

Volume I Section 2.2

SOILS AND FOUNDATIONS

2.2.1 PURPOSE

To establish requirements for maintaining and publishing the Florida Department of Transportation (Department) ***Soils and Foundations Handbook***.

2.2.2 AUTHORITY

Section 334.044(2), Florida Statutes

2.2.3 SCOPE

The ***Soils and Foundation Handbook*** is used by geotechnical engineers doing geotechnical work for the Department. Department staff using the handbook include District Material and Research Engineers (DMREs), District Geotechnical Engineers, and State Geotechnical Engineers. The ***Soils and Foundation Handbook*** is referenced in the Scope of Services for Geotechnical Consultant work on Road and Bridge Construction Contracts.

2.2.4 GENERAL

The purpose of the ***Soils and Foundation Handbook*** is to provide geotechnical engineers with a guide to the tasks which should be performed when doing geotechnical work for the Department. State-of-the-art exploration, testing and analysis methods applicable within the state of Florida are described. Guidelines are provided on the extent of explorations and the methods of data presentation which are preferred. Both roadway soil surveys and structure foundation investigations are addressed.

The State Materials Office (SMO), in conjunction with the State Structures Design Office, is responsible for maintaining and publishing the ***Soils and Foundation Handbook***.

2.2.5 REVIEW AND APPROVAL

The ***Soils and Foundation Handbook*** is a technical guide which is reviewed by the DMREs and Geotechnical Engineers from the District and State offices. Any proposed changes must be submitted to the State Geotechnical Materials Engineer to be distributed for review and, if deemed necessary, incorporated into the handbook. Approval is by the Director, Office of Materials.

2.2.6 UPDATE SCHEDULE

The ***Soils and Foundations Handbook*** is continuously updated as deemed necessary. Reasons for revision include changes in Department geotechnical practices and the incorporation of changes in the state-of-the-art techniques. Revisions are made by the issuance of a new ***Soils and Foundations Handbook*** at the start of each calendar year.

2.2.7 DISTRIBUTION

The ***Soils and Foundations Handbook*** and subsequent revisions are issued to Department geotechnical personnel, other Department personnel requiring knowledge of the geotechnical process, and consultants performing geotechnical work for the Department.

The handbook is available on the Structures Design Office web site at www.dot.state.fl.us/structures under the Geotechnical Services menu.

2.2.8 TRAINING

None required.

2.2.9 FORMS

The following forms are referenced in the ***Soils and Foundations Handbook*** and can be found in the Department's Procedural Document Library:

<https://pdl.fdot.gov/Forms>

Form No.	Item
675-020-12	Field Boring Log
675-020-13	Field Boring Log (Metric)
675-020-14	Field Reconnaissance Report

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
FIELD RECONNAISSANCE REPORT

FORM 875-020-14
 MATERIALS
 0599

FIN PROJ= _____ OLD STATE PROJECT NUMBER: _____ COUNTY: _____
 REPORTED BY: _____ DATE _____

<p>1. STATIONING</p> <p><input type="radio"/> WELL MARKED</p> <p><input type="radio"/> POORLY MARKED (WE CAN WORK)</p> <p><input type="radio"/> POORLY MARKED (WE MUST REMARK)</p> <p><input type="radio"/> REQUEST TO REMARK</p> <hr/> <p>2. BENCH MARKS</p> <p>IN PLACE: <input type="radio"/> YES <input type="radio"/> NO</p> <p>DISTANCE FROM WORKSITE: _____</p> <hr/> <p>3. PROPERTY OWNERS</p> <p>GRANTED PERMISSION: <input type="radio"/> YES <input type="radio"/> NO</p> <p>REMARKS ON BACK _____</p> <hr/> <p>4. UTILITIES</p> <p>WILL DRILLERS ENCOUNTER UNDERGROUND UTILITIES?</p> <p><input type="radio"/> YES <input type="radio"/> NO</p> <p>AT WHICH AREA? _____</p> <p>WHAT TYPE? _____</p> <hr/> <p>5. SURFACE SOILS</p> <p><input type="radio"/> SAND <input type="radio"/> CLAY</p> <p><input type="radio"/> SILT <input type="radio"/> MUCK</p>	<p>8. FOUNDATIONS (CONTINUED)</p> <p>IF WATER CROSSING:</p> <p>WILL BARGE BE NECESSARY: _____</p> <p>EASILY PLACED IN WATER: _____</p> <p>CURRENT <input type="radio"/> SWIFT <input type="radio"/> MODERATE <input type="radio"/> SLOW</p> <p>IF PRESENT BRIDGE NEARBY, WHAT TYPE OF FOUNDATION: _____</p> <p>ANY PROBLEMS EVIDENT IN OLD BRIDGE (DESCRIBE ON BACK)</p> <p>IS WATER SUPPLY NEARBY: _____</p> <hr/> <p>9. GROUND WATER TABLE DEPTH: _____</p> <p>PRESENT WATER LOCATION: _____</p> <hr/> <p>11. SPECIAL EQUIPMENT NECESSARY</p> <p>_____</p> <hr/> <p>12. REMARKS ON ACCESS</p> <p>DESCRIBE ANY PROBLEMS ON ACCESS</p> <p>_____</p> <hr/> <p>13. DEBRIS AND SANITARY DUMPS</p> <p>LOCATION: _____</p> <p>REMARKS: _____</p>
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EXAMPLE