# PROJECT PROFILE

<table>
<thead>
<tr>
<th>Title</th>
<th>Development of a sustainability evaluation system for road design and construction</th>
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<tbody>
<tr>
<td>Contractor</td>
<td>CH2M Hill</td>
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</table>
| Contact details | David Swift  
CH2M Hill IDC Limited  
St. John’s House, 3rd Floor, High Street  
Tallaght, Dublin 24 IRELAND  
David.Swift@ch2m.com |
| NRA Mentor | Helen Hughes |
| Start date | Oct-10 |
| End date | Mar-11 |
| Status | On-going |
| Type of project | NRA Research Project |
| Cost | €113.1k |
| Project reference | NRA/04/250 |

## Description
The purpose of this 6-month project is to initiate a more formal and visible way of incorporating sustainability into the design and construction of roads in Ireland in line with the Authority’s strategic objective of contributing to sustainable development. The project is based on the GreenRoads project developed in the US by CH2M-Hill and the University of Washington. Greenroads is basically a sustainability performance rating system for roadway design and construction and is applicable to both new and reconstructed/rehabilitated roadways. The Greenroads system awards points for approved sustainable choices/practices and can be used to assess road project sustainability.

The project will examine the current NRA operating procedures and provide a mechanism for identifying how sustainable they are, and how they can be improved from a sustainability point of view. This will assist in identifying the attributes which contribute to sustainability in road design and construction, and communicating these attributes to stakeholders. Using the GreenRoad system the NRA will be able to manage and ultimately enhance the sustainability of its operations.

## Objectives
The main objective of the proposal is to assess the sustainability of Irish roads and to indicate how current procedure and practices can be modified to enhance sustainability going forward. A secondary objective is to initiate the development of a sustainability rating system, in line with the GreenRoads system, to enable the NRA to assess and report on the sustainability of its road schemes.

## Benefits
The outputs of this research will enable to NRA to:
- Manage and enhance the sustainability of road construction and management projects
- Identify the project attributes that contribute to the sustainability of roads
- Communicate sustainability project attributes to stakeholders
- Provide a sustainability accounting tool for use by the NRA
- Stimulate the market for sustainable practices and products.

## Outputs
Deliverables include the following:
- Summary Report on the criteria to be included in the sustainability evaluation system
- A Preliminary National Roads Sustainability Evaluation System
- A Benchmarking Report on how the completed system compares with other comparable systems used globally
- A Verification Report on how the developed system performs against a typical recently executed road project
- A Preliminary Implementation Plan for a sustainable roads standard.

![Components of sustainability diagram]