



LECA® LWA SPECIFIED FOR THE CONTINUATION OF THE EDINBURGH TRAM DEVELOPMENT



Over 11,000m³ of LECA® LWA has been specified for the continuation of the existing Edinburgh Tram Network, which has been developed by the main contractor Sacyr Farrans Neopul (SFN) on behalf of the

City of Edinburgh Council. The project is due for completion in 2023.

The aim of the Tram development is to create a sustainable solution for clean, green and accessible public transport, significantly reducing the impact on air quality through the reduction in vehicle congestion, with a move towards a net zero carbon emission future for Edinburgh. In addition, it is expected to deliver significant social and economic benefit to the immediate area and to Edinburgh as a whole.

For this development, LECA® LWA was specified as a lightweight solution to provide a robust foundation support for the track bed between two existing retaining walls whilst not applying excessive pressure to the ground and adjacent retaining walls, it reaches up to 4m high over variable ground conditions, including loose sand and soft clay/ silt. The LECA® LWA has allowed the project to move forward whilst maintaining the existing structures previously installed by others and minimising the ground consolidation.

Based on a historical Tram Project in Murrayfield, where LECA® LWA was successfully applied to provide lightweight ground support. The specific compaction rates of LECA® LWA and the reduction in bearing pressure at base provided a key property for the specification of the material, with the design specification requiring a Type 1 fill to be placed over the LECA® LWA.

11,000m³ of LECA® LWA was delivered by ship directly into the Port of Leith in Edinburgh - helping to minimise the carbon footprint of delivery – reducing the number of trucks required to travel and deliver onto the project site in Edinburgh.

FACTS

Amount of material: 11,000m³ of [LECA®LWA \(10-20mm\)](#)

Interesting Fact: The specific compaction rates of LECA® LWA and the reduction in bearing pressure at base provided a key property for the specification of the material

Delivery Method: Walking Floor

Main Contractor: Sacyr Farrans Neopul (SFN) on behalf of the City of Edinburgh Council

Sacyr Farrans Neopul Feedback

Sacyr Farrans Neopul, Neil Fullerton, Construction Manager, said “Through past relationships and projects, it was a clear advantage to engage and collaborate again with LECA UK when faced with the groundworks design challenge on the project. The need to maintain the use of the existing retaining walls and minimise any further ground consolidation was critical to delivering this area of the track without causing any undue effect on the walls. The need for the supply of the key product on programme was vital to SFN as these works were on the critical path, it was then delivered on time efficiently via ship to the quayside only a few meters from the worksite.”



LECA UK Technical Sales Manager said “We are delighted to have been specified for this continuation of the Edinburgh Tram development and working with the contractors Sacyr Farrans Neopul Construction team. We are pleased to see that the unique properties of LECA® LWA have been a decisive factor by the designers in being specified for this significant project.”

“We have worked with Farrans Construction on many geotechnical projects in the past including bridge, highways and rail developments - so it has been a pleasure for LECA® LWA once again to be considered as a groundwork solution and to engage with a fantastic team on this development. The fact that this project aims to reduce the carbon emissions in the city centre, is something that as a Saint-Gobain company, we truly value in terms of a sustainable future. We hope the residents of Edinburgh enjoy this historical development for many years to come and the sustainable benefits are embraced for the future.”