

RFE No.: NHIIMPL/ TDD / 2026-2027 / 01

Request for Empanelment (“RFE”) issued by National Highways Infra Investment Managers Private Limited (“NHIIMPL “), on behalf of National Highways Infra Trust (“NHIT”), inviting bids for empanelment of Consultants for undertaking Technical Due Diligence Studies.

<u>BID SUMMARY</u>		
(i)	Last date and time for receipt of Bidding Documents	July 20, 2026, by 15:00 hrs
(ii)	Date and Time of Opening of Technical Bids	July 20, 2026, at 17:00 hrs
(iii)	Place of Opening of Bids	Unit No.: 324, 3rd Floor, D21 – Corporate Park, Sector-21, Dwarka –110077, Delhi

Note: – Bids will be opened in the presence of bidders who choose to attend as above.

National Highways Infra Investment Managers (P) Ltd.

Unit No.: 324, 3rd Floor, D21 – Corporate Park,
Sector-21, Dwarka –110077, Delhi

Email: tender@nhit.co.in

Date: 08-07-2026

Table of Contents

1	Disclaimer	3
2	Section 1 – Notice Inviting Tender.....	4
3	Section 2 – Instructions to the Bidders	6
4	Section 3 – Scope of work	21
5	Section 4 – Form of Technical Proposal	36
6	Section 5 – Form of Financial Proposal	38
7	Section 6 – Undertakings.....	40
8	Glossary	41
9	Annexures.....	42
10	Appendix-1.....	43
11	Appendix-2.....	43
12	Appendix-3.....	43
13	Appendix-4.....	44
14	Appendix-5.....	44

1 Disclaimer

The information contained in this Request for Empanelment ("RFE") or subsequently provided to Bidder(s), in documentary or any other form by or on behalf of NHIIMPL, by person(s) authorized to do so, is provided to the interested parties on the terms and conditions set out in this RFE and such other terms and conditions subject to which such information is provided.

This RFE is not an agreement and is neither an offer nor an invitation by NHIIMPL to interested parties who submit their quote (henceforth "Bidders" or "Service Provider") in response to this RFE. The purpose of this RFE is to provide Bidders with information that may be useful to them in preparing and submitting their proposals ("Proposal" or "Bid") for selection as vendor for NHIIMPL as per notified norms.

NHIIMPL makes no representation or warranty and shall have no liability to any person or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFE or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFE and any assessment, assumption, statement or information contained herein or deemed to form part of this RFE or arising in any way from this process.

A Bidder must warrant that all the information provided by it to NHIIMPL at the time of application & subsequently, is true to the best of its knowledge and belief, and specially warrants that it has duly complied with the provisions of laws applicable to it. Bidder indemnifies NHIIMPL from any liabilities arising out of error or default or negligence or contravention regarding any of the applicable laws, including, but not limited to, submission of statutory forms & other such documents.

The issue of this RFE does not imply that NHIIMPL is bound to select any Bidder(s) or select any Bidder(s) for any project. NHIIMPL may accept or reject any proposal in its discretion and may ask for any additional information or vary its requirements, add to, or amend the terms, procedure and protocol set out in RFE for bona fide reasons, which will be notified to all the Bidders invited to tender. Further NHIIMPL hereby reserves its right to annul the process at any time prior to issuance of Letter of Award/Work Order without incurring any liability towards the Bidders.

The Bidders shall bear all costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by NHIIMPL, or any other costs incurred regarding or relating to its Bid. All such costs and expenses will remain with the Bidder and NHIIMPL shall not be liable in any manner for the same or for any other costs or expenses incurred by a Bidders in preparation or submission of the Bid, regardless of the conduct or outcome of this RFE and the related processes

2 Section 1 – Notice Inviting Tender

- 1 The National Highways Infra Investment Managers (P) Ltd. (hereinafter referred to as “NHIIMPL”), invites bids from reputed parties for providing **“Technical Due Diligence Studies”** as detailed in this Request for Empanelment (“RFE”).
- 2 Service Provider will be selected under Quality and Cost Based Selection (“QCBS”) method as described in this RFE and in accordance with the practices of NHIIMPL.
- 3 The RFE includes the following documents:

Section 1 – Notice Inviting Tender

Section 2 – Instructions to Bidders

Section 3 – Scope of work

Section 4 – Form of Technical proposal

Section 5 – Form of Financial proposal

Section 6 – Undertakings

Annexure (s)

- 4 Brief Description of Bidding Process:
 - 4.1 NHIIMPL has adopted two stage evaluation process for selection of the Bidder(s) for award of the work: the technical bid (the “Technical Bid”) and the financial bid (the “Financial Bid”) containing the amount quoted by the Bidder shall be submitted in physical form in the prescribed format (To clarify, the documents should be serially numbered and hard/spiral bound) in the manner and before the date and time specified herein.
 - 4.2 After the submission of technical bids, each of the Bidders shall be invited for making presentation of their proposal to NHIIMPL. The date and time of presentations would be intimated to Bidders separately by NHIIMPL through email. The Presentation shall be made through either video-conferencing facility or in person meeting at NHIIMPL office.
 - 4.3 Only those Bidders whose Technical Bids are found to be responsive and meeting the Minimum Eligibility Criteria (hereinafter referred to as Technically Qualified Bidders) in terms of this RFE, shall be invited to participate in the opening of their Financial Bids. The technically qualified bidders may send their authorized representatives along with authorization letter on the letter head of the bidder for participation in the opening of the financial bid. The date and time of opening of Financial Bids of such Bidders, will be intimated to them separately by NHIIMPL through email or uploaded on NHIT website (<https://nhit.co.in>). The Financial Bids will be opened physically at the location provided in this document. Only one representative of the Technically Qualified Bidder shall be allowed to attend the opening of the Financial Bids.

4.4 The financial proposal of each technically qualified bidder shall be opened and evaluated.

- 5 Any queries or request for additional information concerning the RFE shall be submitted in writing and/or e-mail to the officer designated below. The envelope / email communication shall clearly bear the following identification/title:

"Queries/Request for Additional Information: RFE issued by "NHIIMPL" for "Technical Due Diligence Studies"

- 6 Address for Communication:

Mr. Mathew George, CFO
National Highways Infra Investment Managers (P) Ltd.
Unit No.: 324, 3rd Floor, D21 - Corporate Park, Sector-21, Dwarka -110077, Delhi
E mail: tender@nhit.co.in

- 7 Schedule of Bidding Process:

NHIIMPL shall endeavour to adhere to the following schedule:

Sr. No.	Description of Events	Date
(i)	Last date for receiving queries from bidders	July 13, 2026
(ii)	Pre-bid queries	No pre-bid meeting. The bidders have to submit their queries through email which will be replied at NHIT website/ through email.
(iii)	NHIIMPL's response to queries latest by	July 15, 2026
(iv)	Bid due date (Last date for bid submission)	July 20, 2026, by 1500 hrs
(v)	Opening of Technical bids	July 20, 2026, at 1700 hrs
(vi)	Presentations by Bidders	Will be intimated later
(vii)	Opening of Financial bids	Will be intimated later to technically qualified bidders
(viii)	Validity of proposal	120 days from Bid Due Date

3 Section 2 – Instructions to the Bidders

1 Introduction:

- 1.1 About the company: Please refer our website: www.nhit.co.in

2 Proposal:

- 2.1 National Highways Infra Investment Managers (P) Ltd. seeks proposal from reputed parties for “Technical Due Diligence Studies” as per the detailed scope of work as given in Section 3 – Scope of Work of the RFE document (“Services”).

3 Clarification and Amendment of RFE Documents:

- 3.1 Bidders may request a clarification on any of the RFE documents up to time mentioned in Section 1. Any request for clarification must be sent in writing to National Highways Infra Investment Managers (P) Ltd.’s address indicated in the RFE or by e-mail to tender@nhit.co.in. NHIIMPL will respond in writing, or by e-mail/ uploading responses on website or will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders. Should NHIIMPL deem it necessary to amend the RFE because of a clarification, it shall do so following established procedure.
- 3.2 At any time before the submission of Bids, NHIIMPL may amend the RFE by issuing an addendum/ amendment / corrigendum in writing or by standard electronic means. The addendum/ amendment shall be uploaded on the website of NHIT at <https://nhit.co.in> which will be binding on all participating bidders. To give Bidders reasonable time in which to take an addendum/ amendment into account in their Bids, NHIIMPL may, if the addendum/ amendment / corrigendum is substantial, extend the deadline for the submission of Bids.
- 3.3 It will be the responsibility of the bidders to keep track of any uploaded addendum/ amendment before submission of the bid.

4 Submission of proposal

- 4.1 The proposal shall be submitted as indicated below:
- 4.1.1 **Envelope I**, containing the Technical Proposal of the consultant. The proposal should be in the manner and format as prescribed in RFE Section 4 – Form of Technical Bid.
- 4.1.2 **Envelope II**, containing the Financial Proposal of the consultant. The proposal should be in the manner and format as prescribed in Section 5 – Form of Financial Bid. The financial proposal of only those Bidders shall be opened which meet the technical criteria. Please note that proposals with any conditionality will be summarily rejected.

