

A55 Llandegai to Holyhead Trunk Road

Biodiversity Case Record



Location Llandegai to Holyhead, North Wales

"The new highway has been designed in a way that is sensitive to the environment, integrates into the landscape and has a reduced visual impact, a great achievement for all those involved".

Client Welsh Office

The Right Honourable Rhodri Morgan AM MP upon opening the road in April 2001.

Main Contractor Carillion / Laing JV

The A55 project provides for the upgrade of the existing A55 trunk road across the Isle of Anglesey in North Wales. The A55, which serves the port of Holyhead is part of the Trans European Network (TENS).

The Inland Sea SSSI area supports a range of habitats and was noted for its importance to wintering wildfowl, wading birds and eelgrass colonies. Strict working times ensured minimal disturbance was caused to feeding and roosting birds. A shingle spit for nesting and roosting birds was relocated and improved early in the project to protect them from predation and disturbance which proved to be very successful. Pollution control measures at the Inland Sea include the surface water run off not being discharged into the Inland Sea SSSI area but instead being discharged directly into the Beddmanarch Bay via a pumped drainage system.

Technical Data

Contract type Upgrade, operate and maintain the road for 27 years

The project scope includes the upgrade of the existing road to dual lane standard, the rebuilding of a number of structures and the taking over of two historic bridges over the Menai Strait.

Much of the route lay across open country, this includes SSSI sites and other locally important conservation areas and many high quality wetland habitat. It was therefore essential that construction impacts were kept to a minimum in order to protect the environment.

Environmental Initiatives

Water vole habitat creation.

Recommendations of the Environmental Statement were implemented and extensive work was undertaken to mitigate the effects of the construction on species both in the short term and long term. These mitigation measures were carried out in consultation with the Environment Agency, The Countryside Council for Wales and other environmental groups.

Placement of rock for the construction of the new embankment across the Inland Sea was synchronised with the tidal regimes, which minimised sediment suspension and limited damage to the eelgrass colonies.

Badger and Otter access routes created.

To ensure minimal disturbance to the populations of endangered water voles found on the island, new habitats were created away from the construction area with the original habitat slowly uprooted to allow natural migration to the new site. Once construction had been completed the area was replanted using native species sources from the local biogeographical region.

Stripped topsoil was stored and replaced as close as possible to the source locations to maintain botanical diversity and continued habitat for invertebrate species.

Impacts minimised on the Inland Sea SSSI.

The integration of the road into the existing landscape has been carefully viewed with much of the road edged with traditional Cloddiau walls, which provide screening and in the future additional habitat.

Invertebrate habitat retained where possible.

Much of the excavated rock was extensively recycled with around 90% of all aggregates secured from within site, keeping lorry traffic on the A5 to a minimum.

Visible impact of road minimised.

Fencing was designed to prevent both badger and otter populations straying onto the new road and underpasses were provided to enable their safe passage beneath the new road. In addition new artificial badger setts were designed and built to replace setts lost on the line of the new road.

A drainage system was designed as a combined filter / carrier drain system along the route, with a compacted sub-case channel to cater for peaks in rainfall. Drainage catchment areas outfall into 27 balancing ponds via interceptors and pollution containment tanks to prevent discharge.