DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

LOAD RESISTANCE FACTOR DESIGN
FOR BRIDGE FOUNDATION INVESTIGATION

INTRODUCTION

The purpose of these guidelines is to facilitate the implementation of the new AASHTO Load Resistance Factor Design (LRFD) Specifications into geotechnical reports. Newly programmed projects with federal dollars require the use of these specifications. The following guidelines denote changes based on LRFD Specifications from the existing methods and practices used to create geotechnical reports.

Unless otherwise stated all mentions of the Load Resistance Factor Design (LRFD) Specifications refers to the AASHTO LRFD Specifications 5th Edition 2010 and June 2010 Errata.

All information in section 9.2 pertains specifically to LRFD Guidelines. All previous guidelines still apply unless otherwise stated below.

In accordance with the AASHTO LRFD Specifications, special attention should be made to issues dealing with drivability and down drag. Also, foundations founded on rock cannot be recommended if the proper parameters have not been obtained from rock cores within an appropriate distance from the foundation location.

Rock cores should be taken at locations where foundations on rock are to be recommended. Unconfined compression tests are required on rock cores for the calculation of bearing resistance on rock based on the LRFD Specifications.

All of the steps required for preparing a LRFD BFI report may involve several parties working in conjunction and cooperatively with each other.