- 4.2 The above proposals (i.e. the aforesaid two envelopes put in a single sealed envelope marked as “Bid – Proposal **“Request for Empanelment (“RFE”) issued by National Highways Infra Investment Managers Private Limited (“NHIIMPL”), on behalf of National Highways Infra Trust (“NHIT”), inviting bids for empanelment of Consultants for undertaking Technical Due Diligence Studies.**” should reach the undersigned, latest by date/time mentioned in the Section 1 – Notice inviting Tender, in hard copies/in original and shall remain valid for 120 days thereafter. The proposal should be signed by the authorized signatory of your entity. No proposal will be entertained after the due time and date, as stated above. National Highways Infra Investment Managers (P) Ltd. shall not be responsible for any delay whatsoever in nature. The proposals received after the due time and date, will be summarily rejected.
- 4.3 National Highways Infra Investment Managers (P) Ltd. reserves the right to accept or reject any or all the offers received without assigning any reason. For any clarification, you may feel free to contact the undersigned.

5 Modification/Substitution/Withdrawal of Bids:

- 5.1 The Bidder may substitute or withdraw its bid after submission prior to the Bid due date. No Bid shall be allowed to be substituted or withdrawn by the Bidder on or after the Bid due date.
- 5.2 Any alteration/modification in the Bid or additional information supplied after the Bid Due Date, unless the same has been expressly sought for by NHIIMPL, shall be disregarded.
- 5.3 Partial modification of the Bid is not allowed. The Bidder will have to submit the revised bid again in a sealed envelope, as per clause 4 above, mentioning “Revised Bid” on the top of the sealed envelope and the original bid envelope will be returned to the Bidder. No Technical or Financial Bid may be modified after Bid Due Date. Withdrawal or modification of Technical or Financial Bids between the Bid Due Date and Expiration of Bid validity shall result into disqualification from the bidding process.

6 Opening and Evaluation of the Bids:

- 6.1 The Technical Bids will be opened after the due date at the time prescribed in the RFE document in the presence of the Bidders who choose to attend. NHIIMPL will subsequently examine and evaluate the Bids in accordance with the provisions set out.
- 6.2 After the submission of technical bids, each of the Bidders shall be invited for making presentation of their proposal to NHIIMPL. The date and time of presentations would be intimated to Bidders separately by “NHIIMPL” through email. The Presentation shall be made either through video-conferencing facility or in person meeting at Unit No.: 324, 3rd Floor, D21 – Corporate Park, Sector-21, Dwarka –110077, Delhi.
- 6.3 Prior to evaluation of the Technical Bids, the NHIIMPL shall determine whether each Bid is responsive to the requirements of this RFE.

- 6.4 Financial Bid of non-responsive Bidders shall not be opened.
- 6.5 To assist in the examination, evaluation, and comparison of Bids, National Highways Infra Investment Managers (P) Ltd. may, at its discretion, ask any Bidder for clarification of its Bid. The request for clarification and the response shall be in writing or by email, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by "NHII MPL" in the evaluation of the Bids.
- 6.6 The Bidders would be evaluated on the criteria mentioned in Section 4 of this RFE and shortlisted for the purpose of opening of their Financial Bids.
- 6.7 Except in case any clarification is asked by "NHII MPL", no Bidder shall contact National Highways Infra Investment Managers (P) Ltd. on any matter relating to its Bid from the time of the Bid opening to the time the contract is awarded. If any Bidder wishes to bring additional information to the notice of "NHII MPL", it should do so in writing at the address prescribed in the Notice Inviting Tender.

7 Prior to evaluation of the Bids, National Highways Infra Investment Managers (P) Ltd. shall determine as to whether each Bid is responsive to the requirements of this RFE document. A Bid will be declared non-responsive in case:

- 7.1 If a Bidder submits more than one Bid against this RFE.
- 7.2 The physical bid submissions are incomplete/ inadequate to the requirements of the RFE Documents.
- 7.3 Documents are submitted loose. (To clarify, the documents should be serially numbered and be submitted in hard bound / spiral bound).
- 7.4 If in case the Power of Attorney or the Authority Letter is not provided the draft mentioned in this RFE.
- 7.5 If a Bidder submits a conditional Bid or makes changes in the terms and conditions given in this RFE document.
- 7.6 Failure to comply with all the requirements of RFE document by a Bidder.
- 7.7 If the Bid is not submitted in the formats prescribed in the RFE document.
- 7.8 If any requisite document/ certificate is not in the prescribed format the same shall not be considered while evaluating the bids and the same may lead to Bid being declared as non- responsive.

7.9 If the envelope containing physical submission is not sealed and marked as prescribed in the RFE document.

7.10 A Bid valid for a period of time shorter than prescribed in the RFE document.

8 Conflict of Interest:

8.1 Bidders at all times shall provide professional, objective, and impartial advice and at all times hold the NHIIMPL's interest paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work.

8.2 Non-Disclosure Agreement ("NDA") clause to be signed between the Issuing Entity / Entities and Successful Bidder post release of the LOA, wherever applicable.

9 Fraud & Corruption:

9.1 Bidders would be required to observe the highest standard of ethics during the selection and execution of such work. National Highways Infra Investment Managers (P) Ltd. defines:

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

9.1.2 "Fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the NHIIMPL and includes collusive practices among bidders (prior to or after submission of proposals) and to deprive the NHIIMPL of the benefits of free and open competition.

9.2 NHIIMPL will reject a proposal for appointment if it determines that the bidder recommended for engagement has engaged in corrupt or fraudulent activities in competing for the work in question.

9.3 NHIIMPL will declare a bidder ineligible, either indefinitely or for a stated period of time, to be engaged if it at any time determines that the bidder has engaged in corrupt or fraudulent practices in the bidding process for engagement for the subject work.

9.4 The bidder declared ineligible for corrupt and fraudulent practices by NHIIMPL in accordance with the above paras shall not be eligible for selection.

10 Consortium of Bidders is not allowed.

11 Proposed Team

For each assignment, the selected Empanelled Consultant shall deploy a team comprising at least 1 Team Leader, 1 Bridge Engineer, 1 Highway cum Pavement Engineer, 1 Quantity Surveyor and 1 System Expert. Detailed CV of the personnel certified by Authorized Signatory of the Bidder to be provided along with the Bid.

The above-mentioned professionals are defined as under:

- 11.1 **Team Leader** – A professional on the rolls of the Bidder with B. Tech / B.E. or equivalent in Civil Engineering along with Master's in Highway/Bridge/Structural/Pavement Engineering and having at least 15 years of relevant work experience as on 30.06.2026
- 11.2 **Bridge Engineer** – A professional on the rolls of the Bidder with B. Tech / B.E. or equivalent in Civil Engineering along with Master's in Bridge/Structural Engineering and having at least 10 years of relevant work experience as on 30.06.2026
- 11.3 **Highway cum Pavement Engineer** – A professional on the rolls of the Bidder with B. Tech / B.E. or equivalent in Civil Engineering along with Master's in Highway / Pavement / Transport Engineering and having at least 10 years of relevant work experience as on 30.06.2026
- 11.4 **Quantity Surveyor** – A professional on the rolls of the Bidder with B. Tech / B.E./ Diploma or equivalent in Civil Engineering and having at least 10 years of relevant work experience as on 30.06.2026
- 11.5 **Systems Expert** – A professional with B. Tech / B.E. or equivalent in Electronics / Telecommunications / Computer / Information Technology Engineering and having at least 10 years of relevant work experience as on 30.06.2026. Bidder may also hire services of a dedicated consultant for services to be provided. In such case, document of tie-up with dedicated consultant to be provided.
- 11.6 **Electric Engineer** – A professional with B. Tech / B.E. or equivalent in Electrical Engineering and having at least 10 years of relevant work experience as on 30.06.2026. Bidder may also hire services of a dedicated consultant for services to be provided. In such case, document of tie-up with dedicated consultant to be provided.

12 Minimum Eligibility Criteria:

- 12.1 The Bidder/Company should have an annual revenue/ turnover of not less than INR 25 crores during the last three financial years ending 31/03/2024, 31/03/2025 and 31/03/2026. Certified copies of financial statements or certificate of turnover from Statutory Auditor/ Chartered Accountant of the Bidder to be submitted along with the bid.
- 12.2 The Bidder should have experience of completed / ongoing projects for conducting technical due diligence studies for at least 15 Qualifying Projects since January 1st,

2016. Certified copies of completion certificate issued by client or any other documentary proof (signed by Statutory Auditor / Chartered Accountant) of completion to be provided.

For the purpose of this RFE, Qualifying Project shall mean an Expressway / National Highway project in India of 4 or more lanes and minimum length of 50 km.

- 12.3 The Bidder shall not be an associate of the Sponsor i.e., NHAI, or NHIIMPL or NHIT or IDBI Trusteeship Services Limited or SPVs under NHIT.
- 12.4 The Bidder should have a minimum technical score of 75 marks as per evaluation criteria mentioned in Section 4 including their presentation scores. Only those bidders who score minimum 75 marks shall be considered as Technically Qualified Bidder.
- 12.5 **Legal Entity:** The bidder should be a Legal Entity registered under the Companies Act, 2013 or the Companies Act, 1956 OR a Limited Liability Partnership (LLP) registered under the LLP Act, 2008 or Indian Partnership Act 1932.
- 12.6 **Blacklisting:** The bidder should not be debarred/ blacklisted by NHIIMPL or NHIT or SPVs under NHIT or CPSU or SPSU or Government companies or Government organizations or regulatory authorities in India as on date of submission of the Bid
- 12.7 **Legal:** The bidder should not be subjected to any legal action for any cause in any legal jurisdiction in the last five years which would materially affect its ability to perform under this RFE

13 Tax / GST Payment:

The bidder must have a valid GST Registration and PAN in India. In case of payment to a GST registered supplier, GST amount as claimed in the invoices by the consultant/contractor /vendor in terms of provisions mentioned in the Contract Agreement/Purchase Order may be paid along with their invoices subject to:

- 13.1 The GST portion that would be released would be proportionate to the amount of work certified as due for payment.
- 13.2 If the GST for any previous invoice is not reflected or reflected incorrectly in GSTR-2B after the due date of filing Return under GST Act is over, then for further payments the GST portion will be withheld till the previous GST amount is reflected accurately in GSTR-2B and position to the extent as depicted above is rectified.
- 13.3 The GST portion for the final invoice will be withheld till the GST of all invoices including the final invoice are accurately reflected in the GSTR-2B.
- 13.4 If a consultant/contractor/vendor abandons their work before completion, the unpaid GST portion of all invoices raised by them shall be withheld until the GST portion for the said invoices are reflected accurately in GSTR-2B.

