

CASE STUDY

SDS

Water
Infrastructure
Systems

Volkswagen Group UK Financial Services

SuDS underpin high quality sustainable office development



→ SDS SYSTEMS

SDS GEOLight® Attenuation Tanks, Flow Controls, Drainage and Permeable Paving.

→ CLIENT

VINCI Construction UK.

→ END CUSTOMER

Volkswagen Financial Services (UK) Limited.

→ PROJECT

New Headquarters.

→ PURPOSE

To provide long term premises for VW Group Financial Services in close proximity to the UK offices of the Group's automotive brands.

→ BRIEF TO SDS

To deliver best-in-class Sustainable Urban Drainage Systems (SuDS).

→ TIMING

Construction of the building commenced in 2013. The offices were opened to employees on 5 January 2015 and officially opened by Business Secretary, Vince Cable, on 11 March.

→ PROJECT BACKGROUND INFORMATION

One in every five new cars sold in the UK is manufactured by Volkswagen Group, comprising the VW (passenger and commercial), Audi, Seat, Skoda, Porsche, Bentley and Lamborghini brands.

Volkswagen Financial Services (UK) is a major employer in the area; the new offices are anticipated to accommodate an additional 340 employees by 2018.

The 4-storey building, which has been short-listed for a BCO (British Council for Offices) Award, is constructed to BREEAM Grade A 'Excellent' standard and is equipped with 82 roof mounted solar panels, producing 40,000kW per year, and multiple charge points for use with electric vehicles. Inside, the building provides 100,000ft² of office space, spread across 4 floors, along with a staff restaurant, coffee shop and conference centre, whilst, outside, the staff car park and bicycle storage facility are supplemented by green space designed to complement the style of the building.

→ PROJECT OBJECTIVES

To combine two pre-existing, totally separate offices into a single new, purpose-designed and high specification building, with sufficient space available to meet planned growth for the next 20 years.

→ PROJECT REQUIREMENTS

The development is intended to be a landmark building in the city of Milton Keynes, providing a physical representation of the VW Group brand that is manifested in the building's exterior and interior design.

→ SURFACE WATER SYSTEM REQUIREMENTS

The SuDS system is required to handle surface water from a 1 in 100 year storm with an additional allowance of 30% for climate change. This ensures that the site will remain free of flooding from prolonged, extensive rainfall which is anticipated to become more frequent and intense in line with climate change.

→ SDS PRODUCT FEATURES

SDS was engaged to supply every aspect of the drainage system (with the sole exception of the manholes).

2 SDS GEOLight® tanks have been installed, supported by Channel Drainage and 9 Vortex Flow Controls, and over 2,500m² of Permeable Block Paving.

SDS embraced the invitation to design a surface water drainage system that would complement the client's requirements for a high quality sustainable development.

→ CAPACITY

The combined capacity of the SDS GEOLight® tanks is 175m³.

→ ISSUES OVERCOME

SDS was able to deliver substantial cost savings through value engineering the design of this installation.

"Having reviewed our requirements, SDS took the initiative to design and value engineer a bespoke system, enabling us to pass on significant savings to our client. Their innovative design involved several stages of surface water treatment and was crucial to securing planning approval from the Council and the Environment Agency."

SEAN O'CONNOR, SITE MANAGER, VINCI CONSTRUCTION



Photographs kindly supplied by Volkswagen Financial Services (UK) Limited, pHp Architects, Evolve Engineering.