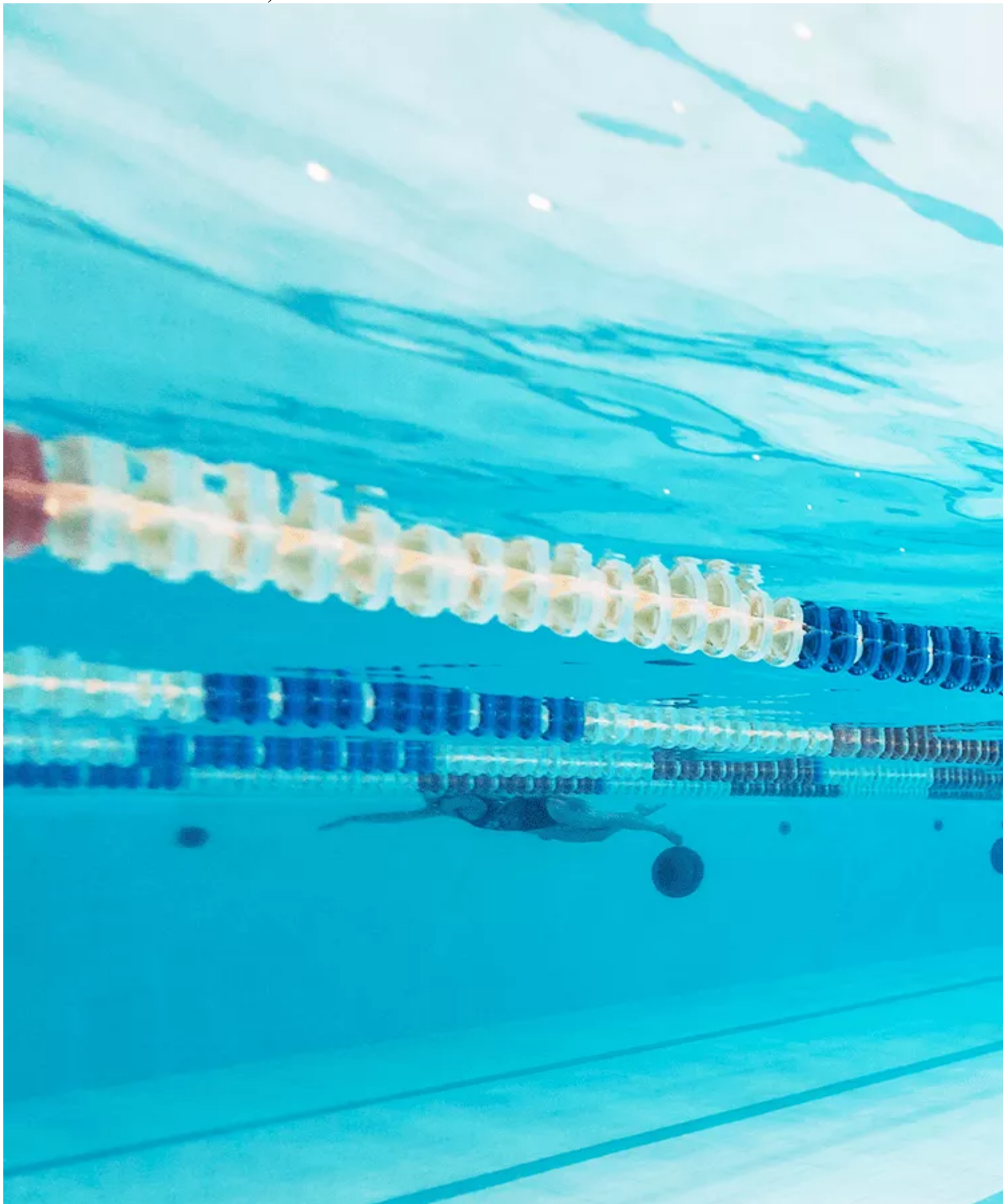




SANDS LEISURE CENTRE, CARLISLE



Leca LWA was specified for the Sands Leisure Centre swimming pool in Carlisle.

This forms part of the Sands Leisure Centre development costing £27 million for redevelopments in partnership with Carlisle City Council. The new centre includes a new gym facility for the local residents and includes a new 8 lane, 25m swimming pool. The four-lane 20m pool offers a moveable floor which is home to the Better Swim School and hosts the popular Water Workout fitness classes

Over 700m³ was pneumatically delivered to fill the voids around the perimeter of the new swimming pool. Due to limited access of the facility, a solution was required to fill in the voids around the swimming pool and Leca LWA was specified to allow for a piping system reaching up to 50m to deliver the aggregate fill.

MGL Group Site Manager, Gordon France explains *“The project was an extension to the existing sands leisure centre in Carlisle which was to comprise of 2 new swimming pools as well as a multi-purpose indoor sports pitch.”*

FACTS

Material: [700m³ of Leca LWA \(10-20mm\)](#)

Interesting Fact: Leca LWA saved potentially 10+ days on programme plans and had the increased benefit on enhancing the thermal values of the pool tank

Delivery Method: Pneumatic Delivery

Main Contractor: MGL Group

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Overview of Project

MGL Group Site Manager, Gordon France goes on to explain, why Leca LWA was specified for this project, *“Leca was selected for this project primarily due to its delivery method on a very restricted area of the project which was to fill the exterior of the pool walls, this saved potentially 10+ days on programme and had the increased benefit on enhancing the thermal values of the pool tank.”*

The material was conveniently stockpiled in a near carpark which allowed for quick re-filling of the pneumatic delivery vehicle. This speeded up the process of delivery and provided a cost saving solution for the new development.

Through specifying Leca LWA - engineering issues could be overcome which would have been found with type 1 fill material and GSB type fill. This includes reducing the weight acting on the rear of the structure by at least 75%, in comparison to traditional fill materials. This reduction in weight can avoid potential sliding, overturning, slip and tilting or bearing failures.

The MGL team had no previous experience of using Leca but found that the delivery of the material through the unique pneumatic delivery facility to be a cost saving option, MGL Group Site Manager, Gordon France goes to explain “The volume delivered to the work face via the hosed delivery method over the 3 days was circa 700m³ with 50% of the labour requirements compared to if we had used GSB type fill.”

Leca LWA has been applied for many swimming pools throughout the UK, due to its unique pneumatic delivery facility and its natural properties as a lightweight aggregate fill material and this was the case for the Sands Swimming Pool development where Leca LWA was a “...Light weight material which was manageable to level and compact with the structural properties to take loading of a 150mm thick concrete floor slab.” explains MGL Group Site Manager, Gordon France explains”

The project was successfully completed and the MGL team were satisfied with the speed of delivery and technical properties of Leca LWA. MGL Group Site Manager, Gordon France concludes “On the right project I would not hesitate to consider using Leca whether it was structural, loading requirements due to its lightweight properties or as a need to improve programme and bring forward the overall completion date of the project.”

