

SYLWRAP Case Study

Protection of Gas Pipe Network in River System

SGN and Sylmasta devise a protection programme for underwater gas pipes laid in riverbeds throughout Scotland left exposed by scour and erosion



Contractors from SGN entered the river to wrap the gas pipe exposed by scour with SylWrap HD



SylWrap HD was wrapped along the length of pipe whilst it remained submerged underwater



Six layers were applied and smoothed off, curing to form a rock hard, 6mm thick shell around the pipe



The completed repair left the exposed gas pipe fully protected - and soon began attracting the attention of some intrigued fish

Defect

Large sections of the gas pipe network in Scotland run through river and stream beds. Whilst well buried during installation, these pipes can become exposed by scour washing away the gravel and sand riverbed.

With climate change increasing the number of flood events, leading to faster waterways and more scour, gas distributor SGN have seen a sharp rise in the number of their riverbed pipes becoming exposed.

This poses a serious challenge to the gas network as without the covering of the riverbed, pipes are at risk of being weakened and breached by impact damage.

Solution

SGN contacted Sylmasta looking for a protection method effective on any submerged pipe in any river. **SylWrap HD Pipe Repair Bandage** was put forward.

Before application on the gas network, SylWrap HD required several approvals from industry bodies. It also had to be passed as safe to use in waterways by the Scottish Environment Protection Agency.

Sylmasta flew to Scotland to assist with initial trial repairs in a shallow river. SGN contractors entered the water and wrapped SYL616HD Bandages in a six layer repair along entire lengths of multiple pipes.

Result

SylWrap HD easily cured underwater. Within minutes it set to form a rock hard, 6mm thick shell shielding the pipe against any future impact damage.

The trial showed SGN they could protect hundreds of kilometres of pipework at a rapid rate using SylWrap HD. They subsequently ordered over 500 SYL633HD Bandages to start the full programme immediately.