

All projects shall be designated by a prequalified Consultant with SUE capabilities. The Department has contracts statewide with Subsurface Utility Engineering (SUE) consultants to designate and locate utilities on projects selected by the Department. These contracts also have GPR (ground penetrating radar) and CCTV available for use.

Designation:

The horizontal location of existing subsurface utilities will be by the consultant and the information will be returned to the department in the format requested on the task request. This includes showing all visible utility facilities such as water meters, cutoff valves, poles, etc. and all sanitary (except force mains) and storm sewers including top and invert elevations. The next structure (manhole, etc.) outside of the survey limits will be shown with elevations and inverts. Annotation, property data and any other information will be secured and plotted simultaneously with the designating of the subsurface utilities. The Consultant/VDOT unit preparing the plan base shall submit MicroStation DGN files electronically via the FTP Server of the entire project (including title sheet and/or location map) for the designation of the horizontal location of subsurface utilities. If this is an extension of an existing project, the files should clearly show the survey line and control that was established in the field along with sufficient references to locate and retrace.

Location (test-holes):

Test-holes should be secured on all underground facilities, i.e., water and gas lines larger than 3" (75 mm), telecommunications (copper/fiber optics) and electric lines in conduit systems and sanitary sewer force mains when there are potential conflicts. Direct buried telephone or electric cables typically should not require test-holes. Service lines to properties should not be secured unless they are 6" (150 mm) or greater in size. ***Test-holes should not be requested for facilities where construction will require that the facility be relocated.*** Test-holes should not be requested for gravity sanitary sewer facilities, unless the inverts of the manholes are not obtainable because of physical obstructions. In addition to the potential conflict sites where the utilities are crossed by the proposed storm drainage, consideration should be given to requesting data in locations:

1. Where potential conflicts may exist with the project design (i.e., retaining walls, bridge footings, signal structures, ditches, entrance cuts, unsuitable material, etc.).
2. Where cut to the subgrade line is 18" (0.5 m) or less. (Test-holes should not be requested in cuts where the excavation would be expected to uncover the utility.)

Sec. 13.03 Workflow Process

Designation:

Survey:

1. PM-100 is used to establish the limits of mapping and authorize the topographical survey and the SUE designation. This also establishes begin and end dates for activity 31S. Additional requests are submitted on LD-261 if necessary.