

## Soils analysis and recommendations

### Description

The purpose of this work type is to analyze field boring measurements and laboratory soils tests to develop recommendations that include but are not limited to muck excavation, subgrade excavation, embankment construction, subsurface drainage, infiltration tests, dewatering, ponding, berms, shrinkage factors, use of onsite materials and grading, base and surfacing design. The required outline for the Materials Design Recommendations Report can be found in Chapter 6 of the MnDOT Geotechnical and Pavement Design Manual.

### Standards and specifications

May include the following:

- All tasks will be performed in accordance with current ASTM, AASHTO, and, for highway construction projects, MnDOT standards, specifications, and manuals. The current MnDOT Specifications for Soils Surveys, Engineering Analysis, Laboratory, and Field Soils Tests can be found at: <https://www.dot.state.mn.us/materials/index.html>, <https://www.dot.state.mn.us/metro/materials/soils.html> and <https://www.dot.state.mn.us/materials/geotmanual.html>

### Provided by Hennepin County

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

- Plans showing existing topography, proposed alignments, locations of the existing and proposed structures and locations of borings.
- Completed soils investigation including boring logs in electronic format (MnDOT's Soils Data Dictionary format).
- Approved traffic forecast.
- American Society for Testing and Materials (ASTM), American Association of State Highway & Transportation Officials (AASHTO), MnDOT Geotechnical and Pavement Manual, MnDOT Standard Specifications and Technical Memoranda.

## Typical services

Project deliverables may include the following:

- Final materials design recommendation report.
  - Laboratory testing reports.
  - Plotted boring plan and soils profile in electronic format (hard copy may be required).
  - A Final Materials Design Recommendation Report (if required) summarizing the results of the investigation, testing, analyses, and recommendations.