



Treorchy Flood Alleviation Scheme Phase 1

Flood Alleviation Scheme delivered to reduce the risk of ordinary watercourse and surface water flooding to 92 properties in the Treorchy area.

Scheme Summary	
Strategic Flood Risk Area	Upper Rhondda Fawr
Location	Cemetery Road, Treorchy
Properties benefiting	92 properties
Type of scheme	Culvert Inlet Improvements
Cost	£530,000
Contractor	Peter Simmons Construction
Status	Completed
Scheme Completion Date	2023
Funding Source	Welsh Government FCERM Capital Grant



Culvert improvements carried out as part of the Treorchy Flood Alleviation Scheme Phase 1

Scheme Background

Treorchy is noted as an area of high surface water and ordinary watercourse flood risk based on Natural Resources Wales's Flood Risk Assessment Wales (FRAW) maps and is identified as the **3rd most at risk community** for ordinary watercourse and surface water flooding in Wales according to the Communities at Risk Register (CaRR).

The Treorchy area has been subject to several flooding events in recent years. The most significant incident occurred on the 15th and 16th February 2020 following Storm Dennis, where 44 residential and 4 commercial properties were internally flooded with several other properties experiencing external flooding in the lower reaches of the town. The primary source of flooding to people and properties in this incident was attributed to the network of ordinary watercourses to the north of Treorchy. These are heavily culverted beneath Treorchy's urbanised area, with flooding primarily being sourced from culvert inlets and bank breaches.

Scheme Description

The area in which the works were commenced as part of the first phase of Treorchy flood alleviation scheme focus upon the network of ordinary watercourses to the East of Treorchy cemetery.

The flood alleviation scheme involved **improving the structural condition** of below ground culvert networks, improvements to the culvert inlets and associated ordinary watercourse channels within Treorchy, specifically the Nant Tyle Du watercourse. These improvements were aimed at **reducing the potential of structural failure** within the culvert networks in the short term whilst **improving the hydraulic efficiency** of the culvert inlets and channels.

The scheme also targeted works which included open channel improvements, as well as manhole and headwall upgrades along the Nant Tyle Du watercourse from Heol Tyle Du down to the Northern end of Column Street.

As part of the scheme, the Council installed three **CCTV monitoring stations** along the Nant Tyle-du watercourse and a water level warning systems at the Nant Tyle-du culvert inlet to provide the Council's maintenance teams with **advanced warnings of potential blockages**.

A second phase of flood alleviation works in Treorchy is currently ongoing which looks to further reduce the risk of flooding in the community. You can learn more about the second phase on our ongoing scheme webpages.

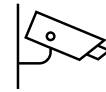
Scheme Benefits



Reduced flood risk to **92 properties**



Alarm warning system installed at key points along the Nant Tyle DU watercourse



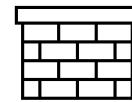
CCTV monitoring of inlets along the Nant Tyle Du watercourse



Improved debris control measures installed to reduce risk of blockage from debris.



Improved maintenance access for future works along the watercourse



Improved long term resilience of culverted infrastructure and downstream community