14 Dis-qualification Criteria:

The company may at its sole discretion and at any time during the evaluation of proposal, disqualify any respondent, if the respondent:

- 14.1 Submitted the proposal documents after the response deadline.
 - 14.1.1 Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
 - 14.1.2 Failed to provide related clarifications, when sought.
 - 14.1.3 Respondent or its partners declared ineligible by NHIIMPL / NHIT / SPVs under NHIT / CPSU/ SPSU/ Government companies/ Government organizations/ regulatory authorities for corrupt and fraudulent practices or blacklisted.
 - 14.1.4 Bidders who submit their bid as JV other than as provided in this document, to meet eligibility criteria will not be considered as qualified bidder. Such, JV bidder will be considered ineligible and summarily rejected.
 - 14.1.5 The Employer reserves the right to reject any or all Bids/Quotations and/or cancel or withdraw the Tender/RFQ at any stage without assigning any reason whatsoever, and no Bidder, intending Bidder or Vendor shall have any claim arising out of such action. Without prejudice to the foregoing, the Employer further reserves the right to declare ineligible or reject the Bids/ Quotations of any empanelled Bidder/Vendor whose performance under any contract/work order with the Employer, or with any State Government, Central Government, statutory authority, or Public Sector Undertaking, has been found unsatisfactory within the preceding three (3) years, including but not limited to cases involving non-compliances, issuance of warning notices or deficiency letters, repeated breaches of contractual obligations, or imposition of penalties, deductions, or any other contractual remedies or actions on account thereof.

15 Technical Evaluation Criteria:

- 15.1 Technical Evaluation shall be based on the Technical Bid submitted by the Bidders as per Section 4 – Form of Technical Proposal.
- 15.2 The evaluation of the Technical Proposals shall be carried out on a maximum score of 100 as per the methodology mentioned in Section 4 Form of Technical Proposal. For the computation of combined score, the technical scores will be given a weightage of 80% as follows:

- *Weighted technical scores (TS) = Total technical score x 0.80*

- Where Total technical score total would be as computed under Section 4.

15.3 The Technical Proposal shall be submitted in physical form along with all supporting documentation/ information as mentioned along with the criteria.

15.3.1 The presentation need not be included in the Technical Proposal. The Presentation shall be made as per schedule communicated by **NHIIMPL** and a copy of presentation to be submitted on email at the time of presentation.

15.3.2 The presentation shall cover the following and shall be evaluated accordingly:

15.3.2.1 Experience in conducting Technical Due Diligence Studies for National Highways and Expressways;

15.3.2.2 Experience, capability and strength of the Proposed Team.

15.3.2.3 Experience in conducting technical due diligence with visual inspection and testing of major bridges, flyovers and other similar structures

15.3.2.4 Elaborate the Work approach:

15.3.2.4.1 Equipment & software proposed to be used for material/ project testing, survey & investigation. In case of tie-ups with external agencies, details of collaboration to be shared by the Bidder during presentation

15.3.2.4.2 Provide plan to showcase resource capacity to undertake the study within given timelines

15.4 The Bidders would be evaluated on the criteria mentioned in the Section - 4 based on their Proposals received and shortlisted for the purpose of opening of their Financial Bids.

16 Financial Proposal:

16.1 After the short listing of Bidders based on their Technical Proposal including the presentation, the Financial Proposals of only Technically Qualified Bidders would be opened. The Technically Qualified Bidders, if they so desire, may remain present at the time of opening of the Financial Proposals. The date and time of opening of the Financial Proposals would be shared with the Technically Qualified Bidders.

16.2 The Financial Proposal of the Technically Qualified Bidders will be given a weightage of 20%. The lowest price bid shall be given a financial score of 20 and the financial score of other bidders shall be made inversely proportionate to their prices as follows:

- The Lowest Financial Proposal ("LFP") will be given a Financial Score ("FS") of 20 points.

- $FS \text{ (other bidders)} = 20 \times LFP / F$ (F= amount of Financial Proposal)

- 16.3 For the purposes of deriving lowest financial proposal, the bid fee quoted for Technical Due Diligence study shall be considered.
- 16.4 For additional services the lowest unit rate discovered for the respective services shall be considered for award of additional services to empanelled bidders.

17 Procedure for Selection of Empanelled Consultants:

- 17.1 Post qualification of the minimum eligibility criteria, the bidder(s) will be selected under Quality and Cost Based Selection method as described in this section and in accordance with the practices of NHIIMPL.
- 17.2 Proposals will finally be ranked according to their combined Technical score (TS) and Financial Score (FS) as follows:

- $S = TS + FS$

- 17.3 The combined score on the basis of Quality and Cost Based System (QCBS) of technical and financial proposals will determine the H1, H2, H3 and so on. The bidder scoring the highest points/marks (H1) based on the above principles would be selected as the First Technical Consultant to be empanelled as Service Provider for "Technical Due Diligence Studies" .
- 17.4 Thereafter, sequentially the Technically Qualified bidders based on their ranking (H2, H3 and so on) would be asked to accept the fee quoted by H1 bidder ("**Discovered Fee**") or its respective Base Fee (as quoted in Section 5), whichever is lower; this process will be followed till the requisite number of consultants are selected for empanelment ("**Empanelled Consultant**").
- 17.5 National Highways Infra Investment Managers (P) Ltd. , proposes to empanel **Three Technical Consultant**. However, NHIIMPL reserves the right to modify the number of consultants to be empanelled at its discretion.
- 17.6 The allocation of projects between Empanelled Consultants will be done by NHIIMPL at its discretion. Accordingly, NHIIMPL has the right to award the work to any of the Empanelled Consultant, depending on the exigencies, nature and magnitude of the Services.
- 17.7 In case two or more Bidders have a tie in their combined scores, the relative rankings would be determined such that the Bidder with higher technical score (as computed in Section 4 (Technical Proposal) will get higher ranking. Further, in case the tied Bidders also have a tie in their technical scores, the relative rankings would be determined basis the Bidder with higher Criteria 1 score obtained as per its Technical Proposal (Section 4).

18 Nature of Assignments & Fees Structure:

18.1 The below table broadly indicate the possible nature of the potential Services expected during the empanelled period. The Services have been categorized as under:

S No	Assignment Name	Scope	Assignment Fee (excl. GST)
1	Technical Due Diligence Study	As per Section 3 Clause 3	100% of Eligible Fee
2	Field Investigations	As per Section 3 Clause 4	70% of Eligible Fee
3	Periodic Review	As per Section 3 Clause 5	80% of Eligible Fee
4	Periodic Review without Instrument based Survey	As per Section 3 Clause 6	20% of Eligible Fee

18.2 For the purpose of fee computation, **Eligible Fee** is defined as the Discovered Fee or the Base Fee whichever is applicable to the respective empanelled consultant as elaborated in clause 17.4, 17.5, 17.6 & 17.7 above of this Section 2.

19 Change of Scope

19.1 In the event of any modification of the scope of the Services including but not limited to any additional work, as required by the NHIIMPL/ NHIT, such modification may be carried out on the basis of underlying principles of this RFE and thereafter, mutually agreed between the parties. If the work is similar but with less scope, then proportionate method would be applied. If the additional work is on time estimated basis then fees will be based on expected time.

20 Timelines & Payments Schedule

20.1 The payment for the respective assignment shall be milestone linked and shall be made only post submission of invoice as per following milestones:

S. No	Assignment Name	Milestone	Timelines	Payment of applicable Fee as %
1	Technical Due Diligence Study	Completion of Surveys & Red Flag / Critical issues report	4 weeks	30% on submission of Critical issues report and Field Investigation data
		Draft Report	6 weeks	30% on submission of draft report
		Final Report	1 week post receipt of comments	40% on acceptance of final report and Submission of all relevant data in Hard disk
2	Field Investigations	Completion of Surveys	4 weeks	100% on submission of Field Investigation data, test result report and recommendation for remedial measures (if any) and Submission of all relevant data in Hard disk
3	Periodic Review	Draft Report	4 weeks	50% on submission of draft report

		Final Report	1 week post receipt of comments	50% on acceptance of final report and Submission of all relevant data in Hard disk
4	Periodic Review without Instrument based Instrument based Survey	Draft Report	2 weeks	50% on submission of draft report
		Final Report	1 week post receipt of comments	50% on acceptance of final report and Submission of all relevant data in Hard disk

The definition of lane-km fee is as follows: if the assigned project has “A” number of lanes and a length of “B” km, then the lane-km for billing purposes shall be calculated as $A \times B$. However, all surveys, including instrument-based and visual surveys, shall be carried out on all lanes of the assigned project highway, as per the scope mentioned in Section 3.

