

Standard penetration (SPT) and rock coring

Description

Investigations will identify and locate, both horizontally and vertically, significant soil and rock types, ground water conditions, and establish the characteristics of the subsurface materials visually, by sampling, and by laboratory and in-situ testing. The methodology involved includes on-site investigations by performing standard penetration tests and rock coring. Specialized test equipment may also be required, such as the field vane shear, pressure meter, or dilatometer. This work type also includes the installation of instrumentation such as piezometers and slope indicators.

Standards and specifications

All tasks will be performed in accordance with current ASTM, AASHTO, and, for highway construction projects, MnDOT standards and specifications. All investigations will be conducted in accordance with current Minnesota Department of Health Regulations. The current Specifications for Subsurface Investigation & Geotechnical Analysis and Design Recommendations can be found at <https://www.dot.state.mn.us/materials/foundationdocs/tcontract/consultdrillreport.pdf>

Provided by Hennepin County

Information to be supplied by Hennepin County for a project may include the following:

- Plans showing existing topography, proposed alignments, and locations of the existing and proposed structures.
- Information (plans) showing property ownership information for boring locations off of state right-of-way.
- Bridge benchmark information for determining boring elevations.
- American Society for Testing and Materials (ASTM), American Association of State Highway & Transportation Officials (AASHTO), and MnDOT standard specifications.

Typical services

Project deliverables may include the following:

- Final Standard Penetration Test (SPT) and/or Rock Coring Investigation Report
 - Final boring logs in hard copy and electronic format (.gpj)
 - A copy of the driller's field boring logs and samples if required
 - Weekly progress reports
 - SPT hammer calibration reports
 - Minnesota Department of Health sealing records