



Heath Terrace Ynyshir Flood Alleviation Scheme

Flood Alleviation Scheme delivered to Heath Terrace in the Ynyshir area to reduce the risk of ordinary watercourse and surface water flooding to 30 properties.

Scheme Summary	
Strategic Flood Risk Area	Lower Rhondda Fach
Location	Heath Terrace, Ynyshir
Properties benefiting	30 residential properties
Type of scheme	Culvert Inlet Improvement
Cost	£234,096
Contractor	Hammonds Construction
Status	Completed
Scheme Completion Date	July 2022
Funding Source	Welsh Government FCERM Small-scale Schemes RCT Core Capital grant



Before (left) and After (right) of the Heath Terrace Ynyshir Flood Alleviation Scheme

Scheme Background

Heath Terrace in Ynyshir 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.

Analysis of historical flood incidents identify a total of 11 residential properties flooding across 3 storm events, although it is important to note historical records are limited and there may have been a greater number of incidents through the years.

On the 15 and 16th of February 2020, RCT was impacted by an extreme weather event which was designated by the Met Office as 'Storm Dennis'. The storm event resulted in internal flooding to 26 properties: including 24 residential properties and 2 non-residential properties. The primary source of flood risk in the area being associated to pluvial sources. The flood risk associated to the area is not considered part of a wider catchment issue, as the source of flooding has been identified relating to the hydraulic capacity and susceptibility of debris accumulation within the channel and inlet of the ordinary watercourse network.

The community of Ynyshir is also noted as the 55th most at risk community for ordinary watercourse and surface water flooding in Wales according to the Communities at Risk Register (CaRR) which was developed to provide an objective means of identifying risk and prioritising flood risk management activities at a Wales-wide, community level.

Scheme Description

The works at Heath Terrace, Ynyshir, **involved upgrading two existing culvert inlet** structures associated to the unnamed ordinary watercourse which runs down the hillside to the east of Heath Terrace towards the River Rhondda Fach. The upgrade works were facilitated to **increase the capacity** of the culverted watercourse infrastructure to **manage the flow of water** entering the system, in addition to **enhancing the infrastructures resilience** against flooding.

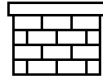
The scheme also involved replacing the existing natural channel with a concrete-lined channel **to reduce the rate of scour, decrease the amount of debris** accumulation in the watercourse, **improve the structural stability** of the channel banks and **improve resilience**.

Additionally, **telemetry monitoring devices** were installed at both culvert inlets at Heath Terrace, Enabling the Council to **monitor the inlet's condition** and provide **early detection of potential blockages** to infrastructure.

Scheme Benefits



Reduced flood risk to **30 properties**



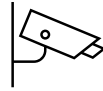
Improved the long-term resilience and structural stability of watercourse.



Improved scour protection in watercourse to reduce erosion within watercourse



Reduce risk from Debris blockage within the watercourse and at inlet.



Installation of CCTV to monitor watercourse inlet.



Early warning alarm system installed for Council maintenance purposes.