Deduction in lane-km from the fee shall be applicable as follows: Full fee corresponding to the affected lane-km shall be deducted if NSV and FWD surveys are not conducted over any continuous stretch exceeding 2 km in any direction of the Main Carriageway (MCW) due to construction, repair, rehabilitation, or maintenance activities.

No deduction shall be applicable where NSV and FWD surveys are not conducted over a continuous stretch of less than 2 km in any direction of the MCW due to construction, repair, rehabilitation, or maintenance activities.

21 Documents to be submitted along with the Technical bids:

- 21.1 Either power of attorney or an authority letter from Partner/ Board / Managing Committee of the Bidder entity should be provided for authentication of the authorized signatory signing the bid document.
- 21.2 Technical bid in the form provided in the RFE duly signed by the authorized representative of the bidder on all pages.
- 21.3 Detailed CV of the personnel of Proposed Team certified by Authorized Signatory of the Bidder.
- 21.4 Documents in support of the claims of bidder regarding eligibility/ experience duly signed by the authorized representative of the bidder on all pages. NHIMPL may ask for 3rd party certificates from the Bidder(s), at a later stage.
- 21.5 Undertaking in the format provided in the RFE duly signed by the authorized representative of the bidder on all pages.

22 MSME Agency/Firm:

Bidder shall confirm if they are/are not registered as Micro Enterprise/ Small Enterprise/ Medium Enterprise. The registered Bidder shall submit Registration no. along with Registration Certificate issued. Bidder shall also confirm that any change in Status of their organization under the above Act shall be duly informed to NHIIMPL. Any failure on their part in informing them about changed status shall be sole responsibility of Bidder.

23 Indemnification:

The Agency shall hold the harmless and shall indemnify the same against all claims, penalties, fines, losses, damages, costs and proceedings arising from the breach or contravention of any laws, rules and regulations referred to in this order

24 Limitation of Liability:

24.1 Parties comprising of (NHIIMPL and successful bidder, mutually agree;

24.1.1 That upon issuance of Letter of Award ("LoA"), neither party excludes any liability arising from its own fraud or fraudulent misrepresentation.

24.1.2 That neither party shall in any way be held liable towards the other party for any of the other party's or its affiliates' consequential or indirect loss, including but not limited to interruption or loss of business, contract or revenue, loss of goodwill, loss of profit, loss of production, wasted overhead, cost of substitute equipment, downtime costs or other special, punitive or other forms of indirect losses, howsoever such may arise, whether under contract, tort (including negligence), strict liability or otherwise.

24.1.3 In case of fraud or fraudulent misrepresentation or other similar circumstance for which a party may not lawfully limit its liability under this RFE's applicable law, successful bidder's maximum cumulative liability (and whether in contract, tort including without limitation negligence, breach of statutory duty, under any indemnity or otherwise howsoever) arising out of or related to a Work / service Order under this RFE and the performance or non-performance of any Work or Deliverables shall be limited to the lesser of (a) a sum equal to 5 (five) times the remuneration paid to the Successful bidder under the relevant Work Order.

24.1.4 That, no claims shall be set forth later than twenty-four (24) months following the delivery of the Deliverables, or if none, notice of the completion of the Work under the relevant Work / Service Order

24.2 Undertaking in the format provided in the RFE duly signed by the authorized representative of the bidder on all pages.

25 Key Terms and Conditions of Empanelment

25.1 The duration of each Empanelment will be for a period of 2 (Two) Years. However, NHIIMPL reserves the right to curtail or extend the validity period of empanelment.

- 25.2 NHIIMPL will have the right to remove any Empanelled Consultant from the empanelled list without assigning any reason whatsoever and without any cost & compensation therefore.
- 25.3 The Empanelled Consultant(s) is/are expected to maintain high level of professional ethics and will not act in any manner, which is detrimental to NHIIMPL's Interest.
- 25.4 Each Empanelled Consultant will maintain confidentiality on matters disclosed.
- 25.5 The Technical study conducted for any existing or future asset of NHIIMPL will be the property of the NHIIMPL and it can be repeatedly used by NHIIMPL for its disclosed and undisclosed purposes.
- 25.6 Each bidder should undertake that during the empanelment period, the Empanelled Consultant would make no change in the composition of the Proposed Team (as submitted in the Technical Proposal) and if any change happens, then the replacement should have credentials higher or equivalent to the exiting member.

26 Anti-Bribery & Corruption (ABC) Policy:

It is our policy to conduct all our business in an honest and ethical manner. We take a zero-tolerance approach to Bribery and Corruption and are committed to acting professionally, fairly and with integrity in all our business dealings and relationships wherever we operate and implementing and enforcing effective systems to counter bribery. Requested to report improper demands from the employees of NHIT entities. You may address the same through email at whistleblow@nhit.co.in.

27 Financial Bids / Fees:

- 27.1 The Bidder is required to submit financial proposal as per Section 5 – Form of Financial Proposal.
- 27.2 The fee quoted should be unconditional.
- 27.3 NHIIMPL shall pay the Empanelled Consultant the applicable fees as detailed in Section 2 above, as sole compensation for the performance of the Services for the respective assignment.
- 27.4 The fees shall be payable as per payment schedule after submission of appropriate tax invoice.
- 27.5 All the expenses including those related to the scope of work, travelling, manpower, equipment or any other out-of-pocket expense shall be borne by the Empanelled Consultant. The travel related expenses of NHIIMPL officials / its affiliates or any other advisor appointed by NHIIMPL, if any, will be borne by NHIIMPL.

28 Dispute Resolution:

Any dispute arising out of the RFE, which cannot be amicably settled between the parties, shall be referred to arbitration in accordance with the Arbitration and Conciliation Act, 1996 through a panel of three arbitrators, with each of National Highways Infra Investment Managers (P) Ltd. and the remaining disputing party(s) appointing one arbitrator and the two arbitrators so appointed appointing a third arbitrator. Provided that in the event that any disputing parties fail to appoint an arbitrator within 15 days from the dispute being referred to arbitration, the other parties shall be at liberty to appoint an arbitrator for such disputing party(s) and such appointment shall be final and binding on the other disputing parties. The venue of the arbitration shall be at New Delhi.

29 Force Majeure:

A Force Majeure (FM) means extraordinary events or circumstance beyond human control such as an event described as an act of God (like a natural calamity) or events such as a war, strike, riots, crimes (but not including negligence or wrong-doing, predictable/seasonal rain and any other events specifically excluded in the clause). In the case of an FM, the contract frees both parties (NHIIMPL & the Agency/Firm) from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. However, this does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The parties have to give notice of FM as soon as it occurs, and it cannot be claimed ex-post facto. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (Ninety) days, NHIIMPL may at its option terminate the contract without any financial repercussion on other side. Notwithstanding the punitive provisions contained in the contract for delay or breach of contract, the Agency/Firm would not be liable for imposition of any such sanction so long as the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event covered in the FM clause.

30 Ethics & integrity:

The selected agency/firm is/are expected to maintain a high level of professional ethics and will not act in any manner, which is detrimental to NHIIMPL Interest.

31 Matter of Confidentiality:

Each agency/firm Agency/firm will maintain confidentiality on matters disclosed.

32 LOA/LoE Acknowledgement:

As a token of acceptance, you are requested to acknowledge the receipt of LoA/LoE with official seal & sign form the authorized signatory along with all Annexures (if any) – within 3 working days of Issuance and initiate the process for the signing of the Agreement.

33 Right of Removal:

National Highways Infra Investment Managers (P) Ltd. will have the right to remove any selected Agency/firm from the selection list without assigning any reason whatsoever and without any cost & compensation therefore NHIIMPL also reserves the right to replace/remove/ Empanel any new agency/firm as the Agency/firm for an ongoing or future Requirements at any stage.

34 General Terms and Conditions:

- 34.1 The agency/firm is solely responsible for ensuring the timely submission of their Bids at our office.
- 34.2 The agency/firm shall not sublet, subcontract, transfer or assign the package and should offer Terms with 100% Capacity.
- 34.3 The undersigned reserves the right to reject any or all bids without assigning any reason or whatsoever.

4 Section 3 – Scope of work

1 The proposed objective is to engage an agency / firm to provide **“Technical Due Diligence Studies”**

2 **Special Requirements:**

Consultant shall fulfil following survey requirements during various studies stipulated in clause 3, clause 4 and clause 5 of section 3.

2.1 **NSV Survey**

2.1.1 Survey Requirements:

- a) The Consultant shall conduct NSV surveys on all project lanes, including main carriageways, service roads, loops, and ramps. This includes both flexible and rigid pavement sections.
- b) The Consultant shall utilize advanced survey techniques, incorporating laser technology, GPS, and video imaging to collect the required data at highway speeds.
- c) The Bidder shall collect all pavement distresses data at interval of 10m in case of flexible pavement and panel wise data (distance between two transverse joint) in case of rigid pavement.

2.1.2 Data Collection Obligations:

The Consultant shall use 3D laser-based NSV System capable of automatically detecting, measuring and counting the following defects without and human intervention with distance triggered mechanism as per required accuracy and resolution.

