



Date: 19/10/2022

Minutes of Meetings

A pre-bid meeting for the Detail Design and Construction of Khuru Kuenphen Bridge on Bajo – Khuru SNH was conducted at 2:00 PM, October 18 2022. The meeting was chaired by Executive Engineer, Design Section, Bridge Division and following representative of relevant companies attended the meeting:

- 1. Mr. Rohit Adhikari, APECS Consultant.**
- 2. Mr. Ram Chandra Darjey, CDCL.**

The meeting was conducted to clarify any doubts regarding the submission of the bid. The meeting commenced with Bridge Division (BD) briefly presenting on the background of the project. BD briefly highlighted on the significance and requirement of the project in accordance to the ToR of the tender documents. Furthermore, the floor was reminded to take note of the changes in the standard SBD especially regarding the criteria set for the evaluation and award of the work. In addition, the following points were discussed:

1. Design span of the bridge

The bidders enquired to know, if multi-span would be considered instead of a single span as specified in the ToR considering the location and complexity of the the proposed bridge. To this BD clarified, looking at the past experiences of other bridges it could be drawn that a multi-span type would not be feasible as it would require the construction of the pier making it more difficult & challenging . Therefore, the option to consider a multi-span bridge was ruled out by the department.

2. Requirement of the proposed bridge to be aesthetically pleasing.

The bidders raised concern on the aesthetic requirement of the bridge and enquired as how the aesthetic of the bridge would be evaluated since bridge type is already decided and stipulated in the ToR. To this BD clarified that with the type already decided by the client the aesthetic component here refers to the railings and paintings with Bhutanese architectural features.

3. Substructure design of the bridge

The bidders enquired to know if the client/department could provide any data or information on the foundation of the bridge to help the bidders to propose suitable depth or type of the foundation and also estimate probable cost of the substructures since the sub-soil/geo-technical investigation is to be carried out after award of the work. The bidders also shared that since the sub-soil investigation is to be carried out at the late stage and cost to be included now during the bid submission, there might be



དཔལ་ལྷན་འབྲུག་གཞུང་། རྒྱལ་ཁྲིམས་ལྷན་ཁག། ལམ་སེལ་ལས་ཁུངས།

**Royal Government of Bhutan
Ministry of Works & Human Settlement
Department of Roads**



"Construction Industry: Solutions through innovation and improved technology"

high chances of changing and fitting the design submitted during the conceptual stage to the actual design. To this, it was clarified that choosing the appropriate foundation and design depends on the knowledge and experience of the geo-technical designer in consultation with the design engineer to come up with the most suitable proposal. Furthermore, the chances of fitting the narrative of the conceptual design to actual design are possibly slim as the consultant is required to present the conceptual design and inception report to the department for review and assessments.

The BD also informed the bidders that the department does not have any data or report on geo-technical studies conducted within the project vicinity or nearby areas.

4. JV of consultancy firms

The bidders enquired to know if the Bhutanese consultancy firm registered with CDB can form a JV with other regional/international firm to be evaluated for firm's experience. To this BD clarified that the invitation is open only to the Bhutanese firm for the design and construction works with Bhutanese large class contractor as the lead partner of the JV. However, the Bhutanese firms may participate of joint-venture/partnership/consortium/association with regional/international consultancy firms or individual. For the purpose of evaluation of experiences of the firm, the individual credentials of the JV partners shall be averaged using their stake.

5. Presentation of Conceptual Design

As per the requirement the consultants are required to make presentation on the evaluation criteria No ii) **"Adequacy of the proposed methodology and work plan in responding to the Terms of Reference"** and bidders enquired to know if it can also be done virtually. To this BD clarified that presentation can be done in person or virtually to the convenience of the bidders. If conducted virtually, the BD reminded the floor to ensure a stable internet connectivity.

Furthermore, BD suggested that the Chief Design Engineer should lead the presentation for effective follow-up discussion with the committee.

6. Years of experience of Key personal

The bidders sought clarifications on the no. of years of experience considered for the purpose of evaluation. To this BD clarified that as stated in the tender documents the work experiences for the proposed key personnel shall be based on actual experiences gained and not from the date of the graduation. Furthermore, the experience shall be considered from the time which the particular personnel has started conducting bridge design work (as for K1).

7. Qualification of Key Personnel (K1)



དཔལ་ལྷན་འབྲུག་གཞུང་། རྒྱལ་ཏོག་ལྷན་ཁག། ལམ་སེལ་ལས་ཁུངས།
Royal Government of Bhutan
Ministry of Works & Human Settlement
Department of Roads



"Construction Industry: Solutions through innovation and improved technology"

The bidders enquired to know if the qualification of design engineer with masters in other branch of Civil Engineering such as earthquake engineering or tunnelling engineering would be considered for the evaluation as the requirement stipulated in the tender document is Master Degree and above in Civil / Structural Engg.

To this BD clarified that as long as the key personnel holds master degree in any field of Civil Engineering and has carried out the analysis and design of bridges backed by the supporting documents such as experience certificates, the proposed key personnel qualifies for the work.

The bidders also enquired to know if the design work experience of Chief Design Engineer (70m span) is to be considered as single span or as multi-span. To this, it was clarified that experience requirement is for single span of 70m for Chief Design Engineer (K1). Similarly, for Asst. Design Engineer (K2) the experience requirement is for single span of 30m.

8. Points allocation for Participation by Nationals

The bidders submitted that allocation of points (10points) for Participation by National does not appear to be advantageous for the consultants since supply of Bhutanese engineers are limited in numbers and expertise, therefore, attributing to hiring of International key personnel

To this BD clarified that this particular criteria is kept to encourage participation of Bhutanese engineers. Furthermore, BD explained that the qualification and experience requirement criteria for Asst. Design Engineer and Geo-technical engineer have been kept minimum considering the current capacity of construction industry.