



**National Highways & Infrastructure Development Corporation Limited
(Ministry of Road Transport & Highway)
Government of India**

**Consultancy Services for Additional Topographical,
Geological/Geotechnical Survey and data collection from Km.85.00 to
95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu
of NH-51 and construction of in the State of Meghalaya**

Request for Proposal

February, 2017

Corporate Office: 3rd Floor, PTI Building, 4 Parliament Street, New Delhi-110001

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SECTION-1

NOTICE INVITING E-TENDER

National Highways & Infrastructure Development Corporation Ltd.
(Ministry of Road Transport & Highways)
Government of India

NOTICE INVITING TENDER (NIT)

NHIDCL has been assigned the work by the Ministry of Road Transport & Highways, Govt. of India for the Consultancy Services for feasibility studies and Detailed Project Report for preparation for widening of “Geometric improvements from Km.85.00 to 95.00, 101.00 to 145.00, to 2- Lane with paved shoulders of Tura – Dalu of NH-51 in the State of Meghalaya” .

2. Proposals are hereby invited from eligible Consultants for “*Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya*” (as per Annexure I). (hereinafter called as ‘Assignment’). The Letter of Invitation (LOI) and Terms of Reference (TOR) including Request for Proposal (RFP) are available online on e-tender portal of nic i.e. <https://eprocure.gov.in> .

3. The document can also be viewed at NHIDCL website <https://www.nhidcl.com>. The cost of the bid document in the form of a non- refundable document fee of Rs. 2,000 (Rupees Two Thousand only) in the form of Demand Draft favoring ‘**National Highways & Infrastructure Development Corporation Ltd.**’ and payable at New Delhi must be furnished in a separate envelop while submitting the proposal.

Bid must be submitted online at e-tender portal <https://eprocure.gov.in> on or before as per schedule given hereunder.

S No.	Event Description	Date
1	Invitation of RFP (NIT)	17.02.2017
2	Downloading Period	18.02.2017 to 09.03.2017 (09:00 Hrs)
3	Last date of receiving queries/clarifications	28.02.2017 (17:30Hrs)
4	Pre-Proposal Conference (Pre-bid meets)	28.02.2017 (15:30Hrs) at NHIDCL HQ, 3 rd floor, 4-Parliament Street, New Delhi-01
5	Authority’s response to queries	Up to 02.03.2017
6	Submission of online proposal starts	03.03.2017
7	Last date of submission of hard copies of the proposal, tender fee and bid security, etc.	09.03.2017 (1200 Hrs)
8	Last date of submission of online proposal	09.03.2017 (1200 Hrs)
9	Opening of Technical proposal	10.03.2017 (1400Hrs)
10	Opening of Financial proposal	13.03.2017 (AT 16.00 Hrs. at NHIDCL HQ)

Anand Mohan Prasad
General Manager (Technical)
National Highway & Infrastructure Development Corporation Ltd.
PTI Building, 3rd Floor, 4, Parliament Street, New Delhi-110001
Ph. 011-23461629;
Email: anand.prasad@gov.in,

**NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION
LIMITED
(A Govt. of India Undertaking)**

NIT No. NHIDCL/NH-51 /Tura-Dalu/2017

Dated _____

Letter of Invitation

Dear Sir,

Sub: Short Tender for

“Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya”

1. NHIDCL invites online bids from Consultancy firms as per schedule given hereunder:-

Name of the work: Specialised Consultancy Services for *“Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya”*

1.2 For the above project the following DPR Consultant was engaged for feasibility study/DPR preparation: **M/s Theme Engineering Services Pvt. Ltd**

1.3 The above project is being funded by JICA (Japan International Cooperation Agency). JICA has sought additional topographic survey; geological/geotechnical investigation before finalising bid documents and for reviewing/modifying design/drawing are required to propose slope protection etc. The above mentioned DPR Consultant has submitted DPRs. JICA may also engage their consultants during this addl. survey/investigations to review and monitor entire process of the above survey/design

1.4 NHIDCL will be the employer and executing agency for the Consultancy Services sought and the standard of output required from the appointed Consultants are expected to be of international level both in terms of quality and adherence to the agreed time schedules. The Letter of Invitation (LOI) and Terms of Reference (TOR) including Request for Proposal (RFP) are available online on e-tender portal of NIC i.e. <https://eprocure.gov.in> and also can be viewed on NHIDCL website www.nhidcl.com.

2. Brief Scope of Work:

2.1 **The scope of services shall comprise:**

2.1.1. Engineering Survey

- I. Additional Topographic Survey
- II. Additional Geological/ Geotechnical Survey
- III. Material Survey

2.2 Bidders shall be provided soft copy of relevant data from DPRs including alignment plan and cross-section prepared by the DPR Consultant. Topographic survey shall be carried out along the alignment and on the cross-sections as in DPR. Any minor variation shall be fine tuned with the existing alignment/cross-section.

- 2.3 Alignment plan as well as cross-section shall be prepared super-imposing the existing alignment/cross-sections as in DPR incorporating the extra points, BOQ shall be prepared for earth cutting/filling and design/drawing/BOQ of protective works in consultation with JICA.
3. **Time for completion:** The Consultant shall complete and submit the study/detailed report as per scope of work in **60 Days** from the date of letter to proceed and shall submit deliverables mentioned at 2(v) above within 60 days from letter to proceed.
 4. **Cost of Bid Document:** The cost of the bid document in the form of a non- refundable document fee of Rs. 2,000 (Rupees Two Thousand only) in the form of Demand Draft favouring “*National Highways & Infrastructure Development Corporation Ltd.*” and payable at New Delhi must be furnished in a separate envelope while submitting the proposal.
 5. **Cost of e-tender processing fee:** As per the CPPP norms. The Bidders are requested to visit the website <https://eprocure.gov.in>. The bid document can be downloaded from the <https://eprocure.gov.in>. Corrigendum, if any, would appear on this web site only and shall not be published elsewhere.
 6. The intending bidder(s) must read the General Conditions of this contract carefully. He/ She should only submit his/her bid if eligible and in possession of all the documents required.
 7. Information and instructions for bidders posted on website shall form part of the bid document.
 8. The bid document consisting of scope of work and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and can be downloaded from website <https://eprocure.gov.in> and can also be viewed at www.nhidcl.com
 9. The intending bidder(s) must have valid class-III Digital Signature Certificate to submit the bid.
 10. Notwithstanding anything stated above, NHIDCL reserves the right to assess the capabilities and capacity of the bidder to perform the contract in the overall interest of NHIDCL.
 11. The bidder(s) is/are required to quote strictly as per the terms and conditions, given in the tender documents and not to stipulate any deviations.
 12. NHIDCL reserves the right to reject any or all tenders or cancel/withdraw the invitation for bids without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.
 13. Integrity Pact duly signed by the bidder shall be submitted. Any bid without signed Integrity Pact shall be rejected.

14. Bid Security:

- 14.1 The applicant shall furnish as part of its proposal, a Bid Security of Rs 25,000/- (Rupees Twenty Five Thousand only) in the form of Demand Draft/Banker's Cheque/Bank Guarantee in favour of "*National Highways & Infrastructure Development Corporation Ltd.* payable at New Delhi(the "Bid Security")
- 14.2 This Bid Security is returnable not later than 30 (thirty) days from the date of Opening of the financial proposals. Bid Security of L-1 bidder shall be returned upon the signing the Agreement after receipt of Performance Bank Guarantee. Bid Security of all other bidders shall be returned in 15 days.
- 14.3 Any Bid not accompanied by the Bid Security of the required value and minimum required validity shall be rejected by the Client as non responsive.
- 14.4 The NHIDCL shall not be liable to pay any interest on the Bid Security and the same shall be interest free.
- 14.4.1 The Consultant by submitting its proposal pursuant to this RFP, shall be deemed to have acknowledged that without prejudice to the NHIDCL's any other right or remedy hereunder or in law or otherwise, the Bid Security shall be forfeited and appropriated by NHIDCL as the mutually agreed pre-estimated compensation and damage payable to NHIDCL for, *inter alia* the time, cost and effort of the NHIDCL in regard to RFP including the consideration and evaluation of the Proposal under the following conditions:
- (a) If a Consultant withdraws its proposal during the period of its validity as specified in this RFP and as extended by the Client from time to time;
 - (b) In the case of the selected Consultant, if the Consultant fails to reconfirm its commitments during negotiations.
 - (c) In the case of a selected Consultant, if the Consultant fails to sign the Agreement.

15. Set of Tender Documents:

The following documents will constitute the set of tender documents:

- a) Notice inviting e-Tender
- b) RFP
- c) Technical Proposal.
- d) Financial Proposal.
- e) Integrity pact
- f) Corrigendum, if any
- g) Other documents, if any

16. Mode of Submission

The bidder must submit the Technical proposal in sealed envelope addressed to **Anand Mohan Prasad, General Manager (Technical), National Highways & Infrastructure Development Corporation Ltd, PTI Building, 3rd Floor, Parliament Street, New Delhi-110001.**

The envelope shall contain the following documents:

- a. Demand Draft/Banker's Cheque/Bank Guarantee of any Scheduled Bank against BID

SECURITY.

- b. Demand Draft or Banker's Cheque of any Scheduled Bank towards cost of Bid Document.
- c. Integrity Pact.
- d. Letter of Acceptance of tender conditions in the prescribed format as enclosed in the section 2 of RFP.
- e. Power of Attorney
- f. Proof of Empanelment as per clause 18 of Letter of Invitation (LOI) Or
- g. Copy of Debarment/Enforcement (if any).

The envelope containing Technical bid should also indicate clearly the name of the bidder and his/her address. In addition, the left hand top corner of the envelope or container should indicate the name of the work, name of the document in the envelope with bid opening date and time and the addressed to the address mentioned above and shall reach on 02.03.2017 by 1200Hrs and the online bids shall be opened at 1400 Hrs on the same day.

Online technical bid documents submitted by intending bidders shall be opened only of those bidders, whose Bid Security, Cost of Bid Document and e-Tender Processing Fee and other documents placed in the envelope are found in order. **The Financial bid of only those bidders whose documents are found to be in order and who qualify the eligibility criteria mentioned in clause 18 of LOI (proof of empanelment) shall be opened. The following documents are to be submitted online as Technical Bid.**

- a) Scan Copy of Demand Draft or Banker Cheque of any Scheduled Bank against BID SECURITY.
 - b) Scan Copy of Demand Draft or Banker's Cheque of any Scheduled Bank towards cost of Bid Document.
 - c) Scan Copy of Integrity Pact.
 - d) Scan Copy of Letter of Acceptance of tender conditions in the prescribed format as enclosed in the section 2 of RFP.
 - e) Scan Copy of Power of Attorney
 - f) Scan Copy of Proof of Empanelment as per clause 18 of LoI or
 - h) Scan Copy of Debarment/Enforcement (if any).
17. Before the last date and time of submission of bid as notified, the bidder can submit revised bid any number of times.
 18. Consultants empanelled with the MORTH under Category I(A), vide Ministry's letter No. RW/NH-34054/1/2014-S&R(B) dated 03.05.2016, and letter no. RW/NH-34054/1/2006-S&R(B)-Part IV dated 01.08.2014, 15.01.2015 and 23.12.2013 are **only** eligible for submission of bid.
 19. The bid for the works shall remain open for acceptance for a period of 90 days from the last date of submission of bid including the extension given, if any. In case any bidder withdraws his/her bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to NHIDCL, then NHIDCL shall, without prejudice to any other right or remedy, would be at liberty to forfeit the said bid security as aforesaid. Further the bidders shall not be allowed to participate in the re-bidding process, if any.
 20. The acceptance of any or all tender(s) will rest with the NHIDCL which does not bind itself to accept the lowest tender and reserves to itself the right to reject any or all of the tenders

received without assigning any reason thereof.

21. On acceptance of tender, the name of the accredited representative(s) of the Consultant firms who would be responsible for taking instructions from Engineer-in-charge / GM, NHIDCL or its authorized representative shall be intimated within 07 days of the issue of letter of award by NHIDCL.
22. Date of start of work shall be reckoned from the date of letter to proceed.
23. The award of consultancy work, execution and completion of work shall be governed by tender documents consisting of (but not limited to) Letter of Award /Letter of Work Order, Price Bid, TOR, Conditions of Contract etc. The bidders shall be deemed to have gone through the various conditions while making/preparing their technical & financial proposals & submitting the Bid(s) including site conditions, topography of the land, drainage and accessibility etc. or any other condition which in the opinion of bidder will affect his/her price/rates before quoting their rates.
24. Any entity which has been barred by the Central/ State Government, or any entity controlled by it, from participating in any project, and the bar subsists as on the date of Application, would not be eligible to submit the BID.
25. The Bidder should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, as the case may be, nor should have been expelled from any project or contract by any public entity nor should have had any contract terminated by any public entity for breach by such Bidder.
26. The Authority reserves the right to reject an otherwise eligible bidder on the basis of the information provided under clause 23 & clause 24. The decision of the Authority in this case shall be final.
27. **Introduction**
 - 27.1 The Consultant firms are invited to submit Technical bid together with a Financial Bid. The tender will be on the basis of financial bid of the eligible consultant only .
 - 27.2 Consultant firms should familiarize themselves with local conditions and take them into account while preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Consultant firms may visit the site before submitting their proposal. Consultant firms or their authorized representatives should contact the following regarding site specific information and site visit enquiry.

Anand Mohan Prasad

GM (Tech)

National Highways & Infrastructure Development Corporation Ltd.

Head Office: 3rd Floor PTI building, 4 Parliament Street

New Delhi-110001

Mob No. 011-23461629

Email: anand.prasad@gov.in

- 27.3(a) The NHIDCL will provide the inputs to the consultant firms, if available. However, NHIDCL does not assume any Responsibility for any loss or financial damages on account of use of such information by consultant & consultants are advised to collect their own information for

preparation, submission of bids & execution of services after award of work.

- 27.3(b) The Consultant firms shall be responsible for obtaining licenses and permits to carry out the services.
- 27.4 Consultant firms shall bear all costs associated with the preparation and submission of their proposals and contract negotiation, site visits etc.
- 27.5 The NHIDCL is not bound to accept any proposal and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultant firms.

28 Conflict of Interest

- 28.1 NHIDCL policy requires that Consultant Firms provide professional, objective, and impartial advice and at all times hold the NHIDCL interest's paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work.
- 28.2
- (i) Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

Conflicting assignments

- (ii) A Consultant firm (including its Personnel and Sub Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Employer.

Conflicting relationship

- (iii) A consultant (including its Personnel and Sub Consultants) that has a business or family relationship with a member of the NHIDCL staff who is directly or indirectly involved in any part of (a) the preparation of the Terms of Reference of the assignment, (b) the selection process for such assignment, or (c) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to NHIDCL throughout the selection process and the execution of the Contract.
- 28.3 Consultant firms have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the NHIDCL, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant firms or the termination of its Contract any time, throughout currency of the work.
- 28.4 No agency of current employees of the NHIDCL shall work at Consultant's firm. Recruiting former employees of the NHIDCL to work is acceptable, provided no conflict of interest exists.

29 Fraud and Corruption

- 29.1 The NHIDCL requires that the Consultant firms participating in selection process adhere to the highest ethical standards, both during the selection process and throughout the execution of a contract. In pursuance of this policy, the NHIDCL:
- (a) defines, for the purpose of this paragraph, the terms set forth below:
- (i) "corrupt practice" means the offering, promising, giving, receiving, or soliciting, directly or

indirectly, of anything of value to a public official which he/she is not legally entitled to, to influence their action(s) in the selection process or in contract execution;

- (ii) "fraudulent practice" means a willful misrepresentation or omission of facts or submission of fake/forged Documents in order to influence a selection process or the execution of a contract;
 - (iii) "collusive practices" means a scheme or arrangement whether formal or informal, between two or more consultants with or without the knowledge of the NHIDCL, designed to establish prices at artificial, non competitive levels, submission or non submission of Bids;
 - (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 firm recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question; and
 - (c) will impose a sanction on the consultant firm, including declaring the consultant ineligible, either indefinitely or for a stated period of time, for award of a contract if at any time determines that the consultant firms has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing a contract.

29.2 The consultants firms should be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.

30 Only One Proposal

The consultant firm shall only submit one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified. However, this does not limit the participation of the same Sub-Consultant, including individual experts, to more than one proposal.

31 Proposal Validity

The consultant firm's tender must remain valid for 90 days after the last date fixed for submission of tender including the extension(s) given, if any.

32. Clarification and Amendment of Bid Documents

32.1 Consultant firms may request for a clarification on any clause(s) of the Bid documents as per the schedule mentioned in the Critical Date Sheet in Section – 1. Any request for clarification must be sent in writing, or by standard electronic means to the NHIDCL's address. The NHIDCL will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without disclosing the Source of query) to all Consultant firms. Should NHIDCL find it necessary to amend the bid document as a result of a clarification or any other reasons it shall do so following the procedure under para 35.2. However NHIDCL reserves the right to respond to the queries after cutoff date as mentioned above.

32.2 At any time before the submission of tender, NHIDCL may modify/ amend the bid document and extend the last date of submission/ opening of the tender by issuing a corrigendum/addendum. Any Corrigendum/Addendum thus issued shall form part of tender document and shall be posted only on <https://eprocure.gov.in> and the consultants are thus advised to update their information by using said website. To give the consultant reasonable time to take such amendments into account in their bids, and on account of any other reasonable

circumstances, NHIDCL may at its discretion, extend the deadline for the submission/opening of the tender.

33 Preparation of Bid Proposal

33.1 In preparing their tender, Consultant firms are expected to examine in detail the tender document. The tender shall contain technical & financial Bids.

33.2 The bid proposals, all related correspondence exchanged by the Consultant firms & NHIDCL and the contract to be signed with the winning consultant shall be written in English language.

33.3 Technical Bid Proposal

a) The Technical bid shall not include any financial information. A Technical bid containing Financial information shall be declared non responsive/invalid.

b) The Technical bid will be declared non responsive/ invalid, if the bid is not accompanied by the requisite documents as stipulated in tender document.

33.4 Financial Bid Proposals

The Financial bid shall not include any commercial or technical condition/information. The **Financial offer shall be submitted as lump sum Rate.**

34 Submission, Receipt and Opening of bids

34.1 The original bids (Technical bid and Financial bid) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed tender documents must initial such corrections. Letter for acceptance of tender condition should be submitted in the prescribed format of Annexure-I, Section-2.

34.2 An authorized representative of the Consultant firms shall sign the Technical & Financial bids. The authorization shall be in the form of a legally enforceable written power of attorney executed on non-judicial stamp paper of appropriate value duly notarized and shall be submitted along with bid.

34.3 The NHIDCL shall open the Technical bid after the deadline for the submission of original in hard form as per NIT. The Financial bid shall remain securely stored.

35 Tender Evaluation

35.1 If required, the NHIDCL may seek clarifications on the technical bid of the applicants. If the clarifications sought by the NHIDCL are not received in stipulated period, technical evaluation then will be done based on available data in the technical bid. Evaluators of Technical bid shall have no access to the financial bid until the technical evaluation is concluded.

35.2 Opening of Financial Bid

The Financial bid of only those bidders whose documents are found to be in order and who qualify the eligibility criteria mentioned in clause 18 of LOI (proof of empanelment) shall be opened. The following documents are to be submitted online as Technical Bid, otherwise bid shall be considered as Non-Responsive.

1. Demand Draft or Banker's Cheque of Rs. 25,000/- issued from any Nationalized or approved Scheduled Bank towards bid security.
2. Demand Draft or Banker's Cheque of Rs. 2,000/- issued from any Scheduled Bank towards cost of Bid Document.

3. Integrity Pact.
4. Letter of Acceptance of tender conditions, in the prescribed format as enclosed.
5. Power of Attorney and Copy of Service Tax Registration Number
6. Proof of Empanelment as per clause 18 of LOI.
7. Copy of Debarment/Enforcement.(if any).

35.3 Bidders fulfilling clause 38.2 above shall be technically responsive.

36 Evaluation of Financial Bid:

The Consultancy firms quoting the lowest rate in its Financial Proposal will be declared as L-1 Bidder.

37 Award of Contract

The contract will be awarded to the firm quoting the lowest rate in its Financial Proposal. i.e. L-1 Consultant by NHIDCL through a letter of Award. The Consultant firms shall commence the assignment from the date of letter to proceed.

38 Confidentiality

Information relating to evaluation of tenders and recommendations concerning awards shall not be disclosed to the Consultant firms who submitted the tender or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its tender and then may be debarred from participating in future tenders.

SECTION -2

ACCEPTANCE OF TENDER CONDITIONS

ACCEPTANCE OF TENDER CONDITIONS

From: (On the letter head of the company by the authorized signatory having power of attorney)

To

**Managing Director,
NHIDCL**

Sub: *“Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya”*

Sir,

This has reference to above referred tender. I/We are pleased to submit our tender for the above work and I/We hereby unconditionally accept the tender conditions and tender documents in its entirety for the above work.

2. I/we are eligible to submit the bid for the subject tender and I/We are in possession of all the documents required.

3. I / We have viewed and read the terms and conditions of NHIDCL carefully. I/We have downloaded the following documents forming part of the tender document:

- a. Demand Draft or Banker Cheque of any Scheduled Bank against BID SECURITY.
- b. Demand Draft or Banker's Cheque of any Scheduled Bank towards cost of Bid Document.
- c. Integrity Pact.
- d. Letter of Acceptance of tender conditions in the prescribed format as enclosed in the section 2 of RFP.
- e. Power of Attorney if applicable.
- f. Proof of Empanelment as per clause 18 of LoI
- g. Copy of Debarment/Enforcement (if any).

4. I/we have uploaded the mandatory scanned documents such as cost of bid document, bid security, e-tendering Processing Fee with all Annexures of Acceptance of Tender Conditions.

Yours faithfully,

(Sign of the bidder)
With rubber stamp

Dated: _____

**(Annexure-I of Acceptance of Tender Conditions)
Form - A**

General Information

1.	Name of Applicant / Company	
2.	Address for correspondence	
3.	Contact Person: Telephone Nos. Fax Nos. Mobile	
3	Type of Organisation: (a) An individual (b) A proprietary firm (c) A firm in partnership (Attach copy of partnership) (d) A Limited Company (Attach copy of Articles of Association) (e) Any other (mention the type)	
5.	Place and Year of Incorporation	
6.	Details of registration/membership with Institute of Engineers or such other Institute. (Attach copy)	
7.	Name of Director/Partners in the organisation and their status along with their qualifications.	
8.	Name(s) of the persons along with their qualification and designation, who is authorised to deal with NHIDCL.(Attach copy of power of Attorney)	
9.	Organisation Chart of Key Personnel	
10.	Details of Awards/ Appreciations supported with document to be submitted.	
11.	Any other Information	

**(Annexure IV of Acceptance of Tender Conditions)
Form - D**

AFFIDAVIT

(TO BE SUBMITTED ON NON-JUDICIAL STAMP PAPER OF MINIMUM **Rs. 10/-** DULY
CERTIFIED BY NOTARY PUBLIC)

Affidavit of Mr....., S/o..... R/o.....

I, the deponent above named do hereby solemnly affirm and declare a under:

1. That I am the Proprietor/Authorised Signatory of M/s.....having its Head Office / Regd. Office at.....
2. That the information / documents/ experience certificates submitted by M/s.....along with this tender to NHIDCL are genuine and true and nothing has been concealed.
3. I shall have no objection in case NHIDCL verifies them from issuing Authority (ies). I shall also have no objection in providing the original copy of the documents(s), in case NHIDCL demands so for verification.
4. I hereby confirm that in case, any document, information &/or certificate submitted by me are found to be incorrect/false/fabricated, NHIDCL at its discretion may disqualify / reject my application for pre-qualification out rightly and also debar me / M/s.....from participating in any future tenders / PQ.

