

**SECTION 01050
CONSTRUCTION SURVEYING**

PART 1 - GENERAL

1.01 SUMMARY.

A. This Section includes provision required by the Contractor for construction surveying as specified herein for the construction of the Work.

B. Contractor shall be responsible for any monumentation and/or benchmarks which will be disturbed or destroyed by performing the Work. Such points shall be referenced and replaced with appropriate monumentation by a Licensed Surveyor or Registered Civil Engineer authorized to practice Land surveying in the State of California. A Corner Record or Record of Survey, as appropriate, shall be filed by the Licensed Land Surveyor or Registered Civil Engineer as required by the Land Surveyor's Act.

C. Contractor shall provide all surveying necessary for completion of Work as defined by the Contract Documents.

1.02 DEFINITIONS.

A. Surveyor: The Surveyor will be an approved licensed Land Surveyor or Registered Civil Engineer authorized to practice Land Surveying in the State of California.

1.03 CONTROL.

A. VCMWD has established the survey control points within the VCMWD's property and around the reservoir perimeter, as shown on the Drawings. The control points have been established by VCMWD's surveyor for the Contractor's use for establishing lines and grades required for the Project.

B. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument cover to the new grade at the Contractor's expense, unless otherwise specified in the Contract Documents.

1.04 QUALITY CONTROL.

A. All surveying work will be performed under the direction and supervision of an approved licensed Land Surveyor or Registered Civil Engineer authorized to practice Land Surveying in the State of California employed or retained by the Contractor.

1.05 SUBMITTALS.

A. Submittals shall be made in accordance with Specifications Section 01300, Submittals, and the following special provisions provided herein.

B. Prior to beginning any phase of the survey Work, the Contractor shall submit to the District Engineer for approval in accordance with Section 01300, the Contractor's projected requirements for construction surveying of the Project, including timetable for required survey data.

C. All survey data will be recorded in accordance with standard methods approved by the District Engineer. All original field notes, computations, and other records for the purposes of layout will be recorded in field books, or other methods acceptable to the District Engineer. All "Cut Sheets" will be forwarded to the District Engineer prior to staking and/or excavation. Any changes to the cut sheets shall be recorded as changes and a complete set of "Record Cut Sheets" shall be submitted to the District Engineer.

D. The Surveyor will submit to the District Engineer, full descriptions and surveying, location, and elevation information for all monuments established as a part of the Project.

PART 2 – PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 LINE AND GRADE.

A. All Work shall conform to the lines, elevations, and grades shown on the Drawings.

B. Three (3) consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the District Engineer. In the absence of such report, the Contractor shall be responsible for any error in the grade of the finished Work.

C. Grades for underground conduits will be set at the surface of the ground. The Contractor shall transfer them to the bottom of the trench.

END OF SECTION 01050