



Customer Aviagen Turkeys

Location Llay Wrexham

Value £35k

Contract NEC Option 3

Project Duration 4 weeks

Completion August 2020

Project Highlights

Aviagen Turkeys required a sustainable management system for excess process water produced at one of their sites in Llay, Wrexham.

The project was designed to manage the excess dirty water, while protecting adjacent catchments from runoff. The nature of the design also provided ecological improvements in the area.

The Solution; to construct a series of Reedbeds and Willow Corpses to manage the site generated run-off inline with current SuDS requirements.

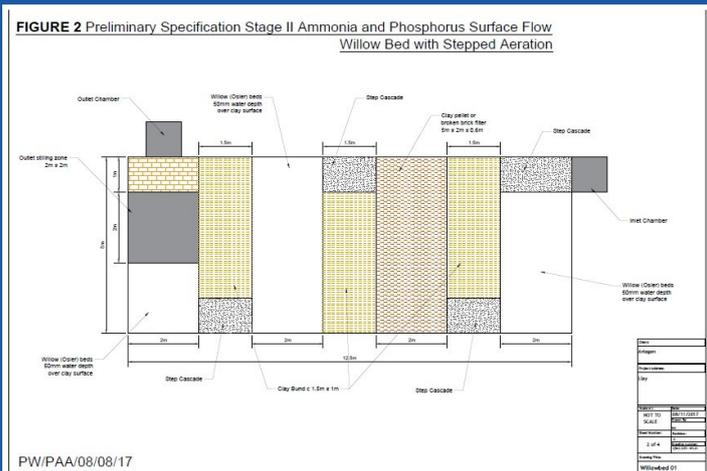
Knights Construction acting as Principal Contractor worked closely with the Consultant Ecologists to deliver a successful project for both the client and the environment.





The Solution

The treatment required two phases. The first was the construction of a gravel filled reedbed system. This was constructed with a series of gravel filled cells divided by stone filled Gabion Baskets and open channels. The Reedbeds were fed via inlet distribution chambers with aeration cascades. The gravel was subsequently planted with 6 reed plugs per m².



Phase two involved the creation of the Willow treatment beds which comprised of a soil based system where flows are directed by the construction of clay bunds and channels. The design ensures the water cascades through a series of Willow beds and filler medium. The installation of impermeable clay substrate prevents the water leaving the process.



The process was complimented by the construction of underground storage tanks at the beginning of the process where the dirty process water was collected, and outlet chambers and distribution of the treated water at the conclusion of the treatment.

The results provided a robust and reliable system of water management for the Client and had the added benefit of creating ecological improvements to the area, through the creation of Reed and Willow habitats.