Pre bid queries and clarification for the work of "Upgradation of Alappuzha-Changanssery road into Semi Elevated Highway"

S.No	Clause in the tender Document	Pre-bid Queries	Clarification
1	**General** **Wildlife Clearance**	a) Please clarify whether the project is in or nearby Wildlife/ National Park / Sanctuary / Eco sensitive Zone Land? b) If yes, Has Authority applied for National Board for Wildlife Clearance and if so please clarify the status of the same.	Wild life clearance not required.
2	**General** **Forest Clearance**	Request the Authority to kindly provide details of Forestland to be diverted, if any and status of Forest Clearance required if any.	Forest clearance not required.
3	**General** **Environment Clearance**	Request the Authority to kindly provide details of Environmental clearance, if any and status of Environmental clearance, required if any	Environmental clearance not required.
4	**General** **Tree cutting/Tree felling**	Is the project Alignment/RoW needs cutting/Felling of trees? If yes, please clarify about the permission for the	Cutting/felling of trees is required along the project alignment/RoW. Permission for the same will be taken

		cutting/felling of trees in Project Alignment/RoW.	by the authority. Refer Article 9.4 of SBD.
5	**General** **Encroachment Details**	Kindly provide the details of existing encroachment, if any on or along the project highway	As such encroachments are not identified. In case of any encroachment identified later on, the same will be removed by Authority.
6	**General** **Pending litigations**	Delay in execution of the project alignment/RoW due to pending litigation, if any, shall be treated as Political Force Majeure event and concessionaire may kindly be compensated accordingly.	Pending litigation if any shall not be treated as Political Force Majeure event. Force Majeure events are defined in the bid document.
7	**General** **Utility shifting**	Is the project alignment/RoW needs utility shifting? (i.e Gas/Water pipe line, sewer lines, electricity high tension line etc.). If yes please provide scope for the same	The proposed project alignment/RoW warrants utility shifting. Please refer Article 9 of the bid document.
8	**General** **Beneficiary bank details for issuance of bank guarantee**	Our bankers insisting us to submit the beneficiary bank details for the issuance of Bank Guarantees, Bank Guarantee Amendments as per the advice received from IBA (India Banks Association) to all banks and has been implemented with effect from 01.06.2015 onwards in India for bank guarantees, Bank Guarantee Amendments issuance. Our bankers suggested that BG's issued/amended in paper format will become operative only of an advice through SFMS mode follows it. In view of the same, it is requested to	Beneficiary details as desired is given below. 1. Name and address of the beneficiary: The project Director, Kerala State Transport Project. 2. Beneficiary bank branch IFSC and swift code : IFSC – SBIN0070308 Swift code- State Bank of India (SBI)

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<td>kindly share the Beneficiary Bank details for BG issuance through SFMS as follows :
<table>
<tr><td>S.No</td><td>Particulars</td></tr>
<tr><td>1</td><td>Name and address of the beneficiary</td></tr>
<tr><td>2</td><td>Beneficary bank branch IFSC and swift code</td></tr>
<tr><td>3</td><td>Beneficary bank and bank branch name</td></tr>
<tr><td>4</td><td>Beneficiary bank branch address</td></tr>
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</td>
<td>3. Beneficiary bank and bank branch name : State Bank of India (SBI), Vellayambalam Brach
4. Beneficiary bank branch address : PB No. 2211, Vellayambalam - Sasthamangalam Rd, Vellayambalam, Thiruvananthapuram, Kerala 695010</td>
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<td>9</td>
<td>General
Bid due date extension</td>
<td>It is requested to kindly extend the bid due date for further 21 days from the existing date, after receiving the above information’s and also according to the scope of the work, bidders need more time for complete pre bid assessments to quote competitive offer</td>
<td>SBD condition prevails</td>
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10	Sec – III EQC 2.4.2(b)- Specific Construction experience b) For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities: 1. Bituminous Concrete: 3800 cum per year 2. Dense Bituminous Macadam: 11700 cum per year 3. Wet Mix Macadam: 18900 cum per year 4. Granular Sub-base: 15000 cum per year 5. Major bridge/fly over – 3 No per year 6. RCC M30 grade – 37600 Cum per year	For. S.No.1, 2,3,4&6- we understand that the required quantities must be in any one year and not per year in the last 5 years. For S.No 5 Kindly allow bidder to claim major bridge/flyover experience during any three years in preceding 5 years as the major structures takes more than one year to complete	Bid document is self-explanatory and the condition prevails. For S.No.5 3 Major bridge/fly over of length more than 300m and cumulative length of 1600m in last 3 years. Or 2 Major Bridge/ Flyover length more than 450m and cumulative length of 1600m in last 3 years. Or 1 Major Bridge/ Flyover length more than 900m and cumulative length of 1600m in last 3 years Bid document will be modified to such extent and corrigendum issued.
11	Sec – III EQC 2.7 Equipment Notes:	Due to pandemic situation in all over the country it will not be possible to verify required details from Department of Revenue, Ministry of Finance, Government of India. The same may be	Bid document prevails.