DEPONENT

I,....., the Proprietor / Authorised Signatory of M/s....., do hereby confirm that the contents of the above Affidavit are true to my knowledge and nothing has been concealed there from and that no part of it is false.

Verified at.....this.....day of

DEPONENT

(Annexure V of Acceptance of Tender Conditions)

Form – E

AFFIDAVIT (original to be submitted in the envelope containing originals)

1. I, the undersigned, do hereby certify that all the statements made in the enclosed attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s _____ have abandoned any work with National Highways & Infrastructure Development Corporation Ltd. nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
3. The undersigned hereby authorise(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by NHIDCL to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the NHIDCL and within the prescribed time.

(Signed by an Authorised Representative of the Firm)

Name of the Representative

Name of Firm

DATE

(To be notarized by Notary)

(Annexure VI of Acceptance of Tender Conditions)

Form – F

UNDERTAKING

(Original to be submitted in the envelope containing originals)

I, The undersigned do hereby undertake that our firm M/s _____ agree to abide by this bid for a period of 90 days after the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

(Signed by an Authorised Representative of the Firm)

Name of the Representative

Name of Firm

DATE

(To be notarised by Notary)

Section-3

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

1. Central Procurement Portal

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal website for e-Procurement at <https://eprocure.gov.in/eprocure/> **app:-**

- (i.) Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the eProcurement/eTender portal is a prerequisite for e-tendering.
- (ii.) Bidder should do the enrollment in the e-Procurement site using the “Click here to Enroll” option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide the correct/true information including valid email ID. All the correspondence shall be made directly with the contractors/bidders through email id provided.
- (iii.) Bidder need to login to the site through their user ID/ password chosen during enrollment/ registration.
- (iv.) The Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/SmartCard, should be registered.
- (v.) The DSC that is registered only should be used by the bidder and should ensure safety of the same.
- (vi.) Contractor/Bidder may go through the tenders published on the site and download the required tender documents/schedules for the tenders he/she is interested.
- (vii.) After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise bid will be rejected.
- (viii.) If there are any clarifications, this may be obtained online through the tender site, or through the contact details. Bidder should take into account the corrigendum published before submitting the bids online.
- (ix.) From “my tender” folder, select the tender to view all the details indicated.
- (x.) Bidder can then log in to the site through the secured login by entering the user id/ password chosen during enrolment/registration and then by entering the password of the eToken/SmartCard to access DSC.
- (xi.) Bidder can then select the tender which he/she is interested in by using the search option & then moving it to the ‘my tenders’ folder.
- (xii.) It is construed that the bidders have read all the terms and conditions before submitting their offer. Bidders should go through the tender schedules carefully and upload the documents as asked; otherwise, the bid will be rejected.
- (xiii.) Bidders should ready the bid documents to be submitted, in advance, as indicated in the tender document/schedule and generally, they can be in PDF/xls/rar/zip/dwf formats. If there is more than one document, they can be clubbed together and can be provided in the requested format. Each document to be uploaded through online portal for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same can be uploaded, if permitted. Bidders’ Bid

- documents may be scanned with 100 dpi with black and white option. However if the file size is less than 1 MB the transaction uploading time will be very fast.
- (xiv.) If there are any clarifications, they may be obtained through the site, or during the pre-bid meeting, if any. Bidders should take into account the corrigendum published from time to time before submitting their online bids.
 - (xv.) The Bidders can update well in advance, the documents such as certificates, annual report details etc., under “My Space” option and these can be selected as per tender requirements and sent along with bid documents during bid submission. This will facilitate faster bid submission process by reducing upload time of bids.
 - (xvi.) Bidders should submit the Tender Fee/ EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority (TIA), at least one working date prior to bid submission due date & time for the tender. Scanned copy of the instrument should be uploaded as part of the offer.
 - (xvii.) While submitting the bids online, the bidder reads the terms & conditions and accepts the same to proceed further to submit the bid packets.
 - (xviii.) The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the instruments.
 - (xix.) The details of the DD/ any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise submitted bid will not be acceptable.
 - (xx.) The bidder has to digitally sign and upload the required bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the bid document including General conditions of contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.
 - (xxi.) The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
 - (xxii.) If the Financial Bid format is provided in a spread sheet file like BoQ_xxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Financial Bid/BOQ template must not be modified /replaced by the bidder; else the bid submitted is liable to be rejected for this tender.
 - (xxiii.) The bidders are requested to submit the bids through online e-tendering system to the TIA well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
 - (xxiv.) After the bid submission (i.e. after Clicking “Freeze Bid Submission” in the portal), the acknowledgement number, given by the system should be printed by the bidder and kept as record of evidence for online submission of bid for the particular tender and will also act as an entry pass to participate in the bid opening date.
 - (xxv.) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
 - (xxvi.) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by

- unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
- (xxvii.) Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
 - (xxviii.) The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
 - (xxix.) The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
 - (xxx.) For any queries regarding e-tendering process, the bidders are requested to contact as provided in the tender document. Parallel for any further queries, the bidders are asked to contact over phone@ 1-800-233-7315 or send a mail over to cppp-nic@nic.in.

Section-4

CONDITIONS OF CONTRACT

&

TERMS OF REFERENCE (TOR)

GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) “Applicable Law means the laws and any other instruments having the force of law in the Government’s country as they may be issued and in force from time to time;
- (b) “Contract” means the Contract signed by the Parties, to which these General Conditions of Contract are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (c) “Effective Date” means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1;
- (d) “foreign currency” means any currency other than the currency of the Government;
- (d) “GC” means these General Conditions of Contract;
- (f) “Government” means the Government of India;
- (g) “local currency” means the currency of the Government;
- (h) “Member”, in case the Consultants consist of a joint venture or consortium of more than one entity, means any of these entities, and “Members” means all of these entities;
- (i) “Personnel” means persons hired by the Consultants or by any Sub Consultant as employees and assigned to the performance of the Services or any part thereof; “foreign Personnel” means such persons who at the time of being so hired had their domicile outside India; and “local Personnel” means such persons who at the time of being so hired had their domicile inside India;
- (j) “Party” means the Client or the Consultants, as the case may be, and Parties means both of them;
- (k) “Services” means the work to be performed by the Consultants pursuant to this Contract for the purposes of the Project, as described in Appendix A hereto;
- (l) “SC” means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;
- (m) “Sub Consultant” means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Clause GC 3.7; and
- (n) “Third Party” means any person or entity other than the Government, the Client, the Consultants or a Sub Consultant.

1.2 Relation between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of agent and principal as between the Client and the Consultants. The Consultants, subject to this Contract, have complete charge of Personnel performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.3 **Governing Law and Jurisdiction**

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Laws of India and the Courts at Delhi shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

1.4 **Language**

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.5 **Table of Contents and Headings**

The table of contents, headings or sub-headings in this agreement is for convenience for reference only and shall not be used in, and shall not limit, alter or affect the construction and interpretation of this Contract.

1.6 **Notices**

1.6.1 *Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, facsimile or e-mail to such Party at the address specified in the SC.*

1.6.2 Notice will be deemed to be effective as specified in the SC.

1.6.3 A party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the SC with respect to Clause GC 1.6.2.

1.7 **Location**

The Services shall be performed at such locations as are specified in **Letter of Acceptance** hereto and, where the location of a particular task is not so specified, at such locations, whether in India or elsewhere, as the Client may approve.

1.8 **Authority of Member in Charge**

In case the Consultants consist of a joint venture of more than one entity, with or without an Associate the Members hereby authorize the entity specified in the SC to act on their behalf in exercising all the Consultants' rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

1.9 **Authorized Representatives**

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants may be taken or executed by the officials specified in the SC.

1.10 **Taxes and Duties**

Unless otherwise specified in the SC, the Consultants shall pay all such taxes, duties, fees and other impositions as may be levied under the Applicable Law.

2. **COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT**

2.1 **Effectiveness of Contract**

This Contract shall come into force and effect on the date of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

2.2 **Termination of Contract for Failure to Become Effective**

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than four (4) weeks' written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

2.3 **Commencement of Services**

The Consultants shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the SC.

2.4 **Expiration of Contract**

Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire when services have been completed and all payments have been made at the end of such time period after the Effective Date as shall be specified in the SC.

2.5 **Entire Agreement**

This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

2.6 **Modification**

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties. Pursuant to Clause GC 10 hereof, however, each party shall give due consideration to any proposals for modification made by the other Party.

2.7 **Force Majeure**

2.7.1 **Definition**

- (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub Consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.7.2 **No Breach of Contract**

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.7.3 Measures to be Taken

- (a) A party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
- (b) A party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- (c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

2.7.4 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.7.5 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Services after the end of such period.

2.7.6 Consultation

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

2.8 Suspension

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

2.9 Termination

2.9.1 By the Client

The Client may, by not less than thirty (30) days' written notice of termination to the Consultants (except in the event listed in paragraph (f) below, for which there shall be a written notice of not less than sixty (60) days), such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause 2.9.1, terminate this Contract:

- (a) if the Consultants fail to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to Clause 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration

- proceedings pursuant to Clause 9 hereof;
- (d) if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;
- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (f) if the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

2.9.2 **By the Consultants**

The Consultants may, by not less than thirty (30) day's written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 2.9.2, terminate this Contract:

- (a) if the Client fails to pay any money due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 8 hereof within forty-five(45) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;
- (c) if, as the result of Force Majeure, the Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (d) if the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause 9 hereof.

2.9.3 **Cessation of Rights and Obligations**

Upon termination of this Contract pursuant to Clauses 2.2 or 2.9 hereof, or upon expiration of this Contract pursuant to Clause 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause 3.3 hereof, (iii) the Consultant's obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause 3.6 (ii) hereof, and (iv) any right which a Party may have under the Applicable Law.

2.9.4 **Cessation of Services**

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses 2.9.1 or 2.9.2 hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Clauses 3.9 or 3.10 hereof.

2.9.5 **Payment upon Termination**

Upon termination of this Contract pursuant to Clauses 2.9.1 or 2.9.2 hereof, the Client shall make the following payments to the Consultants (after offsetting against these payments any amount that may be due from the Consultant to the Client):

- (i) remuneration pursuant to Clause 6 hereof for Services satisfactorily performed prior to the effective date of termination.
- (ii) reimbursable expenditures pursuant to Clause 6 hereof for expenditures actually incurred prior to the effective date of termination; and
- (iii) except in the case of termination pursuant to paragraphs (a) through (d) of Clause 2.9.1 hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract including the cost of the return travel of the Consultants' personnel and their eligible dependents.

2.9.6 Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (e) of Clause 2.9.1 or in Clause 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause 9 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3. OBLIGATIONS OF THE CONSULTANTS

3.1 General

3.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations here under with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-Consultants or Third Parties.

3.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub Consultants, as well as the Personnel and agents of the Consultants and any Sub Consultants, comply with the Applicable Law. The Client shall advise the Consultants in writing of relevant local customs and the Consultants shall, after such notifications, respect such customs.

3.2 Conflict of Interests

3.2.1 Consultants not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause 6 hereof shall constitute the Consultants' sole remuneration in connection with this Contract or the Services and the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the Discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any Sub Consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

3.2.2 Consultants and Affiliates not to be otherwise interested in Project

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultants, as well as any Sub Consultant and any entity affiliated with such Sub Consultant, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

3.2.3 Prohibition of Conflicting Activities

Neither the Consultants nor their Sub Consultants nor the Personnel of either of them shall engage, either directly or indirectly, in any of the following activities:

- (a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract; or
- (b) After the termination of this Contract, such other activities as may be specified in the SC.

3.3 **Confidentiality**

The Consultants, their Sub Consultants and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relation to the Project, the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

3.4 **Liability of the Consultants**

Subject to additional provisions, if any, set forth in the SC, the Consultants' liability under this Contract shall be as provided by the Applicable Law.

3.5 **Insurance to be taken out by the Consultants**

The Consultants (i) shall take out and maintain, and shall cause any Sub Consultants to take out and maintain, at their (or the Sub Consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the Special Conditions (SC), and (ii) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

3.6 **Accounting, Inspection and Auditing**

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges and cost, and the bases thereof (including the bases of the Consultants' costs and charges), and (ii) shall permit the Client or its designated representative periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client.

3.7 **Consultants' Actions requiring Client's prior Approval**

The Consultants shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel as are listed in Appendix B;
- (b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the Sub-Consultant and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub-Consultant and its Personnel pursuant to this Contract;
- (c) any other action that may be specified in the SC.

3.8 **Reporting Obligations**

The Consultants shall submit to the Client the reports and documents specified in **Appendix A/E** hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.

3.9 **Documents prepared by the Consultants to be the Property of the Client**

All plans, drawings, specifications, designs, reports and other documents prepared by the Consultants in performing the Services shall become and remain the property of the Client, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents. Restrictions about the future use of these documents shall be as specified in the SC.

3.10 Equipment and Materials furnished by the Client

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Client's instructions. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them in an amount equal to their full replacement value.

4. CONSULTANTS' PERSONNEL

4.1 General

The Consultants shall employ and provide such qualified and experienced Personnel as are required to carry out the Services.

4.2 Description of Personnel

- (a) The titles, agreed job descriptions, minimum qualification and estimated periods of engagement in the carrying out of the Services of each of the Consultants' Key Professional / Sub Professional Personnel are described in Appendix B.
- (b) If required to comply with the provisions of Clause 3.1.1 of this Contract, adjustments with respect to the estimated periods of engagement of Key Professional / Sub Professional Personnel set forth in Appendix B may be made by the Consultants by written notice to the Client, provided
 - (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and
 - (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause 6.1 (b) of this Contract. Any other such adjustments shall only be made with the Client's written approval.
- (c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix B may be increased by agreement in writing between the Client and the Consultants.

4.3 Approval of Personnel

The Key Personnel and Sub Consultants listed by title as well as by name in Appendix B are hereby approved by the Client. In respect of other Key Personnel which the Consultants propose to use in the carrying out of the Services, the Consultants shall submit to the Client for review and approval a copy of their biographical data. If the Client does not object in writing (stating the reasons for the objection) within twenty-one (21) calendar days from the date of receipt of such biographical data, such Key Personnel shall be deemed to have been approved by the Client.

4.4 Working Hours, Overtime, Leave, etc.

- (a) Working hours and holidays for Key Professional / Sub Professional Personnel are set forth in

Appendix C hereto. To account for travel time, foreign Personnel carrying out Services inside the Government's country shall be deemed to have commenced (or finished) work in respect of the Services such number of days before their arrival in (or after their departure from) the Government's country as is specified in Appendix C hereto.

- (b) The Key Professional / Sub Professional Personnel shall not be entitled to be paid for overtime nor to take paid sick leave or vacation leave except as specified in Appendix C hereto, and except as specified in such Appendix, the Consultants' remuneration shall be deemed to cover these items. All leave to be allowed to the Personnel is included in the staff-months of service set for in Appendix B. Any taking of leave by Personnel shall be subject to the prior approval of the Client by the Consultants, who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.

4.5 Removal and/or Replacement of Personnel

Removal and/or replacement of Personnel shall be regulated as under:

- 4.5.1** In case notice to commence services pursuant to Clause 2.1 of this Contract is not ordered by Client within 120 days of negotiations the key personnel can excuse themselves on valid grounds, e.g., selection on some other assignment, health problem developed after contract negotiation, 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.

- 4.5.2** In case notice to commence services is given within 120 days of negotiations there placement shall be as below:

- a. Replacement up to 33%: Replacement shall be by an equal or better scoring person. Reduction in remunerations for the balance period shall be @ 5% of the monthly rate.
- b. Replacement of more than 33% and up to 50%: Replacement shall be by an equal or better scoring person. Reduction in remunerations for the balance period shall be @ 10% of the monthly rate.
- c. Replacement beyond 50% and upto 66%. Replacement shall be by an equal or better scoring person. Reduction in remunerations for the balance period shall be @ 15% of the monthly rate.
- d. Replacement beyond 66 % shall normally not be considered. However in exceptional circumstances, where it becomes absolutely essential the remunerations of the substitute shall be reduced by 50 % of the original person replaced. Replacement shall be by an equal or better scoring person, The Department may initiate action for termination/debarment of such Consultant for future projects of NHIDCL/ MORTH for a period of 6 months to 24 months depending upon the severity of case.

- 4.5.3** 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.

- 4.5.4** 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.

- 4.5.5** If the team leader or any other key personnel/ specialist considered pivotal to the project are replaced, the substitute may be interviewed by NHIDCL to assess their merit and suitability.

- 4.5.6** If any member of the approved team of a Consultant engaged by NHIDCL leaves that Consultant before completion of the job, 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/ MORTH projects.

4.5.7 In exceptional situations where the replacement with equivalent or better qualification is not available, replacement with lower qualifications than the originally approved may be accepted with reduction in remuneration as per the procedure prescribed below. This kind of relaxation shall however, be limited to replacement of 2 key personnel only in one consultancy contract package.

i) The new proposed personnel as a replacement has to be evaluated as per the criteria fixed at the time of evaluation of original proposal and marks/rating and then:

-If the original personnel (included in the original proposal based on which the contract was awarded) is to be replaced at the instruction of NHIDCL and the new proposed personnel is having less qualification/ experience i.e. marks/rating (but fulfilling the minimum requirement as per TOR), his remuneration would be reduced by 15% over and above the stipulated conditions in the contract because of less qualified personnel.

-If the original personnel (included in Contract Agreement) is to be replaced by the Consulting firm and the new proposed personnel is having less qualification/ experience (marks/rating), then his remuneration would be decreased proportionally in comparison to the marks of the original personnel. This will also take into account the contract condition and if the proposed reduction is less than that stipulated in contract condition, it would be as per the contract provision.

It will be ensured that the new proposed personnel should score at least 75% of the marks of the originally approved key personnel. Both the Consulting firm and the proposed personnel should give the undertaking in the format available in Section 6 of RFP along with the replacement CV.

ii) The CV should be signed by personnel and the consulting firm in every page. If the CV is found incorrect at later date, the personnel accepted would be removed from the assignment and debarred from further NHIDCL/ MORT&H works for an appropriate period to be decided by NHIDCL and the new proposed personnel in place of removed personnel would be paid 15% less salary than the original personnel. 15% reduction in the salary will be imposed as penalty for submitting the incorrect information. This penalty will be imposed only once. If the same consulting firm submits incorrect information again second time, necessary action will be taken by NHIDCL to black list the firm.

4.6 Resident Project Manager

If required by the SC, the Consultants shall ensure that at all times during the Consultants' performance of the Services in the Government's country a resident project manager, acceptable to the Client, shall take charge of the performance of such Services.

5. OBLIGATION OF THE CLIENT

5.1 Assistance and Exemptions

Unless otherwise specified in the SC, the Client shall use its best efforts to ensure that the Government shall:

- (a) provide the personnel of the Consultants, Sub Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultants, Sub Consultants or Personnel to perform the Services;
- (b) assist for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all supporting papers for necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in India;
- (c) facilitate prompt clearance through customs of any property required for the Services;
- (d) issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;

5.2 Access to Land

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all land in the Government's country in respect of which access is required for the performance of the Services. The Client will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Consultants and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultants or any Sub Consultants or the Personnel of either of them.

5.3 Change in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost or reimbursable expenses incurred by the Consultants in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause 6.1(b),

5.4 Services, Facilities and Property of the Client

The client shall make available to the Consultants and the Personnel, for the purposes of the Services and free of any charge, the services, facilities and property described in Appendix D at the times and in the manner specified in said Appendix D, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on (i) any time extension that may be appropriate to grant to the Consultants for the performance of the Services, (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Clause 6.1(c) hereinafter.

5.5 Payment

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause 6 of this Contract.

6. PAYMENT TO THE CONSULTANTS

6.1 Cost Estimates ; Ceiling Amount

- (a) An abstract of the cost of the Services payable in **local currency (Indian Rupees)** is set forth in **Appendix E**.
- (b) Except as may be otherwise agreed under Clause 2.6 and subject to Clause 6.1(c), the payments under this Contract shall not exceed the ceiling specified in the SC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of the ceiling.
- (c) Notwithstanding Clause 6.1(b) hereof, if pursuant to Clauses 5.4 hereof, the Parties shall agree that additional payments shall be made to the Consultants in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause 6.1(a) above, the ceiling set forth in Clause 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

6.2 Currency of Payment

- (a) The payment shall be made in Indian Rupees.

6.3 Mode of Billing and Payment

Billing and payments in respect of the Services shall be made as follows:-

- (a) The Client shall cause to be paid to the Consultants an advance payment as specified in the SC, and as otherwise set forth below. The advance payment will be due after provision by the Consultants to the Client of a bank guarantee by a bank acceptable to the Client in an amount (or amounts) and in a currency (or currencies) specified in the SC, such bank guarantee (i) to remain effective until the advance payment has been fully set off as provided in the SC, and **ii) in such form as the Client shall have approved in writing.**

(b) **Payment Schedule**

The Consultant will be paid stage-wise as a percentage of the contract value as per the schedule given below if not otherwise stated in SC:

SI. No.	Description	Payment	Duration (In Days)
1	On Submission of Inception Report	15%	15
2	On Submission of Draft Project Report/ Additional Survey	50%	50
3	On Submission of final Project Report and Approval	35%	60
Total		100%	

S. No.	Description	Payment
<p><i>Note: Consultants have to provide a certificate that all the key personal as envisaged in the contract Agreement have been actually deployed in the projects. They have to furnish the certificate at the time of submission of their bills to NHIDCL from time to time.</i></p>		

No payment shall become eligible for the next stage till the Consultant completes to the satisfaction of the client the work pertaining to the preceding stage. The payment for the work of sub-soil investigation (Boring) will be as per plan approved by the client and will be paid as per actual at the rates quoted by the Consultants. The payment for the quantity given by the client for boring will be deemed to be included in the above mentioned payment schedule. Any adjustment in the payment to the Consultants will be made in the final payment only.

- (d) The Client shall cause the payment of the Consultants in Para 6.3 (b) above as given in schedule of payment within thirty (30) days after the receipt of bills by the Client. Interests at the rate specified in the SC shall become payable as from the above due date on any amount due by, but not paid on, such due date.

The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory one hundred and eighty (180) calendar days after receipt of the final report and final statement by the Client unless the Client, within ninety(90) day period, gives Consultants specifying in written notice to the detailed deficiencies in the Services, the final report or final statement. The Consultants shall

thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Client as paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultants to the Client within thirty (30) days after receipt by the Consultants of notice thereof. Any such claim by the Client for reimbursement must be made within twelve (12) calendar months after receipt by the Client of a final report and a final statement approved by the Client in accordance with the above

- (f) All payments under this Contract shall be made to the account of the Consultants specified in the SC.

7. Responsibility for Accuracy of Project Documents

7.1 General

- 7.1.1 The Consultant shall be responsible for accuracy of the data collected, by him directly or procured from other agencies/authorities, the designs, drawings, estimates and all other details prepared by him as part of these services. He shall indemnify the Authority against any inaccuracy in the work which might surface during implementation of the project. The Consultant will also be responsible for correcting, at his own cost and risk, the drawings including any re-survey/ investigations and correcting layout etc. if required during the execution of the Services.

