

## 7.0 - Geotechnical Engineering Services Category

### 7.1 - Geotechnical Engineering Division

#### General

This work type consists of providing geotechnical engineering, laboratory, and drilling and sampling services. All Geotechnical work shall be performed in accordance with the INDOT Geotechnical Manual, FHWA, AASHTO guidelines, Indiana Test Method (ITM), and generally accepted principles of sound engineering practice and all other pertinent state and federal regulations. For consideration as an approved laboratory the facility must demonstrate proficiency in tests specified in section D2 of this document. Requirements to be met for INDOT Geotechnical Engineering Division approval can be found on the INDOT Geotechnical Engineering Division website at <http://www.in.gov/indot/2804.htm>.

#### Requirements

- A. Prerequisite Work Type Approval:** No prior work type approval required.
- B. Qualifying Person(s):** The firm must have at least one (1) full time employee on staff that meets all of the requirements of each discipline (may be the same or different individuals for each discipline).
- C. Licensure:**
1. **Engineering** - The qualifying person must be a professional engineer licensed in the State of Indiana.
  2. **Laboratory** - The qualifying person must be a professional engineer licensed in the State of Indiana.
  3. **Drilling** - The qualifying person must hold an Indiana Well Driller License.
- D. Certification:**
1. **Engineering** - The qualifying person (or firm) shall be on the INDOT Geotechnical Engineering Division Approved List.
  2. **Laboratory** - The laboratory facility must have AASHTO re:source accreditation. The laboratory must be proficient in the following procedures:
    - AASHTO re:source Laboratory Assessment Program (LAP)-provides assessments of laboratories that perform testing of materials used for construction and the preservation of roads, bridges, and vertical infrastructure. The following test shall be assessed:
      - i. Soil: R-58, T-88, T-89, T-90, T-99, T-100, T-180, T-207, T-208, T-215, T-216, T-265, T-267, T-289, T-290, T-296, (ITM 507 and 510-Not required by AASHTO)
      - ii. Aggregate: T-11, T-27
    - AASHTO re:source Proficiency Sample Program (PSP)
      - i. Soil: R-58, T-88, T-89, T-90, T-99, T-100, T-267, T-289

ii. Aggregate: T-11, T-27

3. **Drilling** - The qualifying person (or firm) shall be approved by the INDOT Geotechnical Engineering Division.

**E. Education:**

1. **Engineering** - The qualifying person must have a bachelor's degree in Civil Engineering.
2. **Laboratory** - The qualifying person must have a bachelor's degree in Civil Engineering.
3. **Drilling** - The qualifying person must have a high school Diploma or equivalent.

**F. Experience:**

1. **Engineering** –
  - The qualifying person must have a minimum of five (5) years of civil engineering experience and hold a bachelor's degree in civil engineering.
  - The qualifying person must demonstrate experience in the following:
    - i. Deep foundations
    - ii. Shallow foundations
    - iii. Earthen structures and retaining walls
    - iv. Highway and pavement related geotechnical experience
    - v. Sampling and laboratory testing
    - vi. Subsurface exploration
2. **Laboratory** – The qualifying person shall have a minimum of five (5) years of experience in soil and rock testing in accordance with AASHTO/ASTM.
3. **Drilling** –
  - The qualifying person must demonstrate experience in the following:
    - i. Geotechnical drilling operations
    - ii. Sampling
    - iii. Instrument installation
    - iv. Borehole logging
  - The qualifying person must demonstrate compliance with INDOT safety requirements.

**G. Submittal Requirements**

1. Resume listing the qualifying person's education and work experience.
2. A list of projects must be entered in the "Projects" section of the qualifying person's information in the Professional Services Contracting System (PSCS). All projects should include a brief description of the project, client, year of completion, and a detailed description of the individual's responsibilities on the project as they relate to the work type experience requirements.
3. INDOT may require that the consultant provide additional supporting documents upon request.