	50-51
Form TECH – 2 :	Consultant’s Organization and Experience.....	
	A- Consultant’s Organization.....	52
	B- Consultant’s Experience.....	52
Form TECH – 3 :	Comments and Suggestions on the Term of Reference and on Counterpart Staff and Facilities to be Provided by the Client.....	
	A – On the Term of Reference.....	53
	B – On Counterpart Staff and Facilities.....	53
Form TECH – 4 :	Description of Approach, Methodology and Work Plan for Performing the Assignment.....	54
Form TECH – 5 :	Team Composition, Task Assignments and Summary of CV Information.....	55
Form TECH – 6 :	Curriculum Vitae (CV) for Proposed Key Experts.....	56-57
Form TECH – 7 :	Expert Schedule.....	59
Form TECH – 8 :	Work Schedule.....	60
Form TECH – 9 :	Acknowledgement of Compliance with the Guidelines for Employment of Consultants.....	61-62

## Form TECH-1: Technical Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for **“Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)”** in accordance with your Request for Proposals dated ----- and our Proposal. “We are hereby submitting our Proposal, which includes this Technical Proposal in a uploaded on CPP Portal (<https://eprocure.gov.in>) and Financial Proposal uploaded on CPP Portal only (<https://eprocure.gov.in>)”.

*[If the Consultant is a joint venture, insert the following: We are submitting our Proposal as a joint venture with: [Insert a list with full name and the legal address of each member, and indicate the lead member]. We have attached a copy [insert: “of our letter of intent to form a joint venture” or “of the JV agreement”] signed by every participating member, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture.*

OR

*If the Consultant’s Proposal includes Sub-consultants (i.e. an Associate), insert the following: We are submitting our Proposal with the following firms as Sub-consultants: [Insert a list with full name and address of each Sub-consultant.]*

We hereby declare that:

- (a) All the information provided and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification by the Client.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 7.1.
- (c) We have no conflict of interest in accordance with ITC 3.
- (d) We meet the eligibility requirements as stated in ITC 5, and we confirm our understanding of our obligation to abide by JICA’s policy in regard to corrupt and fraudulent practices as per ITC 4.

**Section 3. – Technical Proposal – Standard Forms**

- (e) We undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in ITC 7.5 and ITC 15.4 may lead to the termination of Contract negotiations.
- (f) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We understand that the Client is not bound to accept any Proposal that the Client receives.

We remain,

Yours sincerely,

Authorized Signature [*in full and initials*]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Consultant [*company's name or JV's name*]: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Address: \_\_\_\_\_

Contact information [*phone and e-mail*]: \_\_\_\_\_

*[For a joint venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached]*

## **Form TECH-2: Consultant’s Organization and Experience**

---

### **A - Consultant’s Organization**

*Provide a brief description of the organization and general experience of the Consultant and, if applicable, each joint venture member for this assignment.]*

### **B - Consultant’s Experience**

*Provide information on each assignment for which your firm and each joint venture member for this assignment, was legally contracted either individually as a corporate entity or as a lead firm or one of members within a joint venture, for carrying out consulting services similar to the ones requested under this assignment. Use about 20 pages]*

Assignment	Approx. value of Contract (in current US or Eur or Yen, INR)
Country: Location within country	Duration of assignment (months)
Name of Client	Total No. of man-months of the assignment
Address	Approx. value of services provided by your firm under the contract (in current US or Eur or Yen, INR)
Start Date (month/year) Completion date (month/year)	No. of professional man-months provided by the joint venture members or sub-consultants
Name of Joint venture member or sub-consultant, if any	
Narrative description of project	
Description of actual services provided in the assignment	

## **Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be provided by the Client**

---

### **A - On the Terms of Reference**

*[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to enhance performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding others, or proposing a different phasing of the activities).]*

### **B - On Counterpart Staff and Facilities**

*[Comment here on counterpart staff and facilities to be provided by the Client according to Clause 2.5 of the Data Sheet including: administrative support, office space, local transportation, equipment, data, background reports, etc., if any.]*

## Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment

---

*[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (about 50 pages, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

- a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach. Staffing for training should also be explained, if so required in the TOR. Please do not repeat/copy the TOR in here.*
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.*
- c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the Key Experts and Non-Key Experts, and proposed technical and administrative support staff. You shall also specify if you will be the lead firm in a joint venture or in an association with Sub-consultants. For joint ventures, you must attach a copy of the joint venture agreement or a letter of intention to form a Joint Venture, as specified in Form TECH-1.]*

**Section 3. – Technical Proposal – Standard Forms**

**Form TECH-5: Team Composition, Task Assignments and Summary of CV Information**

Family Name, First Name	Firm Acronym	Area of Expertise	Position Assigned	Task Assigned	Key Expert or Non-Key Expert	Nationality	Employment Status with Firm (full-time, or other)	Education / Degree (Year / Institution)	No. of years of relevant project experience	CV signature (by expert/by other)

## Form TECH-6: Curriculum Vitae (CV) for Proposed Key Experts

---

1. General

2. Education

3 Employment

4. Membership in Professional Associations & Publications:

5. Language Skills.....

6. Adequacy for the Assignment:

7. Certification:

I, the undersigned, certify to the best of my knowledge and belief that:

- (i) This CV correctly describes my qualifications and my experience;
- (ii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in the Expert Schedule in Form TECH-7 provided team mobilization takes place within the validity of this proposal or any agreed extension thereof;
- (iii) I am committed to undertake the assignment within the validity of Proposal;
- (iv) I am not part of the team who wrote the terms of reference for this consulting services assignment;
- (v) I am, pursuant to Clauses 3 and 4 of the ITC, eligible for engagement.
- (vi) My CV is being proposed for this project by ----- (the Consultant firm) and I have not given consent to any other consultant(s) to propose my CV for any position for this project.

.....  
(Signature of Key Personnel)

Date :(Day/Month/Year)

.....  
[Signature of authorized representative of the Firm]

Date:.....(Day/Month/Year)

**Section 3. – Technical Proposal – Standard Forms**

Note: Following documents are also to be uploaded:

- (i) Document for proof of age.
- (ii) Document for proof of qualification.
- (iii) Experience Certificates from Employers.



## FormTECH-7:Expert Schedule<sup>1</sup>

N°	Name of Expert /Position /Category(International/National)	Professional Expert input (in the form of a bar chart) <sup>2</sup>													Total man-month input	
		1	2	3	4	5	6	7	8	9	10	11	12	n	Total	
<b>Key Experts</b>																
ex.	Mr. XYZ Project Manager (International/National)	[Home]														
		[Field]														
1																
2																
n																
													<b>Subtotal</b>			
<b>Non-Key Experts</b>																
1		[Home]														
		[Field]														
2																
n																
													<b>Subtotal</b>			
													<b>Total</b>			

1 For Key Experts, the input should be indicated individually for the same position as required under Clause 14.2 of the Data Sheet; for Non-Key Experts it should be indicated individually, or, if appropriate, by category (e.g. economists, financial analysts, etc.).

2 Months are counted from the start of the assignment. For each Expert indicate separately the input for home and field work.

3 One (1) month equals twenty six (26) working days. One (1) working day shall be not less than eight (8) hours. 4 Field work means work carried out at a place other than the Expert's home office; i.e. normal place of business.

Full time input  Part time input

## Form TECH-8: Work Schedule

N°	Activity <sup>1</sup>	Months <sup>2</sup>												
		1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
n														

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each Phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

## Form TECH-9: Acknowledgement of Compliance with the Guidelines for Employment of Consultants

---

A) I, [name and position of authorized signatory] being duly authorized by [name of Consultant/members of joint venture] (“JV”) (“Consultant”) to execute this Acknowledgement of Compliance with Guidelines for Employment of Consultants, hereby certify on behalf of the Consultant and myself that all information provided in the Technical and Financial Proposals (collectively “Proposals”) submitted by the Consultant for “**Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)**”(hereinafter called “the Project”) is true, correct and accurate to the best of the Consultant’s and my knowledge and belief. I further certify, on behalf of the Consultant, that:

- (i) the Proposals have been prepared and submitted in full compliance with the terms and conditions set forth in Guidelines for the Employment of Consultants under Japanese ODA Loans (hereinafter called the “Guidelines”); and
- (ii) the Consultant has not, directly or indirectly, taken any action which is or constitutes a corrupt, fraudulent, collusive or coercive act or practice in violation of the Guidelines and is not subject to any conflict of interest as stipulated in the relevant section of the Guidelines.

*<If debarment for more than one year by the World Bank Group is NOT imposed, use the following sentence B).>*

B) I certify that the Consultant has NOT been debarred by the World Bank Group for more than one year since the date of issuance of the Request for Proposals.

*<If debarment for more than one year by the World Bank Group has been imposed BUT three (3) years have passed since the date of such debarment decision, use the following sentence B’).>*

B’) I certify that the Consultant has been debarred by the World Bank Group for a period more than one year BUT that on the date of issuance of the Request for Proposals at least three (3) years had passed since the date of such debarment decision. Details of the debarment are as follows:

Name Of The Debarred Firm	Starting Date Of Debarment	Ending Date Of Debarment	Reason For Debarment

C) I certify that the Consultant will not enter into a Sub-contract with an entity or individual which has been debarred by the World Bank Group for a period more than one year, unless on the date of the subcontract at least three (3) years have passed since the date of such debarment.

D) I certify that the Experts of the Consultant and either Sub-consultant having a direct contract with the Consultant or Expert nominated by the Consultant, who are assigned to this contract on time basis, will not be engaged in any other assignment which may have time conflict with the Contract.

E) I certify, on behalf of the Consultant, that if selected to undertake services in

**Section 3. – Technical Proposal – Standard Forms**

connection with the Contract, the Consultant shall carry out such services in continuing compliance with the terms and conditions of the Guidelines.

- F) I further certify, on behalf of the Consultant, that if the Consultant is requested, directly or indirectly, to engage in any corrupt or fraudulent action under any applicable law, such as the payment of a rebate, at any time during a process of consultant selection, negotiations, execution or implementation of contract (including amendment thereof), the Consultant shall report all relevant facts regarding such request to the relevant section in JICA (details of which are specified below) in a timely manner.

JICA's information desk on fraud and corruption (A report can be made to either of the offices identified below).

- (1) JICA Headquarters: Legal Affairs Division, General Affairs Department  
URL: <https://www2.jica.go.jp/en/odainfo/index.php>  
Tel: +81 (0)3 5226 8850

- (2) JICA India office  
Tel: (91-11) 4909-7000

- G) The Consultant acknowledges and agrees that the reporting obligation stated above shall NOT in any way affect the Consultant's responsibilities, obligations or rights, under relevant laws, regulations, contracts, guidelines or otherwise, to disclose or report such request or other information to any other person(s) or to take any other action, required to or allowed to, be taken by the Consultant. The Consultant further acknowledges and agrees that JICA is not involved in or responsible for the selection process in any way.
- H) If any of the statements made herein is subsequently proven to be untrue or incorrect based on facts subsequently determined, or if any of the warranties or covenants made herein is not complied with, the Consultant will accept, comply with, and not object to any remedies taken by the Employer and any sanctions imposed by or actions taken by JICA.

\_\_\_\_\_  
**Authorized Signatory**  
*[Insert name of signatory; title]*

**For and on behalf of the Consultant**  
Date: \_\_\_\_\_

**SECTION- 4**

**Financial Proposal - Standard Forms**

**Table of Financial Forms**

<b>Form Fin – 1</b>	<b>Financial Proposal Submission Form.....</b>	<b>64</b>
<b>Form Fin – 2</b>	<b>BOQ.....</b>	<b>65-73</b>
	<b>Appendix: Instructions for preparing Financial Proposal (to be uploaded in BOQ online at CPP Portal, <a href="https://eprocure.gov.in">https://eprocure.gov.in</a>).....</b>	<b>74-75</b>

## Form FIN-1: Financial Proposal Submission Form

---

To: [Name and address of Client] [Location, Date]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for **“Authority’s Engineer for “Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)”.**” in accordance with your Request for Proposal dated .....and our Technical Proposal. Our attached Financial Proposal has been uploaded in the prescribed BOQ form on CPP Portal (<https://eprocure.gov.in>).

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Clause 7.1 of the Data Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [*in full and initials*]: \_\_\_\_\_  
Name and Title of Signatory: \_\_\_\_\_  
Name of Firm: \_\_\_\_\_  
Address: \_\_\_\_\_

**Section 4. – Financial Proposal – Standard Form**

## Form FIN-2: Format of BOQ

(PLEASE NOTE that this BOQ format is not to be filled here, but is to be filled in the EXCEL Sheet named 'BOQ' available on CPP Portal. After completing all the details therein it must be uploaded ONLY on the CPP Portal as Financial Proposal).

Format as below:

**Item Wise BoQ**

**Tender Inviting Authority: National Highway & Infrastructure Development Corporation Limited**

**Name of Work: Consultancy Services for Authority's Engineer for Supervision of "Construction of Four Lane Bridge Project including approaches over River Brahmaputra between Dhubri (on North Bank, Assam) and Phulbari (on South Bank, Meghalaya) on NH-127B (Design length 19.282km) with Loan assistance from JICA".**

**Contract No: NHIDCL/D-P-Bridge/E-170621/2018/AE**

Name of the Bidder/ Bidding Firm / Company :

**PRICE SCHEDULE**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

Sl. No.	Item Description	Quantity	Units	Quoted Currency in INR / Other Currency	BASIC RATE (inclusive of all taxes except GST)	TOTAL AMOUNT With Taxes (except GST)	TOTAL AMOUNT In Words
---------	------------------	----------	-------	---	--	--------------------------------------	-----------------------

Section 5 – Term of Reference,

					In Figur es (in INR/U SD/JP Y) To be enter ed by the Bidde r in INR/U SD/JP Y		
1	2	4	5	12	13	53	55
<b>1</b>	<b>Remuneration of Key Professionals</b>						
1.01	Team Leader cum Sr. Bridge Engineer	95.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.02	Deputy Team Leader cum Sr. Bridge Engineer	89.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.03	Sr. Contract Expert 1	10.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.04	Chief QA/QC Expert 1	10.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.05	Chief Safety Expert	40.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.06	Chief Social and Environment Expert	13.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.07	Chief Bridge Engineer (Bridge Team-Foundation/Substructure Sub-Team)	9.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.08	Chief Bridge Engineer (Superstructure (Extradozed) Sub-Team)	15.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.09	Chief Bridge Engineer (Superstructure(Viaduct/VOP) Sub Team)	30.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only
1.10	Chief O&M Expert	7.00	manm onths	<b>INR</b>		<b>0.0000</b>	INR Zero Only

Section 5 – Term of Reference,

1.11	Chief Resident Engineer (Execution Team)	32.00	manm onths	INR		0.0000	INR Zero Only
1.12	Chief Resident Engineer (Viaduct Team)	8.00	manm onths	INR		0.0000	INR Zero Only
<b>2</b>	<b>Remuneration of Sub Key-Professionals</b>						
<b>2.01</b>	<b>Contract/Cost/Planning Team</b>						
2.02	Sr. Contract Expert 2	30.00	manm onths	INR		0.0000	INR Zero Only
2.03	Contract Expert 1	99.00	manm onths	INR		0.0000	INR Zero Only
2.04	Sr. Quantity Surveyor 1	79.00	manm onths	INR		0.0000	INR Zero Only
2.05	Quantity Surveyor 1	87.00	manm onths	INR		0.0000	INR Zero Only
2.06	Chief Legal Advisor	25.00	manm onths	INR		0.0000	INR Zero Only
2.07	Chief Construction Planning Expert	45.00	manm onths	INR		0.0000	INR Zero Only
2.08	Sr. Programming & Scheduling Expert	58.00	manm onths	INR		0.0000	INR Zero Only
2.09	Sr. Document Controller	98.00	manm onths	INR		0.0000	INR Zero Only
<b>2.10</b>	<b>QA/QC Team</b>						
2.11	Chief QA/QC Expert 2	28.00	manm onths	INR		0.0000	INR Zero Only
2.12	Sr. QA/QC Expert	95.00	manm onths	INR		0.0000	INR Zero Only
<b>2.13</b>	<b>Safety Team</b>						
2.14	Sr. Safety Expert	90.00	manm onths	INR		0.0000	INR Zero Only
<b>2.15</b>	<b>Social and Environment Team</b>						
2.16	Sr. Social Expert	29.00	manm onths	INR		0.0000	INR Zero Only
2.17	Social Specialist	29.00	manm onths	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

2.18	Environment Specialist	93.00	manm onths	INR		0.0000	INR Zero Only
2.19	Dolphin Expert	19.00	manm onths	INR		0.0000	INR Zero Only
2.20	HIV/STD Preventive Coordinator	16.00	manm onths	INR		0.0000	INR Zero Only
<b>2.21</b>	<b>Design Team</b>						
<b>2.22</b>	<b>Highway Team</b>						
2.23	Sr. Highway Engineer-1	8.00	manm onths	INR		0.0000	INR Zero Only
2.24	Sr. Highway Engineer-2	4.00	manm onths	INR		0.0000	INR Zero Only
2.25	Pavement Engineer	7.00	manm onths	INR		0.0000	INR Zero Only
2.26	Drainage Engineer	7.00	manm onths	INR		0.0000	INR Zero Only
2.27	Electrical Engineer	7.00	manm onths	INR		0.0000	INR Zero Only
2.28	Traffic Engineer	4.00	manm onths	INR		0.0000	INR Zero Only
<b>2.29</b>	<b>Bridge Team (Foundation/Sub-structure)</b>						
2.3	Chief Bridge Engineer (Bridge (Fdn./Sub-Structure))	14.00	manm onths	INR		0.0000	INR Zero Only
2.31	Bridge Engineer (Bridge Team (Fdn./Sub-Structure))	24.00	manm onths	INR		0.0000	INR Zero Only
2.32	Sr. Geotechnical Engineer	8.00	manm onths	INR		0.0000	INR Zero Only
2.33	Geotechnical Engineer	20.00	manm onths	INR		0.0000	INR Zero Only
2.34	Revetment Engineer	10.00	manm onths	INR		0.0000	INR Zero Only
2.35	Hydrological Engineer	4.00	manm onths	INR		0.0000	INR Zero Only
<b>2.36</b>	<b>Bridge Team (Superstructure-Extradosed)</b>						
2.37	Sr. Bridge Engineer (Superstructure(Extradosed) Sub-Team)	15.00	manm onths	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

2.38	Bridge Engineer (Super Structure (Extradosed) Sub-Team)	30.00	manm onths	INR		0.0000	INR Zero Only
<b>2.39</b>	<b>Bridge Team (Superstructure-Viaduct/VOP)</b>						
2.4	Bridge Engineer 1 (Superstructure (Viaduct/VOP) Design Team)	40.00	manm onths	INR		0.0000	INR Zero Only
<b>2.41</b>	<b>Operation and Maintenance Team</b>						
2.42	O&M Expert	9.00	manm onths	INR		0.0000	INR Zero Only
<b>2.43</b>	<b>Execution Team</b>						
<b>2.44</b>	<b>Main Bridge Team</b>						
2.45	Sr. Resident Engineer	34.00	manm onths	INR		0.0000	INR Zero Only
2.46	Site Engineer	174.00	manm onths	INR		0.0000	INR Zero Only
2.47	Safety Engineer	87.00	manm onths	INR		0.0000	INR Zero Only
2.48	QA/QC Engineer	126.00	manm onths	INR		0.0000	INR Zero Only
2.49	Material Engineer	141.00	manm onths	INR		0.0000	INR Zero Only
2.5	Surveyor	141.00	manm onths	INR		0.0000	INR Zero Only
<b>2.51</b>	<b>Viaduct Team</b>						
2.52	Sr. Resident Engineer	26.00	manm onths	INR		0.0000	INR Zero Only
2.53	Site Engineer	170.00	manm onths	INR		0.0000	INR Zero Only
2.54	Safety Engineer	85.00	manm onths	INR		0.0000	INR Zero Only
2.55	QA/QC Engineer	85.00	manm onths	INR		0.0000	INR Zero Only
2.56	Material Engineer	85.00	manm onths	INR		0.0000	INR Zero Only
2.57	Surveyor	85.00	manm onths	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

<b>3</b>	<b>Remuneration of Support Staff (inclusive of per diem allowance)</b>						
3.01	Office Manager	195.00	manm onths	INR		0.0000	INR Zero Only
3.02	Secretary/Typist	236.00	manm onths	INR		0.0000	INR Zero Only
3.03	Accountant	248.00	manm onths	INR		0.0000	INR Zero Only
3.04	Office Assistant	381.00	manm onths	INR		0.0000	INR Zero Only
3.05	IT Specialist	186.00	manm onths	INR		0.0000	INR Zero Only
3.06	Cad Operator	332.00	manm onths	INR		0.0000	INR Zero Only
3.07	Site Inspector (Main Bridge)	1008.00	manm onths	INR		0.0000	INR Zero Only
3.08	Site Inspector (Viaduct)	288.00	manm onths	INR		0.0000	INR Zero Only
3.09	Document Controller	165.00	manm onths	INR		0.0000	INR Zero Only
<b>4</b>	<b>Transportation (Fixed Costs)</b>						
4.01	Scorpio or SUV 4x4 vehicle (Minimum 10 numbers and not more than 1 year old vintage) To provide adequate mobility for real time supervision atleast one SUV per team be considered at the time during including 1 vehicle for the client Construction period and the requirement may be reduced to 50% during maintenance period.	1170.00	month s	INR		0.0000	INR Zero Only
4.02	Motor-boat (preferably fibre make with cover, twin engine equipped with safety gear for minimum 5 person (6 Nos for inspecting work during construction & maintenance) one boat for dolphin expert for mitigation plan and the requirement may be reduced to 50% during maintenance period.	702.00	month s	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

5	Duty Travel to Site (Fixed Costs): Professional and Sub-Professional Staff. The employer may require the key personnel to visit the Employer's Site Offices/Regional Office. The quoted amount against remuneration should include travel fare for 560 round trip to Employer's Head Office and 560 round trip to Employer's regional office. (including Hotel Charges,travel costs etc. complete)	1120.00	Nos	INR		0.0000	INR Zero Only
6	<b>Office Rent (Fixed Costs) The rent cost includes electricity and water charges, maintenance, cleaning, repairs, etc.</b>						
6.01	Main office of minimum 600 sqm area including a conferernce hall to house minimum 50 person for Construction Period and two sub-Office 300sqm area on either banks (Adeqaute independent communication facility to field staff.	93.00	months	INR		0.0000	INR Zero Only
6.02	Defect Liability Period (min. 200sqm area)	48.00	months	INR		0.0000	INR Zero Only
7	<b>Office Supplies, Utilities and Communication (Fixed Costs)</b>						
7.01	Office Supplies	141.00	months	INR		0.0000	INR Zero Only
7.02	Drafting Supplies	141.00	months	INR		0.0000	INR Zero Only
7.03	Computer Running Costs	141.00	months	INR		0.0000	INR Zero Only
7.04	Domestic and International Communication	141.00	months	INR		0.0000	INR Zero Only
8	<b>Office Furniture and Equipment (Rental)</b>						
8.01	Executive Table (Godrej make, model No.T-108orequivalent) (12 Nos)	284.00	Nos	INR		0.0000	INR Zero Only
8.02	Executive Chairs(Godrej make, model No.PCH-701orequivalent) (12 Nos)	284.00	Nos	INR		0.0000	INR Zero Only
8.03	Tables(Godrej make, model No.T-104 or	252.00	Nos	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

	equivalent) <b>(70 Nos)</b>						
8.04	Ordinary Chairs Type-1(Godrej make,Model NoT-CHR-6 or equivalent) <b>(70 Nos)</b>	252.00	Nos	INR		0.0000	INR Zero Only
8.05	Tables(for all other staff)(Godrej make,modelNo.T-101orequivalent) <b>(10 Nos)</b>	576.00	Nos	INR		0.0000	INR Zero Only
8.06	Ordinary Chairs–Type II (for all other staff) (Godrej make,modelNo.CHR-6 or equivalent) <b>(10 Nos)</b>	576.00	Nos	INR		0.0000	INR Zero Only
8.07	Steel AlmiraH 1270mmx765mmx440mm(Godrej make, model minor plain or equivalent) <b>(60 Nos)</b>	284.00	Nos	INR		0.0000	INR Zero Only
8.08	Visitors chairs/Conference room chairs (Godrej make, model No. DCH7004 or equivalent) <b>(50 Nos)</b>	252.00	Nos	INR		0.0000	
8.09	Tables for computers with 3 drawers, keyboard/mouse pull out trays size 1664mmx 900(Godrej make. Or equivalent as per Engineer’s design) <b>(10 Nos)</b>	192.00	Nos	INR		0.0000	INR Zero Only
8.10	Printer desks(Godrej make or equivalent) <b>(12 Nos)</b>	132.00	Nos	INR		0.0000	INR Zero Only
8.11	Side tables (Godrej make or equivalent) <b>(12 Nos)</b>	192.00	Nos	INR		0.0000	INR Zero Only
8.12	Conference Table(Godrej make, model No.T-12 or equivalent) <b>(3 No)</b>	48.00	Nos	INR		0.0000	INR Zero Only
8.13	Revolving Chairs for Computer Room/Drawing room <b>(3 Nos)</b>	144.00	Nos	INR		0.0000	INR Zero Only
8.14	Telephone with PABX facilities (2External lines&10internal lines) <b>(4 Nos)</b>	192.00	Nos	INR		0.0000	INR Zero Only
8.15	Interpersonnel Radio Communication devices for all staff	1.00	Nos	INR		0.0000	INR Zero Only
8.16	Photocopier <b>(3 No)</b>	96.00	Nos	INR		0.0000	INR Zero Only
8.17	Fax <b>(1 No)</b>	96.00	Nos	INR		0.0000	INR Zero Only
8.18	Air-Conditioner(1.5Ton) <b>(25 Nos)</b>	96.00	Nos	INR		0.0000	INR Zero Only
8.19	Computer PC (state of the art) <b>(70 Nos)</b>	384.00	Nos	INR		0.0000	INR Zero Only
8.20	LaserJet Printers <b>(15 Nos)</b>	288.00	Nos	INR		0.0000	INR Zero Only

Section 5 – Term of Reference,

8.21	Diesel Generator (Minimum of 50KVA)with running Cost <b>(3 No)</b>	96.00	Nos	INR		0.0000	INR Zero Only	
8.22	Binding Machine <b>(2 No)</b>	96.00	Nos	INR		0.0000	INR Zero Only	
8.23	Air Cooler(of 24" size fan with suitable Pump and shall be of either GEC, Katina or Cool Home make or equivalent) <b>(10 Nos)</b>	192.00	Nos	INR		0.0000	INR Zero Only	
8.24	Water Coolers (Voltas or equivalent) <b>(5 No)</b>	96.00	Nos	INR		0.0000	INR Zero Only	
8.25	Software (Project management softwares, Document Control, Surveys, Digitization of records, etc.)	1.00	Nos	INR		0.0000	INR Zero Only	
<b>9</b>	<b>Report and Document Printing</b>							
9.1	Monthly Reports (Design and Construction)	3750.00	Nos	INR		0.0000	INR Zero Only	
9.2	Quarterly/Half yearly reports	705.00	Nos	INR		0.0000	INR Zero Only	
9.3	Various other reports as provided in the Contract Agreement such as completion report, inception report, LA & monitoring, Technical report etc.)	20.00	Nos	INR		0.0000	INR Zero Only	
10	<b>Rental cost towards Survey Equipment(GPS/Total station /Auto Level/LIDAR/Drone/Falling Weight Deflectometer /Retro-reflectometer/Network Survey Vehicle/Laser Profilometer/Mobile Bridge Inspection Unit) with expert survey Party and one dedicated vehicle for Survey Party (inclusive of vehicle rental driver's salary, fuel operationand maintenance etc complete) with rods, flags and other sundries During DLP</b>	48.00	Months	INR		0.0000	INR Zero Only	
11	<b>Contingencies (Fixed as per RFP- Rs. 2 Crore)</b>	1.00	Nos	INR		0.0000	INR Zero Only	
<b>Total in Figures</b>						<b>0.0000</b>	<b>INR,USD,JPY,EUR Zero Only</b>	
<b>Quoted Rate in Words</b>		<b>INR,USD,JPY,EUR Zero Only</b>						

## **Appendix: Instructions for Preparing Financial Proposal (to be uploaded in the BOQ)**

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- 1 Financial Proposal is to be uploaded ONLY in prescribed BOQ on CPP Portal strictly in accordance with the instructions.
  
- 2 **S. No. 1 to 3 of BOQ: Remuneration (inclusive of per Diem allowance)**  
The purpose is to identify the monthly billing rates for each Key Expert (also named as Key Professional) and Non-Key Expert (i.e. Sub-Professionals and Support Staff) to be filled by the Consultant as part of its proposed team of Experts. Please note that, for purposes of computing remuneration payable to Experts, payments for periods of less than one month shall be calculated on an hourly basis for actual time spent in the Consultant's home office and directly attributable to the Services (one hour being equivalent to 1/240<sup>th</sup> of a month) and on a calendar-day basis for time spent away from home office (one day being equivalent to 1/30<sup>th</sup> of a month).
  
