

## 5.6 Site 6: Cwm Colliery and Coking Works, Beddau

### 5.6.1 Site Description

The Cwm Colliery and Coking Works are situated in the upper reaches of the Nant Myddlyn catchment near the town of Beddau. The colliery opened in 1909 and during the 1970's employed over 1500 people. The coke works were opened in 1958 to centralise and maintain production of South Wales foundry coke. Cwm coal was well suited to the process as it had a low sulphur content but the colliery and coke works closed in November 1986 and June 2002, respectively.

The Nant Myddlyn, a tributary of the River Clun, flows through the site and is culverted for approximately three quarters of the length. The site has undergone some reclamation and as such is on a number of tiers. The south western corner is the lowest and therefore at the highest risk of flooding, while the eastern side of the site comprises of a large spoil tip upon which sit two large lagoons. In addition, there are also two large above ground settlement tanks in the south west of the site (Figure 5-24).

**Plate 5-12: Looking south across Cwm Colliery and Coking Works.**



### 5.6.2 Proposed Development

The aim of development would be to regenerate this brownfield site to provide benefits to the local community. It is proposed that development would be residential led mixed use scheme comprising of a small country park on the tip to the east, a new school to the south, a community building and employment development surrounding the listed cooling towers. It is proposed to de-culvert the watercourse and other associated streams and create public open spaces.

### 5.6.3 Flood History

There is no known history of flooding at the site although the Environment Agency have expressed concerns regarding the capacity of the B4295 Parish Road Bridge to the south of the site.

### 5.6.4 Fluvial Flood Risk

Approximately 12% (11 ha) of the site is identified as being within WAG's Flood Zone C2 (Figure 5-25) and the Environment Agency's Flood Zones 2 and 3 (Figure 5-26). However, there are areas within these flood zones that are culverted beneath the site.

As the current proposal is to de-culvert the watercourse the river channel and associated floodplain can be engineered to accommodate the extreme flood event. The Environment Agency are likely to require full details of such a scheme and under the Land Drainage Act 1991. Their prior written consent (Flood Defence Consent) will be required for any works affecting the flow of water within the Nant Myddlyn.

From a review of the Environment Agency hydraulic modelling of the catchment it has been concluded that the bridge beneath the B4596 can not convey the 1 in 100 year return period flood event. The flood risk outline produced from the hydraulic model (Figure 5-27) highlights that the water is held back up stream of the bridge, flooding the south-west corner of the site. It is estimated that flooding depths in this area will reach a level equivalent to that of the road before floodwater weirs across the road and re-enters the channel downstream.

If the culvert was removed then fluvial flow would need to be attenuated to a rate that could pass beneath the B4596 bridge thus not increasing third part flood risk in line with TAN15 policy. Similarly surface water discharge would need to be attenuated to ensure that flood risk was not increased.

### 5.6.5 Groundwater Flood Risk

No groundwater flooding issues have been highlighted at this site

### 5.6.6 Overland Flow

While the ground is composed predominately of spoil material backfilled and tipped during coal operations, the bedrock would have been overlain by glacial till (generally boulder clay). These give rise to gley soils that are predominantly poorly drained with limited capability for surface water infiltration.

### 5.6.7 Sewers

Due to its location towards the top of the catchment and due to its previous land usage it is not believed that sewerage infrastructure will exist on the site. However in the absence of data from DCWW, this should be clarified during the undertaking of a site specific FCA.

### 5.6.8 Artificial Sources

On top of the spoil tip to the east of the site are located two large lagoons covering an area of approximately 3 ha. Due to their location adjacent to and above the site they pose a flood risk to the site; however they discharge in an easterly direction towards Upper Church Village (Figure 5-24) and as such any water overtopping the lagoon should flow easterly away from the village. At a strategic level, detailed assessment of the risk from these lagoons is not within the scope of the report. These risks should be explored further and management systems designed accordingly, during the pre-planning surface water management scheme design phase.

### 5.6.9 TAN15 Constraints

Recognising that highly vulnerable development should not be permitted in zone C2, all other new development should only be permitted in zone C if it can be justified by the LPA. As part of this justification, the development should be proven to: be flood free in the 1% (plus climate change) flood event (A1.14, TAN15); have acceptable consequences of flooding in the extreme 0.1% flood event (A1.15, TAN15); and not cause flooding elsewhere (A1.12, TAN15).

However it is proposed that the watercourse be de-culverted as apart of the sites re-development and therefore the sites hydrological regime will be changed and can be altered to suit the development constraints and developer's needs. This can involve the creation of public open space and engineering the river channel to contain an extreme flood event.

### 5.6.10 Flood Risk Summary

Approximately 12% (11 ha) of the site is estimated as being within Flood Zones 2 and 3 as highlighted on the Environment Agency flood maps (Figure 5-26).

The current proposal includes de-culverting the watercourse and re-engineering the channel and associated floodplain to accommodate the 1 in 1000 year return period flood event. This may provide an area that forms open space within the wider site that allows the conveyance of flood flows. Those areas that lie outside of the re-engineered floodplain would be suitable for development.

During detailed design stage, a surface water management plan or site specific FCA would be required to demonstrate that if the culvert beneath the site was removed that fluvial flow would not adversely affect third party flood risk. There is likely to be the need to attenuate flows to that of the capacity of the B4295 bridge therefore managing the flood risk to the B4295 and land downstream. Similarly surface water discharges would need to be attenuated to ensure that third party flood risk was not increased.

Any changes in the existing watercourses will require Flood Defence Consent from the Environment Agency under the Land Drainage Act 1991, in addition to any planning permissions. Flood depth analysis was not possible as the Environment Agency hydraulic modelling does not extend up through the site.

In addition, flood risks associated with the sewer and groundwater are estimated to be low but should be further evaluated as a part of a site specific FCA.

**Table 5-6: Cwm Colliery and Coking Works Constraints Table**

Cwm Colliery and Coking Works	Area (Hectares)	Percentage of the Site
Total Area	92	100
Flood Zone C2	11	12
Total Flood Zone 3	9.5	9.5
Potential Highly Vulnerable Development	81*	88*
Potential Lower Vulnerability Development	82.5*	90.5*

*\* For the purpose of this report the "developable area" quoted is an approximation of the land that is identified outside the flood zones where policy will permit a development type. The actual area of developable land may be different from the figure quoted due to site specific constraints (such as minor water features or isolated areas of raised ground). However, precise developable land available for each site should be confirmed in a detailed FCA as mitigation measures may also increase this area.*