The Consultant shall be fully responsible for the accuracy of design and drawings of the bridges and structures. All the designs and drawings for bridges and structures including all their components shall be fully checked by a Senior Engineer after completion of the designs. All drawings for bridges and structures shall be duly signed by the (a) Designer, (b) Senior Checking Engineer, and (c) Senior Bridge / Structure Expert. The designs and drawings not signed by the three persons mentioned above shall not be accepted. The Consultant shall indemnify the Client against any inaccuracy / deficiency in the designs and drawings of the bridges and structures noticed during the construction and even thereafter and the Client shall bear no responsibility for the accuracy of the designs and drawings submitted by the Consultants.

- 7.1.3 The survey control points established by the Consultant shall be protected by the Consultants till the completion of the Consultancy Services.

7.3. Penalty

7.3.1. Penalty for Error/Variation

- i) Deleted.
- ii) For inaccuracies in survey/investigation work the penalties shall be imposed as per details given in Table below:

Sl. No.	Item	Penalty (%age of contract value)
1	Topographic Surveys	0.25 to 0.5
	<i>a) The horizontal alignment does not match with ground condition.</i>	
	<i>b) The cross sections do not match with existing ground.</i>	
	<i>c) The co-ordinates are defective as instruments of desired accuracy not used.</i>	
2	Geotechnical Surveys	0.25 to 0.5
	<i>a) Incomplete surveys</i>	
	<i>b) Data not analysed properly</i>	
	<i>c) The substrata substantially different from the actual strata found during construction.</i>	
3	Deleted	Deleted
4	Deleted	Deleted
5	Deleted	Deleted

7.3.2 Penalty for delay

In case of delay in completion of services, a penalty equal to 0.05% of the contract price per day subject to a maximum 10% of the contract value will be imposed and shall be recovered from payments due/performance security. However in case of delay due to reasons beyond the control of the Consultant, suitable extension of time will be granted.

7.3.3 Total amount of recovery from all penalties shall be limited to 20% of the Consultancy Fee.

7.4 ACTION FOR DEFICIENCY IN SERVICES

7.4.1 Consultants liability towards the Client

Consultant shall be liable to indemnify the client for any direct loss or damage accrued or likely to accrue due to deficiency in service rendered by him.

7.4.2 Warning / Debarring

In addition to the penalty as mentioned in para 7.3, warning may be issued to the erring Consultants for minor deficiencies. In the case of major deficiencies in the Detailed Project Report involving time and cost overrun and adverse effect on reputation of NHIDCL, other penal action including debarring for certain period may also be initiated as per policy of NHIDCL.

8. FAIRNESS AND GOOD FAITH

8.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

8.2 Operation of the Contract

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause 9 hereof.

9. SETTLEMENT OF DISPUTES

9.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.

9.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.

10. Change of Scope

The change of Scope **on account of variation of total length as well as 2 lane length of project Highway from the indicative length** as given Letter of Invitation of the RFP shall be dealt as follows

- i) During the course of consultancy services in case it is considered necessary to increase/decrease the scope of services by the client the same shall be notified by Change of scope notice. Similarly, if the Consultant determines that change of scope is needed, he shall inform of the same to the Client. The Client will examine and shall either reject the proposal or issue change of scope notice.
- ii) The Consultancy fee shall be revised on account of change of scope as below:
 - In case the total length of project increase/ decrease up to more 10% of indicative length given in the RFP : **No change in Consultancy Fees**
 - In case the increase/ decrease in total length of project is more than 10 % of the indicative length as given in the RFP: The consultancy fee shall be increased/ decreased in the same proportion in which the length of the project road is increased/ decreased beyond 10%.
 - In case the length of 2 lane road is increased up to 10% of the length as indicated in the RFP :**No change in Consultancy Fees**
 - In case the length of 2 lane road is increased by more than 10% of the length as indicated in the RFP : The consultancy fee shall be increased by 0.25 times the average quoted rate (Rs per km) for the increased length of 2 lane beyond 10%
- iii) Length of Bypass / realignment shall not be treated as additional to the existing length of the highway for the purpose of change / variation in length. Increase/decrease in length on account

of bypasses/realignment shall not be considered as change of scope. However, the total length of the project highway (including bypasses and realignment) along the finally approved alignment shall be compared with the indicative length in the RFP for the purpose of variation.

SPECIAL CONDITIONS OF CONTRACT

Number of
GC Clause

A. Amendments of, and Supplements to, Clauses in the General Conditions

1.1(a) The words “**in the Government’s country**” are amended to read “**in INDIA**”

1.4 The language is: **English**

1.6.1 The addresses are:

For the Client: Managing Director
National Highway & Infrastructure Development Corporation Ltd.
PTI Building, 3rd Floor, 4, Parliament Street, New Delhi-110001

Attention : General Manager (Technical)
National Highway & Infrastructure Development Corporation Ltd.
PTI Building, 3rd Floor, 4, Parliament Street, New Delhi-110001
Ph. 011-23461629;
Email: anand.prasad@gov.in,

For the Consultants:

Attention: Name
Designation
Address
Tel:
Fax:
E-mail address

1.6.2 Notice will be deemed to be effective as follows:

- (a) in the case of personal delivery or registered mail, on delivery;
- (b) In the case of facsimiles, 24 hours following confirmed transmission.
- (c) In case of E mail, 24 hours following confirmed transmission.

1.8 Entity to Act as Member in charge (In case of Joint Venture of Consultants) with or without an Associate:

-

1.9 The Authorized Representatives are:

For the Client: (--)
Managing Director, NHIDCL (--)

For the Consultant: Name
 Designation

1.10 The Consultants and the personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws (prevailing 7 days before the last date of submission of bids) during life of this contract and the Client shall perform such duties in regard to the deduction of such tax as may be lawfully imposed.

2.1 **The effectiveness conditions are the following:**

- a) The contract has been approved by NHIDCL.
- b) The Consultant will furnish within 15 days of the issue of letter of acceptance, an unconditional Bank Guarantee from a Nationalised Bank, IDBI or ICICI/ICICI Bank/Foreign Bank/EXIM Bank / Any Scheduled Commercial Bank approved by RBI having a networth of not less than 500 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 Nationalised Bank in India. In case of JV, the BG shall be furnished on behalf of the JV or lead partner of JV for an amount equivalent to 10% of the total contract value to be received by him towards Performance Security valid for a period of one year beyond the date of completion of services.

2.2 The time period shall be “sixty days” or such other time period as the parties may agree in writing.

2.3 The time period shall be “fifteen days” or such other time period as the Parties may agree in writing.

2.4 The time period shall be “six months” or such other time period as the parties may agree in writing.

3.4 Limitation of the Consultants’ Liability towards the Client

- (a) Except in case of negligence or willful misconduct on the part of the Consultants or on the part of any person or firm acting on behalf of the Consultants in carrying out the Services, the Consultants, with respect to damage caused by the Consultants to the Client’s property, shall not be liable to the Client:

- (i) for any indirect or consequential loss or damage; and
- (ii) for any direct loss or damage that exceeds (A) the total payments for Professional Fees and Reimbursable Expenditure made or expected to be made to the Consultants hereunder, or (B) the proceeds the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability, whichever of (A) or (B) is higher.

- (b) This limitation of liability shall not affect the Consultants’ liability, if any, for damage to Third Parties caused by the Consultants or any person or firm acting on behalf of the Consultants in carrying out the Services.

3.5 The risks and the coverage shall be as follows:

- (a) Third Party motor vehicle liability insurance as required under Motor Vehicles Act, 1988 in respect of motor vehicles operated in India by the Consultants or their Personnel or any Sub Consultants or their Personnel for the period of consultancy.

- (b) Third Party liability insurance with a minimum coverage, for Rs. 1.00 million for the period of consultancy.

- (c)
 - (i) The Consultant shall provide to NHIDCL Professional Liability Insurance (PLI) for a period of One year beyond completion of Consultancy services or as per Applicable Law, whichever is higher.
 - (ii) The Consultant will maintain at its expense PLI including coverage for errors and omissions caused by Consultant’s negligence in the performance of its duties under this agreement, (A) For the amount not exceeding total payments for Professional Fees and Reimbursable Expenditures made or expected to be made to the Consultants hereunder OR (B) the proceeds, the Consultants may be entitled to receive from any insurance maintained

by the Consultants to cover such a liability, whichever of (A) or (B) is higher.

- (iii) The policy should be issued only from an Insurance Company operating in India.
 - (iv) The policy must clearly indicate the limit of indemnity in terms of “Any One Accident” (AOA) and “Aggregate limit on the policy” (AOP) and in no case should be for an amount less than stated in the contract.
 - iii) If the Consultant enters into an agreement with NHIDCL in a joint venture or ‘in association’, the policy must be procured and provided to NHIDCL by the joint venture/in association entity and not by the individual partners of the joint venture/ association.
 - iv) The contract may include a provision whereby the Consultant does not cancel the policy midterm without the consent of NHIDCL. The insurance company may provide an undertaking in this regard.
- (d) Employer’s liability and workers’ compensation insurance in respect of the Personnel of the Consultants and of any Sub Consultant, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and all insurances and policies should start from the date of commencement of services and remain effective as per relevant requirements of contract agreement
- 3.9 The Consultants shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Client.
- 4.6 The person designated as Team Leader cum Senior Highway Engineer in Appendix B shall serve in that capacity, as specified in Clause 4.6

6.1 (b) The ceiling amount in local currency is **Rs..... Excluding Service Tax)**

6.3 (a) No advance payment will be made.

6.3 (b) Payment Schedule

SI. No.	Description	Payment	Duration (In Days)
1	On Submission of Inception Report	15%	15
2	On Submission of Draft Project Report/ Additional Survey	50%	50
3	On Submission of final Project report and Approval	35%	60
Total		100%	

Note: Approval of the various stages of the services rendered by the Consultant is mandatory to release the payment for that stage of the payment schedule.

- 6.3 (e) The interest rate is: @ 12% annum
6.3 (f) **The account is: As provided by the Consultant.**

9.2 Disputes shall be settled by arbitration in accordance with the following provisions:

9.2.1 Selection of Arbitrators

Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions:

- (a) Where the Parties agree that the dispute concerns a technical matter, they 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 the sole arbitrator for the matter in dispute. 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.
- (b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultants shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the later of the two arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by Secretary, the Indian Council of Arbitration, New Delhi.
- (c) If, in a dispute subject to Clause SC 9.2.1 (b), one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the Secretary, Indian Council of Arbitration, New Delhi, to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.

9.2.2 Rules of Procedure

Arbitration proceedings shall be conducted in accordance with procedure of the Arbitration & Conciliation Act 1996, of India unless the Consultant is a foreign national/firm, where arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as in force on the date of this Contract

9.2.3 Substitute Arbitrators

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.

9.2.4 Qualifications of Arbitrators

The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) to (c) of Clause 9.2.1 hereof shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute.

9.2.5 Miscellaneous

In any arbitration proceeding hereunder:

- (a) Proceedings shall, unless otherwise agreed by the Parties, be held in DELHI
- (b) 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.]

- (c) 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.
- (d) The maximum amount payable per Arbitrator in Arbitration clauses shall be as under

S.No	Particulars	Maximum amount payable per Arbitrator/ per case
1	Arbitrator fee	Rs 15,000/- per day subject to a maximum of Rs 4 lacs or Rs 2.5 lacs (lump sum) subject to Publishing the award within 12months.
2	Reading charges	Rs 15,000/-
3	Secretarial Assistance and Incidental charges(telephone, fax, postage etc)	Rs 20,000/-
4	Charges for publishing/ declaration of the award	Rs 20,000/-
5	Other expenses (As per actual against bills subject to maximum of the prescribed ceiling given below)	
	Traveling expenses Lodging and Boarding	Economy class (by air), First class AC (by train) and AC Car (by road) a) Rs 15,000/- per day (in metro cities) b) Rs 7,000/- per day (in other cities)
		c) Rs 3,000/- per day if any Arbitrator makes their own arrangements.
6	Local travel	Rs 1,500/- per day
7	Extra charges for days other than hearing/ meeting days (maximum for 2 days)	Rs 3,500/- per day
Note:-	1. Lodging boarding and traveling expenses shall be allowed only for those members who are residing 100 kms. away from place 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 Managing Director NHIDCL before appointment of the Arbitrator.

10. The indicative length for the project is **51.50 Km.**

“Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51 in the State of Meghalaya”

Terms of Reference for Consultancy Services (TOR)

1. General

1.1 National Highways & Infrastructure Development Corporation Limited (NHIDCL) has decided to execute the “2-lane with geometric improvements from Km.85.00 to 95.00, 101.00 to 145.00 of NH-51 in the State of Meghalaya”.

1.2 For the above project, following DPR Consultant was engaged for feasibility study/DPR preparation: M/s Theme Engineering Services Pvt. Ltd.

1.3 The above project is being funded by JICA (Japan International Cooperation Agency). JICA has sought additional topographic survey; geological/geotechnical investigation before finalising bid documents and for reviewing/modifying design/drawing required to propose slope protection etc.

1.4 The above mentioned DPR Consultants have submitted DPRs after incorporating modifications as suggested by JICA during discussions. However, JICA has insisted for addl. survey (topographic/geological/geotechnical) and investigations as mentioned in Para 1.3 above.

1.5 JICA may also engaged their consultants during this addl. survey/investigations to review and monitor entire process of the above survey/design.

1.6 Consultant shall carry out survey & investigation in close association with JICA. In a phased manner, survey/investigation data/details/report shall be submitted.

1.7 Bidders shall be provided soft copy of relevant data from DPRs including alignment plan and cross-section prepared by the DPR Consultants. Topographic survey shall be carried out along the alignment and on the cross-sections as in DPRs. Any minor variation shall be fine tuned with the existing alignment/cross-section.

1.8 Alignment plan as well as cross-section shall be prepared super-imposing the existing alignment/cross-sections as in DPR incorporating the extra points, BOQ shall be prepared for earth cutting/filling and design/drawing/BOQ of protective works in consultation with JICA.

2. Objective

3. Scope of Services

3.1 The scope of services shall comprise:

3.1.1 A. Engineering Survey

- I. Additional Topographic Survey
- II. Additional Geological/ Geotechnical Survey
- III. Material Survey

3.1.2 To verify, reference survey points of DPR and to establish GPS Control Point with interval of 5.0 km with elevation survey from GTS Bench Mark (national bench mark).

Total NH-51: 11 Points

3.1.3 The scope of works for the topographic survey is as follow:

S. No	Item	Note	Unit	Quantity
A	<u>Plan Mapping Survey(S = 1:1,000)</u>			
1	Survey for Additional Data	- To cover average 15 m outside from the most lateral survey point of hill side in DPR design and average 10 m outside from the most lateral survey point of valley side in DPR design. - Existing utilities, road structures, house structures and social/ religious objects shall be covered.	ha	128.80
B	<u>Control Point Survey</u>			
2	Primary Control Survey	- To use Global Positioning System (GPS) and to integrate to the World Geographic System (WGS) 1984. - Elevation of GPS point shall be connected with the GTS Bench Mark (national bench mark).	Nos.	11
3	Establishing GPS Monument	- To install concrete square monument with dimension of 30 cm X 30 cm X 60 cm with a 10 mm diameter, 60 cm long steel bar embedded at the centre of the monument with i) Date Established, ii) GPS No., iii) Coordinates, iv) Elevation, v) Name of Project.	Nos.	11
4	Establishing Secondary Traverse	- Secondary traverse will be established using Total Station instrument and will be tied to at least 2 GPS control points. - To be spaced not greater than 500 m interval. - To be marked with wooden hub of dimension of 5 cm X 5 cm X 50 cm with a common wire nail embedded at the centre of the wooden hub.	Nos.	1,236
5	Traverse Survey	- Secondary traverse will be observed and measured in accordance with the following manners; <ul style="list-style-type: none"> • Horizontal angles will be observed by two rounds of angle on 2 different zero setting. • The allowable linear error of closure not to exceed 0.0002 Ps where Ps is the perimeter of the control. • The angular error of closure (Azimuth) not to exceed 10'' \sqrt{S} where S is the number of station. • Number of station between azimuth check not to exceed 35. • Relative error after azimuth adjustment not less than 1:10,000. 	Kms	30.2

Geological/Geotechnical Survey and Investigation

A Detailed Slope Inventory Survey (At every 40 m Interval/ Both side of ROW)					
	Item	Note	Unit	Quantity	Remarks
1	Type of rock/ soil	By visual inspection		At every 40m	-To take photograph & sketch
2	Degree of weathering	By visual inspection		-do-	
3	Classification of rock	As per (IS: 13365:1998)- Code for rock classification		-do-	
4	Slope angle	To measure by using survey tool (portable Clinometer)		At every 40m	-A sample of inventory sheet for geological survey of slope surface (General Section) & Critical section is attached for guidance/reference (Annexure I to TOR)
5	Dislocation/ landslide/ spring, and to take photograph and sketch	To identify by visual inspection		-do-	
B.	Bore Hole investigation at Land Slide Section		Nos.	6	-Reference of Bore hole locations attached. -Requirement given at. (Annexure I to TOR)

Sample of Inventory Sheets, Sketches of Geological survey, locations of critical sections, Bore hole locations and suggested slope design/ drawings prepared by JICA are enclosed at (Annexure I to TOR) for reference/guidance.

3.1.5 Preparation of Inventory Sheet

- (a) A sample of inventory sheet for geological survey of slope surface (general section) is enclosed in Attachment, and the inventory sheet for critical sheet is also enclosed in Attachment for guidance purpose.
- (b) 3 locations for critical failure section identified in JICA Preparatory Survey, for counter measure against debris flow disaster. JICA Preparatory Survey has recommended considering potential flow capacity of debris in the culvert design. In detail inventory survey, the potential scale of debris flow should be updated for the review design.

3.1.6 Borehole Investigation at Landslide Section

Identify critical section of landslide of NH-51 and sinking section to be subjected to the borehole investigation through the detailed slope inventory survey. As per JICA provisional scope of NH-51 is as follows:

- a. **NH-51:** 3 locations: as decided during the joint survey taken by DPR consultant, JICA study team, and NHIDCL,

3.1.7 The Contractor shall implement the tasks as listed below:

- 1) Preparation of detailed work plan, including time schedule and required equipments;
- 2) Negotiation with land owners and/or relevant organizations for permission to enter and conduct the Works in their lands;
- 3) Preparation, mobilization, transportation, setting and/or dismantling of equipments, tools, and materials;
- 4) Core drilling and sampling;
- 5) Monitoring of Groundwater level in borehole during drilling;
- 6) Record the drilling log and establish geological column of each borehole;
- 7) Make up groundwater monitoring boreholes (installation of perforated pipes and grouting) for the purpose of measurement of groundwater level affecting landslide movement;
- 8) Monitoring of Groundwater level after completion of core drilling;
- 9) Photographing of boring cores, PVC pipes being installed and field works;
- 10) Logging of borehole cores;
- 11) Cross-section survey at landslide site;
- 12) Demobilization and site clearing;
- 13) Reporting

3.1.7 Requirement of Core Sampling

(a) The drilling machine shall have the drilling capacity sufficient to drill the required depth and with hole diameter of more than 66 mm. The drill bit shall be selected deliberately to meet the geological conditions for the best core recovery and efficiency.

- For Cohesive Soil:
- Thin-walled tube (+76) should be used to obtain undisturbed samples.
- For Rock Core:

Type: But It-in rotary sleeve double tube sampler

Outer diameter of the inner tube: +68 (+86) Nx Size

Inner diameter of the inner tube: +48 (+66) Nx Size

(b) The Consultant shall use rock coring techniques to explore and sample bedrock, and to

confirm bedrock locations beneath proposed foundations. It is recommended to use double or triple tube core barrels to minimize disturbance of samples, Measure and record percent core

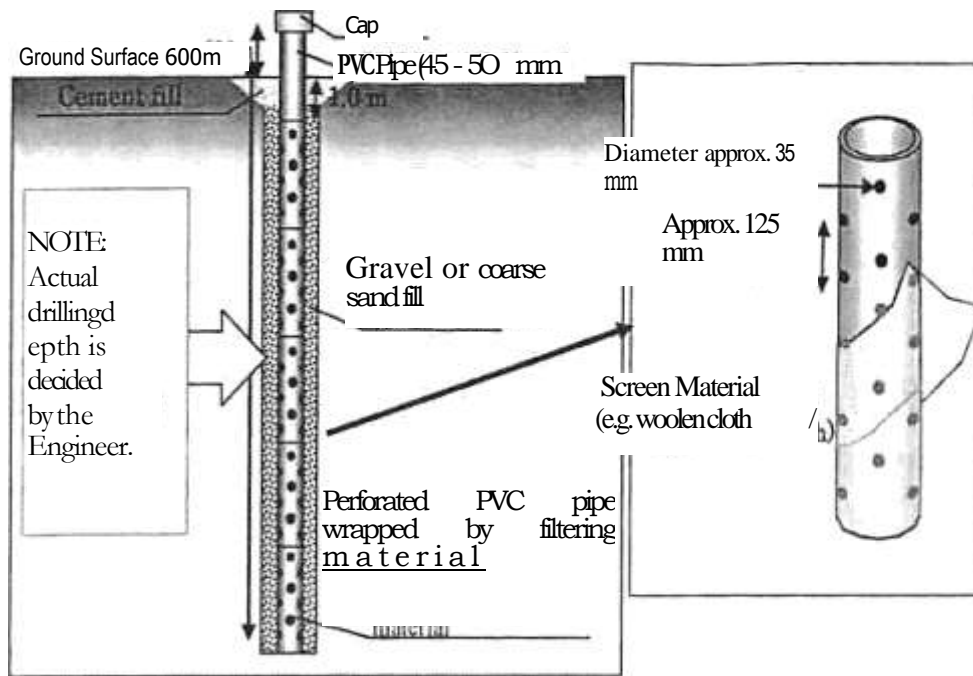
- (c) Recovery ratio (CRR) and Rock Quality Designation (RQD) as soon as the cores are recovered, anal classify the rock. Cored rock samples are retrieved by rotary drilling with hollow core barrels equipped with diamond or carbide embedded bits. The core is commonly retrieved in 1.50 m lengths.
- (d) The drilling shall aim at 100% core recovery in both rock and unconsolidated deposits. Drilling slime shall not be regarded as recovery of core samples. The recovery rate of samples in each five-meter section of the hole shall be not less than 70 % without acceptable reason.

(e) Monitoring Groundwater Level

- Perforated PVC pipes with diameter 45-50 mm shall be prepared. The perforated PVC pipes shall be installed into each borehole. Details of the perforated PVC pipe are shown as below. The inside diameter of the pipes shall be not less than 40 mm.
- After installation of the perforated PVC pipe into each other borehole, the groundwater level shall be measured twice (2) a week for (5) weeks from installation of drilling. Groundwater levels shall be measured by using a battery-operated electrical indicator (tester).
- The result of the measurement of groundwater levels shall be recorded in Graphs and tables with rainfall. The rainfall data shall be obtained from authorized metrological agency/CWC regional center by the Consultant.

Figure Details of Perforated PVC Pipe for Each Borehole

3.1.9 Cross-Sections Survey in landslide site;



The Contractor shall make cross-section topographic equipments such as total station and theodolite. The cross-section, which is used for geological profiles, shall include location of the drilled boreholes as well as existing facilities and topographic features in site such as road, footpath, house, drainage, river, and what the engineer requested. The location of the cross-section shall be instructed to the Contractor by the engineer. The base point used for the survey shall be fixed point, clarified and informed to the engineer.

