

Silverstone Business Park, Northamptonshire

Case Study



BACKGROUND

With its main entrance right opposite the famous Silverstone Circuit, the developers of Silverstone Park designed the facility to attract engineering firms and high-tech companies to the area. Comprising a total of four industrial buildings with 12 individual office and warehouse units, contractors Readie Construction were tasked with finding an efficient and compliant stormwater management system – one that would provide long-term protection against flooding, whilst complying with strict water runoff requirements of just nine litres per second set out by the council.

SOLUTION

Having previously worked together on a number of projects, Readie Construction approached GRAF UK for a reliable, futureproof solution that would comply with the council's runoff requirements. The GRAF UK team specified, designed and installed a bespoke 945m3 EcoBloc Inspect Flex system, comprising five tanks made of around 4,458 heavyduty crates. In line with DEFRA and Environment Agency guidelines (outlined in the 'Rainfall runoff management for developments' document), the system was also built with enough capacity to resist the kind of extreme storm only likely to appear once in a 100-year period, with an additional 20% contingency buffer for climate change on top of this.

RESULTS

The EcoBloc Flex modules used at the Silverstone Business Park have a lorrybearing capacity of 60 tonnes with an 800 mm (2' 7.5") earth covering, making them the obvious choice for the site, which will see a continuous influx of lorries coming in and out of the warehouses. As the tanks' outlet and inlet are at the same level, the team was able to install the crates at a very shallow depth of just 1.78 metres (with a 1,100 millimetre earth covering) - considerably reducing the amount of excavation work required, whilst maintaining durability for heavy traffic overhead. This also allowed for extra storage space, as water could back up into the pipework where needed.

"It was handy to work with a local company based just 10 miles down the road from Silverstone. As GRAF UK was able to get on site quickly, it meant we could stagger the install. We were responsible for all the preliminary excavation work to prepare the ground for the tanks, and the GRAF UK team came in to install the water management system. They were absolutely first-class, and as a site manager, I couldn't have asked for more!" Matthew Mayfield, Site Manager at Readie Construction