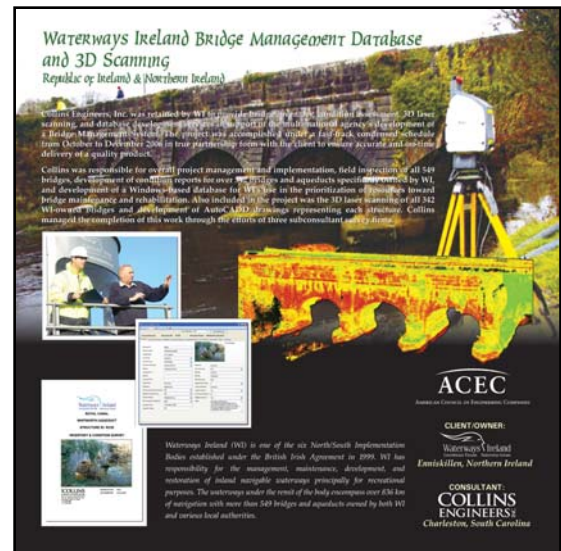


**Bridge Management Database and 3D Scanning  
Republic of Ireland & Northern Ireland  
Waterways Ireland  
American Council of Engineering Companies of South Carolina  
2008 Engineering Excellence Award—Finalist**

Waterways Ireland (WI) is one of the six North/South Implementation Bodies established under the British-Irish Agreement Act in 1999. It has responsibility for the management, maintenance, development, and restoration of inland navigable waterways principally for recreational purposes. The waterways under the remit of the body are the Barrow Navigation, the Erne System, the Grand Canal, the Lower Bann, the Royal, the Shannon-Erne Waterway, and the Shannon Navigation. All together, these waterways encompass over 836 km of navigation with more than 549 bridges and aqueducts owned by both WI and various local authorities.



Collins was retained by WI to provide bridge inventory, condition assessment, 3D laser scanning, and database development services in support of the multi-national agency's Bridge Management System currently under development. The project was accomplished under a fast-track condensed schedule from October to December 2006 in true partnership form with the client to ensure accurate and on-time delivery of a quality product.

Collins was responsible for overall project management and implementation; field inspection of all 549 bridges; development of condition reports for over 342 bridges and aqueducts specifically owned by WI; and development of a Windows-based database for use by WI in prioritizing resources available for bridge maintenance and rehabilitation. Also included in the project was the 3D laser scanning of all 342 Waterways Ireland bridges, and development of AutoCAD drawings representing each structure. Collins managed the completion of this work through the efforts of three subconsultant survey firms.

This project was awarded and Engineering Excellence Award by ACEC South Carolina, and advanced to the ACEC national competition.