

NATIONAL HIGH SPEED RAIL CORPORATION LIMITED (NHSRCL)

TENDER FOR FINAL ALIGNMENT DESIGN INCLUDING AERIAL LIDAR SURVEY AND OTHER RELATED WORKS FOR SIX HIGH SPEED RAIL CORRIDORS

Tender No- NHSRCL/CO/CONTRACT/LIDAR/2020/03

Response to Bid Queries-1

Sr. No	Pg. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
1	Page no. 22 & 23	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.1 & Clause 2.2.2	The bidder must own/lease (as indicated against each item) the following instrument/ machine/software/ manpower, as minimum, to be eligible to bid: S No. 3 : Aircraft (excluding Drones & Unmanned Aerial Vehicles)/ Helicopter – Own/Lease	This is a serious lacunae that can be glaringly seen in the fact that except for serial number 3 (own / lease - aircraft / helicopter) , for all other 6 items of this clause, it is specified they should be owned by the bidder. The aircraft / helicopter & NSOP for undertaking aerial survey is the key and ownership of this asset should be mandatory. The entire 6 corridors being vested to a single vendor on a LEASED asset is doomed for failure before the project is awarded. It is important to note that ownership of aircraft / helicopter also demonstrates the financial strength of the organization in having their own capacities to undertake such nationally important projects.	Tender Condition shall remain unaltered.
2	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.2 d.	i. Bidder must have satisfactorily completed at least One single contract of "Aerial LIDAR survey work including data processing for at least 100 km for any linear project in India carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender (Refer Note-3).	A) Technologies of Lidar/Aerial photography acquire data on linear mode only and generate similar products and accuracies irrespective of whether the features are linear such as Railways/Roads/Canals/Coastline or area based such as Tanks/Urban Areas/Forest Areas etc. As per the standards of linearity practiced by the national mapping agencies such as Survey of India (SOI) and Ordnance Survey (UK); Railways, Roads, Canals, Coastline and Rivers come under the category of linear features. It is thus assumed that experience in either aerial photography or aerial Lidar for linear features be considered as has been accepted by Survey of India for the World Bank assisted National Hydrology Project in 2019. NHSRCL may please clarify and confirm a similar acceptance of these 2 modes of aerial data acquisition as eligibility criteria for this project. B) It is crucial to note that projects either delivered in India or abroad demonstrate the bidder's expertise, experience and efficiency of an organizations capability in using Lidar technology. Limiting the experience to projects delivered in India alone does not reflect the right qualifying criteria considering the fact that Aerial Lidar technology has been in use in India for the past few years only.	Tender Condition shall remain unaltered.
3	Page no. 18	SECTION-III INSTRUCTIONS TO BIDDERS (ITB)	Clause 17.1.3 Financial Bid Evaluation	On completion of Technical and Financial evaluation of submitted Bids, final ranking of the Bids will be determined. This will be done by normally applying weightage as specified in the procedure listed in Annexure 1 respectively to the technical and financial score of each evaluated qualifying Technical and Financial Bids and then computing the relevant combined total score for each Bidder. After such final ranking, normally, the first-ranked Bidder shall be awarded the Contract.	Based on our experience of handling similar projects worldwide we are of the view that there is no sufficient capacity for any one single company to execute the project of over 4100 kms of the corridors. Taking into consideration limited number of days for flying available in India based on the weather conditions, multiple companies may be engaged with a restriction that not more than 3 corridors be allocated to a single company/JV/Consortium to complete the project within 470 days. Kindly review and confirm.	Please Refer Addendum No. 01, Item no 06.
4	Page no. 22 & 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.1 Clause 2.3	The tenderer's bid will first qualify the minimum required criteria and thereafter shall be evaluated based on Combined Quality and Cost Based Selection (CQCBS) and procedures described in this tender document. Overall final evaluation of the bidder will be done on the basis of technical as well as financial scores achieved by the bidder. The weightage of technical and financial scores will be 70% and 30% respectively. The minimum technical score required to qualify is 70%. The financial bids of unsuccessful bidders will not be opened and will be returned un-opened	With limited similar projects executed in India to date; with limited companies to undertake aerial Lidar survey in India a CQCBS formula put forth in the bid will lead to an unfair advantage to a preferred vendor thus causing a huge loss to the exchequer. An L1 based selection will encourage a healthy competition and wider participation in the bid, please clarify.	Tender Condition shall remain unaltered.
5	Page no. 101	SECTION VIII PARTICULAR CONDITIONS OF CONTRACT (PCC)	Particular Conditions of Contract Clause 14.2	Advance Payment 5% (ten percent) of the Accepted Contract Amount (excluding the Provisional Sum) payable in the currencies and proportions in which the Accepted Contract Amount is payable.	Kindly confirm whether the advance money is 5% or 10% of the contract value?	Please Refer Addendum No. 01, Item no 33.



