

-Y4-	22+10	to	22+90
-Y4-	24+30	to	27+80
-Y5-	10+00	to	10+30
-Y5-	11+70	to	18+70
-Y5-	19+50	to	20+80
-Y5-	21+60	to	22+30
-Y6-	11+30	to	12+20
-FLYOVER-	0+00	to	2+50
-FLYOVER-	6+80	to	9+80
-FLYOVER-	10+80	to	11+60
-FLYOVER-	12+60	to	16+69
-RAMP A-	4+00	to	6+40
-RAMP A-	7+60	to	8+30
-RAMP A-	8+90	to	11+50
-RAMP B-	0+60	to	3+00
-RAMP B-	3+70	to	4+85
-LOOP B-	2+40	to	3+10
-RAMP C-	0+00	to	1+10
-RAMP C-	2+60	to	3+50
-RAMP C-	3+80	to	6+30
-LOOP C-	1+60	to	5+30
-RAMP D-	1+40	to	2+00
-RAMP D-	4+30	to	4+60

-L2RT-	117+80	to	126+50
-L2-	126+50	to	138+80
-L2-	140+60	to	147+60
-Y3-	17+00	to	17+90
-Y4-	22+00/RT	to	26+00/RT
-Y5-	10+09	to	24+00
-Y6-	10+30	to	14+20
-FLYOVER-	0+40	to	14+80
-RAMP A-	1+40	to	10+45
-RAMP B-	0+60	to	6+33
-LOOP B-	1+70	to	2+20
-LOOP B-	4+50	to	4+80
-RAMP C-	0+00	to	7+75
-LOOP C-	0+00	to	6+05
-RAMP D-	0+00	to	4+00

A discussion of these highly plastic clay soils is located below in the section titled: "Soil Properties".

2) Hard Rock: Hard rock was encountered in the following areas:

<u>Alignment</u>	<u>Station</u>
-L2LT-	108+40 to 108+90
-L2LT-	110+10 to 110+60
-L2RT-	108+20 to 108+60
-L2RT-	110+00 to 111+10
-L2-	110+75 to 110+90
-Y4-	22+20 to 22+60

3) Groundwater: The following areas exhibit a high water table, seasonal high groundwater, or the potential for groundwater related construction problems:

<u>Alignment</u>	<u>Station</u>
-L2LT-	108+57 to 108+70
-L2LT-	109+03 to 110+17
-L2LT-	113+90 to 117+10
-L2LT-	118+80 to 120+50
-L2LT-	123+00 to 126+38
-L2RT-	109+63 to 110+88
-L2RT-	115+00 to 117+10

4) Pond: A man-made pond is located within the construction limits at -L2RT- Sta. 117+85 to 118+80.

5) Water Wells: Water wells were noted within the construction limits at the following locations:

<u>Alignment</u>	<u>Station</u>	<u>Offset</u>
-L2-	113+17	80 LT
-L2-	116+90	8 LT
-L2-	117+53	1 LT
-L2-	117+55	13 RT
-L2-	141+41	24 RT
-Y1-	12+72	11 RT
-FLYOVER-	13+55	8 LT
-RAMP B-	1+07	7 RT

6) Organic Soils: An area of Coastal Plain sandy silt (A-4) with an organic content of 6.8% occurs at -RAMP A- Sta. 9+10 to 9+85.

Physiography and Geology

The project is located southeast of the town of Clayton at the boundary of the Piedmont Physiographic Province and the Coastal Plain Province. The terrain at the beginning of the project consists of very steep hillsides flanking each side of the Little Creek floodplain. Residual soils, which are derived from the underlying Raleigh Belt bedrock, occur at ground surface on either side of Little Creek. The bedrock in this area is composed of metamorphosed granite (meta-granite), mica schist, and metamorphosed gabbro (meta-gabbro). From approximately -L2- Sta. 115+00 eastward, the terrain is fairly level with Coastal Plain soils occurring at the ground surface. These Coastal Plain soils are derived from Tertiary-age terrace and upland sedimentary deposits. The project corridor includes areas of dense woods, large agricultural fields, pastures, and scattered homes. Several small businesses occur on US 70, just west of the proposed interchange.