







CULLYBACKEY PROJECT CASE STUDY CULLYBACKEY AREA SIGNALLING AND LEVEL CROSSINGS RENEWAL PROJECT

Translink's mission is to lead the transformation of transport in Northern Ireland. Translink remain committed to an effective and successful public transport network, this is vital for the economic, social and environmental well-being of our society.

Translink's Cullybackey Area Signalling and Level Crossings Renewal Project involves significant upgrades and civil engineering works on the track and the platform of Cullybackey Train Station and the surrounding area.

This £31 million project represents a significant investment by Northern Ireland's Department for Infrastructure and Translink in this important strategic rail corridor between Belfast and Derry~Londonderry. This major rail refurbishment project is being carried out between Cullybackey and Ballymena and has three elements - the upgrading of three level crossings at Cullybackey which are coming to the end of their 30 year service life, a platform extension at Cullybackey Train Station to accommodate longer trains and 5.5 miles of cable replacement.

The project will deliver fit for purpose infrastructure, maintain safety standards and improve operational performance for users of the railway. The project is taking place in stages and there are a number of contractor compounds. The work is being carried out by on behalf of Translink by experienced contractors Babcock Rail.

THE CHALLENGE

Translink is committed to delivering high quality sustainable public transport across Northern Ireland and the company has pledged to reduce greenhouse gas (GHG) emissions by 2030 and achieve net zero emissions by 2050.

As the delivery partner on the Cullybackey Project, Babcock was very keen to reduce carbon output and use low carbon products throughout the works wherever possible. It was also crucial that all rental equipment supplied met the desired cost savings on the project.









0161 518 2816

www.sunbeltrentals.co.uk/case-studies



CULLYBACKEY PROJECT CASE STUDY CULLYBACKEY AREA SIGNALLING AND LEVEL CROSSINGS RENEWAL PROJECT

THE SOLUTION

Sunbelt Rentals was awarded the contract to supply the welfare and site accommodation required for the Cullybackey Area Signalling and Level Crossings Renewal Project, due to our ability to cost-effectively provide a number of greener products to help significantly reduce the carbon emissions on the project.

This has involved provision of welfare and site accommodation for a number of different sites on the project, such as Broughdone and Spence Crescent. We have supplied GP360 Eco-Fusion Mobile Welfare Units and the larger GPO660 Eco-Fusion Mobile Welfare Units to provide secure welfare and office space whilst delivering reduced fuel usage, increased generator efficiency and low noise pollution. These units have been able to reduce carbon emissions by up to 80% on these sites.

We have also supplied Solar Toilet Blocks which are powered by roof mounted solar panels during the day and incorporate features such as light sensors to reduce energy. Translink has emissions reduction targets for all of its fleets and facilities, and as part of this, the company is changing over to electric vehicles. To allow electric vehicles to be charged on site quickly and efficiently, we have supplied a number of Electric Vehicle (EV) Charging Points on each site.

In terms of power generation, we have provided a hybrid power solution incorporating Battery Storage Units (BSUs) which run alongside fuel powered generators. The generator charges the battery while simultaneously supplying power to site and is able to detect when power loads are low, such as overnight, turning off the generator and transferring the load to the battery, providing silent power. The two systems work together to ensure that when a higher demand is detected, the load transfers back to the main generator, allowing the battery bank to then recharge. The BSUs are also fully loaded with telemetry, allowing both Sunbelt Rentals and Babcock to monitor cost savings and performance.

This hybrid power solution has led to a number of benefits, such as major reductions in run hours and fuel consumed, fuel savings, fuel deliveries once every three weeks instead of every week, servicing of generators every 13+ weeks instead of every three weeks, noise reduction, use of remote technology instead of in-person site visits and reduction in the size of generators required from 100kVA to 40kVA Stage V.



We have also supplied the latest Stage V compliant Telehandlers for use on the project. These machines help improve the air quality, reduce carbon emissions, offer greater fuel efficiency and can be used with HVO fuel if desired.

Finally, in order to allow Babcock to continue work at nighttime, we have supplied a range of Tower Lights with powerful illumination, including Hybrid Tower Lights equipped with high efficiency LED floodlights powered by a rechargeable battery pack. They provide up to 8 hours of continuous use without carbon dioxide emissions, fuel consumption or noise, due to the battery pack.

Throughout the project, more than 700,000kg of CO2 emissions has been saved as a result of using our greener equipment. This means social value of c£170,000 has been created, as per the National TOMs.

Babcock have since added this technology to further projects and have seen a saving in excess of 1 million kilograms of carbon reduction over the duration. Overall this will equate to more than £250.000 of social value created.

This project is enhancing the network to attract more people to choose greener travel and protecting Northern Ireland's rail infrastructure for future generations to come.





0161 518 2816

www.sunbeltrentals.co.uk/case-studies