- 3 **S. No. 4 & 8 of BOQ Breakdown of Reimbursable Expenses**
  - (i) The purpose is to identify all reimbursable expenses in local currencies considered by the Consultant necessary to carry out the assignment.
  - (ii) For reimbursable expenses, amount to be quoted in Foreign Currency (including Miscellaneous Travel Expenses if any) for International (Expatriate) Key Experts (i.e. of nationality other than Resident Indian) only.
  - (iii) International Travel  
International travel costs will show the airfares needed by International Expatriate Key Experts to travel from their home office, or regular place of work, to the field, by the most appropriate and the most direct practicable route in economy class.

For International Expatriate Key Experts spending twenty-four (24) consecutive months or more in the Client's country, one extra round trip will be reimbursed for every twenty-four (24) months of assignment in the Client's country. Such International Expatriate Key Experts will be entitled to such extra round trip only if upon their return to the Client's country, such International Expatriate Key Experts are scheduled to serve for the purposes of the Project for a further period of not less than six (6) consecutive months.

Air transport for dependents: the cost of transportation to and from the Client's country of eligible dependents who shall be the spouse and not more than two (2) unmarried dependent children under eighteen (18) years of age of those of the International Expatriate Key Experts assigned to resident duty in the Client's country for the purpose of the Services for periods of six (6) consecutive months or longer, provided that the stay of such dependents in the Client's country shall have been for not less than three (3) consecutive months duration. If the assignment period for resident staff of the

Section 5 – Term of Reference,

International Experts will be thirty (30) months or more, one extra economy class air trip for their eligible dependents for every twenty-four (24)-month assignment will be reimbursed.

The number of round trips, the cost for each trip and destinations should be shown under “air travel”.

(iv) Miscellaneous Travel Expenses

International travel costs mentioned at (iii) above shall include “Miscellaneous Travel Expenses” to cover a lump sum allowance per round trip for processing necessary travel documents (passport, visas, travel permits), airport taxes, transport to and from airports, inoculations, the cost of excess baggage up to twenty (20) kilograms per person, or the equivalent in cost of unaccompanied baggage or air freight for each International Expert and each eligible dependent, etc.

4. Costs (Sr. No. 6 to 10) Office (Rent & Supplies), Furniture, Reports, Equipment

these costs include, but are not limited to:

- a. The costs of international and local communication reasonably required by the Consultant for the purposes of the Services;
- b. The cost of printing, reproducing and shipping of the documents, reports, drawings, etc.;
- c. The cost of acquisition, shipment and handling of the equipment, instruments, materials and supplies required for the Services;
- d. Miscellaneous administrative and support costs.

(v) Contingency

The contingency amount must be the exact amounts and in the same currency as specified in the Data Sheet for such cost.

5. Price adjustment on the Remuneration in Foreign/ or Indian Currency shall be carried out in accordance to provision made under Special Conditions of Contract (SCC), Cl. 6.2(c).
6. The price quoted by Bidder shall include all Taxes and Duties other than GST.

## SECTION-5

### Terms of Reference

#### 1. Scope

1.1 These Terms of Reference (the “TOR”) for the Authority’s Engineer are being specified pursuant to the Contract Agreement dated..... (the “Agreement”), which has been/ is going to be entered into between the Authority and..... (the “Contractor”) for “**Authority’s Engineer for Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)**” and a copy of which is annexed hereto and marked as Annex-A (OR shall be provided on signing of the contract with the selected Contractor) to form part of this TOR.

1.2 The TOR shall apply to construction and maintenance of the Bridge Project.

#### 2. Definitions and interpretation:

2.1 The words and expressions beginning with or in capital letters and not defined herein but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement.

2.2 References to Articles, Clauses and Schedules in this TOR shall, except where the context otherwise requires, be deemed to be reference to the Articles, Clauses and Schedules of the Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.

2.3 The rules of interpretation stated in Clauses 2, 12 & 21 of LOI of the Agreement shall apply, *mutatis mutandis*, to this TOR.

#### 3. Scope of Consulting Services

3.1 The Authority’s Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

3.2.1 The Authority’s Engineer shall perform the duties and exercise the authority in accordance with the provisions of this Agreement, but subject to obtaining prior written approval of the Authority before determining:

(a) Any Time Extension;

(b) Any additional cost to be paid by the Authority to the Contractor;

(c) The Termination Payment; or

(d) Any other matter, which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding **Rs. 50, 00, 000/- (Rs. fifty lakh)** for the entire duration of the contract.

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

Agreement. Such reports shall be submitted by the Authority's Engineer within 10 (ten) days of the beginning of every month.

3.2.3 The Authority's Engineer shall inform the Contractor of any delegation of its duties and responsibilities to its suitably qualified and experienced personnel; provided, however, that it shall not delegate the authority to refer any matter for the Authority's prior approval in accordance with the provisions of Clause 3.2 above.

3.3 The Authority's Engineer shall aid and advise the Authority on any proposal for Change of Scope as per the Contract Agreement with the Contractor.

3.4 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Authority's Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

### **3.5 Role and responsibility Officers of the Authority**

The officer in-charge of the Authority (e.g. GM/ RO/ ED/Director in the case of NHIDCL) is responsible for the overall supervision and monitoring of the execution of project as the representative of the owner of the project. The Authority's Engineer is appointed to assist the Authority for carrying out the functions as *detailed under the Contract*. As such, an officer of the Authority is vested with all such powers and responsibilities as are enjoined upon the Authority's Engineer and is fully competent to issue any instructions for proper monitoring and supervision of the project, either by himself or through the Authority's Engineer. Instructions issued by the concerned officer of the Authority shall have the same effect as that of the Authority's Engineer in terms of this Agreement. Wherever such concerned officer issues any instructions or notice to the Contractor, he shall endorse a copy thereof to the Authority's Engineer.

## **4 Construction Period**

4.1 During the Construction Period, the Authority's Engineer shall review the Drawings furnished by the Contractor along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys, and the recommendations of the Safety Consultant in accordance with the provisions of as per the Contract Agreement. The Authority's Engineer shall complete such review and send its observations to the Authority and the Contractor within 30 (thirty) days of receipt of such Drawings. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and Specifications and Standards.

4.2 The Authority's Engineer shall review any revised Drawings sent to it by the Contractor and furnish its comments within 30 (thirty) days of receiving such Drawings.

Section 5 – Term of Reference,

- 4.3 The Authority's Engineer shall review the Quality Assurance Plan submitted by the Contractor and shall convey its comments to the Contractor within a period of 30 (thirty) days stating the modifications, if any, required thereto.
- 4.4 The Authority's Engineer shall complete the review of the methodology proposed to be adopted by the Contractor for executing the Works, and convey its comments to the Contractor within a period of 30 (thirty) days from the date of receipt of the proposed methodology from the Contractor.
- 4.5 The Authority's Engineer shall grant written approval to the Contractor, where necessary, for interruption and diversion of the flow of traffic in the existing lane(s) of the Project Highway for purposes of maintenance during the Construction Period in accordance with the provisions of Contract Agreement.
- 4.6 The Authority's Engineer shall review the monthly progress report furnished by the Contractor and send its comments thereon to the Authority and the Contractor within 7 (seven) days of receipt of such report.
- 4.7 The Authority's Engineer shall inspect the Construction Works and the Project Highway and shall submit a monthly Inspection Report bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. In particular, the Authority's Engineer shall include in its Inspection Report, the compliance of the recommendations made by the Safety Consultant.

On a daily basis, the concerned Key Expert of Authority Engineer shall inspect the Construction Works. Following activities need to be undertaken during the visits.

- Review of construction including progress, quality and safety of construction
- Inspection of defects and deficiencies in construction works
- Witnessing quality inspection tests at labs established by Concessionaire on a sample basis

Review of quality of work shall be done in reference to Quality Assurance Plan (QAP)/Manual and ISO 9001:2008, IRC: SP: 47-1998 and IRC: SP: 57-2000 for road bridges and roads respectively. The Authority's Engineer also needs to capture following documents and send to <NHIDCL> field office via email on a daily basis

- Scanned copy of filled RFI (Request for Inspection) form including commentary on Satisfactory/Unsatisfactory' nature of work completed by Concessionaire
- Daily inspection report Performa as provided in Annexure I
- Readings of quality inspection tests witnessed by the Consultant
- Minimum 6 high resolution photographs supporting the remarks made by the
- Authority's Engineer in RFI form

Team Leader will be responsible for sending daily emails to <NHIDCL> office

- 4.8 On a monthly basis, the Authority Engineer shall prepare a Monthly Inspection Report in accordance with the format prescribed in Annexure V setting forth an overview of the status, progress, quality and safety of construction, including the work methodology adopted, the materials used and their sources, and conformity of Construction Works with the Scope of the Project and the Specifications and Standards. In a separate section of the Inspection Report, the Authority Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in the construction of the Project Highway. The Authority Engineer shall send a copy of its Inspection Report to the Authority and the Contractor latest by 7th of every month. Key sections of the Monthly Progress Report are as follows.

S No.	Section	Sub-Sections
1	<b>Executive Summary</b>	1.1 Construction progress in current month
		1.2 Summary of strip plan
		1.3 Detailed strip plan
		1.4 Current issues and recommended actions by AE
2	<b>Project Overview</b>	2.1 Salient Features of the Project
		2.2 Project Milestones
		2.3 Location Map
		2.4 Key Plan
3	<b>Critical issues and Action log</b>	3.1 Pending issues and action log
		3.2 Obligations as per contract
4	<b>Physical Progress</b>	4.1 Detailed physical progress by component
5	<b>Land Acquisition and Clearances</b>	5.1 LA summary
		5.2 LA detail by CALA
		5.3 LA detail by village
		5.4 Manpower with each CALA
		5.5 Clearances summary
		5.6 Status of utility shifting
6	<b>Change of Scope</b>	6.1 Status of pending COS proposals
7	<b>Mobilization of Resources</b>	7.1 Resource mobilization by contractor/ concessionaire
8	<b>Financial Progress Details</b>	8.1 Pen picture- Escrow
		8.2 Escrow details
9	<b>Summary of quality control tests</b>	9.1 Tests witnessed by IE/AE
		9.2 Tests conducted by IE/AE
10	<b>Monitoring of maintenance obligations during construction phase</b>	10.1 Critical issues and action log
		10.2 Cumulative defects and deficiencies
		10.3 Status of damages
11	<b>Safety features</b>	11.1 Pen picture on safety features at construction site
		11.2 Accident report
12	<b>Annexure</b>	Annex 1: Detailed list of physical components as per Schedule G
		Annex 2 onwards: Additional details provided by AE

Section 5 – Term of Reference,

- 4.9 If at any time during the Construction Period, the Authority Engineer determines that the Contractor has not made adequate arrangements for the safety of workers and Users in the zone of construction or that any work is being carried out in a manner that threatens the safety of the workers and the Users, it shall make a recommendation to the Authority forthwith, identifying the whole or part of the Construction Works that should be suspended for ensuring safety in respect thereof.
- 5.0 The Authority's Engineer shall conduct the pre-construction review of manufacturer's test reports and standard samples of manufactured Materials, and such other Materials as the Authority's Engineer may require.
- 5.1 For determining that the Works conform to Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out, or cause to be carried out, tests at such time and frequency and in such manner as specified in the Agreement and in accordance with Good Industry Practice for quality assurance. For purposes of this Paragraph 4.9, the tests specified in the IRC Special Publication-11 (Handbook of Quality Control for Construction of Roads and Runways) and the Specifications for Road and Bridge Works issued by MORTH (the "Quality Control Manuals") or any modification/substitution thereof shall be deemed to be tests conforming to Good Industry Practice for quality assurance.
- 5.2 The Authority's Engineer shall test check at least 60 (sixty) percent of the quantity or number of tests prescribed for each category or type of test for quality control by the Contractor.
- 5.3 The timing of tests referred to in Paragraph 5.1, and the criteria for acceptance/ rejection of their results shall be determined by the Authority's Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Contractor for its own quality assurance in accordance with Good Industry Practice.
- 5.4 In the event that results of any tests conducted as per the provisions of Contract Agreement establish any Defects or deficiencies in the Works, the Authority's Engineer shall require the Contractor to carry out remedial measures.
- 5.5 The Authority's Engineer may instruct the Contractor to execute any work which is urgently required for the safety of the Project Highway, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work required on account of a Force Majeure Event, as per the provisions of Contract Agreement shall apply.
- 5.6 In the event that the Contractor fails to achieve any of the Project Milestones, the Authority's Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Authority's Engineer shall determine that completion of the Project Highway is not feasible within the time specified in the Agreement, it shall require the Contractor to indicate within 30 (thirty) days the steps proposed to be taken to expedite progress, and the period within which the Project Completion Date shall be achieved. Upon receipt of a report from the Contractor, the Authority's

Section 5 – Term of Reference,

Engineer shall review the same and send its comments to the Authority and the Contractor forthwith.

- 5.7 The Authority’s Engineer shall obtain from the Contractor a copy of all the Contractor’s quality control records and documents before the Completion Certificate is issued pursuant to as per the provisions of Contract Agreement.
- 5.8 Authority’s Engineer may recommend to the Authority suspension of the whole or part of the Works if the work threatens the safety of the Users and pedestrians. After the Contractor has carried out remedial measure, the Authority’s Engineer shall inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked.
- 5.9 In the event that the Contractor carries out any remedial measures to secure the safety of suspended works and Users, and requires the Authority’s Engineer to inspect such works, the Authority’s Engineer shall inspect the suspended works within 3 (three) days of receiving such notice, and make a report to the Authority forthwith, recommending whether or not such suspension may be revoked by the Authority.
- 5.10 The Authority’s Engineer shall carry out, or cause to be carried out, all the Tests specified in **the Contract Agreement** and issue of Completion Certificate or Provisional Certificate, as the case may be. For carrying out its functions under this Paragraph 5.10 and all matters incidental thereto, the Authority’s Engineer shall act under and in accordance as per the provisions of Contract Agreement.

S No	Key metrics of Asset	Equipment to be used
1	Surface defects of pavement	Network Survey Vehicle (NSV)
2	Roughness of pavement	Laser Profilometer
3	Strength of pavement	Falling Weight Deflectometer (FWD)
4	Bridges	Mobile Bridge Inspection Unit (MBIU)
5	Road signs and road markings	Retro-deflectometer

**6. Maintenance Period**

- 6.1 The Authority’s Engineer shall aid and advise the Contractor in the preparation of its monthly Maintenance Programme and for this purpose carry out a joint monthly inspection with the Contractor.
- 6.2 The Authority’s Engineer shall undertake regular inspections, at least once every month, to evaluate compliance with the Maintenance Requirements and submit a Maintenance Inspection Report to the Authority and the Contractor.
- 6.3 The Authority’s Engineer shall specify the tests, if any, that the Contractor shall carry out, or cause to be carried out, for the purpose of determining that the Bridge Project is in conformity with the Maintenance Requirements. It shall monitor and review the results of such tests and the remedial measures, if any, taken by the Contractor in this behalf.

Section 5 – Term of Reference,

- 6.4 In respect of any defect or deficiency referred to as per the provisions of Contract Agreement, the Authority's Engineer shall, in conformity with Good Industry Practice, specify the permissible limit of deviation or deterioration with reference to the Specifications and Standards and shall also specify the time limit for repair or rectification of any deviation or deterioration beyond the permissible limit.
- 6.5 The Authority's Engineer shall examine the request of the Contractor for closure of any lane(s) of the Project Highway for undertaking maintenance/repair thereof, and shall grant permission with such modifications, as it may deem necessary, within 5 (five) days of receiving a request from the Contractor. Upon expiry of the permitted period of closure, the Authority's Engineer shall monitor the reopening of such lane(s), and in case of delay, determine the Damages payable by the Contractor to the Authority as per the provisions of Contract Agreement.

**7 Determination of costs and time**

- 7.1 The Authority's Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.
- 7.2 The Authority's Engineer shall determine the period of Time Extension that is required to be determined by it under the Agreement.
- 7.3 The Authority's Engineer shall consult each Party in every case of determination in accordance with as per the provisions of Contract Agreement.

**8. Payments**

- 8.1 The Authority's Engineer shall withhold payments for the affected works for which the Contractor fails to revise and resubmit the Drawings to the Authority's Engineer in accordance with as per the provisions of Contract Agreement
- 8.2 Authority's Engineer shall -
- (a) within 15 (fifteen) days of receipt of the Stage Payment Statement from the Contractor pursuant to as per the provisions of Contract Agreement, determine the amount due to the Contractor and recommend the release of 90 (ninety) percent of the amount so determined as part payment, pending issue of the Interim Payment Certificate; and
  - (b) within 15 (fifteen) days of the receipt of the Stage Payment Statement referred to in as per the provisions of Contract Agreement, deliver to the Authority and the Contractor an Interim Payment Certificate certifying the amount due and payable to the Contractor, after adjustments in accordance as per the provisions of Contract Agreement
- 8.3 The Authority's Engineer shall, within 15 (fifteen) days of receipt of the Monthly Maintenance Statement from the Contractor as per the provisions of Contract Agreement, verify the Contractor's monthly statement and certify the amount to be paid to the Contractor in accordance with the provisions of the Agreement.

8.4 The Authority’s Engineer shall certify final payment within 30 (thirty) days of the receipt of the final payment statement of Maintenance in accordance as per the provisions of Contract Agreement.

**9. Facilitation of implementation of Environmental Management Plan (EMP), Environmental Monitoring Plan (EMoP)**

The Consultant shall:

- (a) Update EMP as appropriate; incorporate necessary technical specifications with design and contract documentation;
- (b) Assist NHIDCL in preparation of Forest Clearance or the required environmental clearance in accordance with EIA and the conditions stated in environmental permit certifications for the Project;
- (c) Assist NHIDCL in dissemination and explanation of additionally confirmed and identified environmental issues to public including holding public consultations, if necessary;
- (d) Assist NHIDCL in obtaining the Forest Clearance from the state and central government, or the required environmental clearance, in accordance with the planned implementation schedule;
- (e) During the preparation of bidding documents, clearly identify environmental responsibilities as explained in the EIA and EMP;
- (f) Assist NHIDCL to review the Construction Contractor’s Environmental Program to be prepared by the contractor in accordance with EMP, relevant plans and JICA Environmental Guidelines and to make recommendations to NHIDCL regarding any necessary amendments for its approval;
- (g) Assist NHIDCL to implement the measures identified in the EMP; Monitor the effectiveness of EMP and negative impacts on environment caused by the construction works and provide technical advice, including a feasible solution, so that NHIDCL can improve situation when necessary;
- (h) Assist NHIDCL in monitoring the compliance with conditions stated in the Contract and the requirements under EMP and JICA Environmental Guidelines;
- (i) Assist NHIDCL to review the Construction Contractor’s STI, STD and HIV/AIDS Prevention Program to be prepared by the contractor in accordance with the civil works contract, and to make recommendations to NHIDCL regarding any necessary amendments for its approval;
- (j) Assist NHIDCL in preparation of the answer to the request from JICA’s advisory committee for environmental and social considerations if necessary
- (k) Assist NHIDCL in the capacity building of NHIDCL staff on environmental management through on-the-job training on environmental assessment techniques, mitigation measure planning, supervision and monitoring, and reporting.

**10. Technology Transfer**

The Consultant shall carry out the technology transfer as an important aspect in supervision works. The Consultant shall provide the opportunity to NHIDCL and other relevant authorities’ officers and staffs to be involved in the working team of the Consultant during the contract administration and supervision works for their capacity building wherever possible. If requested by NHIDCL, the Consultant shall brief and demonstrate the survey and design

procedure, the construction supervision and contract management process and procedures. The consultant shall assist NHIDCL and its staff to build their capacity as a part of on the job training under the Project.

**11. Other duties and functions**

The Authority's Engineer shall perform all other duties and functions as specified in the Agreement.

**12. Miscellaneous**

- 12.1 A copy of all communications, comments, instructions, Drawings or Documents sent by the Authority's Engineer to the Contractor pursuant to this TOR, and a copy of all the test results with comments of the Authority's Engineer thereon, shall be furnished by the Authority's Engineer to the Authority forthwith.
- 12.2 The Authority's Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.
- 12.3 Within 90 (ninety) days of the Project Completion Date, the Authority's Engineer shall obtain a complete set of as-built Drawings, in 2 (two) hard copies and in micro film form or in such other medium as may be acceptable to the Authority, reflecting the Project Highway as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project Highway and setback lines, if any, of the buildings and structures forming part of Project Facilities; and shall hand them over to the Authority against receipt thereof.
- 12.4 The Authority's Engineer, if called upon by the Authority or the Contractor or both, shall mediate and assist the Parties in arriving at an amicable settlement of any Dispute between the Parties.
- 12.5 The Authority's Engineer shall inform the Authority and the Contractor of any event of Contractor's Default within one week of its occurrence.
- 12.6 All Key Expert and sub professional staff of the Authority Engineer shall use the fingerprint based (biometric) attendance system for marking their daily attendance. Attendance shall be marked at least once a day and anytime during the day. 1 Biometric Attendance System shall be installed by the Authority Engineer at its own cost at the site office in order to facilitate the attendance marking. More systems can be installed near the project in order to encourage frequent visits of project by Key Expert and sub professional staff. A copy of monthly attendance records shall be attached with Monthly Status Report. Proper justification shall be provided for cases of absence of key personnel/ sub professional staff which do not have prior approval from Project Director of concerned stretch

**13. Performance Clause**

Authority’s Engineers shall be expected to fully comply with all the provisions of the `Terms of Reference’, and shall be fully responsible for supervising the Designs, Construction and maintenance and operation of the facility takes place in accordance with the provisions of the Agreement and other schedules. Any failure of the Authority Engineer in notifying to Employer and the Contractor on non-compliance of the provisions of the Contract Agreement and other schedules by the Contractor, non-adherence to the provision of ToR and non-adherence to the time schedule prescribed under ToR shall amount to non-performance.

The Authority’s Engineer shall appoint its authorized representative, who shall issue on behalf of the AE, the Provisional Completion Certification and Completion Certificate along with the Team Leader and shall carryout any such task as may be decided by Employer. The AE shall take prior approval of Employer before issuing Provisional Completion Certification and Completion Certificate. The proposal submitted shall also include the name of the authorized representative along with the authorization letter and power of attorney.

**14. Expected Time Schedule**

14.1 The total duration of consulting services will be 141 months including 93 Construction and 48 months of defects liability period.

14.2 The services of an Authority’s Engineer will be in phases as per Contract Agreement.

14.2.1 The appointment of the Authority’s Engineer shall initially be as per details given below.

Period of service (in months)	Construction period (in months)	Maintenance/ DLP Period (in months)
Construction Period + DLP Period as per Civil Contract Agreement	93	48

The proposed manpower deployment for this period shall be matching the activities to be performed during the said period. The time frame for services during the deployment of Key Expert during this period shall be as shown in **Enclosure A**. Extension of Time for providing services of the Authority’s Engineer may be extended concurrently with the Extension of Time granted, if any, to the Contractor for the project, subject to satisfactory performance of the Authority’s Engineer.

**15. Consultant’s Proposal**

15.1 Broad job-description and minimum qualification for Key Expert mentioned above is enclosed as **Enclosure-B**. However, higher marks shall be accorded to the Candidate with higher relevant qualification and experience. All the CV’s

of the personals mentioned in **Para 14.2 (iii) of Data Sheet** shall be evaluated at the time of evaluation of technical proposal. The age of the Key Expert should not be more than 60 years on the date of submission of proposal. Consultants are advised in their own interest to frame the technical proposal in an objective manner as far as possible so that these could be properly assessed in respect of points to be given as part of evaluation criteria. The bio-data of the Key Expert should be signed on every sheet by the personnel concerned and the last sheet of each bio-data should also be signed by the authorized signatory for the Consultant. The Key Expert shall also certify at the end of their bio-data Performa that they have not left any of the Employer works without completing of their assignment and have not accepted any other offer at the time of signing of the bio-data and as such shall be available to work with the Authority Engineer, if the Project is awarded. In case the Key Expert leave the assignment without approval of Employer, Employer would beat liberty to take any appropriate action against that Key Expert including debarment. The CV submitted by selected firm/JV shall be hoisted on official website of Employer.

15.2 In addition to above, consultants are required to propose other key Professionals, sub-professional staff and other field engineers as detailed in **Enclosure-A** and the minimum qualification requirements for the same is enclosed in **Enclosure-B** is the minimum requirement to be met by the consultant.

**16. Project Coordinator**

The Firm shall appoint personnel from its head office to act as Project Coordinator for the assignment. He will be authorized to communicate with the Authority in respect of all matters pertaining to the project. The cost of the Project Coordinator shall be incidental to the Consultancy Assignment.

**MAN-MONTH INPUT FOR KEY PROFESSIONAL STAFF  
AUTHORITY'S ENGINEER  
STANDALONE BRIDGE PROJECT**

Sr. No.	Key Personnel	Total Man-month (in months) (Construction period and maintenance period)
<b>Key Personnel</b>		
<b>1.</b>	<b>Project Management Team</b>	
(i)	Team Leader	95
(ii)	Deputy Team Leader.	89
<b>2.</b>	<b>Contract/Cost/Planning Team</b>	
(i)	Sr. Contract Expert	10
<b>3.</b>	<b>QA/QC Team</b>	
(i)	Chief QA/QC Expert	10
<b>4.</b>	<b>Safety Team</b>	
(i)	Chief Safety Expert	40
<b>5.</b>	<b>Social &amp; Environment Team</b>	
(i)	Chief Social & Env. Expert	13
<b>6.</b>	<b>Design Team / Highway Team</b>	
	Not Used	
<b>7.</b>	<b>Bridge Team (Fdn./Sub-Structure</b>	
(i)	Chief Bridge Engineer	9
<b>8.</b>	<b>Superstructure (Extradosed) Sub-Team</b>	
(i)	Chief Bridge Engineer	15
<b>9.</b>	<b>Superstructure (Viaduct/VOP) Design Team</b>	
(i)	Chief Bridge Engineer	30
<b>10.</b>	<b>Operation &amp; Maintenance Team</b>	
(i)	Chief O&M Expert	7
<b>11.</b>	<b>Execution Team/ Main Bridge Team</b>	
(i)	Chief Resident Engineer	32
<b>12.</b>	<b>Viaduct Team</b>	
(i)	Chief Resident Engineer	8
<b>Sub - Total</b>		<b>358</b>

Section 5 – Term of Reference,

<b>Sub Key Personnel</b>		
<b>1.</b>	<b>Contract/Cost/Planning Team</b>	
(i)	Sr. Contract Expert 2	30
(ii)	Contract Expert 1	99
(iii)	Sr. Quantity Surveyor 1	79
(iv)	Quantity Surveyor 1	87
(v)	Chief Legal Advisor	25
(vi)	Chief Construction Planning Expert	45
(vii)	Sr. programming & Scheduling Expert	58
(viii)	Sr. document Controller	98
<b>2.</b>	<b>QA/QC Team</b>	
(i)	Chief QA/QC Expert 2	28
(ii)	Sr. QA/QC Expert	95
<b>3.</b>	<b>Safety Team</b>	
(i)	Sr. Safety Expert	90
<b>4.</b>	<b>Social &amp; Environment Team</b>	
(i)	Sr. Social Expert	29
(ii)	Social expert	29
(iii)	Environment Specialist	93
(iv)	Dolphin Expert	19
(v)	HIV/STD Preventive Coordinator	16
<b>5.</b>	<b>Design Team / Highway Team</b>	
(i)	Sr. Highway Engineer - 1	8
(ii)	Sr. Highway Engineer - 2	4
(iii)	Pavement Engineer	7
(iv)	Drainage Engineer	7
(v)	Electrical Engineer	7
(vi)	Traffic Engineer	4
<b>6.</b>	<b>Bridge Team (Fdn./Sub-Structure</b>	
(i)	Chief Bridge Engineer	14
(ii)	Bridge Engineer	24
(iii)	Sr. Geotechnical Engineer	8
(iv)	Geotechnical Engineer	20
(v)	Revetment Engineer	10

Section 5 – Term of Reference,

(vi)	Hydrological Engineer	4
<b>7.</b>	<b>Superstructure (Extradosed) Sub-Team</b>	
(i)	Sr. Bridge Engineer	15
(ii)	Bridge Engineer	30
<b>8.</b>	<b>Superstructure (Viaduct/VOP) Design Team</b>	
(i)	Bridge Engineer 1	40
<b>9.</b>	<b>Operation &amp; Maintenance Team</b>	
(i)	O&M Expert	9
<b>10.</b>	<b>Execution Team/ Main Bridge Team</b>	
(i)	Sr. Resident Engineer	34
(ii)	Site Engineer	174
(iii)	Safety Engineer	87
(iv)	OA/QC Engineer	126
(v)	Material Engineer	141
(vi)	Surveyor	141
<b>11.</b>	<b>Viaduct Team</b>	
(i)	Sr. Resident Engineer	26
(ii)	Site Engineer	170
(iii)	Safety Engineer	85
(iv)	OA/QC Engineer	85
(v)	Material Engineer	85
(vi)	Surveyor	85
<b>Sub - Total</b>		<b>2370</b>
<b>12.</b>	<b>Supporting Staff</b>	
(i)	Office Manager	195
(ii)	Secretary/Typist	236
(iii)	Accountant	248
(iv)	Office Assistant	381
(v)	IT Specialist	186
(vi)	CAD Operator	332
(vii)	Site Inspector (Main Bridge)	1008
(viii)	Site Inspector (Viaduct)	288
(ix)	Document Controller	165
<b>Sub Total</b>		<b>3039</b>

**Qualification of Key Experts**

The qualification of key team members is shown in Table below:

This is the senior most position and the expert engaged as the team leader shall be responsible for reviewing the entire Project preparation and implementation activities of the Contractor. He shall check all the Designs being prepared by the Contractor, ensure execution of works on site as per specification and standards, and continuously interact with the <NHIDCL> and the Contractor. He shall undertake Project site visits and shall guide, supervise, coordinate and monitor the work of other experts in his team as well as those of the Contractor. The candidate is required to be a Senior Bridge Engineer, who should have a proven record of supervising, organizing and managing of construction of highway projects and also of Project preparation of large magnitudes projects, as defined below, financed by international lending agencies and others. Knowledge of Project management shall be an added advantage. He should have the following qualification / experience.