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6	Page no. 104 Page no. 19	SECTION VIII PARTICULAR CONDITIONS OF CONTRACT (PCC) SECTION-III INSTRUCTIONS TO BIDDERS (ITB)	Sub Clause 5.1 Sub Clause 20.1 (c)	1st Paragraph of Clause 5.1 is deleted. A firm (including its affiliate), if acting in the capacity of a Subcontractor in one Bid, may participate in other Bids, only in that capacity	Kindly confirm, if the subcontractor is allowed who is other than JV/Consortium member? We understand as a subcontractor, other than JV/Consortium member, we are allowed to partner with multiple bidders for this tender. Kindly reconfirm. .	As per the said ITB clause, A firm (including its affiliate), if acting in the capacity of a Subcontractor in one Bid, may participate in other Bids only in that capacity (means as a sub contractor only). Hence, Tender Condition shall remain unaltered.
7	Page no. 4,	NOTICE INVITING TENDER (NIT)	Clause 5	No pre-bid meeting is planned for this tender.	With several crucial points that need to be deliberated and clarified, for such a major initiative of your enterprise we humbly request NHSRCL to conduct a prebid meeting that will facilitate mutual discussion and pave way for right steps for this project to be highly successful.	Tender Condition shall remain unaltered.
8	Page no. 22.	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY STAGE-A	Clause 2.2.1 & Clause 2.2.2	2.2.1 The bidder must own/lease (as indicated against each item) the following instrument/ machine/software/ manpower, as minimum, to be eligible to bid:	1) We request you to allow use of High resolution satellite images for data acquisition or survey grades drones can be used to acquire the data which give same accuracy. There are only one or two agencies having the owned Aircraft, Camera and processing software's. it is to mention that aim is to capture the data along the proposed corridor with desired accuracy. Therefore, we request to allow use of HighResolution satellite data or use of survey grade Drones.	Tender Condition shall remain unaltered.
9	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.2 d.i.	Bidder must have satisfactorily completed at least One single contract of "Aerial LIDAR survey work including data processing for at least 100 km for any linear project in India carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender (Refer Note-3). Form 4 & 6 to be filled and submitted	1) Process for data acquisition is same for either linear projects or Non-linear project then why this condition is specifically mentioned. In fact, data acquisition is happening in linear way only either for linear projects or non-linear projects, For linear project no. of path may be limited to ROW width were ac in non liner projctct it will depend up on the extent of Area to be mapped. Therefore, we request you to allow for Non-linear projects. 2) Data acquisition process is similar in any part of the world. Then why this restriction. We request you to allow projects completed abroad also. 3) More the experience better will be the out Therefore we request you to allow project completed during last 15 years instead of instead of 7 years. 4) As per CVC guideline experience should be at least 30% of execution quantity, However only 100 linear km experience is mentioned in the eligibility criteria For 4100 km proposed high speed route length and 4 km belt survey along the alignment selected in stage 1 preliminary route selection (For which tender is in process) total area of extent would be @ 16000 sq.km . If we considered 30% of 16000 sq. km, at least 4800 Sq.km Lidar Survey/ mapping experience is needed. So, request you to revise the eligibility criteria as per CVC guideline.	Tender Condition shall remain unaltered.
10	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.2 d.ii	ii. Bidder must have satisfactorily completed at least One single contract of ("Final alignment design work for at least 100 km for Railway/ Highway/ Road/ Metro project in India carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender (Refer Note3). Form 5 & 6 to be filled and submitted.	1) Being a High-speed railway project, design experience other than railway/Metro projects will not be helpful. As there are so many design parameters are not there in Highway designing or other linear design projects. For ex. Compensated grade concept is not in Highway design. Also, yard designing not involved in the highway or other department projects. Also, Ca and Cd concept is known to only Railway design experts and not others. Considering the importance of the project, expert form only railway domain is necessary. therefore, we request you to change eligibility for Railway projects only. 2) In this clause also experience of 100 km design work is put up for eligibility. As per CVC guideline it should be 30% of execution quantity. For 4100 km proposed high-speed route length at least 1200 km design alignment IS needed. So, request you to revise the eligibility criteria as per CVC guideline. 3) Design experience enriches day by day so we request you to allow design experience during last 15 years instead of 7 years.	Tender Condition shall remain unaltered.