3.1.10 Daily Report

Prior to commencement of the field work, the Contractor shall prepare format of daily report and submit to the engineer for approval. The daily report of drilling shall be recorded every day and attached to the final report. The daily report shall contain the following information at least:

- 1) Borehole number and date;
- 2) Work progress of the day;
- 3) Model name of the drilling machine utilized;
- 4) Diameter of the drill bit and the casing;
- 5) Groundwater level in the borehole before and after work;
- 6) Depths at which the core barrel was recovered of the core barrel;
- 7) Rate of drilling water circulation;
- 8) Rock condition;
- 9) Depth and rate of water loss or spring, if any, and back pressure of spring water;
- 10) Standard penetration test data; and
- 11) Name of personal in charge of drilling and the tests.

3.1.11 Reporting

On completion of the Works, the Contractor shall prepare survey report and submit it to the Engineer. The survey report shall be prepared in English, in proper forms. The report shall include the followings:

- 1) Actual location of the boreholes
- 2) Geological column,
- 3) Photograph of drilling core samples and PVC pipes being installed,
- 4) Geological profile based on the measured cross-section,
- 5) Daily drilling report,
- 6) Ground water level monitoring result, and
- 7) Drawing of cross-section measurement

The Contractor shall submit one (1) hard copy and soft copy (original data of MS-Word/Excel and CAD) of the report to the Engineer.

Slope Design

- Slope design of JICA Preparatory Survey is to be reviewed and updated in accordance with the results of detailed slope geological survey to refer the enclosed methodology (Attachment- 3-5). It shall be ensured that design is done considering the Indian Codes.
- For the critical slope failure section, the slope protection design shall be finalized to analyze the result of detailed slope geological survey and borehole investigation. Indicative BOQ and Indicative cost estimate shall be prepared.

Spoil bank Design

- In accordance with the result of topographic survey and estimated quantity of surplus soil to be required for disposal, the spoil bank shall be designed to introduce the design concept as per JICA Preparatory Survey.

3.1.12 Material Source Survey of Quarry

- 1) DPR Consultants have to identify locations of existing quarry sites: On NH-51

S. No.	Quarry Name	Location

- 2) 3 samples of rock/soil materials shall be taken from each quarry, and the following laboratory material tests shall be conducted to confirm quality as aggregate.

Laboratory Material Test	Number Test (approx.)
Specific Gravity	24 samples (3 samples X 8 quarries)
Water Absorption	24 samples (3 samples X 8 quarries)
Soundness	24 samples (3 samples X 8 quarries)
Loss Angels Abrasion	24 samples (3 samples X 8 quarries)
AIV	24 samples (3 samples X 8 quarries)

- 3) Besides the above existing quarry identified in DPRs the potential location of quarry development should be surveyed, and carry out laboratory material tests with same manner of the above. The above numbers of samples (24 nos.) may vary based on the addl. quarry, if identified.

4 General

4.1 to 4.4 Deleted

4.5 Standards and Codes of Practices

1. All activities related to field studies, design and documentation shall be done as per the latest guidelines/ circulars of MoRT&H and relevant publications of the Indian Roads Congress (IRC) and Bureau of Indian Standards (**BIS**). For aspects not covered by IRC and BIS, international standard practices, such as, British, Japanese or American Standards may be adopted. The Consultants, upon award of the Contract, may finalise this in consultation with NHIDCL and reflect the same in the inception report.
2. All notations, abbreviations and symbols used in reports, documents and drawings shall be as per IRC: 71-1977.

4.6 Quality Assurance Plan (QAP)

1. The Consultants should have detailed Quality Assurance Plan (QAP) for all field studies including topographic surveys, traffic surveys, engineering surveys and investigations, design and documentation activities. The quality assurance plans/procedures for different filed studies, engineering surveys and investigations, traffic surveys, material geo technical and sub-soil investigations, road and pavement investigations.
2. It is imperative that the QAP is approved by NHIDCL before the Consultants start the field work.

4.7 to 4.13 Deleted

5 Deleted

6 **Viability and Financing Options: Deleted**

6.1. Economic Analysis: Deleted

6.2. Financial Analysis: Deleted

7 **Time period for the service**

1. Time period envisaged for the study of the project is indicated in **Annex-I to LOI**. The final reports, drawings and documentation shall be completed within this time schedule.
2. NHIDCL shall arrange to give approval on all sketches, drawings, reports and recommendations and other matters and proposals submitted for decision by the Consultant in such reasonable time so as not to delay or disrupt the performance of the Consultant's services.

8 **Project Team and Project Office of the Consultant**

1. The Consultants shall be required to form a multi-disciplinary team for this assignment. The consultants Team shall be manned by adequate number of experts with relevant experience in the execution of similar detailed design assignments.
2. List of suggested key personnel to be fielded by the consultant with appropriate man-month of consultancy services is given in Enclosure I as per client's assessment.
3. Deleted
4. The Consultants shall establish an office at the project site manned by senior personnel during the course of the surveys and investigations. All the project related office work shall be carried out by the consultant in their site office unless there are special reasons for carrying out part of the office work elsewhere for which prior approval of NHIDCL shall be obtained. The address of the site office including the personnel manning it including their Telephone and FAX numbers will be intimated by the Consultant to NHIDCL before commencement of the services.
5. Deleted.

9 Reports to be submitted by the Consultant to NHIDCL

- 9.1 All reports, documents and drawings are to be submitted separately for each of the Sub-section of the Project Road. The analysis of data and the design proposals shall be based on the data derived from the primary surveys and investigations carried out during the period of assignment. The sources of data and model relationships used in the reports shall be indicated with complete details for easy reference.
- 9.2 Project preparation activities will be split into four stages as brought out below. Preliminary design work should commence without waiting for feasibility study to be completed.

Stage 1 : Inception Report

Stage 2: Initial topographic/Geological Report

Stage 3: Topographic Survey Report

Stage 4: Borehole Investigation Report

Stage 5: Project Report/Additional Survey

- 9.3 Time schedule in respect of all such stages has been indicated in the next Para. Consultant shall be required to complete, to the satisfaction of the client, all the different stages of study within the time frame indicated in the schedule of submission in Para 10 pertaining to Reports and Documents for becoming eligible for payment for any part of the next stage.

10 Reports and Documents to be submitted by the Consultant to NHIDCL

1. The Consultant shall submit to the client the reports and documents in bound volumes (and not spiral binding form) after completion of each stage of work as per the schedule and in the number of copies as given in Enclosure III. Further, the reports shall also be submitted in floppy diskettes /CD's in addition to the hard copies as mentioned in Enclosure-III. Consultant shall submit all other reports mentioned specifically in the preceding Paras of the TOR.
2. The time schedule for various submissions prescribed at SI.No.1 above shall be strictly adhered to. No time-over-run in respect of these submissions will normally be permitted. Consultant is advised to go through the entire terms of reference carefully and plan his work method in such a manner that various activities followed by respective submissions as brought out at SI.No.1 above are completed as stipulated. Consultant is, therefore, advised to deploy sufficient number of supporting personnel, both technical and administrative, to undertake the project preparation activities in construction package (Section) simultaneously. As far as possible, the proposal should include complete information such as number of such persons, name, position, period of engagement, remuneration rate etc. The Consultant is also advised to start necessary survey works from the beginning so as to gain time in respect of various other activities in that stage.

STAGE 1

10.1 Quality Assurance Plan (QAP) Document

Immediately upon the award, the Consultants shall submit four copies of the QAP Document covering all aspects of field studies, investigations design and economic financial analysis. The quality assurance plans/procedures for different field studies, engineering surveys and investigation, design and documentation activities should be presented as separate sections like engineering surveys and investigations, traffic surveys, material geo-technical and sub-soil investigations.

10.2 Inception Report (IR)

The report shall cover the following major aspects:

- i. Project appreciation;
Detailed methodology to meet the requirements of the TOR finalised in consultation with the NHIDCL officers; including scheduling of various sub-activities to be carried out for completion of various stages of the work; stating out clearly their approach & methodology for project preparation after due inspection of the entire project stretch and collection/ collation of necessary information;
Task Assignment and Manning Schedule;*
- iv. Work programme;*
- v. Proforma for data collection;*
- vi. Design standards and proposed cross-sections;*
- vii. Key plan and Linear Plan;*
- viii. Development plans being implemented and / or proposed for implementation in the near future by the local bodies and the possible impact of such development plans on the overall scheme for field work and design for the study;*
- ix. Quality Assurance Plan (QAP) finalised in consultation with NHIDCL;*
- x. Draft design standards.*

STAGE 2

10.3 Initial topographic/Geological Report

- i. Executive Summary
Primary Control Survey: Co-ordinates data's of Bench Marks.
Establishing GPS Monuments: Summary of all monuments*
 - With location
 - Date established
 - GPS No.
 - Coordinates
 - Elevation
 - Photographs
- ii. Summary details of Secondary traverse*
- iii. Geological report*
 - Type of Rock
 - Degree of weathering

- Classification of rock
- Slope angle
- Dislocation
- iv. *Material Survey report*
 - *Test reports as per details given at per Para 3.1.12*

STAGE 3

10.4 Topographic Survey Report

- i. Executive Summary
- ii. Summary of data input (x,y,z form)
- iii. Plotting of L-section, cross-sections (superimposed on existing cross-section)
- iv. Indicative BOQ and rough cost estimate
- v. Details of utilities/structures.
- vi. Spoil Bank Design

STAGE 4

10.4 Borehole Investigation Report

- i. Executive Summary
- ii. Actual location of the boreholes
- iii. Geological column,
- iv. Photograph of drilling core samples and PVC pipes being installed,
- v. Geological profile based on the measured cross-section,
- vi. Daily drilling report,
- vii. Ground water level monitoring result
- viii. Drawing of cross-section measurement.
- ix. Indicative design of slope protection work with indicative BOQ/ Cost and Surveys
 - At locations, where borehole investigations are done
 - *At critical locations/landslide locations.*

STAGE: 5

10.5 Project Report/Additional Survey

- The Draft DPR submission shall consist of construction package wise:
- Main report
- Material report
- Control Point Survey report
- Additional topographic survey report, indicative BOQ & rough cost assessment of earlier wise
- Geological report
- Borehole investigation report, slope protection design/BOQ/Cost assessment report.

Reports

- i. Volume-I, Main Report:** *This report will present the project background, social analysis of the project, details of surveys and investigations carried out, analysis and interpretation of survey and investigation data, ~~traffic studies and demand forecast~~, designs, cost estimation, environmental aspects, economic and commercial ~~environmental aspects, economics and commercial analysis and conclusions~~. The report shall include Executive summary giving brief account of the findings of the study and recommendations*

The Report shall also include maps, charts and diagrams showing locations and details of existing features and the essential features of improvement and upgrading.

- ii. Volume - II, Design Report:** *This report will be based on the additional survey data, the protective works proposed by the DPR Consultant shall be reviewed and accordingly indicative BOQ and rough Cost shall be provided.*

Based on the Additional survey data, indicative BOQ, rough cost estimate shall be prepared. Any modifications in DPRs shall be suggested.

Design for Slope protection at critical locations and at Bore-hole investigations location, considering the JICAs suggestions, Indian Codes. Indicative BOQ and cost estimates shall be worked out.

- iii. Volume - III, Materials Report:** *The Materials Report shall contain details concerning the proposed borrow areas and quarries for construction materials as mentioned in para 3.L12.*

- iv. Volume - E, Technical Specifications:** The MoRT&H's Technical Specifications for Road and Bridge works shall be followed for this study. However, Volume - IV: Technical Specifications shall contain the special technical specifications which are not covered by MOST Specifications for Roads and Bridges (latest edition / revision) and also specific quality control norms for the construction of works.

- v. Volume - VI, Rate Analysis:** This volume will present the analysis of rates for all items of works. The details of unit rate of materials at source, carriage charges, any other applicable charges, labour rates, and machine charges as considered in arriving at unit rates will be included in this volume.

- vi. Volume - VII, Cost Estimates:** This volume will present the contract package wise cost of each item of work as well as a summary of total cost.

- vii. Volume - VIII, Bill of Quantities:** This volume shall contain the package-wise detailed Bill of Quantities for all items of works.

- viii. Volume - IX, Drawing Volume:** All drawings forming part of this volume shall be 'good for construction drawings. All plan and profile drawings will be prepared in scale 1:250V and 1 "2500H scale to cover one km in one sheet. In addition this volume will contain good for construction' drawings for the following:

- a. *Horizontal Alignment and Longitudinal Profile.*
- b. *Cross-sections*
- c. *All drawings will be prepared in A2 size sheets. The format for plan, cross-section and profile drawings shall be finalised in consultation with the concerned NHIDCL officers. The drawings shall also include details of all BM and reference pillars, HIP and VIP. The coordinates of all points should be referenced to a common datum, preferably, GTS referencing system. The drawings shall also include the locations of all traffic safety features including traffic signals, signs, markings, crash barriers delineators and rest areas, bus bays, parking areas etc.*
- d. *Drawings pertaining to revised/reviewed protection works, geological sketches/drawings, slope protection drawings, spoil bank drawings.*

10.6 Final Project Report/Additional Survey, Documents and Drawings (6 Sets)

The Final package-wise DPR consisting of Main Report, Design Report, Drainage Design Report and Materials Report, incorporating all revisions deemed relevant following receipt of the comments from NHIDCL on the draft DPR shall be submitted as per the schedule given in Enclosure-III.

11. Interaction with NHIDCL

During entire period of services, the Consultant shall interact continuously with NHIDCL and provide any clarification as regards methods being followed and carry out modification as suggested by NHIDCL. A programme of various activities shall be provided to NHIDCL and prior intimation shall be given to NHIDCL regarding start of key activities such as boring, survey etc. so that inspections of NHIDCL officials could be arranged in time.

2. The NHIDCL officers and other Government officers may visit the site at any time, individually or collectively to acquaint themselves with the field investigation and survey works.
3. The consultant shall be required to send 3 copies of concise monthly Progress Report by the 5th day of the following month to the designated officer at his Head Quarter so that progress could be monitored by the NHIDCL. These reports will indicate the dates of induction and de-induction of various key personnel and the activities performed by them. Frequent meetings with the consultant at site office or in Delhi are foreseen during the currency of project preparation
4. All equipment, software and books etc. required for satisfactory services for this project shall be obtained by the Consultant at their own cost and shall be their property.

12. Payment Schedule

1. The Consultant will be paid consultancy fee as a percentage of the contract value as per the schedule given below:

PAYMENT SCHEDULE:

Sl. No.	Description	Payment	Duration (In Days)
1	On Submission of Inception Report	15%	15
2	On Submission of Draft Project Report/ Additional Survey	50%	50
3	On Submission of final Project Report and Approval	35%	60

Total		100%	
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S. No.	Description	Payment
<i>Note: Consultants have to provide a certificate that all the key personal as envisaged in the contract Agreement have been actually deployed in the projects. They have to furnish the certificate at the time of the of submission of their bills to NHIDCL from time to time.</i>		

After completion of services the final contract amount shall be worked out on the basis of inputs and services actually carried out and the payment shall be adjusted accordingly.

13. Data and Software

1. The ~~floppy diskettes~~/CD's containing all basic as well as the proposed data from all field studies and investigations, report, appendices, annexure, documents and drawings shall be submitted to NHIDCL at the time of the submission of the final Report.
2. Software: The Consultant shall also hand-over to NHIDCL ~~floppies~~/CD's containing any general software including, the-financial-model which has been specifically developed for the project.
3. The DVD's/CD's should be properly indexed and a catalogue giving contents of all DVD's/CD's and print-outs of the contents (data from field studies topographic data and drawings) should be handed over to NHIDCL at the time of submission of the Final Report.

14. Requirement of suitable Key Personnel:

Required as per scope of work. Consultant shall engage required Key Personnel as per Standard Engineering Practice with minimum ten years of experience.

14.1 Time Duration: Total 60 days

14.2 Costing: Total Cost including all:

Type of Expenditure	
Manpower	Required as per Scope of Work
Miscellaneous	Field Investigation and Surveys Office, Accommodation, Travel, Consumables, and other miscellaneous expenses.
Total	Manpower + Miscellaneous

15. Consultancy Fee:

NHIDCL agrees to pay the Consultant firm fee for the professional services to be rendered by them as herein after described at SC Clause 6.(The above fee is inclusive of fee payable by the Consultant to any other Consultant/Associate(s) and nothing extra shall be payable by NHIDCL for this purpose. The Consultant shall be reimbursed the service tax subject to submission of proof of payment of service tax).

16. Additions, Alterations and Variation:

- i. NHIDCL shall have the right to request in writing for additions alterations, modifications or deletions in the design and drawing of any part of the work and to request in writing for additional work in connection therewith and the consultants shall comply with such requests without any extra cost.
- ii. The Consultant shall not make any material deviation, alteration, addition to or omission from the work except without first obtaining the written consent of NHIDCL.

17 If any additional works are awarded by NHIDCL, and if NHIDCL desires, the consultant shall carry out additional work and it shall be completed proportionally. However this will be considered subject to the satisfactory performance of the consultant and the consultancy fee shall be calculated as per payments decided by NHIDCL and the consultant shall have no further claim whatsoever on this account from NHIDCL.

18. Taxes

- a) All taxes, income tax and any other leviable tax (except Service Tax) in connection with the execution of the contract levied by the statutory Authorities/State/Central Govt. of India/State Govt. or any local authorities on the consultant in accordance with the applicable law shall be borne by the consultant and are deemed to be included in their bid price. The bidders shall note that the Tax Deduction at Source (TDS) as per applicable law shall be made from the payments due/made to the consultants which shall not be reimbursed.

- b) The Service tax as applicable shall be reimbursed by NHIDCL on actual production of receipt of deposit duly authenticated by Chartered Accountant. However, consultant has to mention Service Tax Number in the invoice, and amount of Service Tax should be shown separately in the bill.
- c) Any enhancement of taxes/duties by the authorities/Government of India/State Government, during currency of this contract shall be borne by the Consultant only, which shall not be reimbursed by NHIDCL.

19.0 Performance Security/Guarantee

- 19.1 For the due performance of the contract in accordance with the terms and conditions specified, the consultant shall on the day of, or before signing the contract which shall not be later than 10 (ten) days from the issue of the Letter of Award, furnish performance security/Guarantee on the Proforma prescribed by NHIDCL from a Nationalized/Scheduled Bank to the extent of 5% of the value of total consultancy fees of consultant. The Bank Guarantee shall remain valid till stipulated time for completion of work plus 200 days. The Bid Security paid by the Consultant shall be returned to the consultant after receipt of Performance Guarantee.
- 19.2 The Bank Guarantee shall be in favour of NHIDCL, payable at New Delhi. The Bank Guarantee should be (in the prescribed format of NHIDCL as per Section-6) issued from any Nationalized Bank and shall be transmitted online through SFMS gateway to NHIDCL banker.
- 19.3 It is expressly understood and agreed that the performance security is intended to secure the performance of entire contract. It is also expressly understood and agreed that the performance security is not to be construed to cover any damages detailed/ stipulated in various clauses in the Contract document.
- 19.4 The performance security will be discharged by NHIDCL and returned to the Consultancy firms after 100 days of successful completion of the services to NHIDCL and statutory bodies.
- 19.5 NHIDCL reserves the right of forfeiture of the performance guarantee in addition to other claims and penalties in the event of the consultant's failure to fulfill any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract.
- 19.6 Should the stipulated time for completion of work for whatever reason get extended, the consultant, shall at his own cost, get the validity period of Bank Guarantee in respect of performance security furnished by him extended and shall furnish the extended / revised Bank Guarantee to NHIDCL before the expiry date of the Bank Guarantee originally furnished.

20. Completion period:

- a. The overall completion period for the execution of this project from the date of commencement of work shall be mentioned in NIT.
- b. If at any stage, the Project has been delayed by the acts of authorities or by the deployed contractor for the work, nothing extra shall be payable to the consultant. However suitable extension of time for completion of work shall be granted accordingly.
- c. Escalation/Price Variation

No claim / additional fees on account of any price variation/Escalation on whatsoever ground shall be entertained at any stage of works. Quoted fees shall be firm and fixed

for entire contract period as well as extended period for completion of the works.

Stage No.	Activity	No. of copies	Time Period for assignment
	Time Duration		60 Days
1	Inception Report (i) Inception Report including QAP Document	3	15
2	Draft project Report/Additional Survey (i) topographic survey (ii)geological survey (iii) borehole investigation report	6	50
3	Final Project report/ Additional Survey	6	60

21. Number of Drawing Sets etc. and Copyright:

The Consultant shall supply free of charge to the NHIDCL, the adequate no. as specified elsewhere of following documents in soft as well as hard copy.

- a) Detailed Project Reports with coloured drawings.
- b) All the Drawings and estimates to be submitted to NHIDCL.
- c) Complete detailed design calculations (structural and other services) including supply of drawings incorporating subsequent modifications.
- d) All working drawings for all the components (Good for Construction Drawings).
- e) Deleted
- f) Completion drawings and detailed documents.
- g) Deleted.

The Consultant shall supply free of charge to the NHIDCL all the estimates detailed designs, reports and any other details envisaged under this agreement, Including drawings would be supplied by the consultants as indicated above. Any extra sets of drawings will become the property of the NHIDCL.

The drawing cannot be issued to any other person, firm or authority or used by the consultants for any other project. No copies of any drawing or document shall be issued to anyone except the NHIDCL and authorized representative of NHIDCL.

22. Determination or Rescission of Agreement:

The NHIDCL without any prejudice to its right against the Consultant in respect of any delay by notice in writing absolutely may determine the contract in any of the following cases:

- i. If the consultants being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of the creditor shall be appointed or if circumstances shall arise which entitle the court or creditor to appoint a receiver or a manager which entitles the court to make up a winding order.
- ii. If the consultants commit breach of any of the terms of agreement. When the consultants have made themselves liable for action under any of the clauses aforementioned, the NHIDCL shall have powers:
 - a) to determine or rescind the agreement.
 - b) to engage another consultant(s) to carry out the balance work at the risk and cost of the consultant and debiting the consultant(s) the excess amount, if any, so spent.

In case contract of consultant is determined, the Performance Guarantee and Security Deposit of the consultant shall stand forfeited. The decision of NHIDCL in this regard shall be final and binding on the consultant.

23. Withholding and Lien of Payment

Whether any claim or claims for payment of money arises out of or under the contract against the Consultant, the NHIDCL shall be entitled to withhold and also to have a lien to retain in whole or in part, the security deposit, performance guarantee and or to withhold and have a lien to retain in part or in full the payments due to the consultant, or any claims of the consultant, so as to cover the claimed amount till the claim arising out of or under the contract is determined by the competent court.

24 Jurisdiction

The agreement shall be governed by the Indian Law for the time being in force and the Courts in Delhi alone will have jurisdiction to deal with matter arising there from.

25 General:

1. The scrutiny of the drawing, and designs by the NHIDCL's own supervisory staff, if any, does not absolve the Consultant of their responsibility under the agreement. The Consultant shall remain solely responsible for structural soundness of the design and other services for all provisions of the contract so as to satisfy the particular requirement of the specifications.
2. The Consultancy firms shall supply to the NHIDCL copies of all documents, instructions issued to Consultancy firms, if any, relating to the work, drawings, specifications, bill of quantities and also other documents as may be required.
3. The Consultant hereby agree that the fees to be paid as provided herein (clause 3.0) will be in full discharge of function to be performed by him and no claim whatsoever shall be against the NHIDCL in respect of any proprietary rights or copy rights on the part of any party relating to the plans, models and drawings.
4. While providing consultancy services, the consultant shall ensure that there is no infringement of any patent or design rights and he shall be fully responsible for consequences/any actions due to any such infringement. Consultant shall keep NHIDCL indemnified at all times and shall bear the losses suffered by NHIDCL in this regard.
5. Consultant shall appoint and notify a team of two senior officials of his organization as nodal officers to represent the consultant in all the Meetings /presentations with Local Municipal Corporation Authorities/ State/ NHIDCL/Central Govt. or any other agency.
6. All designs and drawings shall be the property of NHIDCL. The name and logo of NHIDCL shall be pre-dominantly displayed on all the drawings and documents. The consultant shall not put his name or firms name on any of the documents/drawings on the DPR. The name of Consultant shall be written as Associate Consultant on all drawings/documents only after DPR is approved from all the concerned authorities.
7. The originals of approved completion drawings shall be on good quality reproducible tracing paper and soft copy of all the drawings & design shall have to be given on compact disc (CD). The proprietary rights of all the design shall remain with NHIDCL.