Figure 5-24: Cwm Colliery and Coking Works – Site Overview

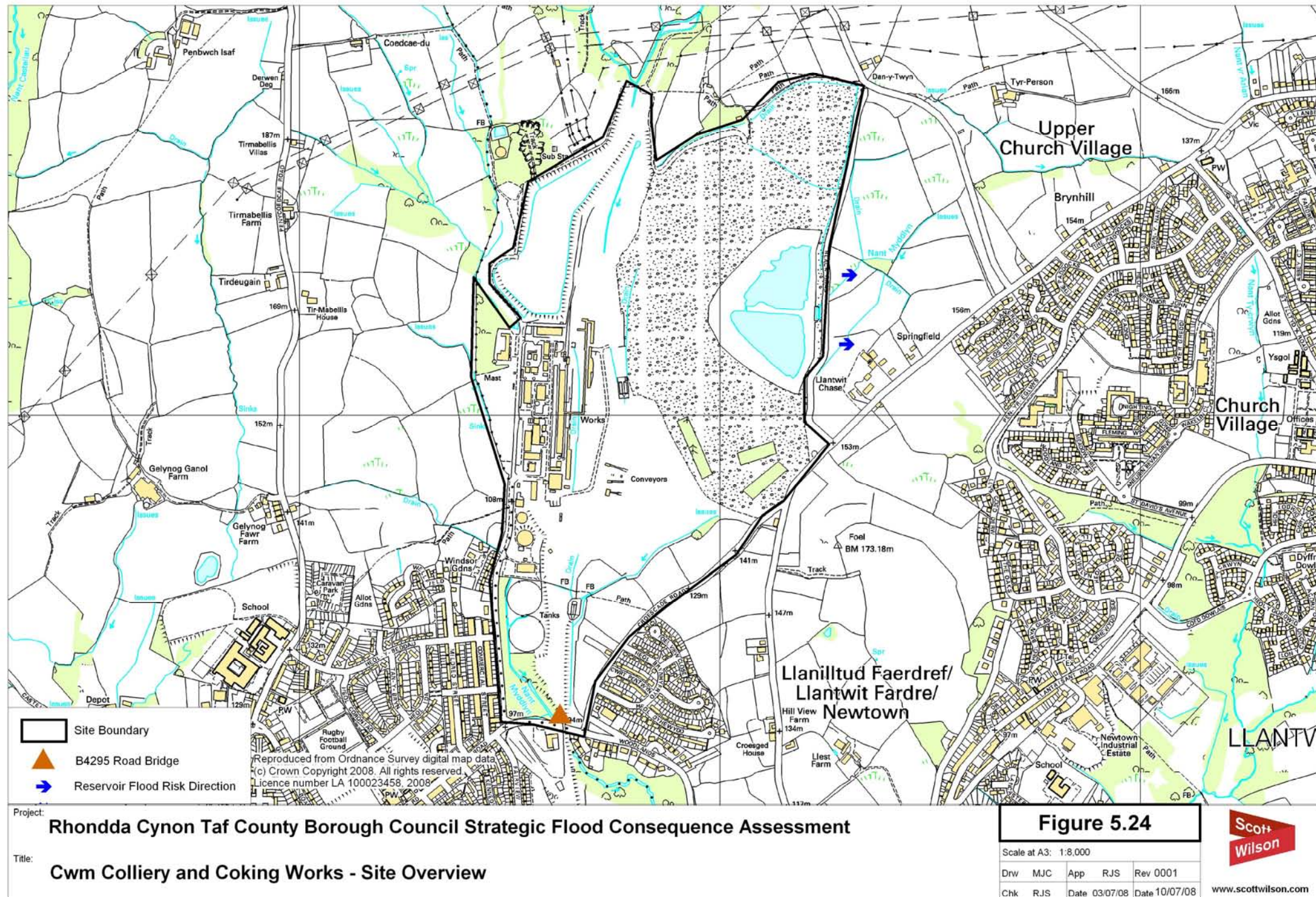


Figure 5-25: Cwm Colliery and Coking Works - WAG DAM

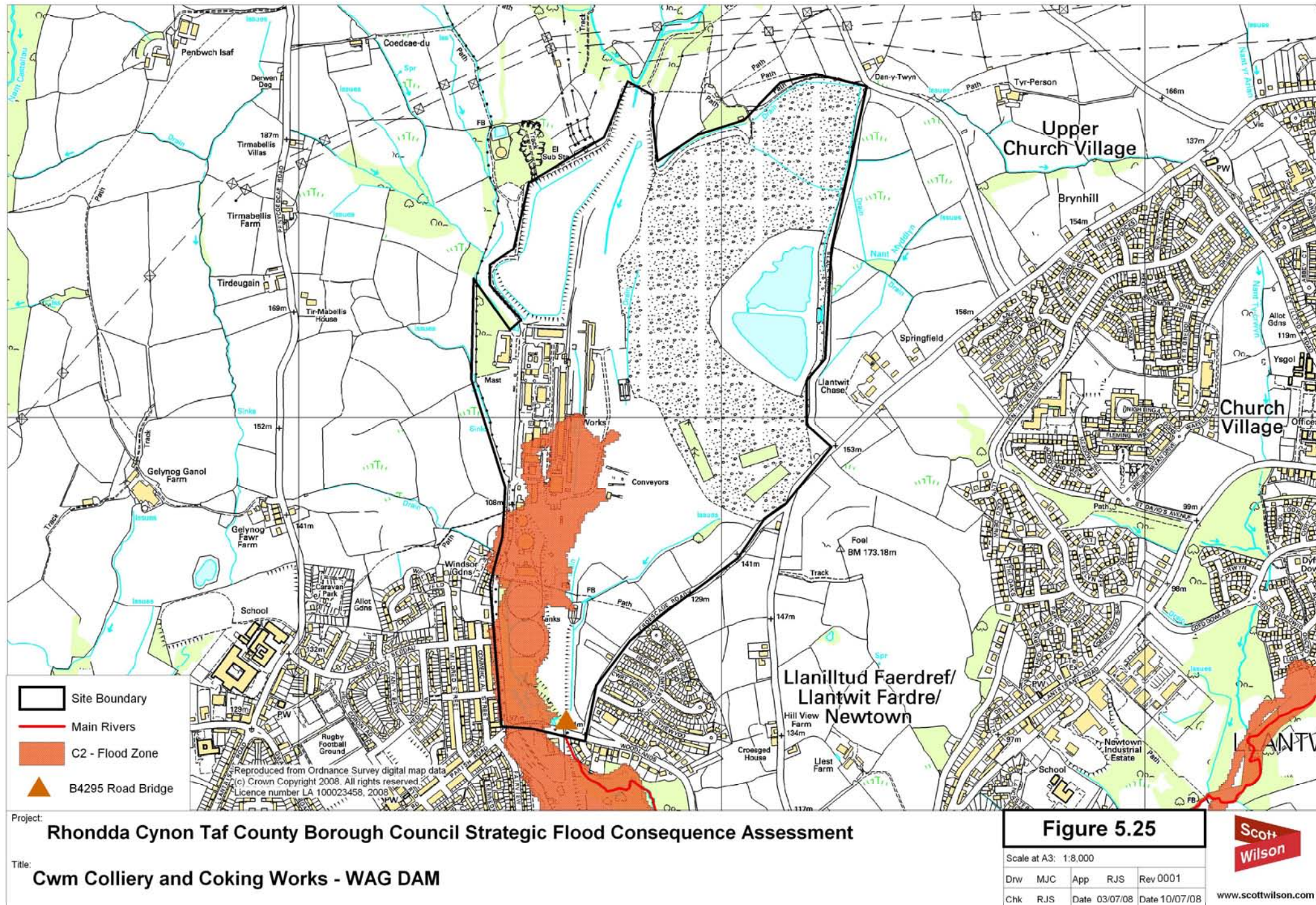


Figure 5-26: Cwm Colliery and Coking Works - the Environment Agency Flood Zones 2 and 3

