

Abercorn Bridge, N. Ireland

Town & Country: Newtownstewart, United Kingdom

Client: Graham Structural Solutions, N. Ireland

Transport

Project Timescale: April—December 2014 **Structure**: 4 Span Bridge (Hennebique Design

1932)

CPT Treatment Applied:

DuoGuard[™] Hybrid Anode[™] System

CPT Products used

- 4000 DuoGuard[™] anodes
- DuoCrete SD Mortar
- MN15 Reference Electrodes
- Surface Mounted Connection Boxes,
- Steel reinforcement (condition) Monitoring System

The Abercorn Bridge was built to a Hennebique design in 1932. Having served the local community of Newtownstewart for over 80 years the four span steel reinforced concrete bridge (now 82 years old) was showing signs of severe deterioration and was subject to a one lane 3 tonne weight restriction. A condition survey along with Finite Element Analysis was undertaken and a minimum disruption repair plan using DuoGuard Hybrid anodes drawn up.

Using a range of DuoGuard Hybrid anode sizes this designed solution has quickly restored, refurbished and reinstated the structure to a two lane usable bridge without taking away from its original appearance and at a price much less than replacement.







A monitoring station installed with the DuoGuard Hybrid anodes will track the condition of the steel reinforcement within the structure.

The project received the 2014 Northern Ireland Concrete Society, Certificate of Excellence award (Restoration category).





MN15 Reference Electrode

DuoGuard Range

For technical and sales support please contact us at:

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