	Designation	Essential Qualification
<b>Professional Key Experts Staff (i.e., International/National)</b>		
1	<b>Team Leader</b>	<p><b>Education:</b></p> <p>(1) Graduate and Post Graduate in Civil Engineering.  (2) Additional Desirable Qualification 2<sup>nd</sup> Post Graduate or doctorate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering / Geotechnical Engineering/ Soil Mechanics/Foundation Engineering.</p> <p><b>Experience:</b></p> <p>(3) Professional Experience: Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).  (4) Experience of construction supervision of Highway/ Expressway Bridge projects in similar capacity: (a) 5 years or more; (b) Minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis with minimum bridge length of 500 mtrs having span not less than 125 mtrs each. (c) Minimum 2 Bridge Projects with minimum one year in each project; and (d) atleast one project funded by Multilateral/Bilateral Funding Agency(ies) with minimum 1year period.  (5) Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 1,750 Cr. Minimum 2 (two) year in each project.  (6) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:  i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/ IE/ AE).  ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision).  iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
2	<b>Deputy Team Leader</b>	<p><b>Education:</b></p> <p>(1) Graduate and Post Graduate in Civil Engineering.  (2) Additional Desirable Qualification 2<sup>nd</sup> Post Graduate or doctorate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /</p>

Section 5 – Term of Reference,

		<p>Geotechnical Engineering/ Soil Mechanics/Foundation Engineering</p> <p><b>Experience:</b></p> <p>(3) Professional Experience: Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience of construction supervision of Highway/ Expressway Bridge projects in similar capacity: (a) 5 years or more; (b) Minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis with minimum bridge length of 500 mtrs having span not less than 125 mtrs each. (c) Minimum 2 Bridge Projects with minimum one year in each project; and (d) atleast one project funded by Multilateral/Bilateral Funding Agency(ies) with minimum 1year period (e) “Experience in Design of bridge Projects” and “Operational and Maintenance” is the essential qualification</p> <p>(5) Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 1,750 Cr. Minimum 2 (two) year in each project.</p> <p>(6) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
3	<b>Senior Contract Expert (International/ National)</b>	<p><b>Education:</b></p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification LLB or Diploma or Post Graduate in Construction Management or Certificate Course in Construction Management or Certificate Course in Contract Management or equivalent.</p> <p><b>Experience:</b></p> <p>(3)Professional Experience in Contract Management of projects of Bridges &amp; Highways: Aggregate minimum 15 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4)Experience of working in similar capacity on any International / National / State Highway or major bridge projects minimum 4 years or more.</p> <p>(5) Contract Management of minimum Two large Highway or major bridge Project on mode including experience of handling of variation orders, claims of the Contractor and their disposal.</p> <p>(6) Experience of procurement specialist for bidding document preparation and tender assistance in more than Two Bridge Projects as Contract Specialist on any International/National Projects where value of ICB Contract is more than Rs. 1,750 Cr. in minimum two projects</p> <p>(7) Experience of handling Arbitration cases in respect of Construction of Highway or major bridge projects as Contract Specialist on any International/National Projects</p> <p>(8) Experience in handling of Contract cases in Projects funded by Multilateral/ Bilateral Funding Agency(ies)</p> <p><b>(9) Age:</b> Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer/Sr. Contract Expert (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager/Sr. Contract Expert (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
4	<b>Chief QA &amp;</b>	<p><b>Education:</b></p>

Section 5 – Term of Reference,

	<p><b>QC Engineer (International/ National)</b></p>	<p>(1) Graduate in Civil Engineering  (2) Additional Desirable Qualification Post Graduate Material Sc. Engineering or Geo-technical Engineering or Soil Mechanics &amp; Foundation Engineering.  <b>Experience:</b>  (3) Professional Experience in Bridge projects: Aggregate minimum 15 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).  (4) Experience in similar capacity* in handling of similar minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge-  (5) Experience in Operation &amp; Maintenance of Major Bridge projects in similar capacity. Minimum 1 project (having experience of minimum not less than one year in project). Additional 1 marks for each additional project with minimum one year duration.  (6) Age: Not more than 60 years.  <b>Note:</b> Similar Capacity includes the following positions:  i) On behalf of Consultant: Team Leader/ Resident /Quality Control Engineer (Construction Supervision/ IE/ AE).  ii) On behalf of Contractor: Project Director/ Project Manager/Quality Control Engineer (Construction/ Construction Supervision).  iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
<p>5</p>	<p><b>Chief Safety Expert (International/ National)</b></p>	<p><b>Education:</b>  (1) Graduate in Civil Engineering  (2) Additional Desirable Qualification;  Post Graduate in Highway Engineering / Transportation Engineering / Professional Certificate recognized by statutory body on Safety &amp; Construction  <b>Experience:</b>  (3) Professional Experience in Bridge projects: Aggregate minimum 15 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).  (4) Experience in Similar Capacity* in major Bridge projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis over Sea/ Creek/ Perennial River/ Estuary.  (5) Experience in Similar Capacity* in Road and Bridge Safety Audits of Minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis  (6) Experience in Similar Capacity* in Road and Bridge identification and improvement of black spots in at least 2 Highway Projects.  (7) Experience in Similar Capacity* of preparation of Safety Management Plans for Construction of Bridge projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.  (8) Experience in Similar Capacity* in field of Road Safety Management Plans in Bridge projects. Minimum 1 project.  (9) Age: Not more than 60 years.  <b>Note:</b> Similar Capacity includes the following positions:  i) On behalf of Consultant: Team Leader/ Resident Engineer/Safety Expert (Construction Supervision/ IE/ AE).  ii) On behalf of Contractor: Project Director/ Project Manager/Safety Expert (Construction/ Construction Supervision).  iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>

Section 5 – Term of Reference,

6	<p><b>Chief Social &amp; Environment Expert (International/ National)</b></p>	<p><b>Education:</b>            (1) Civil Engineering / BSc in Sociology or Environment /Environmental Engineering or equivalent.            (2) Additional Desirable Qualification;            Post Graduation in Environmental/Sociology/ Environmental Science or Environment Management or equivalent</p> <p><b>Experience:</b>            (3) Professional Experience in Social &amp; Environment Engineering fields: Aggregate minimum 15 years of professional experience in Bridge/Highway Construction Projects.            (4) Experience in Similar Capacity* in major Bridge projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.            (5) Experience in Similar Capacity* in Road and Bridge Safety Audits of Minimum 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basis            (6) Experience in Similar Capacity* in identification and improvement of Social &amp; Environment issues in at least 2 Highway / Bridge Projects.            (7) Experience in Similar Capacity* of preparation of Social &amp; Environment Management Plans for Construction of major Bridge/Highway Projects.            (8) Experience in Similar Capacity* in field of Social &amp; Environment Management Plans in Bridge projects funded by Multilateral/ Bilateral Funding Agency(ies). Minimum 1 project.            (9) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:            i) On behalf of Consultant: Environmental / Social &amp; Environmental/ Resident Engineer / Team Leader (Construction Supervision/ IE/ AE).            ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision).            iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
7	<p><b>Chief Bridge Engineer (Foundation/ Structure) (International/ National)</b></p>	<p><b>Education:</b>            (1) Graduate in Civil Engineering            (2) Additional Desirable Qualification;            Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering / Soil Foundation Engineering.</p> <p><b>Experience:</b>            (3) Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).            (4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary 5 years or more.            (5) Experience in Similar Capacity* in supervision of Major Bridge Project (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basiswith minimum bridge length of 500 mtrs having span not less than 125 mtrs.)            (6) Experience in Design of bridge projects in similar capacity* Experience in at least 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with minimum bridge length of 500 mtrs having span not less than 125 mtrs each) over Sea/ Creek/ Perennial River/</p>

Section 5 – Term of Reference,

		<p>Estuary with well foundation and piles</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation and repair of major Bridge either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with minimum two spans not less than 125 mtrs</p> <p>(8) Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</p> <p>(9) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer /Bridge Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager /Bridge Engineer (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
8	<p><b>Chief Bridge Engineer (Super-Structure - Extradosed) (International/ National)</b></p>	<p><b>Education:</b></p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification;</p> <p>Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering</p> <p><b>Experience:</b></p> <p>(3) Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr. with minimum span length of 125mtr each) 5 years or more.</p> <p>(5) Experience in Similar Capacity* in supervision of Major Bridge Project (Bridge Projects in Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on basis with minimum bridge length of 500 mtrs having span not less than 125 mtrs.)</p> <p>(6) Experience in Design of bridge projects Experience in similar capacity* at least 2 Bridge Projects of Extradosed of 2/4/6 lane for highway/expressway/rail cum road bridge with minimum bridge length of 500 mtrs (superstructure span length not less than 125 mtrs ) over Sea/ Creek/ Perennial River/ Estuary.</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation and repair of major Bridge either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.</p> <p>(8) Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency (ies).</p> <p>(9) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer/Bridge Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager/ Bridge Engineer (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
9	<p><b>Chief Bridge Engineer (Super-Structure -VD) (International/</b></p>	<p>Education:</p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification;</p> <p>Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering</p>

Section 5 – Term of Reference,

	<b>National)</b>	<p>Experience:</p> <p>(3) Aggregate minimum 15 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr. with minimum span length of 125mtr each) 5 years or more.</p> <p>(5) Experience in Similar Capacity* in supervision of Major Bridge Project (Bridge Projects in Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basiswith minimum bridge length of 500 mtrs having span not less than 125 mtrs.</p> <p>(6) Experience in Design of bridge projects Experience in similar capacity for at least 2 Bridge Projects of pre-stressed box girder over Sea/ Creek/ Perennial River/ Estuary.</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation and repair of major Bridge either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge.</p> <p>(8) Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency (ies).</p> <p>(9) Age: Not more than 60 years.</p> <p>Note: Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer/Bridge Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager/ Bridge Engineer (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
10	<b>Chief Resident Engineer (Main Bridge) - Execution Team (International /National)</b>	<p>Education:</p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification;</p> <p>Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering</p> <p>Experience:</p> <p>(3) Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary 5 years or more.</p> <p>(5) Experience in Similar Capacity* in supervision of Two Bridge Project (Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on Design, Engineering, Procurement, Supply And Construction basiswith minimum bridge length of 500 mtrs )</p> <p>(6) Experience in Design of bridge projects in similar capacity* Experience in atleast 2 Bridge Projects either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with minimum bridge length of 500 mtrs having span not less than 125 mtrs each) over Sea/ Creek/ Perennial River/ Estuary with well foundation and piles</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation oand repair of major Bridge either Cable stayed or Cable suspension or Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary with minimum two spans not less than 125 mtrs</p>

Section 5 – Term of Reference,

		<p>(8) Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</p> <p>(9) Age: Not more than 60 years.</p> <p>Note: Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
11	<p><b>Chief Residential Engineer (Viaduct) - Execution Team (International/ National)</b></p>	<p><b>Education:</b></p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification;</p> <p>Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering /Soil Foundation Engineering</p> <p><b>Experience:</b></p> <p>(3) Aggregate minimum 20 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr.) 5 years or more.</p> <p>(5) Experience in Similar Capacity* in supervision of Major Bridge Project (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on basis with minimum bridge length of 500 mtrs.)</p> <p>(6) Experience in Design of bridge projects - Experience in similar capacity* at least 2 Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge with minimum bridge length of 500 mtrs) over Sea/ Creek/ Perennial River/ Estuary.</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation and repair of Bridge either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary)</p> <p>(8) Experience in Similar Capacity* of Bridge Project funded by Multilateral/ Bilateral Funding Agency(ies).</p> <p>(9) Age: Not more than 60 years.</p> <p><b>Note:</b> Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer (Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
12	<p><b>Chief O &amp; M Expert (International/ National)</b></p>	<p><b>Education:</b></p> <p>(1) Graduate in Civil Engineering</p> <p>(2) Additional Desirable Qualification;</p> <p>Post Graduate in Construction Management / Highway Engineering / Transportation Engineering / Structural Engineering</p> <p><b>Experience:</b></p> <p>(3) Aggregate minimum 15 years of professional experience in minimum 3 countries (which may include their home country) with minimum two years in foreign country (other than home country).</p> <p>(4) Experience in Similar Capacity* in Design/Construction/Construction Supervision of Bridges (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for</p>

Section 5 – Term of Reference,

		<p>highway/expressway/rail cum road bridge) with well foundation and piles over over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr.) 5 years or more.</p> <p>(5) Experience in Similar Capacity* in supervision of Major Bridge Project (Bridge Projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge on basis with minimum bridge length of 500 mtrs.)</p> <p>(6) Experience in Similar Capacity* in Operation &amp; Maintenance of Major Bridge projects either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary with Minimum length of 500mtr.</p> <p>(7) Experience in Similar Capacity* Supervision of Re-habilitation and repair of Bridge either Extradosed or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary)</p> <p>(8) Experience in Operation &amp; Maintenance of Major Bridge projects in similar capacity*</p> <p>(9) Age: Not more than 60 years.</p> <p>(10) Experience in handling of Contract cases in Project funded by Multilateral/Bilateral Funding Agencies</p> <p>Note: Similar Capacity includes the following positions:</p> <p>i) On behalf of Consultant: Team Leader/ Resident Engineer /O &amp; M Expert(Construction Supervision/ IE/ AE).</p> <p>ii) On behalf of Contractor: Project Director/ Project Manager O &amp; M Expert (Construction/ Construction Supervision).</p> <p>iii) In Government Organizations: Superintending Engineer (or equivalent) and above.</p>
<p><b>Supporting Staff (Not to be evaluated in Technical Evaluation). The Consultant shall have to get their CVs approved from Employer before mobilization.</b></p>		
	Designation	Essential Qualification
<p><b>Professional Key Experts (i.e., International/National)</b></p>		
<b>Sr. No.</b>	<b>Designation</b>	<b>Qualification</b>
1	<b>Sr. Contract Expert 2</b> (Contract / Cost / Planning Team)	<p><b>Education</b> Graduate in Civil Engineering/Construction Management /LLB / Certificate Course in Construction Management or Certificate Course in Contract Management or equivalent from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil Contract Work projects of minimum 15 years. Experience as Contract Specialist in similar position in Civil Work Contract in Highways / major Bridge Projects in more than two projects or more. Preferably, Experience of working in at least One projects with ICB (International Competitive bidding) Project funded by Multilateral/ Bilateral Funding Agency(ies) where value of ICB Contract is more than Rs. 500 Cr.</p>
2	<b>Contract Expert 1</b> (Contract / Cost / Planning Team)	<p><b>Education</b> Graduate in Civil Engineering/Construction Management/Certificate in from a recognized University.</p> <p><b>Experience</b> Total professional Experience in similar position in Civil Contract Work projects of minimum 10 years. At Least 3 years Experience as Contract Specialist in Design, Engineering, Procurement, Supply And Construction of Civil Work Contract for Highways/ major bridge projects. Preferably, Experience of working in at least One projects with ICB (International Competitive bidding) Project funded by Multilateral/ Bilateral Funding Agency (ies).</p>

Section 5 – Term of Reference,

3	<b>Sr. Quantity Surveyor</b> (Contract / Cost / Planning Team)	<b>Education</b> Graduate or equivalent in Civil Engineering <b>Experience</b> Total Professional experience working in Highways/ major bridge project for min. 10 years. Min. 10 years experience in Preparation of Bill of Quantities / estimates for major bridge projects costing over 500cr. Experience as Quantity Surveyor in at least two projects in Construction Supervision of major bridge project. Preferably, Experience of working in at least One projects with ICB (International Competitive bidding) Project funded by Multilateral/ Bilateral Funding Agency(ies)
4	<b>Quantity Surveyor</b> (Contract / Cost / Planning Team)	<b>Education</b> Graduate or equivalent in Civil Engineering from a recognized University. <b>Experience</b> Total Professional experience working in Highways/ major bridge project for min. 10 years. Min. 10 years experience in Preparation of Bill of Quantities/estimates for major bridge projects costing Rs.500 Crore or above. Experience as in similar position as Quantity Surveyor in at least one on Design, Engineering, Procurement, Supply And Construction Project in Construction &Supervision of major bridge project.
5	<b>Chief Legal Advisor</b> (Contract / Cost / Planning Team)	<b>Education</b> Graduate or equivalent in Civil Engineering/Law or Degree in LLB and post graduate in Law. <b>Experience</b> Min. 10 years of professional experience in civil works. Min. 7 years experience as Contract specialist or legal advisor in Civil works.
6	<b>Chief Construction planning Expert</b> (Contract / Cost / Planning Team)	<b>Education</b> Graduate or equivalent in Civil Engineering ad Post Graduate in Construction Management or Certificate Course in Construction Management or Certificate Course in Contract Management or equivalent from a recognized University. <b>Experience</b> Min. 10 years of professional experience in civil works. Min. 7 years experience as Constriction planning /Project Manager in major bridge projects. Experience of at least two constructions / supervision / execution of major bridge projects.
7	<b>Sr. Programming &amp; scheduling expert</b> (Contract / Cost / Planning Team)	<b>Education</b> Graduate or equivalent in Civil Engineering ad Post Graduate in Construction Management or Certificate Course in Construction Management or Certificate Course in Contract Management or equivalent from a recognized University. <b>Experience</b> Min. 10 years of professional experience in civil works. Min. 7 years experience as Construction planning/Project Manager in supervision/execution of major bridge projects having experience of preparing work programme schedule.

Section 5 – Term of Reference,

8	<b>Sr. Document Controller</b> (Contract / Cost / Planning Team)	<p><b>Education</b> Graduate in any discipline from a recognized University.</p> <p><b>Experience</b> Min. 10 years of professional experience in management works in Highways / major bridge project. Preferably, Experience of working in at least One projects with ICB (International Competitive bidding) Project funded by Multilateral/ Bilateral Funding Agency (ies).</p>
9	<b>Chief QA &amp; QC</b> (QA/QC Team)	<p><b>Education</b> Graduate in Civil Engineering from a recognized University and M Tech in Material Engineering.</p> <p><b>Experience</b> Total professional Experience of minimum 15 years working Highways / major bridge projects Experience of working as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision in an Contract major Bridge Project (Extra dosed/Cable-stay/cable-suspension) in at least two bridge projects. Preferably, Experience in similar position in minimum One construction supervision projects with ICB (International Competitive bidding) projects.</p>
10	<b>Sr. QA &amp; QC</b> (QA/QC Team)	<p><b>Education</b> Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 10 years. Experience of working as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/ Construction Supervision in an or Design, Engineering, Procurement, Supply And Construction Contract of major Bridge Project (Extra dosed/Cable-stay/cable-suspension) in at least two projects. Preferably Experience in similar position in minimum One construction supervision projects with ICB (International Competitive bidding) projects.</p>
11	<b>Sr. Safety expert</b> (Safety Team)	<p><b>Education</b> Graduate in Civil Engineering from a recognized University and Certificate course in Traffic Transportation/Safety Engineering/ Professional Certificate recognized by statutory body on Safety/Health/Construction.</p> <p><b>Experience</b> Total professional Experience in working in similar position in a major bridge projects for 10 years. Experience in at least One Contract and management of Safety works of Major Bridge (extra-dosed/cable-stay/suspension) over river/sea/creek. Experience in Road Safety Audit of at least 2 nos. 2/4/6 lane** highway / expressway project including 1 nos. at design stage. Experience in the field of Road Safety Management Plan.</p>
12	<b>Sr. Social Expert</b> (Safety & Environment Team)	<p><b>Education</b> Master's Degree or equivalent in Social Sciences or related field.</p> <p><b>Experience</b> Minimum total work experience after post-graduation – 10 years Minimum Social/ resettlement expert in at least two externally funded (World Bank or ADB or JICA) projects of similar size and complexity. Experience in preparation and monitoring of Resettlement Plans, gender plan, LAP, community consultations and IPDP for at least two transport projects. Familiarity with project area and local language will be advantageous</p>

Section 5 – Term of Reference,

13	<b>Social Specialist</b> (Safety & Environment Team)	<p><b>Education</b> Bachelor's degree in anthropology, sociology and development studies or related subjects.</p> <p><b>Experience</b> Minimum of 5 years of working experience in preparing, implementing and monitoring Resettlement Plan (RP) Experience in transport projects in at least one externally funded (World Bank or ADB or JICA) projects of similar size and complexity. Familiarity with project area and local language will be advantageous</p>
14	<b>Sr. Environmental Expert</b> (Safety & Environment Team)	<p><b>Education</b> Master's Degree or equivalent in Environment Sciences or related field.</p> <p><b>Experience</b> Minimum total work experience after post-graduation – 10 years. Minimum 5 years of total work experience in similar capacity on carrying out environment impact assessments of Highway development projects including major bridge. Experience as Environmental Expert in at least two externally funded (World Bank or ADB or JICA) transport projects having good knowledge of the JICA's guidelines, procedures and operational policies/directives. Experience of at least One major Bridge project for preparing environmental management plans and supervising &amp; monitoring implementation of the plans with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment &amp; forests (MoEF), Government of India. Familiarity with project area and local language will be advantageous</p>
15	<b>Environment specialist</b> (Safety & Environment Team)	<p><b>Education</b> Bachelor's degree in environmental assessment, environmental engineering, or related subjects.</p> <p><b>Experience</b> Minimum total work experience after post-graduation – 10 years. Minimum of 5 years of working experience in implementing environment safeguard and related activities for road construction projects including major bridges. Experience in at least one externally funded (World Bank or ADB or JICA) transport projects. Familiarity with project area and local language will be advantageous</p>
16	<b>Dolphin Expert</b> (Safety & Environment Team)	<p><b>Education</b> Bachelor's degree in environmental assessment, environmental engineering, or related subjects.</p> <p><b>Experience</b> <b>Min. 5 Years experience of</b> monitoring and appropriate mitigation measures of dolphin preservation and protection as per the EMP enforceable during work execution and make technical advices/instructions. Preferably, experience in at least one externally funded (World Bank or ADB or JICA) transport projects.</p>
17	<b>HIV/STD Preventive Coordinator</b> (Safety & Environment Team)	<p><b>Education</b> Bachelor's degree in any discipline from a recognized University</p> <p><b>Experience</b> Minimum total work experience – 5 years. Minimum of 3 years of working experience in Conduct awareness program for HIV/AIDs, health and hygiene. Familiarity with project area and local language will be advantageous</p>

Section 5 – Term of Reference,

18	<b>Sr. Bridge Engineer</b> [Bridge Team (Foundation/Substructure Sub-Team)]	<b>Education</b> Graduate in Civil Engineering from a recognized University and MTech in Structural/Bridge Engineering. <b>Experience</b> Total Professional Experience in Highways and major bridge projects of minimum 15 years. Experience in similar capacity in Construction/Construction Supervision of projects (Bridge Projects either Cable stayed or Cable suspension or pre-stressed bridge of 2/4/6 lane for highway/ expressway/ rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary minimum 5 years Experience in similar capacity of at least two construction supervision of Bridge Projects either Cable stayed or Cable suspension or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge . Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.
19	<b>Bridge Engineer</b> [Bridge Team (Foundation/Substructure Sub-Team)]	<b>Education</b> Graduate in Civil Engineering from a recognized University. <b>Experience</b> Professional Experience of at least 10 years in handling Highway/Bridge projects. At least 5 years experience in Construction / Construction Supervision of bridge /interchange / any other structures. Experience in similar capacity in supervision of at least 2 Major Highway Bridges. Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.
20	<b>Sr. Geotechnical engineer</b> [Bridge Team (Foundation/Substructure Sub-Team)]	<b>Education</b> Graduate in Civil Engineering and masters in engineering geology or equivalent from a recognized University. <b>Experience</b> Professional Experience of at least 20 years. Experience of at least 10 years in Construction / Construction Supervision of major bridge projects over Sea/ Creek/ Perennial River/ Estuary. Experience as Geotechnical Engineer in Construction/Construction Supervision of at least 4 major bridge projects over Sea/ Creek/ Perennial River/ Estuary of length equal to or more than 500 m. Experience in similar capacity in project preparation of at least 2 Highway projects including major bridge of length equal to or more than 1000 m
21	<b>Geotechnical engineer (Bridge team – Foundation)</b>	<b>Education</b> Graduate in Civil Engineering from a recognized University. <b>Experience</b> Professional Experience of at least 10 years. Experience of at least 5 years in Construction / Construction Supervision of Highway projects including major bridge of length more than 200 m. Experience as Geotechnical Engineer in Construction/Construction Supervision of at least 2 Highway projects including major bridge of length more than 200 m.. Experience in similar capacity in project preparation of at least one Highway projects including major bridge of length equal to or more than 500 m

Section 5 – Term of Reference,

22	<b>Revetment Engineer (Execution)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Professional Experience of at least 10 years in river or coastal engineering works. Experience of working in similar capacity in at least two Projects in Construction / Preferably, Construction Supervision of Major Bridge Project Experience of working in similar capacity in at least one Bridges Project funded by Multilateral/ Bilateral Funding Agency (ies).</p>
23	<b>Hydrological Engineer (Execution)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Professional Experience of at least 10 years in river or coastal engineering works. Experience of working in similar capacity in at least two Projects in Construction / Construction Supervision of Major Bridge Project /rail cum road bridge over Sea/ Creek/ Perennial River/ Estuary. Preferably, Experience of working in similar capacity in at least one Bridges Project funded by Multilateral/ Bilateral Funding Agency(ies).</p>
24	<b>Sr. Bridge Engineer (Execution)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University and MTech in Structural/Bridge Engineering.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 15 years. Experience in Construction/Construction Supervision of projects (Bridge Projects either Extradosed of 2/4/6 lane for highway/ expressway/rail cum road bridge) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary of minimum 5 years. Experience in similar capacity of at least One construction supervision of Bridge Projects either Cable stayed or Cable suspension or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge . Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.</p>
25	<b>Bridge Engineer (Execution)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Professional Experience of at least 10 years in handling Highway/Bridge projects. At least 5 years experience in Construction / Construction Supervision of bridge /interchange / any other structures. Experience in similar capacity in supervision of at least 2 Bridge Projects either Extradosed of 2/4/6 lane for highway/expressway/rail cum road bridge with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, and Incremental Launching.</p>
26	<b>Sr. Bridge Engineer (Execution)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University and MTech in Structural/Bridge Engineering.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 15 years. Experience in Construction/Construction Supervision of major Bridge Projects for highway/ expressway/rail cum road bridge with well and pile foundation over over Sea/</p>

