02/25/2025

## Section 154. — CONTRACTOR SAMPLING AND TESTING

**Construction Requirements**

Include if the project has concrete.

**154.03 Sampling.** Add the following:

Perform the initial curing of all concrete test cylinders. Provide for transporting the Government verification cylinders to the FHWA-Central Federal Lands Highway Division (CFLHD) Laboratory unless other testing facilities are approved.

Label each concrete mold with the name and number of the project, the cylinder number, date molded, location of the sample, and the test age (7, 14, or 28 days). Label the mold after casting and the cylinder after stripping to ensure the sample can be identified throughout the entire curing process.

Provide the required cylinder molds.

Include if the project requires significant material testing. Include both 154.04A and 154.04B.

Check with the PM and COE regarding the need for and availability of a Government-furnished field laboratory to the project. (Small, short duration projects and projects that do not include statistically accepted materials may not warrant a Government trailer).

If a Government-furnished field laboratory is not available or warranted, do not include Subsection 154.04A.

**154.04A Field Laboratory (Government-Furnished).** (Added Subsection).

Refer to the “Notice to Bidders”in the bid proposal for information regarding the option to use a Government-furnished field laboratory.

If the bid alternate Item 15401-0000 Contractor Testing (Using Government-furnished Field Laboratory) is exercised, the Government will furnish for the Contractor’s use a mobile field laboratory. If the Government-furnished field laboratory bid alternate is not exercised, provide a laboratory according to Subsection 154.04B.

The Government-furnished field laboratory includes testing equipment as follows:

**(a)** Thermolyne ignition oven

**(b)** AASHTO T 209 rice vacuum equipment

**(c)** AASHTO T 166 bulk specific gravity of compacted mix equipment

**(d)** Convection oven

**(e)** Liquid limit machine and grooving tool

**(f)** 30,000-gram balance

**(g)** 12,000-gram balance

**(h)** 4600-gram balance (readable to 0.01)

**(i)** Platform scale

**(j)** Mechanical compactor (moisture density) and accessories

**(k)** 12-inch sieve shaker and sieve stack

**(l)** Drill press with muller

**(m)** Large sample splitter

**(n)** Small sample splitter

**(o)** Pine AFG1A gyratory compactor

Provide any additional equipment or facilities necessary to fulfill the requirements of the contract.

Transport the laboratory from 12300 West Dakota Avenue, Lakewood, CO to the point of use and return the laboratory to the same Lakewood address upon completion of the work. The trailer will be available upon issuance of NTP and must be returned no later than 14 days following final acceptance. Contact the CFLHD Equipment Depot at (720) 963-3459 or (720) 963-3384 for specific directions to the laboratory storage location.

Assume responsibility for the replacement of all missing or damaged equipment and for the repair of any damage to the laboratory. Replacement cost for missing or damaged equipment or facilities will be deducted from any remaining monies owed the Contractor. If sufficient funds are not available under the contract for such retention, the Contractor agrees to make payment directly to the Government for all damaged or missing equipment or facilities.

Furnished equipment will be inspected by the Government by checking, standardizing, calibrating, and verifying, as appropriate, according to the applicable AASHTO and ASTM standards. The Government equipment inspection will be completed after the laboratory has been moved to its permanent location on the project site before actual use in project testing and at least once a year thereafter. Notify the CO at least 30 days before intent to use the testing equipment on the project so that Government equipment inspection can be scheduled and performed. Assume responsibility for additional equipment inspections prior to the Government’s yearly inspection if the mobile laboratory is moved. Maintain records documenting these inspections in the laboratory.

Maintain equipment in proper operating condition. Do not use equipment that is found to be deficient or defective. Mark deficient or defective equipment and take it out-of-service and immediately notify the CO. If Government-furnished testing components fail through no fault or negligence of the Contractor, the Government will replace or repair the equipment in the most expeditious manner practical. Requests for time extensions or delay damages will not be granted for delays of less than 48 hours for any one occurrence, or for cumulative delays amounting to less than 5 days in any one 365-day period. Requests for time extensions or damages due to equipment-related delays caused by equipment misuse or other Contractor fault will not be granted.

Provide water to the Government-furnished field laboratory, which is clear and free of oil, acid, rust, alkali, sugar, and vegetable substances. Provide 120/240-volt, 60-cycle, single-phase current adequate to operate all of the Government field laboratory facilities at all times. Supply enough power to support a 200-amp service panel. Equip the power supply with a regulator that limits the voltage of the power to the laboratory to not less than 220 volts and not more than 240 volts.

All equipment furnished by the Government and replaced by the Contractor will remain with the laboratory and will become the property of the Government.

Use of the laboratory is limited to testing materials in connection with this contract.

**154.04B Laboratory (Contractor-Provided).** (Added Subsection).

Provide a field laboratory or commercial laboratory equipped with all test equipment necessary to satisfy the requirements of the contract.

The sampling and testing services of a commercial laboratory meeting or exceeding the requirements described herein may be used if all contract sampling and testing requirements are satisfied by the use of the commercial facility.

Ensure test equipment has been checked, calibrated, standardized or otherwise verified according to AASHTO and ASTM standards by an individual qualified to do this work. Ensure mobile laboratories receive an equipment inspection after the laboratory has been moved to its permanent location on the project site and anytime it is moved thereafter. Inspect equipment within 45 days of actual use in project testing and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and take it out-of-service until it is repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting these inspections in the laboratory. Provide certifications stating the equipment conforms to testing requirements and provide evidence of current inspection.

The CO may require the Contractor to perform testing to demonstrate acceptable equipment and an acceptable level of technician competence. The CO may also check equipment and inspection records to verify condition. Repair or replace equipment not meeting applicable requirements. Keep laboratory facilities clean and maintain equipment in proper working condition. Provide the CO unrestricted access to the laboratory for inspection and review.