Sr. No.	Defects/object	Functional and performance requirement
1	3D laser based NSV System capable of following defect measurements	
	Crack measurement	Length, Width, Depth, Area and counting
	Sealed Crack area	Area and counting
	Ravelling	Area
	Patch area	Area and counting
	Pothole	Area, Depth, Counting and type of pothole
	Edge Break	Length and Area
	Concrete	Joint Module
		Spalling and Fault measurement
	Bridge	Width of expansion joint, differential height at expansion joint
	Bridge approach	Riding quality measurement
	Road Geometry	Gradient, slope and cross slope, Horizontal curvature and vertical curvature
	Texture	Macro Texture measurement (MPD & MTD) in all 5 AASHTO bands
	Roughness	Roughness of Entire Lane width as per ASTM E 950
	Rutting	Depth and Width measurement for entire lane as per ASTM E1703 Standard

Sr. No.	Defects/object	Functional and performance requirement
	Lane Marking	Length (including missing length) through 3D sensor or 360 degree camera
	Kerb Height	Height from carriageway FRL
	Geo-tagging	GPS coordinate for all defects based on the DGPS data points collected. NSV must use a differential GPS system to improve the real time position accuracy.
	Transverse Profile	Range should be minimum 4000 mm with accuracy ± 1.0 mm and minimum resolution of 1.0 mm
	Data Points	Atleast, 4000 data points should be measured for any 4 meters transverse width. Images & videos of any stretches should be available for upload. Photos of major defects is mandatory. The defect wise photo its longitude and latitude, chainage information is to be provided.
	System requirement	The working speed should be from 0 to 100 km/h, the distance accuracy should be better than $\pm 0.1\%$ for atleast 10km.
2	Data acquisition, data processing and data analysis software	
	Software	The Consultant shall be equipped with NSV having Reporting software reporting defects and inventory details prepare the report and MS-Excel sheets.
3	Camera for Road Inventory	
	System	It should have road inventory detection and measurement system with 360° High precision GPS, IMU and DMI. The 360° camera shall be accompanied with a software which can geotag the road furniture/encroachment area at identified spots and not where the GPS is positioned.
	Camera	The image resolutions should be minimum 1600 x 1200 pixel. All pictures should be compressed and stitched together automatically. All pictures should be GPS tagged along with road chainage. DMI should be provided for user defined distance-based triggering with minimum 5 meter onward.
	DGPS	i) Road Centreline, (i.e. Longitude, Latitude and Altitude)

2.2 FWD Survey

2.2.1 Survey Requirements:

- The Consultant shall conduct FWD surveys on main carriageways, service roads, loops, and ramps. This includes both flexible and rigid pavement sections.
- The FWD is integrally mounted on a trailer which is towed by a dedicated vehicle. All testing is controlled by a personal computer which is in the vehicle towing the FWD.

c. The Consultant shall conduct Falling Weight Deflectometer (FWD) tests on flexible and rigid pavements in accordance with the latest editions of IRC:115 and IRC:117, respectively, or any subsequent circulars, guidelines, policies, or revisions issued by NHAI/MORTH from time to time.

d. Minimum confidence limit shall as follows:

- Load cell accuracy 2% $\pm$ 2 KPa (1kPa = 0.145 psi)
- Load resolution 0.03 - 0.12 KN (7 - 26 lbf), magnitude dependent
- Deflection range 2.0 mm (80 mil)
- Deflector accuracy 2% $\pm$ 2 microns (1 micron = 0.04 mil)
- Deflector resolution 1 micron
- Deflection random error typically 1 - 2 microns (0.04 - 0.08 mil)
- Deflection systematic error $\pm$ 2%

e. Based on visual inspection, the Consultant shall classify flexible pavement conditions as follows:

- **Good:** Isolated cracks less than 3.0 mm in width in less than 5% of the surface; average Rut Depth < 10 mm.
- **Fair:** Cracks less than 3.0 mm in 5-20% of the paved surface or Rut Depth between 10-20 mm.
- **Poor:** Cracks greater than 3.0 mm in 5-20% of the paved surface, or cracking in > 20% of the surface, or Rut Depth > 20 mm.

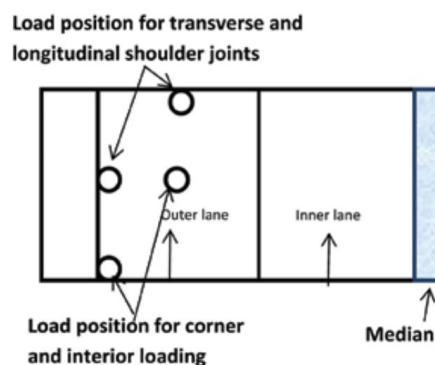
2.2.2 Measurement Scheme:

a) The Consultant shall execute deflection measurements as per the condition of the flexible pavement, following the schemes detailed in IRC 115 for four-lane dual carriageways.

Type of Carriageway	Recommended measurement scheme	Maximum Spacing (m) for test points along selected wheel path for pavements of different classification		
		Poor	Fair	Good
Single-lane two-way	i) measure along both outer wheel paths	60	130	500
Two-lane two-way single carriageway	i) measure along both outer wheel paths	60	130	500
Four-lane single carriageway Or	i) measure along outer wheel paths of outer lanes	30	65	250
Four-lane Dual (divided) carriageway Or	ii) measure along the outer wheel path of inner lane/ More Distressed Lane	60	130	500
Dual carriageways with 3 or more lanes in each direction (Measurement	iii) measure along the centre line of paved shoulder (in case of Widening projects)	120	260	500

Type of Carriageway	Recommended measurement scheme	Maximum Spacing (m) for test points along selected wheel path for pavements of different classification		
		Poor	Fair	Good
scheme given for each carriageway)				

- b) Minimum deflection measurements of flexible pavement shall be at a rate of 6 points per kilometre per direction (i.e., 12 points in total for both directions).
- c) Minimum deflection measurements of rigid pavement shall be at a rate of 8 points (inner & Outer) per kilometre per direction at an interval of 500 mtr (i.e., 16 points in total for both directions) and scheme of deflection measurement as per below figure:



2.3 MBIU Survey

2.3.1 The Consultant/Agency shall deploy a truck-mounted Mobile Bridge Inspection Unit (MBIU) suitable for inspection of 6-lane highway structures under live traffic conditions. The MBIU shall meet the following minimum requirements:

Parameter	Minimum Requirement
Horizontal Reach	14 m
Vertical Depth Below Deck	8 m
Platform Load Capacity	300 kg
Personnel Capacity	3 persons with equipment
Platform Width	0.80 m
Stabilization System	Hydraulic outriggers with safety interlocks
Control System	Electro-hydraulic/PLC-based with emergency stop
Application	Inspection of girders, bearings, deck soffit, pier caps, expansion joints, and other inaccessible areas
Safety Requirements	Safety harness, overload protection, warning lights, and traffic safety arrangements

2.3.2 The MBIU shall be suitable for visual inspection, crack mapping, photography/videography, and Non-Destructive Testing (NDT) of bridges, flyovers, ROBs, and other highway structures.

3 **Scope of work for Technical Due Diligence Studies:**

3.1 Review of Project documents

- 3.1.1 Review of DPRs/ draft CA/ Schedules pertaining to the scope of work and understand the Sch- B requirements for improvement works for the assessment of capex and Opex during the concession period.
- 3.1.2 Review of As-built drawings and Designs
- 3.1.3 Collection of relevant records and documents and review of same
- 3.1.4 Review of correspondences with IE, if any, on technical issues
- 3.1.5 Review of EPC, Operation, Maintenance and Systems Contracts
- 3.1.6 Review of Progress Reports, if any
- 3.1.7 Prepare head of terms (highlight the key commercial, technical terms of the contracts) for the reviewed Contracts – EPC, O&M, Asset Management, Operational Agreements (if any), CAs (key technical items) etc.
- 3.1.8 Review of Asset Management Contracts to understand the maintenance of asset from the Concession agreement perspective
- 3.1.9 Review the technical approvals / consents from IE or another agency required under the CA

3.2 Field Investigations

- 3.2.1 Undertake detailed reconnaissance to appreciate the project corridor characteristics
- 3.2.2 Undertake field investigations to collect first-hand information on present condition of project road and establish the requirements for rehabilitation and up gradation
- 3.2.3 Carrying out inventory and condition surveys for Project Road;
- 3.2.4 Carrying out Inventory and detailed condition surveys for bridges & cross drainage structures (along with Photographs thereof) including recommendation for either strengthening/rehabilitation or reconstruction; Identify requirements of NDT tests if any (to be executed if required and commissioned by client with separate mutually agreed payments).
- 3.2.5 For Major for Major Structures (length > 60 m) and structures where bearings, expansion joints, substructure or critical components are not visually accessible,

detailed condition assessment shall be undertaken using MBIU/Man hoist or equivalent bridge inspection systems to facilitate inspection of inaccessible bridge elements as per clause 2 of section 3.

- 3.2.6 Video-graphic survey of the entire Project corridor/s.
- 3.2.7 Axle load survey for 24 Hrs X 7 Days in both directions of traffic at toll plaza location (7-day traffic count to be provided by client).
- 3.2.8 Test pits required @ every 5 km interval (staggered) along the Project corridor in Main carriageway as well as in Service Road.
- 3.2.9 Carrying out necessary laboratory tests to determine the CBR value of the sub grade materials.
- 3.2.10 Carrying out deflection testing of the existing pavement of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using a Falling Weight Deflectometer (FWD) as per clause 2 of section 3.
- 3.2.11 Consultant shall assign structure-wise condition ratings for deck, superstructure, substructure, bearings, expansion joints, wearing coat, drainage spouts, protective works and other bridge components using IRC/SP/NHAH guidelines and international best practices wherever applicable.
- 3.2.12 Carrying out Pavement Condition Survey on each lane of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using NSV as per Clause 2 of section 3.
- 3.2.13 Availability of construction materials.
- 3.2.14 Assess drainage adequacy: Review of available hydrological reports and assess the availability and condition of existing road side drainage along the corridors.
- 3.2.15 The outputs of investigations are basically used to identify the strengthening requirements for project sections and also used to form the inputs for deterioration modelling.