8. The Consultant shall be required to sign an Agreement with NHIDCL within 10 days of the receipt of letter to proceed, based on these terms & conditions.
9. Recovery/Penalties can be recovered from the Consultancy Fee/BID SECURITY/BG of the other works that the consultant is doing or would be doing for NHIDCL at that time.

SUPPLEMENT

ADDITIONAL POINTS TO BE CONSIDERED FOR HILL ROADS IN ADDITION TO POINTS COVERED IN MAIN TOR

Sl. No.	Clause No. of TOR	<i>Additional points</i>
1.	2.3	<ul style="list-style-type: none"> a) Design of tunnels, if required b) Design of protective works, slope stabilization measures, erosion control measures, land slide control/protection measures snow drift control/snow clearance measures, avalanche protection measures, if required
2. 3.	3 4.1	<p>Feasibility study and preparation of Project report/ Additional Survey for hill roads shall be done in accordance with best international practices and wherever practicable/feasible steep gradients and hair pin bends may be avoided by Realignments and by provision of structures</p> <ul style="list-style-type: none"> a) Inventory and condition survey for tunnels, if required. b) Identification of faults in rock strata and impact of faults in design of tunnels, if required c) Detailed design of road considering and incorporating specific aspects related to hill region like terrain, topographic conditions, extreme weather conditions, altitude effects etc. d) Design of protective works, slope stabilization measures, erosion control measures, land slide control/protection measures, snow drift control/snow clearance measures, avalanche protection measures, if required e) Design of scenic overlooks/watering points etc.
4.	4.5 (1)	All activities related to field studies, design and documentation shall be done as per the latest guidelines/circulars of MORT&H and relevant publications of the Indian Roads Congress (IRC)/Bureau of Indian Standards (BIS) for hill roads. For aspects not covered by IRC and BIS, international standard practices, such as, British and American Standards may be adopted.
5.	4.7	<p>Review of data and documents pertaining to</p> <ul style="list-style-type: none"> a) Terrain and soil condition b) Condition of tunnels, if required. c) Sub-surface and geo-technical data for existing tunnels, if required. d) Drawing and details of existing tunnels, if required. e) Existing protective works, erosion control and land slide control/protection works, slope stabilization measures, snow drift control measures, avalanche protection measures f) Existing land slide and snow clearance facilities g) Geological details of rock strata in the area in case of tunnels
6.	4.11(1)	The Consultant should make an indepth study of available geological and Meteorological maps of the area.
7.	4.11 (2)	<p>The primary tasks to be accomplished during the reconnaissance survey shall also include:</p> <ul style="list-style-type: none"> a) details of terrain (steep or mountainous), cliffs and gorges, general elevation of the road including maximum heights negotiated by main ascents and descents, total number of ascents and descents, hair pin bends, vegetation etc. b) Climatic conditions i.e. temperature, rain fall data, snow fall data, fog conditions, unusual weather conditions etc. c) Realignment requirements including provision of tunnels, if required. d) Inventory of tunnels and geologically sensitive areas like slip prone areas, areas subject to landslides, rock fall, snow drifts, erosion, avalanche activity etc.
8.	4.11.2.1 (ii)	Cross sections shall be taken at every 25 meter in case of hill roads and at points of appreciable changes in soil conditions. While taking cross sections, soil conditions shall also be recorded.
9.	4.11.3.1 (1)	The inventory data shall also include:

		<p>a) General elevation of road indicating maximum & minimum heights negotiated by main ascents & descents and total no. of ascents & descents.</p> <p>b) Details of road gradients, lengths of gentle & steep slopes, lengths & location of stretches in unstable areas, areas with cliffs, areas with loose rocks, land slide prone areas, snow drift prone areas, no. & location of hairpin bends etc.</p> <p>c) Details of tunnels</p> <p>d) Details & types of protective structures, erosion & land slide control/protection measures, snow drift control measures, avalanche protection/control measures etc.</p>
10.	4.11.3.2 (2)	<p>Pavement:</p> <p>a) Location of crust failures along with their causes</p> <p>b) Conditions of camber/cross falls/super elevations etc., whether affected by subsidence</p> <p>Embankment:</p> <p>Extent of slope erosion on hill and valley side</p>
11.	--	<p>Condition Surveys & Investigation for Slope Stabilization, Erosion Control, Landslide Correction/Protection & Avalanche Protection Measures:</p> <p>a) Inventory & Condition Surveys of Existing Protective/Control Measures:</p> <p>The consultant shall make an inventory of all the structures related to Slope Stabilization, Erosion Control, Landslide Control/protection, Avalanche Protection etc. This shall include details of effectiveness of control measures already done and condition of protective/control structures.</p> <p>b) Landslide Investigation</p> <p>This shall be carried out to identify landslide prone areas, to suggest preventive measures or alternate routes that are less susceptible to landslide hazard. Further in existing slide areas this shall help to identify factors responsible for instability and to determine appropriate control measures needed to prevent or minimize recurring of instability problems.</p> <p>Initial preliminary studies shall be carried out using available contour maps, topographical maps, geological/geo-morphological maps, aerial photographs etc. for general understanding of existing slide area and to identify potential slide areas. This shall be followed by further investigations like geological/geo-technical/hydrological investigation to determine specific site conditions prevailing in the slide area as per relevant IRC specifications/publications, MORT&H circulars and relevant recommendations of the international standards for hill roads. The result of the investigations shall provide basis for engineering analysis and the design of protection/remedial measures.</p>
12.	4.12.1 (1)	<p>The Consultant shall also carry out detailed designs and prepare working designs for the following:</p> <p>a) cross sections at every 25 meter intervals</p> <p>b) Slope stabilization and erosion control measures</p> <p>c) Design of protection/control structures in areas subject to subsidence, landslides, rock fall, rock slide, snow drifts, icing, scour, avalanche activity etc.</p> <p>d) Design of protective structures in slip prone and unstable areas</p> <p>e) Design of scenic overlooks, watering points etc.</p> <p>f) Safety features specific to hill roads</p>
13.	4.12.2 (1)	<p>The Consultant shall evolve Design Standards and material specifications for the Study primarily based on IRC publications, MoRT&H Circulars and relevant recommendations of the international standards (American, British etc) for hill roads.</p>
14.	4.12.3	<p>Wherever practicable/feasible hairpin bends and steep gradients shall be avoided by</p>

		realignments, provision of structures or any other suitable provisions.
15.	4.12.4	While designing pavement for hill roads specific aspects relevant to hill regions like terrain & topographic conditions, weather conditions, altitude effects etc. shall be duly considered and suitably incorporated in design so that pavement is able to perform well for the design traffic and service life. Effects of factors like heavy rainfall, frost action, intensive snow and avalanche activity, thermal stresses due to temperature difference in day and night, damage by tracked vehicles during snow clearance operations etc. must also be considered along with traffic intensity, its growth, axle loads and design life.
16.	4.12.5(3)	The design of embankments should include the requirements for protection works and traffic safety features including features specific to hill roads.
17.	--	Design and Drawing of Tunnels: The Consultant shall prepare design and drawings for tunnels, if required as per the results of feasibility study, as per the relevant specifications of IRC/MORT&H and other international specifications.
18.	4.12.7	a) Topography of hills generates numerous water courses and this coupled with continuous gradients of roads in hills and high intensity of rainfall calls for effective drainage of roads. The drainage system shall be designed to ensure that the water flowing towards the road surface may be diverted and guided to follow a definite path by suitable provision of road side drains, catch water drains, interceptors etc. and flow on valley side is controlled so that stability is not affected. b) Further, adequate provision shall be made for sub-surface/subgrade drainage to take care of seepage through the adjacent hill face of the road & underground water flows.
19.	4.12.8	The Consultant shall design suitable traffic safety features and road furniture including traffic signals, signs, markings, overhead sign boards, crash barriers, delineators etc. including any feature specific to hill roads. The locations of these features shall be given in the reports and also shown in the drawings.
20.	4.12.3 (1)	The Consultant shall make suitable designs and layout for miscellaneous works including rest areas, bus bays, vehicle parking areas, telecommunication facilities, scenic overlooks, watering points etc. wherever appropriate.
21.	10.6 (1)	Volume II: Design Report : a) Inventory of protection measures and other structures b) Inventory of tunnels, if required. c) Proposed preliminary designs for tunnels, if required. Volume III: Drawings a) Drawings for protection/control measures and other structures b) Drawings for tunnels, if required.
22.	10.7 (3)	Volume II: Design Report (Part II) Part II of Design Report shall also deal with design of tunnels, if required and design of other protection/control structures. Volume IX: Drawing Volume This shall also include : a) Detailed working drawings for tunnels, if required. b) Detailed working drawings for protection/control structures

Attachment -3-1 : Critical Slope Failure Section as per RCA Preparatory Survey (for reference only)

LS No.	Landslide Location					Disaster Type	Soil/Rock Condition	Landslide Size			Road Deformation				Landslide Countermeasure	ratio
	Start		End					Length	Width	Depth	Collapse	Sinking	Crack	Bulge		
01	93		290	- 93	+ 310	SF	Very Soft	20	50	2	x				Gabion wall	10
02	101		910	-101	+ 970	SF	Soft	50	80	7	x				Gabion wall	7
03	101	+	970	-102	+ 010	SF	Soft	40	90	6					Gallon wall	7
04	107		550	- 107	+ 588	SF	Very Soft	38	9	4	x		x	x	Earth removal Gabion wall Seeding and mulching	10
05	112	+	750	-112	+ 790	SF	Soft	20	20	3	x	x			- No need	7
06	115	+	810	-115	+ 850	SB	Very Soft	20	-	-		x			Replacement of Subgrade	10
07	116	+	700	-116	+ 740	SH	Very Soft	20	-	-		\			Replacement of Subgrade	10
08	116	+	970	-116	+ 990	SH	Very Soft	10	-			\			Replacement of Subgrade	10
09	117	+	270	-117	+ 290	SB	Very Soft	10	-						Replacement of Subgrade	10
10	117	+	510	-117	+ 550	SB	Very Soft	20				x			Replacement of Subgrade	10
11	117	+	750	-117	+ 790	SH	Very Soft	20	-			x			Replacement of Subgrade	10
12	117	+	910	-117	+ 930	SB	Very Soft	20	-			x			Replacement of Subgrade	19
13	118		110	- 118	+ 139	MM	Very Soft	19	50	2		s.	x		Earth removal Gabion Wall	10
14	118	+	280	-118	+ 320	SB	Very Soft	30				.			Replacement of Subgrade	10
15	118	+	450	-118	+ 500	SB	Very Soft	40		-		s.			Replacement of Subgrade	10
16	118	+	610	-118	+ 850	SB	Very Soft	210	-			s			Replacement of Subgrade	113
17	118	+	910	- 118	+ 970	SB	Very Soft	60	-	.		x			Replacement of Subgrade	10
18	120	+	920	-121	+ 000	SB	Very Soft	70		-		x			Replacement of Subgrade	10
19	121	+	170	-121	+ 240	MM-p	Very Soft	70	100	7		x			- No need	10
20	121	+	310	-121	+ 410	SB	Very Soft	80	-						Replacement of Subgrade	10
21	121	4.	610	-121	+ 670	S13	Very Soft	60	-	-		x			Replacement of Subgrade	10
22	122	i.	860	-122	+ 889	MM	Very Soft	20	40	2		x			- No need	10
23	129	+	140	- 129	+ 160	MM	Very Soft	15	10	2		x			- No need	10

LS Type	Condition	ratio
Bed Rock	Bed Rock	5
Weathered Rack	Hard	
Colluvirim	Soft	7
Cohesive Soil	Very Soft	10

NH-51 Critical Slope Failure Section for Slope Design

Attachment -3-2 : Sample of Slope Inventory Sheet (General Section) (for reference only)

Field Survey Result

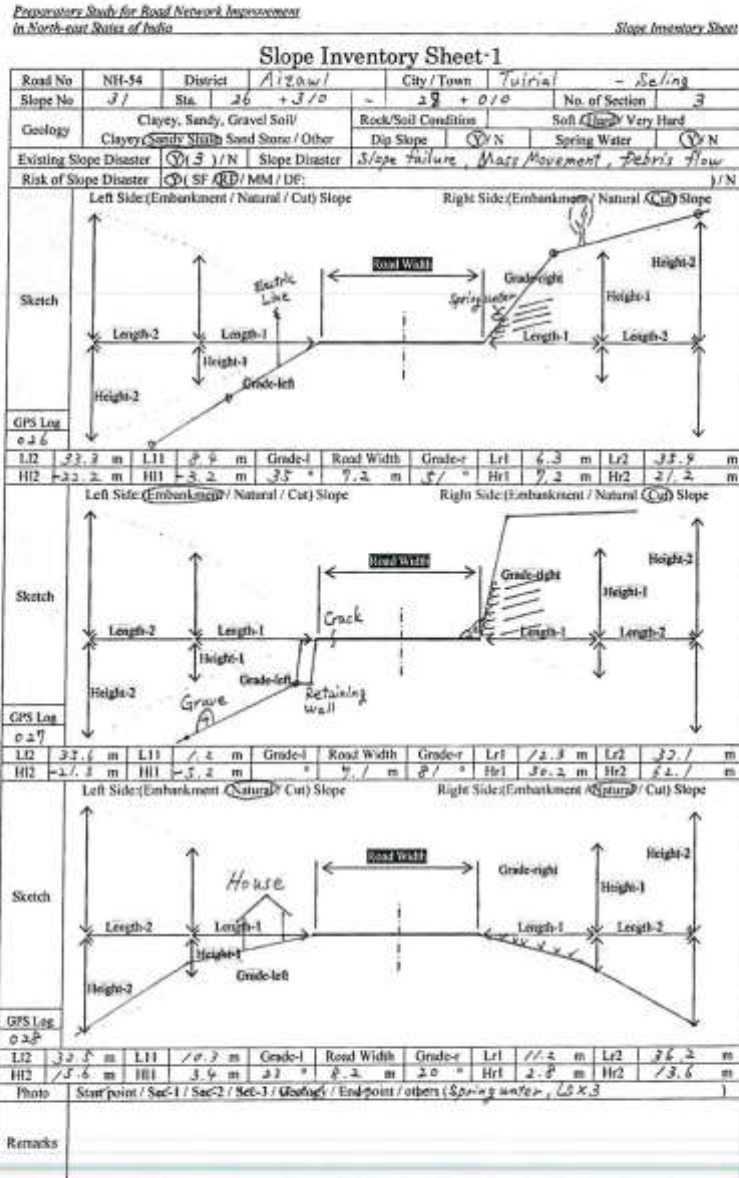
Section STA. OO ~ STA. OO

Geological Structure	①	Rock type		
	②	Degree of weathering		
	③	Rock Classification	-A- B- C _H - C _M - C _L - D-	
	④	Slope angle	(°)	
	⑤	Strike and Dip		
		Dislocation	YES	NO
	⑥	Landslide	YES	NO
		Spring	YES	NO

Sketch

Attachment -3

Attachment -3-3 : Sample of Slope Inventory Sheet (Critical Section)



Attachment -3

Preparatory Study for Road Network Improvement
in North-east States of India

Slope Inventory Sheet

Slope Inventory Sheet-2

Slope No	31		No. of Landslide	3	
No.1	Disaster type	Slope failure	No.2	Disaster type	Mass movement
Sta.	26+320-330	GPS Log	029	Sta.	27+820-27+120
					GPS Log
					030
Length	10.2 m	Height	3.6 m	Length	70.0 m
Width	20.1 m	Photo	4	Width	67.3 m
No.3	Disaster type	Debris flow	No.4	Disaster type	
Sta.	27+000-27+010	GPS Log	031	Sta.	-
					GPS Log
Length	5.0 m	Height	3.4 m	Length	m
Width	5.2 m	Photo	2	Width	m

Attachment -3

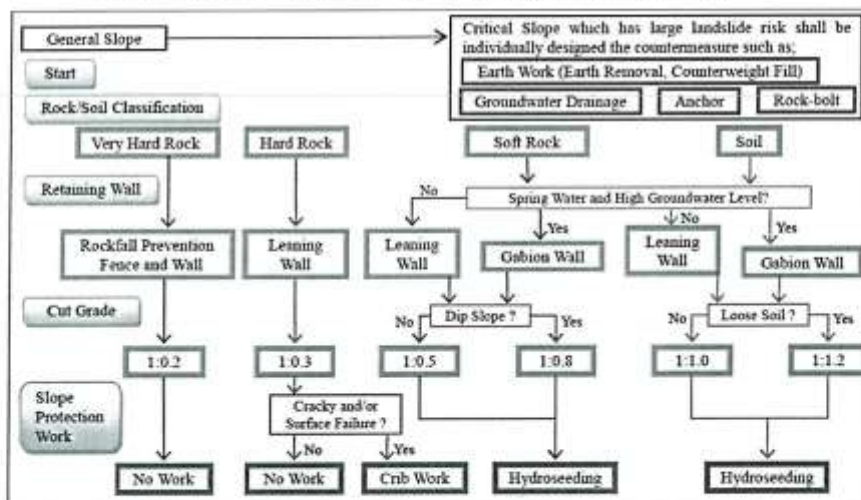
Attachment -3-4 : Reference of Borehole Investigation Location (for reference only)

No	Landslide Location		Disaster Type	Soil/Rock Condition	Landslide Size			Road Deformation				Landslide Countermeasures	Boring Plan		
	Start	End			Length	Width	Depth	Collapse	Sinking	Crack	Damage		Number	Length	Total
1	118 + 975	118 + 989	SB	Vary Soft	10	-	-		a			Reinforcement of Subgrade	2	13	16
2	118 + 110	118 + 130	MIM	Vary Soft	19	30	2		a	a		Earth removal Closure Wall	2	13	16
3	118 + 951	118 + 870	SB	Vary Soft	48	-	-		a			Replacement of Subgrade	2	15	18
Sub Total:												6	-	90	

Attachment -3

Attachment -3-5 : Methodology of Slope Design as per JICA Preparatory Survey (for reference only)**1 GENERAL**

The slope protection works and the cut grade shall be planned based on the geological/geotechnical condition and topography of each slope. Figure 1 summarizes the flowchart of selection of retaining wall type, cut grade, and slope protection works for cut slope on hill side. Critical slope which has large landslide with more than 1.0 m depth and is expected to give damage to the road shall be surveyed and individually designed its countermeasures e.g. earth work including landslide removal and counterweight fill, groundwater drainage, anchor work, and rock-bolt work, etc.



Source: JICA Study Team

Figure 1 Flowchart of Selection of Slope Protection Work for Cut Slope

2 RETAINING WALL

Retaining walls shall be built on the toe of all slopes on hill side along the road in order to prevent the small debris fall from the cut and natural slopes from accumulating in the side drainage, that can result in damage of pavement by the flooding discharged water.

Attachment -3

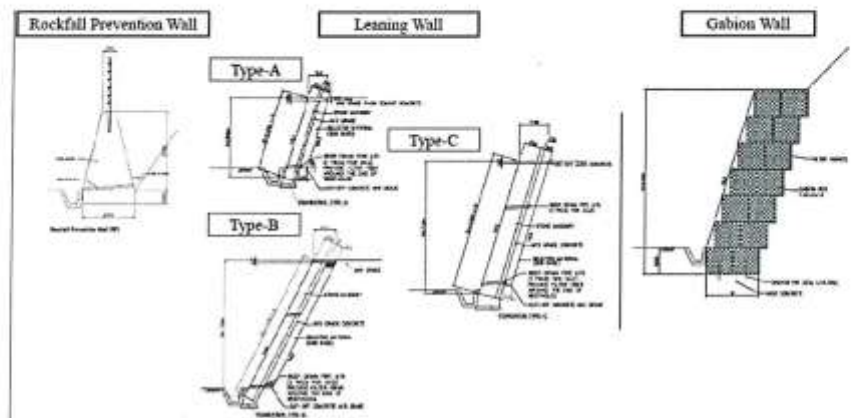
Table 1 shows design criteria of the retaining wall. To reduce cut soil amount, the type of the retaining wall shall be changed by slope topography. Namely, large retaining wall with 65 cm thickness shall be applied for higher slope, and small one with 35 cm thickness shall be applied for other lower slope and soil slope. Gabion wall, which has high permeability, shall be adopted for the slope where spring water was found at the site and groundwater level was assumed to be high. In high and steep slope consisted of very hard rock strata, gravity-type retaining wall with high-intensity rockfall prevention fence shall be built at the toe of cut slope in order to prevent rocks from falling on the road.

Attachment -3

Table 1 Design Criteria of Retaining Wall on Hill Side

Slope Type		Wall Height	Retaining Wall Type (Grade on Front Slope)	
Rock	Very Hard	Less than 3.0 m	Rockfall Prevention Wall	1:0.25
		Less than 3.0 m	Leaning Wall Type-A	1:0.3
	Hard	3.0 ~ 7.0 m	Leaning Wall Type-B	1:0.5
		3.0 ~ 7.0 m	Leaning Wall Type-C	1:0.3
		Less than 3.0 m	Leaning Wall Type-A	1:0.3
	Soft	3.0 ~ 7.0 m	Leaning Wall Type-B	1:0.5
		3.0 ~ 7.0 m	Leaning Wall Type-C	1:0.3
High Groundwater Level		Less than 8.0 m	Gabion Wall	1:0.3~
Soil	Dense Soil	Less than 3.0 m	Leaning Wall Type-A	1:0.3
		3.0 ~ 7.0 m	Leaning Wall Type-B	1:0.5
	High Groundwater Level	Less than 8.0 m	Gabion Wall	1:0.3~
	Loose Soil	Less than 3.0 m	Leaning Wall Type-A	1:0.3
		3.0 ~ 7.0 m	Leaning Wall Type-B	1:0.5
	High Groundwater Level	Less than 8.0 m	Gabion Wall	1:0.3~

Source: JICA Study Team



Source: JICA Study Team

Figure 2 Typical Cross Section of Retaining Walls

3 CUT SLOPE WITH WIDENING ON THE HILL SIDE

Cut grade of slope above the retaining walls above at the toe shall be decided based on the geological and geotechnical condition of the slope. Table 2 presents design criteria of cut grades for each rock and soil classification comparing those in IRC. Because there are many slope failure on cut slope with 1:0.3 which mainly consists of weathered and loosen rock, soft rock slope shall be cut with gentler grade than IRC and 1:0.5 to 1:0.8 grades. And very loose quaternary alluvium distributes along NH-51 and slope failure and erosion has frequently occurred on cut slope along NH-51. Therefore, such loose soil slope shall be cut with 1:1.2 gentler than IRC standard for landslide prevention. Harder rock slope can be applied steeper cut grade; namely very hard rock slope shall be cut with 1:0.2. On the other hand, loosen and weakened rock and soil slope shall be cut with gentler cut grades.

