# Section 01720

# FIELD SURVEYING

## **1.0 GENERAL**

# **1.01 SECTION INCLUDES**

- A Requirements for surveyors and surveys.
- B Procedures pertaining to survey control points and reference points.
- C References to Technical Specifications:
  - 1. Section 01350 Submittals
  - 2. Section 01760 Project Record Documents

#### **1.02 MEASUREMENT AND PAYMENT**

A Unless indicated as a Bid Item, no separate payment will be made for Work performed under this Section. Include cost in Bid Items for which this Work is a component.

#### **1.03 QUALITY CONTROL**

A Conform to State of Texas laws for surveys requiring licensed surveyors. Employ a land surveyor acceptable to Engineer.

#### **1.04 SUBMITTALS**

- A Make Submittals required by this Section under the provisions of Section 01350 Submittals.
- B Submit to Engineer the name, address, and telephone number of Surveyor before starting survey work.
- C Submit documentation verifying accuracy of survey work on request.

#### **1.05 PROJECT RECORD DOCUMENTS**

- A Maintain a complete and accurate log of control and survey work as it progresses.
- B Submit Record Documents under provisions of Section 01760 Project Record Documents.

#### **1.06 EXAMINATION**

- A Verify locations of survey control points prior to starting Work.
- B Notify Engineer immediately of any discrepancies discovered.

#### **1.07 SURVEY REFERENCE POINTS**

- A Control datum for survey is that established by Owner-provided survey and indicated on Plans.
- B Locate and protect survey control points, including property corners, prior to starting site work. Use caution to preserve permanent reference points during construction.
- C The Contractor shall not reset; nor cause to be reset, lost, disturbed, or damaged; control points. Promptly notify Engineer of disturbance or damage to any control point(s).
- D Notify Engineer 48 hours in advance of need for relocation of reference points due to changes in grades or other reasons.
- E Report promptly to Engineer the loss or destruction of any reference point.
- F Any re-staking of control points lost, disturbed, or damaged by Contractor's operations will be provided by Owner at Contractor's expense.
- G Employ a Registered Public Land Surveyor to reset any missing, disturbed, or damaged monumentation.

#### **1.08 SURVEY REQUIREMENTS**

- A Utilize recognized engineering survey practices.
- B Establish a minimum of two permanent bench marks on Project Site, referenced to established control points. Record locations, with horizontal and vertical data, on Project Record Documents.
- C Establish and record in survey notes elevations, lines and levels to provide quantities required for Measurement and Payment and to provide appropriate controls for the Work. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading; fill and topsoil placement; utility locations, slopes, and invert elevations.
  - 2. Grid or axis for structures.
  - 3. Mounumented Baseline.
- D Verify periodically layouts by same means.

## 2.0 PRODUCTS - Not Used

## 3.0 E X E C U T I O N - Not Used

## END OF SECTION