

TERMS OF REFERENCE

for

Specialist Structural Engineering/Bridge

UTTARAKHAND DISASTER RECOVERY PROJECT – UDRP (The World Bank)

Job Title:	Specialist Structural Engineering/Bridge
Location:	PIU Road and Bridge -UDRP(The World Bank)
Contract term:	One year with possibility for extension
Start date:	Immediately
Responsible to:	Program Manager, PIU Road and Bridge -UDRP (The World Bank)
Responsible for:	To provide the structural design and engineering services required for the construction of bridges, culverts and other structures planned under the UDRP

BACKGROUND:

In June 2013, the north Indian state of Uttarakhand and adjoining regions experienced heavy rainfall due to a cloud burst causing devastating landslides and flash floods. The rainfall during the period of June 15 – 18 recorded to be 375 % above the normal rainfall resulted in a total human live loss of 580 as reported by the State Govt. of Uttarakhand (GoU) with more than 5400 still reported as missing. The region is amongst the country's most important pilgrimage centers and the disaster occurred during the peak pilgrimage season leaving over 70,000 tourists and over 100,000 locals stranded in the upper reaches of the mountain terrain. As per the preliminary assessment report by the GoU and UN, total local population affected is recorded as 110,000, 4200 villages affected, 9200 cattle / livestock lost, 3320 houses fully damaged.

The Government of Uttarakhand was extremely proactive in relief operations in the immediate aftermath of the flood and also received support from GoI for this. The project will support the recovery of communities from the flood event in the several affected districts of Uttarakhand.

Objective

PIU (Roads & Bridges) is seeking a Specialist Structural Engineer/ Bridge to provide the structural design and engineering services required for the construction of bridges, culverts and other structures planned under the UDRP having good experience in design of bridges(esp. steel bridges) and who is familiar with latest specifications and design methodologies of bridge design. The objective of this consultancy is to contribute to the implementation of the Uttarakhand Disaster Recovery Project to ensure the efficient and timely implementation of all UDRP activities.

The consultant will be based in Dehradun and will be required to travel regularly to project sites within the state as per operational needs.

Scope of Work

To provide structural design and engineering services required for the construction of bridges, culverts and other structures planned under the UDRP, with focus to the following tasks.

1. To design the bridges, culverts, other cross drainage works and other structures to be constructed for the restoration and reconstruction works of roads and bridges under UDRP.

2. To ensure that all designs produced are in accordance with the requirements for completeness, accuracy, constructability, and compliance to seismic requirements of the prevalent safety codes.
3. To review designs, specifications, construction methods, etc. of the bridges obtained from other consultants and advice PIU (Roads and Bridges) accordingly.
4. To review already existing designs of bridges and to advice PIU (Roads and Bridges) weather these can be adopted for the construction of bridges under UDRP and to suggest necessary modifications.
5. To coordinate with different agencies involved in the design and construction of bridges and to advice PIU (Roads and Bridges) on the technical matters related to engineering and design of bridges and other structures.
6. To provide recommendations to PIU (Roads and Bridges) on bridge and structures conditions assessment and maintenance.
7. To help in capacity building on bridge and structure design, construction and maintenance.
8. Retaining wall design.
9. Coordination and liaison with district EAs, contractors, consultants and other stakeholders involved in the design and construction of bridges.
10. To participate in meetings related to design and construction of bridges and other structures.
11. Other relevant tasks given by Program Manager, PIU (Roads and Bridges).

Reporting:

The consultant will report to the Project Project Manager, PIU-UDRP (Roads and Bridges), UDRP Uttarakhand.

Qualifications and experience

Education:	M.Tech. in Structural Engineering with a reputed organization.
Experience:	Post qualification, minimum fifteen (15) years of professional experience in design of bridges (esp. steel bridges) and other steel structures.

OTHER SELECTION CRITERIA

Specialized knowledge: Knowledge of latest national and international codes of practices and standards related to bridge design and steel structures is mandatory. He/ she should be proficient in working with latest software's/ tools related to bridge design.

General Information:

Engagement of the Specialist Structural Engineer/ Bridge will be on full time basis and the place of work will be PIU-UDRP(Roads and Bridges), Dehradun.