

SECTION 01 45 29

TESTING LABORATORY SERVICES FURNISHED BY OWNER

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. OWNER will employ and pay for an independent testing laboratory to perform specified services. Testing laboratory selected will be subject to ENGINEER's acceptance.
2. Inspection, sampling, and testing shall be as specified in the Specifications including but not limited to:
 - a. Section 01 45 33, Code-Required Special Inspections and Procedures.
 - b. Section 03 30 00, Cast-in-Place Concrete.
 - c. Section 03 60 00, Grouting.
 - d. Section 04 05 11, Masonry Mortaring and Grouting.
 - e. Section 05 05 33, Anchor Systems.
 - f. Section 05 12 00, Structural Steel Framing.
 - g. Section 05 31 23, Steel Roof Decking.
 - h. Section 09 91 00, Painting.
 - i. Section 31 23 05 Excavation and Fill.
 - j. Section 32 12 00, Flexible Paving.
 - k. Section 33 05 05, Buried Piping Installation, for bacteriological testing.
 - l. Section 33 16 13.16, Prestressed Concrete Aboveground Water Utility Storage Tanks.
 - m. Section 40 05 05, Exposed Piping Installation, for bacteriological testing.
 - n. Section 46 61 13, Filter Media.
 - o. Section 46 61 15, GAC Media.
 - p. Other tests in the Contract Documents that are not specifically assigned to others.
3. CONTRACTOR shall pay for:
 - a. Tests not specifically indicated in the Contract Documents as being OWNER's responsibility.
 - b. Tests made for CONTRACTOR's convenience.
 - c. Repeat tests required because of CONTRACTOR's negligence or defective Work
 - d. Tests required after failure of two or more of the same test for the same item to comply with the Contract Documents, for tests initially paid for by OWNER.
4. Testing laboratory is not authorized to approve or accept any portion of the Work or defective Work; rescind, alter, or augment requirements of Contract Documents; and perform duties of CONTRACTOR.

1.2 REFERENCES

- A. Standards referenced in this Section are:
 - 1. ASTM E329, Specification for Agencies Engaged in Construction Inspection and/or Testing.
 - 2. ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories.
 - 3. NIST SRM, Standard Reference Materials.

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Testing Laboratory:
 - a. Testing laboratory will comply with applicable requirements of ASTM E329.
 - b. Testing laboratory will be authorized to operate in the same state as the Site. Where applicable, laboratory will be certified by the authority having jurisdiction for the types of testing required.
 - c. Testing equipment used by laboratory will be calibrated at maximum intervals of twelve months by devices of accuracy traceable to one of the following: NIST SRM, ISO/IEC 17025, certified by state or local bureau of weights and measures, or values of natural physical constants generally accepted in the engineering and scientific community.

1.4 SUBMITTALS

- A. Informational Submittals:
 - 1. Quality Control Submittals and Test Reports: Promptly submit to ENGINEER and CONTRACTOR results of testing and inspections, in accordance with Section 01 33 00, Submittal Procedures, including:
 - a. Date issued.
 - b. Project title, number, and name of the Site.
 - c. Testing laboratory name and address.
 - d. Name and signature of inspector or person obtaining samples.
 - e. Date of inspection or sampling.
 - f. Record of temperature and weather.
 - g. Date of test.
 - h. Identification of material or product tested, and associated Specification Section.
 - i. Location in the Project.
 - j. Type of inspection or test.
 - k. Results of tests and observations regarding compliance with the Contract Documents.
 - 2. Qualifications Statements: Upon CONTRACTOR's request, testing laboratory will submit the following:
 - a. Testing Laboratory:

- 1) Qualifications statement indicating experience and facilities for tests required under the Contract Documents.
- 2) Copy of report of inspection of facilities during most recent NIST inspection tour. Include memorandum of remedies of deficiencies reported during inspection.
- 3) Copy of certificate of calibration for each instrument or measuring device proposed for use, by accredited calibration agency.

1.5 TESTING LABORATORY DUTIES

- A. OWNER-hired testing laboratory will:
1. Cooperate with CONTRACTOR and ENGINEER and provide qualified personnel promptly when notified.
 2. Perform required inspections, sampling, and testing of materials and methods of construction; comply with applicable reference standards and the Contract Documents; and ascertain compliance with requirements of the Contract Documents.
 3. Promptly advise ENGINEER and CONTRACTOR in writing of irregularities and deficiencies in the Work observed during performance of services.
 4. Submit to ENGINEER and CONTRACTOR written reports of inspections and tests required by the Contract Documents.
 5. Perform additional tests and services as required by OWNER or ENGINEER to verify compliance with the Contract Documents.

1.6 CONTRACTOR'S COORDINATION WITH TESTING LABORATORY

- A. CONTRACTOR shall perform and provide the following relative to OWNER-hired testing laboratory:
1. Provide to testing laboratory representative samples of materials to be tested, in required quantities.
 2. Provide labor and facilities:
 - a. For access to the Work to be tested, and where required, to Suppliers' operations.
 - b. For obtaining and handling samples at the Site.
 - c. For facilitating inspections and tests.
 - d. For laboratory's exclusive use for storing and curing of test samples.
 - e. Forms for preparing concrete test beams and cylinders.
 3. Notify testing laboratory and ENGINEER sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests.
 4. Arrange with testing laboratory and pay for additional services, sampling, and testing required for CONTRACTOR's convenience.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++