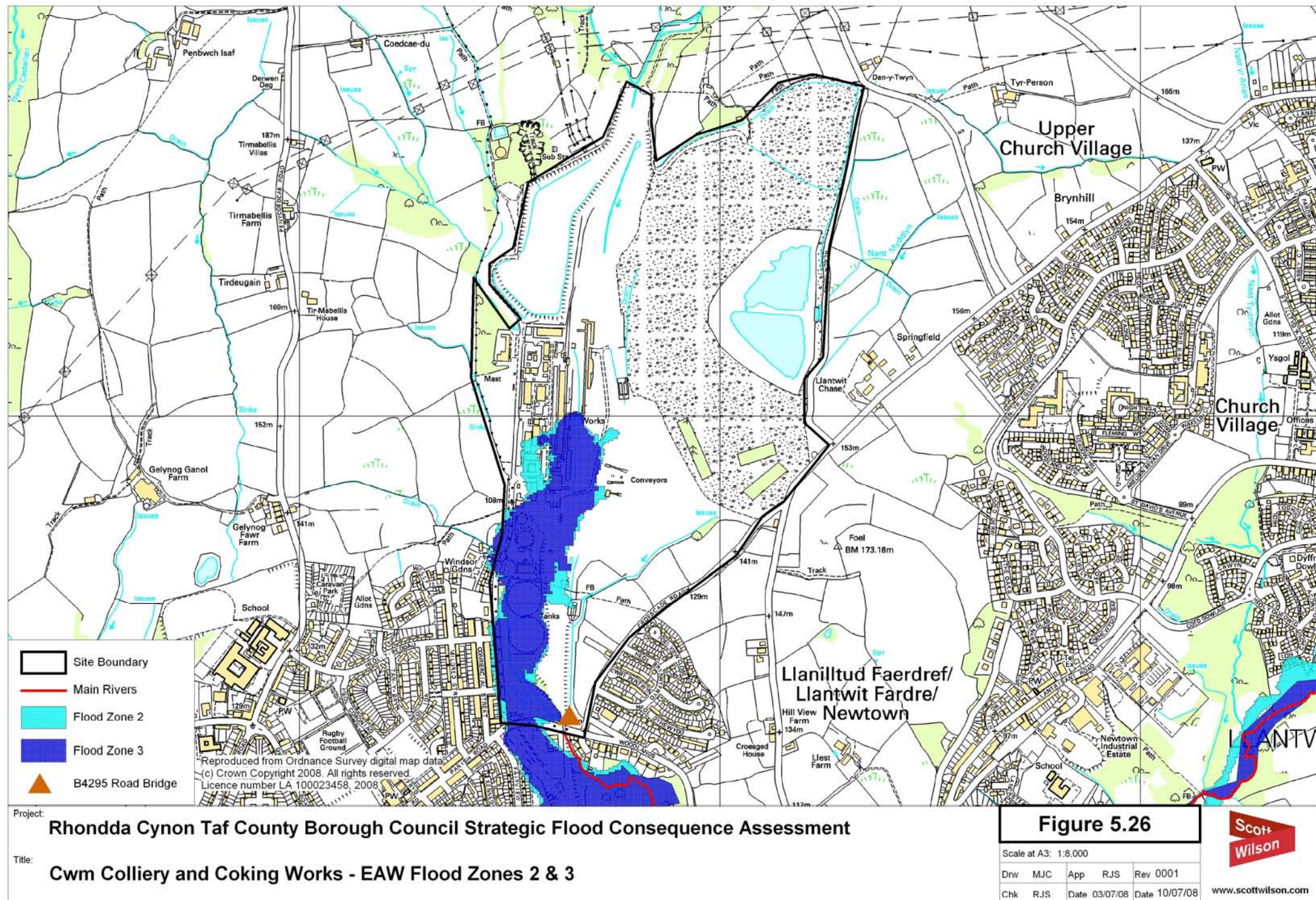
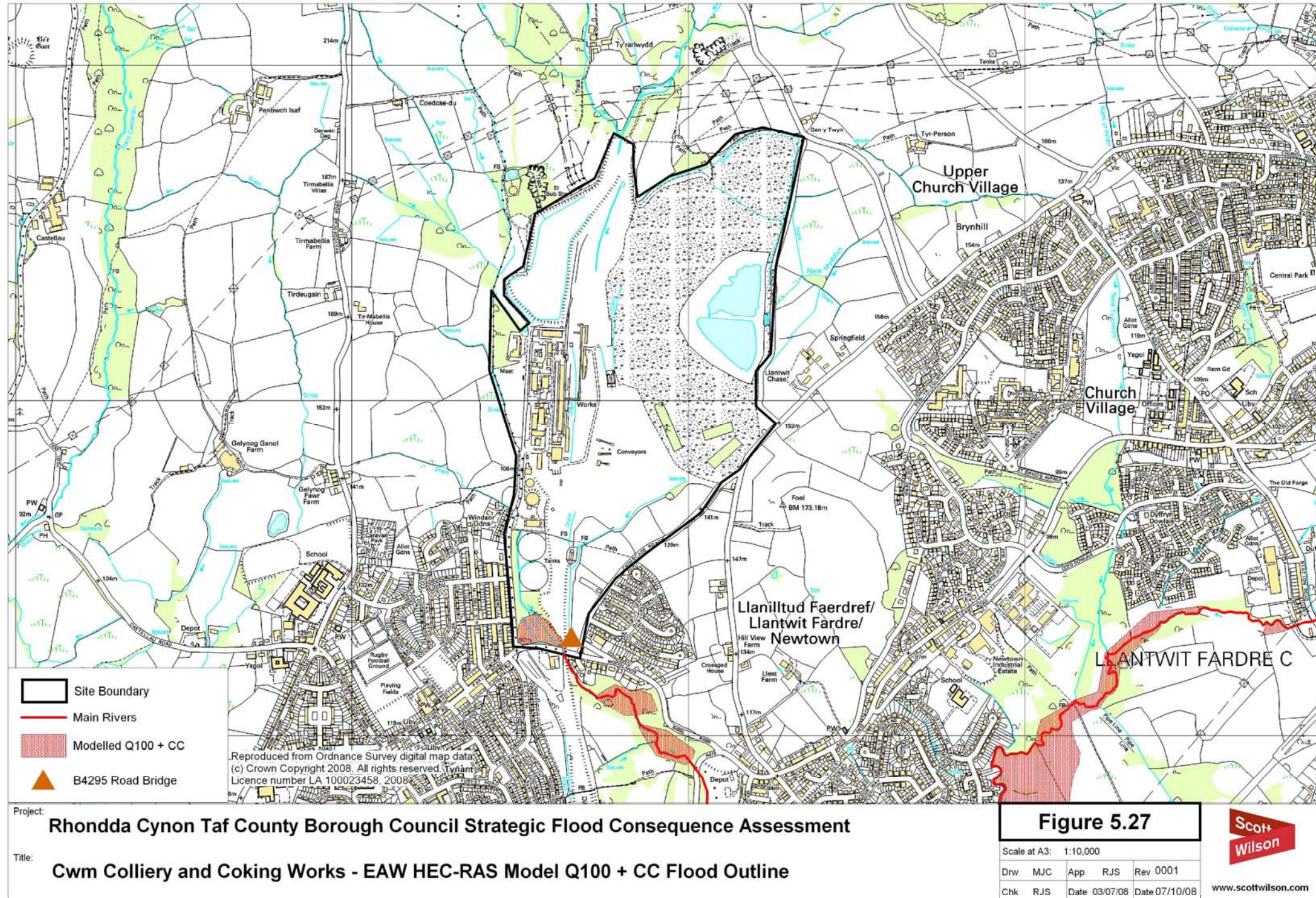


Figure 5-27: Cwm Colliery and Coking Works - the Environment Agency HEC-RAS Model Q100+CC Flood Outline



## 5.7 Site 7: Mwyndy / Talbot Green, Llantrisant

### 5.7.1 Site Description

This development site covers an area of land approximately 186 ha immediately south of the town of Llantrisant. The River Clun crosses most of the proposed development site along its northern boundary, flowing east to west, with the A473 being the boundary. In addition there are two tributaries that also cross the site. The first flows through the centre of the site from Mwyndy, north to the River Clun. The second, the Nant Cymdda-Bach, meets the River Clun in the north-east corner of the site, flowing south from Llantrisant Common. To the west of the site is the River Ely into which the River Clun flows (Figure 5-28).

This river has a formal Environment Agency earth embankment defence protecting the development on its right and left banks. While these defences would have been designed to the 1 in 100 year return period flood event, with changes in flow calculations and climate change their current level of service is not known.

Due to the sites topography there is limited floodplain on the River Clun's left bank and therefore land between the river and Mwyndy is predominately outside the fluvial floodplain. In contrast land on the River Clun's right bank is very flat in places and therefore there is an extensive floodplain reaching beyond the A473. The majority of the site is Greenfield, however the north west corner has been previously developed.

### 5.7.2 Proposed Development

The proposed development aims to provide Llantrisant with enhanced status as a principal settlement. Development would provide a new town centre comprising of retail, commercial, educational, civic, employment and residential uses. Development of the site will also require improvement to the existing transport network and upgrading of the junction with the A4119.

### 5.7.3 Flood History

There is a history of flooding in the Talbot Green area although this is associated with the River Ely that lies to the west of the development site and not the River Clun that flows through the site. There are no records of flooding within the development site.

### 5.7.4 Fluvial Flood Risk

The majority of land on the River Clun's right bank is flat and is highlighted as being with Flood Zone C2 as shown on WAG's DAMs (Figure 5-29). However, this is only approximately 12% (22 ha) of the total development site of 186 ha. 5% (9 ha) of the site is highlighted as having a flood risk greater than 1 in 100 (the Environment Agency Flood Zone 3; Figure 5-30) and as such should remain development free under the guidance laid out in TAN15.

In addition, flood depths in a 1 in 100 year return period flood event plus climate change have been calculated. Using LiDAR, GIS and floodwater levels extracted from the Environment Agency's hydraulic model for the catchment, it is predicted that floodwater could reach a depth of up to 1.5 metres (Figure 5-31). This depth of flooding is confined to the 5% (9 ha) of the site that should remain development free, as mentioned above. As highlighted in the methodology, the data to evaluate flooding depths in the 1 in 1000 year return period year flood event is not

currently available however it can be assumed that flood depths during this event would be greater than those calculated for the 1 in 100 year flood event plus climate change.

### 5.7.5 Groundwater Flood Risk

No groundwater flooding issues have been identified at this site.

### 5.7.6 Overland Flow

The bedrock beneath the site comprises of the rock formations associated with the South Wales Coal Field. They are overlaid by glacial deposits, typically Boulder Clay. These give rise to gley soils which are predominantly poorly drained with limited capability for surface water infiltration. The low laying land around the River Clun has more recent fluvial alluvium above the bedrock. This has good drainage properties however these soils are largely affected by the level of water in the ground and in the River Clun.

There are no reports of surface water flooding at the site however, as the site is largely undeveloped any flooding is unlikely to affect people and property and as such would probably remain un-reported. For the purpose of this SFCA, further evaluation is beyond the scope of this document. At the planning application stage, the Environment Agency are likely to require the submission of a surface water management plan. This will capture these issues ensuring that suitable SUDS techniques are adopted and that flood risk is managed. It should also be noted that due to downstream restricting structure and inadequate capacity in the receiving waters the Environment Agency have stated that they would object to any development that intends to discharge surface water flows at a rate greater than 15 litres / second / hectare.

**Plate 5-13: Looking upstream. The River Clun is in the tree line of the left. This photo illustrates the small floodplain on the River Clun's left bank.**



### 5.7.7 Sewers

While no data to the sewerage infrastructure or flood risks has been received, it has been concluded that the flood risk is low as no concerns have been highlighted. However, this should be further evaluated in a site specific FCA.

### 5.7.8 Artificial Sources

There are three minor ponds that could potentially impact on flood risk at the development sites. These ponds are shown on Figure 5-28 and based on analysis of the topography, water escaping these ponds is likely to flow northwards towards the River Clun. Further evaluation of this risk should be undertaken in a site specific FCA.