3.3 Validation of Executed Works and Assessment of Improvement Works

- 3.3.1 Validation of executed works with respect to Schedule A of the [draft] CA by physical verification at site
- 3.3.2 Assess the present status of the projects with relevant standards and confirm that works are meeting the requirements and have been accepted by the authorities.
- 3.3.3 Understand the scope requirements for Improvement works from the Sch-B of the draft CA

- 3.3.4 Where project stretch / structures / service roads / ancillary works are pending and if not covered in the Sch-B scope of the draft CA, then assessment of details relating to land acquisition, approvals, timelines for completion, etc. along with cost forecast
- 3.3.5 Cost estimates for any missing items and all works included in the Sch-B of the draft CA
- 3.3.6 Make an assessment of any risks associated with already executed works

3.4 Quality Audit

- 3.4.1 Review quality of construction based on available data, available design and drawings.
- 3.4.2 Review of Quality of materials from Laboratory testing for aggregates & soil
- 3.4.3 Check compaction and quality of subgrade material used vide test pits
- 3.4.4 Visual inspection of bridges for any visible distress and anomalies. Identify requirements of NDT testing based on same.
- 3.4.5 Examine Expansion joints and bridge bearings condition and assess requirements for replacements
- 3.4.6 Shall be examining expansion joints visually to the extent possible. Shall use high binoculars/ pictures from accessible points. Shall review all photographs closely and come to a conclusion on same.
- 3.4.7 Identify any critical issues / red flags in relation to the quality or condition of the projects; Identify any structural integrity issues that require rectification / re-mediation.

3.5 Rehabilitation Plans & Designs

- 3.5.1 Check the adequacy of designs carried out for execution based on available reports
- 3.5.2 Undertake designs for immediate rehabilitation requirements based on CA specifications using FWD data and condition assessment surveys
- 3.5.3 Assess the requirements of rehabilitation to bridges/CD structures by structure based on visual inspections and compare with Sch-B requirements of the draft CA
- 3.5.4 Assess the requirements including BOQ and cost estimates of repair and replacements for various elements and ancillary works

3.6 Major Maintenance

- 3.6.1 Review of current maintenance system.
- 3.6.2 Preparation of the maintenance costs to be incurred over the period of the concession keeping in mind the maintenance requirements of the Concession Agreement.
- 3.6.3 Detailed assessment of maintenance cycles for pavements using HDM4 analysis and estimation of maintenance cost for the concession period
- 3.6.4 To understand the current maintenance strategy for each of the project and review the BOQ to be provided by the DPR consultant for adequacy in relation to Major Maintenance work of Highways, structures, Road Furniture and other site-specific requirements as per respective CA
- 3.6.5 Recommendations for strengthening, rehabilitation, replacement or reconstruction along with structure-wise BOQ, cost estimates and prioritization of interventions. Identify requirements of NDT tests, proof load testing or detailed structural analysis, wherever required.
- 3.6.6 Minor maintenance will be included in routine maintenance and estimated year wise based on assumed percentages based on present condition.
- 3.6.7 Identify any impacts on revenue due to Major Maintenance.
- 3.6.8 Maintenance requirements for approaches/VOP/Underpass forming part of CA would also be assessed.

3.7 Cost of Improvement Works and Operations

- 3.7.1 Preparation of O&M cost for the concession period.
- 3.7.2 Assess the adequacy of costs assumed in the vendor model are adequate to meet the major maintenance, stage construction and routine maintenance requirements.
- 3.7.3 Independently develop a bottom-up forecast of Operating expenses for project, with detailed break up of each type of operating expense, along with underlying assumptions

3.8 BOQ and Cost Estimates

- 3.8.1 Preparation of BOQ & Cost for Improvement works as per Sch-B of the CA
- 3.8.2 Preparation of BOQ and Costs for Major Maintenance
- 3.8.3 Preparation of BOQ and cost for Routine maintenance and Route Patrolling
- 3.8.4 Preparation of BOQ and Cost for Operations

- 3.8.5 Preparation of year-by-year O&M cost
- 3.8.6 The costs would be provided till the end of the concession period including any expected extension of Concession periods as informed by the Client.
- 3.8.7 Benchmarking of costs against other similar Indian toll roads where available (using available data)
- 3.8.8 Historical trend analysis on the maintenance program based on the existing pavement condition and review of all relevant maintenance plans/ documents of NHAI or its concessionaires or contractors.
- 3.8.9 Review and comment on the current organizational structure from an O&M perspective at each asset. Also suggest an indicative organization structure based on project / CA requirements.

The technical documents such as DPR, Pavement Design Reports, Material test reports, draft Concession Agreement, technical schedules and drawings pertaining to the Projects shall be made available by NHIIMPL

4 Scope for Field Investigations

- 4.1.1 Undertake detailed reconnaissance to appreciate the project corridor characteristics
- 4.1.2 Undertake field investigations to collect first-hand information on present condition of project road and establish the requirements for rehabilitation and up gradation
- 4.1.3 Carrying out inventory and condition surveys for Project Road;
- 4.1.4 Carrying out Inventory and detailed condition surveys for bridges & cross drainage structures (along with Photographs thereof) including recommendation for either strengthening/rehabilitation or reconstruction; Identify requirements of NDT tests if any (to be executed if required and commissioned by client with separate mutually agreed payments).
- 4.1.5 For Major for Major Structures (length > 60 m) and structures where bearings, expansion joints, substructure or critical components are not visually accessible, detailed condition assessment shall be undertaken using MBIU/Man hoist or equivalent bridge inspection systems to facilitate inspection of inaccessible bridge elements as per clause 2 of section 3.
- 4.1.6 Consultant shall assign structure-wise condition ratings for deck, superstructure, substructure, bearings, expansion joints, wearing coat, drainage spouts, protective works and other bridge components using IRC/SP/NHAH guidelines and international best practices wherever applicable.

- 4.1.7 Video-graphic survey of the entire Project corridor/s.
- 4.1.8 Axle load survey for 24 Hrs X 7 Days in both directions of traffic at toll plaza location (7-day traffic count to be provided by client).
- 4.1.9 Test pits required @ every 5 km interval (staggered) along the Project corridor in Main carriageway as well as in Service Road.
- 4.1.10 Carrying out necessary laboratory tests to determine the CBR value of the sub grade materials.
- 4.1.11 Carrying out deflection testing of the existing pavement of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using a Falling Weight Deflectometer (FWD) as per clause 2 of section 3.
- 4.1.12 Carrying out Pavement Condition Survey on each lane of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using NSV as per Clause 2 of section 3.
- 4.1.13 Availability of construction materials.
- 4.1.14 Assess drainage adequacy: Review of available hydrological reports and assess the availability and condition of existing road side drainage along the corridors.
- 4.1.15 The outputs of investigations are basically used to identify the strengthening requirements for project sections and also used to form the inputs for deterioration modelling.

5 Scope of work for Periodic Review:

Scope of work is mainly divided into following major activities:

5.1 Review of Project documents

- 5.1.1 Collection of relevant records and documents and review of same
- 5.1.2 Review of correspondences with IE, if any, on technical issues
- 5.1.3 Review of EPC, Operation, Maintenance and Systems Contracts
- 5.1.4 Review of Asset Management Contracts to understand the maintenance of asset from the Concession agreement perspective
- 5.1.5 Review the technical approvals / consents from IE or another agency required under the CA

5.2 Scope for Field Investigations

- 5.2.1 Undertake detailed reconnaissance to appreciate the project corridor characteristics
- 5.2.2 Undertake field investigations to collect first-hand information on present condition of project road and establish the requirements for rehabilitation and up gradation
- 5.2.3 Carrying out inventory and condition surveys for Project Road;
- 5.2.4 Carrying out Inventory and detailed condition surveys for bridges & cross drainage structures (along with Photographs thereof) including recommendation for either strengthening/rehabilitation or reconstruction; Identify requirements of NDT tests if any (to be executed if required and commissioned by client with separate mutually agreed payments).
- 5.2.5 Video-graphic survey of the entire Project corridor/s.
- 5.2.6 Axle load survey for 24 Hrs X 7 Days in both directions of traffic at toll plaza location (7-day traffic count to be provided by client).
- 5.2.7 Test pits required @ every 5 km interval (staggered) along the Project corridor in Main carriageway as well as in Service Road.
- 5.2.8 Carrying out necessary laboratory tests to determine the CBR value of the sub grade materials.
- 5.2.9 Carrying out deflection testing of the existing pavement of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using a Falling Weight Deflectometer (FWD) as per clause 2 of section 3.
- 5.2.10 Carrying out Pavement Condition Survey on each lane of Main Carriageway, Service Road, Loops and Ramps of Project Corridors using NSV as per Clause 2 of section 3.
- 5.2.11 Availability of construction materials.
- 5.2.12 Assess drainage adequacy: Review of available hydrological reports and assess the availability and condition of existing road side drainage along the corridors.
- 5.2.13 The outputs of investigations are basically used to identify the strengthening requirements for project sections and also used to form the inputs for deterioration modelling.

