

# Eaves Green

Link Road

**Working in partnership, Lancashire County Council and their contractor, Birse Civils, have achieved fantastic results at Eaves Green Link Road.**

The project has:

- Opened 15 weeks early
- Been completed within budget
- Used innovative and sustainable engineering solutions
- Maximised the use of recycled materials
- Worked over 100,000 accident free man hours

## Scheme description

Eaves Green Link Road is a single carriageway with one lane in each direction designed to a 40mph speed limit with a shared use cycle/footway running the entire length.

Starting at the western end with a new roundabout on Lower Burgh Way the new road is 1.45km long and has a 13.3m wide corridor of carriageway, verges and footway/cycleway. The route then runs eastward to a junction at the southern end of Burgh Lane where a controlled cycle/pedestrian crossing facility has been installed. The road curves northeast into cutting to a roundabout providing a short access link to Holy Cross RC High School. This will now be the only vehicular access to the school. Accesses have also been created for the former Chorley Conference Centre area and Duxbury Mill pumping station.

From here the road continues in a mix of cutting and embankment to rise over the River Yarrow on a 60m long three span concrete bridge. The sympathetic design was chosen to maintain an unrestricted river, and an open aspect to the valley and woodland.



Piled foundations support the bridge at its ends and intermediate piers are founded on the underlying mudstone bedrock. A continuous deck slab, will reduce future maintenance costs by minimising the ingress of road de-icing salts.

East of the bridge the route continues to a new traffic signal controlled junction with the A6 Bolton Road. Pedestrian and cycle crossing facilities have also been provided at this tie-in.

The new road completes the southern and western bypass of Chorley, improving traffic movements for the whole area. It will enable further residential development of the Eaves Green area and commercial development at Red Bank.

## Making roads safer in Chorley

Eaves Green Link Road will significantly reduce traffic on existing roads, providing a safer, purpose-built route to the south and west of Chorley town. It has created a much needed second access to the Eaves Green neighbourhood, improving access for residents, emergency services and new public transport. The local community will also benefit from improved access to schools, local facilities and businesses.

## Caring for the environment every step of the way

During the planning stages of the scheme Chorley Council conducted a comprehensive Environment Impact Assessment (EIA). It looked at the impact of the scheme on the local community, landscape, ecology and cultural heritage, with particular attention to noise, air quality and vibration.

The EIA highlighted the presence of Great Crested Newts and various types of roosting bat, both protected species requiring special conservation treatment. Dippers, a small riverside bird, and ancient woodland soil containing native species of plants were also identified, together with the possible archaeological remains of Duxbury Mill. Chorley Council in conjunction with Lancashire County Council implemented a range of mitigation measures before construction started to protect these sensitive species and habitats.

## Warning – newts crossing!

To keep the Great Crested Newts away from the road, during and after construction, we installed special amphibian fencing. As part of the finished works two new ponds have also been created with four interconnecting tunnels crossing under the road to provide a safe route for the newts. We have also created 'hibernacula' areas where the newts can hibernate and 80 new bat boxes have been installed to provide new homes for the bats.

To protect the ancient woodland identified on the site the precious topsoil was translocated to a receptor site where its native species can continue to thrive. An archaeological watching brief was employed to inspect the excavations for historical interest and activity.

## Minimising road noise

The new road was purposefully designed in a cutting in the location of Holy Cross High School to minimise the impact of additional traffic noise. In addition the team have used a low noise "thin surfacing" for the final layer of road construction to minimise tyre noise. Over 1000m of timber screen fencing has also been installed in sensitive areas.

In the spring the embankments will be planted with grass seed and shrubs to create a pleasant visual aspect to the road.

## Creating community involvement

Any major new road will have an impact on the local community. From conception to completion the team have gone to extraordinary efforts to involve the community.

It started with Chorley Council who played a key role in promoting the scheme and initiating public consultation securing planning approval and the Side Roads Order. Council Members gave their wholehearted commitment and support and Officers have diligently carried out their professional duties ensuring successful delivery of the scheme.

During construction Lancashire County Council and Birse Civils have continued with this. The site team have used the Considerate Constructors Scheme as a framework to manage the stakeholder and public interfaces. As part of this, the Considerate Constructors Scheme audited the project, giving it a score of 99%!

The team have carried out a number of activities to engage with the community, including:

- Presentations and site tours for 160 pupils from Holy Cross High School
- Weekly drop-in 'surgeries' to answer queries from local residents
- Providing fencing for local charity events
- Assisting Friends of the River Yarrow with tree and debris clearance to the Salmon Fish pass

## Innovative engineering ideas

In the original design 24,000m<sup>3</sup> of material would have been transported off site for disposal to landfill. A similar quantity of new 'virgin' materials would have been imported to site. Birse Civils made a proposal to Lancashire County Council to treat the existing material with lime and cement stabilisation. This meant all the material would be suitable to be re-used in the road's embankment.



Choosing this option:

- Generated a cost saving
- Removed 6,000 wagon journeys from local roads
- Reduced carbon emissions by 98%
- Preserved natural resources
- Avoided using scarce landfill capacity

## Sustainability

Over 84% of construction materials by value are recycled or contain recycled elements.