### 5.7.9 TAN15 Constraints

Recognising that highly vulnerable development should not be permitted in zone C2, all other new development should only be permitted in zone C if it can be justified by the LPA. As part of this justification, the development should be proven to: be flood free in the 1% (plus climate change) flood event (A1.14, TAN15); have acceptable consequences of flooding in the extreme 0.1% flood event (A1.15, TAN15); and not cause flooding elsewhere (A1.12, TAN15).

The site will also need to meet the surface water requirements of TAN15, namely that land SUDS systems will need to be implemented to manage surface waters.

**Plate 5-14: Looking south across the site with the River Clun in the distance. The photo highlights the relatively flat land on the River Clun’s right bank.**



### 5.7.10 Flood Risk Summary

The flood risk to this site is largely governed by the site topography. The majority of the proposed development site is located on the left bank of the River Clun. The land rises steeply from the left bank and with limited floodplain extent within the site boundary. Land on the right bank of the River Clun is relatively level and is subject to inundation during flood conditions. Therefore the development potential with regards to this site primarily lies on the right bank or south of the River Clun.

Approximately 88% (164 ha) of the site is developable under the guidance laid out in TAN15. A further 13 ha could be developed if it was demonstrated by the submission of a full FCA that the risks could be managed in line with policy guidance and that there was no detriment to third parties.

While it has been calculated that flooding depth in a 1 in 100 year return period flood event plus climate change, could reach a depth of 1.5 metres, this is a part of the site where TAN15 recommends that development should not be considered as the flood risk is too great.

In addition, flood risk associated with surface water and groundwater sources are believed to be manageable. No data has been received on the sewer infrastructure at the time of writing the report. Due to a downstream restricting structure and inadequate capacity in the receiving waters the Environment Agency have stated that they would object to any development that intends to discharge surface water flows at a rate greater than 15 litres / second / hectare.

**Table 5-7: Mwyndy and Talbot Green Constraints Table.**

Mwyndy and Talbot Green	Area (Hectares)	Percentage of the Site
Total Area	186	100
Flood Zone C2	22.5	12
Total Flood Zone 3	9	5
Potential Highly Vulnerable Development	163.5*	88*
Potential Lower Vulnerability Development	177*	95*

*\* For the purpose of this report the “developable area” quoted is an approximation of the land that is identified outside the flood zones where policy will permit a development type. The actual area of developable land may be different from the figure quoted due to site specific constraints (such as minor water features or isolated areas of raised ground). However, precise developable land available for each site should be confirmed in a detailed FCA as mitigation measures may also increase this area.*



