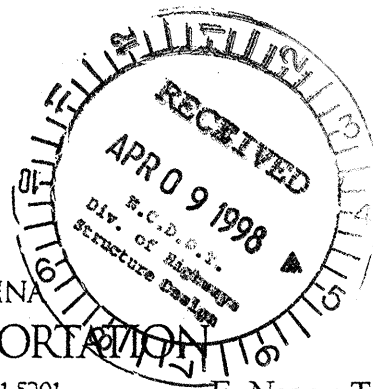




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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April 1998

STATE PROJECT: 8.1910203 (R-977A)
COUNTY: Cherokee
DESCRIPTION: Bridge on US 64 over Hiwassee River at Peachtree (Bridge 4)
SUBJECT: Geotechnical Report - Bridge Foundation Investigation

Site Description

This new bridge is located where proposed new US Highway 64 crosses the Hiwassee River near the community of Peachtree, in Cherokee County. The site is approximately 700 meters due west of the intersection of existing US 64 and SR 1548.

This bridge is to be one of two bridges planned for this river crossing, to carry east- and west-bound traffic, respectively. This bridge, on the east bound side, will carry traffic in both directions until the west-bound bridge is built at a later time. The centerline of this bridge is approximately 10.5 meters right of the centerline of -L-Rev.

Plans call for a bridge approximately 212.6 meters long and 12.5 meters wide, in 8 spans of 26.5 meters each. Its height will be about 20 meters above the river channel.

The Hiwassee River floodplain at this site is approximately 300 meters wide, including the river channel about 45 meters wide. Water depth in the channel varies from less than a meter to about 2.5 meters. Flow is controlled by the Chatuge Dam, a TVA facility approximately 20 miles upstream. There normally are rapid diurnal variations in the flow in response to TVA power demands at Chatuge dam.

End Bent One, Interior Bent 1, and the west-bound side of Interior Bent 2 lie in a cultivated field on the west bank floodplain. This field is the extreme end of a very large cultivated floodplain known as Harshaw Bottom. End Bent One is about 10 meters from the distal edge of the floodplain, which is bordered by a steep, forested slope. The

