CITY OF CENTERVILLE REQUEST FOR PROPOSAL CONSTRUCTION MATERIAL TESTING SERVICES – 2022/2023 February 1, 2022

Summary

The City of Centerville is soliciting proposals for the provision of construction material testing services for construction projects. **Proposals are due by Friday, February 11, 2022 at 4:00 p.m.**

Scope of Services

The City of Centerville is requesting proposals for construction material testing services for construction projects in 2022 and 2023. The testing services must be performed by a full-service certified independent testing laboratory capable of performing the required tests. Some projects, particularly those with federal funding, will require accreditation through the AASHTO Materials Reference Laboratory. Therefore, on the Price Sheet, indicate this and any other relevant accreditations. The City intends to request work according to accreditation requirements and the least cost for a project-specific set of tests.

Details on the anticipated tests to be performed are listed on the following pages. Please complete and submit the attached Price Sheet with your proposal. *Only time onsite may be charged*. The cost for other time (travel, office, etc.) must be included in the price per hour for that item. Overtime is only applicable for time outside of Monday through Friday from 8 AM to 5PM. For items with a per hour cost unit, overtime may be charged at 1.5 times the standard rate. For items *without* a per hour cost unit, overtime may be charged at 1.25 times the standard rate. Be sure to list any specific conditions that should be considered during review of the proposal (for example: two-hour minimum charged for Batch Plant Inspection). Payment for work items not included as a specific pay item shall be considered incidental to other work items.

Proposal Requirements

Firms specializing in construction material testing that are interested in being considered to provide the required services should provide a proposal via email to tschindler@centervilleohio.gov no later than Friday, February 11, 2022 at 4:00 p.m. No paper copies are necessary. Proposals received after this deadline will not be considered.

Proposals should include information for evaluation regarding:

- Narrative to demonstrate understanding of the scope of work.
- Experience and qualifications of the staff (including sub-consultants) with similar work, demonstrated by specific examples of work history and personnel.
- Responsiveness concerning scheduling and completion of tests and reports.
- Location(s) of office and laboratory to be used.
- Contact person with phone numbers and e-mail address.
- A list of references (with contacts) for related work.
- Listing of accreditations for each area of work (include copy of all certifications noted).
- Prices per item as specified on attached Price Sheet.

If you have any questions, please contact me prior to 4:00 p.m. on Wednesday February 9, 2022.

Taylor Schindler, Staff Engineer 937-428-4727 tschindler@centervilleohio.gov

Proposal Details

A. CONCRETE TEST

Testing is required to be performed by an ACI Certified Concrete Technician of at least Level 1. The material testing shall be as referenced in the most recent ODOT Construction and Material Specifications Item 499 and include all labor, equipment, and materials.

- 1. <u>Set of Cylinders –</u> This item shall include: slump test, air test, concrete temperature test, make one set of compression cylinders, transport cylinders from job site, perform compression testing of cylinders in lab, and submit report(s) of test results. A set shall consist of three cylinders, with one tested at 7 days, and two tested at 28 days (unless otherwise directed). This includes all travel time to and from all job sites. Additional time is to be paid under Item 3. (Per set of 3) (ASTM C-31, C-39, C-94, C-143, C-173, C-231, C-1064)
- 2. <u>Set of Beams –</u> This item shall include: slump test, air test, concrete temperature test, make one set of flexural beams, transport beams from job site, perform flexural testing of beams in lab, and submit report(s) of test results. A set shall consist of two beams, with one tested at 24 hours, and the other at 7 days (unless otherwise directed). Additional time is to be paid under Item 3. (Per set of 2) (ASTM C-31, C-78, C-94, C-143, C-173, C-231, C-293, C-1064)
- 3. Additional Time This item includes overage time (field time that exceeds the time required to obtain a set of cylinders or set of beams) for Items 1 and 2, and is only to be used with explicit prior permission from the City Engineer. Notification to City Engineer on date and time of overage is required to be considered. This is intended to reimburse the materials testing firm if the contractor is unreasonably inaccurate in his target time to pour concrete. (Per hour) (ASTM C-31, C-94, C-143, C-173, C-231, C-1064)
- 4. <u>Batch Plant Inspection -</u> The plant check should consist of testing the coarse and fine aggregate for percent of moisture and checking the mix composition and proportions. Aggregate sieve analysis is included and paid under Section C, and will be performed only when requested. (Per Hour)
- 5. <u>Concrete Coring and Testing –</u> Work to include the coring of hardened concrete pavements at locations determined by the City Engineer. Core diameters to be 2"-4" as specified. Patch-repair included. Testing to include thickness and compressive strength per ASTM C-42. (Per Each)

B. ASPHALT CONCRETE TEST

Testing on the ingredients and composition of the different mixes specified are required to be performed by an ODOT or NICET Certified Asphalt Technician of at least Level 1. Aggregate test will be performed and paid under Section C. The material testing shall be referenced to the most recent ODOT Construction and Material Specifications Items 301, 401, 402, 403, 424, 441, 442, 446 and 448 Asphalt Concrete and include all labor, equipment, and materials.