Attachment -3

Against hard rock slope which is cracky and has a risk of rockfall or slope failure, crib work shall be applied for prevention of landslide, which can deter surface failure and rockfall with around 10 m³ (less than 3m width and less than 1 m depth) on the cut slope. In case that larger landslide is expected, countermeasure against the landslide such as anchor and rock-bolt works shall be planned and designed individually.

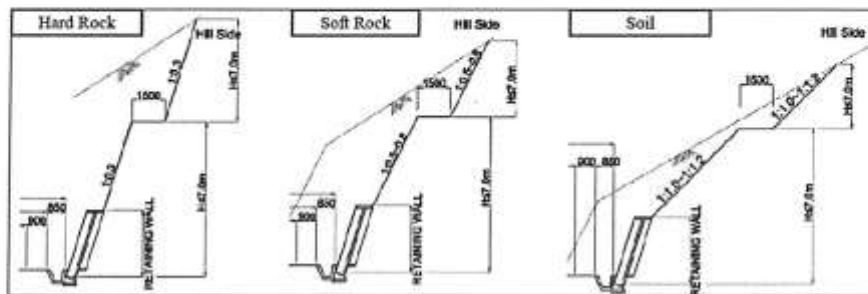
For prevention of erosion and surface failure and also for landscape improvement, most of cut slope shall be covered by hydroseeding work and be greened. The thickness of the sprayed hydroseeding shall be varied from 3 to 7 cm depending on the geotechnical condition. As very hard or hard rock slope consists of intact bed rock and is cut with steep grade, the vegetation work cannot be applied because the plant cannot be expected to grow on the slope.

Table 2 Design Criteria of Cut Slope and Slope Protection Work

IRC Standard*		JICA Study Team		Cut Grade	Slope Protection Work
Classification	Cut Grade	Rock/Soil Classification			
Hard Rock	80 ~ 90 degree	Rock	Very Hard	1:0.2	No protection work
			Hard	No Risk	1:0.3
	Landslide Risk	Crib work			
Ordinary Soft Rock	1:0.25 ~ 1:0.125	Soft	Non-Dip Slope	1:0.5	Hydroseeding (t=7 cm)
			Dip Slope	1:0.8	Hydroseeding (t=5 cm)
Ordinary Soil/ Heavy Soil	1:1.0 ~ 1:0.5	Soil	Dense Soil	1:1.0	Hydroseeding (t=3 cm)
			Loose Soil	1:1.2	Hydroseeding (t=3 cm)

*IRC: SP:48:1948 Clause 7.4

Source: JICA Study Team



Source: JICA Study Team

Figure 3 Typical Cross Section of Cut Slope

4 EMBANKMENT WITH WIDENING ON THE VALLEY SIDE

Slope grade of embankment slope is generally decided based on the embankment material and total slope height. In this project, because surplus soil by cutting is expected to utilize as embankment material, the embankment material is composed of gravelly soil derived from sandy and clayey shale. The slope grade of embankment is proposed as shown in

Attachment -3

Table 3. In order to prevent slope collapse, retaining wall such as gabion wall shall be built at the toe of slope. And the hydrosceding shall be implemented on the embankment slope for slope protection and landscape improvement.

1x: 0.5H
1 3

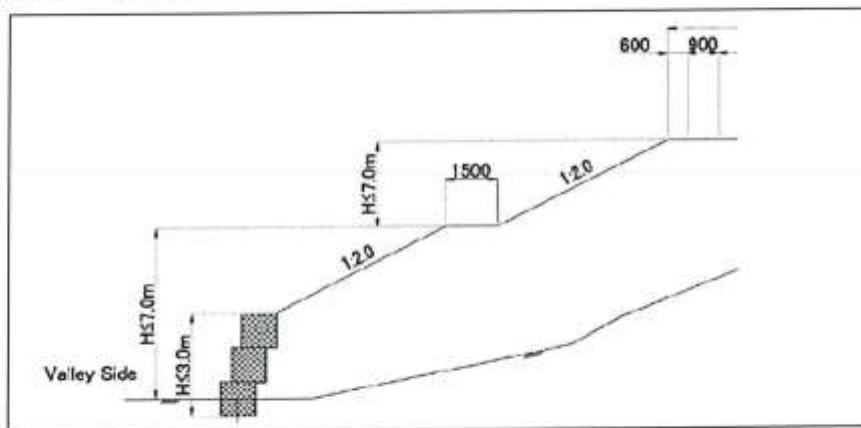
Attachment -3

Table 3 Design Criteria of Embankment Slope and Slope Protection Work

IRC Standard*		Embankment Material	Height	Grade	Slope Protection Work
Classification	Grade				
Embankment	1:2.0	Gravelly Sand derived from Cutting	less than 5 m	1:1.5	Hydroseeding (t=3 cm)
			5 – 20 m	1:2.0	Hydroseeding (t=3 cm)

*IRC: 36-1970

Source: JICA Study Team



Source: JICA Study Team

Figure 4 Typical Cross Section of Embankment Slope**5 EMBANKMENT STRUCTURE**

With widening on valley side, retaining wall is built in front of the road embankment. Type of retaining wall should be selected depending on topography of the topography of slope on valley side and condition of the road. For gentle and low valley slope which is gentler than 30 degree, gravity and leaning wall are frequently used for soil retaining. Because the gravity walls which has vertical or very steep grade on front slope need to excavate largely behind the wall in construction, it is necessary to pay attention to ensure the present traffic while construction. Steep and high slope as frequently seen in NH-54 need the reinforced soil wall which can be built steep gradient on its front slope and more than 20m in height.

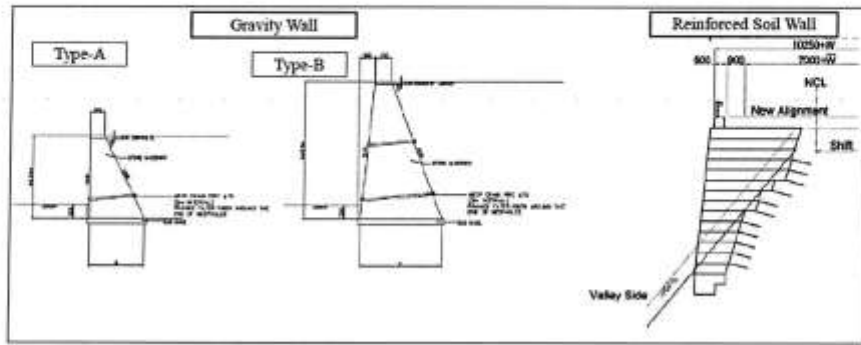
As there is often loose soil dumped in the past road construction on slope of valley side, embeded depth for foundation of the retaining wall shall be 2m on soil slope and 1m on rock slope.

Table 4 Design Criteria of Embankment Slope and Slope Protection Work

Embankment Material		Height	Grade of Front Slope	Apply for
Gravity Wall	Type-A	less than 3 m	Vertical	Gentle and Low Slope
	Type-B	less than 5 m	1:0.1	Gentler than 30 degree
Leaning Wall Type-B		less than 7 m	1:0.5	Gentler than 30 degree
Gabion Wall		less than 8 m	1:0.3	High Groundwater Level At Toe of Embankment
Reinforced Soil Wall		4 ~ 20 m	1:0.1	High and Steep Slope

Source: JICA Study Team

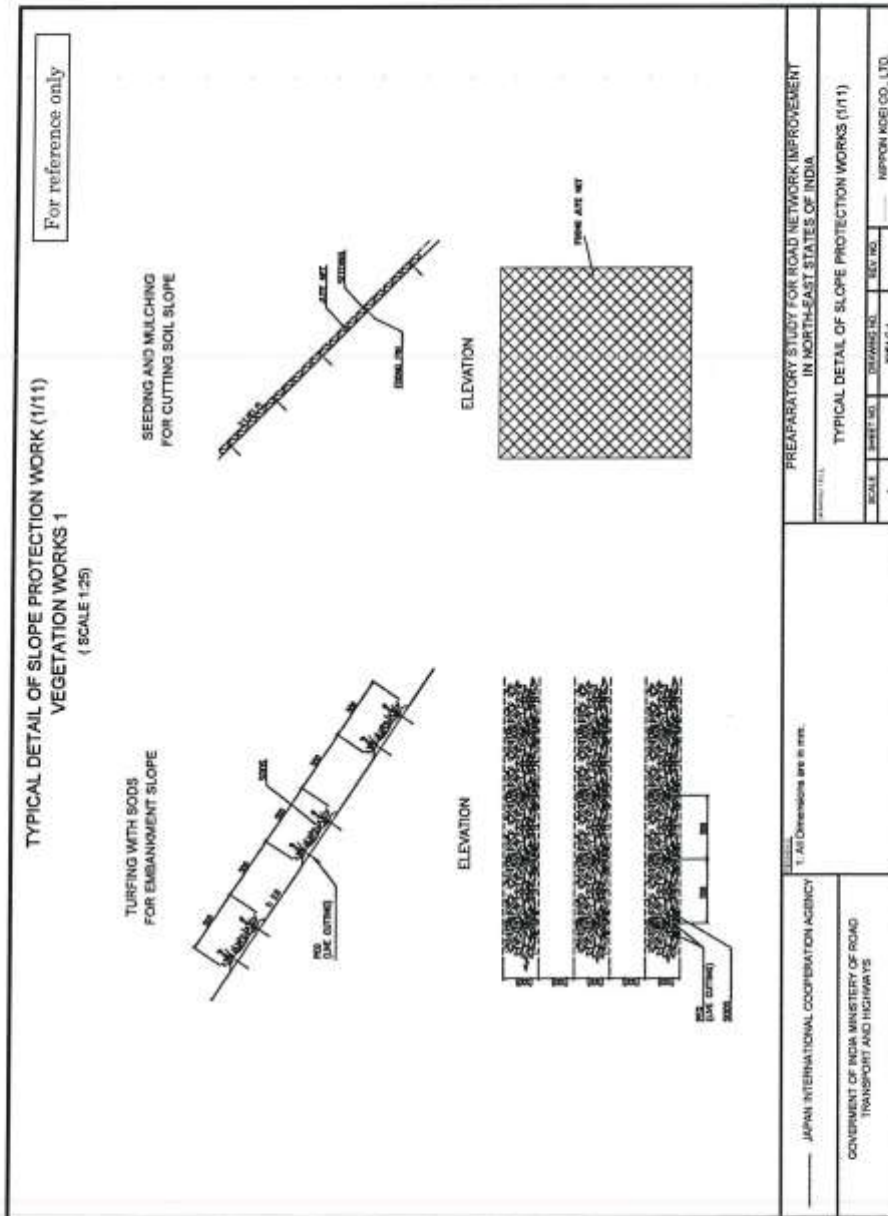
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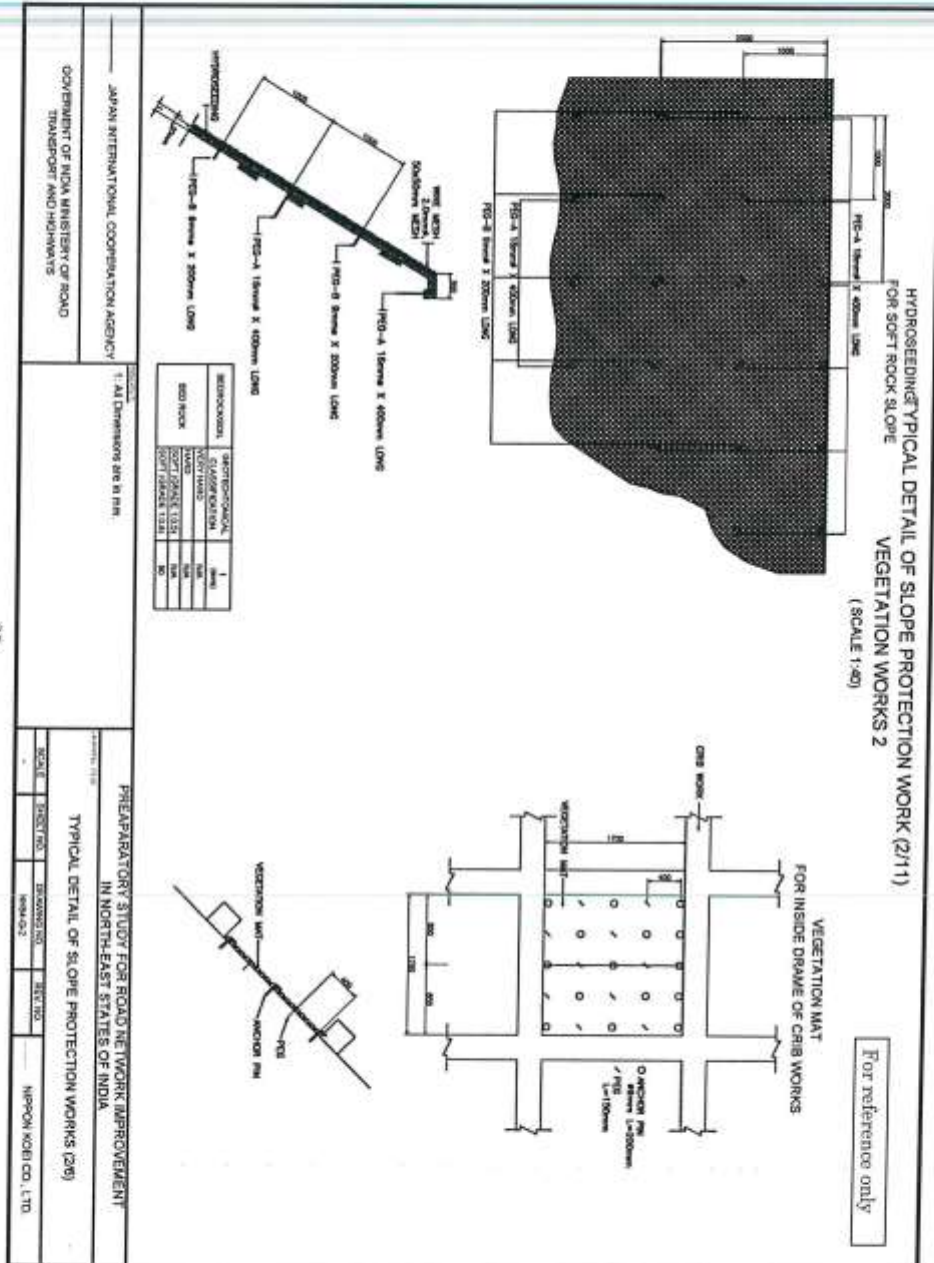


Source: JICA Study Team

Figure 5 Typical Cross Section of Retaining Walls

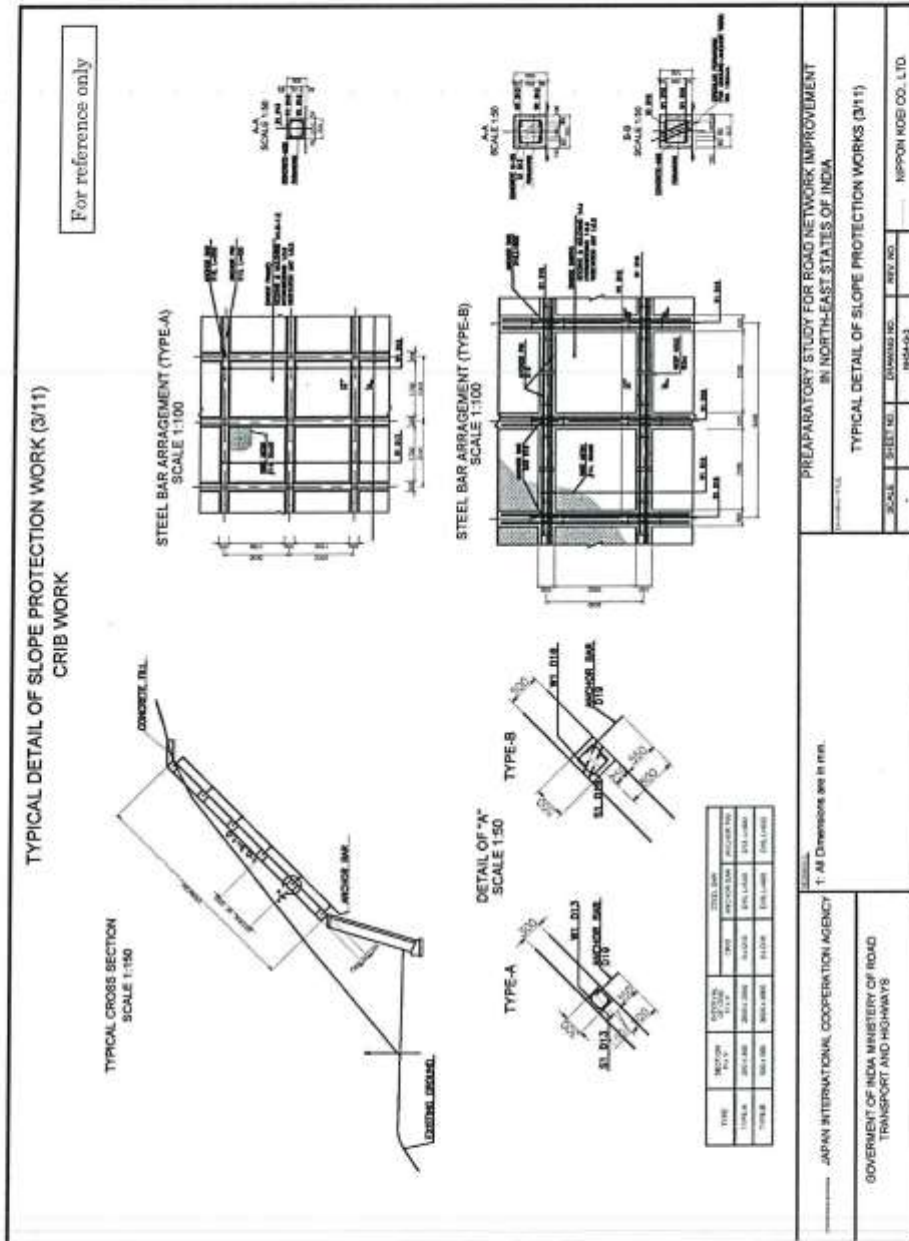
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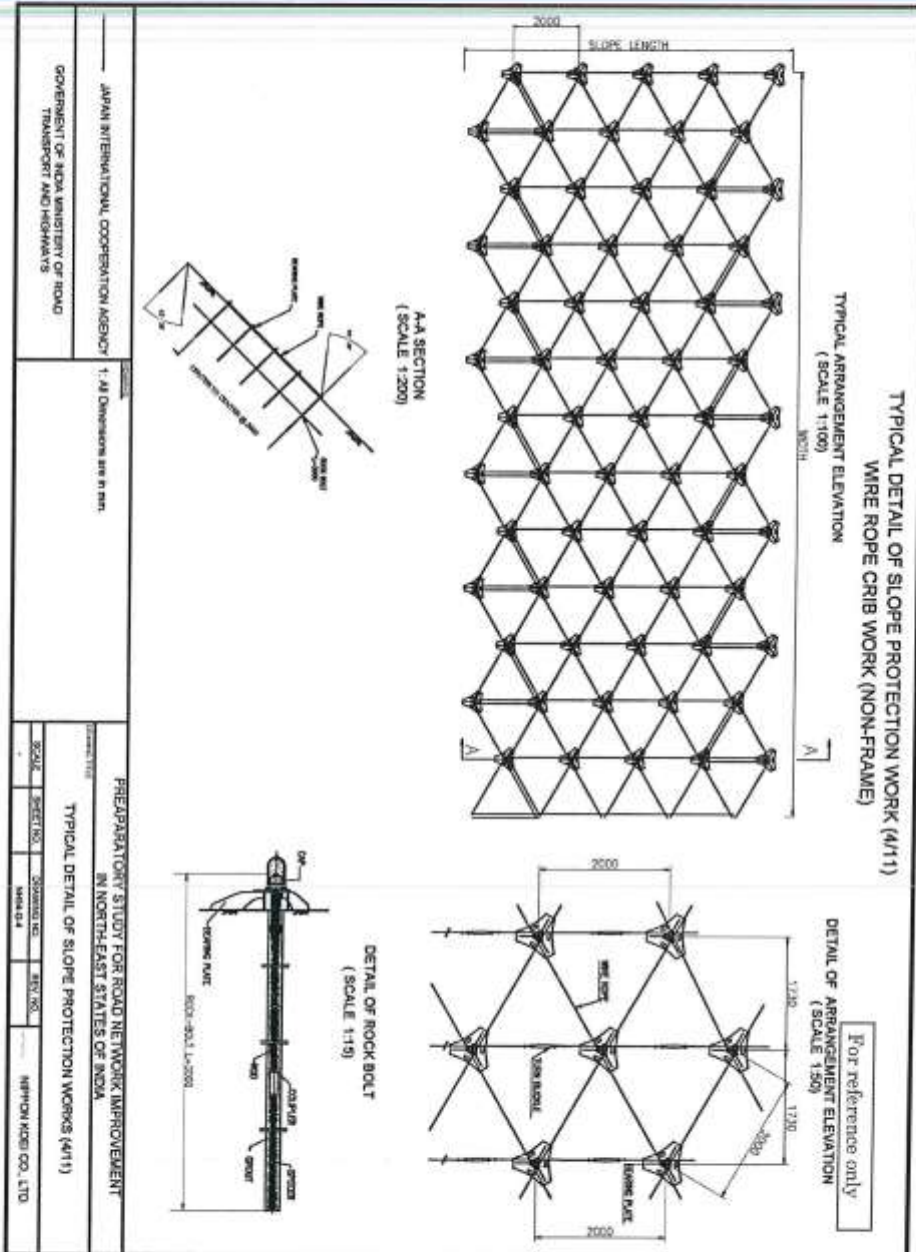