Sr. No	Pg. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
11	Page no. 24, Point 2 of Note 3	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Note 3, Point 2	Only such works shall be considered where physical completion of activity of Aerial LiDAR Survey including data processing and/or Final alignment design (FAD) has been fully completed, however the other overall work of the contract (part of which Aerial LiDAR Survey and/or FAD have been completed) may/ may not be fully completed.	1) Pl clarify, Two separate completed projects i.e. one for Aerial mapping and other one for Final alignment design is considered or authority expecting one project only.	Clause are self explanatory. Bidder may have completed the required works either in two separate projects or completed both the works in a single project.Hence, tender condition shall remain unaltered.
12	Page no. 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Note 3, Point 7	Any work carried out with unmanned Aerial Vehicle or Drone shall not be considered for satisfaction of the qualifying criteria by the bidder.	1) Request you to allow survey grade unmanned vehicle which give similar in ne..... In less cost and time	Tender Condition shall remain unaltered.
13	Page no. 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.4.1	Sr. Photogrammetry (A) ii. Expert Relevant experience in Linear project	We request you to remove the condition of experience in linear projects as experience required for photogrammetry is same for other mapping projects and linear projects.	Tender Condition shall remain unaltered.
14	Page no. 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.4.1	Alignment Design Expert (B) ii.Relevant experience in Railway/ Highway/ Metro project	We request you to remove the Highway project as alignment design experience of Highway projects are no way like Railway projects. For ex. Highway engineer considered 400m radius is to large whereas in railway it is not accepted even. So there is large thinking pattern difference in Highway alignment designer and Railway alignment designer	Tender Condition shall remain unaltered.
15	Page no. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.4.1	Sr. LiDAR Professional (C) ii.Relevant experience in linear project	Expertise of Lidar professional is always in Linear way only. It does not make difference for Linear projects or Nonlinear projects. So, we request you to remove the same.	Tender Condition shall remain unaltered.
16	Page no. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Note 4, Point 1	Maximum marks shall be allotted to the bidder having required professional candidate with maximum number of years of Experience in respective category. Marks to other bidder(s) shall be allotted in a proportionate manner	We request you remove the co relation as it is subjective, We request you to allot the mark based on individual experience	Tender Condition shall remain unaltered.
17	Page no. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.4.2	Relevant experience means related works done for various projects as described in table below. Only top five projects (project lengthwise) to be listed for evaluation purpose. In case more than five projects are listed, projects mentioned at Sr.No.1 to 5 will only be considered. A project to qualify for evaluation consideration only such works shall be considered where physical completion of activity of Aerial LiDAR data processing or Final alignment design (FAD) of railway/highway/metro/road has been fully completed, however the overall work of the contract (part of which activity of Aerial LiDAR Survey and/or FAD has been completed) may/may not be fully completed.	We request you to remove the Highway Experience for design purpose and for linear mapping other mapping projects shall be allowed as Aerial mapping is always happen in linear way or along the path only.	Tender Condition shall remain unaltered.