Section 5 – Term of Reference,

		<p>Creek/ Perennial River/ Estuary including major Bridge of minimum 5 years.  Experience in similar capacity in at least two construction supervision of Bridge Projects with superstructure of box girder or pre-stressed type for highway/expressway/rail cum road bridge with well and piles foundation over Sea/ Creek/ Perennial River/ Estuary.  Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.</p>
27	<b>Bridge Engineer (Execution)</b>	<p><b>Education</b>  Graduate in Civil Engineering from a recognized University.  <b>Experience</b>  Professional Experience of at least 10 years in handling Highway/Bridge projects. At least 5 years experience in Construction / Construction Supervision of bridge /interchange / any other structures.  Experience in similar capacity in supervision of at least 2 Major Highway Bridges. (Bridge Projects Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge)  Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.</p>
28	<b>Sr Resident Engineer (Execution)</b>	<p><b>Education</b>  Graduate in Civil Engineering from a recognized University and Post Graduation in Transportation / Highway Engineering / Structural Engineering / Geotechnical Engineering  <b>Experience</b>  Total professional Experience in Civil works including major bridge projects of minimum 12 years.  Experience in similar capacity in Construction/Construction Supervision of projects (Bridge Projects Extradosed / Cable stayed /Cable suspension/Pre-stressed/Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge of minimum 5 years  Experience in similar capacity of at least two construction supervision of Bridge Projects either Extradosed / Cable stayed /Cable suspension / Pre-stressed / Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge .</p>
29	<b>Site Engineer (Execution)</b>	<p><b>Education</b>  Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.  <b>Experience</b>  Professional Experience of at least 5 years in handling Highway/Bridge projects. At least 3 years experience in Construction / Construction Supervision of 2/4/6 lane Highway projects including Major bridge.  Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.</p>
30	<b>Safety Engineer (Execution)</b>	<p><b>Education</b>  Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University and Certificate course in Traffic Transportation/Safety Engineering.  <b>Experience</b>  Total professional Experience in Civil works including major bridge projects of minimum 5 years.  Minimum 3 years experience in Road Safety works of Major Highway Projects (4 / 6 laning projects) including major bridge.  Experience in the field of Road Safety Management Plan.</p>

Section 5 – Term of Reference,

31	<b>QA/QC Engineer (Execution)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including major Bridge of minimum 3 years</p>
32	<b>Material Engineer (Execution)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including major Bridge of minimum 3 years. Experience of Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including major Bridge of at least 2 projects.</p>
33	<b>Surveyor (Execution)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University and Certification course in survey engineering</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience in the field of surveying including major Bridge of minimum 3 years. Experience of in the field of surveying of Highway projects including major Bridge of at least 2 projects. Must have understanding of modern computer based method of surveying with total station digital level</p>
34	<b>Sr Resident Engineer (Viaduct Team)</b>	<p><b>Education</b> Graduate in Civil Engineering from a recognized University and Post Graduation in Transportation / Highway Engineering / Structural Engineering / Geotechnical Engineering</p> <p><b>Experience</b> Total professional Experience in Highways/ major bridge projects for minimum 12 years. Experience in similar capacity in Construction/Construction Supervision of projects (Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge of minimum 5 years Experience in similar capacity of at least two construction supervision of Bridge Projects either Cable stayed or Cable suspension or pre-stressed bridge of 2/4/6 lane for highway/expressway/rail cum road bridge ) with well foundation and piles over Sea/ Creek/ Perennial River/ Estuary including major Bridge .</p>
35	<b>Site Engineer (Viaduct Team)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Professional Experience of at least 5 years in handling Highway/Bridge projects. At least 3 years experience in Construction / Construction Supervision of 2/4/6 lane Highway projects including Viaduct.</p>

Section 5 – Term of Reference,

		Must have understanding and experience of modern bridge construction technology. viz., Precast Segmental, Balanced Cantilever Construction, Extradosed Bridge, Full Span Launching, Incremental Launching.
36	<b>Safety Engineer (Viaduct Team)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University and Certificate course in Traffic Transportation/Safety Engineering.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Minimum 3 years experience in Road Safety works of Major Highway Projects (4 / 6 laning projects) including Viaduct. Experience in the field of Road Safety Management Plan.</p>
37	<b>QA/QC Engineer (Viaduct Team)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including major Bridge of minimum 3 years</p>
38	<b>Material Engineer (Viaduct Team)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience as Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including Viaduct of minimum 3 years. Experience of Quality Expert/Material Engineer/Material Expert/Quality Engineer/Geo-Technical Expert in Construction/Construction Supervision of Highway projects including Viaduct of at least 2 projects.</p>
39	<b>Surveyor (Viaduct Team)</b>	<p><b>Education</b> Diploma in Civil Engineering or Graduate in Civil Engineering from a recognized University and Certification course in survey engineering.</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 5 years. Experience in the field of surveying including major Bridge/Viaduct of minimum 3 years. Experience of in the field of surveying of Highway projects including major Bridge/Viaduct of at least 2 projects. Must have understanding of modern computer based method of surveying with total station digital level</p>
40	<b>O &amp; M Expert (Operation &amp; Maintenance Team)</b>	<p><b>Education</b> Diploma in Civil Engineer or Graduate in Civil Engineering from a recognized University</p> <p><b>Experience</b> Total professional Experience in Civil works including major bridge projects of minimum 10 years.</p>

Section 5 – Term of Reference,

	<p>Experience as Resident Engineer/Highway Engineer/Bridge Engineer in Construction/Construction Supervision of Highway projects (Bridge Projects Extradosed/Cable stayed /Cable suspension/Pre-stressed/Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge) with well foundation and piles of minimum 5 years</p> <p>Experience as Resident Engineer/Highway Engineer/Bridge Engineer in Construction/Construction Supervision of Highway projects (Bridge Projects Extradosed/Cable stayed /Cable suspension/Pre-stressed/Viaduct of 2/4/6 lane for highway/expressway/rail cum road bridge) with well foundation and piles of at least 2 projects.</p>
<p><b>Supporting Office Staff (Not to be evaluated in Technical Evaluation). The Consultant shall have to get their CVs approved from Employer before mobilization at field.</b></p>	
Office Manager (Supporting Staff)	<p>Should be Graduate /Post Graduate with Computer and IT knowledge. Should have working of more than 5 years experience working experience in Infrastructure/Highways/Bridge project costing more than Rs 100 Crore for minimum two years on similar position.</p>
Secretary / Typist (Supporting Staff)	<p>Should be Graduate with Computer Science/ knowledge. Should have working of more than 3 years experience in Infrastructure/Highways/Bridge project costing more than Rs 100 Crore for minimum two years in similar position.</p>
Accountant (Supporting Staff)	<p>Should be a Commerce Graduate /Post Graduate preferable with knowledge in software's for accountancy. Should have working experience of more than 3 years in Infrastructure/Highways/Bridge project costing more than Rs 100 Crore for minimum two years on similar position.</p>
Office Assistant (Supporting Staff)	<p>Should be Graduate with Computer knowledge. Should have working experience of more than 3 years in Infrastructure/Highways/Bridge project.</p>
IT Specialist (Supporting Staff)	<p>Should be Graduate in Civil Engineering/Computer Science/Electronics having experience in IT works. Should have working of 3 years experience in Infra-structure/Highways/Bridge project costing more than Rs 100 Crore for minimum two years.</p>
CAD Engineer (Supporting Staff)	<p>Should be Graduate in Civil Engineering/Computer Science having experience in computer related design method for highway engineering. Should have 3 years experience and should have handled at least 1 road project costing more than Rs 100 Crore for minimum two years.</p>
Site Inspector (Main Bridge)& Site Inspector(Viaduct)	<p>Should be Diploma / Graduate in Civil Engineering with Computer knowledge and should have working experience of more than 3 years in Major Highways &amp; Bridge project with minimum two years experience in similar position.</p>
Document Controller (Supporting Staff)	<p>Should be Graduate /Post Graduate with Computer and IT knowledge and experience of using and maintaining various electronic/digital mode for documentation / records. Should have working of more than 5 years experience in Infrastructure/Highways/Bridge projects costing more than Rs 100 Crore for minimum two years on similar position.</p>

Consultant shall be required to deploy other experts and supporting staffs required to accomplish the tasks outlined in the ToR. The Cost for the same shall be deemed to be included in the Financial Proposal submitted for this Project and therefore no

Section 5 – Term of Reference,

additional payment shall be eligible for any additional Personnel or equipment. The Consultant is required to submit the Financial Proposal accordingly.

**Scope of Works for the Respective Personnel**

A tentative information on the major tasks and duties themember of the Authority's Engineer team shall perform is provided as follows:

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
1	Team Leader	International / National	<ol style="list-style-type: none"> <li>1) Lead the detailed design task team. Ensure all deliverables are prepared in accordance with quality and time constraints.</li> <li>2) Administrate and supervise site investigation and design and documentation activities for civil and facility / Equipment Installation works contracts.</li> <li>3) Identify appropriate design codes and standards in collaboration with IRC.</li> <li>4) Assess road &amp; bridge sections for detailed engineering, including geometric features, pavement, intersecting roads, its development plan interface with the main road to a certain extent as agreed upon. Review available data relating to traffic, sYle loads and pavement strength.</li> <li>5) Review the need for road safety measures based on the findings of the feasibility study and road safety review of the road environment. Identify, design and cost road accident mitigation measures based on this review.</li> <li>6) Develop the specifications for road construction in collaboration with the NHIDCL. Assist NHIDCL to prepare construction schedules showing anticipated progress of works by contract package. The schedules should reflect seasonal climatic effects at the work sites.</li> <li>7) Based on the findings of the approved EIA, the road &amp; bridge designs should incorporate the EMP to mitigate adverse environmental impacts including those encountered during construction.</li> <li>8) Ensure that deliverables comply with relevant GOI technical requirements, Bank conditions and the terms of the assumptions in the cost benefit analysis.</li> <li>9) Ensure that the bidding documents for bridge construction works including specific provisions to minimize disruption/damage to local settlements clue to construction.</li> <li>10) Assist the NHIDCL to appraise the bids as part of the hid evaluation process.</li> <li>11) Assist the NHIDCL evaluate the capacity of contractors.</li> <li>12) Prepare monthly progress reports and quarterly progress reports in a form agreed with the NHIDCL and JICA (in PSR), and submit the reports within 10 days before the end of the month or quarter to which they refer.</li> <li>13) Prepare a final report, which will be a compilation and condensation of the data presented in regular monthly progress reports, together with copies of as-built drawings within two months from the issuance of the defects liability certificate.</li> <li>14) Prepare a final report for each and all contracts.</li> </ol>
2	Deputy Team Leader	International / National	<ol style="list-style-type: none"> <li>1) To conduct all related tasks together with the Team Leader.</li> <li>2) To manage and supervise all tasks for National / International experts.</li> </ol>
3	Sr. Contract Expert	International / National	<ol style="list-style-type: none"> <li>1) Assist the NHIDCL to design, administrate and monitor all procurement activities to ensure compliance with agreed</li> </ol>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<p>procurement frameworks.</p> <ol style="list-style-type: none"> <li>2) Prepare Pre-Qualification (PQ) documents in compliance with JICA and Indian procurement guidelines. PQ documents will be prepared for ICB for major works.</li> <li>3) Assist the NHIDCL in Pre-Qualification in accordance with the PQ documents and prepare PQ reports for approval of NHIDCL and JICA.</li> <li>4) Prepare bid documents in compliance with JICA procurement guidelines. Bid documents will be prepared for ICB for major works</li> <li>5) Assist the NHIDCL in the preparation Of invitation for bids, evaluation of bids received, and award of civil works and equipment and facility installation contracts.</li> <li>6) Evaluate the claims submitted by the contractor with support from the engineers and provide a draft answers Team Leader.</li> <li>7) Support to the Team Leader to issue the variation order to the contractor and various certificates to the contractor</li> <li>8) Support NHIDCL to deal with DAB discussion with the contractor's claim</li> <li>9) Assist Team Leader /Resident Engineer /Employer in all aspects of contract management in proper implementation of contract provisions including controlling the project cost.</li> <li>10) Offer his advice on contractual complications arising during the implementation as per the request of the Employer.</li> <li>11) Responsible for processing of bills and giving appropriate suggestions in handling claims of the Contractors and any dispute arising.</li> <li>12) He will be required to prepare manuals/ schedules for the consultant team/ employer based on the provisions of the Contract document.</li> </ol>
4	Chief QA/QC	International / National	<ol style="list-style-type: none"> <li>1) Manage the QA/QC team activities and report to the Team Leader.</li> <li>2) Overall monitoring the construction activities in respect of the quality of the work.</li> <li>3) Ensure that the construction materials conform to the quality norms specified in the codes/specification in the bid documents.</li> <li>4) Ensure that field / laboratory tests regarding the quality control are carried out as per the norms / procedures specified in codes / specifications in the bid documents.</li> <li>5) Check the results of the field / laboratory tests regarding the quality control and take remedial actions in case of any nonconformity.</li> <li>6) Prepare and submit the periodic Quality Control Reports to NHIDCL.</li> <li>7) Conduct workshops for the site Engineers / labours to update them about the Quality Assurance &amp; Quality Control procedures so as to ensure that the QA &amp; QC norms are adhered to.</li> </ol>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
5	Chief Safety Experts	International / National	<ol style="list-style-type: none"> <li>1) Manage the Safety Team and report to the Team Leader</li> <li>2) Ensure that the contractors provide sufficient safety devices and sign boards for own safety as well as safety of general traffic and pedestrians through the review of the method statement and periodical site patrol.</li> <li>3) Ensure that the contractors provide sufficient safety devices to the construction Engineers, subordinate staff &amp; labour working on the site.</li> <li>4) Ensure adherence to the safety norms prescribed in the relevant codes / specifications in the bidding documents.</li> </ol>
6	Senior Highway Engineer	International / National	<ol style="list-style-type: none"> <li>1) Manage highway team and report to the Team Leader</li> <li>2) Review and finalize bidding documents and specification with respect to approach road</li> <li>3) Review and verify contractor's detailed design</li> <li>4) Ensure that all supervision team members undertake comprehensive day-to-day field contract supervision, quality assurance, measurements and administration services at the site.</li> <li>5) Provide the contractors with all necessary survey data and reference for setting out the works.</li> <li>6) Receive, assess and approve the contractors' implementation work plans and programs.</li> <li>7) Ensure that the highway construction works are executed in accordance with all the provisions of the contract, including those concerning standards of workmanship, and other safety provisions and protection of the environment.</li> <li>8) Maintain regular estimates of the cost to completion and time to completion for each contract.</li> <li>9) Assess time and cost claims submitted by contractors and advise the NHIDCL for actions to be taken.</li> <li>10) Ensure that as-built drawings are prepared for approach road.</li> </ol>
7	Chief Bridge Engineer (Foundation) / (Substructure)	International / National	<ol style="list-style-type: none"> <li>1) Manage foundation/substructure sub-team of bridge team and report to the Team Leader</li> <li>2) Review and finalize bidding documents and specification with respect to foundation and substructure of the bridge</li> <li>3) Review and verify contractor's detailed design</li> <li>4) Confirm with NHIDCL all design conditions including design code, control points such as position of public utilities, and cross sections in collaboration with Highway Engineer</li> <li>5) Review and check the bill of quantities prepared by local bridge engineer</li> <li>6) Assist the Procurement Specialist to prepare the PQ conditions and technical criteria to evaluate the bid documents submitted by the bidder</li> <li>7) Prepare the answers to inquiries from the bidder during the Tender Assistance Period, and evaluate the technical part of the bidding documents together with TL and Procurement Specialist</li> </ol>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<ul style="list-style-type: none"> <li>8) Reviews the method statement of bridge construction submitted by the contractor and provides comments or give no-objection.</li> <li>9) Review and Check the quality of the works at site as well as inspection sheets prepared by the inspector, and provide necessary instruction if any.</li> <li>10) Check the interim payment claim from the contractor to support the Quantity Surveyor.</li> <li>11) Provide draft variation order in bridge structure when necessary of the design change.</li> <li>12) Support the Team Leader to issue the Taking over certificate and completion certificate in terms of bridge structures</li> <li>13) Participate the meeting with relevant authorities/the client/contractor when required.</li> <li>14) Provide a part of the reports to be submitted to the Client in terms of the bridge works.</li> <li>15) Ensure full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</li> <li>16) Check the as-build drawings submitted by the contractor</li> </ul>
8	Senior Geotechnical Engineer	International / National	<ul style="list-style-type: none"> <li>1) Review and finalize bidding documents and specification with respect to geotechnical issues</li> <li>2) Review and verify contractor's detailed design.</li> <li>3) Supervise the local contractor's performance in the-quality of the Work and schedule and give guidance if necessary.</li> <li>4) Check the output of the geotechnical survey and report done by the local contractor.</li> </ul>
9	Chief Bridge Engineer (Superstructure — Extradozed bridge)	International / National	<ul style="list-style-type: none"> <li>1) Manage superstructure sub-team (extra-dozed bridge) of bridge team and report to the Team Leader</li> <li>2) Review and finalize bidding documents and specification with respect to extra-dozed bridge</li> <li>3) Review and verify contractor's detailed design</li> <li>4) Confirm with NHIDCL all design conditions including design code, control points such as position of public utilities, and cross sections in collaboration with Highway Engineer</li> <li>5) Review and check the bill of quantities prepared by local bridge engineer</li> <li>6) Assist the Procurement Specialist to prepare the PQ conditions and technical criteria to evaluate the bid documents submitted by the bidder.</li> <li>7) Prepare the answers to inquiries from the bidder during the Tender Assistance Period, and evaluate the technical part of the bidding documents together with TL and Procurement Specialist</li> <li>8) To review the method statement of bridge construction submitted by the contractor and to provide comments or give</li> </ul>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<p>no-objection.</p> <p>9) Review and Check the quality of the works at site as well as inspection sheets prepared by the inspector and provide necessary instruction if any.</p> <p>10) Check the interim payment claim from the contractor to support the Quantity Surveyor.</p> <p>11) Provide draft variation order in bridge structure when necessary of the design change.</p> <p>12) Support the Team Leader to issue the Taking over certificate and completion certificate in terms of bridge structures</p> <p>13) Participate the meeting With relevant authorities/the client/contractor when required.</p> <p>14) Provide a part of the reports to be submitted to the Client in terms of the bridge works.</p> <p>15) Ensure full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</p> <p>16) Check the as-build drawings submitted by the contractor.</p>
10	Chief Design Engineer (Superstructure – Viaduct)	International / National	<p>1) Manage superstructure sub team (viaduct) of bridge team and report to the Team Leader</p> <p>2) Review and finalize bidding documents and specification with respect to viaduct section</p> <p>3) Review and verify contractor's detailed design</p> <p>4) Confirm with NHIDCL all design conditions including design code, control points such as position of public utilities, and cross sections in collaboration with Highway Engineer</p> <p>5) Review and check the bill of quantities prepared by local bridge engineer</p> <p>6) Assist the Procurement Specialist to prepare the PQ conditions and technical criteria to evaluate the bid documents submitted by the bidder</p> <p>7) Prepare the answers to inquiries from the bidder during the Tender Assistance Period, and evaluate the technical part of the bidding documents together with TL and Procurement Specialist</p> <p>8) Review the method statement of bridge construction submitted by the contractor and provide comments or give no-objection.</p> <p>9) Review and Check the quality of the works at site as well as inspection sheets prepared by the inspector and provide necessary instruction if any.</p> <p>10) Check the interim payment claim from the contractor to support the Quantity Surveyor.</p> <p>11) Provide draft variation order in bridge structure when necessary of the design change.</p> <p>12) Support the Team Leader to issue the Taking over certificate and completion certificate in terms of bridge structures</p>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<ul style="list-style-type: none"> <li>13) Participate the meeting with relevant authorities/the client/contractor when required.</li> <li>14) Provide a part of the reports to be submitted to the Client in terms of the bridge works.</li> <li>15) Ensure full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</li> <li>16) Check the as-build drawings submitted by the contractor</li> </ul>
11	Chief O&M Expert	International / National	<ul style="list-style-type: none"> <li>1) Manage O&amp;M team and report to the Team Leader</li> <li>2) Review and finalize the appropriate technical specifications for O&amp;M facility and equipment that enables the contractor/supplier to conduct the detailed design of the O&amp;M facility and equipment</li> <li>3) Review the detailed design of Contractor</li> <li>4) Review and finalize the O&amp;M manual submitted from the Contractor</li> </ul>
12	Chief Resident Engineer (main bridge and viaduct)		<ul style="list-style-type: none"> <li>1) Lead the construction supervision task teams. Ensure all deliverables are prepared in accordance with quality and time constraints.</li> <li>2) Ensure full and. detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</li> <li>3) Certify advance payments in accordance with the contracts when necessary.</li> <li>4) Certify interim and final payment certificates for submission to the employer.</li> <li>5) Ensure that all supervision team members undertake comprehensive day-to-day field contract supervision, quality assurance, measurements and administration services at the site.</li> <li>6) Provide the contractors with all necessary survey data and reference for setting out the works.</li> <li>7) Receive, assess and approve the contractors' implementation work plans and programs.</li> <li>8) Ensure that the rehabilitation works are executed in accordance with all the provisions of the contract, including those concerning standards of workmanship, and other safety provisions and protection of the environment.</li> </ul>
13	Quantity Surveyor	International / National	<ul style="list-style-type: none"> <li>1) Ensure full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</li> <li>2) Review and check the inspection sheets submitted by the inspectors</li> </ul>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<ol style="list-style-type: none"> <li>3) Review and check the interim payments and final payment claims submitted by the contractor, particularly the bill of quantities done by the contractor</li> <li>4) Provide or review the unit price for new work items when necessary</li> <li>5) Support the Claim Specialist to evaluate the claims submitted by the contractor.</li> </ol>
14	Social & Environmental Expert	International / National	<ol style="list-style-type: none"> <li>1) Update EMP as appropriate; incorporate necessary technical specifications with design and contract documentation.</li> <li>2) Assist NHIDCL in obtaining the certificate for trees cutting from Assam State High Court in accordance with the planned implementation schedule;</li> <li>3) Assist NHIDCL to implement the measures identified in the Projects Environmental Management Plan (EMP).</li> <li>4) Monitor the effectiveness of EMP (and CCEP) and negative impacts on environment caused by the construction works and provide technical advice, including a feasible solution, so that NHIDCL can improve situation when necessary;</li> <li>5) Assist NHIDCL in monitoring the compliance with conditions stated in the EMP and the requirements under EMP and JICA Environmental Guidelines;</li> <li>6) Assist NHIDCL in facilitating stakeholder's participation (including focus group discussions for vulnerable PAPS) and providing feedback their comments on EMP and EMOP</li> <li>7) Provide skills transfer with respect to environment, through workshops, seminars, and on-the-job training, to NHIDCL staff. Review of EMT and revise it if required so.</li> <li>8) At the completion of the Project, (a) undertake final environmental monitoring and evaluation against the set indicators, (b) evaluate sustainability of environmental benefits associated with road &amp; bridge construction, taking into account both positive and negative impacts associated with roads, and (c) prepare an evaluation report for each subproject.</li> <li>9) Update RAP/Fisherman. Compensation Policy as necessary based on detailed design in accordance with the agreed resettlement framework, including entitlement matrix and compensation plan; coordinate with various agencies in preparing the procedures for timely land. acquisition and disbursement of compensation to PAPS;</li> <li>10) Assist NHIDCL in identifying the eligible PAPS, and in preparation/updating of the list of eligible PAPS and 'Payment Statement' for individual eligible PAPS. The places where each eligible PAPS will relocate to are necessary to be recorded so that NHIDCL could implement monitoring on income and living conditions of resettled persons;</li> <li>11) Monitor the existing income restoration plan and special assistance plan for vulnerable PAPS and revise/update the contents of the plans if necessary based on priorities identified through the social assessment during detailed design stage with support of relevant government agencies and Non-</li> </ol>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<p>Governmental Organizations (NGOs). The following contents should be included in the plans;</p> <ul style="list-style-type: none"> <li>(i) Skills Training</li> <li>(ii) Project related Job Opportunities</li> <li>(iii) Assistance to access to social welfare scheme</li> <li>(iv) Assistance to start new livelihood options</li> <li>(v) Provision of the special allowance to vulnerable PAPs</li> </ul> <p>12) Assist NHIDCL to implement the measures identified in the Project's Resettlement Action Plan (RAP) and Fisherman Compensation</p> <p>13) Monitor land acquisition and compensation activities being undertaken by NHIDCL and/or competent authorities, and report the results in monthly progress reports;</p> <p>14) Assist in procurement of Implementation NGO (INGO) and, external monitoring agency (EMA), if necessary.</p> <p>15) Assist NHIDCL in facilitating stakeholder's participation (including focus group discussions for vulnerable PAPs) and providing feedback their comments on RAP;</p> <p>16) Assist NHIDCL in establishment of grievance redress mechanism including formation of Grievance Redress Committee;</p> <p>17) Assist NHIDCL to ensure that the PAPs are fully aware of the grievance redress procedure and the process of bringing their complaints, investigate the veracity of the complaints, and recommends actions/measures to settle them amicably, fairly and transparently before they go to the redress committee or the courts of law;</p> <p>18) Provide technical services with grievance redress committee for keeping and updating records when necessary;</p> <p>19) Provide skills transfer with respect to resettlement and land acquisition, through workshops, seminars, and on-the-job training, to NHIDCL staff.</p> <p>20) Provide a part of the reports to be submitted to the Client in terms of the social safeguard monitoring.</p>
15	Chief Legal Advisor	International / National	<ul style="list-style-type: none"> <li>1) Review the project proceedings from point of view of violation of any act / law and advice NHIDCL accordingly.</li> <li>2) In case of any litigation, appeal in court of law/tribunals/commissions etc. in respect of the project; advice &amp; prepare affidavits / rejoinders / submissions etc.</li> <li>3) Attend meetings with the lawyer appointed by RTDA in respect of the litigation / appeal.</li> </ul>
16	Material Engineer	International / National	<ul style="list-style-type: none"> <li>1) Investigate the suitability of locally available construction material', and where necessary, locate new quarries and borrow pits and assess the quality and quantity of materials and hauling distance.</li> <li>2) Approve the equipment list for laboratory submitted by the contractor</li> <li>3) Approve the materials to be used for the Works submitted by</li> </ul>

Section 5 – Term of Reference,

No	Position	Category	Major Tasks and Duties
			<p>the contractor by checking the test results</p> <ol style="list-style-type: none"> <li>4) Participate in the material testing at laboratory or factory in order to Confirm the test procedure and its result,</li> <li>5) Ensure full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings, and records of all other contractually relevant matters.</li> </ol>
17	Dolphin Expert	International / National	<ol style="list-style-type: none"> <li>1) Oversee monitoring of dolphins by Contractor or other organization and make technical advices/instructions</li> <li>2) Propose/instruct appropriate mitigation measures when necessary</li> </ol>
18	Inspector	International / National	<ol style="list-style-type: none"> <li>1) Measure the day-to-day quantities at site and confirm with the foreman or site supervisor of the contractor.</li> <li>2) Keep and maintain full and detailed measurement records, which will include quantity measurement data, site diaries and other records.</li> <li>3) Assist the engineer's representative for managing quantity and cost.</li> <li>4) Assist NHIDCL for assessing contractor's claims.</li> <li>5) Undertake day-to-day field contract supervision, quality control and measurements at the site.</li> <li>6) Keep full and detailed permanent site records, which will include site correspondence, survey data, quality acceptance data, day work records, site diaries, measurement and other field records.</li> <li>7) Prepare data presented in regular monthly progress reports.</li> <li>8) Provide measurement and inspection data required for interim payments.</li> <li>9) Ensure that the laboratory of the engineer is equipped in accordance with the technical specifications.</li> <li>10) Attend and supervise so that all day-to-day field and laboratory quality tests are conducted in accordance with the technical specifications and instruction of the engineer's representative.</li> <li>11) Approve or disapprove the materials to be used by the contractors in accordance with the contract and technical specifications.</li> <li>12) Approve or disapprove the works executed by the contractors in accordance</li> <li>13) Keep and maintain full and detailed permanent site and laboratory records, which will include test data, quality acceptance data, site diaries and other quality related data.</li> </ol>
19	Surveyor	International / National	<ol style="list-style-type: none"> <li>1) Provide the necessary information about the coordinates related to the alignment and ROW of the Project.</li> <li>2) Check the correctness of the coordinates of temporary benchmarks and alignments set by the contractors.</li> <li>3) Check the coordinates of Contractor's works</li> </ol>

## 17. Reporting

Within the scope of consulting services, the Consultant shall prepare and submit reports and documents to NHIDCL as shown in Table 5.3. The Consultant shall provide electronic copy of each of these reports.

### List of Reports

Category	Type of Report	Timing	No. of Copies
Consultancy Services	Inception Report	Within 1 month after commencement of the services	10
	Monthly Progress Report	Every month	10
	Quarterly Progress Report	Every quarter	10
	Project Completion Report	At the end of the services	10
Construction Supervision	Quality Control Report	Every month	10
	Completion Report (and As-built Drawings, if any)	At the end of the Project	5
Environment and Social Safeguard	Environmental Monitoring Report	Every quarter	10
	Land Acquisition and Re-settlement Monitoring Report	Every Month	10
Other Reports	Technical Report	As required or upon request	As required

## 18. Obligations of the Executing Agency

A certain range of arrangements and services will be provided by the Executing Agency to the Consultant for smooth implementation of the Consulting Services. In this context, the Executing Agency will:

- a) Report and data - Make available to the Consultant existing reports and data related to the Project
- b) Appoint counterpart officials, agent and representative as may be necessary for effective implementation of the Consulting Services;
- c) Assistance and exemption  
Use its best efforts to ensure that the assistance and exemption, as described in the Standard Request for Proposal issued by JICA, will be provided to the Consultant, in relation to
  - (i) Work permit and such other documents;
  - (ii) Entry and exit visas, residence permits, exchange permits only with respect to applicable documents
  - (iii) Instructions and information to officials, agent and representatives of the Borrower's Government;

(iv) Privilege pursuant to the applicable law in the Borrower’s Country.