	• Bidders are requested to verify latest position in respect of "Duties on Contractor's Equipment" from Department of Revenue, Ministry of Finance, Government of India. • The equipment listed above should not be older than 7 years of age.	done after the award of work before mobilizing the equipment's to the site Hence, we request kindly delete the note. The age of equipment up to 10 years may kindly be considered	

<table>
<tr>
<td>12</td>
<td>Schedule J
Project Completion Schedule
Project Milestones
<table>
<tr><td colspan="3">As per tender documents</td></tr>
<tr><td>Project milestones</td><td>No. of days</td><td>Min. value of stage payment statement to achieve the milestones</td></tr>
<tr><td>Project milestone - 1</td><td>180</td><td>20%</td></tr>
<tr><td>Project milestone - 2</td><td>360</td><td>45%</td></tr>
<tr><td>Project milestone - 3</td><td>540</td><td>70%</td></tr>
<tr><td>Project milestone - 4</td><td>720</td><td>85%</td></tr>
</table>
</td>
<td>The project construction schedules for the construction period of 912 days are split up into 5 milestones. The first few months will be spent on mobilization, detailed survey, soil investigation and preparation of design and drawings. Construction in full capacity can be expected only few months after the appointed date. Completion of stages of work worth 20% of total contract amount will not be possible to achieve in the first 180 days (19.17% of time period). Therefore relaxation in the first two milestones as proposed may be considered
<table>
<tr><td colspan="3">Modification required</td></tr>
<tr><td>Project milestones</td><td>No. of days</td><td>Min. value of stage payment statement to achieve</td></tr>
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</td>
<td>Revised project milestone are redrawn as below:
<table>
<tr><td>Project Milestone</td><td>No. of days</td><td>% of completion</td></tr>
<tr><td>1</td><td>180</td><td>15%</td></tr>
<tr><td>2</td><td>360</td><td>45%</td></tr>
<tr><td>3</td><td>540</td><td>70%</td></tr>
<tr><td>4</td><td>720</td><td>85%</td></tr>
<tr><td>5</td><td>912</td><td>100%</td></tr>
</table>
</td>
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	Project milestone - 5	912	100%				

		the milestones
Project milestone - 1	180	5%
Project milestone - 2	360	25%
Project milestone - 3	540	55%
Project milestone - 4	720	80%
Project milestone - 5	912	100%

13		According to the tender schedule technological designs like PVD & Stone columns are proposed as a solution to the subsoil improvement of the weak soil. This seems to be a concern as an apt solution for sub soil stabilization, considering the settlement, which may arise. The alternate methods commonly available in the market may be costlier. Please confirm.	Details provided under Schedule B, item 13 and respective appendix E in the Bid documents are suggestive in nature and is provided to assist the bidders for understanding the soil nature and probable mode of soil improvement. However, bidder can adopt innovative technologies and cost-effective method of ground improvement using reinforcements, inclusions, soil stabilization and compaction techniques as per the design parameters and codal provisions and standards mentioned in schedule D. Bid document will be modified to such extent and corrigendum issued.
14		As per ITB 13.1 and ITB 13.4 alternate bids and technical solutions are not Permitted. But in ITB change of scope provisions alternate designs can be submitted & considered for providing complete/better solution to the subsoil issues. Please confirm.	Condition in Bid Data Sheet prevails
15		During construction/installation work for PVD, Stone column, piling etc.., electrical posts & other LT/HT lines will have to be temporarily dismantled & reinstalled. Please confirm if the required approvals from the respective departments will be	Refer article 9.2 of the bid document.

		obtained & the expenses for the same is to be considered or as a separate reimbursable item?	
16		There exists underground water lines and other utility pips along the stretch of the road. Please clarify the dismantling & re-installation process of all underground water lines & other utility pipes including main & distribution will be done to facilitate work.	Refer article 9.2 of the bid document
17		In the areas where underground pipes are present, the suggested spacing/design for PVD & stone column as per tender schedule may not be possible to achieve. And also, it may lead to uneven settlement, which will damage the road surface. In the above scenario, request to provide details for PVD & Stone column designs at those stretches.	Refer Article 9 and reply to query No. 13 above.
18		The tender document is silent on the Rainfall details & Water level around the Road which were considered for the road design. Please confirm the rainfall data and the highest and lowest water level details considered in the design.	Maximum flood level used for the design is 97.6m
19		Whether Detailed Survey Data marking the Public/Private Boundaries will be provided.	Refer article 8.2 of the Bid document. Physical demarcation shall be done with the assistance of concerned PWD office.

