# SECTION 01781

# SURVEY AND LAYOUT DATA

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

### 1.2 SECTION INCLUDES

A. Administrative requirements for survey and layout data submittals.

### 1.3 RELATED SECTIONS

A. Section 01450 - Quality Control: Test and inspection reports.

B. Section 01720 - Preparation Requirements: Layout of the Work and other engineering services required for accomplishing the Work.

C. Section 01770 - Contract Closeout Procedures: Submittals for occupancy, Acceptance and Final Payment.

### 1.4 LAYOUT OF THE WORK

A. Responsibility for Layout of the Work: Contractor shall be solely responsible for complete, timely and accurate layout of the Work including, but not necessarily limited to, horizontal and vertical control and dimensional coordination as necessary to construct the Work in accordance with the Contract Documents. Contractor shall:
   1. Employ a Land Surveyor or a Civil Engineer, registered in the State of California, to perform survey work.
   2. Employ a Professional Engineer, of the discipline required for the specific service on the Project, and licensed in the State of California where required in the specifications in Divisions 02 through 33.

B. Survey Reference Points: Existing basic horizontal and vertical control points are shown on the Contract Documents, or location of control points will be furnished by the University Representative. Contractor shall use the University Record of Survey, provided by the University Representative, as the Basis of Bearings for survey horizontal control, and shall tie at least one Project site control point to a point on the University Record of Survey. Contractor shall:
   1. Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.
   2. Make no changes or relocations without prior written notice to Architect.
   3. Report to University Representative and Architect when any reference point is lost or destroyed.
   4. Require a surveyor to replace project control points which may be lost or destroyed. Establish replacements based on original survey control.

### 1.5 LAYOUT RECORD SUBMITTALS

A. Land Surveyor: Contractor shall submit name, address and telephone number of land surveyor before starting survey work.

B. Survey Logs: On request, Contractor shall submit copies of field documents verifying accuracy of survey Work.

C. Submittal: Contractor shall submit a copy of registered site drawing and certificate signed by the land surveyor that the elevations and locations of the Work are in conformance with Contract Documents.

## 1.6 SURVEY RECORD DOCUMENTS

A. Survey Record Documents: Contractor shall maintain a complete and accurate log of control and survey work as Work progresses. Upon completion of foundation walls and major site improvements, Contractor shall prepare a certified survey illustrating dimensions, locations, angles and elevations of new construction and site work. Contractor shall submit survey record documents as specified in Section 01770 - Contract Closeout Procedures.

B. Locations provided on the certified survey shall be coordinated with the control points tied to the University Record of Survey as per Section 1.4B.

C. For each new Project utility or improvement which is not to be owned and maintained by the University, Contractor shall provide a legal description and plot, stamped and signed by a properly licensed surveyor or Civil Engineer, and which will use the University Record of Survey as the Basis of Bearings and will provide a Point of Commencement shown on said Record of Survey.

## 1.7 CONTRACTOR'S REVIEW

A. Scope of Contractor's Review: Survey and layout data shall be reviewed by Contractor prior to submission for University's review or filing. Contractor shall sign each submittal copy certifying that:
   1. Field measurements have been determined and verified.
   2. Field construction criteria have been verified.
   3. Conformance with Drawings and Specifications requirements is confirmed.

B. Contractor's Review Action: Contractor shall indicate clearly on survey and layout data whether the dimensions and coordinates are in compliance with Contract requirements. Contractor shall note clearly and sign each submittal certifying that reported data "Conforms" or "Does Not Conform".

C. Changes and Deviations: Contractor shall identify all deviations from requirements of Drawings and Specifications. Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written Change Order or Field Instruction, in accordance with the Contract General Conditions.

## 1.8 REVIEWS BY UNIVERSITY'S REPRESENTATIVE AND ARCHITECT

A. Reviews by University's Representative and Architect, General: Reviews of survey and layout data by University's Representative and Architect, or other responsible design professional, shall be only for general conformance with the design concept and requirements based on the information presented. Neither Architect nor other responsible design professional shall verify submitted survey and layout data.

B. Contract Requirements: Reviews by University's Representative, Architect or other responsible design professional shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications. Changes shall only be authorized by separate written Change Order or Field Instruction, in accordance with the Contract General Conditions.

## PART 2 - PRODUCTS

Not applicable to this Section.

## PART 3 - EXECUTION

Not applicable to this Section.

**END OF SECTION**