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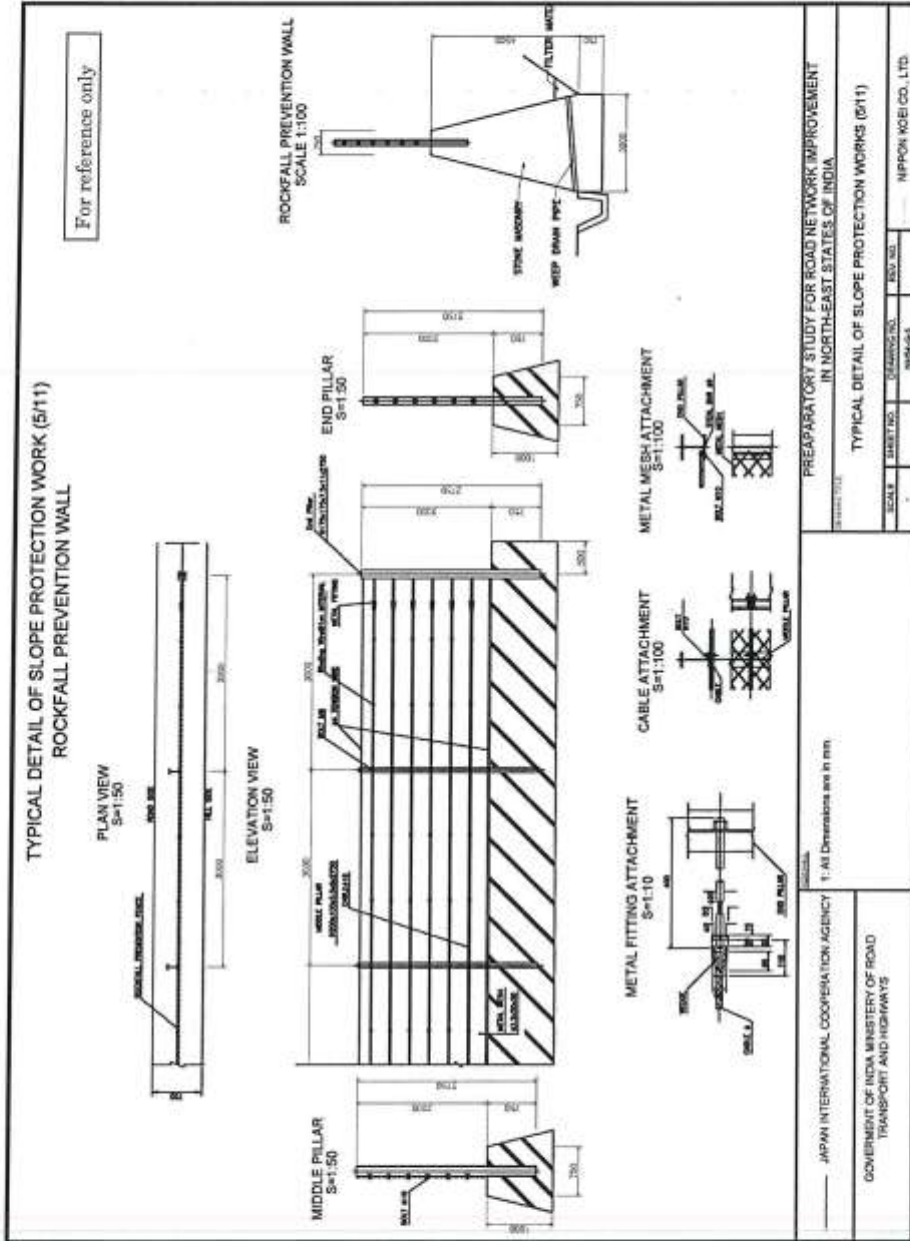
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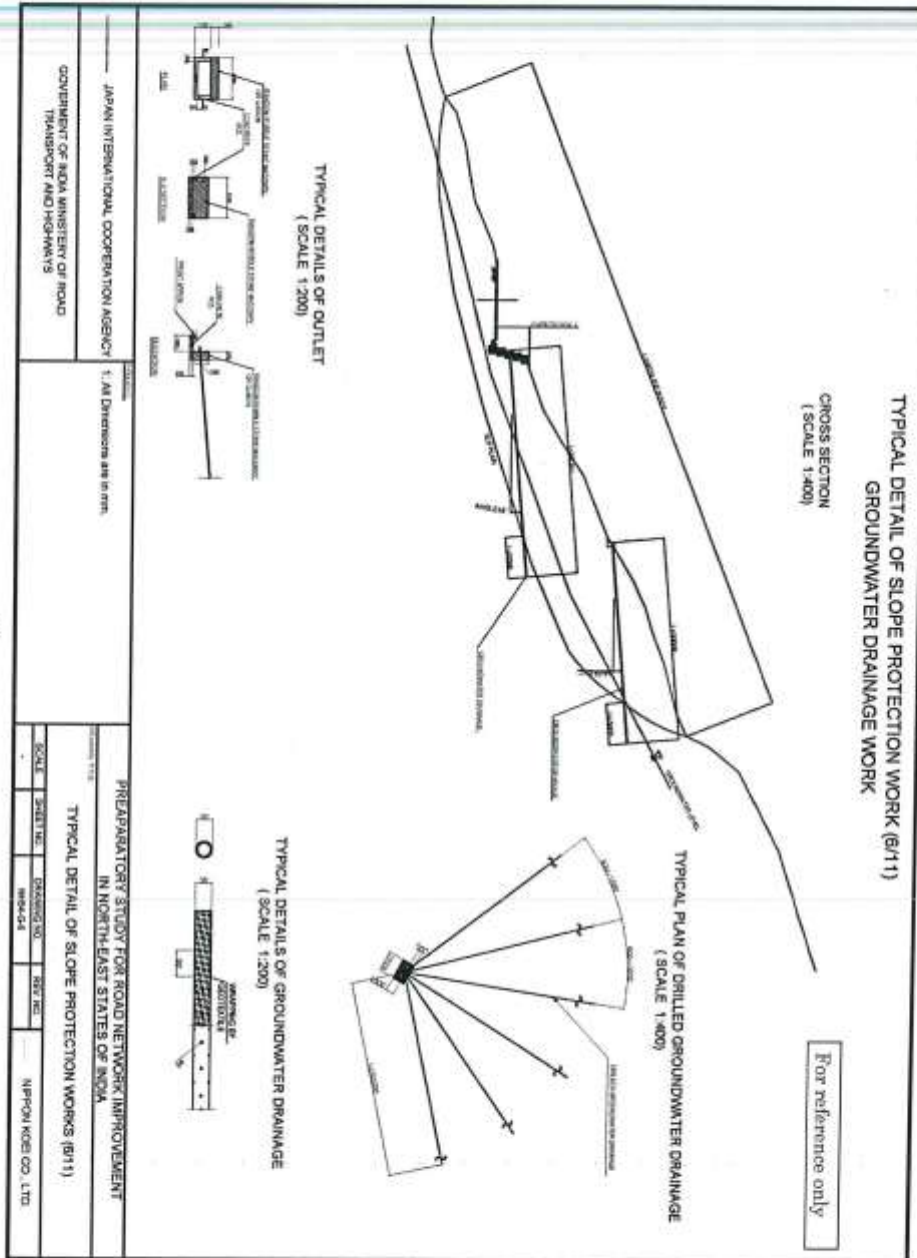




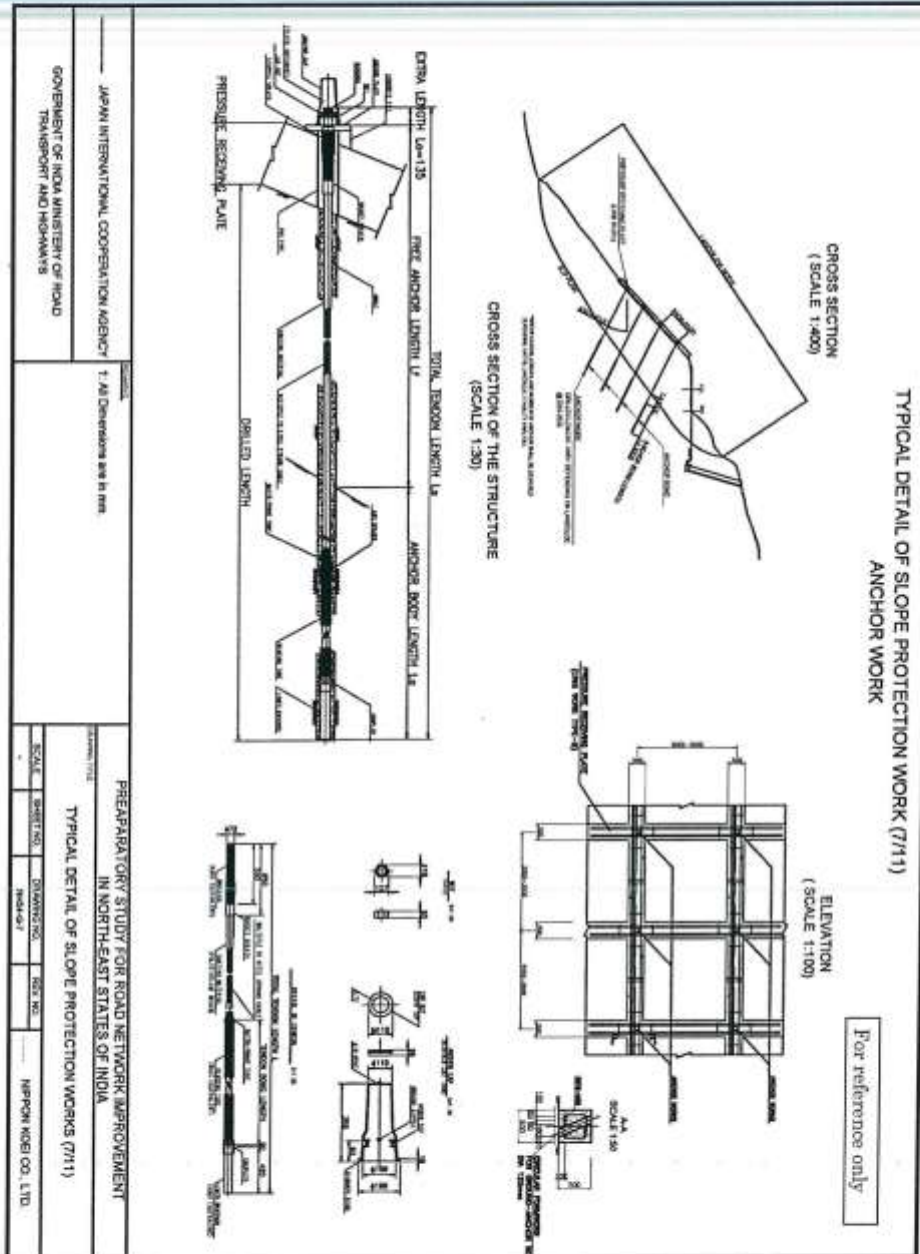
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Attachment -3

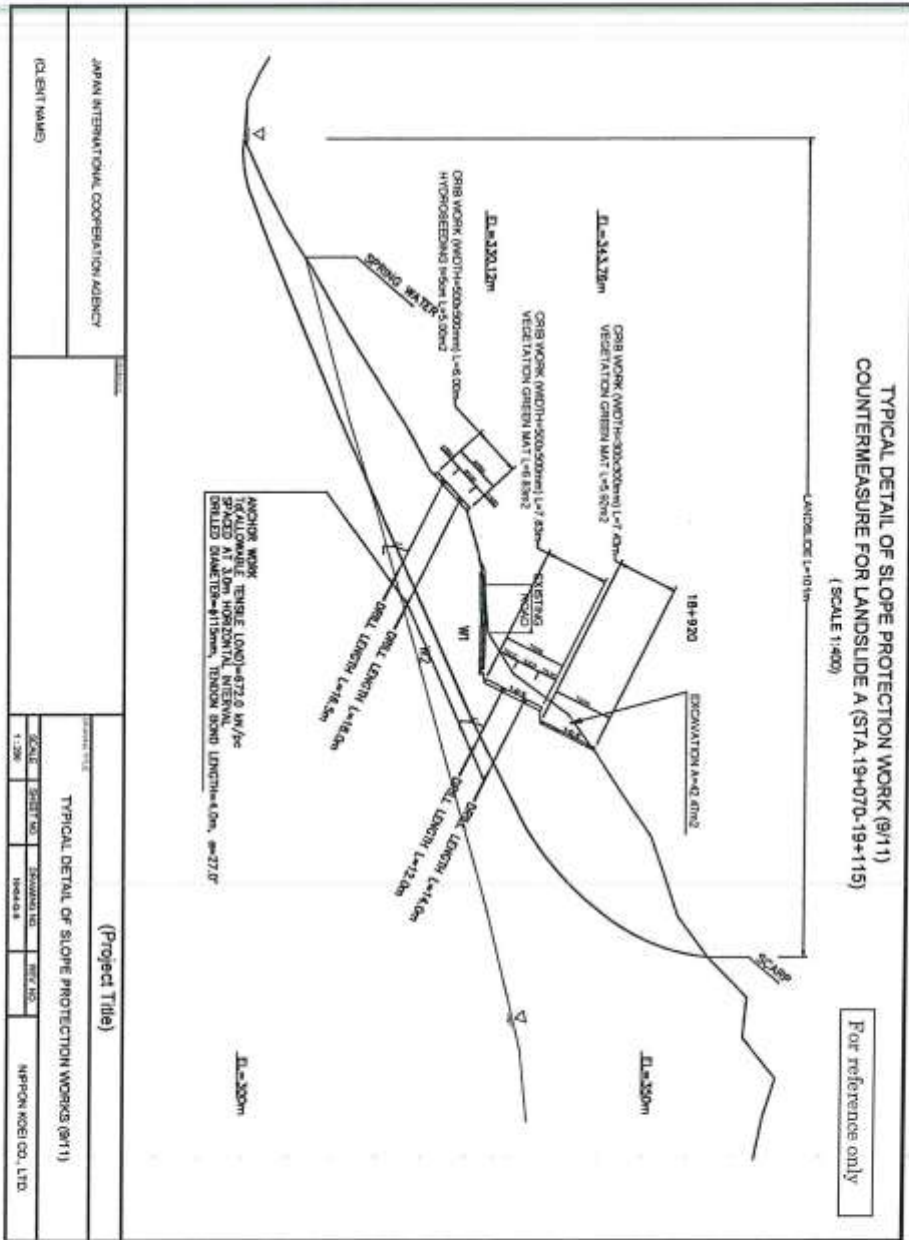




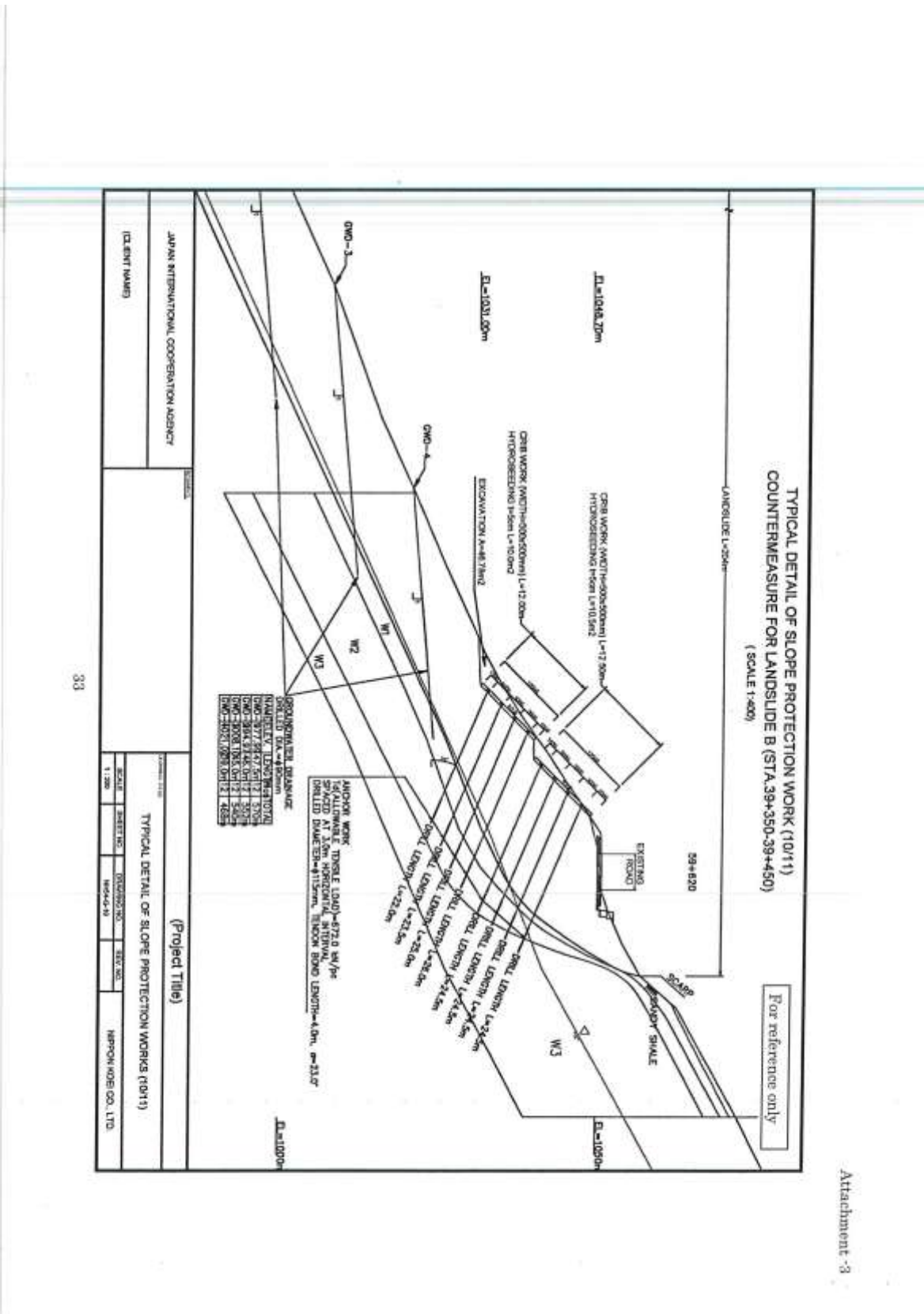
Attachment-3



Attachment - 3

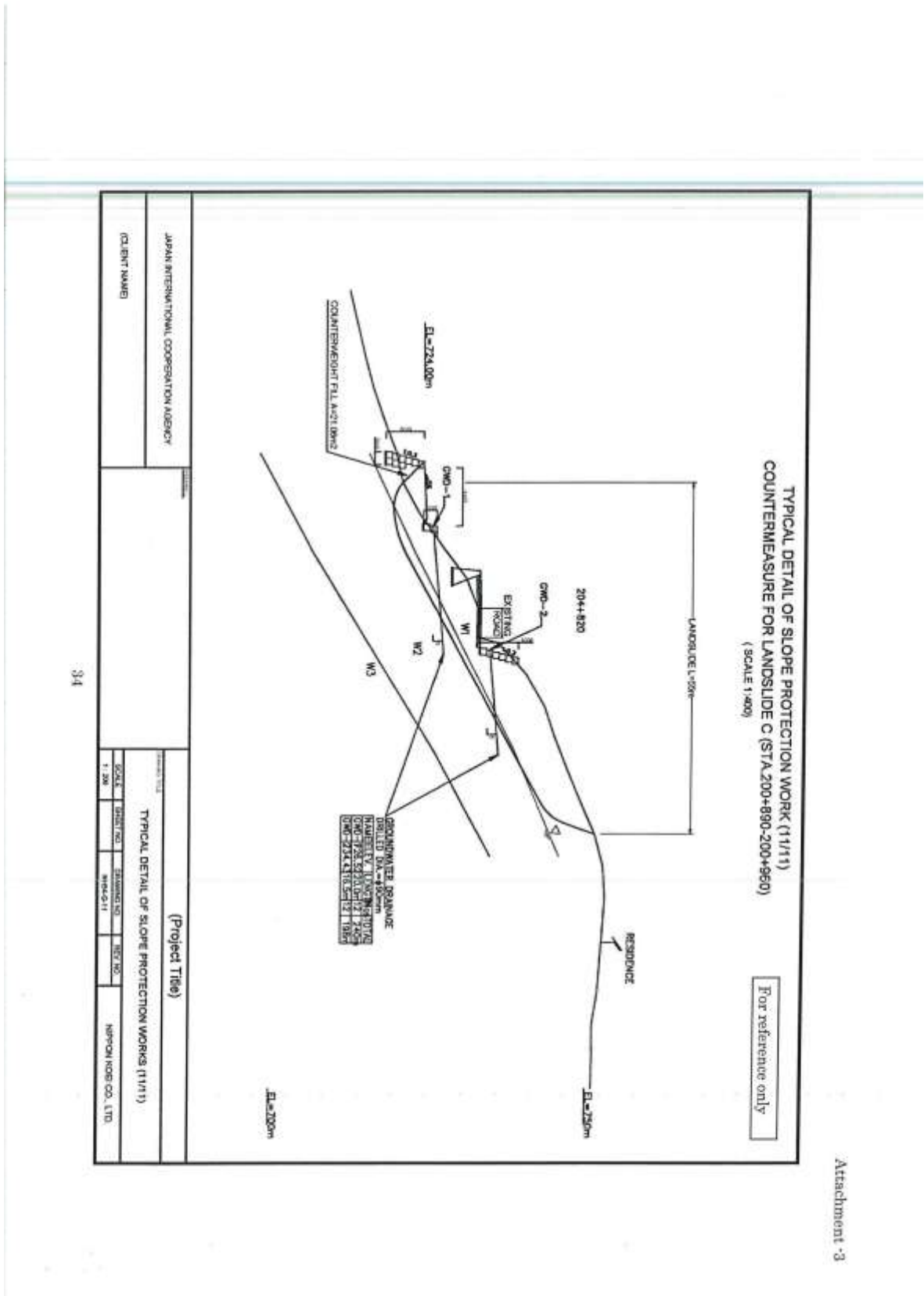


Attachment - 3



Attachment -3

33



Attachment - 3

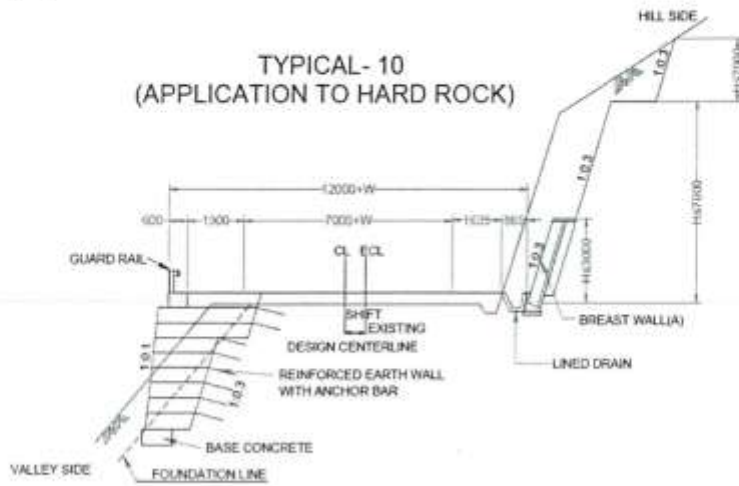
JAPAN INTERNATIONAL COOPERATION AGENCY		(Project Title)	
CLIENT NAME			
TYPICAL DETAIL OF SLOPE PROTECTION WORKS (1/1/11)		SCALE	1:200
		DATE	2014.11
NHPCON INFRA CO., LTD.		DESIGN NO.	INFRA-11
		REV. NO.	

