GEOTECHNICAL ENGINEERING BUREAU
SOIL SURVEY REPORT CHECKLIST

PROJECT_____DATE_____ENGINEER_____

I. EARTHWORK

- If poor Class IIIC2 or worse soils are found at grade in cut sections, is extra graded aggregate base set up? Is lime or cement stabilization needed?

- Specify that Class IIIC2 and worse soils which will be excavated from cut sections not be placed within 3 feet of subgrade. Also need special provision, Section 205 for this requirement.

- If removal of poor soils is required, is a removal detail included? Also, have you specified what should be used as replacement material, and what should be done with removed material?

- If good Class II B3 or better soils are readily available on Coastal Plain projects, have you set up a 12-inch layer at subgrade? Special provision Section 209 is needed for this requirement.

- On sections with cuts and/or low fills (3' or less), if the in-place moisture of the soils 1 to 3 feet below subgrade is significantly above (>4 to 5%) optimum moisture, have you set up removal or drying out and replacement of the wet soils?

- For fills and/or cuts higher than 35± feet, is the berm detail referenced and enclosed?

- Have any proposed slopes steeper than 2:1 in either soil or rock been investigated and addressed?

II. GROUNDWATER

- If groundwater was found above grade in cuts, or within 1 to 2 feet of grade in fills, have underdrains been set up? Remember to include correct underdrain detail.

- If high groundwater was found in cuts, will the special slope drain detail be needed to prevent slope sloughing? Special provision Section 572 is needed for this.

- For high groundwater in cuts, will additional graded aggregate base be needed in the pavement section for stability?

- If the project crosses a pond, lake, swamp, or other wet areas, make sure that some soil samples were taken from the bottom for classification to see if any removal will be required.

- Is granular or rock embankment needed to mat into any inundated areas? Is special provision 208 needed for granular embankment? For fills of 4 feet and less, consider placing geogrid under granular embankment. Geogrid may also be used in the bottom of inundated removal trenches.

- On Coastal plain projects with low fills in areas of high groundwater or low wet areas, consider placing one layer of low strength filter fabric under the fills.

III. PAVEMENT DESIGN

- ☐ For projects in the Piedmont region using graded aggregate base, is a minimum recommended base thickness set up?
- ☐ Have the options for acceptable base materials been listed?
- ☐ Have you checked adjacent projects to see if the soil support value is consistent with this project?
- ☐ Will lime or cement stabilization of subgrade soils be needed?

IV. MISCELLANEOUS

- ☐ For soil surveys at bridge approaches, have you included copies of the endbent borings?
- ☐ Is a waiting period needed before approach slabs are constructed? (for projects that include bridges)

IV. DETAILS AND SKETCHES

- ☐ Removal detail
- ☐ Berm detail for cuts or fills
- ☐ Surcharge and/or filter fabric details
- ☐ Benching detail
- ☐ Underdrain detail
- ☐ Serrated slopes
- ☐ Steep rock cuts
- ☐ Project location sketch
- ☐ Corrosion chart
- ☐ Slope drainage detail