## 19. PERFORMANCE SECURITY

- 19.1 The successful consulting firm shall have to submit a Bank Guarantee (BG) for an amount of 10% of the Contract Value within 15 days of issue of LOA. The BG shall be valid for a period of 141 + 2 months i.e. upto 2 months beyond the expiry of the Contract of 141 months. The BG shall be in the format specified in Appendix I of draft contract form and furnished from a Nationalized Bank, IDBI or ICICI/ ICICI Bank/ Foreign Bank/ EXIIM Bank/ Any Scheduled Commercial Bank approved by RBI having a net-worth of not less than 1000 crore as per latest Annual Report of the Bank. In the case of a Foreign Bank (issued by a Branch in India) the net-worth in respect of Indian operations shall only be taken into account. In case of Foreign Bank, the BG issued by Foreign Bank should be counter guaranteed by any Nationalized Bank in India. In case of JV, the BG shall be furnished on behalf of the JV and not individually by the members.
- 19.2 Further, in cases where the bid of the successful consulting firm is less than 85% of the average of all bids received, the successful consulting firm shall have to submit an Additional Performance Security (APS) in the form of a Bank Guarantee for 30% of the differential value between the successful bid and average of all bids received. The BG shall be valid for a period of 141 + 2 months i.e. up to 2 months beyond the expiry of the Contract of 141 months. The other requirements of APS are same as those of Performance Security.

The bank detail of NHIDCL is as under if required for BG preparation by issuing bank:-

S.No.	Particulars	Details
1	Name of Beneficiary	National Highways & Infrastructure Development Corporation Limited
2	Beneficiary Bank Account No.	90621010002659
3	Beneficiary Bank Branch IFSC	SYNB0009062
4	Swift Code (For foreign Applicants)	SYNBINBB126
5	Beneficiary Bank Branch Name	Transport Bhawan, New Delhi
6	Beneficiary Bank Address	Canara Bank (formerly Syndicate Bank) Transport Bhawan, 1st Parliament Street, New Delhi-110001

- 19.3 In the event the Consultant fails to provide the security within 15 days of date of LOA, it may seek extension of time for a period of 15 (Fifteen) days on payment of damages for such extended period in a sum of calculated at the rate of 0.1% (Zero Point One Percent) of the contract price for each day until the performance security is provided. For the avoidance of doubt the agreement shall be deemed to be terminated on expiry of additional 15 days time period.

Section 5 – Term of Reference,

- 19.4 Notwithstanding anything to the contrary contained in this Agreement, the Parties agree that in the event of failure of the Consultant to provide the Performance Security in accordance with the provisions of H (i) within the time specified herein or such extended period as may be provided by the Authority, in accordance with the provisions of Clause H (ii) and thereupon all rights, privileges, claims and entitlements of the Consultant under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Consultant, and LoA shall be deemed to have been withdrawn by mutual agreement of the Parties. Authority may take action debar such firm for future projects for a period of 1-2 years.

## Section 6. Form of Contract

### FORM OF CONTRACT

# Consultants' Services

## Time-Based Contract

**CONTRACT FOR CONSULTANTS’ SERVICES**

**Time-Based**

**Project Name:**

***“Authority’s Engineer for “Design, Engineering, Procurement, Supply And Construction For Construction Of Four Lane Bridge Including Approaches Over River Brahmaputra Between Dhubri On North Bank And Phulbari On South Bank In The State Of Assam / Meghalaya On Nh-127B (Length: 19.282 km)”.***

**Loan Agreement No.: [ID-P276]**

**Contract No.: [insert contract number]**

between

**National Highways & Infrastructure Development Corporation Limited (NHIDCL),  
Ministry of Road Transport & Highways,  
Govt. of India**

and

---

**[Name of the Consultant]**

**Dated: \_\_\_\_\_**

## **Table of Contents**

I.	Form of Contract	127-129
II.	General Conditions of Contract (GCC)	130
III.	Special Conditions of Contract (SCC)	131-137
IV.	Appendices	138
	Appendix A – Description of the Services	138
	Appendix B – Reporting Requirements	138
	Appendix C – Key Expert and Sub-Consultants (Expert Schedule)	138
	Appendix D – Remunerations Cost Estimate	139
	Appendix E – Reimbursable Cost Estimate	139
	Appendix F – Summary of Cost Estimate	139
	Appendix G – Services, Facilities and Property to be provided by the Client	139
	Appendix G1 - Services, Facilities and Property to be made available to the consultant by the Client	139
	Appendix G2 - Counterpart personnel to be made available to the consultant by the Client	139
	Appendix H – Form of Performance Security	140-142
	Appendix I - Form of Bank Guarantee for Advance payments	143-145
	Appendix J – Letter of Award	146
	Appendix K – Minutes of pre-bid meeting	147
	Appendix L – Memorandum of Understanding (to be replaced by Joint Venture Agreement in the Contract)	148-149
	Appendix M – Bank Guarantee Format for Bid Security (Not used)	150
	Appendix N – Acknowledgement of Compliance with Guidelines for the employment of Consultant under Japanese ODA Loan	151
	Appendix O – Integrity Pact	152
	Appendix P – Medical Certificate	153

## I. Form of Contract

### TIME-BASED

This CONTRACT (hereinafter called the “Contract”) is made the [day] day of the month of [month],[year], between, on the one hand, The **National Highways & Infrastructure Development Corporation Limited (NHIDCL)** represented by its Managing Director and having its principle office at 3<sup>rd</sup> Floor, PTI Building, 4, Parliament street, New Delhi-110001 (hereinafter called the “Employer” or the “Client”) and, on the other hand, [name of Consultant] (hereinafter called the “Consultant”).

*[Note: If the Consultant consists of more than one entity all of which are liable under the contract, the above should be partially amended to read as follows:...(hereinafter called the “Client”) and, on the other hand, a Joint Venture consisting of the following entities, each of which will be jointly and severally liable to the Client for all the Consultant’s obligations under this Contract, namely, [name of member] and [name of member] (hereinafter collectively called the “Consultant”).]*

#### WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the “Services”);
- (b) the Consultant, having represented to the Client that it has the required professional skills, expertise and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;
- (c) by an Agreement dated [day, month, year] (hereinafter called the Loan Agreement) between the [name of Borrower] (hereinafter called the Borrower) and Japan International Cooperation Agency (hereinafter called “JICA”), JICA has agreed to make a loan to the Borrower for the purpose of financing [name of the Project] (hereinafter called the Project);

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
  - (a) Minutes of Contract Negotiation;
  - (b) The Special Conditions of Contract (SCC);
  - (c) The General Conditions of Contract (GCC);
  - (d) The following Appendices:

**Section 6.– Annex I (Time Based) – II General Conditions of Contract**

Appendix A:	Description of Services
Appendix B:	Reporting Requirements
Appendix C:	Key experts and Sub-consultants (Expert Schedule)
Appendix D:	Remuneration Cost Estimates
Appendix E:	Reimbursable Cost Estimates
Appendix F:	Summary of Cost Estimates
Appendix G:	Services, Facilities and Property to be provided by the Client (Duties of the Client) - <b>Deleted</b>
Appendix G1:	Services, Facilities and Property to be made available to the Consultants by the Client - <b>Deleted</b>
Appendix G2:	Counterpart personnel to be made available to the Consultants by the Client - <b>Deleted</b>
Appendix H:	Form of Performance Security
Appendix I:	Form of Bank Guarantee for Advance Payments
Appendix J:	Letter of Award
Appendix K:	Minutes of pre- Proposal meeting
Appendix L:	Joint Venture Agreement
Appendix M:	Bank Guarantee Format for Proposal Security - <b>Deleted</b>
Appendix N:	Acknowledgment of Compliance with Guidelines for the Employment of Consultants under Japanese ODA Loan
Appendix O:	Integrity Pact.
Appendix P:	Medical Certificate

In the event of any ambiguity or conflict between the documents listed above, the order of precedence shall be the order in which the documents are listed in this Clause 1.

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:
  - (a) the Consultant shall carry out the Services in accordance with the provisions of the Contract;
  - (b) the Client shall make payments to the Consultant in accordance with the provisions of the Contract;
  - (c) The maximum amount specified in subparagraph (c) here above has been fixed on the understanding that the Client will make available free of charge to the Consultant the exemptions, assistance, services and facilities provided for under Clause 5 of the General Conditions of Contract and in Appendix G as required for the purposes of the Services. If any such exemptions, assistance, services and facilities are not supplied, the parties shall consult regarding what additional allowance (if any) should be made to the Consultant as a result thereof to cover necessary additional expenses not envisaged in the cost estimates in Appendices D and E.

**Section 6.– Annex I (Time Based) – II General Conditions of Contract**

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of [*name of Client*]

\_\_\_\_\_  
[*Authorized Representative of the Client - name, title and signature*]

For and on behalf of [*name of Consultant or Name of a Joint Venture*]

\_\_\_\_\_  
[*Authorized Representative of the Consultant - name and signature*]

[*For a joint venture, either all members shall sign or only the member in charge, in which case the power of attorney to sign on behalf of all members shall be attached.*]

For and on behalf of each of the members of the Consultant [*insert the name of the Joint Venture*]

[*Name of the member in charge*]

\_\_\_\_\_  
[*Authorized Representative on behalf of a Joint Venture*]

[*Add signature blocks for each member if all are signing*]

## II. General Conditions of Contract (GCC)

The General Conditions of Contract governing this Contract are the “General Conditions of Contract for Time-Based Contract, Annex I-II, Section 6” of the Standard Request for Proposals (version 1.1) published by JICA in October 2012. Those General Conditions of Contract are available on the JICA’s web site shown below

[http://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/index.html](http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/index.html)

at the following link:

[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/c8h0vm0000aoesst-att/consul.pdf](https://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/c8h0vm0000aoesst-att/consul.pdf)

A copy of these General Conditions is not attached to this RFP/this Contract.

### III. Special Conditions of Contract (SCC)

#### Special Conditions of Contract

Number of GCC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
1.1 (a)	The Applicable Guidelines are those published in April 2012 including those given in the RFP and in this Contract Agreement.
1.4	The Contract shall be executed in: English
1.6	The addresses are:  Client: <b>ShriW Blah</b> , Executive Director-V, NHIDCL, 2nd Floor, PTI Building, 4, Parliament Street, New Delhi - 110001  Attention: _____ K C Bhatt, Dy. General Manager (Tech), NHIDCL Facsimile: +91-11-2346-1626 E-mail: <a href="mailto:kc.bhatt@gov.in">kc.bhatt@gov.in</a>
{1.8}	The Lead Member is <i>[insert name of member]</i> <b>Note:</b> <i>If the Consultant consists of a Joint Venture the name of the entity whose address is specified in Clause SCC 1.6 should be inserted here. If the Consultant consists only of one entity, delete this Clause SCC1.8.</i>
1.9	The Authorized Representatives are: For the Client: <b>ShriW Blah</b> , Executive Director-V, NHIDCL For the Consultant: _____
2.4	The total time period shall be 141 months. <del>The total time period for the assignment as Authority's Engineer will be for Construction Period of 93 months + Maintenance Period of 48 Months with reduced man-power.</del>
2.9	<b>Add g) to this subclause as below;</b>  <b>Fake CV</b> If any case of fake/incorrect/inflated CV is found, it shall be dealt with very severely and would result in all possible penal action including blacklisting from future projects of NHIDCL. This would also apply even when the consulting firm is not successful in getting the assignment. <i>In case CV of a person is turned out to be fake/incorrect/inflated during the assignment, the consultancy firms will have to</i>

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

	<i>refund the salary and perks drawn including interest @12% per annum in respect of the person apart from other consequences. In addition to above, 10% of the salary and perks to be refunded shall be recovered from the Firm as penalty.</i>
<b>3.4 (e) (ii)</b>	The ceiling on Consultants' liability shall be limited to the amount of this contract
<b>3.5</b>	<p>The risks and the coverage shall be as follows:</p> <ul style="list-style-type: none"> <li>(a) Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Client's country by the Consultant or its Experts or any Sub-consultants or their Experts, with a minimum coverage in accordance with the applicable law in the Client's country;</li> <li>(b) Third Party liability insurance with a minimum coverage of Rs. 1.0 million for the period of consultancy.</li> <li>(c) Professional liability insurance, with a minimum coverage of Contract amount;</li> <li>(d) Employer's liability and workers' compensation insurance in respect of the Experts of the Consultant and of any Sub-consultants, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Experts, any such life, health, accident, travel or other insurance as may be appropriate; and</li> <li>(e) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, and (ii) the Consultant's property used in the performance of the Services.</li> </ul> <p><b>The Insurance shall be valid 60 days beyond the completion of the Defect Liability Period</b></p>
<b>3.8</b>	The Client is entitled to use the documents prepared by the Consultant under this Contract for other projects, without prior written permission of the Consultant.
<b>4.5</b>	<p>Replace GCC 4.5 (<u>Removal and/or Replacement of Personnel</u>) entirely with the following:</p> <ul style="list-style-type: none"> <li>(a) Any of the Personnel provided as a replacement <b>under Clauses 4.2 and 4.4 of GCC</b>, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Client. Except as the Client may otherwise agree, the Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and</li> <li>(b) In case notice to commence services pursuant to Clause 2.1 of this Contract is not ordered by Client within 120 days of signing of contract the Key Expert can excuse themselves on valid grounds, e.g., election on some other assignment, health problem developed after signing of contract, etc. In such a case no penalty shall be levied on the Firm or on the person concerned. The firm shall however be asked to give a replacement by an equal or better scoring person, whenever mobilization is ordered.</li> <li>(c) In case notice to commence services is given within 120 days of signing of contract the, the Authority expects all the Key Expert specified in the Proposal to be available during implementation of the Agreement. The Authority will not consider</li> </ul>

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

	<p>any substitution of Key Expert except under compelling circumstances beyond the control of the Consultant and the concerned Key Personnel. Such substitution shall be limited to not more than three Key Expert subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Authority. Replacement of the Team Leader will not normally be considered and may lead to disqualification of the Applicant or termination of the Agreement. Replacement of one Key Expert shall be permitted subject to reduction of remuneration equal to 5 % (five per cent) of the total remuneration specified for the Key Expert who is proposed to be replaced. In case of second replacement the reduction in remuneration shall be equal to 10% (ten per cent) and for third and subsequent replacement, such reduction shall be equal to 15% (fifteen per cent) If the consultant finds that any of the personnel had made false representation regarding his qualification and experience, he may request the Employer for replacement of the personnel. There shall be no reduction in remuneration for such replacement. The replacement shall however be of equal or better score. The personnel so replaced shall be debarred from future projects for 2 years.</p> <p>(d)Replacement after original contract period is over: There shall be no limit on the replacements and no reduction in remunerations shall be made. The replacement shall however be of equal or better score.</p> <p>(e) If the Employer (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action or (ii) has reasonable ground to be dissatisfied with the performance of any of the Personnel, then the consultant shall, at the Employer's written request specifying the grounds therefore, forthwith provide a replacement with qualifications and experience acceptable to him. For such replacement there will be no reduction in remuneration.</p> <p>(f) If any member of the approved team of a consultant engaged by NHIDCL leaves or replaced after completion of his / her deployed for 50% of his / her scheduled man-month which was agreed shall not be penalized/debarred. However, if the consultant leaves before completion of the assigned period , he shall be barred for a period of 6 months to 24 months from being engaged as a team member of any other consultant working (or to be appointed) for any other NHIDCL/projects.</p>
<p><b>4.6 (a)</b></p>	<p>In respect of foreign personnel, one day per trip as travel time from and to the country of the Government shall be allowed. However, if the actual travel time is more, then the same shall be allowed subject to submission of proof thereof. *These provision is only for International Expatriate Key Experts</p>
<p><b>6.1(b)</b></p>	<p>(a) Proposal to be submitted in [foreign and/or local] currency. (b) Any local indirect taxes chargeable in respect of this Contract for the Services provided by the Consultant are to be included in the Contract Price/Fee except GST, GST will be reimbursed by Authority based on actuals and on submission of documentary evidences. . (c) Goods &amp; Service tax as applicable shall be paid to the Consultant while making payment for services rendered based on actuals. The consultants shall deposit the same with the tax authorities and provide a proof of having done so within next 90 days in line with policy circulars issued by Employer. Employer shall pay only the Goods &amp; service tax. All other Taxes and duties, Fees, Charges etc. are to be borne by Consultant.</p>

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

<p><b>6.2 (b)</b></p>	<p>Penalty shall not be imposed if key personnel are replaced after completion of his/her deployed for at least 50% of his/her scheduled man-month.</p>
<p><b>6.2(c)</b></p>	<p>Price adjustment on the remuneration: Payments for remuneration made in [foreign and/or local] currency shall be adjusted as follows:</p> <p>(1) Remuneration paid in foreign and/or local currency on the basis of the rates set forth in <b>Appendix C</b> shall be adjusted every 12 months (and, the first time, with effect for the remuneration earned in the 13th calendar month after the date of submission of Proposal) by applying the following formula:</p> $R = R_o \times \left[ 1 + 0.9I / I_o \right]$ <p>where</p> <p>R is the adjusted remuneration;</p> <p>R<sub>o</sub> is the remuneration payable on the basis of the remuneration rates (<b>Appendix C</b>) in foreign and/or local currency;</p> <p>I is the official Consumer Price Index maintained by Central Statistical Office, India for Urban (General) for the first month for which the adjustment is to have effect; and</p> <p>I<sub>o</sub> is the official Consumer Price Index for salaries maintained by Central Statistical Office, India for Urban (General) for the month of the date of submission of Proposal.</p> <p>Official Consumer Price Index for salaries maintained by Central Statistical Office, India for Urban (General) is available at link: <a href="https://data.gov.in/catalog/all-india-consumer-price-index-ruralurban">https://data.gov.in/catalog/all-india-consumer-price-index-ruralurban</a></p> <p>Any part of the remuneration that is paid in a foreign currency shall be further adjusted by a correction factor X<sub>o</sub>/X. X<sub>o</sub> is the number of units of local currency (i.e. INR), equivalent to one unit of the currency of payment on the date of submission of Proposal. X is the number of units of local currency (i.e. INR), equivalent to one unit of the currency of payment on the first day of the first month for which the adjustment is supposed to have effect.</p> <p>Number of units of local currency (i.e. INR), equivalent to one unit of the currency of payment shall be as per the Exchange Rate (FBIL reference rate) published by Reserve Bank of India for the relevant date. This rate is available at the website of Financial Benchmarks India Pvt. Ltd. under the tab 'DATA AND METHODOLOGY'=&gt; Data =&gt; Benchmark Data =&gt; Reference Rate; link: <a href="http://www.fbil.org.in/securities?op=referencerate&amp;mq=o">http://www.fbil.org.in/securities?op=referencerate&amp;mq=o</a></p>
<p><b>6.3 (a) and (b)</b></p>	<p>Replace GCC 6.3 entirely with the following: 1. The Consultants, Sub Consultants and the Personnel shall pay the corporate</p>

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

	<p>income tax and personal income tax payable by them under the Contract and applicable laws.</p> <p>2. The Client;</p> <p>a) shall effect Tax deduction at source as per the applicable rates in respect of payments made to the Consultants;</p>
<b>6.4</b>	<b>The currency [currencies] of payment shall be in INR only.</b>
<b>6.5(a)</b>	<p>The Advance Payment shall be payable maximum @ 10% of the Contract Price against submission of irrevocable and unconditional Guarantee from a Bank for an amount equivalent to 110% of the such installment, substantially in the form provided at Appendix I.</p> <p>The advance payment bank guarantees shall be in the amounts and in the currencies of the advance payment. The Advance Payment shall be made within 28 days after receipt and verification of advance payment bank guarantees.</p> <p>The advance payment along with interest will be set off by the Client in equal installments against the invoices for the 12months from the <b>third</b> month from the month in which they have received advance payment until the advance payment has been fully set off.</p> <p>For the avoidance of doubt, it is clarified that if the Advance has been paid in the month of <b>July</b>, then recovery shall begin from the Invoice of the month of <b>October</b>.</p>
<b>6.5(e)</b>	<p>The accounts are:</p> <p>- for local currency: <i>[insert account]</i>.</p>
<b>6.6</b>	<p>Simple interest @2% above the discount rate of the central bank in the country of the currency of payments shall become payable, on any amount due, but not paid on, from the date on which any notice issued by the Consultant in this regard is received by the Client</p>
<b>8.1</b>	Deleted.
<b>8.2(a)</b>	Deleted
<b>8.2 (b)</b>	<p>Replace GCC 8.2 (b) with the following:</p> <p>The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contractor the interpretation thereof.</p> <p>(a) Dispute Resolution</p> <p>(i) Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in (b).</p> <p>(ii) 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.</p>

**(b) Conciliation**

In the event of any Dispute between the Parties, either Party may call upon [Managing Director, NHIDCL and the Chairman of the Board of Directors of the Consultant or a substitute thereof for amicable settlement, and upon such reference, the said persons shall meet no later than 10(ten) days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 10(ten) day period or the Dispute is not amicably settled within 15(fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in (a)(i) or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the Provisions of Clause 8.4.

**(c) Arbitration**

(i). Any Dispute which is not resolved amicably by conciliation, as provided in Clause, shall be finally decided by reference to arbitration by an Arbitral Tribunal appointed in accordance with Clause 8.4.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi (the "Rules"), or such other rules as may be mutually agreed by the Parties, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996 as amended. The venue of such arbitration **New Delhi** shall be and the language of arbitration proceedings shall be English.

(ii) Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator to be appointed as per the procedure below(aa) Parties may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty(30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the President, Indian Roads Congress, New Delhi for a list of not fewer than five nominees and, on receipt of such list, the Parties shall alternately strike names there from, and the last remaining nominee on the list shall be sole arbitrator for the matter indispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, the president, Indian Roads Congress, New Delhi, shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.

**(d) Substitute Arbitrator**

If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.

**(e) Qualifications of Arbitrator**

The sole arbitrator selected pursuant to (a)(i) hereof shall be expert with extensive experience in relation to the matter in dispute.

(i) The Arbitrators shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this (a) shall be final and binding on the Parties as from the date it is made, and the Consultant and the Authority agree and undertake to carry out such Award without delay.

(ii) The Consultant and the Authority agree that an Award may be enforced against the Consultant and/or the Authority, as the case may be, and their respective assets wherever situated.

(iii). 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

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

**(f). Miscellaneous**

In any arbitration proceeding hereunder:

(i) Proceedings shall, unless otherwise agreed by the Parties, be held in DELHI

(ii) the English language shall be the official language for all purposes; and [Note: English language may be changed to any other Language, with the agreement of both the Parties.]

(iii) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

(iv) The maximum amount payable per Arbitrator in Arbitration clauses shall be as under:

Sr No.:	Particulars of Fees and	Maximum amount payable per case
1	Fee	(i) Rs. 25,000/- per day; (ii) 25% extra on fee at (i) above in case of fast-track procedure as per Section -29 (B) of A&C Act; Or 10% extra on fee at (i) above if award is published within 6 months from date of entering the reference by AT; Alternatively, the Arbitrator may opt for a lump -sum fee of Rs. 5.00 Lakh per case including counter -claims.
2	Reading charges- one Time	Rs 25,000/- per case including counter claims.
3	One -time charges for Secretarial Assistance and Incidental Charges (telephone, fax, postage etc.)	Rs 25,000/- per case
4	One time charges for publishing/declaration of the Award	Rs 40,000/-
5	Other expenses (As per actual against bills subject to celling given below	
i.	Travelling expenses	Economy class (by air), First class AC (by train) and AC Car (by road)
ii.	Lodging and Boarding	Rs. 8000 per day (in other cities); or Rs. 15,000/-per day (in metro cities); or Rs. 5,000/- per day, if any Arbitrator makes their own arrangements
6	Local travel	Rs. 2,000 /- per day
7	Extra charges for days other than meeting days	Rs. 5000 /- per ½ day for outstation Arbitrator

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

	(maximum for 2 X ½ days)	
Note	1. Lodging boarding and travelling expenses shall be allowed only for the arbitrator who is residing 100 kms. away from the venue of meeting,	
	2. Delhi, Mumbai, Chennai, Kolkata, Bangalore and Hyderabad shall be considered as Metro cities.	
In exceptional cases, such as cases involving major legal implications/wider ramifications/higher financial stakes etc. a special fee structure could be fixed in consultation with the Contractor/Supervision Consultants and with the specific approval of the <Agency> before appointment of the Arbitrator		

## IV. Appendices

### Appendices

#### Appendix A - Description of the Services

*[Give detailed descriptions of the Services to be provided; dates for completion of various tasks, place of performance for different tasks; specific tasks to be approved by Client, etc.]*

*Details as per TOR.*

#### Appendix B - Reporting Requirements

*{List format, frequency, contents of reports and number of copies; persons to receive them; dates of submission, etc. If no reports are to be submitted, state here "Not applicable".}*

*Please refer TOR*

#### Appendix C - Key Expert and Sub-consultants (Expert Schedule)

*{List under;*

- C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications, experience of Personnel to be assigned to work in India, and staff- months for each.*
- C-2 Same information as C-1 for Key local Personnel.*
- C-3 Same as C-1 for Key foreign Personnel to be assigned to work outside India.*
- C-4 List of approved Sub-consultants [if already available]; same information with respect to their Personnel as in C-1 through C-4)*

*Please refer TOR*

***Note:** Insert a table based on Form TECH-7 of the Consultant's Technical Proposal and finalized at the Contract negotiation. Attach the CVs demonstrating the qualifications of Key Experts (Form TECH-6 of the Consultant's Technical Proposal) updated and signed by the respective Key Experts.*

**Appendix D - Remunerations Cost Estimate**

**Ref. Sr. No. 1 to 3 of Form FIN-2: Format of BOQ**

**Appendix E -Reimbursable Cost Estimate**

**Ref. Sr. No. 4 to 11 of Form FIN-2: Format of BOQ**

**Appendix F - Summary of Cost Estimate**

**Ref. Form FIN-2: Format of BOQ**

*List here under cost estimate in Foreign/ or INR currency:*

1. *Monthly rates for local Personnel (Key Expert and other Personnel)*
2. *Reimbursable/Rental/ Fixed expenditures as follows:*
  - a. *Cost of local transportation.*
  - b. *Cost of other local services, rentals, utilities, etc.*

**Appendix G -Services, Facilities and Property to be provided by the Client  
(Duties of the Client)**

**Not Used**

**Appendix G1 -Services, Facilities and Property to be made available to the  
Consultants by the Client**

**Not Used**

**Appendix G2 - Counterpart personnel to be made available to the Consultants  
by the Client.**

**Not Used**

Appendix H - FORM OF PERFORMANCE SECURITY

(PERFORMAMANCE BANK GUARANTEE)

(Clause-17 of TOR)

To

Address of Employer:

WHEREAS

[Name and address of Consultants]\* (hereinafter called “the consultants”) has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to provide the services on terms and conditions set forth in this Contract \_\_\_\_\_ [Name of contract and brief description of works) (hereinafter called the “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the Consultants shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

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

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

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

We further agree that no change or addition to or other modification of the terms of the Contractor of the services to be performed there under or of any of the Contract documents which may be made between you and the Consultants shall in

-Section 6-Annex I (Time-Based)-III Special Conditions of Contract

any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The liability of the Bank under this Guarantee shall not be affected by any change in the constitution of the consultants or of the Bank.

Notwithstanding anything contained herein before, our liability under this guarantee is restricted to Rs.\_\_\_\_(Rs.\_\_\_\_\_) and the guarantee shall remain valid till\_\_\_\_\_(Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 17 of TOR). Unless a claim or a demand in writing is made upon us on or before \_\_\_\_all our liability under this guarantee shall cease.

This guarantee shall also be operatable at our .....(Branch Full Address) at New Delhi, 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 there under claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

This bank guarantee shall be valid for a period of 143 months (93 months construction period and 48 months maintenance period)i.e. two months after the expiry of the Contract period.

Signature and Seal of the Guarantor \_\_\_\_\_ In presence of  
Name and Designation

\_\_\_\_\_

1.

(Name, Signature & Occupation)

Name of the Bank \_\_\_\_\_

Address \_\_\_\_\_

2. \_\_\_\_\_

(Name &Occupation)

Date \_\_\_\_\_

**NOTE for Issuing Bank (Not to be included in the BG):-**

(i) The bank guarantee(s) contain(s) the name, designation and Code number of the officer(s) signing the guarantee(s).

