

Case Study Number:	Case Study 1
Title:	Kingsbridge Trunk Sewer Desilting Project
Client:	Dŵr Cymru Welsh Water
Location of Services:	Kingsbridge, Swansea, SA4 6PT 
Contract Value:	£310,000
Contract Dates:	July – September 2026
Scope of Services:	● Access Enablement Works ● CCTV Support ● Remote Reel Jetting ● Recycler Jetting Operations ● Large Diameter Sewer Desilting ● Silt and Debris Removal ● Site Access Management ● Vehicle Movement Control ● Environmental Protection Measures

Introduction

Drainforce were tasked by Dŵr Cymru Welsh Water to undertake extensive desilting operations on a large diameter public sewer under SAP Reference 97534974 at Kingsbridge, Swansea. The sewer was heavily impacted by accumulated silt and debris which had significantly reduced the operational capacity of the asset and required specialist intervention

Before works commenced, detailed planning was undertaken to establish safe access to the location. The site was situated within environmentally sensitive ground and required the construction of temporary access routes using bog mats to allow specialist plant and equipment to safely reach the working area. Dedicated exclusion zones, vehicle control measures and pedestrian routes were established before operational activity commenced

Drainforce mobilised specialist CCTV and jetting crews to investigate and clean the sewer network. Using remote reel technology, operatives initially jetted approximately 200 metres of sewer before connecting directly to the recycler unit and extending the cleaning operation further into the network. Multiple cleansing passes were required to break down the extensive accumulation of silt that had built up within the system.

Over several visits, Drainforce crews repeatedly dragged jetting hoses through approximately 600 metres of sewer, removing substantial quantities of silt and debris. During the final phase of works, approximately Thirty tonnes of material were removed from the network, restoring hydraulic performance and improving the operational condition of the asset.

The works were completed successfully, all chambers were reinstated, and the site was left in a safe and operational condition following each attendance





Photo of Bog Matt road

Aerial photo of recycler set up in road



Crane mobilisation



Health & Safety

Drainforce produced and delivered a project-specific Toolbox Talk covering site access controls, slips, trips and falls, vehicle movements, restricted working areas and exclusion zones. All operatives were required to always remain within designated barriered areas.

Due to the temporary bog mat roadway and uneven ground conditions, all vehicle movements were controlled by trained banksmen. Daily inspections of access routes, working areas and temporary barriers were completed throughout the project to ensure risks remained controlled.

Dynamic risk assessments were completed throughout the project, and all works were undertaken in accordance with Drainforce and Welsh Water safety procedures. The project was completed with zero reportable incidents.

Staff Competence

Street Works Qualified Personnel
Confined Space Trained Operatives
Dynamic Risk Assessment Competence
First Aid Trained Personnel
Water Jetting Association Accredited Operatives
Associated Training on Equipment (Prokasro, Whale)
Asbestos Awareness Training
Manual Handling Training
OS19X and 21X Technicians
Specialist Recycler and Jetting Equipment Operators

All works were carried out by directly employed Drainforce personnel

Quality Assurance

Drainforce are ISO 9001 and ISO 14001 certified. We continuously monitor and improve our quality of services through robust quality assurance procedures, operational reviews and client feedback. Daily operational records and Welsh Water response forms were completed and submitted throughout the duration of the works, ensuring full visibility of progress, findings and outcome

Collaborative Working

Drainforce worked closely with Dŵr Cymru Welsh Water operational teams, CCTV crews and sewer cleansing personnel to identify blockage locations, assess the extent of silt accumulation and develop a phased cleansing strategy. Regular communication was maintained throughout the project, ensuring all parties remained informed regarding progress, site conditions and future requirements. Daily updates and feedback forms were provided to support collaborative delivery of the works

Plant and Equipment

Drainforce deployed specialist equipment including:

- Kaiser Recycler Combination Unit
- Remote Reel Jetting System
- CCTV Inspection Equipment
- Temporary Bog Mat Access Road
- Vehicle Movement Management Systems
- Crane Assisted Site Mobilisation
- Specialist Access Equipment

The project demonstrated Drainforce's ability to deploy specialist plant and equipment in challenging environments where standard access arrangements would not have been suitable

Value for Money

By utilising specialist recycler technology and experienced operational teams, Drainforce were able to maximise cleansing efficiency whilst minimising environmental impact and disruption. The successful removal of silt restored sewer capacity and reduced the likelihood of future operational issues. Through effective planning, specialist access solutions and experienced personnel, Drainforce delivered a cost-effective solution that provided long-term value to Welsh Water
