Silverton Mill, Exeter

D S Smith

£4.5m

3 years

Project Overview

As Principal Contractor we were to demolish and remediate a former paper mill that straddled a major river (River Culm) in Devon. The mill had heavy industrial usage dating back to the 1800's with a significant pollution legacy in the form of heavy and light hydrocarbons and asbestos in the soils.

The initial design problem, was how to remediate the contaminated ground either side and beneath an existing culvert, which had a substantially active water flow and a very rapid flood response during heavy rainfall.

Somerset

Exeter

Dorset

Cornwall

Exeter

Demolition and removal of above and below ground structures followed by excavation, this included the controlled explosive demolition of the water tower. Pre-treatment and disposal of waste construction materials, soils and sediments.

Excavated and treated materials were stockpiled and underwent a management process, allowing testing, categorisation and segregation without mixing wastes and materials, enabling re-use. The work was carried out under a CL:AIRE code of practice Materials Management Plan.

Active stakeholder engagement including client, regulators, third parties and the freeholder.

Construction of a groundwater base flow alleviation system, using site won materials, to prevent erosion of the new south river bank.

Construction of the new river channel post-remediation, including groundwater base flow alleviation system, rock armour flow protection and restoration of grassed embankments.

Challenges

We designed and constructed a river diversion, which was later reinstated (see separate River Diversion Case Study) allowing remediation of the ground around the culvert.

Achievements

Full Principal contractor role with management of all aspects of the works.

All wildlife was protected and relocated whilst works were carried out.

Clearance of all contamination, waste materials and structures through remediation techniques allowing for soils to be cleansed, reused and the site readied for the full river works to commence.