Figure 5-28: Mwyndy / Talbot Green – Site Overview

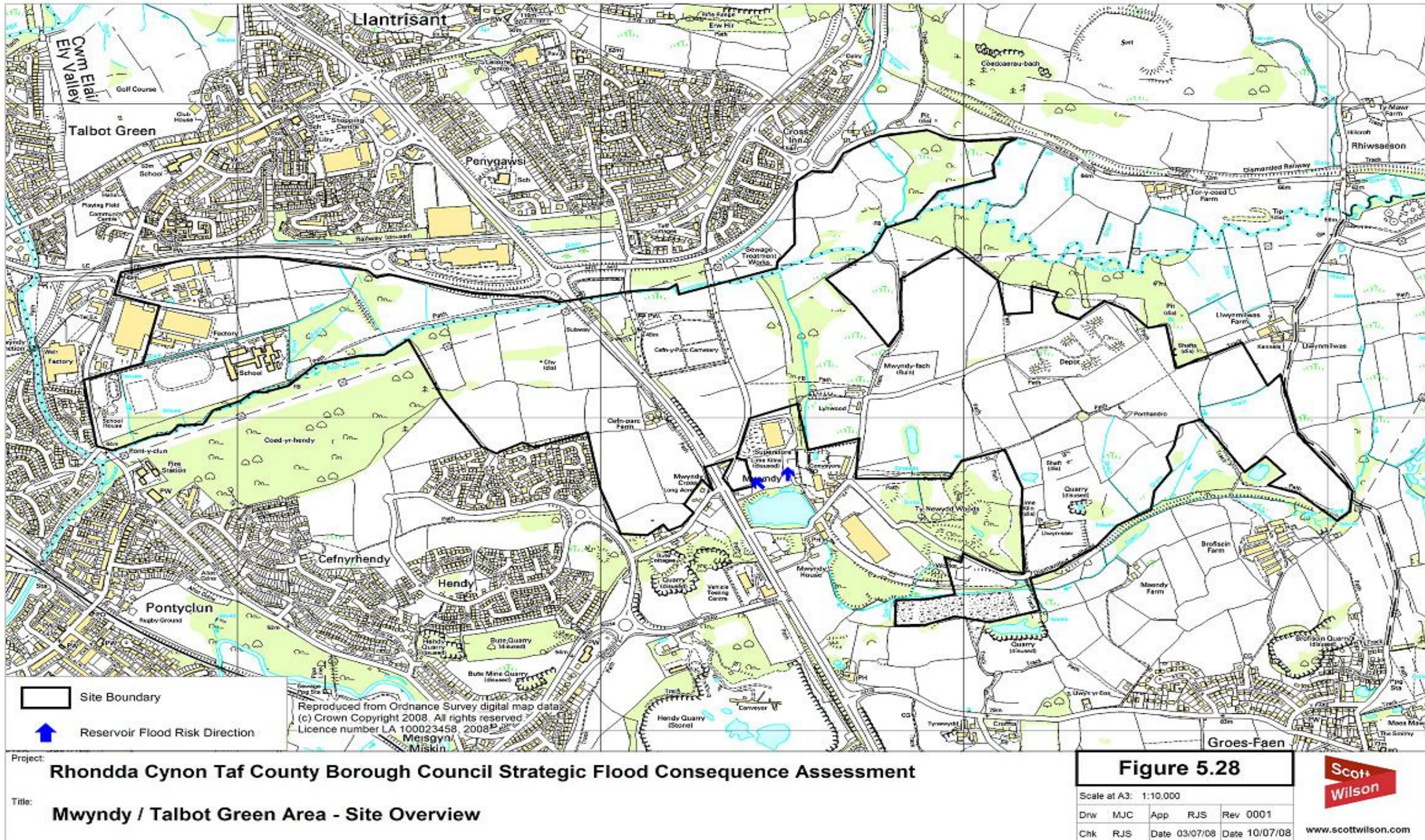


Figure 5-29: Mwyndy / Talbot Green Area - WAG DAM

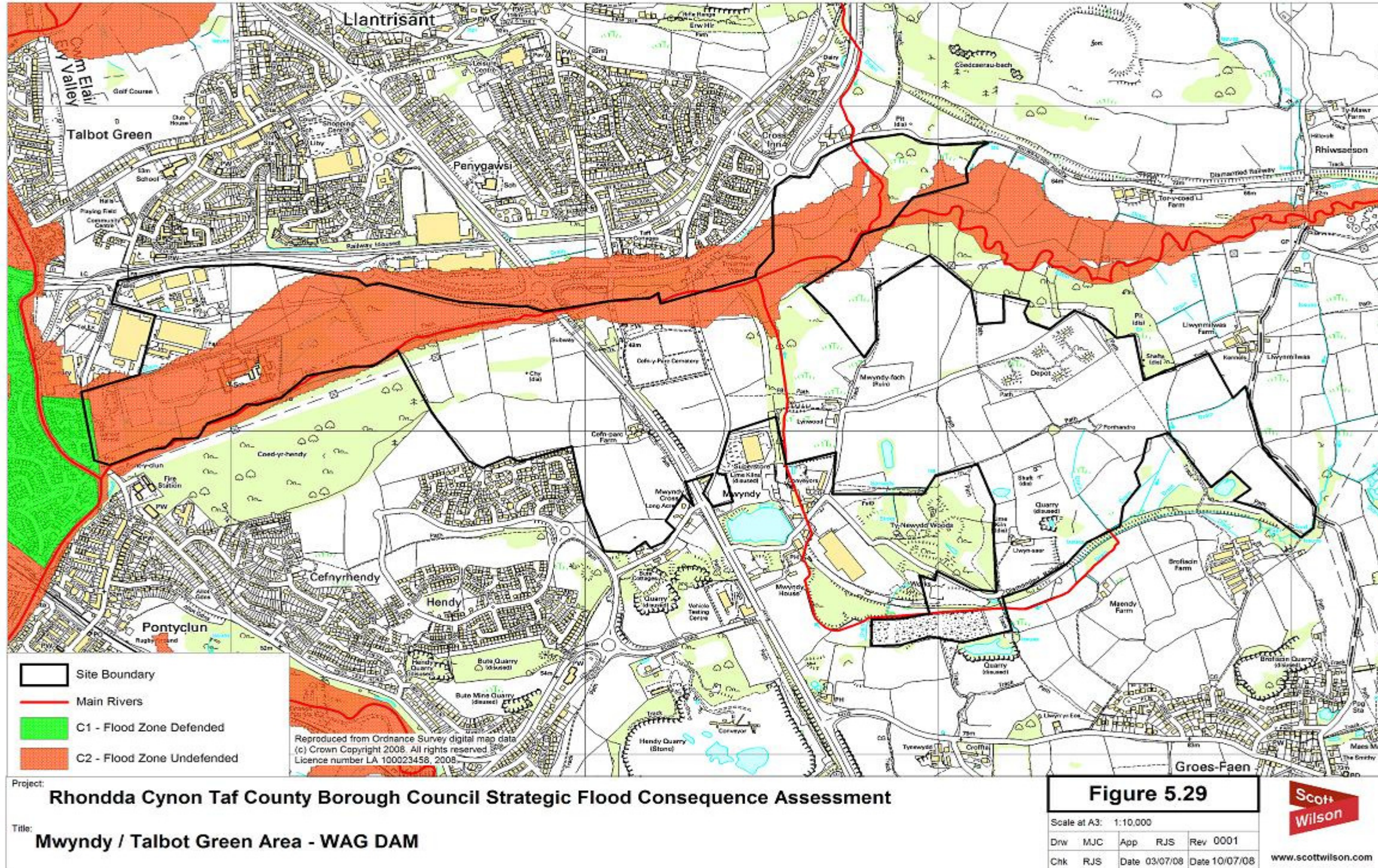


Figure 5-30: Mwyndy / Talbot Green Area - the Environment Agency Flood Zones 2 and 3

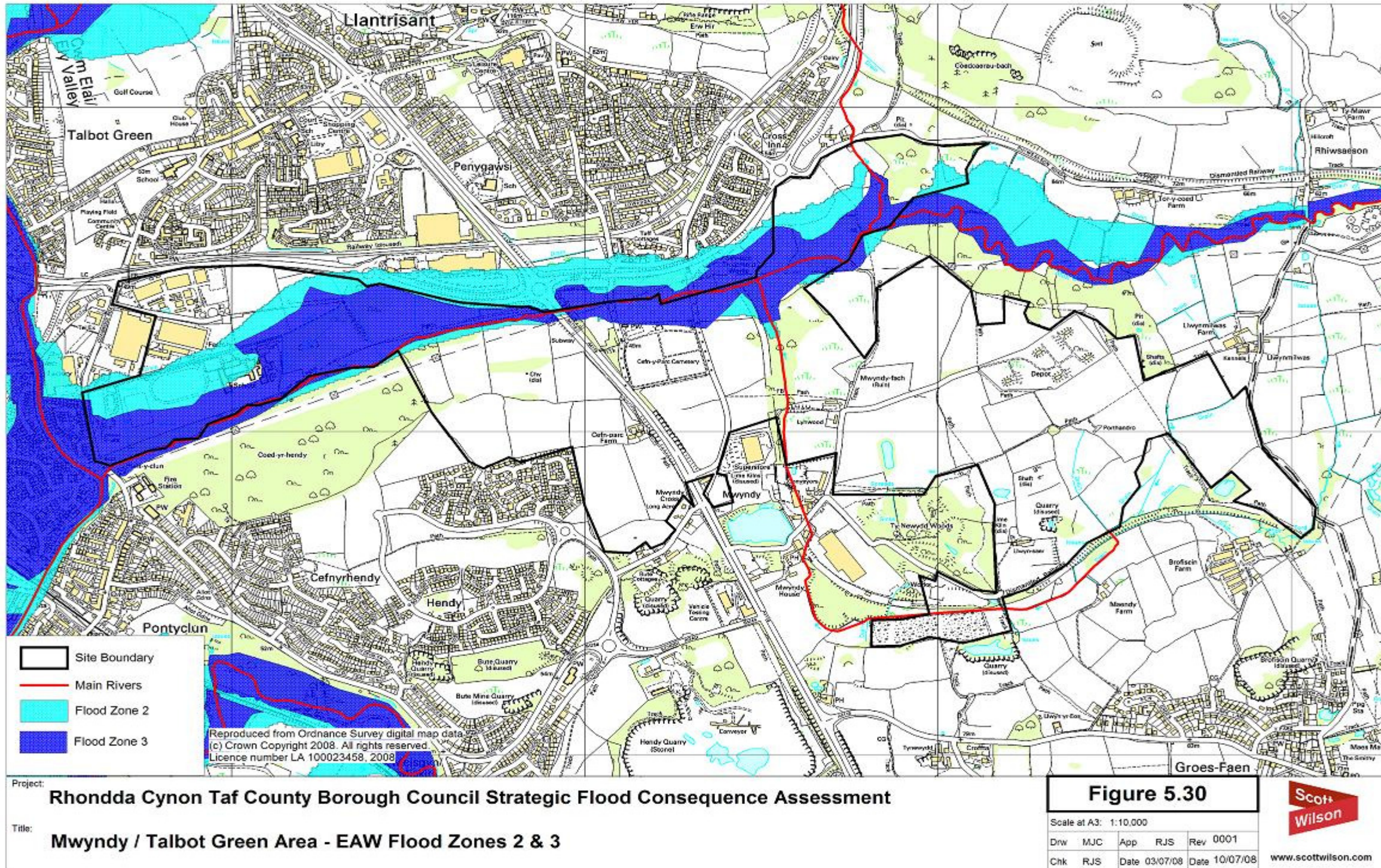
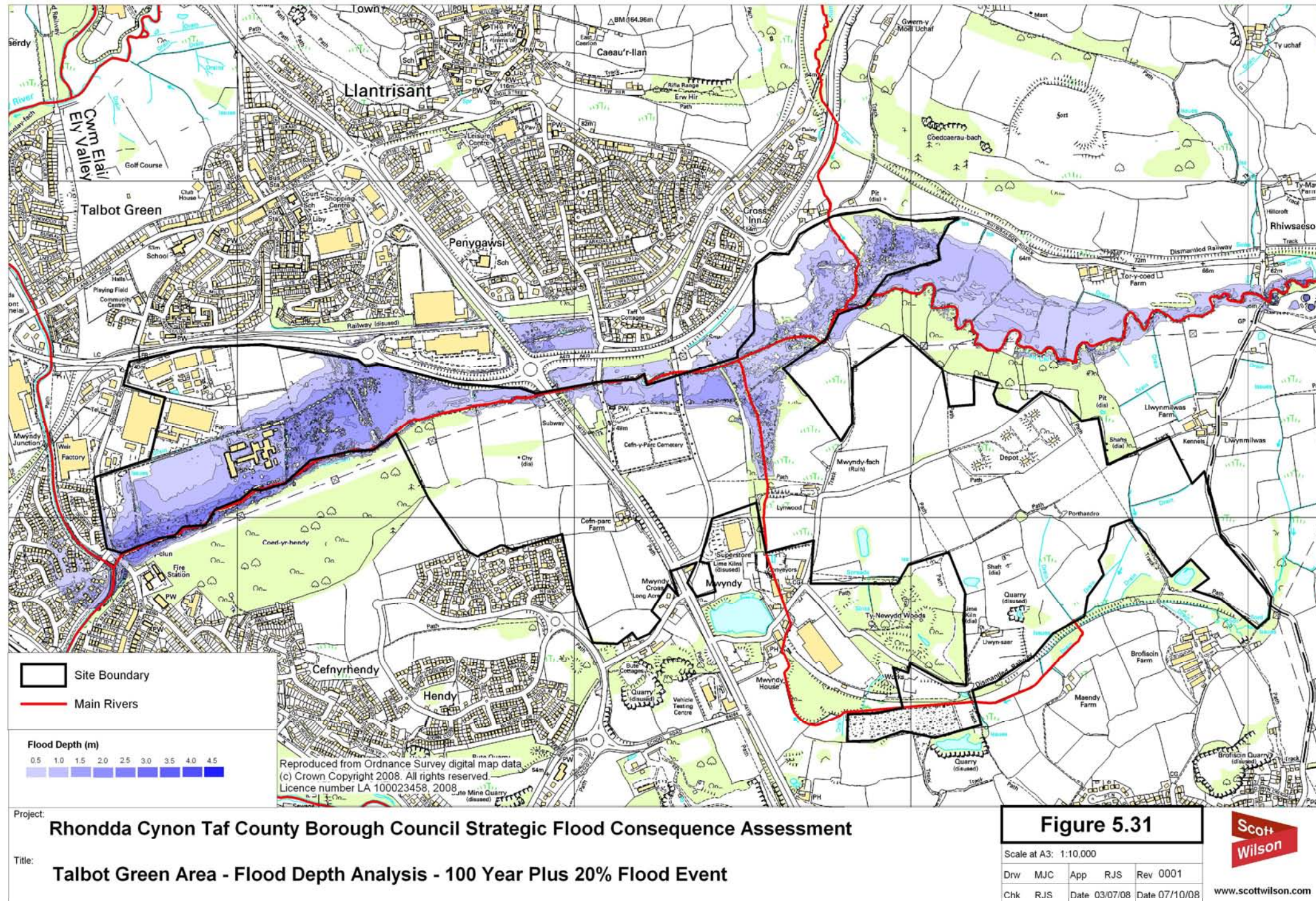


Figure 5-31: Mwyndy / Talbot Green Area - Flood Depth Analysis – 100 year plus 20% flood event.