Slope Inventory Sheet													NH51	
Slope No.	Ls No.	Disaster Type	Landslide Location				Dimension				Evaluation		Critical Slope No.	
			Start	~	End	Side	Length	Width	Height	Volume	Hazard	Stability		
200	1	SF	85 + 520	~	85 + 540	L	13.0	6.4	4.8	23	C	e		
200	2	SF	85 + 623	~	85 + 627	L	14.0	5.2	3.9	21	C	e		
202	1	SF	85 + 973	~	85 + 987	R	13.4	3.8	3.3	15	C	e		
203	1	SF	86 + 738	~	86 + 742	L	3.5	5.5	3.2	1	C	e		
203	2	SF	86 + 763	~	86 + 777	L	14.0	5.4	4.2	22	C	b		
204	1	SF	87 + 183	~	87 + 198	L	14.8	4.2	3.8	21	C	e		
205	1	SF	87 + 355	~	87 + 365	R	9.6	8.8	6.2	17	C	e		
207	1	SF	88 + 115	~	88 + 122	L	6.8	5.4	4.6	5	C	e		
207	2	SF	88 + 463	~	88 + 477	R	13.8	2.6	2.6	12	C	e		
208	1	SF	88 + 523	~	88 + 537	R	14.0	4.0	4.4	19	C	e		
211	1	SF	89 + 884	~	89 + 936	L	52.0	10.8	7.2	585	B	e		
212	1	SF	90 + 045	~	90 + 055	L	9.4	7.0	9.0	17	C	e		
214	1	SF	90 + 947	~	90 + 953	L	4.6	4.4	3.6	2	C	e		
216	1	SF	91 + 601	~	91 + 619	L	18.4	5.8	4.4	41	C	e		
216	2	SF	91 + 782	~	91 + 798	R	16.2	6.0	4.2	32	C	e		
217	1	SF	91 + 833	~	91 + 857	R	13.4	6.4	5.2	25	C	e		
217	2	SF	91 + 907	~	91 + 913	R	5.4	3.4	2.8	2	C	e		
217	3	SF	91 + 927	~	91 + 933	R	5.8	3.2	2.4	2	C	e		
217	4	SF	92 + 122	~	92 + 138	R	16.2	13.4	9.6	72	C	e		
219	1	SF	93 + 008	~	93 + 013	R	5.0	5.4	3.4	3	C	e		
220	1	SF	93 + 240	~	93 + 260	R	19.2	33.4	16.4	229	B	e		
220	2	SF	93 + 403	~	93 + 417	R	15.0	6.0	3.8	27	C	e		
221	1	SF	93 + 510	~	93 + 530	R	20.0	50.0	15.0	348	B	a	T01	
221	2	SF	93 + 678	~	93 + 682	R	4.4	5.8	3.6	2	C	e		
222	1	SF	93 + 712	~	93 + 728	R	17.2	8.6	4.8	49	C	e		
222	2	SF	93 + 992	~	94 + 008	R	16.8	10.2	6.6	57	C	e		
223	1	SF	94 + 445	~	94 + 454	R	9.0	4.2	2.2	6	C	e		
1	1	SF	97 + 535	~	97 + 545	R	9.2	3.6	3.4	7	C	e		
6	1	SF	99 + 541	~	99 + 559	L	18.0	2.8	2.2	19	C	e		
7	1	SF	99 + 805	~	99 + 816	L	10.8	4.8	2.2	10	C	e		
9	1	SF	100 + 613	~	100 + 627	L	14.2	10.2	9.0	46	C	e		
11	1	SF	101 + 178	~	101 + 182	L	4.2	2.6	2.2	1	C	e		
11	2	DF	101 + 199	~	101 + 202	L	21.9	3.0	11.0	91	C	b		
12	1	DF	101 + 467	~	101 + 474	L	28.0	3.0	5.0	76	C	e		
13	1	DF	101 + 500	~	101 + 501	L	13.0	0.8	5.0	14	C	e		
14	1	SF	101 + 910	~	101 + 970	L	50.0	80.0	40.0	3727	A	b	T02	
15	1	SF	101 + 970	~	102 + 010	L	40.0	90.0	50.0	2746	A	b	T03	
15	2	DF	102 + 028	~	102 + 031	L	22.0	2.0	8.0	67	C	e		
15	3	SF	102 + 068	~	102 + 073	L	5.0	6.2	5.4	3	C	e		
17	1	SF	102 + 505	~	102 + 515	L	10.4	6.0	5.2	14	C	e		
17	2	SF	102 + 605	~	102 + 615	L	10.0	6.6	5.2	14	C	e		
17	3	SF	102 + 857	~	102 + 863	L	6.0	6.4	2.2	4	C	e		
19	1	SF	103 + 333	~	103 + 347	L	14.0	4.4	4.2	20	C	e		
22	1	SF	104 + 598	~	104 + 602	R	4.0	3.2	2.0	1	C	e		
23	1	SF	105 + 184	~	105 + 216	R	33.0	3.5	3.2	86	C	e		
24	1	SF	105 + 598	~	105 + 602	R	4.2	2.8	1.8	1	C	e		
26	1	SF	105 + 996	~	106 + 005	R	9.0	3.8	3.0	7	C	e		
30	1	SF	107 + 550	~	107 + 588	L	37.8	9.0	5.8	255	B	a	T04	
31	1	SF	107 + 844	~	107 + 856	L	13.0	3.4	1.8	11	C	e		
31	2	SF	107 + 874	~	107 + 886	L	13.2	2.8	2.2	10	C	e		
32	1	SF	107 + 913	~	107 + 927	L	13.4	2.4	1.7	9	C	e		
32	2	SF	107 + 966	~	107 + 974	L	7.2	5.0	3.8	5	C	e		
32	3	SF	108 + 005	~	108 + 015	L	9.4	3.4	2.8	6	C	e		
46	1	SB	112 + 750	~	112 + 790	C	20.0	20.0	-	-	-	b	T05	
46	2	SF	112 + 778	~	112 + 782	R	4.0	1.8	2.0	1	C	e		
46	3	SF	112 + 808	~	112 + 812	L	4.4	2.4	2.6	1	C	e		

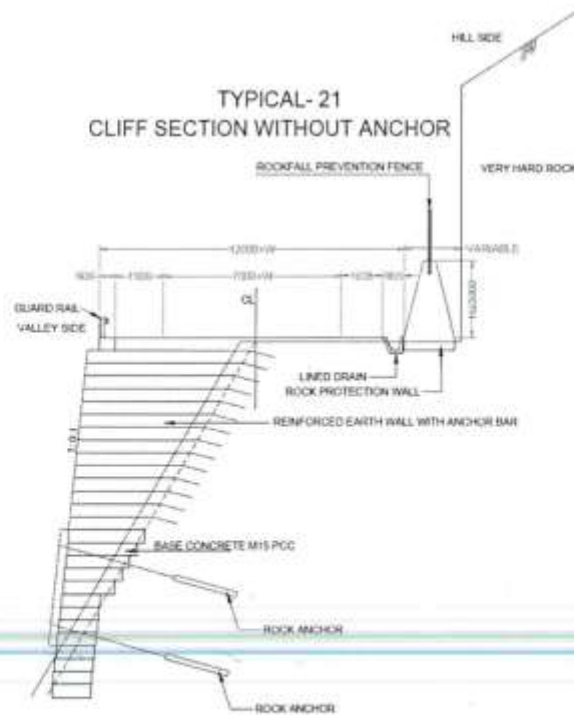
Attachment 4

Typical Cross Sections

W=12.0m (1/2)



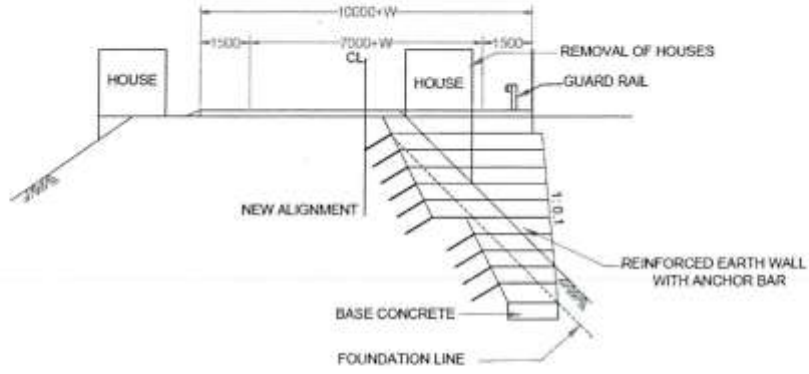
W=12.0m (2/2)



Attachment 4

W=10.0m (1/1)

TYPICAL- 45



Section-5

FINANCIAL PROPOSAL

(As per BOQ uploaded on CPP portal i.e. eprocure.gov.in)

Section-6

FORMATS

- 1. Performa of Performance Guarantee**
- 2. Agreement Form**
- 3. Integrity Pact**
- 4. LOA**
- 5. Undertaking from Key Personnel**

FORM OF BANK GUARANTEE FOR PERFORMANCE SECURITY

To

Managing Director, NHIDCL

National Highway & Infrastructure Development Corporation Ltd.

PTI Building, 3rd Floor,

4, Parliament Street

New Delhi-110001

WHEREAS.....(name and address of Contractor) hereinafter called “the contractor” has undertaken, in pursuance of LOA No. Dated to execute..... (Name of Contract and brief description of Works) (hereinafter called “the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you with a Bank Guarantee by a Nationalized /Scheduled bank of India 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 Contractor such a Bank Guarantee:

NOW THEREOF we hereby affirm that we are the guarantor and responsible to you on behalf of the Contractor, up to a total of Rs..... (amount of guarantee) (Rupees..... (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 Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract or of the works to be performed there under or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Bank Guarantee, and we hereby waive notice of any such change, addition or modification.

This Bank Guarantee shall also be operable at our, New Delhi office, from whom, confirmation regarding the issue of this Bank 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.

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

This Bank Guarantee shall be valid until 28 days from the date of expiry of the Defects Liability Period.

Notwithstanding anything contained herein before, our liability under this Bank Guarantee is restricted to Rs. _____ (Rs. _____ in words) and the Bank Guarantee shall remain valid till _____. Unless a claim or a demand in writing is served upon us on or before _____ all our liability under this Bank Guarantee shall cease.

12. This guarantee shall also be operatable at our..... Branch 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.

13. Bank Guarantee has been sent to Authority's Bank through SFMS gateway as per the details below:

Sno	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	Beneficiary Bank Branch Name	Transport Bhawan, New Delhi
5	Beneficiary Bank Address	Syndicate Bank transport Bhawan No.1, Parliament Street, New Delhi-110001

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

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 7.2 of Section 4 of the RFP)

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(Code Number)

(Address)

NOTES:

(i)

(ii)

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

(iii) THE USE OF STRUCTURED FINANCIAL MESSAGING SYSTEM (SFMS) HAS BEEN MADE MANDATORY BY I.B.A FOR BANK GUARANTEE TRANSACTIONS. WITH IMMEDIATE EFFECT.

BANK GUARANTEES WILL BE CONTINUED TO BE ISSUED IN PAPER FORM AND DELIVERED TO THE BENEFICIARY/APPLICANT HOWEVER IN ADDITION TO THIS A SEPARATE ADVISE OF THE BG IS TO BE SENT BY ISSUING BANK TO ADVISING BANK THROUGH SFMS, ONLY AFTER WHICH PAPER BG WOULD BECOME OPERATIVE

FORM OF AGREEMENT

This agreement made the _____ day of _____ 2017 between the National Highway Infrastructure Development Corporation Ltd, New Delhi (hereinafter called “the Employer” of the one part and _____ (here in after called “the Contractor”) of the other part.

AND WHEREAS the Employer invited bids from eligible bidders of the execution of certain works, viz *Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya*” (as per Annexure I).

AND WHEREAS pursuant to the bid submitted by the Contractor, vide _____ (here in after referred to as the “BID” or “ÖFFER”) for the execution of works, the Employer by his letter of acceptance dated _____ accepted the offer submitted by the Contractor for the execution and completion of such works and the remedying of any defects thereon, on terms and conditions in accordance with the documents listed in para 2 below.

AND WHEREAS the Contractor by a deed of undertaking dated _____ has agreed to abide by all the terms of the bid, including but not limited to the amount quoted for the execution of Contract, as stated in the bid, and also to comply with such terms and conditions as may be required from time to time.

AND WHEREAS pursuant to the bid submitted by the Contractor vide _____ (hereinafter referred to as the “the Offer”), the employer has by his letter of acceptance no. _____ - dated _____ accepted the offer submitted by the Contractor for the execution and completion of such works and the remedying of any defects therein, on terms and conditions in accordance in the conditions of particular application and condition included hereinafter;

AND WHEREAS the Contractor has agreed to undertake such works and has furnished a Performance Security pursuant to clause 19 of TOR in Section-4.

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement works and expressions shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to;
2. The following documents shall be deemed to form and be read and constructed as part of this Agreement viz.
 - a) Notice inviting e-Tender
 - b) RFP
 - c) Technical Proposal.
 - d) Financial Proposal.
 - e) Integrity pact
 - f) Corrigendum, if any
 - g) Other documents, if any
3. The foregoing documents shall be constructed as complementary and mutually explanatory one with another. Should any ambiguities or discrepancy be noted then the

order of precedence of these documents shall subject to the condition of particular applications be as listed above.

- 4. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works and remedy any defects therein in conformity in all respect with the provisions of the contract.
- 5. the Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works and the remedying of defects therein the contract price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

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

Signed, sealed and delivered by the said Employer through his Authorized Representative and the said Contractor through his Power of Attorney holder in the presence of:

Binding Signature of Employer _____ **Binding Signature of Contractor**

For and on behalf of National Highway & Infrastructure Development Corporation Ltd.

(Name of Consultancy Firm)

In the presence of

1. Name:
Address:

2. Name:
Address:

In the Presence
of

1. Name:
Address:

2. Name:
Address:

INTEGRITY PACT

BETWEEN

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

(NHIDCL) hereinafter referred to as "**The Principal**" (which expression, unless repugnant to the context thereof, shall mean and include its legal representatives, heirs and assigns)

AND

..... hereinafter referred to as "**The Bidder/Contractor**" (which expression, unless repugnant to the context thereof, shall mean and include its legal representatives, heirs and assigns)

Preamble

The Principal intends to award, under laid down organizational procedures, contract(s) for Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51 in the State of Meghalaya.

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

In order to achieve these goals, the Principal may appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the Integrity Pact by all parties concerned, for all works covered in the Project.

Section 1 - Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - a. No employee of the Principal, personally or through family members or through any other channel, will in connection with the tender for or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit, which the person is not legally entitled to.
 - b. The Principal will, during the tender process treat all Contractor(s)/Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Contractor(s)/Bidder(s) the same information and will not provide to any Contractor(s)/Bidder(s), confidential/additional information through which the Contractor(s)/Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c. The Principal will exclude from the process all known prejudiced persons. **The Principal shall** obtain bids from **only** those parties who have been short-listed or pre qualified or through a process of open advertisement/web publishing or any combination thereof.
- (2) If the Principal obtains information on the conduct of any of its employees, Contractor(s) and/or Bidder(s), which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and **subject to its discretion**, can **additionally** initiate disciplinary actions.

- (3) The Principal will enter into agreements with identical conditions with all Contractor(s)/Bidder(s) **for the different Work Packages in the aforesaid Project.**
- (4) The Principal will disqualify from the tender process all Contractor(s)/Bidder(s) in the range of Rs 50 Crore and above, who do not sign this Pact or violate its provisions.

Section 2 - Commitments of the Bidder(s) / Contractor(s)

- (1) The Bidder(s) / Contractor(s) commit(s) itself/themselves 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's employees involved in the tender process or the execution of the contract 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 Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - (c) The Bidder(s)/Contractor(s) will not use improperly, for purpose of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is annexed and marked as Annex-"A".
 - (e) The Bidder(s)/Contractor(s) will, when submitting 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.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3: Disqualification from tender process and/ or exclusion from future contracts.

- (1) If the Bidder(s)/Contractor(s), before awarding the Project or during execution has committed a transgression by violating Section 2 above or in any other form so as to put his reliability or credibility in question, the Principal, at its sole discretion, is

entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or terminate the contract, if already awarded, for that reason, without prejudice to any other legal rights or remedies available to the Principal under the relevant clauses of GCC /SCC of the tender/contract.

- (2) If the Contractor(s)/Bidder(s) has committed a transgression through a violation of any of the terms under Section 2 above or in any other form such as to put his reliability or credibility into question, the Principal will also be entitled to exclude such Contractor(s)/Bidder(s) from future tenders/contract award processes. The imposition and duration of the exclusion will be determined by the Principal, keeping in view the severity of the transgression. The severity will be determined by the circumstances of the case, in particular, the number of transgressions and/or the amount of the damage.
- (3) If it is observed after payment of final bill but before the expiry of validity of Integrity Pact that the contractor has committed a transgression, through a violation of any of the terms under Section 2 above or any other term(s) of this Pact, during the execution of contract, the Principal will be entitled to exclude the contractor from further tender/contract award processes.
- (4) The exclusion will be imposed for a minimum period of six (6) months and a maximum period of three (3) years.
- (5) If the Contractor(s)/Bidder(s) can prove that he has restored/recouped the damage to the Principal caused by him and has installed a suitable corruption prevention system, the Principal may, at its sole discretion, revoke or reduce the exclusion period before the expiry of the period of such exclusion.

Section 4: Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s)/Contractor(s) from the tender process prior to the awarding of the Project according to Section 3, the Earnest Money Deposit (BID SECURITY)/Bid Security furnished, if any, along with the offer, as per terms of the Invitation of Tender, shall also be forfeited. The Bidder(s)/Contractor(s) understands and agrees that this will be in addition to the disqualification and exclusion of the Contractor (s)/Bidder(s) as may be imposed by the Principal, in terms of Section 3 above.
- (2) If, at any time after the awarding of the Project, the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Security Deposit/Performance Bank Guarantee furnished by the contractor, if any, as per the terms of the NIT/Contract shall be forfeited without prejudice to any other legal rights and remedies available to the Principal under the relevant clauses of General/ Special Conditions of Contract.

The Contractor(s)/Bidder(s) be in addition to the Bidder(s)/Contractor(s), as terms of Section 3 *above*. understands and agrees that this will disqualification and exclusion of the may be imposed by the Principal in

Section 5: Previous transgression

- (1) The Bidder(s)/Contractor(s) herein declares that it has committed no transgressions in the last 3 years with any other Company in any country conforming to the anti corruption approach as detailed herein or with government/ any other Public Sector Enterprise in India that could justify its exclusion from the tender process.

- (2) If at any point of time during the tender process or after the awarding of the Contract, it is found that the Bidder(s)/Contractor(s) has made an incorrect statement on this subject, he can be disqualified from the tender process or if, as the case may be, that the Contract, is already awarded, it will be terminated for such reason and the Bidder(s)/Contractor(s) can be black listed in terms of Section 3 above.

Section 6: Independent External Monitor / Monitors

- (1) The Principal shall, in case where the Project Value is in excess of Rs 50 Crore and above, appoint competent and credible Independent External Monitor(s) with clearance from Central Vigilance Commission. The Monitor shall review independently, the cases referred to it to assess whether and to what extent the parties concerned comply with the obligations under this Integrity Pact.
- (2) In case of non-compliance of the provisions of the Integrity Pact, the complaint/non-compliance is to be lodged by the aggrieved party with the Nodal Officer only, as shall be appointed by the MD, NHIDCL. The Nodal Officer shall refer the complaint/non-compliance so received by him to the aforesaid Monitor.
- (3) The Monitor will not be subject to any instructions by the representatives of the parties and will perform its functions neutrally and independently. The Monitor shall report to the Managing Director, NHIDCL.
- (4) The Bidder(s)/Contractor(s) accepts that the Monitor shall have the right to access, without restriction, all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to its project documentation. The Monitor is under contractual obligation to treat the information and documents of the Bidder (s) /Contractor(s) with confidentiality.
- (5) The Principal will provide to the Monitor, sufficient information about all meetings among the parties related to the Project, provided such meetings could have an impact on the contractual relations between the Principal and the Contractor.
- (6) As soon as the Monitor notes, or believes to note, a violation of this Pact, he will so inform the Principal and request the Principal to discontinue and/or take corrective action, or to take other relevant action (s). The Monitor can in this regard submit non-binding recommendations. However, beyond this, the Monitor has no right to demand from the parties that they act in a specific manner and/or refrain from action and/or tolerate action.
- (7) The Monitor will submit a written report to the MD, NHIDCL within 4 to 6 weeks from the date of reference or intimation to it and, should the occasion arise, submit proposals for corrective actions for the violation or the breaches of the provisions of the agreement noticed by the Monitor.
- (8) If the Monitor has reported to the MD, NHIDCL, of a substantiated suspicion of an offence under relevant IPC/PC Act, and the MD, NHIDCL, has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Chief Vigilance Officer, NHIDCL / MD.

- (9) The word 'Monitor' means Independent External Monitor and includes both singular and plural forms.

Section 7 Criminal Contractor(s)/charges against violating Bidder(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder/Contractor or any employee or a representative or an associate of a Bidder/Contractor, which constitutes a criminal offence under the IPC/PC Act, or if the Principal has substantive suspicion in this regard, the Principal will forthwith inform the same to the Chief Vigilance Officer, NHIDCL/MD.

Section 8 - Duration of the Integrity Pact

This Pact shall come into force when both parties have legally signed it. The Pact shall expire, in case of the Contractor(s), 3 (three) months after the last payment under the Contract is made and in case of the unsuccessful Bidder(s), 2 (two) months after the contract for the project has been awarded.

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

The Bidder(s)/Contractor(s), however, understands and agrees that even upon the completion of the Project and/or the last payment under the Contract having been made, if any transgression/violation of the terms of this Pact comes/is brought to the notice of the Principal, it may, subject to its discretion, blacklist and/or exclude such Bidder(s)/Contractor(s) as provided for in Section 3, without prejudice to any other legal right or remedy so available to the Principal.

Section 9 - Other provisions

- (1) This Agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- (2) Changes and supplements as well as termination notices need to be made in writing.
- (3) If the Bidder/Contractor is a partnership or a consortium, this Agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this Agreement turn out to be invalid, the remainder of this Agreement shall remain valid and binding. In such a case, the parties will strive to come to an Agreement in accordance to their original intentions.
- (5) Wherever he or his as indicated in the above sections, the same may be read as he/she or his/her, as the case may be.

(For & On behalf of the Principal)

(For & On behalf of Bidder/
Contractor)

(Office Seal)

(Office Seal)

Place _

Date _

Witness 1:

(Name & Address)

Witness 2:

(Name & Address)

Letter of Acceptance

No. _____

Dated: .././2017

To

Kind Attention: _____

Subject: *“Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya”*

Sir,

This is to notify you that your bid dated _____ for “Consultancy Services for Additional Topographical, Geological/Geotechnical Survey and data collection from Km.85.00 to 95.00, 101.00 to 145.00 to 2- Lane with paved shoulders of Tura – Dalu of NH-51, in the State of Meghalaya” for the Contract Price of Rs _____ (Rupees _____ only), excluding service tax is hereby accepted by National Highways & Infrastructure Development Corporation Ltd.

Accordingly, pursuant to clause 19.0 of TOR of the RFP, you are requested to furnish an unconditional Bank Guarantee towards Performance Security for Rs. _____ /- (Rupees _____ only) within 10 days from the date of this LOA as per the specified format given under Sec. 6 of RFP.

Further we request that, within 7 days of the date issue of this Letter of Acceptance you prepare the Advisory Services Agreement, in duplicate, on Government Stamp Paper and meet with the undersigned at the address provided during normal office hours on any working day to sign the Agreement.

One copy of the signed Agreement will be provided to you, while the original copy will remain with us.

General Manager (Technical)

UNDERTAKING FROM THE KEY PERSONNEL

I, (Name and Address) have not left any assignment with the Consultants engaged by MORT&H/ contracting firm (firm to be supervised now) for any continuing works of MORT&H without completing my assignment. I will be available for the entire duration of the current project (named.....). If I leave this assignment in the middle of the completion of the work, I may be debarred for an appropriate period to be decided by NHIDCL. I have also no objection if my services are extended by NHIDCL for this work in future.

I, the undersigned, certify that to the best of my knowledge and belief, my biodata, information and credentials submitted, correctly describes myself, my qualification and my experience. I am liable for any action, as deemed fit, in case there is any mis-representation in this regard.

Signature of the Key Personnel_____

Position under the assignment_____

Place:_____

Date:_____

Signature of Authorised Representative of the Consultant_____

Place:_____

Date:_____

Appendix A

Terms of reference containing, inter-alia, the Description of the Services and Reporting Requirements

Appendix B

Consultants' Sub Consultants, Key Personnel and Sub Professional Personnel

Appendix C

Hours of work for Consultants' Personnel

The Consultant's personnel shall normally work for 8 hours in a day and six days a week. Normally Sundays shall be closed for working. In addition they shall also be allowed to avail holidays as observed by the Client's office in the relevant state without deduction of remunerations. In case any person is required to work on Sunday or Holiday due to exigency of work, he/she shall be given compensatory leave within the next 15 days.

Appendix D

Duties of the Client

Appendix E

Cost Estimate