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18	Page no. 27	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Note 5, Point 2	For (B) above, Maximum marks shall be allotted to the bidder who has completed maximum length of Aircraft/Helicopter LIDAR Survey calculated by combining the total Aerial survey length of top 5 Projects of LIDAR Survey in last 7 years (In case more than five projects are listed, projects mentioned at Sr.No.1 to 5 will only be considered). Marks to other bidders shall be allotted proportionately according to flying length.	We request you to allow Aircraft/Helicopter LIDAR Survey for other mapping projects also as Aerial Lidar survey is happen in linear way only.	Tender Condition shall remain unaltered.
19	Page no. 27	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Note 5, Point 3	Drone/UAV LIDAR Survey will not be considered	Request you to allow survey grade unmanned vehicle which give similar accuracy in less cost and time.	Tender Condition shall remain unaltered.
20	Page no. 36	SECTION V TERMS OF REFERENCE	Clause 3.3.1	Aerial LiDAR & Imagery Survey The contractor will undertake Aerial LIDAR Survey complemented by Aerial Imagery in a corridor width of 300 m (150 m on either side) around the proposed alignment.	It is experienced that during the final alignment design more width is needed to shift the alignment as stage one alignment is designed on satellite images. Ground variations and uncertain factors may crop up once large-scale data from aerial mapping is available. Considering the large radius requirement for high speed railway, additional data will be required to shift the alignment. Therefore, we request you to make data acquisition for 500m width on either side.	Tender Condition shall remain unaltered.
21	Page no. 36	SECTION V TERMS OF REFERENCE	Clause 3.3.1.2	c. Master Control Network comprising of interconnected triangles (with baseline of about 25km) to be established for overall horizontal control with approx. 25 km baseline length throughout the alignment. Secondary Control Network comprising of interconnected triangles weaved with Master control network to be established with a baseline length of approx. 3-5 km throughout the alignment. Target LIDAR points to be established at an interval of approx. 5 km within the final alignment. To densify Horizontal Control Network, the GNSS triangulation method should be adopted and processing of data for network adjustment should be done to achieve an accuracy of at least 1:100,000 in horizontal.	We request you to specify the time duration for observations for such a larger base. As the time factor will considerably reduce the data accuracy, it is necessary to specify the time duration for observation for primary control points and secondary control points.	Observation period has been mentioned in clause no. 2 of Annexure-3 (TOR). Hence, Tender Condition shall remain unaltered.
22	Page no. 48	SECTION V TERMS OF REFERENCE	Clause 3.9	Submission of Alignment Report Stage-II (Final Submission) as per clause 3.4.5	We request you to extend the time period to D+ 290 as data acquisition will not take much time however data processing and extract the desired output will take more time.	Please Refer Addendum No. 01, Item no 22.
23	Page no. 72	SECTION-VI ANNEXURES/PER FORMAS	Form 4	Firms' experience in Aerial LIDAR Survey using Aircraft/ Helicopter for top 5 linear projects length wise in the last seven years.	We request to make the changes as follows Firms experience in Aerial LIDAR Survey using Aircraft/ Helicopter for top 5 mapping projects length wise in the last Fifteen years.	Tender Condition shall remain unaltered.
24	Page no. 74	SECTION-VI ANNEXURES/PER FORMAS	Form 5	Bidder's experience in Works of Alignment Design for Railways/ Highways/ Road/ Metro in the last seven years (Top 5 Projects length wise)	We request to make the changes as follows "Bidder's experience in Works of Alignment Design for Railways/ Metro. The last Fifteen years.	Tender Condition shall remain unaltered.
25	Page no. 4,	NOTICE INVITING TENDER (NIT)	Clause 5 & 6		In order make a very competitive proposal & understand the bid well, we would like to make a kind request for Pre-bid meeting (tentative around 26 th february) & also to Extend the date of bid submission till 25th March 2020.	For Pre-bid meeting: Tender condition shall remain unaltered. For Extension the date of bid submission: Please Refer Addendum No. 01, Item no 01.
26	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.2 d.i	Bidder must have satisfactorily completed atleast One single contract of "Aerial LIDAR survey work including data processing for at least 100 km for any linear project in India carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender (Refer Note-3). Form 4 & 6 to be filled and submitted.	The Current criteria allows bidders who are having an experience of 100km in Manned Aerial Platform, which will allow the bidders with very low experience to participate in the bid. As the given project length of work is around 4000 linear Km, we request you to consider changing the eligibility criteria for the linear project experience as 500 km instead of 100 km, to enable properly qualified bidders only to participate.	Tender Condition shall remain unaltered.



