

Ongar Academy Ecological Enhancement Plan
Ongar, Essex, England
 Kier Construction Eastern

BIG Biodiversity Challenge Award category: Small Scale Permanent Award

Project overview

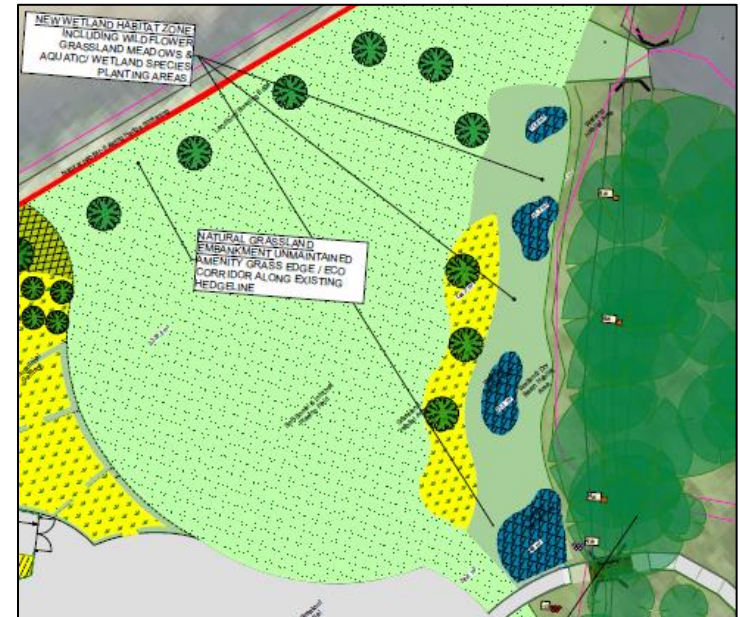
Kier are the principal contractor for the construction of a new Academy School in the town of Ongar, Essex. The School is being constructed on a former playing field covered with sports pitches. As part of the development an Ecological Enhancement Plan has been developed to incorporate biodiversity into the very heart of the project. The enhancement plan has not been completed at this stage and is scheduled to commence during August 2018.

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

The biodiversity conditions of the site prior to the development were relatively poor. The majority of the site was used as a playing field / sports pitches meaning it was mostly amenity grassland. The mature hedgerow separating the development site from the larger playing field area offers quite a rich habitat corridor for many species, this is to be retained and enhanced during the project.

Were there any specific reasons that led to this project?

The project has been developed as part of the overall design of the project. Some core aspects to project have been included to meet planning requirements of the development. However, as a traditional design and build contract Kier have gone beyond the requirements of planning. The project was also seen as a great chance to showcase an initiative within the Big Biodiversity Challenge 2017.



Plan for new wetland habitat zone to be created as part of the Ecological Enhancement Plan.

What were the biodiversity measures taken?






The Ecological Enhancement Plan involves a number of separate initiatives which together form the overall plan. The different ecological enhancements being undertaken include:


- The creation of a new wetland habitat zone involving the installation of 4no shallow scrapes to be planted with aquatic/wetland plant species.
- Extensive areas of wildflower meadows to be planted. Wildflower meadows are extremely beneficial to many species of invertebrate. As the populations of invertebrates increases this in turn benefits species at higher trophic levels.
- Enhancement of the existing mature tree belt including the formation of a buffer zone between the new school and existing buildings using native scrub and shrub species.
- Installation of significant numbers of bat boxes, various types of bird boxes including House Martin next boxes included in the façade of the building, reptile hibernacula in addition to log piles.

As part of the enhancement plan Kier also decided to run a competition involving the future pupils of the school. The competition involved the pupils designing the enclosed garden space incorporating the different enhancement features that they would like to see included. The winning design was then selected and supplied to the landscape architect working on the project who used the pupils and interpreted it to create a working design. Picture of winning pupils design to be supplied retrospectively.

Ecological Installations.

Exact locations of ecological installation/ elements to be finalised on site with guidance from a suitably qualified ecologist.

Ba 	Bat Box Locations. (Within existing retained trees)
Bi1 	Bird Box Locations. (Within existing retained trees and fixed to building facade)
Bi2 	House Martin nest Box Locations. (fixed to south east building facade)
Rea 	Reptile Hibernacules- stone and rubble mound 1200mmX1200mmX 400mm high (located within vicinity of wetland areas & native buffer zone scrub)
Lo 	Log Piles- 1200mmX1200mmX1200mm High- located within extent of woodland edge and native buffer zone scrub.



Details of different types of ecological installation to be included with the enhancement plan

How would you best describe the project?

Enhancement

Further information

Although the ecological enhancement plan has in part been developed to mitigate the impacts of the project, due to the scale and detail of the plan it is hoped that the resulting variety of habitats will lead to net gain in overall biodiversity inhabiting the site.

The main installation of the enhancements will commence during August 2017 with photos of the completed project to be sent to the Big Biodiversity Challenge 2017 to support the entry.

What was your personal motivation for carrying out the enhancement?

Kier's motivation for undertaking the project comes from its continued commitment to promoting ecological enhancements on developments wherever possible. It is hoped that the environment created will act as an invaluable learning tool for the pupils of the school in the future. The school should also provide a stimulating environment for the pupils to learn and play within.



Planned Enclosed Garden Space where the winning school pupils design will be used