5.3 Major Maintenance

- 5.3.1 Review of current maintenance system.

- 5.3.2 Preparation of the maintenance costs to be incurred over the period of the concession keeping in mind the maintenance requirements of the Concession Agreement.
- 5.3.3 Detailed assessment of maintenance cycles for pavements using HDM4 analysis and estimation of maintenance cost for the concession period
- 5.3.4 To understand the current maintenance strategy for each of the project and review the BOQ to be provided by the DPR consultant for adequacy in relation to Major Maintenance work of Highways, structures, Road Furniture and other site-specific requirements as per respective CA
- 5.3.5 Recommendations for strengthening, rehabilitation, replacement or reconstruction along with structure-wise BOQ, cost estimates and prioritization of interventions. Identify requirements of NDT tests, proof load testing or detailed structural analysis, wherever required.
- 5.3.6 Minor maintenance will be included in routine maintenance and estimated year wise based on assumed percentages based on present condition.
- 5.3.7 Identify any impacts on revenue due to Major Maintenance.
- 5.3.8 Maintenance requirements for approaches/VOP/Underpass forming part of CA would also be assessed.

5.4 Cost of Operations

- 5.4.1 Preparation of O&M cost for the concession period.
- 5.4.2 Assess the adequacy of costs assumed in the vendor model are adequate to meet the major maintenance, stage construction and routine maintenance requirements.
- 5.4.3 Independently develop a bottom-up forecast of Operating expenses for project, with detailed break up of each type of operating expense, along with underlying assumptions

5.5 BOQ and Cost Estimates

- 5.5.1 Preparation of BOQ and Costs for Major Maintenance
- 5.5.2 Preparation of BOQ and cost for Routine maintenance and Route Patrolling
- 5.5.3 Preparation of BOQ and Cost for Operations
- 5.5.4 Preparation of year-by-year O&M cost

- 5.5.5 The costs would be provided till the end of the concession period including any expected extension of Concession periods as informed by the Client.
- 5.5.6 Review and comment on the current organizational structure from an O&M perspective at each asset. Also suggest an indicative organization structure based on project / CA requirements.

The technical documents such as DPR, Pavement Design Reports, Material test reports, draft Concession Agreement, technical schedules and drawings pertaining to the Projects shall be made available by NHIIMPL.

6 Scope of work for Periodic Review without Instrument based Field Investigations:

Scope of work is mainly divided into following major activities:

6.1 Review of Project documents

- 6.1.1 Collection of relevant records and documents and review of same
- 6.1.2 Review of correspondences with IE, if any, on technical issues
- 6.1.3 Review of EPC, Operation, Maintenance and Systems Contracts
- 6.1.4 Review of Asset Management Contracts to understand the maintenance of asset from the Concession agreement perspective
- 6.1.5 Review the technical approvals / consents from IE or another agency required under the CA

6.2 Field Investigations

- 6.2.1 Undertake detailed reconnaissance to appreciate the project corridor characteristics
- 6.2.2 Undertake field investigations to collect first-hand information on present condition of project road and establish the requirements for rehabilitation and up gradation
- 6.2.3 Carrying out inventory and condition surveys for Project Road;
- 6.2.4 Carrying out Inventory and detailed condition surveys for bridges & cross drainage structures (along with Photographs thereof) including recommendation for either strengthening/rehabilitation or reconstruction; Identify requirements of NDT tests if any (to be executed if required and commissioned by client with separate mutually agreed payments).
- 6.2.5 Video-graphic survey of the entire Project corridor/s.

6.3 Major Maintenance

- 6.3.1 Review of current maintenance system.
- 6.3.2 Preparation of the maintenance costs to be incurred over the period of the concession keeping in mind the maintenance requirements of the Concession Agreement.
- 6.3.3 Detailed assessment of maintenance cycles for pavements using HDM4 analysis and estimation of maintenance cost for the concession period
- 6.3.4 To understand the current maintenance strategy for each of the project and review the BOQ to be provided by the DPR consultant for adequacy in relation to Major Maintenance work of Highways, structures, Road Furniture and other site-specific requirements as per respective CA
- 6.3.5 Recommendations for strengthening, rehabilitation, replacement or reconstruction along with structure-wise BOQ, cost estimates and prioritization of interventions. Identify requirements of NDT tests, proof load testing or detailed structural analysis, wherever required.
- 6.3.6 Minor maintenance will be included in routine maintenance and estimated year wise based on assumed percentages based on present condition.
- 6.3.7 Identify any impacts on revenue due to Major Maintenance.
- 6.3.8 Maintenance requirements for approaches/VOP/Underpass forming part of CA would also be assessed.

6.4 Cost of Operations

- 6.4.1 Preparation of O&M cost for the concession period.
- 6.4.2 Assess the adequacy of costs assumed in the vendor model are adequate to meet the major maintenance, stage construction and routine maintenance requirements.
- 6.4.3 Independently develop a bottom-up forecast of Operating expenses for project, with detailed break up of each type of operating expense, along with underlying assumptions

6.5 BOQ and Cost Estimates

- 6.5.1 Preparation of BOQ and Costs for Major Maintenance
- 6.5.2 Preparation of BOQ and cost for Routine maintenance and Route Patrolling
- 6.5.3 Preparation of BOQ and Cost for Operations

6.5.4 Preparation of year-by-year O&M cost

6.5.5 The costs would be provided till the end of the concession period including any expected extension of Concession periods as informed by the Client.

6.5.6 Review and comment on the current organizational structure from an O&M perspective at each asset. Also suggest an indicative organization structure based on project / CA requirements.

The technical documents such as DPR, Pavement Design Reports, Material test reports, draft Concession Agreement, technical schedules and drawings pertaining to the Projects shall be made available by NHIIMPL.

7 Additional Services

Services beyond the scope defined under Clause-3, Clause-4, and Clause-5 of Section-3, which may be necessitated based on actual site conditions, including but not limited to Non-Destructive Testing (NDT) of structures, additional FWD survey points, extended duration for axle load surveys, or any other additional services required by the Company, shall be carried out by the Consultant after obtaining prior written approval from the Client. Fees for such additional services shall be as per Section 5.

Upon completion of the visual inspection and prior to demobilization of the MBIU, the Consultant shall submit the proposed locations and strategy for conducting NDT tests. The locations and testing strategy shall be finalized immediately thereafter, and all NDT tests shall be carried out before the MBIU is demobilized from the project site.

5 Section 4 – Form of Technical Proposal

Section A: General Information

- 1 Profile of the organization with full particulars of the constitution, ownership and business activities of the prospective bidder(s).
- 2 Commitment(s) which shall act either as a constraint or as a conflicting interest in the proposed assignment (if any).

3 Section B: Technical Information

Sr. No.	Description	Maximum Point	Document Required
(i)	Experience and Capabilities in handling past Technical Due Diligence Studies for acquisition of Qualifying Projects: - Rating Criteria for this requirement will be as under: a) Number of Qualifying Projects ≥ 30: 100% b) Number of Qualifying Projects ≥ 20: 50% c) Number of Qualifying Projects ≥ 15: 30% - Only studies completed between 01/01/2016 and 30/06/2026 (both dates inclusive) to be included.	30	Certified copies of completion certificate issued by client or any other documentary proof (LOA / Work Order etc.) to be provided. For the purpose of this RFE, Qualifying Project shall mean an Expressway / National Highway / State Highway project in India of 04 lane or more lanes and minimum lane Km. of 150 km. Note: In case more than one projects are awarded under single Work Order/LOA, each project shall be considered separately.
(ii)	Experience and Capabilities in handling DPR/ Feasibility Studies of Qualifying Projects prior to construction stage for Authority: - Rating Criteria for this requirement will be as under: a) Number of Qualifying Projects ≥ 10: 100% b) Number of Qualifying Projects ≥ 5: 50% c) Number of Qualifying Projects ≥ 3: 30% - Only studies completed between 01/01/2016 and 30/06/2026 (both dates inclusive) to be included.	10	Certified copies of completion certificate issued by client (Government or Private Entity) or any other documentary proof (signed by Statutory Auditor / Chartered Accountant) of completion of study/DPR to be provided.
(iii)	Design / Design Coordination / IE / PMC / Construction Supervision services at construction stage of Qualifying Projects developed under TOT/BOT/ Annuity/HAM/EPC models: - Rating Criteria for this requirement will be as under: a) Number of Qualifying Projects ≥ 10: 100% b) Number of Qualifying Projects ≥ 5: 50% c) Number of Qualifying Projects ≥ 3: 30% - Only studies completed between 01/04/2016 and 30/06/2026 (both dates inclusive) to be included.	10	Certified copies of completion certificate issued by client or any other documentary proof (signed by Statutory Auditor / Chartered Accountant) of completion of project to be provided.