Sr. No	Pg. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
27	Page no. 22	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 1.1	The tenderer's bid will first qualify the minimum required criteria and thereafter shall be evaluated based on Combined Quality and Cost Based Selection (CQCBS) and procedures described in this tender document. Overall final evaluation of the bidder will be done on the basis of technical as well as financial scores achieved by the bidder. The weightage of technical and financial scores will be 70% and 30% respectively. The minimum technical score required to qualify is 70%. The financial bids of unsuccessful bidders will not be opened and will be returned un-opened. In case of one or no bidder scoring less than 70%. Employer may relax this requirement at its discretion to 60%.	we suggest giving more importance to the technical qualification, thereby request you to change the QCBS criteria to 80:20, with 80 percentage weightage to the technical marks and 20 percentage weightage to the financial marks.	Please Refer Addendum No. 01, Item no 7.
28		General Note			One of PSUs under Ministry of Railways has submitted a letter regarding exemption of EMD & Security Deposit with reference of Railway Board's letter no.2001/CE1/CT/19 dated 09.07.2004 . Kindly confirm.	In case PSUs units which are wholly owned by the Railways participates as single party, their request for exemption from Earnest Money Deposit (EMD) and Security Deposit (SD) being a PSU under Ministry of Railways vide Railway Board's letter no.2001/CE1/CT/19 dated 09.07.2004 shall be considered. However, this exemption shall not be considered in case PSUs participates in JV.
29	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB)ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Item no.3 of Note 3	LIDAR Works carried out by another Contractor on behalf of the Bidder on a back to back basis will not be considered for satisfaction of the Qualification Criterion by the Bidder.	In this connection, we would like to point out that the above tender clause is not only restrictive but also defies logic of prudence since it gives weightage to the Sub contractor rather than Prime Contractor which got the work completed with the help of Sub contractors as well as Prime Contractors own expertise. It may be worthwhile to point out, in most of the cases even the Sub Contractor further sub-contracts the work in order to economize the Project cost as well as to fasten the Project activities in order to complete the work within the stipulated time frame. For example, in the LiDAR Survey Activities normally the flying agency, the LiDAR equipment agencies and the LiDAR Data processing agencies are mostly different organizations and hence how can only LiDAR equipment agency be given the credit of carrying out LiDAR survey work for qualifying in the Bid. As such, it is paradoxical to give the credit to LiDAR agency for the work since they are also not solely doing the works. Therefore, the established practice of recognizing both the agencies (i.e. the Prime Contractor and Sub- Contractor) who has completed the work by taking help of Sub contractor or by themselves (Prime Contractor) should be given the credit for qualification in the Bid.	Tender Condition shall remain unaltered.
30	Page no.12	SECTION-III INSTRUCTIONS TO BIDDERS (ITB)	Clause 6.2.1	The bidder should submit query in writing not later than Fourteen (14) days prior to the deadline for submission of Bids. Replies to bidder queries should be sent to the Bidders by email/ courier/ registered post but without identifying the source of inquiry not later than Five (05) days prior to the deadline for submission of Bids.	It appears to be a bit surprising that in the age of so-called transparency and competitive bidding, the concealing of name of agencies along with their queries will defeat the very purpose and hence may we request you to kindly include the name of agencies along with their queries and your replies against the same.	Please Refer Addendum No. 01, Item no 03.
31	Page no. 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB)ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.4.1	Sr. Photo-grammetry Expert (A) i. Graduate in Civil Engineering/ M Sc Geomatics/ M Sc Geology/Surveying and Mapping with minimum of 5 years' experience	May be modified to add Geoinformatics qualification "Graduate in Civil Engineering/BE Geoinformatics/MSc Geomatics/MSc Geoinformatics/M ScGeology/Surveying andMapping with minimum of 5 years' experience in Photogrammetry related works"	Please Refer Addendum No. 01, Item no 11.
32	Page no. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB)ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Cl. 2.4.1;	Sr. LiDAR Professional (C) i. (Graduate in Civil Engineering/M Sc Geomatics/M Sc Geology/Surveying & Mapping with minimum of 5 years' experience in LiDAR works.	May be modified to add Geoinformatics qualification "Graduate in Civil Engineering/BE Geoinformatics/MSc Geomatics/MSc Geo-informatics/MSc Geology/Surveying and Mapping with minimum of 5 years' experience in LiDAR works"	Please Refer Addendum No. 01, Item no 12.



