

# Alaska Department of Transportation and Public Facilities



# Alaska Geotechnical Procedures Manual

*Effective May 2007*

# Introduction

This 2007 *Geotechnical Procedures Manual* replaces the 1993 *Engineering Geology and Geotechnical Exploration Procedures Manual* and the 2003 *Alaska Geotechnical Procedures Manual*.

The manual provides the basic policy, procedures, methods, and standards for geotechnical investigations and reports for the design and construction of highways, airports, bridges, marine facilities, buildings, retaining walls, and other Department facilities. The manual provides guidelines and procedures for developing a consistent baseline of engineering and geologic data for use by geotechnical engineers, design engineers, and contractors. The manual also presents guidance for the analysis of other geotechnical issues and problems, and recommendations for resolving such issues.

This new manual includes the following stand-alone guides published in October 2003:

- Field Soil Classification Guide
- Field Rock Classification and Structural Mapping Guide
- Geotechnical Report Preparation Guide

The following stand alone guides published in May 2007 complete the basic manual:

- Geological Field Investigation Guide
- Guide to Description and Classification of Peat and Organic Soil

Additional guides that may be developed in the future as part of this manual include

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- Foundation Investigation Guide
- Liquefaction Analysis Policy and Procedure Guide
- Material Site Investigation Guide
- Slope Stability Investigation Guide

The manual and its included guides constitute the procedures followed by Department staff and those consultants under contract who act as an extension of Department staff. The content of the manual is intended to be as flexible as possible so that each guide may be revised individually and other sections may be added as needed. The manual must be revised from time to time to keep pace with changes in geotechnical engineering, engineering geology, and civil engineering. In situations where the manual does not provide adequate guidance, we expect geotechnical and geological practitioners to follow state-of-the-practice procedures and methods in their respective disciplines. Except where otherwise indicated, the Department will adhere to the appropriate and relevant American Association of State Highway and Transportation Officials (AASHTO) or American Society of Testing and Materials (ASTM) methods and tests.