Title Bridge Geotechnical Engineering Senior Specialist

Vacancy Number MoPW/SRTAP/CMTL/1400-84

Ministry Ministry of Public Works

Organization Directorate of Construction Material Testing Laboratory

Project Sustainable Reform & Technical Assistance Project

Duty Station Kabul + Travel

Duration 1 Year (with possibility of extension)

No of Jobs 1

Nationality Afghan

Sex Male/Female

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

Announcing Date 31/May/2021

Closing Date 11/June /2021

Job Type Engineering

Shift Full Time

Job Status Sourcing

Experience Specific 6 year, General 10 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.

Laboratory's Department of MoPW is responsible for testing of all road and bridge construction materials such as: soil, aggregate, cement, bitumen, asphalt concrete and other distractive and non-distractive tests on fresh and hardened concrete. Laboratory's department is also responsible for geotechnical investigation of for roads/highways, bridges, and related structures. Besides these, Laboratory's department, MoPW is responsible for soil sample collection from various sites and conducting both simple and advanced tests on the collected simples. Moreover, Laboratory's department, MoPW is committed to provide proper geotechnical, geo investigation data and also supervise the process of testing, check, and review the existing reports. Laboratory's department of MoPW witness all quality tests, check, and review of all mix designs provided for asphaltic pavement layers.

Scope of Work/Job Summary:

The Laboratory's Department, MoPW is currently looking for a road pavement geotechnical engineering Senior Specialist to join the Lab Department. He/she will be responsible for conducting, supervising and Monitoring Geotechnical Investigation for Structures and Roads, including case study, preliminary investigation for road alignments, detailed investigation for structures, interpretation of sub soil condition

along the road alignments and structure locations (bridges, retaining walls, etc) and writing geotechnical reports including recommendations. Perform related tests in the lab and onsite, including proposed material specifications. Will also play a key role on managing the geotechnical engineering department, developing leadership and professional development of the team members. More specifically:

Duties & Responsibilities:

- Planning and providing oversight of geotechnical site investigations
- Interpretation of geotechnical engineering reports and site investigation data.
- Ability to present the results of the investigations and reports to members of the project team in an organized, professional and understandable format.
- Analyze geotechnical findings, perform appropriate calculations and prepare data reports to the designer.
- Performing geotechnical analyses and use of associated software for determination of soil bearing capacity and settlement of shallow foundations, lateral earth pressures, and etc.
- Providing leadership and direction with regard to all geotechnical issues during the design and execution stages.
- Ensure successful implementation and project delivery involving engineering geological inputs, including designer liaison, fieldwork, analysis and reporting
- Carry out site missions for doing surveys with the road and bridge survey team; bringing reality data from the site for determination and foundation.
- Facilitate in engineering geology studies and investigations, supervise field testing and sampling and analysis of results using accepted methods and/or computer applications
- Review the contractor's geotechnical reports & facilitate to meet the required standards.
 Traveling to various survey or project sites and obtain soil samples at various depths using specialized drilling equipment.
- Work closely with the soil laboratory personnel and technicians to evaluate the various components of the soil.
- Research technical and engineering geological developments and update procedures and standards to ensure AASHTO, ASTM and MOPW complies with best practice
- Analyzing of Slope stability for embankments and road cuts
- Evaluating test procedures, technical skills of soil laboratory staff, running condition of lab equipment and calibration status of equipment
- Preparation of geological mapping along the road alignment
- Analyzing of Seepage, Saturated or partially saturated flow
- Analyzing of Anchors, nails, and rock bolt modelling, Geotextiles
- Inspecting the geological changes occurred to the planned road/highway route;
- Evaluating the thickness of layers, structure, and stone compositions of the specified working site;
- Provide training and assistance to the lab soil and geotechnical engineers section on conducting different types of geotechnical tests;
- Recommending the depth and type of foundations in accordance with data received from the site and lab tests;
- Analyzing of Frost Heave of the proposed project site;

Skills & Competencies:

- Be familiar with geotechnical engineering material tests and surveys;
- Experience with soil types, aggregate types and usage, performing different tests related to soil geotechnical engineering and components;
- Ability to overcome challenges and work in difficult work environments/conditions (especially in the field);
- High degree of personal initiative and willingness to accept responsibility for poor data collection;
- Knowledge of geotechnical engineering, and conducting relevant tests and analysis;
- Use of Excel, Word, Power Point, AutoCAD and any other software used for geotechnical

engineering.

Job Requirements:

- University Degree in geotechnical engineering or relevant fields, Masters or higher degree will be preferred.
- Minimum 6 years of work-related experience, including geotechnical engineering soil survey and design and 10 years of general experience in civil engineering;
- Proven success in managing and executing geotechnical engineering investigations and research, conducting evaluations and analytical work, and adhering to project budgets and objectives.
- Having a personal computer installed with MS Word, Excel, Power Point, and AutoCAD software.
- Proven ability to establish and maintain effective working relationships with colleagues and coworkers and provide technical leadership to the staff.
- Ability and willingness to travel (short term) within provinces all over Afghanistan.
- Good knowledge in writing reports and proficiency in written and verbal English.

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 to **jobs.mopw1400@yahoo.com** indicate the vacancy number (**MoPW/SRTAP/CMTL/1400-84**) and the post title (**Asphalt Concrete and Bitumen Senior 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 Add: SRTAP Office, Kabul Jalalabad Road, In front of KMTC, Ministry of Public Work, Kabul Afghanistan.

Only short-listed candidates will be notified