## Key Issues –

The EIA of the A5 WTC followed a staged process focused on Options Identification, Options Selection and Assessment of the Preferred Scheme, using guidance contained within the Design Manual for Roads and Bridges Volume 10 and 11 and its relevant Interim Advice Notes.

One of the issues encountered during the EIA was the number of sensitive designated sites for nature conservation within the scheme’s impact zone. The potential road corridor has several areas of international conservation importance. These include four Special Areas of Conservation (SACs) - the River Foyle & Tributaries, River Finn, Owenkillew River and Tully Bog; as well as an area of critical winter foraging for birds associated with three Special Protection Areas (SPAs) - Lough Foyle, Lough Swilly and Lough Neagh & Lough Beg. Other key issues centred on the existing A5 road which is heavily developed thereby restricting on-line upgrade options. Majority of the proposed road had to cross watercourses which are designated or feed designated watercourses, as a result the proposal required mitigation to reduce impacts on these habitats.

## Purpose of the project

The A5 WTC is one of five key transport corridors making up the strategic road network across Northern Ireland. The project is expected to significantly improve safety and journey times along this route, in addition to improving the links between the urban centres in the west of the province, provide a strategic link with international gateways.

## Description of the project

The scheme is 85km long and is from south of Londonderry to the border with the Republic of Ireland at Aughnacloy. Statutory Orders and an Environmental Statement (ES) were published and construction initially commenced in 2012, but was halted in 2013 following a successful judicial review of the Habitats Regulations Assessments undertaken in 2010. The ES and draft Orders were republished in 2016 and the project is now to be constructed in three phases, starting with Phase 1 in 2017, Phase 2 in 2021 and Phase 3 anticipated for 2026. Sensitive receptors include valuable landscapes, agricultural landholdings, cultural heritage sites, private dwellings and community assets, severance of side roads and re-routing of side roads as well as eight Natura 2000 sites and two Ramsar sites within the scheme’s zone of influence.
Lessons learnt
To address the sensitivity of the Natura 2000 sites, and to ensure a robust Habitats Regulation Assessment was undertaken, Mouchel engaged with a number of agencies with respect to the nature conservation interests within the afore-mentioned Natura 2000 sites. These included the Northern Ireland Environment Agency (NEIA), Loughs Agency (with respect to marine resources of the Foyle area) and Royal Society for Protection of Birds.

It became apparent from early examination of the potential road corridor, that consideration of the scheme’s potential impact on the nature conservation objectives of the Natura 2000 sites was not limited to direct impacts to these sites, but extended to habitats outside of the designated areas, which were deemed to have a critical supporting function for the species which form the designation criteria for the sites. A source-pathway approach was used to examine the potential for impact on these sites as potential environmental effects of schemes are not restricted to prescribed boundaries. Early in the scheme design, the identification of internationally and nationally important ecological resources informed the route selection, with crossings of major watercourses, which were either designated or feed in to designated sites, kept to a minimum, and open span structures selected to reduce potential impacts on the aquatic environment. All constraint data was stored geo-spatially, allowing interactive comparison of data layers and informed decision-making.

Lessons learnt cont. -
This cross-disciplinary approach was used to quantify the potential impacts on sites, with the water quality, geotechnical, drainage and highways engineering teams assisting the ecologists in understanding the potential issues which could arise during construction. The A5WTC is an Early Contractor Involvement scheme, and the input from the appointed contractors was invaluable in ensuring that emerging designs represented best value for money, and were underpinned by joint design and build teams decisions.

Significant effort was expended in discussing potential water quality deterioration which could impact fish stocks. NEIA and Loughs Agency provided advice and comment on potential issues, and assisted in making the emerging scheme design robust and minimising potential for significant effects. The iterative use of the Highways Agency’s (now Highways England) Water Risk Assessment Tool allowed comprehensive design of mitigation to control suspended sediments and other pollutants for the operational phase of the project.

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