



Doncaster Carr IEP Project Doncaster Carr Depot, Doncaster VolkerFitzpatrick Ltd

BIG Challenge 2015 submission category: Temporary

Project overview

The Doncaster Carr IEP Project is the construction of a new maintenance depot on behalf of Hitachi for their Intercity Express fleet of trains.

The project includes the removal of existing tracks and an old Victorian maintenance depot and construction of a new five track maintenance shed, a train wash and wheel lathe as well as associated staff buildings.

The project duration is 2 years and there are around 200 staff members involved.

The site has been used for railway maintenance since 1876 for both steam and diesel locomotive maintenance and has suffered considerable ground contamination over the years which the project is in the process of remediating.

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

There is some broad-leaved woodland at the site boundary, and the main site area of scattered trees, and scrub was cleared prior to the site being developed.



Photo: Preparing the Doncaster Bug Minster Garden

An ecological survey was carried out that did not identify any protected species but a number of bird species were present.

The built project will involve landscaping in line with planning requirements, replacement of all trees that have been removed and adding bird and bat boxes.

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

There is a planning requirement to enhance the landscape once the site is complete.

The project has however installed a number of temporary biodiversity features for the enjoyment of the project staff and to attract pollinating and other invertebrate species.

The Project is registered under the Considerate Constructors Scheme and is also being assessed under CEEQUAL the sustainability assessment, rating and awards scheme for civil engineering and is also registered under the Considerate Constructors Scheme.

What were the biodiversity measures taken?

The blue print for the bug minster is available should any other site wish to replicate this.



The current location is near to the entrance and security cabin and this area will be rebuilt later in the project.

The bug minster will be moved to a suitable location on the project with its residents and carry on its role as habitat for local mini beasts.

Although this is not a scientific project, we are confident that the result in provision of different types of habitat will result in biodiversity net gain and contribute to the existing biodiversity in the area.

All materials for the bug minster were upcycled or recycled and planting was either donated by staff or provided by our subcontractors.

There are a number of different shelves within the bug minster with different materials creating habitat including :

Bricks, Straw, Twigs and bark, Roof tiles, Ballast, Bamboo canes, Dead vegetation, Living ivy, Corrugated cardboard.

We are currently liaising with Potteric Carr, a SSSI that is located 1 km away to create a partnership to improve biodiversity in the area by providing volunteers from the project, providing materials and conducting a biodiversity campaign.



The Bug Minster was built to attract invertebrates that are both useful pollinators such as butterflies and bees and species such as woodlice that provide food for the rest of the food chain.

Some wild invertebrates, such as bumblebees and solitary bees, are declining in numbers in the countryside, so by providing a habitat, we can contribute to their conservation.

We are also creating a habitat for other creatures to feed such as frogs, newts,

Photo: Doncaster Bug Minster

small mammals and birds. We built this habitat based on St Georges Minster in Doncaster that has stood for eight centuries.

The Bug Minster is built entirely from recycled/upcycled materials. The main structure is discarded timber found on the site, and contains discarded bricks, wood and hay and has lots of nooks and crannies for mini beasts to tuck themselves under.



Many members of the project team contributed their time in creating the Bug Minster and planting the garden in which it sits with pollinating plants such as lavender, yarrow, and oxe eye daisy.

We used old timber sleepers to frame the garden and planting was funded by project subcontractors, NG Bailey and PLS.

How would you best describe the project? An enhancement.

Further information

The Bug Minster concept was developed by Phil Gregson, HSEQ Manager who drew a design.

The project joiner constructed the frame of the minster and the members of the project team furnished the habitat with materials found on site. The garden was originally fenced and the fence was removed, timber sleepers put down and our Sub contractors, NG Bailey and PLS contributed funds for purchasing the pollinating plants.

We would have preferred to prepare the garden in the spring by sowing wildflower seeds. The garden would then be more established and attract more insects



Photo: Architect & HSEQ manager with masterpiece

What was your personal motivation for carrying out the enhancement?

The Project has a sustainability action plan (PSAP) that implements the VolkerFitzpatrick Rail Sustainability Charter.

We wanted to go beyond the planning requirements for biodiversity and involve project staff in creating a biodiversity garden and a habitat for mini beasts. We considered the local landmarks that we could base the bug habitat on. Doncaster Minster is a key landmark located in the centre of Doncaster and is important to the locality so this was chosen as the template. The garden will be maintained by the project security staff..