## 5.8 Site 8: Former OCC Site, Llanilid, Llanharan

### 5.8.1 Site Description

This development site covers an area of land in excess of 400 ha north of the M4 between Pencoed and the town of Llantrisant. 85% of the site is the former Llanilid OCCS; the remaining 15% consists of previously undeveloped green fields to the north and south. The River Ewenny defines the northern boundary of the site while land to the south, the former Llanilid OCCS makes up the majority of the site. The A473 passes through the site separating the former OCCS from the previously undeveloped land to the north. Crossing the land to the north is an ordinary watercourse, the Nant y Gofer, which flows into the River Ewenny at Rhyd Lethin Farm (Figure 5-32).

**Plate 5-15: Photo viewed north-west across the former OCC site, Llanilid to the new “Valleywood” film studios.**



### 5.8.2 Proposed Development

Development is already underway in part of the site with four film studios and associated infrastructure forming part of the “Valleywood” development. In addition, residential development in the north-east has also started. The site masterplan details commercial, light industrial, recreational and residential land uses in addition to a new motorway junction servicing the site.

### 5.8.3 Flood History

There is no record of flooding at the development site.

### 5.8.4 Fluvial Flood Risk

As a former OCCS the land has been excavated and backfilled resulting in no natural watercourses remaining. As such there is no fluvial flood risk associated with the majority of the site and 98% (393 ha) is developable within the guidance laid out in TAN15. The River Ewenny

defines the sites northern boundary but as the land rises steadily from the river channel the floodplain does not affect a significant area (Figure 5-33).

There is also an ordinary watercourse, the Nant y Gofer, which traverses the site between the River Ewenny and Bridgend Road. While its location across a section of the site maybe a development constraint there is no known history of flooding from this watercourse.

### 5.8.5 Groundwater Flood Risk

No groundwater flooding issues have been highlighted at this site.

### 5.8.6 Overland Flow

The management of surface water will have been incorporated into the masterplanning for current and continued development of this site. In addition, the surface water management system would be designed to meet current standards and therefore further evaluation of this source of flooding is not required.

### 5.8.7 Sewers

The main sewer that serves the Ewenny valley is located beside the River Ewenny along the northern boundary of the site. The sewer system is known to have capacity issues and during periods of heavy rain it surcharges via combined sewer overflows into the River Ewenny. It is not envisaged that the volumes will be sufficient to significantly increase the flood risk afforded to the site. However, flooding from this source may occur more frequently.

### 5.8.8 Artificial Sources

No artificial sources of flooding have been identified at this site

### 5.8.9 TAN15 Constraints

Recognising that highly vulnerable development should not be permitted in zone C2, all other new development should only be permitted in zone C if it can be justified by the LPA. As part of this justification, the development should be proven to: be flood free in the 1% (plus climate change) flood event (A1.14, TAN15); have acceptable consequences of flooding in the extreme 0.1% flood event (A1.15, TAN15); and not cause flooding elsewhere (A1.12, TAN15).

The site will also need to meet the surface water requirements of TAN15, namely that land will be required to attenuate surface water flows to the required Greenfield rate and utilise SUDS.

### 5.8.10 Flood Risk Summary

This development site covers an area of land in excess of 400 ha that was predominately the former Llanilid OCCS. 98% (393 ha) of the site is developable within the guidance laid out in TAN15.

Flood depth analysis was not possible at this site as the Environment Agency hydraulic modelling does not extend to the upper reaches of the River Ewenny.

The management of surface water will have been incorporated into the masterplanning for current and continued development of this site. In addition, the surface water management system would

be designed to meet current standards. Local Authority Building Control would ensure that it is designed accordingly to minimise flood risk.

Based on current Environment Agency data, fluvial flooding is only likely to affect 2% (7 ha) of the site along the northern boundary. As standard planning conditions are likely to include a development free buffer zone to protect the riparian corridor and wildlife that use it and ensure that the watercourse can be accessed for maintenance issues, it is not envisaged that the flood risk will adversely affect any development plans.

**Table 5-8: Former OCC site, Llanilid Constraints Table**

Former OCC Site, Llanilid	Area (Hectares)	Percentage of the Site
Total Area	400	100
Flood Zone C2	7	2
Total Flood Zone 3	n/a	n/a
Potential Highly Vulnerable Development	393*	98*
Potential Lower Vulnerability Development	393*	98*

*\* For the purpose of this report the “developable area” quoted is an approximation of the land that is identified outside the flood zones where policy will permit a development type. The actual area of developable land may be different from the figure quoted due to site specific constraints (such as minor water features or isolated areas of raised ground). However, precise developable land available for each site should be confirmed in a detailed FCA as mitigation measures may also increase this area.*

Figure 5-32: Former OCC Site, Llanilid, Llanharan – Site Overview

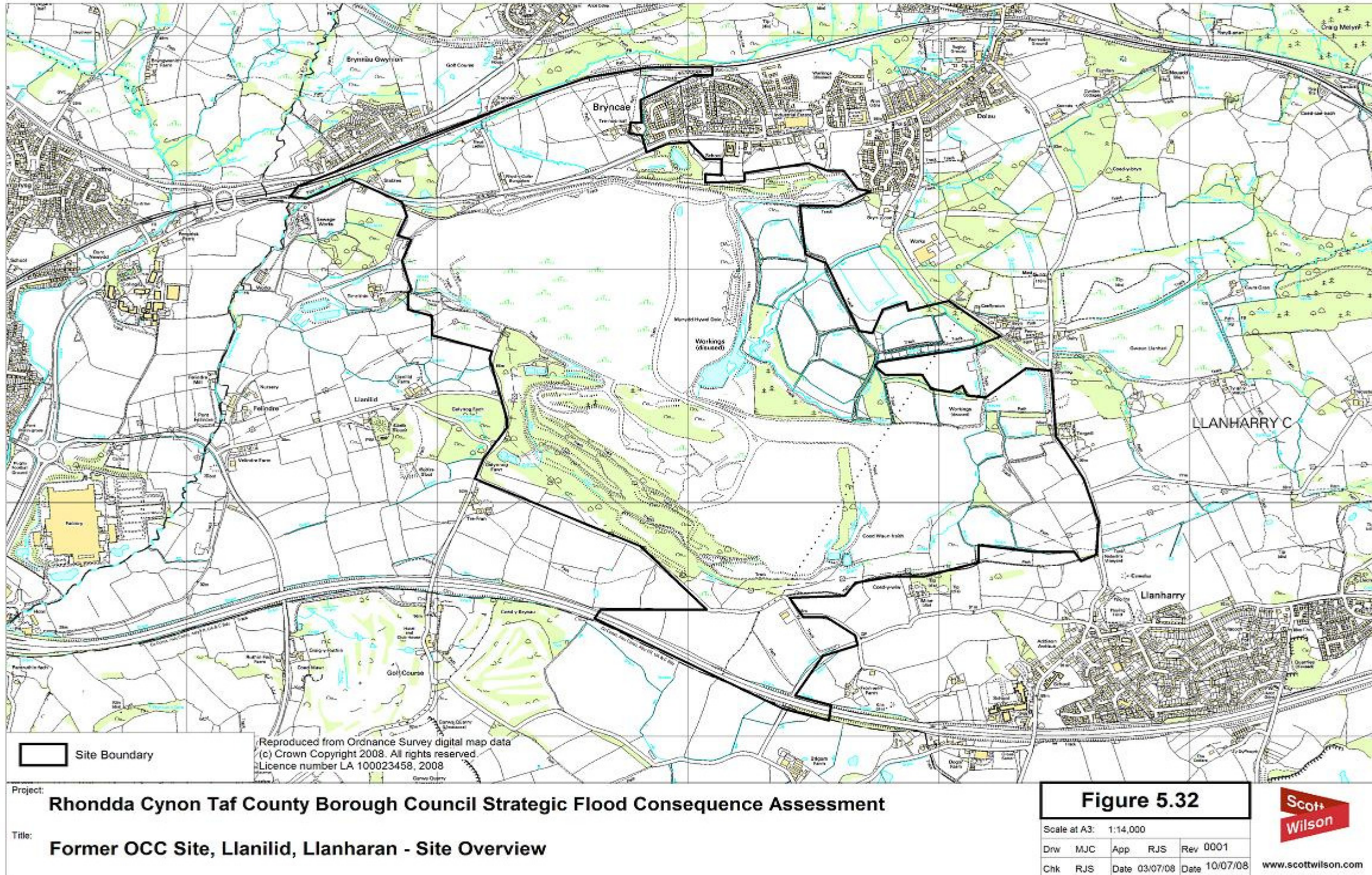
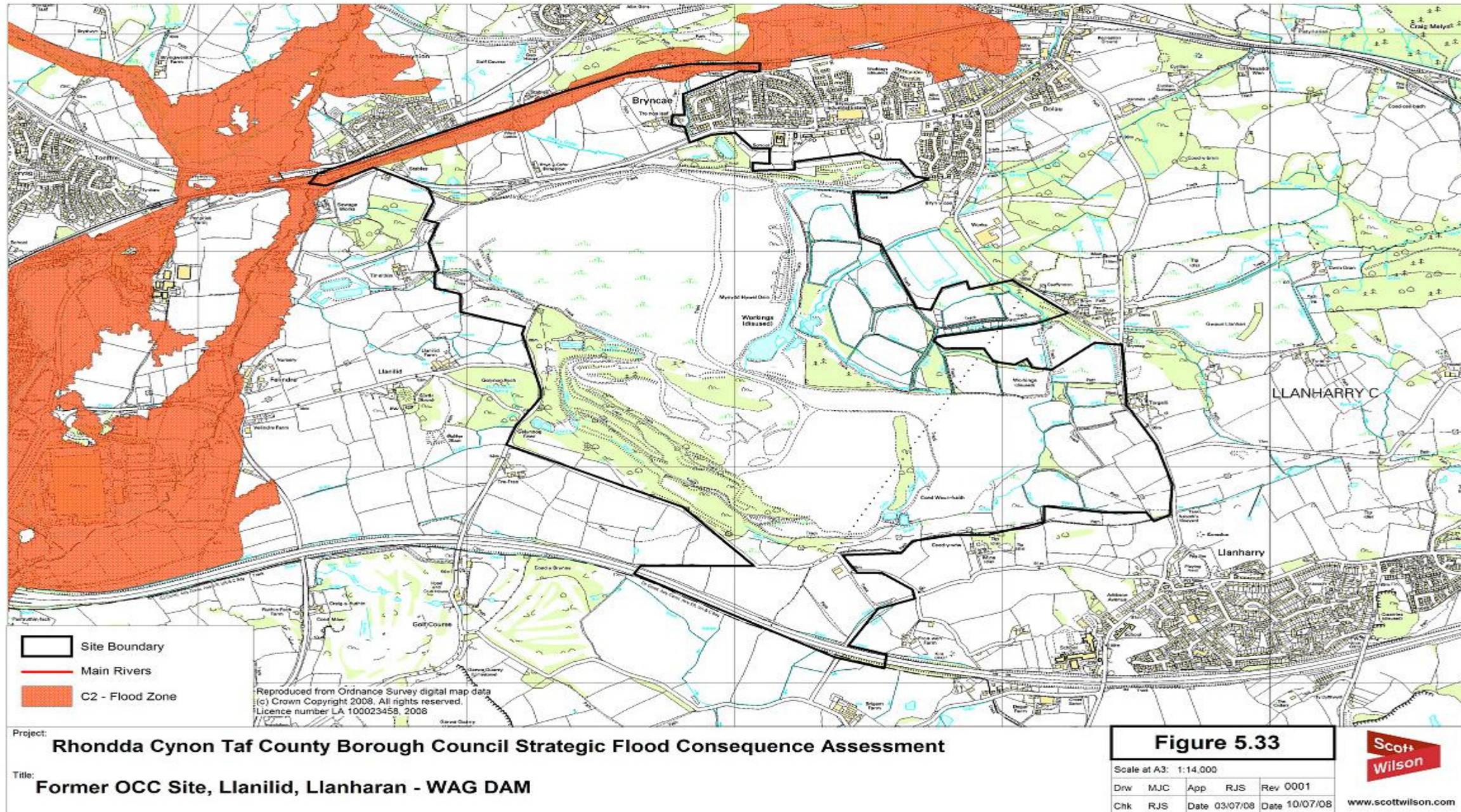


