



<b>Project Title:</b>	Graig Tunnel
<b>Client:</b>	Highways England
<b>Date of Work:</b>	Jan 2013

Project description

The work involved the following:

- Traditional brickwork repairs.
- Re-pointing.
- Installation of Avonguards on fractures.
- Trial pits and trenches.
- 3no panels of sprayed concrete at 9ch.
- Cored holes for visual inspection with Endoscope.
- Ecological Work – Fitting bat bricks, bat boards, excluders on refuge.
- Filling refuges with block-work and concrete.
- Installation of Mortar Tabs.
- Dressing back brickwork.
- Sprayed concrete lining from 5.5ch to 12.25ch.
- Ecological Work – Fitting bat bricks, bat boards.
- Removal of south portal block-work wall and gat and installation of new steel gate system.

Project Constraints

- Ecology.
- Public Interface.
- Poor condition of structure.
- 3<sup>rd</sup> party negotiations (landowners).
- High Level access.
- Plant and Materials delivery logistics.
- Site Security.
- Confined Space Working.