- 1. <u>Batch Plant Inspection -</u> Including bitumen testing, sieve analysis, mix design and plant inspection. (Per Hour)
- Obtaining Asphalt Sample(s) Onsite and Compaction Testing Acquire material for testing under Item 3. To include field compaction testing by nuclear methods (ASTM D6938), includes cost for nuclear testing equipment. (Per Hour)
- 3. Analysis of Asphalt Samples Obtained Onsite Extraction and gradation test to include ash correction by centrifuge method (ASTM D2172 and D5444) from material acquired under Item 2. Perform a set of two tests per each placement or as directed by City Engineer. (Per Set of 2)
- 4. <u>Maximum Theoretical Specific Gravity Per ASTM D2041 from material acquired under Item 2.</u> Perform a set of two tests per each placement or as directed by City Engineer. (Per Set of 2)
- 5. <u>Asphalt Coring and Testing -</u> Core 4" diameter asphalt specimen to determine thickness and compaction. Includes patch-repair of cored sections. (Per Each)

C. AGGREGATE TEST

This section includes testing primarily on aggregates used in concrete and asphalt mixes, as well as in pavement bases. The material testing shall be referenced to the most recent ODOT Construction and Material Specifications and include all labor, equipment, and materials.

- 1. Aggregate Gradation (ASTM C136). (Per Each)
- 2. Aggregate Quality Analysis (ASTM C33)
 - a. Combined Aggregate. (Per Each)
 - b. Fine Aggregate. (Per Each)
 - c. Coarse Aggregate. (Per Each)

D. COMPACTION TESTS

Tests will be required to determine the compaction of base, sub-base, sub-grades and embankments. The proposal should be based on the following and include all labor, equipment, and materials:

- 1. <u>Compaction Tests -</u> Compaction test performed on base, sub-base, sub-grades and embankments, regardless of material tested, but not including moisture density curves. (Per Hour)
- 2. <u>Compaction Tests (ODOT SS 1015)</u> Same as above, plus additional cost for equipment to be used as required by ODOT Supplemental Specification 1015. (Per Hour)
- 3. <u>Moisture Density Curves -</u> Required for conformity to the requirements as specified in the most recent Construction and Material Specifications. Rate should include costs for material pick-up from project site, source, etc. (Per Each)
 - a. Standard Proctor. (Per Each)
 - b. Modified Proctor. (Per Each)

Aggregate sampling and testing will be performed under Section C, when required.

E. STAFF RATES

Staff rates are not to be applied to the rates in Section A through D. This section is for separate work that may be necessary for yet to be determined oversight and related reporting. (Per Hour)

- 1. Field Technician
- 2. Senior Technician
- Staff Engineer
- 4. Senior Engineer Registered Professional Engineer in State of Ohio.
- 5. Principal Engineer Registered Professional Engineer in State of Ohio.

F. RESPONSIVENESS AND DOCUMENTATION

- 1. The City will typically request testing services 18 hours in advance of the planned work. Due to circumstances outside the City's control, the time of service may change or be cancelled.
- 2. The testing firm is to contact the City's project inspector or engineer immediately if specifications are not satisfied. A full report, including an explanation of the test results, is expected as soon as possible.
- 3. Test results shall be submitted to the City Personnel who requested the Test(s), and shall include the following information:
 - a. City Project Name and Location of Test
 - b. Name of City Personnel Requesting Test
 - c. Date and Time of Test
 - d. Weather Conditions
 - e. Technician Names
 - f. Type of Test Performed
 - g. Test Results
 - h. Other Pertinent Information
- 4. The testing firm shall submit a monthly invoice of work performed to the City Personnel who requested the test(s).

City of Centerville <u>Construction Material Testing Services - 2022/2023</u> Unit Price Sheet

Portland Cement Concrete Tests	Unit	Unit Price
Set of Concrete Cylinders	Set of 3	
Set of Concrete Beams	Set of 2	
Additional Time (if authorized)	Hour	
Batch Plant Inspection	Hour	
Concrete Coring and Testing	Each	
Accreditation		

Asphalt Concrete Tests

Batch Plant Inspection	Hour	
Obtaining Asphalt Sample(s) Onsite and Compaction Testing	Hour	
Analysis of Asphalt Samples Obtained Onsite	Set of 2	
Maximum Theoretical Specific Gravity	Set of 2	
Asphalt Coring and Testing	Each	
Accreditation		

Aggregate Tests

Aggregate Gradation	Each	
Aggregate Quality Analysis - Combined	Each	
Aggregate Quality Analysis - Fine Aggregate	Each	
Aggregate Quality Analysis - Coarse Aggregate	Each	
Accreditation		

Compaction Tests

Compaction Tests	Hour	
Compaction Tests (ODOT SS 1015)	Hour	
Standard Proctor	Each	
Modified Proctor	Each	
Accreditation		

Staff Rates

Field Technician	Hour	
Senior Technician	Hour	
Staff Engineer	Hour	
Senior Engineer	Hour	
Principal Engineer	Hour	