

Title	<b>Soil and Aggregate Lab Technician</b>
Vacancy Number	MoPW/SRTAP/CMTL/1400-88
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	4
Nationality	Afghan
Sex	Male/Female
Salary Range	According to NTA Salary Scale (Grade-D)
Announcing Date	31/May/2021
Closing Date	11/June/2021
Job Type	Engineering
Shift	Full Time
Job Status	Sourcing
Experience	Specific 3 years and general 5 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 samples. 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:**

A Soil and Aggregate Lab Technician conducts a wide variety of materials tests related to aggregate and soil, in addition to some limited public works inspections. The aggregate and soil materials' testing is conducted primarily in the Lab Department of MoPW. Also, depending upon need, can also be conducted in the field. Performing different tests including moisture and compaction tests using a Nuclear Dosimeter or Sand Cone Device, obtaining representative field samples, and performing a variety of tests

on soil and aggregates to determine temperature, unit weight, specific gravity, moisture content, CBR, direct shear, unconfined, consolidation and other relevant and required tests. Technicians are required to use appropriate safety equipment and follow procedures while performing assignments. A Soil and Aggregate Lab Technician reports to the soil and aggregate engineer who reviews work through inspections, observation, and gathers overall results achieved.

### **Duties & Responsibilities:**

- Receiving, processing and analyzing samples.
- Conducting tests on samples and experimental processes.
- Using, cleaning and maintaining various types of equipment.
- Handling and storing chemicals and other materials.
- Administrative tasks such as maintaining notebooks, registration the samples and documenting procedures
- Picking-up and delivering items for the lab
- Monitor and authorize entrance and departure of employees, visitors, and other persons.
- Conduct the entire soil and aggregate Lab and filed tests such as aggregate tests, soil tests according to the guidance of soil and aggregate engineer;
- Prepare a detailed report of all tests performed using MS. Office to be used in road / bridge design projects and present it to soil and aggregate engineer;
- Storing and keeping all test materials delivered from the test site in nominal condition;
- While performing Lab tests, must consider all safety rules and regulations and wearing safety suits in the Lab and in the field;
- Testing soil and aggregate samples according to ASTM, BS, ASHTO codes and standards;
- Perform soil tests such as gradation, PI, MDD, CBR, Direct Shear, Unconfined, Consolidation and other related tests as needed;
- Digging test pits with the relevant tool or with hands;
- Management, record keeping and calibrations of all soil and aggregate related equipment and machinery;
- Conduct procedures safely and maintain good housekeeping of laboratory and surroundings;
- Performing all tasks in accordance with the guidance of the soil & aggregate engineer;
- Performing site trips if needed;
- Assisting with the other Lab sections in relevant tasks and operations;
- Performing any other related duties and tasks as assigned by the head/supervisor.

### **Skills & Competencies:**

- Be familiar with all sample and advanced tests required of soil and aggregate, data collection and their analysis;
- Be able to record all test results in the prepared formats;
- Ability to overcome challenges and work in difficult work environments/conditions (especially in the field if required);
- High degree of personal initiative and willingness to accept responsibility for all poor soil and aggregate investigations and test results related to it;
- Familiarity with Excel, Word, Power Point, and any other software used for soil and ge-engineering.

### **Job Requirements:**

- Min of higher baccalaureate or bachelor's degree in civil engineering, geotechnical engineering, and or any other similar discipline;
- Having min of 3-year work experience as soil and aggregate Lab Technician and 5 years general

- experience in civil engineering field;
- Knowledge of standard practices of geo-engineering and all relevant ASTM or AASHTO standards;
  - Good experience in working with relevant lab equipment as necessary;
  - Required verbal and written communication skills in English, Pashto, and Dari;
  - Proven organizational and problem-solving skills.

**Required Documents:**

- CV with an application form for the relevant position;
- 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/1400-88**) and the post title (**Soil and Aggregate Lab Technician**) 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**