

Case Study

Cycle Path Delineation

Cambridgeshire

Delineation of Cycle Route along the Cambridgeshire Guided Busway

Background

The Cambridgeshire Guided Busway (also known as the Cambridge-Huntingdon Rapid Transit Scheme) connects Cambridge, Huntingdon and St Ives and, at 25km, is the longest track of its kind in the world. The busway was opened in August 2011 as part of the Cambridge Gateway Project, designed to improve bus, cycle and pedestrian access in to Cambridge railway station by offering a viable alternative to the congested A14 road.

Running alongside the busway is a wide cycle path which connects St Ives with the north of Cambridge, and Cambridge Rail Station with Trumpington Park & Ride and Addenbrooke's Hospital. The cycle path can also be used by pedestrians and, in parts, as a bridleway.

Atkins, working as an agent for Cambridgeshire County Council during the design and construct period, recommended that the cycle path required some type of night time route delineation to help users to clearly see the path edges, both on the outside edge of the path and adjacent to the bus guidance tracks.

Given the rural nature of much of the route, there was a wish to avoid excessive reliance on overhead lighting which necessitates additional street furniture and contributes to light pollution. Also factored in to the decision was the potential cost of tunnelling and laying electric cables along the route.

Solution

Clearview Intelligence worked with Atkins and Cambridgeshire County Council to design a lighting solution that provided cyclists and pedestrians with a clear delineation between the cycle path and the busway tracks.

SolarLite Active Road Studs were recommended as they provide a lower level of illumination than overhead lights, so they have much less impact on light pollution and on nocturnal wildlife than traditional lighting.

In Spring 2013, Clearview Intelligence installed approximately 2,600 SolarLite Active Road Studs along the northern section of the busway from the Cambridge Science Park towards St Ives. The studs were installed at 20 metre intervals on either side of the path.

Importantly, SolarLite studs do not require any wiring, trenching, or electricity supply and there are no operational costs due to the sustainable energy harvesting power supply. There is no requirement for additional street furniture so the studs are less visibly and physically intrusive.

From a user perspective, the studs provide a consistent level of light, which gives cyclists and pedestrians a sense of security and safety throughout their journey.

Key Benefits ▼

- Clear delineation of the cycle path edges protects cyclists and other users from straying into the busway
- Value for money to the public purse due to low installation costs, and no ongoing operational or maintenance costs
- Provides a consistent, reliable source of light all year round without adversely impacting on local light pollution levels
- No trip hazard and safe for cyclists to ride over without damaging bike or losing balance