(ii) The address, telephone no. 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.

(iii) The bank guarantee for Rs. 10,000 and above is signed by at least two officials (or as per the norms prescribed by the RBI in this regard).

(iv) The Bank Guarantee shall be transmitted through SFMS gateway to our banker with following details:

S. No.	Particulars	Details
1	Name of Beneficiary	National Highways & Infrastructure Development Corporation Limited
2	Beneficiary Bank Account No.	90621010002659
3	Beneficiary Bank Branch IFSC	SYNB0009062
4	Swift Code (For foreign Applicants)	SYNBINBB126
5	Beneficiary Bank Branch Name	Transport Bhawan, New Delhi
6	Beneficiary Bank Address	Canara Bank (erstwhile Syndicate Bank) Transport Bhawan, 1st Parliament Street, New Delhi-110001

(v) The confirmation with supporting details if any shall be specifically mentioned in the covering letter issued with the Bank Guarantee.

(vi) The Bank Guarantee shall be submitted in favour of “Managing Director, NHIDCL, 3<sup>rd</sup> floor, PTI Building, 4-Parliament Street, New Delhi-110 001.

(vii) The validity of the Bank Guarantee shall be 60 days beyond the completion of the project Defect Liability Project.

**Appendix I - Form of Bank Guarantee for Advance Payments  
(Reference Clause 6.5(a) of Contract)**

(To be stamped in accordance with Stamp Act, if any, of the country of issuing bank)

Ref: Bank Guarantee \_\_\_\_\_

Date: \_\_\_\_\_

Dear Sir,

*In consideration of M/s. \_\_\_\_\_ (hereinafter referred as the "Client", which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s \_\_\_\_\_ (hereinafter referred to as the "Consultant" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a contract by issue of client's Contract Agreement No. \_\_ dated \_\_ and the same having been unequivocally accepted by the Consultant, resulting in a Contract valued at \_\_\_\_\_ for Contract (hereinafter called the "Contract") (scope of work) and the Client having agreed to make an advance payment to the Consultant for performance of the above Contract amounting to (in words and figures) as an advance against Bank Guarantee to be furnished by the Consultant.*

*We \_\_\_\_\_ (Name of the Bank) having its Head Office at \_\_\_\_\_ (hereinafter referred to as the Bank), which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators executors and assigns) do hereby guarantee and undertake to pay the client immediately on demand any or, all monies payable by the Consultant to the extent of \_\_\_\_\_ as aforesaid at any time upto \_\_\_ @ \_\_\_ without any demur, reservation, contest, recourse or protest and/or without any reference to the consultant. Any such demand made by the client on the Bank shall be conclusive and binding notwithstanding any difference between the Client and the Consultant or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Client discharges this guarantee.*

*The Client shall have the fullest liberty without affecting in any way the liability*

-Section 6-Annex I (Time-Based)-III Special Conditions of Contract

*of the Bank under this Guarantee, from time to time to vary the advance or to extend the time for performance of the contract by the Consultant. The Client shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Client and to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Client and the Consultant any other course or remedy or security available to the Client. The bank shall not be relieved of its obligations under these presents by any exercise by the Client of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Client or any other Indulgence shown by the Client or by any other matter or thing whatsoever which under law would but for this provision have the effect of relieving the Bank.*

*The Bank also agrees that the Client at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Consultant and notwithstanding any security or other guarantee that the Client may have in relation to the Consultant's liabilities.*

*Notwithstanding anything contained herein above our liability under this guarantee is limited to \_\_\_\_\_ and it shall remain in force upto and including \_\_\_\_\_ and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s \_\_\_ on whose behalf this guarantee has been given.*

This guarantee shall also be operatable at our .....(Bank Branch complete address) at New Delhi, 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 there under claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

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.

-Section 6-Annex I (Time-Based)-III Special Conditions of Contract

Dated this \_\_\_\_\_ day of \_201\_ at \_\_\_\_\_

WITNESS

Strike out, whichever is not applicable.

**NOTE for Issuing Bank (Not to be included in the BG):-**

1. The stamp papers of appropriate value shall be purchased in the name of bank, who issues the "Bank Guarantee".
2. The bank guarantee shall be from a Nationalized Indian Bank or reputed foreign commercial Bank acceptable to client for Foreign Consultant with counter guarantee from Nationalized Bank. Bank guarantee furnished by Foreign consultant shall be confirmed by any Nationalized Bank in India.
3. The bank guarantee(s) contain(s) the name, designation and Code number of the officer(s) signing the guarantee(s).
4. The address, telephone no. 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.
5. The bank guarantee for Rs. 10,000 and above is signed by at least two officials (or as per the norms prescribed by the RBI in this regard).
6. The Bank Guarantee shall be transmitted through SFMS gateway to our banker with following details:

S. No.	Particulars	Details
1	Name of Beneficiary	National Highways & Infrastructure Development Corporation Limited
2	Beneficiary Bank Account No.	90621010002659
3	Beneficiary Bank Branch IFSC	SYNB0009062
4	Swift Code (For foreign Applicants)	SYNBINBB126
5	Beneficiary Bank Branch Name	Transport Bhawan, New Delhi
6	Beneficiary Bank Address	Canara Bank (erstwhile Syndicate Bank) Transport Bhawan, 1st Parliament Street, New Delhi-110001

7. The confirmation with supporting details if any shall be specifically mentioned in the covering letter issued with the Bank Guarantee.

**Appendix J - Letter of Award**

**Appendix K- Minutes of pre-bid meeting**

**Appendix - L - Memorandum of Understanding  
(To be replaced by Joint Venture Agreement in the Contract)**

between

\_\_\_\_\_  
And  
\_\_\_\_\_

Whereas the National Highways & Infrastructural Development Corporation Limited (NHIDCL) (the ‘ **Employer**’) has invited proposal for appointment of Authority’s Engineer for \_\_\_\_\_ (Name of project) hereinafter called the Project.

And Whereas \_\_\_\_\_ (Lead Partner) and \_\_\_\_\_ JV partner/s have agreed to form a Joint Venture to provide the said services to the Employer as Authority’s Engineer; and

Now, therefore, it is hereby agreed by and on behalf of the partners as follows:

- (i) \_\_\_\_\_ will be the lead partner and \_\_\_\_\_ will be the other JV partner/s.
- (ii) \_\_\_\_\_ (lead partner) shall be the in charge of overall administration of contract and shall be authorized representative of all JV partners for conducting all business for and on behalf of the JV during the bidding process and subsequently, represent the joint venture for and on behalf of the JV for all contractual matters for dealing with the Employer/Contractor if Consultancy work is awarded to JV.
- (iii) All JV partners do hereby undertake to be jointly and severally responsible for all the obligation and liabilities relating to the consultancy work and in accordance with the Terms of Reference of the Request for Proposal for the Consultancy Services.
- (iv) Subsequently, if the JV is selected to provide the desired consultancy services, a detailed MOU indicating the specific project inputs and role of each partner/s along with percentage sharing of cost of services shall be submitted to the Employer (Consultant may submit the detailed MOU along with percentage sharing of cost at the time of bidding also).

**-Section 6-Annex I (Time-Based)-III Special Conditions of Contract**

For \_\_\_\_\_ (Name of Lead partner)

\_\_\_\_\_  
Managing Director/Head of the Firm  
Address

For \_\_\_\_\_ (Name of JV partner/s)

\_\_\_\_\_  
Managing Director/Head of the Firm  
Address

For \_\_\_\_\_ (Name of Associate Partner/s)

**Appendix-M**

**Bank Guarantee for Bid Security**

**NOT USED.**

**Appendix N - Acknowledgment of Compliance with Guidelines for the  
Employment of Consultants under Japanese ODA Loan**

*Note: Form TECH-9 in Section 3 is used for this Appendix*

Appendix -0

INTEGRITY PACT

As per Section 8 of RFP

**Appendix P - Medical Certificate**

*[Show here an acceptable form of medical certificate for foreign Personnel to be stationed in India. If there is no need for a medical certificate, state here: "Not applicable."]*

*The form of Medical Certificate as required under the rules of Govt. of India*

## **Section 7. Eligible Source Countries of Japanese ODA Loans**

The Eligible Source Country(ies) for procurement of all goods and services (including consulting services) to be financed out of the proceeds of the Loan are all countries and areas.

## **Section – 8: INTEGRITY PACT FORMAT**

*(To be executed on plain paper and submitted alongwith Technical Bid/Tender documents for tenders having a value of Rs 5 cr or above for Consultancy projects and 100 cr. or above for Construction projects. To be signed by the bidder and same signatory competent/ authorized to sign the relevant contract on behalf of the NHIDCL)*

### **INTEGRITY AGREEMENT**

This Integrity Agreement is made at..... on this.....day of .....201...

**BETWEEN**

National Highways & Infrastructure Development Corporation Ltd (NHIDCL) represented through its Managing Director and having its principal office at 3rd Floor, PTI Building, 4 Parliament Street New Delhi-110001, (Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**AND**

*{Name and address of the Firm/Company}*, (hereinafter 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/ Owner has floated the Tender *{NIT No.....dtd.....}* (hereinafter referred to as “Tender/Bid”) and intends to award, under laid down organizational procedure, contract/s for *{Name of the work}* (hereinafter referred to as the “Contract”).

AND WHEREAS the Principal/ Owner values full compliance with all relevant laws of the land, rules of land, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/ or Contractor(s).

AND WHEREAS to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact (hereafter referred to as “Integrity Pact” or “Pact”) the terms and conditions of which shall also be read as integral part and parcel of the Tender/ Bid documents and Contract between the parties.

AND WHEREAS in order to achieve the above goals, the Principal has appointed an Independent External Monitor (IEM) who will monitor the Tender process and the execution of the contract for compliance with the principles mentioned herein.

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

## **Section 8 –Integrity Pact**

### **Article 1: Commitments of the Principal/Owner**

- (1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/ Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/ Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/ Owner 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/ Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- (2) If the Principal/ Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/ Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/ Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### **Article 2: Commitments of the Bidder(s)/ Contractor(s)/ Consultant(s)**

- (1) It is required that each Bidder/ Contractor/ Consultant (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government/ Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the Interaction or award of a contract.
- (2) The Bidder(s)/ Contractor(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) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/ Owner's employees involved in the Tender process or 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) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contract, submission or non-submission of bids or any other action to restrict

## **Section 8 –Integrity Pact**

competitiveness or to cartelize the bidding process.

- (c) The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(S)/ Contract(s) will not use improperly for the purpose of competition or personal gain, or pass on the others, any information or documents provided by the Principal/ Owner 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) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly, Bidder(s)/ Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/ representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/ parallel tender for the same item.
- (e) The Bidder(s)/Contractor(s) shall, 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.
- (f) The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (g) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice which means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- (h) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may be fall upon a person, his/ her reputation or property to influence their participation in the tendering process).

### **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/ Owner under law or the Contract or its established policies and laid down procedures, the Principal/ Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right

## **Section 8 –Integrity Pact**

- (1) If the Bidder(s)/ Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/ contractor(s) from the Tender process or terminate/determine the Contract, if already executed or executed or exclude the Bidder/ Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/ Owner. Such exclusion may be forever or for a limited period as decided by the Principal/ Owner.
- (2) Forfeiture of EMO/ Performance Guarantee/ Security Deposit: If the Principal/ Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract according to Article 3(1), the Principal/ Owner apart from exercising any legal rights that may have accrued to the Principal/ Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- (3) Criminal Liability: If the Principal/ Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/ Owner has substantive suspicion in this regard, the Principal/ Owner will inform the same to law enforcing agencies for further investigation.

### **Article 4: Previous Transgression**

- (1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anti corruption approach or with Central Government or State Government or any other Central/ State Public Sector Enterprises 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 can be taken for banning of business dealings/ holiday listing of the Bidder/ Contractor as deemed fit by the Principal/ Owner.
- (3) If the Bidder/ Contractor can prove that he has resorted/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/ Owner may, as its own discretion, revoke the exclusion prematurely.

### **Article 5: Equal Treatment of all Bidders/ Contractors/ Subcontractors**

- (1) The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a

## **Section 8 –Integrity Pact**

commitment in conformity with this Integrity Pact. The Bidder/ Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/ Pact by any of its Subcontractors/sub-vendors.

- (2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders, Contractors and Subcontractors.
- (3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any state of the Tender process, from the Tender process.

### **Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/ vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the 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 the Competent Authority.

### **Article 7- Other Provisions**

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- (2) Changes and supplements need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolutions.
- (4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement/ Pact, any action taken by the Owner/ Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

## **Section 8 –Integrity Pact**

### **Article 8- Independent External Monitor**

- (1) The Principal has appointed (as on date) a competent and credible Independent External Monitor for this Pact i.e. Dr. Satyanarayana Dash, IEM, NHIDCL R/o HIG-206, KananVihar Phase I, Chandrasekharapur, Bhubaneswar, Odisha-751024, Email-id: satya8may@yahoo.co.in , +91-97767 51669. 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. It will be obligatory for him to treat the information and documents of the Bidders/ Contractors as confidential. He reports to the MD, NHIDCL.
- (3) The Bidder(s)/Contractor(s) accept that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor 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 Sub-contractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/Sub-contractor(s) with confidentiality.
- (4) 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 Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the IEM notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The Monitor can submit non-binding recommendations in this regard. 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.
- (6) The Monitor will submit a written report to the MD, NHIDCL, 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.
- (7) If the Monitor has reported to the MD, NHIDCL a substantiated suspicion of an offence under relevant IPC/PC Act and the MD, NHIDCL does not, within the reasonable time, takes visible action to proceed against such offence or report it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

**Section 8 –Integrity Pact**

- (8) The word ‘Monitor’ would include both singular and plural.

**Article 9- Legal and Prior Rights**

All right and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/ Contract documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses.

.....  
.....

(For and on behalf of  
Principal/Owner)

.....  
.....

(For and on behalf of  
Bidder/Contractor)

**WITNESSES:**

1. ....  
(Signature, name and address)

2.....  
(Signature, name and address)

**Place:**

**Dated:**

**Annexure V- Monthly Progress Report in Construction Phase**

सड़क परिवहन और राजमार्ग मंत्रालय  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS  
भरत सरकार Government of India

[NAME & LOGO OF IMPLEMENTING AGENCY]

*[PROJECT NAME]*

**Authority Engineer**

*[NAME OF CONSULTING FIRM]*

**MONTHLY PROGRESS REPORT NO. [XX]**

**FOR THE MONTH OF: [MONTH], [YEAR]**

## Table of content

### Contents

#### Page Nos.

1	Executive Summary .....	126
1.1	Construction progress in current month	126
1.2	Current issues and recommended actions by IE / AE	126
1.3	Strip Plan (Summary)	127
1.4	Strip Plan (Details)	128
2	Project Overview .....	129
2.1	Salient Features of Project	129
2.2	Project Milestones	130
2.3	Location Map	131
2.4	Key Plan	132
3	Critical Issues & Action Log .....	133
3.1	Pending Issues & Action Log	133
3.2	Obligations as per Contract	134
4	Physical Progress .....	134
4.1	Detailed Scope of Work & Physical Progress by Component	135
5	Land Acquisition and Clearance .....	136
5.1	LA Summary	136
5.2	LA Detail by CALA	136
5.3	LA Detail by Village for each CALA	136
5.4	Manpower details of CALA	137
5.5	Clearances Summary	137
5.6	Status of utilities shifting	139
6	Change of Scope .....	139
7	Mobilization of Resources .....	140
8	Financial Progress Details (for PPP projects) .....	140
8.1	Pen Picture - Escrow	140

8.2	Escrow details	141
9	Summary of quality control tests .....	142
9.1	Tests witnessed by IE/ AE	142
9.2	Tests conducted by IE / AE	143
10	Monitoring of maintenance obligations during construction phase .....	144
10.1	Critical issues and action log	144
10.2	Summary of repair work	144
10.3	Status of damages	146
11	Safety features .....	146
11.1	Pen picture of safety features	146
11.2	Accident Report	147
12	Annexures .....	149

## 1 Executive Summary

### 1.1 Construction progress in current month

Key reporting metrics	Value/ %/ Amount
Scheduled Physical Progress (%)	
Cumulative Physical Progress upto current month (%)	
Physical Progress during current month (%)	
Financial progress (%)	
Cumulative Expenditure till date (Rs Cr)	
Tests passed as % of total tests witnessed by IE	
Tests passed as % of total tests conducted by IE	
Number of pending COS proposals	
Amount for pending COS (Rs Cr)	

### 1.2 Current issues and recommended actions by IE / AE

1. **Slow Progress of Structures:** The progress of structures (especially, major bridges, flyovers and ROB's) is very slow. Overall progress is only XX%. Out of the total YY underpasses not even single underpass structure and its approaches is completed so far. No bridge is open to traffic sofar.
  - a. ***Recommendation:*** Concessionaire should improve the progress of structures. Request for revised workplan from Concessionaire including specific activities on structures.
2. **Status of Change of Scope Proposals:** Concessionaire has submitted Xx No. Change of Scope proposals, Yy No. of them are still pending for decision. Concessionaire has not submitted necessary clarifications /details for the following Changes of Scope in spite of several reminders.
  - a. ***Recommendation:*** Concessionaire to submit all pending clarifications to Authority. Authority and Concessionaire to expedite pending COS proposals.

**1.3 Strip Plan (Summary)**

	1. Work front Unavailable & reason for Unavailability		2. Length completed by layer (MCW)		3. Length completed by layer (Service Road)			
	Length (km)	% Total Pending Length	Length (km)	% Total Length	Length (km)	% Total Length		
<b>Total Length</b>	80		<b>Total Length</b>	80	<b>Total Length</b>	35		
<b>Total Workfront Unavailable</b>	7	12%	<b>Total Length Completed (Till DBM)</b>	27.5	33%	<b>Total Length Completed (Till DBM)</b>	0	0%
<b>Pending Land Acq.</b>	0	0%	<b>BC</b>	27	32%	<b>BC</b>	0	0%
<b>Pending Clearances</b>	7	12%	<b>DBM</b>	27.5	33%	<b>DBM</b>	0	0%
<b>Encumbrances</b>	0	0%	<b>WMM</b>	29.5	35%	<b>WMM</b>	0	0%
			<b>GSB</b>	32.5	39%	<b>GSB</b>	0	0%
			<b>Sub-Grade</b>	35	42%	<b>Sub-Grade</b>	0	0%
			<b>C&amp;G</b>	47.9	57%	<b>C&amp;G</b>	0	0%



**Detailed report****2 Project Overview****2.1 Salient Features of Project**

<b>Project Name</b>	
<b>NH No. (New/ Old)</b>	
<b>Scheme/ Phase</b>	
<b>Mode of the Execution (BOT Toll/ BOT Annuity/ EPC/ HAM/ Item Rate/ Others)</b>	
<b>No. of Lanes/ Configuration</b>	
<b>Length of the Project (in Km)</b>	
<b>Total Project Cost (in Cr)</b>	
<b>No. of Bypasses (Name of Town, Length)</b>	
<b>No. of Major Bridges (Number and Location)</b>	
<b>No. of Toll Plazas (Number and Location)</b>	
<b>No. of Fly Overs (Number and Location)</b>	
<b>DPR Authority's EngineerName</b>	
<b>Lead &amp; Consortium Members of Banks</b>	
<b>Concessionaire Name (SPV &amp; Parent Company)</b>	
<b>Date of Award (LOA Date)</b>	
<b>Appointed Date</b>	
<b>Concession Period</b>	
<b>Construction Period (in Days)</b>	
<b>O&amp;M Period (in Days)</b>	
<b>Scheduled Date of Completion</b>	
<b>Authority Engineer</b>	
<b>IE / AE Agreement Date</b>	
<b>IE / AE Mobilization Date</b>	

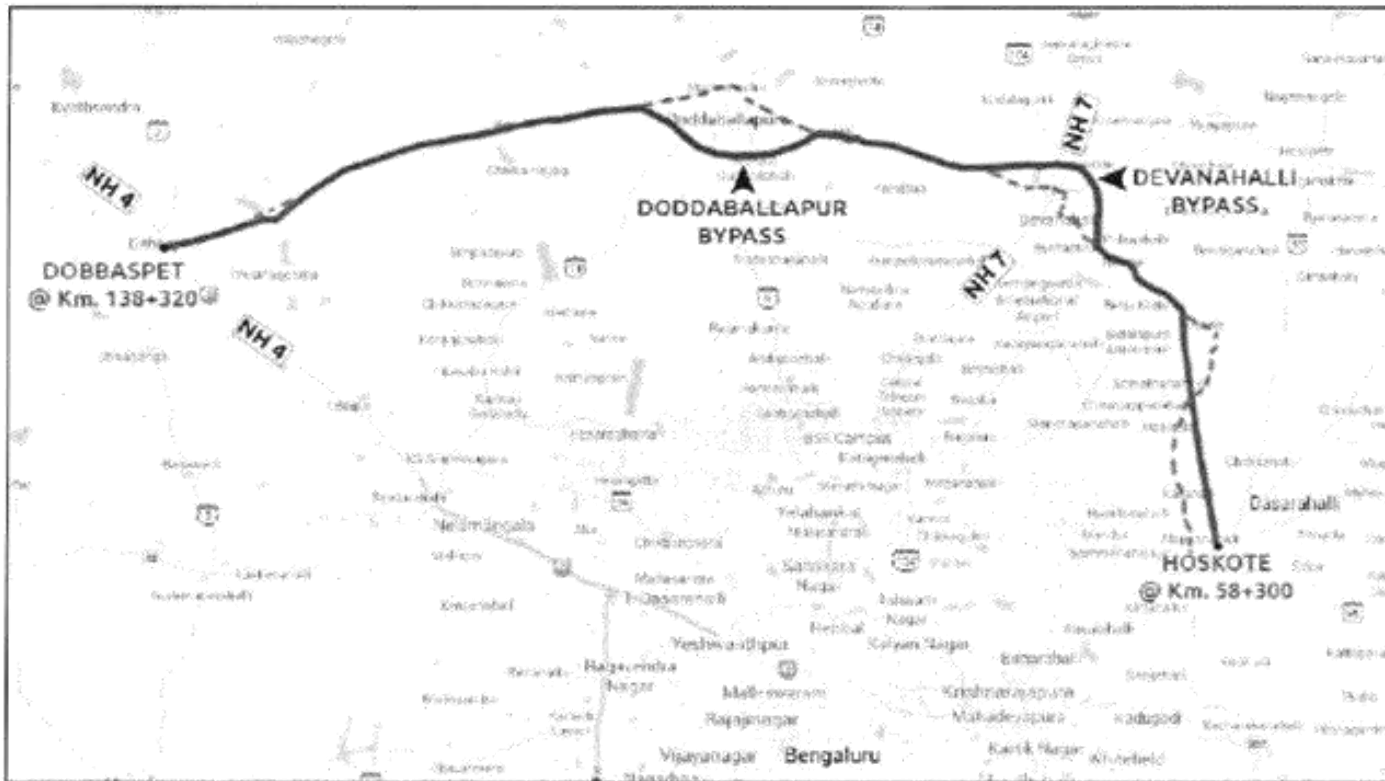
ALL FIGURES & GRAPHS IN TEMPLATES ARE ILLUSTRATIVE. PLEASE ADD ACTUAL DETAILS

## 2.2 Project Milestones

Project Milestone	Description (Days from Appointed Date)	Planned		Actual		Delay (No. of months)	Current Status
		Physical Progress (%)	Scheduled Date	Physical Progress (%)	Revised Date		
Milestone I	[Description]	25	[DD/MM/YYYY]	25	[DD/MM/YYYY]	5	Achieved
Milestone II	[Description]	65	[DD/MM/YYYY]		[DD/MM/YYYY]	22	Started, not achieved
Schedule Completion	[Description]	100	[DD/MM/YYYY]		[DD/MM/YYYY]	21	Not started

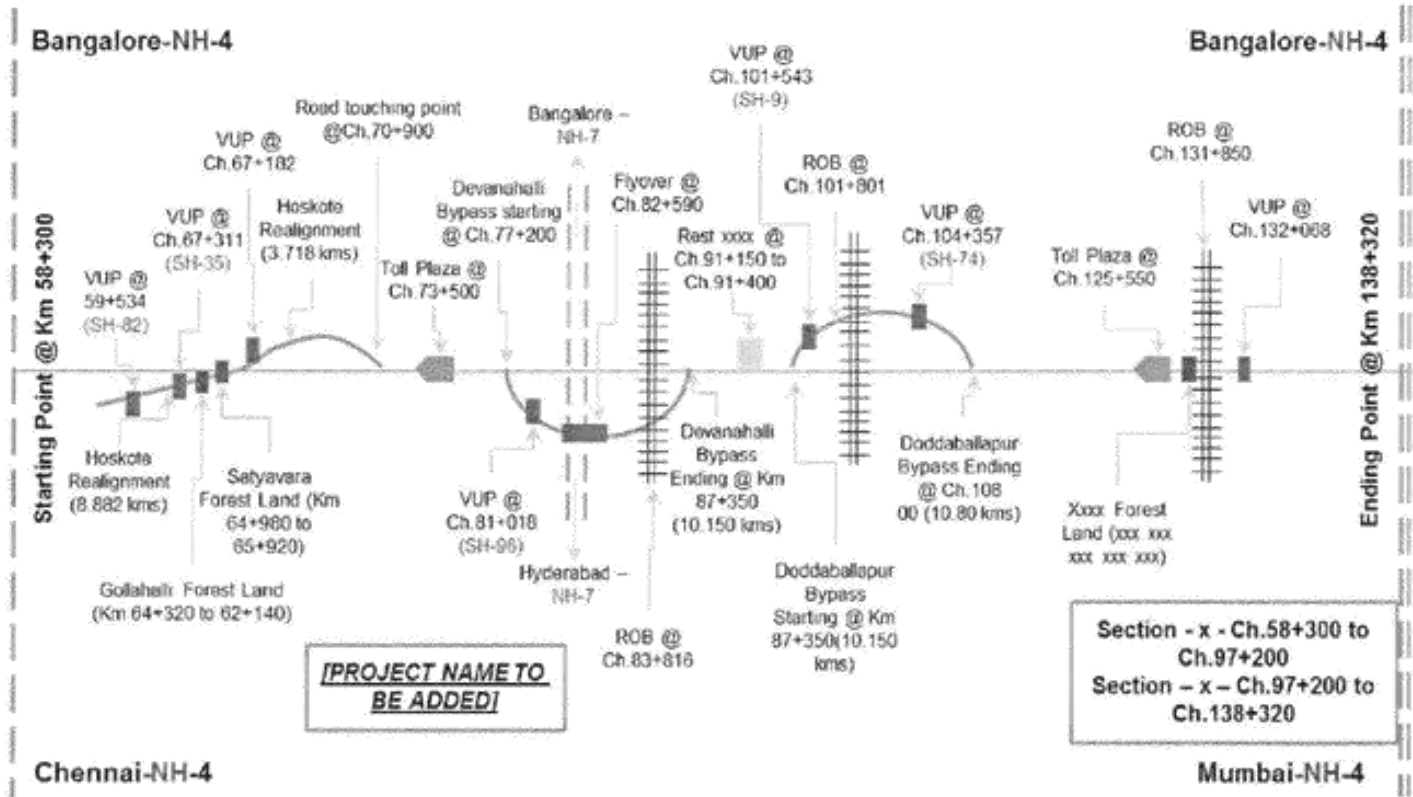
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### 2.3 Location Map



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2.4 Key Plan



[Above image is illustrative only. Please include chainage and name below the axis and list of features above the axis]

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### 3 Critical Issues & Action Log

#### 3.1 Pending Issues & Action Log

S.No	Issue Description	Type	Ongoing/ New Issue/ Resolved	Concerned Authority	Chainage(s) affected due to the issue	Length affected (km)	Action(s) taken till now	Action(s) suggested by the AE	Expected date/ Actual Date for resolving issue
1	Diversion of Xx ha of forest Land	Clearance	Ongoing Issue	MoEF	[Chainage]	4 kms	1. Proposal submitted to MoEF Letter sent by RO to MoEF nodal officer on [DD/MM/YYYY Y]	Escalate to higher level officers at MoEF	[DD/MM/YYYY Y]
2	21 Cr compensation disbursement pending	Land Acquisition	Resolved	[CALAName]	[Chainage]	2.4 km	1. Escalated to chief secretary level through DO from Chairman/ Secretary, dated [DD/MM/YYYY Y]		[DD/MM/YYYY Y]
3	Slow progress by concessionaire	Concessionaire Issue	New Issue	[Concess. Name]	[Chainage]	57 km	None	Project Director to call higher ups of concessionaire	[DD/MM/YYYY Y]

