

**BD-5107E Project Synopsis**

The Design-Build Project consists of replacing seven (7) low-impact bridges located in Alamance, Caswell, Guilford, Orange and Rockingham, Counties. Each of the bridges will be replaced in place with off-site detours. The primary purpose of this project is to begin to replace a large number of structurally deficient bridges in North Carolina. Bridges to be replaced are shown in the following table.

County	Str #	Route	Across
Alamance	000032	SR1582	Buttermilk Creek
Alamance	000066	SR 1910	Quaker Creek
Alamance	000134	SR 2356	Cane Creek
Caswell	160047	SR 1301	Hogan's Creek
Guilford	400231	SR 1005	Stinking Quarter Creek
Orange	670076	SR 1113	New Hope Creek
Rockingham	780143	SR 1321	Beaver Island Creek

All the bridges for this project are on the sub regional tier. A general overview of the Roadway, Hydraulics, Geotechnical, and Structures Scope of Work is specified in the *Sub Regional Tier Design Guidelines for Bridge Projects* dated February 2008 and the *Low Impact Bridge Replacement Process* dated January 2010. An electronic copy of these documents is located at:

<http://www.ncdot.org/doh/preconstruct/highway/structur/subregional/STGFeb2008.pdf>  
<http://www.ncdot.gov/download/projects/ncbridges/lowimpactbridge/finalmanual.pdf>

The Design-Build Team's replacement bridges are required to meet the requirements of these Guidelines. Unless otherwise noted in the Request for Proposal, the Design-Build Team shall follow the Low Impact Bridge Replacement Process.

The Department is currently preparing a Low Impact Project Data Sheet (serves as the Programmatic Categorical Exclusion (PCE)) for each of the bridges.

The Design-Build Team shall be responsible for all hydraulic design and shall provide signed and sealed Bridge Survey Reports for all structures. The Design-Build Team shall be responsible for all storm drainage design, State Stormwater permit as applicable, construction, and shall obtain FEMA compliance for the regulated floodways.

The Department will provide 2 to 3 borings per bridge to the Design-Build Teams. The Design-Build Team shall be responsible for all geotechnical recommendations, as well as supplemental roadway and structural investigations.

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data, other than the low impact bridge Data Sheet, necessary for the Department to obtain the environmental permit for each bridge replacement. These will generally include the Nationwide Permit 3 and a Water Quality Certificate.

The Design-Build Team will be required to adhere to Jordan Lake or Neuse River Buffer Rules as appropriate.

The Department will provide partial surveys and Lidar (Light Detection and Ranging) for each of the bridges. The Design-Build Team shall be responsible for supplemental surveys.

The Design-Build Team shall be responsible for the coordination of all utilities in conflict with the project. The Department will provide list of utilities and contact person for each bridge site.

The Design-Build Team will be responsible for designing and constructing the bridge approaches to tie the new structures into the existing pavement in accordance with Low Impact NCDOT design standards and policies. The pavement design will be provided by the Department.

The Department or others will be responsible for Construction Engineering Inspection (CEI) work.

The replacement structure is anticipated to be built within the existing right of way; if applicable, the Design-Build Team will be responsible for any right of way and easement acquisition.