

## SECTION 01725 - FIELD ENGINEERING

### PART 1 - GENERAL

#### 1.1 Summary:

- A. Provide field engineering services as required for proper completion of the Work including:
  - 1. Locate and set property lines and corners using a licensed Maryland land surveyor. Permanent corner markers shall be installed where they do not already exist.
  - 2. Perform stake outs and elevation checks required for construction using a licensed Maryland land surveyor. Surveyor shall verify adequacy of bench marks before starting construction.
  - 3. Before the start of building construction, Contractor shall have a licensed Maryland land surveyor locate and stake building corners, driveway entrances, driveways, parking areas and playfields. If there are discrepancies between the actual layout and project site plan, they shall be brought to the attention of the Architect and resolved before Work proceeds. A building and site stake out drawing stamped and signed by the land surveyor may be submitted in lieu of this preliminary stake out. Contractor shall meet with Architect on site to verify stake outs prior to building construction.
  - 4. After the corners of the exterior walls have been started, Contractor shall obtain a wall check survey certificate made by a licensed Maryland land surveyor. This survey shall show the accurate location of the building with reference to property lines.
  - 5. After the first sections of slab-on-grade have been placed in the school building, the Contractor shall have a licensed Maryland land surveyor verify and record the finish floor elevation on the wall check survey.
  - 6. At the end of the project, the Contractor shall have a licensed Maryland land surveyor prepare an as-built survey showing accurate locations of building corners, configuration of paved areas and sidewalks, location of electric transformer, fencing, lighting, trees, site walls and backstops in relation to property lines.

#### 1.2 Related Sections:

- A. Documents affecting work of this Section include, General Conditions, and Sections in Division 1.
- B. Additional requirements for field engineering also may be described in other Sections of these Specifications.

#### 1.3 Quality Assurance:

- A. Use adequate quantities of skilled workers who are thoroughly trained and experienced in necessary crafts and who are completely familiar with specified requirements and methods needed for proper performance of Work.

#### 1.4 Submittals:

- A. Comply with pertinent provisions of Section 01330 "SUBMITTALS PROCEDURES".

- B. Upon request of Architect, submit:
1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
  2. Documentation verifying accuracy of field engineering work.
  3. Certification, signed by Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance with requirements of Contract Documents.

**PART 2 - PRODUCTS (not used)**

**PART 3 - EXECUTION**

3.1 Reference Points

- A. In addition to procedures directed by Contractor for proper performance of Contractor's responsibilities:
1. Locate and protect control points before starting Work on site.
  2. Preserve permanent reference points during process of Work.
  3. Do not change or relocate reference points or items of Work without specific approval from Architect.
  4. Promptly advise Architect when a reference point is lost or destroyed, or requires relocation.
    - a. Upon direction of Architect, require field engineer to replace reference stakes or markers.
    - b. Locate such replacements according to original survey control.

**END OF SECTION**