

## **DIVISION 1 GENERAL REQUIREMENTS**

### **SECTION 01 71 23 FIELD ENGINEERING**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

- A. Inspect the site and location of the Work and become acquainted with conditions relating to the construction and completion of the Project.
- B. Provide and pay for field engineering services required for the Project, including survey of existing conditions as required to construct the Project.
- C. Base and grading information is shown on the Drawings for the Contractor's convenience.

##### **1.2 QUALIFICATIONS OF SURVEYOR OR ENGINEER**

- A. Field engineering services shall be performed by a licensed land surveyor or registered professional engineer of the discipline required for the specific service to be performed, licensed or registered in the State of California.

##### **1.3 QUALITY ASSURANCE**

- A. When discrepancies between drawings and actual site conditions are discovered, notify the Architect for instruction on how to proceed.

##### **1.4 SURVEY REFERENCE POINTS**

- A. Existing horizontal and vertical control points for the Project are those designated on the Drawings, if shown.
- B. Grades, Lines, and Levels:
  - 1. Datum: Locate all grades, lines, and levels required for construction and completion of the Project from established reference points and datum furnished on the Drawings.
  - 2. Staking and Grades: Locate and stake out new construction and facilities. Contractor shall be responsible for the accuracy and correctness of lines and grades and for establishing the location of buried utility lines.
- C. Permanent Property Markers: Maintain permanent markers at the property lines of lots from registered approved subdivision maps.
- D. Existing Utilities: Verify on site the location and depth (elevation) of existing utilities and services before performing excavation work.
- E. Accuracy of Data: Site data indicated on the Drawings are as exact as could be obtained, but their absolute accuracy cannot be guaranteed. Exact locations,

distances, elevations and similar data shall be governed finally by field conditions and the Owner's instructions.

- F. Locate and protect control points prior to starting site work, and preserve permanent reference points during construction.
  - 1. Make no changes or relocations without prior written notice to the Architect.
  - 2. Contractor shall have a licensed land surveyor replace Project control points that may be lost or destroyed and establish replacements based on the Owner's original survey.

#### 1.5 PROJECT SURVEY REQUIREMENTS

- A. Establish, locate, and lay out lines and levels by instrumentation and similar appropriate means.
- B. Verify layout from time to time as work progresses.
- C. Verify figures shown on the Drawings and on surveys furnished by Owner before starting work.
  - 1. Report errors and inaccuracies, in writing, to the Architect for clarification.

**END OF SECTION**