

## Case Study

### Deltagen UK, Bason Bridge, Somerset

SDS delivers integrated attenuation and high-specification water recycling for next-generation food manufacturing plant



#### SDS Systems

SDS GEOLight® attenuation tank;  
SDS Weholite attenuation tank;  
SDS Aqua-Swirl® hydrodynamic vortex separator;  
SDS Intellistorm® smart rainwater recovery system;  
SDS SYMBiotic™ smart water management platform.

#### SDS Customer

Deltagen UK.

#### Client

Atura Proteins.

#### Project

Deltagen UK advanced plant-protein production facility expansion.

#### Purpose

To further develop Deltagen UK's advanced production facility as part of Atura Proteins' wider investment in next-generation, plant-based protein manufacturing.

#### Brief to SDS

To design and deliver a rainwater treatment, harvesting and attenuation solution capable of preventing surface water flooding and supplying recycled water to a reverse osmosis treatment system.

#### Timing

The complete solution was commissioned in early 2026.

#### Project Background Information

Deltagen UK forms part of Atura Proteins' investment in next-generation plant-based protein manufacturing. Located at Bason Bridge in Somerset, the facility produces functional plant-origin proteins derived from chickpeas, lentils and fava beans for use in large-scale food production supply chains.

The manufacturing process requires a reliable and consistent water supply for extracting proteins from plant-based raw materials, separating protein fractions from starches and fibres, and cleaning processing equipment and production areas to maintain food-grade hygiene standards. As production capacity has increased, so too has water demand, placing greater emphasis on sustainable sourcing and discharge compliance.

## Project Objectives

The primary objective was to prevent on-site flooding and manage discharge rates in accordance with planning and environmental requirements. Further objectives included reducing the plant's reliance on potable mains supply, improving overall water efficiency and supporting the facility's wider environmental goals.

## Project Requirements

The adopted solution was required to incorporate below-ground attenuation sized for peak storm events while also functioning as secure storage for harvested rainwater from the plant's roof. Effective upstream pre-treatment was essential to remove sediments, hydrocarbons and floatable debris that could compromise downstream treatment processes. Stored water was primarily intended for non-potable uses, mainly site cleaning and operational washdown activities, with controlled reuse supported by system monitoring.

The infrastructure also needed to be configured within a constrained site footprint, requiring careful optimisation of layout and component placement to ensure efficient use of available space while maintaining operational accessibility for inspection and maintenance.

## SDS Product Features

SDS designed and supplied an integrated solution combining GEOLight® and Weholite attenuation tanks with Aqua-Swirl® hydrodynamic vortex separation and Intellistorm® smart monitoring connected through the SYMBiotIC™ platform. SDS Aqua-Swirl® provides pre-treatment of runoff before it enters the storage tanks; this protects both the storage infrastructure and downstream systems from excessive contaminant loading.

GEOLight® geocellular tanks were installed to provide efficient shallow attenuation within the available development footprint, maximising storage capacity within limited surface area.

Weholite HDPE pipe-based tanks were selected primarily to support system layout efficiency and internal access requirements, including provision

for inspection, maintenance, and integration of Intellistorm® components within a tightly controlled internal configuration. This approach ensured all monitoring and control equipment could be safely accommodated within the storage environment while maintaining serviceability.

Stored rainwater is supplied for reuse within the facility for cleaning and washdown purposes. A reverse osmosis system, designed and built by Siren Water Treatment, was delivered as part of a fully integrated package solution coordinated through SDS. This system provides final treatment where required to support non-potable reuse applications.

SDS Intellistorm® continuously monitors and manages stored water levels, communicating real-time data via the SYMBiotIC™ platform to provide operators with visibility of available volumes and system performance.

## Issues Overcome

The primary design constraint was the limited available footprint within the development boundary, which required optimisation of tank configuration and system layout. SDS addressed this through a combination of modular GEOLight® attenuation units and strategically positioned Weholite tanks, ensuring maximum storage efficiency while maintaining access for maintenance and system integration.

The requirement to integrate monitoring and control equipment within the storage system also influenced the design approach, with internal configuration carefully planned to accommodate Intellistorm® components without compromising operational access or hydraulic performance.

## Results

SDS has delivered a system that manages surface water runoff, supports controlled rainwater reuse for operational cleaning activities, and enables efficient use of available site space. The integrated attenuation, pre-treatment and smart monitoring solution ensures reliable system performance, supports sustainable water management practices, and reduces reliance on mains water for non-potable uses within the facility.

**Sam Burgess, Water Reuse Manager, SDS Infrastructure, said:** *"This project highlights how sustainable water management can be embedded within high-performance manufacturing environments without compromising operational standards. By integrating attenuation, pre-treatment and intelligent monitoring and control, we've supported a facility that requires both resilience and precision in its water strategy. It demonstrates how rainwater reuse can reduce mains demand while also protecting critical infrastructure from the threat of flooding."*

