

Case Study

School of Public Health, Imperial College London

SDS stormwater attenuation system protects landmark academic building from risk of flooding



SDS Systems

SDS GEOLight® Stormwater Attenuation Tanks.

SDS Customer

PJ Careys Civil Engineering.

Client

GRAHAM Group.

Project

School of Public Health, Imperial College White City Campus, West London.

Purpose

Imperial College London is developing this new building as part of its major expansion into White City, a new, multi-disciplinary innovation district. The university has outgrown its historic South Kensington campus and needs space to continue expanding world-leading research in science, engineering, medicine and business.

Brief to SDS

To deliver below-ground stormwater attenuation that will protect a constrained West London urban site from surface water flooding, safeguard ongoing construction and future campus operations at Imperial College London's White City Campus, and support the wider vision for a robust, viable and interconnected academic environment.

Timing

Installation was completed Winter 2025.

Project Background Information

Imperial College London is expanding into West London with the White City Campus, transforming a former industrial area into a vibrant hub for health, science and technology research. Since the first buildings opened in 2015, the campus has grown into a thriving community of scientists, clinicians and pioneering companies working together to translate groundbreaking ideas into real-world impact. The new School of Public Health building is one of the first landmark developments on the campus, providing 58,000 sq ft of state-of-the-art research and

teaching space across nine storeys. It forms part of Imperial's wider commitment to increasing its academic presence at White City and strengthening its role as a centre of STEMB 'Science, Technology, Engineering, Medicine and Business' excellence.

Project Objectives

The key objective of the stormwater attenuation system is to prevent flooding in the area of the new School of Public Health building by providing high-volume stormwater storage and ensuring that surface water runoff from the building and surrounding hardstanding areas is properly managed.

Project Requirements

The attenuation system had to fit within a constrained urban site and operate effectively within a multi-phase, live construction environment. It also needed to support Imperial College London's long-term objectives while meeting Hammersmith & Fulham Council's planning and adoption requirements.

While the College's wider vision focuses on creating an interconnected campus that fosters collaboration and innovation, the attenuation system forms a fundamental component of the site's infrastructure. Its role is to ensure stormwater is managed safely and responsibly, supporting the long-term resilience and minimising the ecological impact of the new development.

SDS Product Features

SDS supplied and installed three modular GEOLight® stormwater attenuation tanks, providing a total storage capacity of 651m³. The tanks are manufactured from recycled plastic, offering both high structural performance and environmental benefits. Their modular design allowed for rapid on-site assembly and precise configuration within the available footprint at White City. The system controls the release of stormwater into the drainage network, reducing flood risk while supporting

the regenerative and durability objectives of the School of Public Health building.

Issues Overcome

Installation took place within a live, multi-contractor environment in one of London's busiest regeneration zones. The constrained site and phased construction programme required close coordination with Careys Civil Engineering, who were delivering the groundworks for GRAHAM Group. While Careys managed the sequencing of excavation, base preparation and associated structural works, SDS undertook the installation of the attenuation tanks, working in parallel with other critical groundworks activities.

SDS delivered the installation safely and efficiently, integrating the system within a complex site layout and ensuring full compliance with the required specifications. Throughout the process, SDS supported Careys Civil Engineering to align installation with the wider programme and maintain continuity across the multi-phase construction sequence. The dense urban setting, surrounded by active development plots and future campus connection points, added further logistical challenges, requiring careful planning to position and complete the attenuation system without impacting the landscape strategy or the long-term infrastructure design for the campus.

Results

The SDS GEOLight® attenuation system ensures safe management of stormwater runoff from the building and surrounding areas. The system meets planning and sustainability requirements, mitigates flood risk, and supports the long-term resilience of the School of Public Health. By delivering a reliable and environmentally responsible solution, SDS has enabled the successful construction of a world-class research and teaching facility that aligns with Imperial College London's vision for the White City Campus.

Michael O'Shea, Contracts Manager, Careys Civil Engineering, said: "SDS provided an excellent service on the Imperial College White City project. Their GEOLight® system was delivered on time and installed seamlessly, contributing to the overall success of the scheme. Throughout the project, the SDS team was proactive, responsive, and a pleasure to work with. This collaborative approach contributed towards Careys being shortlisted for the BCIA Award for Team Excellence on this project. We look forward to working with SDS again on future projects."

