

## **PART 1 - GENERAL**

### **1.1 REFERENCES**

- .1 Departmental Representative's identification of existing survey control points and property limits.

### **1.2 QUALIFICATIONS OF SURVEYOR**

- .1 Qualified registered land surveyor, licensed to practice in Place of Work, acceptable to Departmental Representative.

### **1.3 SURVEY REFERENCE POINTS**

- .1 Existing base horizontal and vertical control points are designated on drawings.
- .2 Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.
- .3 Make no changes or relocations without prior written notice to Departmental Representative.
- .4 Report to Departmental Representative when reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
- .5 Require surveyor to replace control points in accordance with original survey control.

### **1.4 SURVEY REQUIREMENTS**

- .1 Establish two permanent bench marks on site, referenced to established bench marks by survey control points. Record locations, with horizontal and vertical data in Project Record Documents.
  - .2 Establish lines and levels, locate and lay out, by instrumentation.
  - .3 Stake for grading, fill placement and landscaping features.
  - .4 Stake slopes.
  - .5 Establish pipe invert elevations.
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- .6 Establish foundation and column locations and floor elevations.
- .7 Establish lines and levels for structural, mechanical and electrical work.

### **1.5 EXISTING SERVICES**

- .1 Before commencing work, establish location and extent of service lines in area of Work and notify Departmental Representative of findings.

### **1.6 LOCATION OF EQUIPMENT AND FIXTURES**

- .1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Departmental Representative of impending installation and obtain approval for actual location.
- .4 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

### **1.7 RECORDS**

- .1 Maintain a complete, accurate log of control and survey work as it progresses.
- .2 On completion of site works, prepare a certified survey showing dimensions, locations, angles and elevations of Work.
- .3 Record locations of maintained, re-routed and abandoned service lines.

### **1.8 SUBMITTALS**

- .1 Submit name and address of Surveyor to Departmental Representative.
  - .2 On request of Departmental Representative, submit documentation to verify accuracy of field engineering work.
  - .3 Submit certificate signed by surveyor certifying and noting those elevations and locations of completed Work that conform and do not conform with Contract Documents.
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**1.9 MEASUREMENT FOR PAYMENT**

- .1 No separate measurement for payment shall be made for items under this section. Include costs for Examination and Preparation in the lump sum portion of work on the Bid and Acceptance Form.

**PART 2 - PRODUCTS**

Not applicable

**PART 3 - EXECUTION**

Not applicable