Sr. No	Pg. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
33	Page no. 38 & 39	SECTION V TERMS OF REFERENCE	Cl.3.3.2; & Figure: Reinforcement details of the pillar	Construction of cast in-situ Permanent Control Point pillars of size 500 mm x 500 mm x 1000 mm of RCC (Nominal Mix 1:1½:3) with provision of 700 mm long M.S. angle of size 50 x 50 x 5 mm with brass nailing on the MS angle for marking the Control Points and embossing the CP pillar number on the MS plate of size 125 mm x 125 mm x 5 mm embedded in concrete by four 6 mm dia rods 150 mm long as per approved drawing. The pillar should have the following reinforcement: 4nos-10mm dia longitudinal and 8mm dia rings@150mm c/c. The Foundation size of the pillar should be: 800mm x 800mm x 150mm with a PCC base.	RCC pillar Drawing is not clearly readable and does not match with the description given in para 3.3.2. As per description: RCC Nominal Mix:1:1½~3 MS Angle Size:50x50x5 mm Rings:8 mm dia @150 mm As per drawing: RCC Nominal Mix:1:1:2 MS Angle Size:50x50x6 mm Rings:6 mm dia @150 mm May kindly be revised to make both consistent. Moreover, 5mm iron plate is too thick for embossing. Pl. consider changing embossing to engraving.	Please Refer Addendum No. 01, Item no 17.
34	Page no. 43 & Page no.47- 48	SECTION V TERMS OF REFERENCE	Clause 3.4.4 (7) & Clause 3.9 (4)	Clause 3.4.4 (7) Draft Alignment Report Stage I: The Draft Alignment Report Stage I shall be submitted within 60 days from date of commencement of work for the corridor (or date of supplying of Imagery/DEM/DMSM by client whichever is later). NHRCL will give its comments on the draft Preliminary Alignment report within 15 days after which the contractor shall incorporate the comments and submit the Final Preliminary Alignment Report Stage – I. The same shall be accepted with another 15 days by the client in case there are no further modifications required.... Clause 3.9 (4) Submission of Alignment Report Stage-I as per clause 3.4.4 - D+80 days	Provisions for the same activity vary in these two clauses. At one place it is 60 days while at other place it is 80 days. Please make same provision.	Please Refer Addendum No. 01, Item no 22.
35	Page no. 45 & Page no. 47- 48	SECTION V TERMS OF REFERENCE	Clause 3.4.5.x & Clause 3.9 (5)	Clause 3.4.5.x Final Alignment Report Stage II as follows: The draft Final Alignment Report Stage II shall be submitted within 150 days from date of commencement of work on the corridor..... Clause 3.9 (5) Submission of Alignment Report Stage-II (Final Submission) as per clause 3.4.5 - D+170	Provisions for the same activity vary in these two clauses. At one place it is 150 days while at other place it is 170 days. Please make same provision.	Please Refer Addendum No. 01, Item no 20 & 22.
36	Page no. 45 & Page no. 46	SECTION V TERMS OF REFERENCE	Clause 3.4.5.ix & Clause 3.4.5. x.g.v	Final Alignment Design outputs include soft copy of design files in the used software along with the alignment design outputs such as Index map, Index Plan & L-section, detailed plan & section and other plans and GAD's... Span configuration and GADs of all bridges, crossing structures.	Seems to have crept in inadvertently, as GAD is not the part of this tender. May kindly be deleted and Span configuration may be replaced with Bridge Opening Size.	Tender Condition shall remain unaltered.
37	Page no. 46	SECTION V TERMS OF REFERENCE	Clause 3.4.5.x.g viii	Soft (in editable format) and hard copies of all the documents obtained and used by the Contractor in the course of alignment design i.e. maps, topo sheets, contour maps, DGPS data, DEM, Bentley Rail Track or similar software files. Hard copy shall be of a size suitable for easy handling and preferably bound.	There are chances that data/ documents received/ obtained from other agencies may not be in editable format and such documents may be allowed to be accepted in non- editable soft copy format also. Kindly confirm.	Bidder's understanding is correct. Hence, Tender Condition shall remain unaltered.
38	Page no. 51	SECTION V TERMS OF REFERENCE ANNEXURE-2 (TOR)	Clause 3	.kmz file of tentative alignment of HSR corridor derived from desktop study done by NHRCL. .kmz file for Delhi-Varanasi corridor shall be provided at the issue of LOA. NHRCL shall provide the .kmz file of subsequent corridors at the interval of approximately 2 months. The sequences of corridors shall be decided after the award of contract.	It is understood that date, D, of commencement of work for subsequent corridors will be the date of receipt of .kmz file for that corridor. Kindly confirm.	Please Refer Addendum No. 01, Item no 22.



