

Section 1000

Miscellaneous Project Support

PART 1: Testing Laboratory Services

- 1.1 *General Description of Work* – The Contractor shall employ, at his/her expense, a certified testing laboratory, acceptable to the Engineer, to provide testing services as prescribed in these specifications and associated Contract Documents. Required tests may include, but are not necessarily limited to: compressive strength tests for placed concrete, mix design and density tests for asphalt paving or patching, Procter density curves for backfill material, in-place densities for placed fill materials, leak detection and pressure testing for completed pressure piping, and start-up testing for new pumps and equipment.
- 1.1.1 The Contractor shall be responsible for providing materials which meet the requirements indicated. For manufactured materials such as reinforcing steel, expansion joint materials, concrete pipe, cement, miscellaneous steel, cast iron materials, etc., the Contractor will be required to furnish a Manufacturer's Certificate that the material meets the requirements specified for this project.
- 1.1.2 The Engineer shall monitor all materials incorporated into the project and their placement by testing at the Contractor's expense. The Engineer does not guarantee the accuracy or validity of the data nor does the Project Engineer or Owner assume any responsibility for the Contractor's interpretation of the data. Materials or work which does not meet the specifications shall be removed or modified.
- 1.1.3 All retesting for work rejected on the basis of the initial test results will be at the expense of the Contractor and the extent of the retesting shall be determined by the Engineer. The Engineer may require additional testing for failing tests and may require two passing retests. Acceptance will be made by the Engineer.
- 1.1.4 The testing laboratory will be approved by the Engineer and shall perform all work in a professional manner.
- 1.2 *Laboratory Duties and Limits of Authority* –
- 1.2.1 Cooperate with Engineer and Contractor to provide qualified personnel as required promptly on notice.
- 1.2.2 Acquaint Engineer's personnel with testing procedures and with all special conditions encountered at the site.
- 1.2.3 Perform specified inspections, sampling and testing of materials and construction methods:
- 1.2.3.1 Comply with specified standards, ASTM and other recognized authorities.
- 1.2.3.2 Ascertain compliance with the Contract requirements.
- 1.2.4 Promptly notify the Engineer of irregularities or deficiencies of work which are observed during performance of services.

1.2.5 Promptly submit 3 copies of reports of observations and tests to the Engineer including but not limited to:

- 1.2.5.1 Date issued
- 1.2.5.2 Project title and number
- 1.2.5.3 Testing laboratory name and address
- 1.2.5.4 Name and signature of technician
- 1.2.5.5 Date of sampling
- 1.2.5.6 Record of temperature and weather
- 1.2.5.7 Date of test
- 1.2.5.8 Identification of product and specification section
- 1.2.5.9 Location of product
- 1.2.5.10 Type of test
- 1.2.5.11 Observations regarding compliance with the Contract documents

1.2.6 Perform additional services ordered by the Engineer.

1.2.7 Laboratory is not authorized to:

- 1.2.7.1 Release, revoke, alter or enlarge on the Contract requirements.
- 1.2.7.2 Approve or accept any portion of work.
- 1.2.7.3 Perform any duties of the Contractor.

1.3 *Contractor's Responsibilities* –

- 1.3.1 Furnish products and complete installation of prescribed work to meet or exceed the Contract requirements.
- 1.3.2 Cooperate with laboratory personnel; provide access to the work or to the Manufacturer's operations.
- 1.3.3 Provide to laboratory preliminary representative samples of materials to be tested in specified quantities.
- 1.3.4 Furnish copies of test reports.
- 1.3.5 Furnish verification of compliance with the Contract requirements for materials and equipment.
- 1.3.6 Furnish casual labor and facilities:

- 1.3.6.1 To provide access to work to be tested
- 1.3.6.2 To obtain and handle samples at site
- 1.3.6.3 To facilitate inspections and tests
- 1.3.6.4 For laboratory's exclusive use for storage and management of test samples.
- 1.3.7 Notify Engineer 24 hours in advance of operations to allow for the assignment of personnel.
- 1.3.8 Notify laboratory 24 hours in advance of operations to allow for the assignment of personnel.
- 1.3.9 Correct work which is defective or which fails to conform to the Contract documents. Corrective work shall not delay the project or the work of other Contractors.
- 1.3.10 Pay all costs of retesting when test results indicate non-compliance with the Contract requirements.
- 1.3.11 Patch all surfaces and areas disturbed by testing operations.

PART 2: Soils and Subsurface Investigations

- 2.1 *General* - Depending on the project requirements, the Engineer may have obtained geotechnical information, which may include subsurface data, logs of soil borings and recommendations from geotechnical consultants.
 - 2.1.1 If soil borings have been prepared, they will be included in the specifications or on the plans.
 - 2.1.2 Any geotechnical information included is for information only. The ECUA and the Engineer do not assume any responsibility for the Contractor's interpretation or conclusions drawn from the data.
 - 2.1.3 The Contractor may, at his option, perform additional subsurface investigations at his own expense.