3.2 Obligations as per Contract

Expected Contents & Structure
<p><i>Please write a summary of non-compliances of contractual obligations highlighting reasons for delay, stating pending actions and their potential risk to the project's progress and recommended actions by the IE.</i></p> <ul style="list-style-type: none"> <li>• <b><i>Critical obligation sand constraints of concessionaire as per contract</i></b></li> <li>• <b><i>Critical obligations of authority as per contract</i></b></li> <li>• <b><i>Critical pending obligations of IE as per contract</i></b></li> </ul> <p><b><i>NOTE: Please include important issues requiring intervention of various parties, giving details and background wherever necessary</i></b></p>

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4 Physical Progress

Component	% Weightage	Physical Progress (During Current Month)	Physical Progress (Cumulative Upto Current Month)
Road Works	35.00%	5%	15.0%
Major Bridge works and ROB / RUB	40.00%	1.20%	26.2%
Structures	21.00%	0.00%	0.8%
Other Works	4.00%	0.00%	0.0%
<b>Physical Progress</b>		<b>2%</b>	<b>42.0%</b>

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#### 4.1 Detailed Scope of Work & Physical Progress by Component

Component	Cost Weightage in Project (%)	Item Description	Cost Weightage in Component (%)	Planned in Scope (As per Scope of Work)	Progress till Date	%Physical Progress	Value of Physical Progress (7X4)
1	2	3	4	5	6	7	8
1. Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	35.00%	1. C&G	5.00%	80 km	45 km	56%	2.8%
		2. Embankment	5.00%	80 km	40 km	50%	2.5%
		3. Sub Grade	5.00%	80 km	35 km	44%	2.2%
		4. GSB	5.00%	80 km	33 km	41%	2.1%
		5. WMM	5.00%	80 km	30 km	38%	1.9%
		6. DBM	5.00%	80 km	28 km	35%	1.8%
		7. BC	5.00%	80 km	27 km	34%	1.7%
2. Major Bridge works and ROB/RUB	40.00%	1. Major Bridges	10.00%	6 No	6 No	100%	10.0%
		2. Minor Bridges	5.00%	23 No	21 No	91%	4.6%
		3. Flyovers	5.00%	2 No	0	0%	0.0%
		4. ROB	5.00%	228 No	121 No	53%	2.7%
		5. VUP	5.00%	11 No	6 No	55%	2.7%
		6. PUP	5.00%	15 No	6 No	40%	2.0%
		7. RUB	5.00%	136 No	114 No	84%	4.2%
3. Structures (elevated sections, reinforced earth)	21.00%	1. Foundation	5.00%	35 km	2.2 km	6%	0.2%
		2. Sub-structure	5.00%	35 km	2.1 km	6%	0.2%
		3. Super-structure	5.00%	35 km	2.1 km	6%	0.2%
		4. Reinforced Earth Wall	6.00%	35 km	2.1 km	6%	0.2%
4. Other Works	4.00%	1. Toll Plaza	4.00%	4 No	0	0%	0.0%
<b>GRAND TOTAL</b>			<b>100%</b>				<b>42.0%</b>

## 5 Land Acquisition and Clearance

### 5.1 LA Summary

Description	Total Required (ha)	Total in possession at start (ha)	Total to be acquired (ha)
Existing ROW	135.00	135.00	0.00
Pvt. Land To be Acquired	240.00	0.000	240.00
Public Land To be Transferred	52.00	50.35	1.65
<b>Grand Total</b>	<b>427</b>	<b>185</b>	<b>242</b>

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### 5.2 LA Detail by CALA

CALA	Total Land left to be Acquired (Ha)	3H Pending (ha)	3H Done (ha)	3G Pending (ha)	3G Done (ha)	3D Pending (ha)	3D Done (ha)	3A Pending (Ha)	3A Done (ha)	Amount Awarded (Crore Rs.)	Amount Deposited (Crore Rs.)	Amount Disbursed by CALA (Crore Rs.)	Pending Amount (Crore Rs.)
CALA 1]	150	15	15	15	135	0	150	0	150	396	370	327	43
[CALA2]	67	0	0	0	67	0	67	0	67	132	132	120	23
[CALA3]	23	23	23	23	0	14	9	0	23	0	0	0	0
<b>Grand Total</b>	<b>240</b>	<b>38</b>	<b>202</b>	<b>38</b>	<b>202</b>	<b>14</b>	<b>226</b>	<b>0</b>	<b>240</b>	<b>528</b>	<b>502</b>	<b>447</b>	<b>66</b>

### 5.3 LA Detail by Village for each CALA

#### CALA 1

Village	Total Land left to be Acquired (Ha)	3H Pending (ha)	3H Done (ha)	3G Pending (ha)	3G Done (ha)	3D Pending (ha)	3D Done (ha)	3A Pending (Ha)	3A Done (ha)	Amount Awarded (Crore Rs.)	Amount Deposited (Crore Rs.)	Amount Disbursed by CALA (Rs Cr)	Pending Amount (Rs Cr)
[Village 1]	150	15	15	15	135	0	150	0	150	396	370	327	43
[Village 2]	67	0	0	0	67	0	67	0	67	132	132	120	23
[Village 3]	23	23	23	23	0	14	9	0	23	0	0	0	0
<b>Grand Total</b>	<b>240</b>	<b>38</b>	<b>202</b>	<b>38</b>	<b>202</b>	<b>14</b>	<b>226</b>	<b>0</b>	<b>240</b>	<b>528</b>	<b>502</b>	<b>447</b>	<b>66</b>

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## 5.4 Manpower details of CALA

CALA	Provided by <Agency> (State Govt)	Amins/ Surveyors	Patwaris/ Village accountant	Revenue Inspectors/ Kanungo	Tehsildar s/ Dep. Tehsildar s	Clerks/ Sahayaks	Accountants	Computer operators	Peons	Chainman	Total
[CALA 1]	<Agency>	4	1	0	0	3	0	3	1	0	12
[CALA 1]	State Govt	2	0	2	0	0	0	1	0	0	5
[CALA 2]	<Agency>										
[CALA 2]	State Govt										
<b>Grand Total</b>											

## 5.5 Clearances Summary

Environment				
Proposal Description	Status	Length Impacted	Current Stage	Issues/ Comments
Approval of construction in coastal zone	Obtained	Nil	Completed	
Forest Land				
Proposal Description	Status	Length Impacted	Current Stage	Issues/ Comments
Diversion of Xx ha ( <i>[Chainage]</i> )	Pending	<i>[Length in km]</i>	Completed	Stage 1 clearance pending
Diversion of Xx Ha. ( <i>[Chainage]</i> )	Obtained	Nil	Ongoing	

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<b>Wildlife</b>				
Proposal Description	Status	Length Impacted	Current Stage	Issues/ Comments
Diversion of Xx Ha. of forest land	Pending	[Length in km]	Ongoing	Queries sent to MoEF by RO, compliance pending
<b>TreeCutting</b>				
Proposal Description	Status	Length Impacted	Current Stage	Issues/ Comments
N.A.	N.A.	N.A.	N.A.	N.A.
<b>Railway (ROBs/RUBs)</b>				
Proposal Description	Status	Length Impacted	Current Stage	Issues/ Comments
[GAD Number]	Proposal Submitted, Approval pending	[Chainage]	Uploaded on portal on [DD/MM/YYYY]	N.A.

**5.6 Status of utilities shifting**

Utility Category	Name	Status	Length affected	Department	Date of request by Authority for estimate	Date when Estimate was Received from concerned dept.	Date of Approval by Authority RO/ HQ	Date of Deposit of supervision charge	Progress of Physical Shifting	Date of Certification from Agency for Completion	Estimate Amount	Issue/ Comments
Water		Estimate Approved	[Length in km]	[DEPARTMENT]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	Not started	TBD		
Electricity		Estimate Approved	[Length in km]	[DEPARTMENT]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	Not started	TBD		
Others		Estimate Approved	[Length in km]	[DEPARTMENT]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]		TBD		

**6 Change of Scope**

S No.	Proposal Details	Date of first submission to AE	Current Status	COS Amount	ed/ Actual Date of Approval
1	Construction of [Flyover Name] at [Chainage]	[DD/MM/YYYY]	Approved in principle by Authority. Detailed quantities in proper order yet to be submitted	[+/- Amount]	[DD/MM/YYYY]
2	Nallah diversion through box culvert at [Chainage]	[DD/MM/YYYY]	Clarifications to be submitted by Concessionaire, expected date [DD/MM/YYYY]	[+/- Amount]	[DD/MM/YYYY]

**7 Mobilization of Resources**

S No.	Equipment Name	Make	Model	Age of Equipment	Planned/ Required Quantity	Actual Quantity	Deployed During the Month	Reason(s) for Under/Over Mobilization	Expected Delay due to Under-Mobilization	Remarks
	Excavator/ Poclain					5				
	Paver					2				
	Transit Meter					0				
	Plate Compactors					0				
	[ADD OTHERS]									

**8 Financial Progress Details (for PPP projects)**

**8.1 Pen Picture - Escrow**

TPC (Cr)	Cumulative inflow to Escrow till previous month (Cr)	Cumulative outflow from Escrow till previous month(Cr)	Inflow to Escrow during the month (Cr)	Outflow from Escrow during the month(Cr)
1,206	1,033	900	30	35

Are the Escrow withdrawals in accordance with the order of withdrawal as specified in the Concession Agreement?

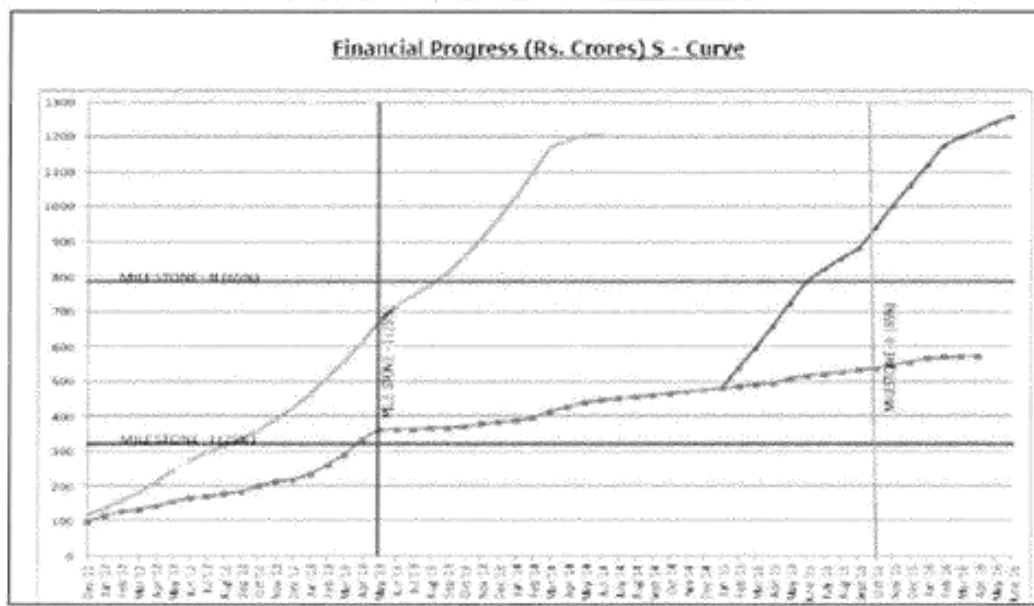
*Tick as applicable*

If not, details to be provided below:

ALL FIGURES & GRAPHS IN TEMPLATES ARE ILLUSTRATIVE. PLEASE ADD ACTUAL DETAILS

### 8.2 Escrow details

TPC (Cr)	Cumulative exp. till date (Cr)	Escrow Plan till date- Debt (BOT)(Cr)	Escrow Plan till date- Equity (BOT) (Cr)	Escrow Plan till date- VGF (BOT) (Cr)	Escrow Actual till date- Debt (BOT) (Cr)	Escrow Actual till date- Equity (BOT) (Cr)	Escrow Actual till date- VGF (BOT) (Cr)
1,206	1,033	900	306	-	769	264	-



- ..... Cum. Scheduled Progress (Original Program)
- Cum. Scheduled Progress (New Program)
- Cum. Achieved Progress

PLEASE EXCLUDE OUTSTANDING MOBILIZATION FEE/ ADVANCE IN S-CURVE

9 Summary of quality control tests

9.1 Tests witnessed by IE/ AE

Description	Frequency of tests		Unit	Total test up to Previous Month			Total test in This Month			Cumulative No. of tests			Remarks
	No. s	Qty.		Conducte d	Pas s	Fai l	Conducte d	Pas s	Fai l	Conducte d	Pas s	Fai l	
<b>Sub grade</b>													
Procter test	1	1500	m3	0	0	0	0	0	0	0	0	0	
Atterberg Limits	1	1500	m3	0	0	0	0	0	0	0	0	0	
Free Swell Index	1	1500	m3	0	0	0	0	0	0	0	0	0	
Grain Size Analysis	1	1500	m3	0	0	0	0	0	0	0	0	0	
C.B.R	1	3000	m3	0	0	0	0	0	0	0	0	0	
<b>Granular Sub Base</b>													
Gradation	1	200	m3	151	151	0	5	5	0	156	156	0	
Atterberg Limits	1	200	m3	151	136	15	5	5	0	151	136	15	
Procter test	1	1500	m3	0	0	0	0	0	0	0	0	0	
Wet Mix Macadam													
Filter material													
Concrete													
Cement													
Water													
Prime Coat													
Tack coat													
Dense Bituminou													

**Annexure V – Section 5 – Term of Reference, Clause 4.8**

Description	Frequency of tests		Unit	Total test up to Previous Month			Total test in This Month			Cumulative No. of tests			Remarks
	No. s	Qty.		Conducte d	Pas s	Fai l	Conducte d	Pas s	Fai l	Conducte d	Pas s	Fai l	
s Macadam													
Bituminou s Concrete													
Bitumen test													
DLC													
Steel													

**9.2 Tests conducted by IE / AE**

*<Quality inspection test results to be reported in a table similar to the table provided in previous section>*

ALL FIGURES & GRAPHS IN TEMPLATES ARE ILLUSTRATIVE. PLEASE ADD ACTUAL DETAILS

## 10 Monitoring of maintenance obligations during construction phase

### 10.1 Critical issues and action log

SNo	Issue Description	Ongoing/New Issue	Concerned Authority	Chainage(s) affected due to the issue	Length affected (km)	Action(s) taken till now	Action(s) suggested by SC	Expected Date for resolving issue
1	Drying up of plants on median	Ongoing	Concessionaire	325+200 to 327+800	2.6	Irregular watering	Replacement of plants and daily watering	NA
2	Large potholes	New	Concessionaire	387+300 LHS	0.1	None	Filling of potholes	<DD/MM M>

### 10.2 Summary of repair work

SNo	Description	Unit	Total	Work done upto previous month	Work done during reporting month	Balance	Remarks
<b>1</b>	<b>Carriageway and paved shoulders</b>						
(a)	Pot Holes	Sqm	42	-	-	42	
(b)	Roughness value exceeding 2,500mm	mm					
(c)	Cracking in more than 5% of road surface	Sqm	7179	-	-	7179	
(d)	Rutting exceeding 10mm in more than 2% of road surface	Sqm	5	-	-	5	
(e)	Bleeding/Skidding	Sqm					
(f)	Ravelling	Sqm					
(g)	Damage to pavement edges exceeding 10cm	m					
<b>2</b>	<b>Hard/Earth Shoulders</b>						

Annexure V – Section 5 – Term of Reference, Clause 4.8

SNo	Description	Unit	Total	Work done upto previous month	Work done during reporting month	Balance	Remarks
(a)	Rain cuts/ gullies in slope	Cum	650	25	-	625	
(b)	Edge drop at shoulders exceeding 40 mm	m					
<b>3</b>	<b>Drains and culverts</b>						
(a)	Cleaning of Culvert	Nos	1	-	-	1	
(b)	Damage to or silting of culverts						
(c)	Silting of drains in urban/ semi urban areas						
<b>4</b>	<b>Road furniture</b>						
(a)	Sign Boards	Nos	456	-	-	456	
(b)	Kilometer Stones						
(c)	Metal Beam Crash Barrier						
(d)	Bus Shelters	Nos	72	4	-	68	
(e)	Junction signs	Nos	26	8	-	18	
(f)	Median Grills	Rmt	894	-	-	894	
(g)	Studs	Nos	5328	-	-	5328	
(h)	Delinators	Nos	8236	-	-	8236	
(i)	Road Marking	Sqm	1899	-	-	1899	
(j)	Kerb Painting	Sqm	4575	-	-	4575	
(k)	Guard Posts	Nos	3657	-	-	3657	
<b>5</b>	<b>Street lighting and telecom (ATMS)</b>						
(a)	Street lights	Nos					
(b)	Telecom	Nos					
<b>6</b>	<b>Trees and plantation</b>						
(a)	Removal of vegetation affecting sight line and road structures	Ha	77.42	-	3.57	73.85	
(b)	Replacement of trees and bushes	Nos	15072	-	-	15072	

**Annexure V – Section 5 – Term of Reference, Clause 4.8**

SNo	Description	Unit	Total	Work done upto previous month	Work done during reporting month	Balance	Remarks
<b>7</b>	<b>Buildings and bridges</b>						
(a)	Rest areas						
(b)	Toll plazas						
(c)	Bridges						

**10.3 Status of damages**

SNo	Period	Amount of damages (Rs)
1	Upto June 2016	
2	Jul 2016	
3	Aug 2016	
4	Sep 2016	
	<b>Total</b>	

**11 Safety features**

**11.1 Pen picture of safety features**

Details to be provided after assessment of the site requirement vis-à-vis provisions in the Concession Agreement:

Location of Black Spots	Suggested Remedial Measures within provisions of Concession Agreement	Additional Remedial Measures (if any)	Financial implications of additional Remedial Measures for Authority(Cr.)

11.2 Accident Report

S No	Date	Chainage no	Time of accident	Sex (M/F)	A	B	C	D	E	F	G	H	I	J	K	No of affected persons			Help provided by
					Accident location	Nature of accident	Classification of	Causes	Load conditions of	Road condition	Intersection type of	Weather condition	Age of victim	Type of victim	Type of vehicle	Fatal	Major	Minor	
1	1/1/17	382/050 RHS	05:25 pm	M	2	2	3	4	1	1	-	1	3	1	3	-	1	1	Ambu

**Mapping of report fields to responses**

A	1. Urban 2. Rural
B	1. Overturned 2. Head On Collision 3. Hit from Back 4. Hit to Fix Object 5. Right turn Collision 6. Left turn Collision 7. Veered Out off The Road 8. Hit Pedestrian 9. Unknown/Hit & Ran Away
C	1. Fatal 2. Major injury 3. Minor injury
D	1. Drunken 2. Over Speeding 3. Vehicle out of Control 4. Driven on wrong side 5. Mechanical Problem 6. Drowsiness/Not Applicable 7. Fault of Driver
E	1. Normally Loaded 2. Overloaded/Handing 3. Empty 4. Unknown
F	1. Straight road 2. Slight Curve 3. Sharp Curve 4. Hump 5. Dip
G	1. T-Junction 2. Y-Junction 3. Four arm Junction 4. Staggered Junction 5. Junction with more than 6. Round about
H	1. Fine/Clear 2. Mist/Fog 3. Cloudy 4. Light Rain 5. Heavy Rain 6. Strong Wind 7. Dust Storm 8. Cold 9. Hot
I	1. 0-18 Years 2. 18-25 Years 3. 25-40 Years 4. 40-60 Years 5. 60-80 Years
J	1. Driver 2. Passenger 3. Pedestrian 4. Cyclist 5. Others
K	1. Two Wheeler 2. Auto Rickshaw 3. Car/Jeep 4. Bus 5. Light Truck 6. Heavy Truck 7. Tractor 8. Bicycle 9. Cycle Rickshaw 10. Hand Drawn Cart 11. Animal Drawn Cart

## 12 Annexures

## Annex 1. Detailed List of Physical Components as per Schedule G

Component	Physical Item
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	<b>A- Widening and strengthening of existing road</b>
	(1) Earthwork up to top of the sub-grade
	(2) Granular work (sub- base, base, shoulders)
	(a) GSB
	(b) WMM
	(3) Shoulders
	(4) Bituminous work
	(a) DBM
	(b) BC
	(5) Rigid Pavement
	Concrete work
	(6) Widening and repair of culverts
	(7) Widening and repair of minor bridges
	<b>B- New realignment/bypass</b>
	(1) Earthwork up to top of the sub-grade
	(2) Granular work (sub- base, base, shoulders)
	(a) GSB
	(b) WMM
	(3) Shoulders
	(4) Bituminous work
	(a) DBM
	(b) BC
	(5) Rigid Pavement
	Concrete work
	<b>C-New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</b>
	(1) Culverts
	(2) Minor bridges
	(a) Foundation
	(b) Sub-structure
	(c) Super-structure (including crash barriers etc. complete)
(3) Cattle/Pedestrian underpasses.	
(a) Foundation	
(b) Sub-structure	
(c) Super-structure (including crash barriers etc. complete)	
(4) Pedestrian overpasses.	
(a) Foundation	
(b) Sub-structure	
(c) Super-structure (including crash barriers etc. complete)	
(5) Grade separated structures	
(a) Underpasses	

Annexure V – Section 5 – Term of Reference, Clause 4.8

Component	Physical Item
	(i) Foundation
	(ii) Sub-structure
	(iii) Super-structure (including crash barriers etc. complete)
	(b) Overpass
	(i) Foundation
	(ii) Sub-structure
	(iii) Super-structure (including crash barriers etc. complete)
	(c) Flyover
	(i) Foundation
	(ii) Sub-structure
	(iii) Super-structure (including crash barriers etc. complete)
	(d) Foot over Bridge
	<b>Major Bridge works and ROB/RUB</b>
(1) Foundation	
(a) Open Foundation	
(b) Pile Foundation/Well Foundation	
(2) Sub-structure	
(3) Super-structure (including crash barriers etc. complete)	
<b>B- Widening and repair of</b>	
(a) ROB	
(1) Foundation	
(2) Sub-structure	
(3) Super-structure (including crash barriers etc. complete)	
(b) RUB	
(1) Foundation	
(2) Sub-structure	
(3) Super-structure (including crash barriers etc. complete)	
<b>C- New Major Bridges</b>	
(1) Foundation	
(a) Open Foundation	
(b) Pile Foundation/Well Foundation	
(2) Sub-structure	
(3) Super-structure (including crash barriers etc. complete)	
<b>D- New rail-road bridges</b>	
(a) ROB	
(1) Foundation	
(2) Sub-structure	
(3) Super-structure (including crash barriers etc. complete)	
(b) RUB	
	(1) Foundation
	(2) Sub-structure
	(3) Super-structure (including crash barriers etc. complete)
<b>Structures (elevated sections, reinforced earth)</b>	(1) Foundation
	(2) Sub-structure
	(3) Super-structure (including crash barriers etc. complete)

**Annexure V – Section 5 – Term of Reference, Clause 4.8**

Component	Physical Item
	<b>(4) Reinforced Earth Wall (includes Approaches of ROB, Underpasses, Overpasses, Flyover etc.</b>
<b>Other Works</b>	<b>(i) Service roads/ Slip Roads</b>
	<b>(ii) Toll Plaza</b>
	<b>(iii) Road side drains</b>
	<b>(iv) Road signs, markings, km stones, safety devices, ....</b>
	<b>(a) Road signs, markings, km stones, ....</b>
	<b>(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work</b>
	<b>(v) Project facilities</b>
	<b>(a) Bus bays</b>
	<b>(b) Truck lay-byes</b>
	<b>(c) Rest areas</b>
	<b>(vi) Repairs to bridges/structures</b>
	<b>(vii) Road side plantation</b>
	<b>(viii) Protection works</b>
	<b>(a) Boulder Pitching on slopes</b>
	<b>(b) Toe/Retaining wall</b>
	<b>(ix) Tunnel</b>
	<b>(a) Excavation</b>
	<b>(b) Construction of support system including rock bolting, lining etc.</b>
	<b>(c) On complete completion of tunnel</b>
	<b>(x) Miscellaneous</b>

\* The above list is illustrative and may require modification as per the actual scope of the work

**Annex 2. Onwards**

IE / AE should include comments, status update, data points and reports in following annexures which have not been included elsewhere in the main report. Such reports may include but not limited to:

- Review status of drawings/ design reports
- Review status of other documents
- Minutes of review meeting
- Detailed Inspection report of project highway
- Correspondence details
- Weather report
- Organizational chart of Concessionaire / Contractor and IE / AE
- List of lab equipment
- Details of user complaints
- Project photographs

सड़क परिवहन और राजमार्ग मंत्रालय  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS  
भारत सरकार Government of India

[NAME&LOGOOFIMPLEMENTINGAGENCY]

*[PROJECT NAME (O&M)]*

**Authority Engineer**

*[NAME OF CONSULTING FIRM]*

**MONTHLY STATUS REPORT NO. [XX]**

**FOR THE MONTH OF: [MONTH], [YEAR]**

**Table of content**

<b>Contents Nos.</b>	<b>Page</b>
1 Executive Summary.....	156
1.1 Overall road condition	156
1.2 Key reporting metrics	156
1.3 Key maintenance activities undertaken	156
1.4 Pending issues	157
1.5 Recommended actions by Authority Engineer	157
1.6 Strip Plan for maintenance	158
2 Project Overview .....	159
2.1 Key project details	159
2.2 Location Map	160
2.3 Key plan	161
2.4 RoW availability	161
2.5 Summary of project features	162
3 Critical Issues and Action taken .....	163
3.1 Issue and action log	163
3.2 Summary of items (Cumulative Observations/ Deficiencies)	163
3.3 Obligations as per contract	165
3.4 Major maintenance and Inspection schedule	166
4 Inspection Report.....	167
4.1 Summary of NCR issued	167
4.2 Equipment based inspection report	167
5 Monitoring of ETC lanes.....	169
5.1 Monthly ETC Report	169
5.2 On-ground infrastructure report	169
5.3 On-ground ETC operations and SLA adherence	170
6 Status of Damages for breach of maintenance activities.....	170

**Annexure V – Section 5 – Term of Reference, Clause 4.8**

6.1	Damages for non completion of project facilities	170
6.2	Damages for breach of maintenance activities	171
6.3	Damages for non completion of major maintenance/ periodic overlay	171
7	Change of Scope proposals.....	172
8	Status of pending disputes .....	172
9	Reports.....	173
9.1	Monthly Toll Collection Report (Applicable only if project highway is tolled)	173
9.2	Accident Report	174
9.3	Details of complaints	176
9.4	Encroachment list	177
9.5	Lane Closure Report	177
10	Annexures .....	178

*All figures and graphs in templates are illustrative. Please add actual details.*

## 1 Executive Summary

### 1.1 Overall road condition

Road condition	LHS	RHS
Satisfactory road condition	40 km	20 km
Poor road condition	50 km	70 km
<b>Total length of project</b>	<b>90 km</b>	<b>90 km</b>

### 1.2 Key reporting metrics

Key metrics	Value/Amount
No of pending NCRs	35
Damages amount recommended on Concessionaire (Rs Cr)	Rs 5.9 Cr
No of pending Change of Scope proposals	2
No of pending disputes	2
Monthly toll collection (Rs Cr) (If applicable)	Rs 3.8 Cr
No of accidents	12
No of encroachments	47

### 1.3 Key maintenance activities undertaken

Asset	Maintenance activities undertaken
Pavement	<ul style="list-style-type: none"> <li>Concessionaire has commenced the work for renewal and repair of pavement on the project highway w.e.f 14th September 2016</li> </ul>
Shoulder	
Drainage	<ul style="list-style-type: none"> <li>Cleaning of drainage in built up areas n progress</li> </ul>
Median	
Road furniture	<ul style="list-style-type: none"> <li>Concessionaire has taken up repairs and maintenance of MCB and electric poles, etc on issuance of NCPs from Authority Engineer</li> </ul>
Bridges	
Buildings	<ul style="list-style-type: none"> <li>As per provisions of CA and policy decided by MoRTH/&lt;Agency&gt;, 2 ETC lanes at each toll plaza have been operationalised w.e.f. 25th September 2016. The connectivity of ETC lanes with Central Clearing House (CCH) has been achieved and presently ETC lanes are operationalized in Hybrid Mode due to less number of tags purchased by highway users</li> </ul>
Horticulture	<ul style="list-style-type: none"> <li>Planting of new trees from Chainage 200+300 to 226+650</li> <li>Trimming of plants which were causing obstruction to highway users</li> </ul>

