

### Reply to Pre-bid Queries

**Sub:** Consultancy Services for Topographical, Traffic, Geological/Geotechnical Survey and Data collection for widening and upgradation of National Highways in the North East Region (NER) of India.

Sl. No.	Section/ Clause as per RFP	Queries	Reply
1	General	The scope of work includes Topographical, Traffic, Geological/Geotechnical Survey and Data collection for widening and upgradation of National Highways in the North East Region (NER) for length of 1000Km. Please provide the details of 1000 Km length of road in terms of number of sections with their length. Start and end of each section.	The list of stretches shall be provided while issuing Letter of Award. The stretches are scattered in NE region
2	Date of uploading of reply to the pre-bid queries -23.03.2017	The date of uploading of reply of pre-bid queries shall be done before the due date i.e. 23.03.2017.	Please refer Corrigendum No 2.
3	Letter of Invitation 2. Brief Scope of Work 2.2 Topographic survey shall be carried out along atleast two possible alignment alternatives	Please clarify the “Topographic survey shall be carried out along at least two possible alignment alternatives.” What are the alternative and the length for which this survey shall be carried out.	Two Alignment alternatives shall be proposed for the given obligatory points based on the topographical survey carried out in accordance with Clause 3.1.3 of TOR. The length of the approved alignment shall be considered for payment purpose.
4	Letter of Invitation 3. Time for completion: The Consultant shall complete and submit the study/detailed report as per scope of work in 3 months from the date of letter to proceed.	Time for completion of the work shall be increased to 6 Months from 3 Months.	As per RFP.
5	SPECIAL CONDITIONS OF CONTRACT Clause 2.2 Clause 2.3 Clause 2.4	Please clarify the time frame mentioned under these clauses.	Please read the SCC clauses in conjunction with corresponding clauses under GCC.
6	Clause 3.1.3 of TOR, Scope of Work I Traffic Survey - To carry out 7 days traffic survey etc in accordance with the IRC guidelines to create data as required for deciding the lanes and designing the pavement. Qty-1000Km	Please mention the number of locations for which 7 days classified traffic volume count survey to be carried.	The number of locations shall be decided as per IRC guidelines so that output is effectively used for deciding the number of lanes and design of pavement/structures.
7	Clause 3.1.3 of TOR, Scope of Work - Geological/Geotechnical Survey and Investigation	Please provide the location details of road sections and also the quantity of boreholes to be considered	Geological/Geotechnical Survey and Investigation shall be carried out as per IRC/MoRTH guidelines for the approved alignment so that comprehensive designing of pavement/ structures and cost

			estimation can be made for execution of the work. In this context, necessary reference may be made to Clause 4.11.4.4 of TOR of model RFP document issued vide MoRTH's circular no H-39011/30/2015-P&P (Pt.1) dated 22.08.2016. A copy of the same is placed at Annexure-I.
8	Clause 3.1.3 of TOR, Scope of Work – IV Material Survey	How Many Quarries to be identified.	As per Site requirement to ensure good quality material is available with least cost of transportation.
9		The number of roads constituting 1000 km length and their locations are key determinant to quantity the inputs as also in assessing associated complications/difficulties. A Bidder is expected to workout costs of inputs as well other difficulties. Therefore, it is requested that a list of roads along with their locations may please be given.	Please refer Sr. No. 1.
10	Clause 3.1.3 of TOR, Scope of Work - Geological/Geotechnical Survey and Investigation	The scope of works under 'Geological/Geotechnical Survey & Investigation' requires more clarity on following lines: (a) It is mentioned that slope inventory survey relates to every vulnerable location. Who will decide as to which is vulnerable location and how many such locations are to be costed? (b) Borehole investigation at Land slide/Bridge locations as per IRC guidelines needs more clarity in terms of number of boreholes and expected depth and the strata in which boring will be done. It is a huge speculation which a risk averse Bidder cannot fairly assume is thus not expected to speculate. Please provide more clarity on this aspect to enable fair estimation of costs by the Bidders?	All such vulnerable locations shall be identified based on geological/geotechnical survey to ensure sustainable and stable slopes after upgradation of the Highway.  Please refer Sr. No. 7.
11		The basis of quoting rates is not provided for in the RFP. If it is to be per km quote, the same be indicated, subject to alignment and regulation of bore hole quantities as mentioned above [(a) & (b)]. How significant variation in length will be tackled?	Please refer Clause 40 of LoI. The selected bidder shall be decided based on the lowest total quoted Rate per Km. Any variation from the indicative length will be dealt as per Clause 10 of GCC.
12	Table under 20 c:	'Completion Period' specifies % of total fee payable for different milestones under the head No of copies. The inconsistency may be reconciled and corrected details be made available in RFP.	As per Corrigendum No. 2.

