

**A19 ROADSIDE IMPROVEMENTS
DISHFORTH TO JARROW (TYNE TUNNEL), NORTH EAST
HIGHWAYS ENGLAND, SIR ROBERT MCALPINE**

BIG Biodiversity Challenge Award Category: Monitoring, Maintenance & Management

Project overview

Under the 30 year concession to Design, Build, Finance and Operate (DBFO) 120km of the A19, between Dishforth in North Yorkshire and the Tyne Tunnel Sir Robert McAlpine have undertaken various enhancements of the biodiversity of the road network. This is part of a long-term landscape planning and management strategy.

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

Prior to Sir Robert McAlpine's involvement when the A19 DBFO was initiated, there was limited consideration given to the existing biodiversity and the highway verges. These were planted with low biodiversity value standard highway grasslands and woodland plots. At this time the A19 DBFO had no recognised Species Rich Grassland on its asset register. DAFOR ecological assessments have aided the programming and assessment of the condition of the 'green' sections of the highway. This identified a portion of the road network is within the County Durham Magnesian Limestone belt, an area of unique and internationally important habitat.

What were the reasons behind this project?

The road maintenance contract does not include provision for maintenance of wildflower areas and there was no additional funding available. However, Sir Robert McAlpine initiated changes to go over and above standard roadside maintenance techniques and highlighted the potential to increase the Biodiversity Action Plan priority habitat management. This is because Sir Robert McAlpine recognise their responsibility and opportunity to protect and enhance the rare Magnesian Limestone habitats in the area. As the project has a long duration, the team recognised that there is significant potential to deliver meaningful benefits.



Hybrid orchid found on an area recently cleared to promote wildflower growth

What were the biodiversity measures taken?

Initially, the existing roadside maintenance regimes were assessed and adjusted to enable basic wildflower management, as recommended by the consultant ecologist. These changes were incorporated into the annual landscape programme and scrub removed from the most vulnerable areas.

Following discussions with the ecologist and subsequent discussions with Durham Wildlife Trust, it was determined that by retaining arisings on some sites, in the form of habitat piles, hibernacula and refugia, we could significantly reduce labour, mobilisation and traffic management requirements. The implementation of these work practices enabled the existing resource to increase the quantity of maintained species rich grassland from 1.3Ha to 3.2Ha, encompassing 10 individual sites.

Changes to cutting regimes mimic the traditional climatic and farming impacts on these habitats and aim to perpetuate the periods of biodiverse cover. The 2017 annual monitoring of these wildflower areas reveals significant increases in the variety and number of Magnesian Limestone indicator species. Continued monitoring will provide the team with any trends that may need to be managed and addressed where required in a collaborative manner.

Sir Robert McAlpine commissioned a Grassland Report by Durham Wildlife Trust in 2017. The purpose of the report was to study the grassland and associated habitats along the A19 corridor and make recommendations for the future management. The report proposed a landscape-scale project to create 41.5 hectares of species-rich grassland over 20 sites and 115 landscape plots. The level of opportunity for species-rich grasslands was far more significant than was originally envisaged. The outcomes of the report will now be taken forwards and inform the future maintenance and management of the network.



Bee Orchid and Red Tailed Bumblebee on Birdsfoot Trefoil on Sheraton Bank



Further information

The A19 Biodiversity Action Plan (BAP) has been reviewed with full consideration of the Highways England Biodiversity Plan. Important changes which have arisen from the periods of review are particularly associated with placing a greater emphasis on habitat. Using independent ecological assessments from accredited and respected organisations is necessary to get sound advice and records.

Pragmatic methods to minimise costs were used for managing the sites including retaining arisings on some sites, significantly reduces labour, mobilisation and traffic management requirements. The cost savings allow further enhancements including green hay spreading, encouraging desired seed distribution and regeneration of key species as well as future plans of incorporating seed collection and storage for future use on areas of poorer form.

Sir Robert McAlpine are continuing to explore opportunities to further enhance the quantity and quality of wildflower meadows on the A19 road network, including for the preparation of bids for additional funding by Highways England as part of their Biodiversity commitments. It is hoped that with additional funding we can create an additional Wildflower Meadows on Magnesian Limestone.

Project Team

Client: Highways England & AutoLink

Main Contractor: Sir Robert McAlpine

Ecologist: PCA Ltd

Volunteer Organisation: Durham Wildlife Trust

What was the motivation for carrying out the enhancement?

In 2015, the A19 DBFO wildflower schemes were submitted in the CIRIA BIG Biodiversity Awards and we have continued our active work to further understand and enhance biodiversity along the network. We are passionate about this cause and this is demonstrated by our long-term work to continually go above and beyond the project requirements.



Project team working to record and monitor the network (Sir Robert McAlpine)



Highway embankment scrub clearance (Sir Robert McAlpine)