

PART 1 GENERAL

1.1 QUALIFICATIONS OF SURVEYOR

- .1 The Contractor shall provide and pay for the services of a land surveyor, licensed to practice in Place of Work, acceptable to the Departmental Representative.

1.2 SURVEY REFERENCE POINTS

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

1.3 SURVEY REQUIREMENTS

- .1 Establish 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 The Contractor shall provide detailed layout for trenching, sanitary, concrete, road work, signalization, illumination, landscaping and all appurtenances installation in accordance with the requirements of the applicable specifications.
- .3 The Contractor shall provide all necessary survey instruments, stakes, and other material required to establish lines and levels and layout of the Work, by instrumentation.
- .4 The Contractor shall give 96 hours advance notice to the Departmental Representative before the respective construction starts. The Departmental Representative's check on the Contractor's survey work and grade sheets shall not relieve the Contractor responsibility.
- .5 The Contractor shall locate, confirm and protect the control points, and legal pins, or he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.
- .6 The Contractor shall not proceed with the work until he has received from the Departmental Representative such base horizontal and vertical control points and instructions required for the execution of the work.
- .7 The Contractor shall, before commencing work at any point, satisfy himself and to the meaning and correctness of all stakes and instructions. No claims shall be considered for any allowance based on alleged inaccuracies, failure to read reference points correctly, or failure to interpret instruction correctly.

- .8 If the Contractor, in the course of the work, finds any discrepancy between the drawings and the physical conditions of the locality or any errors or omissions in the drawings or in the layout as given by points and instructions, he shall inform the Departmental Representative immediately in writing, and the Departmental Representative shall promptly verify the same and issue appropriate instructions. Any work done after such discovery, before further work is authorized, will be done at the Contractor's risk.
- .9 The Contractor shall be responsible for the correctness of the elevations and dimensions from the references provided by the Departmental Representative.
- .10 The layout of the work shall be done in accordance with the current work schedule as prepared by the Contractor and reviewed by the Departmental Representative.

1.4 EXISTING SERVICES

- .1 Before commencing work, establish location and extent of service lines in area of Work and notify the Departmental Representative of findings.
- .2 Remove abandoned service lines within 2 m of structures. Cap or otherwise seal lines at cut-off points as directed by the Departmental Representative.

1.5 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 the 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 the Departmental Representative.

1.6 RECORDS

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

1.7 SUBMITTALS

- .1 Submit name and address of Surveyor to the Departmental Representative. On request of the Departmental Representative, submit documentation to verify accuracy of field engineering work.

- .2 Submit certificate signed by surveyor certifying and noting those elevations and locations of completed Work that conform to the Contract Documents.

1.8 SUBSURFACE CONDITIONS

- .1 Promptly notify the Departmental Representative in writing if subsurface conditions at Place of Work differ materially from those indicated in Contract Documents, or a reasonable assumption of probable conditions based thereon.
- .2 After prompt investigation, should the Departmental Representative determine that conditions do differ materially; instructions will be issued for changes in Work as provided in Changes and Change Orders.

END OF SECTION