20		Chainages mentioned in the Ground Improvement Appendix E (Pages 115-120) & Schedules AC Road (Pages 57 – 59) for PVD/Stone Column are different. Please confirm which chainage to follow for the Tender submission.	For embankment and approach portion the chainages in the Schedule (Page 57-59) shall be followed. For minor culverts, Appendix E shall be followed(Ground improvement using Stone columns are to be provided for all the minor culvert-refer drawing of minor culvert)
21		Ground Improvement Appendix E (Pages 115-120) shows most of the stone column are required at culverts & in the Schedules for AC Road this is not mentioned. Kindly clarify the locations for stone columns.	For minor culverts, Appendix E shall be followed(Ground improvement using Stone columns are to be provided for all the minor culvert-refer drawing of minor culvert) Also refer to reply to query No. 13
22		The schedule has no clarity given on the design speed and sight distance to be adopted. The length of flyover and approaches, overlay design, height of embankment, drainage et are depend on these parameters. Leaving these parameters open will lead to contractual tussles during the execution and delays. Hence, please provide such parameters to be used for design.	The design speed of 80km/h to be adopted for road portion and 60km/h at structures locations. Refer schedule D – design standard and relevant IRC code. Sight Distance shall be adopted as per the standard provided in the schedule D.
23		As per section 5.3 of schedule B, 17.02 km out of 24.164 km is proposed for reconstruction from subgrade level using	The pavement layers shall be designed in accordance with the parameters and standards listed out in schedule D. The

		conventional pavement layers and also mentioned that the pavement layer shown as minimum. Please confirm, whether the pavement layers can be replaced with alterative sustainable pavement technologies similar to cement-based base and sub base layers or reinforced bituminous layers. If this is allowed, please confirm whether the thickness of conventional layer shown in schedule can be varied or not.	pavement layer thickness shown in the schedule are minimum and the same condition will prevail in case of flexible pavement with conventional layers. Alternative and equivalent layers shall be designed adopting alternate techniques of compaction, inclusion, reinforcement etc can be considered in accordance with the data and standards as provided in Schedule D. Bid document will be modified to such extent and corrigendum issued.
24		As per section 5.3, out of 24.164 km, 7.144 km is proposed for overlay with 180 mm bituminous layer and stated as minimum. However, considering the differential settlement observed on these stretches, to improve the tensile stiffness and fatigue and rutting life, usage of asphalt reinforcement layer would be beneficial. Please confirm, whether any such requirement was analyzed in the detailed project report stage. If carried out, please provide the outcome the analysis.	There is no design data available for sharing with regard to Asphalt reinforcement. Please refer to the reply to query no. 23
25		Usage of innovative technologies similar to reinforced bituminous layers will reduce the thickness to be provided for overlay. Please confirm, whether the	Please refer to reply to query No. 23

		contract allow such provisions and technologies.	
26		As per section 11.1, the retaining wall has to be given in the specific form random rubble masonry for a minimum length of 1000 m on the approaches of bridges only. However, considering the existing safe bearing capacity, the size of such structure may be enormous. Hence, please confirm whether innovative technologies similar to gabion or reinforced earth wall etc. are allowed to retain the structures.	Alternative solution of retaining wall is permissible subject to the Design standards as stipulated in Schedule D. Bid document will be modified to such extent and corrigendum issued. .
27		It is mentioned that the stone columns to encased and covered with geotextile and coir blanket. However, it is not possible, if the holes drilled are not withstanding the pore water pressure from sides and collapse during the drilling. Hence, please confirm, these provisions are mandatory or not.	Please refer to reply to query No. 13
28		Please also provide an Extension for Tender submission at least by a month (14th September 2020) as this tender invades complex issues due to weak subsoil conditions.	SBD condition prevails

