

## 2. THE DEPARTMENT'S FUNCTIONAL GROUPS ASSISTING WITH CORROSION INVESTIGATIONS

This section outlines the roles and responsibilities of Department staff performing corrosion assessments of project sites. The District Materials Branches are responsible for preparing a Materials Report (MR) for all projects that involve pavement structural section recommendations or pavement studies, culverts or other drainage features, corrosion studies, materials, or disposal sites. This policy is defined in Chapter 604.1of the *Highway Design Manual* (*HDM*) (see References). The District Materials Branches collect soil and water samples for corrosion testing. They perform minimum resistivity and pH testing. Samples meeting the requirements of Section 6.1 of these guidelines are sent to the Materials Engineering and Testing Services (METS), Corrosion Branch for chloride and sulfate testing. Documentation of the corrosion investigation, sampling, corrosion testing, done by the districts are the responsibility of the District Materials Branch. Recommendations for culverts, drainage structures and other structures are the responsibility of the Corrosion Branch.

Geotechnical Services (GS) is responsible for preparing reports for Structure Design to support design of structure foundations, special design retaining walls and buildings. GS also prepares reports for the District Project Engineer to support design of highways, standard plan structures, earthwork and related items not designed by Structure Design. Geotechnical investigations are required for projects involving cut slopes, embankments, earthwork, landslide remediation, retaining walls, sound walls, sign structures, buildings, pump stations, groundwater studies, erosion control features, sub-excavation, and any other studies involving engineering geology. As part of the geotechnical investigation, GS is responsible for conducting a corrosion investigation of the structure site. The corrosion investigation should include sampling of soil and water for corrosion testing, summarizing corrosion test data, and a discussion of the corrosivity of the project site.

Generally, corrosion mitigation measures for structures are selected by Division of Engineering Services (DES) design staff, using appropriate measures listed in Department guidelines. Additional assistance regarding selecting appropriate corrosion mitigation measures should be obtained from the Corrosion Branch. Geotechnical Services staff does not routinely provide corrosion mitigation measures in their reports. However, the Corrosion Branch is responsible when returning testing results to notify the Geotechnical Engineer of any special mitigation measures that may be required. The Geotechnical Report should provide a note in those cases for the Design Engineer to contact the Corrosion Branch.