

1. REQUIREMENTS INCLUDED

- .1 Field engineering survey services to measure and stake the site.
- .2 Survey services to establish (and confirm) invert measurements for the Work.
- .3 Subsurface conditions.

2. QUALIFICATIONS OF SURVEYOR

- .1 Qualified Registered Land Surveyor.

3. SURVEY REFERENCE POINTS

- .1 Existing base horizontal and vertical control points are designated on drawings.
- .2 Locate, confirm and protect control points. Preserve permanent reference points during construction.
- .3 Make no changes or relocations without prior written notice to the Contract Administrator.
- .4 Report to the Contract Administrator when a 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 the original survey control.

4. SURVEY REQUIREMENTS

- .1 Establish two (2) permanent bench marks on site, referenced to establish 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 and topsoil placement, and landscaping features.
- .4 Stake slopes and berms.
- .5 Establish pipe invert or centerline elevations.
- .6 Establish lines and levels for mechanical and electrical work.

5. RECORDS

- .1 Maintain a complete accurate log of control and survey work as it progresses.

6. SUBMITTALS

- .1 On request of the Contract Administrator, submit documentation to verify accuracy of field engineering work.
- .2 Submit certificate signed by Surveyor certifying that elevations and locations of completed work are in conformance or non-conformance with Contract Documents.

END OF SECTION