Title Road Geometric Design Specialist

Vacancy Number MoPW/SRTAP /1400-74

Ministry of Public Works

Organization Directorate of Survey and Design/ MoPW

Project Sustainable Reform & Technical Assistance Project

Duty Station Kabul/ and Various Provinces

Duration 1 Year (with possibility of extension)

No of Jobs 4

Nationality Afghan

Sex Male/Female

Salary Range According to NTA Salary Scale (Grade-C)

Announcing Date 27/May/2021

Closing Date 08/June/2021

Job Type Engineering

Shift Full Time

Job Status Sourcing

Experience Specific 5 year, General 7 years

#### **Background:**

The Ministry of Public Works (MoPW) is responsible for the planning, design, procurement, implementation, monitoring, and maintenance of the various transportation infrastructure projects such as roads, bridges, and its relevant drainage and retaining/protection structures in the government of the Islamic Republic of Afghanistan.

The Directorate of Survey and Design is a technical survey (Feasibility study, topographical survey, Geotechnical Investigation, Hydrology and hydrologic design,) and design (Geometric Design, pavement design, structural design and bridge design) of all roads and bridges projects as per national and international standards. The survey and design process are required to complete as per approved and standard computer programs.

The survey and design directorate of MoPW is responsible to prepare standard drawings as per mentioned standards and approved programs applicable at construction site. The ministry is recruiting data collectors to carry out pavement and roadway structures' design and technical surveys of the verious Road Network and of rural roads throughout Afghanistan.

# Scope of Work/Job Summary:

The Road Design Engineer works under the guidance of the Head of Technical Section. The Road Design Engineer will assist with all designs and technical documentation produced by the Road Design Unit, and specifically designs and reviews drawings, specifications and work methodologies according to AASHTO and MPW Design standards.

### **Duties & Responsibilities:**

- Assist the Head of Technical Section with the output of Road Design Unit.
- Design of rigid and flexible pavements by AASHTO method
- Review technical specifications to ensure adherence to AASHTO and MoPW standards
- Ensuring that all designs are completed to the highest standards, based on initial survey data provided to the Road Design Unit by the Surveyors, Regional Engineers, and environmental and social inclusion (ESMF) Specialists.
- Assist with the preparation of BoQs and technical documentation in accordance with MoPW standards.
- Provide advice and coordination of the construction of the roads in conjunction with the Contract Management Section and the Contractor.
- Assist the Contract Management Section and QA/QC and Regional Engineers with monitoring the work of the contractor.
- Assist the Senior Road design engineer with reviewing the existing practice of local contractors
  and conventional methodology of road construction; make recommendations that will increase
  safety (taking budget constraints into account) in the construction of roads undertaken by MoPW.
- Review QA/QC site visit and materials testing reports to ensure sampling, testing and inspection of materials are carried out regularly and works are implemented in compliance with design specifications.
- Coordinate with the Contract Management Section and the Procurement Management Section on all contractual matters in the completion of the respective Contracts.
- Coordinate on design changes that are processed by the Contract Management Section.
- Provide technical advice and assistance to contractors to ensure that economical and quality materials are purchased.
- Assist with the provision of social-economic analysis of the respective road designs. This entails
  using Cost Benefit Analysis (CBA) modelling processes, such as cost per person that the road
  will benefit.
- Monitor the implementation of the works by conducting site visits and provide guidance for improvement and good results.
- Perform any other duty in line with these ToR's as directed by the Head of Technical Section.

## **Skills & Competencies:**

- Highly proficient in design software such as AutoCAD, AutoCAD Civil 3D and other structural design software.
- Must able to design the rigid and flexible pavements by AASHTO method
- Proven knowledge of road construction.
- Working knowledge of MS Office packages (MS Project especially), with advanced Excel skills

- Excellent English skills, both written and verbal. Fluent in Pashtu and, Dari both written and verbal.
- Demonstrated ability to training and build capacity of counterparts.
- Proven organizational, negotiation and problem solving skills.
- Be able and willing to travel to all provinces within Afghanistan, including insecure and volatile areas.
- Is able to demonstrate attention to detail and patience.
- Ability to overcome challenges and work in difficult work environments/conditions.
- Must able to deliver at least 10km/month road design with complete documentation
- Must able to review 50Km/month outsource survey and design
- Must able to prepare the bill of quantities of road and bridge projects
- Strong AutoCAD knowledge for drafting of road design output
- Preparation of Bill of Quantities according the MOPW technical Specifications

## **Job Requirements:**

- Bachelor of Civil Engineering and transportation engineering is required.
- At least 7 years of work experience in a large scale roads construction project is required.
- Previous experience working in a UN or World Bank project, INGO is an advantage
- Required verbal and written communication skills in English;
- Proven organizational and problem-solving skills.

# **Required Documents:**

- CV with an application form for the relevant position;
- Copy of verified Degree by the Ministry of Higher Education;
- Copy of verified Afghan ID Card (Tazkera) or Passport copy;
- Copy of verified last Posting Contract;
- Copy of other documents seems to be necessary.

#### **Submission Guideline:**

Interested candidates are requested to forward their applications; detailed CV and other required documents **hr.mopw@yahoo.com** indicate the vacancy number (**MoPW/SRTAP**/1400-74) and the post title (**Road Geometric Design Specialist**) in the subject line when applying by email to the Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Works (MoPW) at Kabul, Afghanistan.

### Office Address:

SRTAP Office, Railway Building, Kabul Jalalabad Road, in front of KMTC, MoPW, Kabul, Afghanistan.

Only short-listed candidates will be notified for written exam and interview