Figure 5-33: Former Llanilid OCC Site, Llanilid, Llanharan - WAG DAM





## 5.9 Site 9: Treforest Industrial Estate

### 5.9.1 Site Description

Treforest Industrial Estate is located between the two main towns of Pontypridd and Caerphilly. It extends to around 76 ha with the existing development covering approximately 190,000m<sup>2</sup>. The site traverses both banks of the River Taff and as such is divided into the “west bank estate” and the “east bank estate”. Both estates are afforded flood protection from the Environment Agency flood defences. The estate currently has a range of ancillary services including services and amenity shops as well as manufacturing units, warehouses and workshop units.

The purpose of the assessment is to ensure that development can continue thus ensuring the prosperity of the estate and guaranteeing existing employment while developing new job opportunities for future employment opportunities.

### 5.9.2 Flood History

The estate suffered severe flooding during the December 1960 flood event. Subsequently, Hawthorn major river improvement scheme, including the building of earth flood defences (Plate 5-16), was carried out in the late 1960s to mid 1970s to provide flood protection up to the 1 in 100 year return period. The scheme extends from the old railway embankment at Oxford Street, Nantgarw, upstream to high ground to the north-west of Hawthorn Comprehensive School, a distance of some 5 km.

During the 1979 flood event minor flooding did occur when the defences were overtopped (Figure 5-35). No flooding has been recorded at the estate after 1979.

**Plate 5-16: Looking downstream at the defences protecting the west bank estate. In the distance is the east bank estate.**



### 5.9.3 Fluvial Flood Risk

The Environment Agency have stated that based on current modelled information, the Hawthorn flood scheme is considered to have a 1% (1 in 100) standard of service. For the Treforest

Industrial Estate flood scheme, the modelled information shows that the standard of service is generally in the order of 2% (1 in 50). There is a section of defence identified as having a 4% (1 in 25) standard of service, although there is a low confidence in this figure and further work is planned to confirm this.

Using the flood outlines from the Environment Agency's ISIS hydraulic model (with defences) it has been confirmed that the current the Environment Agency flood defences no longer provide a level of service up to the 1 in 100 year return period. Figure 5-38 highlights that in the 1 in 100 year return period flood event that approximately 40 ha (52%) of the industrial estate could be flooded.

When climate change (20%) is added then the area at risk increases to approximately 55 ha (Figure 5-39). During a 1 in 1000 year return period flood event this increases further to approximately 65 ha is affected.

However as the analysis is 1-dimensional the affects of the movement of water behind the flood defence bank are not fully represented. 2-dimensional flood modelling would give a far better indication of the water movements and depths on the landward side of the flood bank.

### 5.9.4 Groundwater Flood Risk

No groundwater flooding issues have been identified.

### 5.9.5 Overland Flow

No incidents of surface water flooding at the industrial estate have been recorded. However given that the River Taff can rise to a level above that of the ground behind the defence there will be times when the existing surface water system cannot discharge due to insufficient head.

For the purpose of this SFCA, the details of the estates surface water management system have not been evaluated. However it is recommended that the attenuation capacity of the surface water system and the implementation of SUDS techniques be evaluated in a surface water management report.

### 5.9.6 Sewers

No records have been received from DCWW regarding the flood risk afforded to the estate and therefore the flood risk must remain as undetermined at the time of writing the report.

### 5.9.7 Artificial Sources

No artificial sources of flooding have been identified.

### 5.9.8 TAN15 Constraints

Recognising that highly vulnerable development should not be permitted in zone C2, all other new development should only be permitted in zone C if it can be justified by the LPA. As part of this justification, the development should be proven to: be flood free in the 1% (plus climate change) flood event (A1.14, TAN15); have acceptable consequences of flooding in the extreme 0.1% flood event (A1.15, TAN15); and not cause flooding elsewhere (A1.12, TAN15).

To meet the surface water requirements of TAN15, any new application should make improvement to the surface water system or implement management systems to limit the amount of surface water directly entering the system. On areas of the site where development does not currently exist there will be a requirement to utilise SUDS.

### 5.9.9 Flood Risk Summary

Treforest Industrial Estate is located between the two main towns of Pontypridd and Caerphilly. It extends to around 76 ha with a total built accommodation of approximately 190,000m<sup>2</sup>. The site spans both banks of the River Taff and is afforded flood protection from the Environment Agency flood defences.

Based on current best available data approximately 40 ha (52 %) can only be redevelopment utilising its existing footprint. Any redevelopment would have to be accompanied by an FCA demonstrating that the structure was flood free to the 1 in 100 year standard and that the risks in the extreme, 1 in 1000 year flood event were manageable within the guidance laid out in TAN15 (Table 3-4).

