Title Cost and Quantity Estimation Specialist

Vacancy Number MoPW/SRTAP /1400-71
Ministry Ministry of Public Works
Organization Survey and Design Directorate
Duty Station Kabul, Including Provinces

Duration 1 Year (with possibility of extension)

No of Jobs 3

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 years, 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.

# Scope of Work/Job Summary:

The Cost and Quantity Estimation Engineer works under the guidance of the Head of Technical Section. The Cost and Quantity Estimation Engineer will prepare bill of quantities for civil works and 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. For accurate costing the Senior Costing and or Quantity Estimation Engineer will prepare an up to date unit rate analysis for civil works.

# **Duties & Responsibilities:**

- Responsible for reviewing the plans and specifications on projects, prepared by technical team, and creating the final detail takeoff or Bill of Quantities (BoQ) required for construction in line with the design and technical specifications requirements for completeness and accuracy.
- Confer with members of the design and engineering team and conduct research to determine project requirements/scope of work.
- Conduct reviews of BOQs prepared by other members of the engineering team (i.e. road design engineer and bridge design engineer) or by contractors for accuracy.
- Coordinate with Design Engineers, material/Pavement and Geotechnical Engineer regarding the type of material during preparation of BOQ.
- Review and check the BOQ prepared by contractor.
- Estimate details quantities of roads and structures.

- Estimate details quantity of Bridges.
- Preparation of revised BoQs.
- Travel to the project site and measurement the completed activities and obtain the actual quantity if needed and directed by Head of Technical/Team Leader.
- Preparation and evaluation of Bill of Quantities
- Obtain materials, construction machineries and manpower update market prices for accurate cost estimation from all regions.
- Rate Analysis (Break down) for each pay item of Bill of Quantity.
- Assessing analyzing and developing necessary systems and Cost breakdown spreadsheets to ensure delivery of required cost estimations quickly and accurately.
- Update the estimation database based on feedback from Implementers and other units within MPW.
- Determine accurate cost estimations for complex Pay-items
- Calculation and preparation of Construction Machinery and key staff list for projects.
- Perform quantity comparisons and report on quantity changes.
- Preparation of Rates for Rate Negotiations and Negotiating it with contractors to support Contract management.
- Preparation and extracting Machinery Productivity Norms from Standards
- Preparation of work schedules for Road infrastructure's related projects by Primavera P6.
- Conducting site visits to collect and update Cost/Estimation relevant data.
- Based in Kabul Office, but may be asked to make short term visits of provinces for data collection.
- Perform any other duty in line with this ToR as directed by the Head of Technical Section.
- Any other assignment as required by the Team Leader.

### **Monitoring and Progress Controls:**

- Weekly meeting with Technical Unit for reporting on the progress and completion of works according to project requirements.
- Regular submission and updating of all Cost breakdowns and Market prices.

### **Final Product:**

- BOQs are prepared in adherence to AASHTO ASTM and/or MPW standards and use of materials according to technical specifications.
- The quantity breakdowns and final BoQ's are as per design drawings and specifications.
- Cost is estimated accurately and realistic with all supporting breakdowns.
- Machinery, Equipment and key staff lists is prepared in line with project quantities and needs.

## **Skills and Competencies:**

- Good computer skills in operating MS Windows and MS Office programs.
- Proficiency in English, Dari and Pashto (Reading, Writing and Speaking).
- Self-discipline, integrity and ability to work under pressure to meet tight deadlines.
- Strong communication and interpersonal skills, ability to work with high levels staff and functions within the organization.
- Ability to work independently and as part of a team, accept responsibility, and be extremely discrete with sensitive information.
- Ability to overcome challenges and work in difficult work environments/conditions.
- Be able and willing to travel to all provinces and remote location in Afghanistan, including volatile and insecure areas.
- Strong technical background and working knowledge of road design and construction work
- Good analytical capability and attention to detail within calculations, checking and summarizing.
- Ability to interpret engineering documentation such as drawings, specifications, scope of

- works, etc.
- Excellent working knowledge for preparing quantity breakdown and BOQ of all phases of engineering design, including: Road and Bridge Projects.
- Practical skill in the rate analysis of project activities.
- Practical skill in the preparation and finalizing of variation order of the projects.
- Have strong computer knowledge of Road Software (e.g. AutoCAD Civil 3D) and MS Excel Spreadsheets,
- Have strong knowledge of AutoCAD, and performing material takeoffs with CAD.
- Ability to work effectively and harmoniously with colleagues from varied cultures and professional backgrounds.
- Have strong knowledge of Primavera P6 or MS project.

### **Key Performance Indicators (KPIs):**

- Must be able to deliver at least 400km/year road BOOs with complete quantity breakdown
- Must be able to review 100Km/year BOQs of outsource survey and design

# Job Requirements/Qualification:

- Bachelor Degree in Civil Engineering & Construction Management with 5 years relevant experience
- Master's Degree in Civil Engineering, Construction Management with 3 years relevant experience.
- Previous experience working in a UN or World Bank and Government project, INGO's is an advantage.
- Knowledge of standard practices of Road engineering;
- Required verbal and written communication skills in English;

#### **Job Location:**

Kabul, Afghanistan

#### **Travels to Provinces:**

Require Travels to Provinces.

#### **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 of verified last Posting Contract;
- Copy of other relevant documents seem 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 /1400-71) and the post title (Cost and Quantity Estimation 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