

Environment Agency Asset Refurbishment Programme of Works - Ransome Road Desilt Ransome Road, Northampton, UK

JBA-Bentley

BIG Biodiversity Challenge Award category: Small Scale Permanent Award

Project overview

The Environment Agency commissioned JBA-Bentley to undertake desilting of a small river in Northampton in order to reduce potential flooding issues. Opportunity was seen at the scoping stage to liaise with Froglife and see if we could enhance a nearby pond which had silted up.

The pond was shown on OS maps but did not contain any standing water. Whilst machinery was mobilised for desilting of the river channel, the degraded pond was also excavated to provide open water habitat which would be of benefit to local biodiversity including amphibians, reptiles and invertebrates.

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

Prior to the excavation of the pond, the pond had succeeded to rough grassland surrounded by woodland with relatively low ecological potential.

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

There were no specific legislative driving forces that meant this work had to be completed. The opportunity for the habitat enhancement was identified during scoping of the project which instigated liaison with Froglife and allowed the degraded pond to be reinstated whilst machinery was already mobilised for the desilting works of the river.

Works were undertaken purely in line with our company sustainability principles to protect and enhance biodiversity wherever possible within our works.



Habitat present prior to enhancement

What were the biodiversity measures taken?

In order to determine the suitability of the pond enhancement during the scheme, the site was assessed by an ecologist at project inception to highlight all environmental constraints and provide details on potential enhancement opportunity. Details of the environmental constraints and enhancement opportunities to be implemented were agreed with The Environment Agency and relayed to site staff through toolbox talks.

The opportunity to liaise with Froglife was identified to reinstate a degraded pond which now provided low ecological potential and had succeeded to rough grassland. The reinstatement removed silt from the degraded pond and recreated an area of open water. Removed sediment from the pond area was reused and placed along an existing flood bank, along with material from the desilting of the wider works on the river channel. The pond creation followed good practice guidelines to ensure a range of water depths to provide niche habitats for a variety of aquatic life. The open water habitat is considered to provide optimal habitat for a range of taxa including invertebrates, amphibians and macrophytes. In addition, the pond will attract and provide resource for a range of other terrestrial fauna including mammals, birds and reptiles.

The pond creation is for a small area of approximately 100m², but has significantly increased the biodiversity value of the immediate area, changing it from a low biodiversity status, only containing rough grassland, to a high biodiversity UK priority BAP habitat resulting in biodiversity net gain.

The pond creation was undertaken as a habitat enhancement with very limited cost as it could be undertaken at the same time as the planned wider works for desilting the nearby river channel. This is something that is replicable at other sites and we **already include liaison for our other schemes with the Environment Agency's Fisheries, Biodiversity and**



Pond creation

Geomorphology Team as well as Local Wildlife Sites to identify potential ecological enhancements. Where possible for future schemes we would look to see if similar enhancement opportunities exist and can be implemented.

This project was undertaken in 2016 and it is anticipated that aquatic vegetation within the pond will naturally recolonise, requiring little management. Over time ponds naturally succeed. However, should this be observed in subsequent cycles of desilting of the river channel, opportunity would again exist to maintain the pond.

How would you best describe the project?

An enhancement

Further information

The pond reinstatement was installed by site operatives using a long reach excavator. The operative was instructed to ensure a range of depths were created within the pond which provide areas of different habitat to suit different taxa.

The site has been visited following the scheme and it has been noted that common frog have been seen using the new pond. Although no formal survey has been undertaken it is anticipated that a range of aquatic life will soon colonise this site now that the enhancement has taken place, for the benefit of biodiversity.

The measures undertaken were relatively simple to achieve and only really required a good planning procedure and input of our environmental team from the early stages of the project. In terms of lessons learnt we will continue to arrange environmental input at the start of all new schemes so that opportunities like this one can be flagged at an early stage and the appropriate communication with stakeholders made so enhancements can be effectively implemented for the benefit of biodiversity.



What was your personal motivation for carrying out the enhancement?

As a company we have an obligation to protect and enhance the environment wherever possible. In this instance we saw an opportunity for a significant, albeit small scale enhancement which would provide benefit to biodiversity at the same time as being a cost effective option to include a biodiversity enhancement within the scheme.