13	TOR Clause 1.3	It is indicated that topographical survey shall relate to at least 2 alternatives. This being survey along the existing roads how alternatives are relevant? The inconsistency if any may be corrected. If there is no inconsistency, it may please be amplified.	The assignment aims to finalize the most preferred alignment for widening/upgradation. The alignment shall be finalized out of the 2 alternative proposals based on the topographic survey.
14	Clause 3.1.3 of TOR, Scope of Work - Traffic Survey	How traffic survey points along the existing roads will be fixed?	The locations shall be so decided that output is effectively used for deciding the lane configuration for part/complete stretch and design of pavement/structures in consultation with NHIDCL.
15	Clause 3.1.3 of TOR, Scope of Work - Topographic Survey	Looking to magnitude of work relating to 1,000 km roads 3 month allowed for completion is too short. It may be increased to 365 days. Even by LiDAR the topographical survey itself will take not less than 120 days from start in fair weather conditions. The geotechnical investigations in some parts will be possible only after completing topographical survey and approval of alignment by NHIDCL. Perhaps the 1000 Km roads be divided into 4 lots of about 250 Km each based on priority, with delivery of lot 1 within 150 days. Accurate information provided to EPC potential bidders will be highly cost effective to NHIDCL.	As per RFP. The assignment would cover multiple stretches less than 250 Km. As such, multiple teams can be deployed for completing the work in stipulated period of 3 months.
16	NIT	Since a detailed homework is necessary for preparation and submission of a proper bid, the time of bid submission may be extended at least by 15 days.	As per Corrigendum No. 2.

#### 4.11.4.4 Geo-technical Investigations and Sub-Soil Exploration

1. The Consultants shall carry out geo-technical investigations and sub-surface explorations for the proposed Bridges / Road over bridges/ tunnels/ viaducts/ interchanges etc., along high embankments and any other location as necessary for proper design of the works and conduct all relevant laboratory and field tests on soil and rock samples. The minimum scope of geo- technical investigations for bridge and structures shall be as under:

S.No.	Description	Location of Boring
1	Overall length = 6 – 30 m	One abutment location and One abutment location and at least one intermediate location between abutments for structures having more than one span
2	Overall length = 30 – 60 m	One abutment location and at least one intermediate location between abutments for structures having more than one span.
3	Overall length >60 m	Each abutment and each pier locations.

2. The deviation(s), if any, by the Consultants from the scheme presented above should be approved by NHIDCL.
3. However, where a study of geo-technical reports and information available from adjacent crossings over the same waterway (existing highway and railway bridges) indicates that subsurface variability is such that boring at the suggested spacing will be insufficient to adequately define the conditions for design purposes, the Consultants shall review and finalise the bore hole locations in consultation with NHIDCL's officers.
4. Geotechnical Investigations and Sub soil Explorations shall be carried out to determine the nature and properties of existing strata in bed, banks and approaches with trial pits and bore hole sections showing the levels, nature and properties of various strata to a sufficient depth below the level suitable for foundations, safe intensity of pressure on the foundation strata, proneness of site to artesian conditions, seismic disturbance and other engineering properties of soil etc. Geotechnical investigation and Sub-soil Exploration will be done as per IRC 78.
5. The scheme for the borings locations and the depth of boring shall be prepared by the Consultants and submitted to NHIDCL for approval. These may be finalised in consultation with NHIDCL.
6. The sub-soil exploration and testing should be carried out through the Geotechnical Consultants empanelled by MORT&H. The soil testing reports shall be in the format prescribed in relevant IRC Codes.
7. For the approach road pavement, bore holes at each major change in pavement condition or in deflection readings or at 2 km intervals whichever is less shall be carried out to a depth of at least 2 m below embankment base or to rock level and are to be fully logged. Appropriate tests to be carried out on samples collected from these bore holes to determine the suitability of various materials for use in widening of embankments or in parts of new pavement structure.