Sr. No	Pg. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
39	Page no. 54 & Page no. 57	SECTION V TERMS OF REFERENCE ANNEXURE-3 (TOR)	Clause 4.2 (ii) & Clause 4.3 i. Collection Requirement, Clause 2	Clause 4.2 (ii) The flight path shall cover the study area completely including enough cross flight lines to eliminate shadowing and allow for proper quality control. Flight line overlap should be 20% or greater, as required, to ensure.... Clause 4.3 i. Clause 2 Flight line overlap must be 10% or greater, as required to ensure there are no data gaps between the usable portions of the swaths.	Provisions for the same activity vary in these two clauses. At one place it is 20% while at another place, it is 10%. Normally, it is 20%. Kindly confirm.	Please Refer Addendum No. 01, Item no 24.
40	Page no. 101	SECTION VIII PARTICULAR CONDITIONS OF CONTRACT (PCC)	Particular Conditions of Contract Clause 14.2	5% (ten percent) of the Accepted Contract Amount (excluding the Provisional Sum) payable in the currencies and proportions in which the Accepted Contract Amount is payable.	There is in consistency in figure and word. Pl.confirm the correct figure.	Please Refer Addendum No. 01, Item no 33.
41	Page no. 122	SECTION- X BILL OF QUANTITIES (BOQ)	Clause 4	Final Location Survey using Aerial LiDAR Technology as per Terms of Reference -Total qty. 4821.54	Quantity of 4821.54 km is only about 17% higher than the cumulative Total estimated length o HSR routes (4109km). It seems that additional quantity has been considered to cover water bodies crossing the alignment. Based on our experience,this should be typically,of the order of about 50-60% of the route length. Necessary modification may be made.	Please Refer Addendum No. 01, Item no 37.
42	Page no. 22	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause 2.2.1	S. No. 1 The bidder must own/lease (as indicated against each item) the following instrument/ machine/software/ manpower, as minimum, to be eligible to bid: Item 1: Aerial LiDAR scanner with a range of 1000 m or above and a Pulse Repetition Rate (PRR) of 300 kHz or better along with Inertial Measurement Unit (IMU), Aerial GPS and other associated control units Item 2: Aerial Imagery Camera with a minimum resolution of 50 MP or better Item 3:Aircraft (excluding Drones & Unmanned Aerial Vehicles) / Helicopter Item 4:LiDAR Trajectory Pre-Processing Software compatible to scanner Item 5:Terrascan/Terrasolid/Point Tool/or similar Post-Processing Software Item 6:Photogrammetry Feature Extraction Software Leica photogrammetry suite of Bentley micro station or similar Item 7: FAD Design Software (Bentley Power Rail Track/Civil 3D or similar)	With reference to the above criteria for the bidders to own and lease Aerial Lidar equipment, we feel will limit the participation of reputed engineering firms. You may appreciate that most of the engineering firms who are specialized in alignment design and detailed design for Linear Railway/Highways project do not own the Aerial Lidar equipment. We understand that Aerial Lidar is an important requirement for alignment design. As an input for the study, the responsibility and data analysis of Aerial Lidar survey will rest with the Engineering consultant firm. If required, the Aerial Lidar survey agency could be made part of the tender through sub-contracting arrangement. Therefore, we request you to reconsider this criterion and remove it allowing reputed engineering firms with credential and similar experience to participate in this important project	Tender Condition shall remain unaltered.

Place : New Delhi
Date : 06.03.2020

S/d
General Manager (Contract)
NHSRCL