29	In the Technical Qualification Cl.2.4.2(b) , Dense Bituminous Macadam – 11700 Cum per year	We request you to consider combined quantity of items 1. Bituminous concrete & 2. Dense Bituminous macadam as one activity (15,500 Cum per year)	Accepted
30	In the Technical Qualification Cl.2.4.2(b) , Major bridge/flyover in a year : 3 no's per year	We request you to kindly consider the parties, who have completed two numbers of the bridge/flyover in last 5 years instead of 3 nos per year.	Please refer to the reply to query no. 10
31	As per Schedule-B, Clause-13 Geo technical Improvement "Provisions of Settlement gauge at 250m intervals are to be provide at the locations of stone column and PVD during the construction, operation & Maintenance period"	Kindly provide the type of settlement Guages (Manual/Automatic) and interval/ frequency for record of settlement (daily /Weekly /Monthly)	Automatic Settlement gauge. Frequency – weekly during Construction Period and monthly during O&M period.
32	As per Schedule-B- TCS (Sl. No.55 of Page 62), Flyover is to be constructed from Ch: 18+840 to Ch.19+325. Whereas in the Minor Bridge locations (Sl. No.12 of Page 54), Minor Bridge of span 1x15m (from Ch.19+312.50 to Ch.19+327.50), is to be constructed. These two chainages are overlapped	Please clarify	The minor bridge is from 19+340 to 19+355. (Locations of the structures marked in the horizontal alignment are to be followed) (Slight adjustments in the chainages without changing the length of structures as per site requirement has to be done at the time of execution). Item no 12 in Schedule B (ii) Major culvert/minor bridge, the design chainage shall be read as 19+340 in place of 19+320

33	As per Cl 13-Geotechncial Improvement, Stone Columns and PVD are to be provided. As per Typical Cross Section (TCS-1-Reconstruction from Sub Grade), the Embankment height is coming to Negative values i.e. Less than 0 (FRL-GL-Pavement Crust) and Embankment shall be provided with minimum 500mm thick, at PVD locations. To provide the Stone columns and PVD as per Cl-13, FRL needs to be raised and it involves increase in cost of construction.	Please clarify	Section 1.3 of Schedule A may be referred.
34	As per TCS-2-Overlay is to be provided with DBM & BC, the PCC thickness is coming to Negative values in most of the locations i.e. Less than 0 (FRL-GL-DBM-BC). Hence the pavement needs to be reconstructed or FRL needs to be revised.	Please clarify	Section 1.3 of Schedule A may be referred.
35	As per Typical cross section schedule, Sl No 14 & 15 chainages are overlapping.	Please clarify	The culvert chainage shall be considered as 5/460-5/480. The

			preceding and succeeding chainage of TCS 1 shall be adjusted accordingly.
36	In Flyover locations, minimum vertical clearance of 5.5m is not available	Please clarify	RL and clearance given in the Flyover drawings shall be followed.
37	Since the entire alignment passes through water bodies on both sides, additional retaining walls needs to be constructed duly raising the FRL	Please clarify	Retaining wall should be constructed wherever necessary. The minimum length of retaining wall is specified in 11.1 of Schedule B. Reply no. 26 may also be referred.
38	In Schedule B, (Page no. 35, Cl.2.9) it is mentioned that Typical cross section drawings showing configuration along with a schedule of applicability are enclosed in Appendix -B1 to this Schedule B. But it is noticed that Appendix B1 is missing. TCS 1 and TCS 2 are given in page no.60 of schedule AC- Road. TCS 1 is proposed for the road with DBM and BC overlay. Subsequently TCS 2 is proposed as footpath over drain and duct on one side and footpath over drain on other side. Also, ln Schedule B (Page No.42, C1.5.4.2), a table is given showing reconstruction	Please clarify the chainage for the reconstruction stretches are coming and provide the TCS for the same. Please confirm TSC-O1 is only for overlay	The title of Page No. 60 shall be read as Appendix B1-Typical Cross Section The Typical cross section (TCS 1) shall be read as TCS-2 which represents overlay & The Typical cross section (TCS 2) shall be read as TCS-1 which represents reconstruction. Bid document will be modified to such extent and corrigendum issued.

	stretches. (17.02 Km) But TCS (drawling) for reconstruction stretch as mentioned in the table is not provided. Reconstruction stretches are proposed to be done from the subgrade followed by GSB, WWM, DBM and BC. Subsequently, in a table of typical cross section schedule, (page no. 61 and 62), the length of TCS-I (overlay) is given as 17.02km. Summarily, the schedule for reconstruction with full road structure is also shown as 17.02 km. As per TCS drawing, TCS I (17.02 km) is proposed for BM and BC overlay only.		
39	In schedule B, page no.55 of Schedule AC- road, Cl no.7 .6, Table no.7.6.1, Causeway, Sl no. 4, no. of span is given as 6 spans of 10 m. ie; 60 m whereas, design chainage, and total length shows only 40 m. The same mismatch is showing in Sl no.5 also and Sl no.4 is not matching with the drawing also	Please clarify the actual size	Causeway shown in Table 7.6.1, SL No. 4 is 4 span of 10m and total length of 40m and SL. No. 5 is 2 span of 10m and total length of 20m Bid document will be modified to such extent and corrigendum issued.

40	Minimum experience in key activities given in2.4.2 (b) is given in per year. The criteria have to be satisfied in any one year (1st April 2015 to 31st March 2020) or for every year, please clarify.	Please clarify	Bid document is self-explanatory and the condition prevails.

Sd/-
Project Director