Sr. No.	Description	Maximum Point	Document Required
(iv)	Technical Consultancy experience in completing assignments on different highway concession models viz. (a) TOT (b) BOT(Toll) (c) BOT(Annuity) (d) HAM (e) EPC projects (f) DBFOT - Rating Criteria for this requirement will be as under: a) Experience in at least 3 of the mentioned 5 models - 3 marks b) Experience in all 5 of the mentioned models - 5 marks Only studies completed between 01/04/2016 and 30/06/2026 (both dates inclusive) to be included.	5	Certified copies of completion certificate issued by client or any other documentary proof (LOA / Work Order etc.) to be provided.
(v)	Team Strength & Experience: - Rating Criteria for this requirement will be as under: <u>Team Leader (max marks:6)</u> Experience of 15 years or more but less than 20 years - 3 marks Experience of 20 years or more - 6 marks <u>Highway cum Pavement Engineer(s) (max marks: 4)</u> 1 mark each for 1 such personnel on rolls of the Bidder <u>Bridge Engineer(s) (max marks:4)</u> 1 mark each for 1 such personnel on rolls of the Bidder <u>Quantity Surveyor(s) (max marks:3)</u> 1 mark each for 1 such personnel on rolls of the Bidder <u>Systems Expert (max marks:2)</u> 1 mark each for 1 such personnel on rolls of the Bidder <u>Electric Engineer (max marks:1)</u> 1 mark each for 1 such personnel on rolls of the Bidder Bidder may also hire services of a dedicated consultant for services to be provided. In such case, document of tie-up with dedicated consultant to be provided	20	Certification of the Authorized Signatory to be provided as proof of Team Strength and Experience.
(vi)	Presentation	25	
	Total Technical Score	100	

We accept all the terms & conditions as mentioned in the RFE. In the event of any contradiction in the terms and conditions as mentioned in the RFE and our proposal/ offer to National Highways Infra Investment Managers (P) Ltd.

NHIIMPL's decision shall prevail.

Name & Signature of Bidder's Authorized Signatory

Date:

6 Section 5 – Form of Financial Proposal

(On the letter head of the bidder)

Financial Proposal

From (Name & Address of the bidder)

To

Mr. Mathew George, CFO,

National Highways Infra Investment Managers (P) Ltd.,

Unit No.: 324, 3rd Floor, D21 – Corporate Park, Sector-21, Dwarka –110077, Delhi.

Sub: Request for Empanelment (“RFE”) issued by National Highways Infra Investment Managers Private Limited (“NHIMPL”), on behalf of National Highways Infra Trust (“NHIT”), inviting bids for empanelment of Consultants for undertaking Technical Due Diligence Studies.

Financial offer on firm basis must be submitted in the following manner (as given below):

FINANCIAL BID	Bid Amount (in INR) For Flexible/Rigid Pavement
Base Fee to be charged (per lane-km) as per given scope for Technical Due Diligence Study	[•]

The definition of lane-km fee is as follows: if the assigned project has “A” number of lanes and a length of “B” km, then the lane-km for billing purposes shall be calculated as $A \times B$. However, all surveys, including instrument-based and visual surveys, shall be carried out on all lanes of the assigned project highway, as per the scope mentioned in Section 3.

Financial Bid for Additional Services – Highways

S.no	Particulars	UoM	Bid Amount (in INR) Flexible Pavement	Bid Amount (in INR) Rigid Pavement
1	Falling Weight Deflectometer (FWD)	Per Point		
2	Axle Load Survey including Video based Traffic Volume Count (TVC) (24hours-Both Direction) (Note: – Minimum sample size –25%-30% for each category, and duration of survey can be up to a maximum of 7 days)	Per day		
3	Network Survey Vehicle	Per lane km		
4	Core Cutting investigation (100 to 150mm dia core)	per test		
5	Drone Videography	per km		

Financial Bid for Additional Services – Structures

S. no	Name of the Test/Technique	Application and properties measured	Bid Amount (in INR) Per unit test
1	Pull-out Test (Hole drilled & insert placed in old concrete)	In-situ Compressive Strength	
2	Half-cell potential measurements	Rate of Reinforcement Corrosion	
3	Ultrasonic Pulse Velocity (UPV)	Homogeneity and Quality	
4	Carbonation test	Depth of Carbonation	
5	Schmidt/Rebound Hammer Test	Assessment of likely surface compressive Strength	
6	Chemical Analysis	Cement, Chloride, Sulphate & Water & pH values	
7	Core Test (Up to 150mm dia)	In-situ compressive strength	

Name & Signature of Bidder's Authorized Signatory

Date:

Notes for the bidder

- (i) Minimum amount of fee to be quoted is Re.1/-.
- (ii) The fee quoted should be limited to 2 (two) decimal points and shall remain FIRM during the currency of the contract.
- (iii) The fee quoted by the bidder should be inclusive of all charges except applicable GST, which shall be paid extra as applicable. Taxes should be indicated separately while raising the bills for payment of fee.
- (iv) The fee will be payable in Indian Rupees as per payment terms mentioned in the RFE. Withholding taxes, as applicable, will be deducted at the time of making payment.

7 Section 6 – Undertakings

(On the letter head of the bidder)

To be provided with the technical bid

We undertake that:

1. The proposal submitted hereunder shall remain valid for a period of at least 120 days from the last date for submission of proposal.
2. No other fees/ cost/ expenses/taxes/levies shall be payable by **National Highways Infra Investment Managers (P) Ltd.** or any of the entities under NHIT for the services rendered by Bidder (s) except as mentioned in Financial Proposal.
3. The Bidder has not been banned or blacklisted or de-listed or disqualified or debarred by NHIIMPL or NHIT or SPVs under NHIT or government agency or quasi-government agency or PSU to participate in their tenders for empanelment. We further certify that there is no investigation pending against us or the MD or CEO or Directors of our Company and no action has been initiated against us/ our Directors by CVC/ RBI or any other government/ statutory agency with regard to any financial irregularities.
4. The Bidder does not have any conflict of interest which is prejudicial to the scope of work. Further, the bidder will ensure that no such business or professional activities will be carried out by it, which may affect the interest of **National Highways Infra Investment Managers (P) Ltd.**, National Highways Infra Trust and SPVs under National Highways Infra Trust.
5. The bidder has adequate infrastructure, personnel, and resources to carry out the required Services and are eligible for acting as Service Provider for Technical Due Diligence Studie (s). The Bidder has understood the scope of work properly and shall comply with the terms of engagement.
6. No bankruptcy/ liquidation proceedings have been initiated against the Bidder by any entity/ government agency/ quasi-government agency/ PSU and there is no material case/ proceeding against the Bidder/ its Directors that is likely to have significant impact on its business as Service Provider for Technical Due Diligence Studie (s) or on its deliverables pursuant to this bid/ RFE.
7. All the information submitted as part of the Bid is true and correct.

We accept all the terms & conditions as mentioned in the RFE. In the event of any contradiction in the terms and conditions as mentioned in the RFE and our proposal/ offer to NHIIMPL the NHIIMPL'S decision shall prevail.

Signature(s) and name(s) of the Authorized Signatory with Seal

Date:

8 Glossary

Qualifying Project	As defined in Clause 12.2 of Section 2
IE	Independent Engineer
PMC	Project Management Consultancy
TOT	Toll Operate Transfer
BOT	Build Operate Transfer
HAM	Hybrid Annuity Model
EPC	Engineering, Procurement & Construction
NSV	Network Survey Vehicle
O&M	Operation & Maintenance
CA	Concession Agreement
FWD	Falling Weight Deflectometer
VOP	Vehicular Over Pass
HDM-4 model	Highway Development & Management-4 model
NDT	Non-Destructive Testing
CBR	California Bearing Ratio
BoQ	Bill of Quantities
Authority	NHAI / Ministry of Road Transport & Highways (MoRTH) or any other central government authority
DPR	Detailed Project Report

9 Annexures

(To be on the letter head of the Bidder)

SELF ASSESSMENT EVALUATION SHEET

Criteria	Evaluation criteria & scoring guidance	Maximum Points	Claimed no. of projects	Self-Evaluation Marks	Remarks, if any
1	Experience and Capabilities in handling past Technical Due Diligence Studies for acquisition of Qualifying Projects <i>Provide list of projects as per Appendix-1</i>	30			
2	Experience and Capabilities in handling DPR/ Feasibility Studies of Qualifying Projects prior to construction stage for Authority <i>Provide list of projects as per Appendix-2</i>	10			
3	Design / Design Coordination / IE / PMC/ Construction Supervision services at construction stage of Qualifying Projects developed under TOT/BOT(Toll)/BOT(Annuity)/HAM/EPC models <i>Provide list of projects as per Appendix-3</i>	10			
4	Technical Consultancy experience in completing assignments on different highway concession models viz. (a) TOT (b) BOT(Toll) (c) BOT(Annuity) (d) HAM (e) EPC projects <i>Provide list of projects as per Appendix-4</i>	5			
5	Team Strength & Experience <i>Provide details as per Appendix-5</i>	20			

10 Appendix-1

S. No.	Project Stretch	Client	Project Length	Completion Proof (Completion certificate / Statutory Auditor Certificate/ Chartered Accountant Certificate / any other document)

11 Appendix-2

S. No.	Project Stretch	Authority Name	Project Length	Completion Proof (Completion certificate / Statutory Auditor Certificate/ Chartered Accountant Certificate / any other document)

12 Appendix-3

S. No.	Project Stretch	Work Category (Design / Design Coordination / IE / PMC/ Construction Supervision)	Project Mode (TOT / BOT(Toll) / BOT(Annuity) / HAM / EPC models)	Client	Project Length	Completion Proof (Completion certificate / Statutory Auditor Certificate/ Chartered Accountant Certificate / any other document)

13 Appendix-4

S. No.	Project Stretch	Project Mode (TOT / BOT(Toll) / BOT(Annuity) / HAM / EPC models)	Client	Project Length	Completion Proof (Completion certificate / Statutory Auditor Certificate/ Chartered Accountant Certificate / any other document)

14 Appendix-5

S. No.	Proposed Position	Name of the Team Member	Qualification	Work Experience (in years and months)