#### 1.4 Pending issues

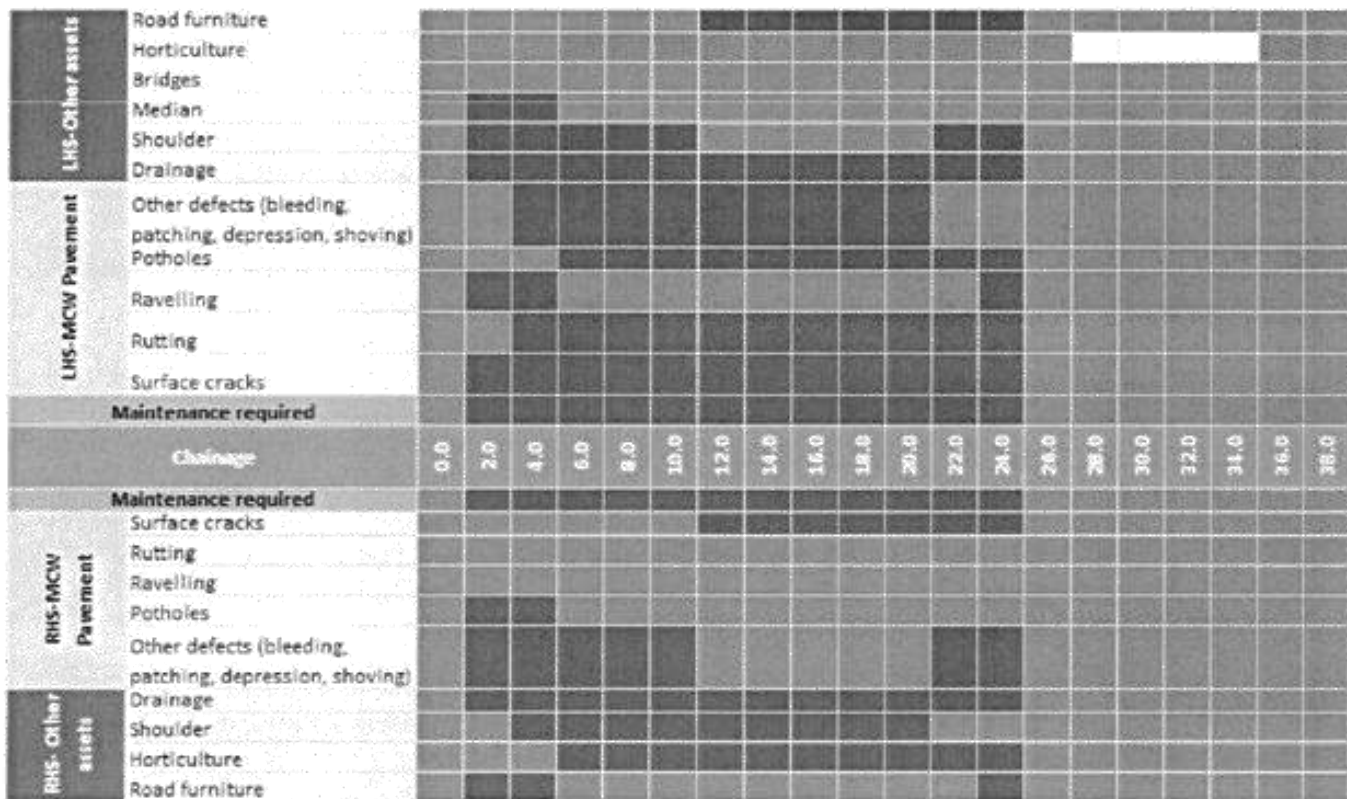
- Overlay on the entire stretch of project length of 252 km and service roads has not been taken up by Concessionaire yet since the date of completion of overlay is due in next 25 days
- Over all progress is very slow regarding repair of potholes and rutting on Main Carriageway which is causing inconvenience to highway users and is also a concern from road safety point of view.
- Street lighting in
  - **Anantapur bypass** completed on main carriageway and is energized but for service roads street lighting is pending on both sides
  - **Kurnool bypass** erection of poles only completed in main carriageway not yet energized till to date, but for service roads not started

#### 1.5 Recommended actions by Authority Engineer

- In spite of the repeated requests, there is no material change in status of works pertaining to repairs/ rectifications of defects on the project highway. AE has recommended the damages of Rs 5.9 Cr on the Concessionaire on account of delay in repairs of defects in road and bridge works in terms of the provision of Clause 15.8.1 of the Concession Agreement. Concessionaire shall be liable for imposition of further damages on similar lines till the date of completion
- Concessionaire is requested to take at most care for completing the overlay before 31.03.2017 since the existing road condition is getting deteriorated day by day causing much inconvenience to the traffic

*All figures and graphs in templates are illustrative. Please add actual details.*

**1.6 Strip Plan for maintenance**



Satisfactory road condition (Maintenance not required)	
Poor road condition (Maintenance required)	

*All figures and graphs in templates are illustrative. Please add actual details.*

## Main report

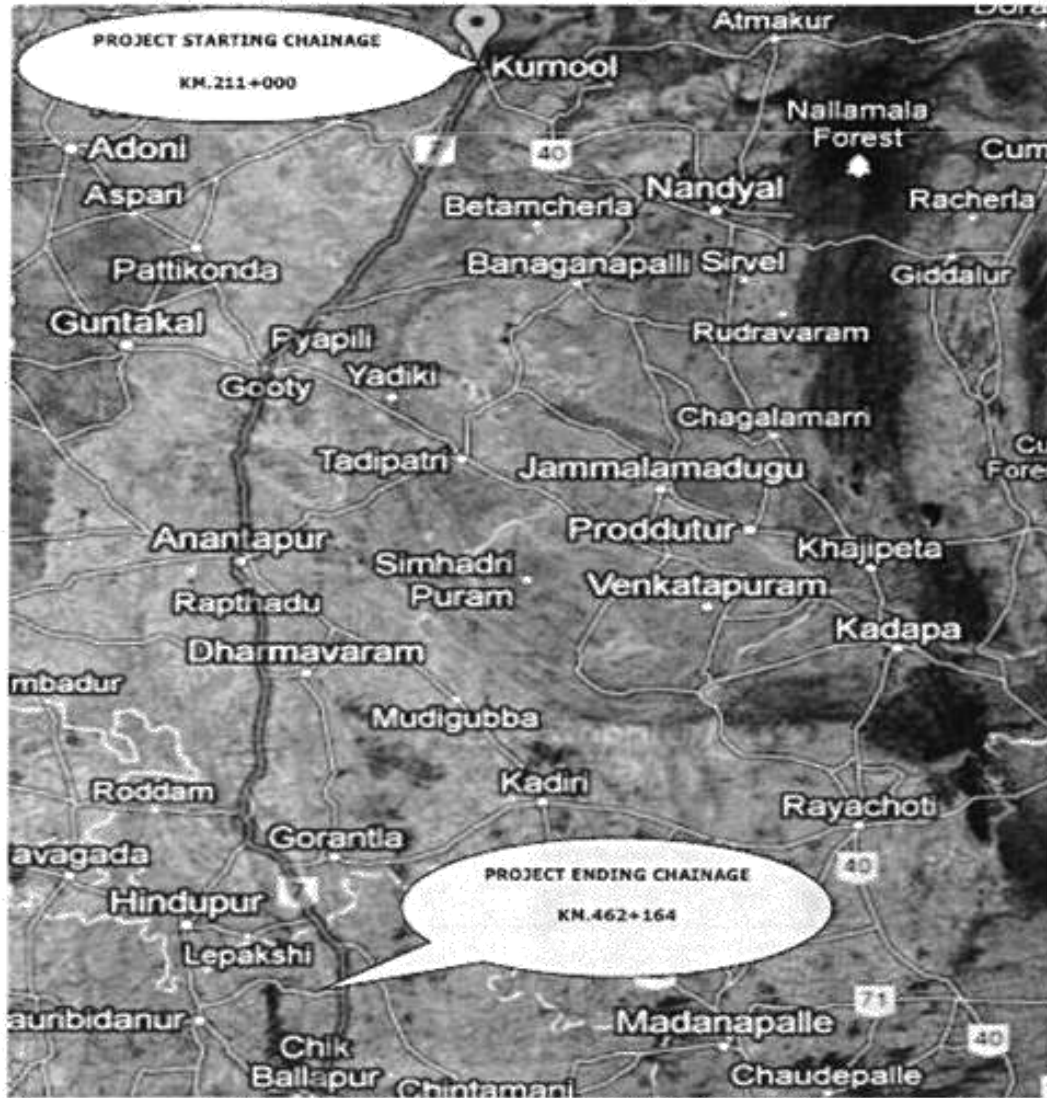
### 2 Project Overview

#### 2.1 Key project details

Project Name	
NH no (New/Old)	
Mode of the Project	
No. of Lanes	
Length of the Project	
Total Project Cost	
Concessionaire/ Contractor	
Date of Award (LOA date)	
Appointed Date	
Commercial Operation Date (COD)	
Concession Period	
O&M Period	
Authority Engineer	
AE Agreement Date	
AE Mobilization Date	
AE Scheduled Completion Date	
AE EOT (Extension Of Time)	

*All figures and graphs in templates are illustrative. Please add actual details.*

## 2.2 Location Map





**2.5 Summary of project features**

SNo	Particulars	Value
1	No of flyovers	2
2	Service Road	45
3	ROBs	5
4	ROB location (chainage)	261.975, 299.606, 350.547, 396.135 & 420.302
5	RUBs	0
6	RUB location (chainage)	NA
7	No of Bypass	7
8	Length of Bypass	43
9	No of Major Bridges	7
10	No of Minor Bridges	67
11	No of Culvert	640
12	No of VUP	16
13	No of PUP/ Cattle Underpass	12
14	No of Major Intersection/ Junction	22
15	No of Toll Plaza	3
16	Location of Toll Plaza (chainage)	
17	No of Truck Laybye	30
18	No of Bus Bays	122
19	No of Wayside Amenities	0
20	Location of Wayside Amenities (chainage)	NA

*All figures and graphs in templates are illustrative. Please add actual details.*

### 3 Critical Issues and Action taken

#### 3.1 Issue and action log

SNo	Issue Description	Ongoing/New Issue	Concerned Authority	Chainage(s) affected due to the issue	Length affected (km)	Action(s) taken till now	Action(s) suggested by SC	Expected Date for resolving issue
1	Drying up of plants on median	Ongoing	Concessionaire	325+200 to 327+800	2.6	Irregular watering	Replacement of plants and daily watering	NA
2	Large potholes	New	Concessionaire	387+300 LHS	0.1	None	Filling of potholes	<DD/MM>

*All figures and graphs in templates are illustrative. Please add actual details.*

#### 3.2 Summary of items (Cumulative Observations/ Deficiencies)

SNo	Description	Unit	Total	Work done upto previous month	Work done during reporting month	Balance	Remarks
<b>1</b>	<b>Carriageway and paved shoulders</b>						
(a)	Pot Holes	Sqm	42	-	-	42	
(b)	Roughness value exceeding 2,500mm	mm					
(c)	Cracking in more than 5% of road surface	Sqm	7179	-	-	7179	
(d)	Rutting exceeding 10mm in more than 2% of road surface	Sqm	5	-	-	5	
(e)	Bleeding/Skidding	Sqm					
(f)	Ravelling	Sqm					
(g)	Damage to pavement edges exceeding 10cm	m					
<b>2</b>	<b>Hard/Earth Shoulders</b>						
(a)	Rain cuts/ gullies in slope	Cum	650	25	-	625	

Annexure V – Section 5 – Term of Reference, Clause 4.8

SNo	Description	Unit	Total	Work done upto previous month	Work done during reporting month	Balance	Remarks
(b)	Edge drop at shoulders exceeding 40 mm	m					
<b>3 Drains and culverts</b>							
(a)	Cleaning of Culvert	Nos	1	-	-	1	
(b)	Damage to or silting of culverts						
(c)	Silting of drains in urban/ semi urban areas						
<b>4 Road furniture</b>							
(a)	Sign Boards	Nos	456	-	-	456	
(b)	Kilometer Stones						
(c)	Metal Beam Crash Barrier						
(d)	Bus Shelters	Nos	72	4	-	68	
(e)	Junction signs	Nos	26	8	-	18	
(f)	Median Grills	Rmt	894	-	-	894	
(g)	Studs	Nos	5328	-	-	5328	
(h)	Delinators	Nos	8236	-	-	8236	
(i)	Road Marking	Sqm	1899	-	-	1899	
(j)	Kerb Painting	Sqm	4575	-	-	4575	
(k)	Guard Posts	Nos	3657	-	-	3657	
<b>5 Street lighting and telecom (ATMS)</b>							
(a)	Street lights	Nos					
(b)	Telecom	Nos					
<b>6 Trees and plantation</b>							
(a)	Removal of vegetation affecting sight line and road structures	Ha	77.42	-	3.57	73.85	
(b)	Replacement of trees and bushes	Nos	15072	-	-	15072	
<b>7 Buildings and bridges</b>							
(a)	Rest areas						
(b)	Toll plazas						
(c)	Bridges						

### 3.3 Obligations as per contract

*Please write a summary of contractual obligations of Concessionaire and non-compliances of critical obligations highlighting reasons for delay and stating pending actions*

- **Critical obligations of Concessionaire as per contract**
  
- **Non compliances of critical contractual obligations**

## 3.4 Major maintenance and Inspection schedule

Item	Responsibility	Last completed on	Due date
Major maintenance	Concessionaire	[DD/MM/YY]	[DD/MM/YY]
Periodic overlay	Concessionaire	[DD/MM/YY]	[DD/MM/YY]
Pavement inspection using NSV	Authority Engineer	[DD/MM/YY]	[DD/MM/YY]
Roughness using Laser Profilometer	Authority Engineer	[DD/MM/YY]	[DD/MM/YY]
Pavement strength using FWD	Authority Engineer	[DD/MM/YY]	[DD/MM/YY]
Bridge inspection using MBIU	Authority Engineer	[DD/MM/YY]	[DD/MM/YY]
Road sign inspection using Reflectometer	Authority Engineer	[DD/MM/YY]	[DD/MM/YY]
Other			

*All figures and graphs in templates are illustrative. Please add actual details.*

#### 4 Inspection Report

##### 4.1 Summary of NCR issued

SNo	Highway asset	Total NCR issued till previous month (A)	NCR issued in reporting month (B)	NCR closed in reporting month (C)	Balance NCR (A+B-C)
1	Pavement	48	12	25	35
2	Shoulder	7	0	3	4
3	Drainage				
4	Median				
5	Road furniture				
6	Bridges				
7	Buildings				
8	Horticulture				
9	[Other assets]				
	<b>Total</b>				

##### 4.2 Equipment based inspection report

Starting Chainage	Ending Chainage	Lane number	Pavement Surface Defects							Roughness (International Roughness Index)	Pavement Strength		
			Cracks (cm)	Potholes (cm)	Raveling (cm)	Bleeding (cm)	Rutting depth (mm)	Texture depth (mm)	Skid Resistance (mm)		Elastic Modulus Bituminous E1	Elastic Modulus	Elastic Modulus
0.000	0.500	L1	2X10	20X35	2.5X1.2	4X12	25	1.4		4.23	7110	34	14
0.500	1.000	L1	3X5	10X15	1.5X0.8	3X10	24	1.8		2.68	7430	36	15
1.000	1.500	L1											

Report of equipment based inspection needs be provided as an Annexure to monthly report as per the defined frequency. Following documents/media to be submitted for equipment based inspection.

- Video footage of all cameras installed on Network Survey Vehicle- ROW cameras and pavement camera
- Network Survey Vehicle report capturing dimensions of following key metrics of pavement

## Annexure V – Section 5 – Term of Reference, Clause 4.8

- Cracks
- Potholes
- Raveling
- Bleeding
- Rutting
- Texture depth
- Skid resistance
- Roughness (IRI)
- Falling Weight Deflectometer (FWD) report capturing following key metrics of pavement strength
  - Deflection Bowl (Transient Deflections at seven different points)
  - Corrected Elastic Modulus Bituminous E1
  - Corrected Elastic Modulus Granular E2
  - Corrected Elastic Modulus Subgrade E3
  - Subgrade CBR
  - Bituminous layer coefficient A1
  - Base layer coefficient A2
  - Granular base layer coefficient A3
  - Modified structural number
- Mobile Bridge Inspection Report (MBIU) capturing following key metrics of bridges
  - Condition Approach
  - Condition Signs
  - Condition Debris
  - Condition Joint
  - Condition Deck
  - Condition Rails
  - Condition Protect
  - Condition Stream
  - Condition Superstructure
  - Condition Piers
  - Condition Abutment
- Retro reflectometer report capturing following key metrics of road furniture
  - Coefficient of retroreflected luminance  $R_A$  (night time retroreflection) of road traffic signs

All figures and graphs in templates are illustrative. Please add actual details.

## 5 Monitoring of ETC lanes

### 5.1 Monthly ETC Report

TYPE OF VEHICLE			For Corresponding month of previous year		For Previous Month		For Current Month		
			No of vehicles	Fee Collected	No of vehicles	Fee Collected	Fee per vehicle	No of vehicles	Fee Collected
A	Car	Total	3845	384500	4659	465,900.00	100	4289	428,900.00
B	LCV	Total	1521	243360	1312	209,920.00	160	1399	223,840.00
C	Bus	Total	2404	793386	2284	765,207.00	201	2349	786,915.00
D	Truck	Total	1603	528924	1523	510,138.00	134	1566	524,610.00
E	3 Axle	Total	18990	6836400	16310	5,953,150.00	365	15127	5,521,355.00
F	MAV	Total	16119	8381880	21111	11,188,830.00	530	18790	9,958,700.00
G	Over Size	Total	1	630	27	17,280.00	640	36	23,040.00
<b>Total for the Month</b>			<b>49844</b>	<b>18,050,618</b>	<b>52963</b>	<b>19,898,834</b>		<b>49016</b>	<b>18,265,661</b>

### 5.2 On-ground infrastructure report

Total number of plaza lanes =

Total number of dedicated ETC lanes =

Total number of hybrid lanes =

SNo	Description	Total units	Units working	Units damaged/missing	Equipment owner/provider	Equipment as per specifications (Y/N)	Remarks
<b>1</b>	<b>Hardware</b>						
(a)	Over-head transceiver	4	3	1	ABC Co.	Y	
(b)	Hand-held reader						
(c)	Lane controller						
(d)	AVC						
(e)	Camera						
(f)	Weigh-in-motion						
(g)	Static weigh bridge						
(h)	Any other items						
<b>2</b>	<b>Softwares</b>						

**Annexure V – Section 5 – Term of Reference, Clause 4.8**

SNo	Description	Total units	Units working	Units damaged/missing	Equipment owner/provider	Equipment as per specifications (Y/N)	Remarks
(a)	Software – Lane/ Plaza level						
(b)	TMS						
(c)	Any other items						

**5.3 On-ground ETC operations and SLA adherence**

Lane	Average queue length during peak time	Average queue length during non peak time	Average Transaction time (cash)	Average transaction time (RFID)	Average transaction time (cards)	Average transaction time (wallet)	Average transaction time (others)
Lane 1	10 vehicles	5 vehicles	15 seconds	10 seconds	20 seconds	25 seconds	UPI – 20 seconds
Lane 2							
Lane 3							

- Average system uptime = 80%
- Transactions uploaded (as per SLA) = 80%
- Blacklists uploaded (as per SLA) = 50%
- Blacklists downloaded (as per SLA) = 85%

**6 Status of Damages for breach of maintenance activities**

**6.1 Damages for non completion of project facilities**

SNo	Period	Amount of damages (Rs)
1	Upto June 2016	15,00,35,000
2	Jul 2016	2,00,88,000
3	Aug 2016	2,00,88,000
4	Sep 2016	1,94,40,000
	<b>Total</b>	<b>20,96,51,000</b>

**Supporting Calculations for damages for Sep 2016**

- No of days in Sep = 30
- Performance security is Rs 64,80,00,000
- As per CA Clause 12.3.2 damages payable is 0.1% of performance security per day = Rs 6,48,000
- Total damages payable = 30 X 6,48,000 = Rs 1,94,40,000

**6.2 Damages for breach of maintenance activities**

SNo	Period	Amount of damages (Rs)
1	Upto June 2016	1,00,35,000
2	Jul 2016	6,63,196
3	Aug 2016	6,63,196
4	Sep 2016	52,22,444
<b>Total</b>		<b>1,65,83,836</b>

**Supporting Calculations for damages for reporting month**

S No	Nature of defect	Unit	Total Quantity	Rate	Cost o repair as estimated	Damages as per CA	Damages at higher side	Date of inspection	No of days as per CA	Damages from	No of days damages	Damages amount

**6.3 Damages for non completion of major maintenance/ periodic overlay**

SNo	Period	Amount of damages (Rs)
1	June 2016	6,48,000
2	Jul 2016	2,00,88,000
3	Aug 2016	2,00,88,000
4	Sep 2016	1,94,40,000
	<b>Total</b>	<b>6,02,64,000</b>

**Supporting Calculations for damages for Sep 2016**

- No of days in Sep = 30
- Performance security is Rs 64,80,00,000
- As per CA Clause 12.3.2 damages payable is 0.1% of performance security per day = Rs 6,48,000
- Total damages payable = 30 X 6,48,000 = Rs 1,94,40,000

All figures and graphs in templates are illustrative. Please add actual details.

### 7 Change of Scope proposals

SN o	Proposal Details	Date of first submission to AE	Current status	COS Amount	Expected/ Actual date of approval
1	Construction of [Flyover Name] at [Chainage]	[DD/MM/YYYY]	Approved in principle by Authority. Detailed quantities in proper order yet to be submitted	[+/- Amount]	[DD/MM/YYYY]
2	Nallah diversion through box culvert at [Chainage]	[DD/MM/YYYY]	Clarifications to be submitted by Concessionaire, expected date [DD/MM/YYYY]	[+/- Amount]	[DD/MM/YYYY]

### 8 Status of pending disputes

SN o	Dispute Details	Date of first submission to AE	Suggested resolution by AE	Dispute Amount (if applicable)	Current stage
1	Increased tollable length to be applicable in toll fee calculations	[DD/MM/YYYY]	No merit in increasing tollable length hence no action required by <Agency>	NA	SAROD
2	Filling stations energized without obtaining NOC from ministry	[DD/MM/YYYY]	<Agency> to consider the Concessionaire's request for intervention and assistance	[+/- Amount]	B/w Concessionaire and <Agency>

*All figures and graphs in templates are illustrative. Please add actual details.*

## 9 Reports

### 9.1 Monthly Toll Collection Report (Applicable only if project highway is tolled)

TYPE OF VEHICLE		For Corresponding month of previous year		For Previous Month		For Current Month			
		No of vehicles	Fee Collected	No of vehicles	Fee Collected	Fee per vehicle	No of vehicles	Fee Collected	
A	Car	Single	3845	384500	4659	465,900.00	100	4289	428,900.00
		Return	1506	218370	1972	295,800.00	150	1758	263,700.00
		Local	769	38450	979	48,950.00	50	1029	51,450.00
B	LCV	Single	1521	243360	1312	209,920.00	160	1399	223,840.00
		Return	134	31490	162	38,880.00	240	132	31,680.00
		Local	1683	134640	1838	147,040.00	80	1461	116,880.00
C	Bus	Single	2404	793386	2284	765,207.00	201	2349	786,915.00
		Return	359	177903	173	87,567.00	303	203	102,717.00
		Local	277	45738	205	34,782.00	102	318	54,060.00
D	Truck	Single	1603	528924	1523	510,138.00	134	1566	524,610.00
		Return	240	118602	116	58,378.00	202	136	68,478.00
		Local	185	30492	136	23,188.00	68	212	36,040.00
E	3 Axle	Single	18990	6836400	16310	5,953,150.00	365	15127	5,521,355.00
		Return	131	70740	34	18,700.00	550	37	20,350.00
		Local	69	12420	84	15,540.00	185	131	24,235.00
F	MAV	Single	16119	8381880	21111	11,188,830.00	530	18790	9,958,700.00
		Return	2	1550	20	15,800.00	790	35	27,650.00
		Local	6	1560	18	4,770.00	265	8	2,120.00
G	Over Size	Single	1	630	27	17,280.00	640	36	23,040.00
		Return		0	0	-	965		-
		Local		0	0	-	320		-
Total for the Month		49844	18,050,618	52963	19,898,834		49016	18,265,661	

All figures and graphs in templates are illustrative. Please add actual details.

**9.2 Accident Report**

S No	Date	Chainage no	Time of accident	Sex (M/F)	A	B	C	D	E	F	G	H	I	J	K	No of affected persons			Help provided by
					Accident location	Nature of accident	Classification of accident	Causes	Load conditions of vehicle	Road condition	Intersection type of control	Weather condition	Age of victim	Type of victim	Type of vehicle	Fatal	Major	Minor	
1	1/1/17	382/050 RHS	05:25 pm	M	2	2	3	4	1	1	-	1	3	1	3	-	1	1	Ambu

**Mapping of report fields to responses**

A	1. Urban 2. Rural
B	1. Overturned 2. Head On Collision 3. Hit from Back 4. Hit to Fix Object 5. Right turn Collision 6. Left turn Collision 7. Veered Out off The Road 8. Hit Pedestrian 9. Unknown/Hit & Ran Away
C	1. Fatal 2. Major injury 3. Minor injury
D	1. Drunken 2. Over Speeding 3. Vehicle out of Control 4. Driven on wrong side 5. Mechanical Problem 6. Drowsiness/Not Applicable 7. Fault of Driver
E	1. Normally Loaded 2. Overloaded/Handing 3. Empty 4. Unknown
F	1. Straight road 2. Slight Curve 3. Sharp Curve 4. Hump 5. Dip
G	1. T-Junction 2. Y-Junction 3. Four arm Junction 4. Staggered Junction 5. Junction with more than 6. Round about Junction
H	1. Fine/Clear 2. Mist/Fog 3. Cloudy 4. Light Rain 5. Heavy Rain 6. Strong Wind 7. Dust Storm 8. Cold 9. Hot
I	1. 0-18 Years 2. 18-25 Years 3. 25-40 Years 4. 40-60 Years 5. 60-80 Years
J	1. Driver 2. Passenger 3. Pedestrian 4. Cyclist 5. Others
K	1. Two Wheeler 2. Auto Rickshaw 3. Car/Jeep 4. Bus 5. Light Truck 6. Heavy Truck 7. Tractor 8. Bicycle 9. Cycle Rickshaw 10. Hand Drawn Cart 11. Animal Drawn Cart

*All figures and graphs in templates are illustrative. Please add actual details.*

### 9.3 Details of complaints

SNo	Toll plaza	Complaint No	Date	Name of the person	Contact details of person	Details of complaint	Compliance by the concessionaire
1		81	8/9/2016	Mr. Shailendra Gurjar, LIG-44, RSS mohalla, Shivaji Nagar, Bhopal (M.P.)		Mr. Shailendra Complaints regarding Pot holes on the Highway may cause accidents.	Pot holes are repaired
2		82	10/9/2016	Dr. Anil Diwakar, HIG Swarganga Complex Bus Stand Seoni (M.P.)		Dr. Diwakar complaints that presence of Animals and also Pot holes on road are obstructing the driving which may cause accidents.	Animals are continuously driven out from the Road by the Highway Patrolling team and Pot holes are repaired.
3		83	11/9/2016	Maj. Sidharth, 238 Fd wksp C/o- 56 APO		Maj. Sidharth while travelling in personal car wants Exemption from Toll Fee on production of I.D. Card	The Exemption under Indian Toll (Army and Air force) Act 1901, to army personnel travelling in private vehicle may be given if on Govt. duty with requisite pass as specified in the Indian Toll (Army and Air Force Rules, 1942)

*All figures and graphs in templates are illustrative. Please add actual details.*

#### 9.4 Encroachment list

SNo	Stretch Chainage (km)	Side (LHS/RHS)	District/ Tehsil	Village	Encroachment type (Temporary/ Permanent)	Category (Tea stall, Temple, etc)	Establishment (New/ existing)	Distance from road edge (m)	Encroachment width and length	Name of Encroacher
1	212+50 0	LHS	Kurnool	Kurnool	Temporary	Tea stall	New	7	5mX3.5m	Vijay Kumar Reddy
2	213+20 0	RHS	Kurnool	Dinnedevara Padu	Permanent	Godown	Existing	5	10.5m X 4m	Buddana

#### 9.5 Lane Closure Report

S.No	Date	Chainage (Km)		Side	Time of Closure	Reasons for Lane Closure & Approval Details	Remarks
		From	To				
1	9/9/2016	215+30 0	215+35 0	RHS	1pm-4pm	Patch work	

**Section 8 –Integrity Pact**

**10 Annexures**

**Annexure 1: Detailed visual inspection report of project highway**

**Assets to be covered-** Pavement, Shoulder, Drainage, Median, Bridges, Road furniture, Buildings, Horticulture, Service Road

SNo	NCP/ SNo	Date of issue	Description of defect	Chainage	Side	AE Remarks
1	311	15.08.2016	Potholes	311+200	LHS	To be repaired
2	312	15.08.2016	Cracking	311+500	RHS	To be filled immediately
3						
4						

**Annexure 2 onwards:**

AE should include comments, status update, data points and reports in following annexures which have not been included elsewhere in the main report. Such reports may include but not limited to:

- Minutes of review meeting
- Correspondence details
- Weather report
- Organizational chart of Concessionaire and AE
- Project photographs