PROJECT PROFILE

Title	Design approach for improving bog rampart roads	An tUdarás um Bóithre Náisiúnta National Roads Authority
Contractor	Trinity College Dublin	
Contact details	Eric Farrell Department of Civil, Structural and Environmental Engineering Trinity College Dublin Dublin 2 efarrell@tcd.ie	
NRA Mentor	Tom Casey	
Start date	Oct-07	
End date	Sep-10	
Status	On-going	
Type of project	Research Fellowship: PhD programme (Juan Pablo Osorio Salas)	
Project reference	NR/250/04 PO 6269	

Description	Bog rampart roads present a significant safety hazard and other maintenance difficulties such as road widening. County Councils have tried many innovative methods over the years to enable rampart roads to be improved and widened to reduce the inevitable maintenance cost. These methods have never been assessed in detail nor have the methods been recorded and a construction methodology been developed for use by others. The research consists of a review of the current extent and variation of bog ramparts throughout the county, analysis of the solutions both mooted and used worldwide in similar geological conditions, and full scale trials involving extensive testing and monitoring of different design solutions.	
Objectives	Bog rampart roads have evolved from the early bog roads and present new and challenging technical issues. The original bog roads offered easy access and this encouraged peat harvesting in their vicinity, which has left the road surface in some cases many metres above the surrounding ground. The objective of the project is to develop effective methods for the design, construction and improvement of roads over peat soils.	
Benefits	There is an urgent need to improve rampart roads to meet the modern traffic demands. Guidelines for the design and improvement of these roads will be a significant benefit to the NRA in terms of reduced construction and maintenance costs, and improved safety.	
Outputs	The main output from this project will be the development of design guidelines for the design and improvement of bog rampart roads.	