

## Swindon Network Growth Upgrade

### Swindon, Wiltshire

J Murphy & Sons Ltd

*BIG Challenge 2015 submission category: Small scale permanent*

#### Project overview

Construction of 80m foul water rising main within great crested newt territorial habitat.

The area affected was approximately 0.41 hectares. The works area was located within an identified receptor site for great crested newt translocation, as part of a recent housing development.

Important breeding ponds were situated within 100meters of the works. The site was situated next to the M4, and was surrounded by housing development, also, public right of way ran through the area.

The approximate contract value of the scheme was £300,000 and involved 20 site workers. The scheme took approximately 3months to complete.

#### What were the biodiversity conditions on site, prior to the enhancement?

The works location was situated on semi-improved grassland. This was located within 500m of ponds that supported Great Crested Newt populations.



*Photo: Great Crested Newt Wichelstowe*

Important great crested newt breeding ponds were located in close proximity to the works. The site location was identified as a receptor site for GCN translocation from recent housing developments.

During the works of the rising main approximately 150 great crested newts were translocated by onsite ecologists.

#### Were there any specific conditions that led to you carrying out this work?

A Great Crested Newt Mitigation licence was required from Natural England.

In order to enhance the existing habitat following

works completion hibernacula were created around the works area.

This involved installing Great crested newt exclusion fencing under ecological supervision. Careful two stage strimming was also conducted under ecological supervision.

A number of pitfall traps and roof tiles were placed around the perimeter fencing. And over a 45 day trapping period approximately 150 GCN were translocated to a receptor site by ecologists.

### What were the biodiversity measures taken?

Hibernacula were created by reusing log piles from site clearance work. No material was imported for creating the habitat.

The wooden stakes from the Amphibian exclusion fencing was also used for the habitat. The council ecologist was engaged throughout the works.

Maintenance agreements such as strimming the grassland and treating weed growth were arranged with the landowner. The site originally did not have many hibernation features for the GCN population.

After completion of the works the hibernation features will help the GCN population to survive the harsh winter months. The hibernacula were created in a short time scale using a mini digger and three workers. There was little added cost to the project and was very easy to produce.

### How would you best describe the project?

An enhancement.

### Further information

A mini digger was used to excavate a pit approximately 1.5 m deep and 1m in diameter, under Natural England guidelines.



*Photo: Reptile Hibernacula*

Log piles and stakes were gathered by the workers on site.

The hole was lined with gravel to provide good drainage.

The log piles together with rubble were used to infill the hole, before the excavated topsoil was put back on top.

Gaps were created so that GCN could enter during the hibernation months. For works within reptile and amphibian habitat it is very easy to enhance the area by creating hibernation features and it should be encouraged where ever possible area.

### What was your personal motivation for carrying out the enhancement?

Creating a positive environmental image for our company was a strong

motivation point for carrying out the project. The legacy we leave behind from our works is important to us and we wish to leave a positive impact on the Environment on every site we visit.