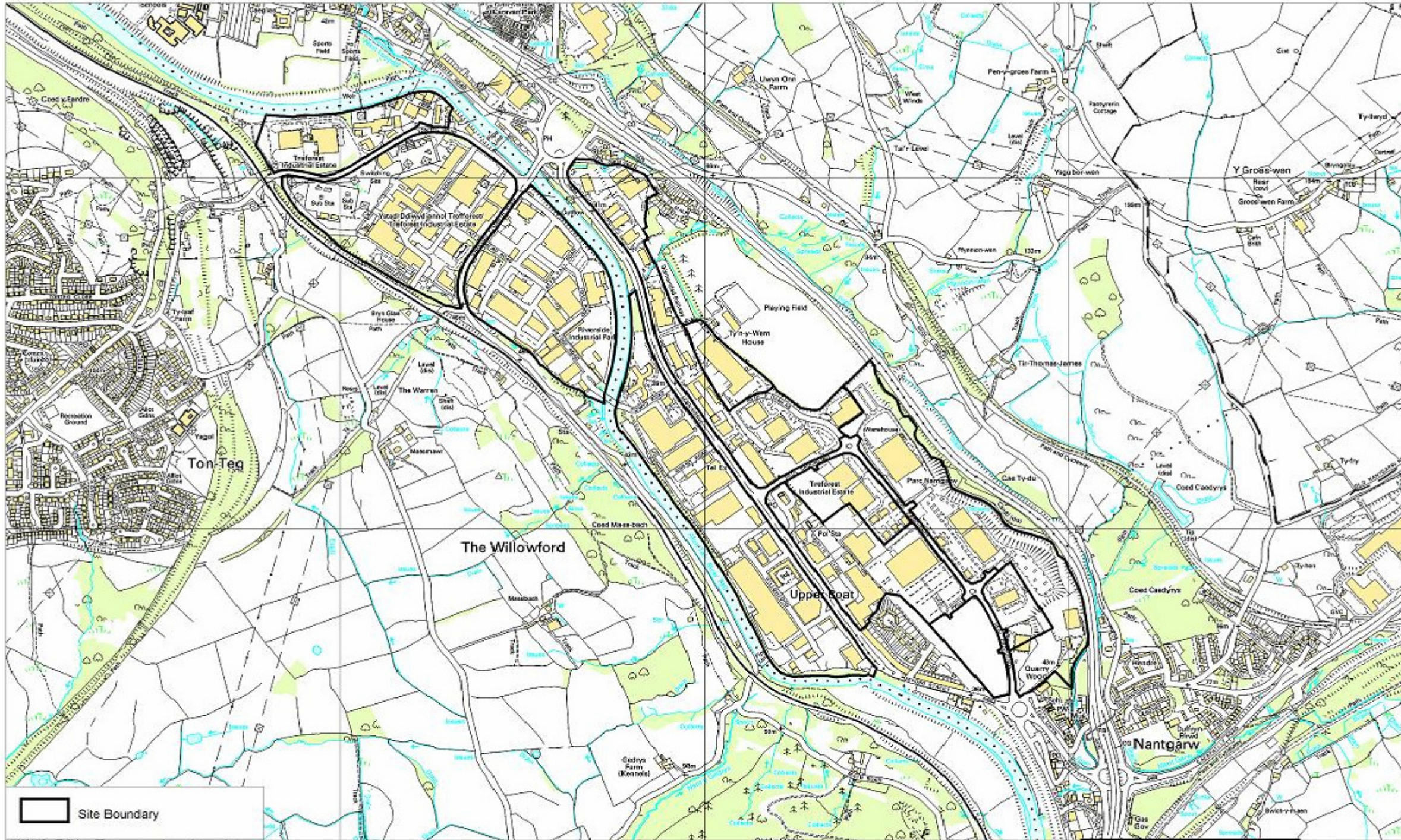
Data on the extreme flood outline (Figure 5-36 and Figure 5-37) highlights that approximately 65 ha (80%) of the estate to be at risk of flooding. However as the analysis is 1-dimensional the affects of the movement of water behind the flood defences are not fully represented. As such this must be regarded as a conservative estimate but is the best information currently available.

**Table 5-9: Treforest Industrial Estate Constraints Table.**

Treforest Industrial Estate	Area (Hectares)	Percentage of the Site
Total Area	76	100
Flood Zone C2	65	80
Total Flood Zone 3	40	52
No Development Restrictions	11*	20*
Development Limited to Existing Developed Footprint	40*	52*

*\* For the purpose of this report the “developable area” quoted is an approximation of the land that is identified outside the flood zones where policy will permit a development type. The actual area of developable land may be different from the figure quoted due to site specific constraints (such as minor water features or isolated areas of raised ground). However, precise developable land available for each site should be confirmed in a detailed FCA as mitigation measures may also increase this area.*

Figure 5-34: Treforest Industrial Estate – Site Overview.



Project: **Rhondda Cynon Taf County Borough Council Strategic Flood Consequence Assessment**

Title: **Treforest Industrial Estate - Site Overview**

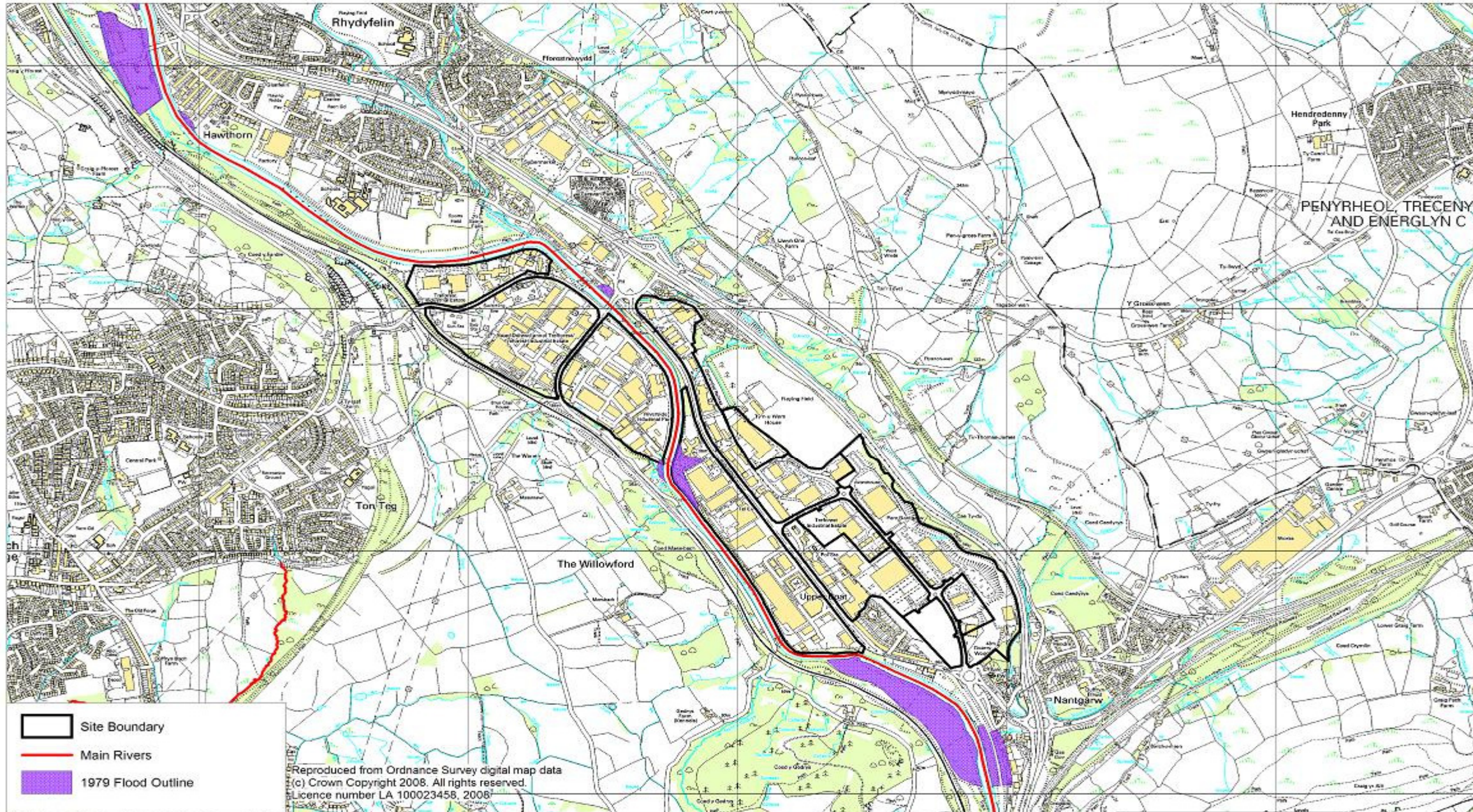
**Figure 5.34**

Scale at A3: 1:10,000		
Drw	MJC	App RJS
Rev	0001	
Chk	RJS	Date 03/07/08
		Date 10/07/08



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Figure 5-35: Treforest Industrial Estate 1979 Flood Outline.



Project: **Rhondda Cynon Taf County Borough Council Strategic Flood Consequence Assessment**  
 Title: **Treforest Industrial Estate - 1979 Flood Outline**

<b>Figure 5.35</b>			
Scale at A3: 1:40,000			
Drw	MJC	App	RJS Rev 0001
Chk	RJS	Date 03/07/08	Date 10/07/08

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Figure 5-36: Treforest Industrial Estate WAG DAM

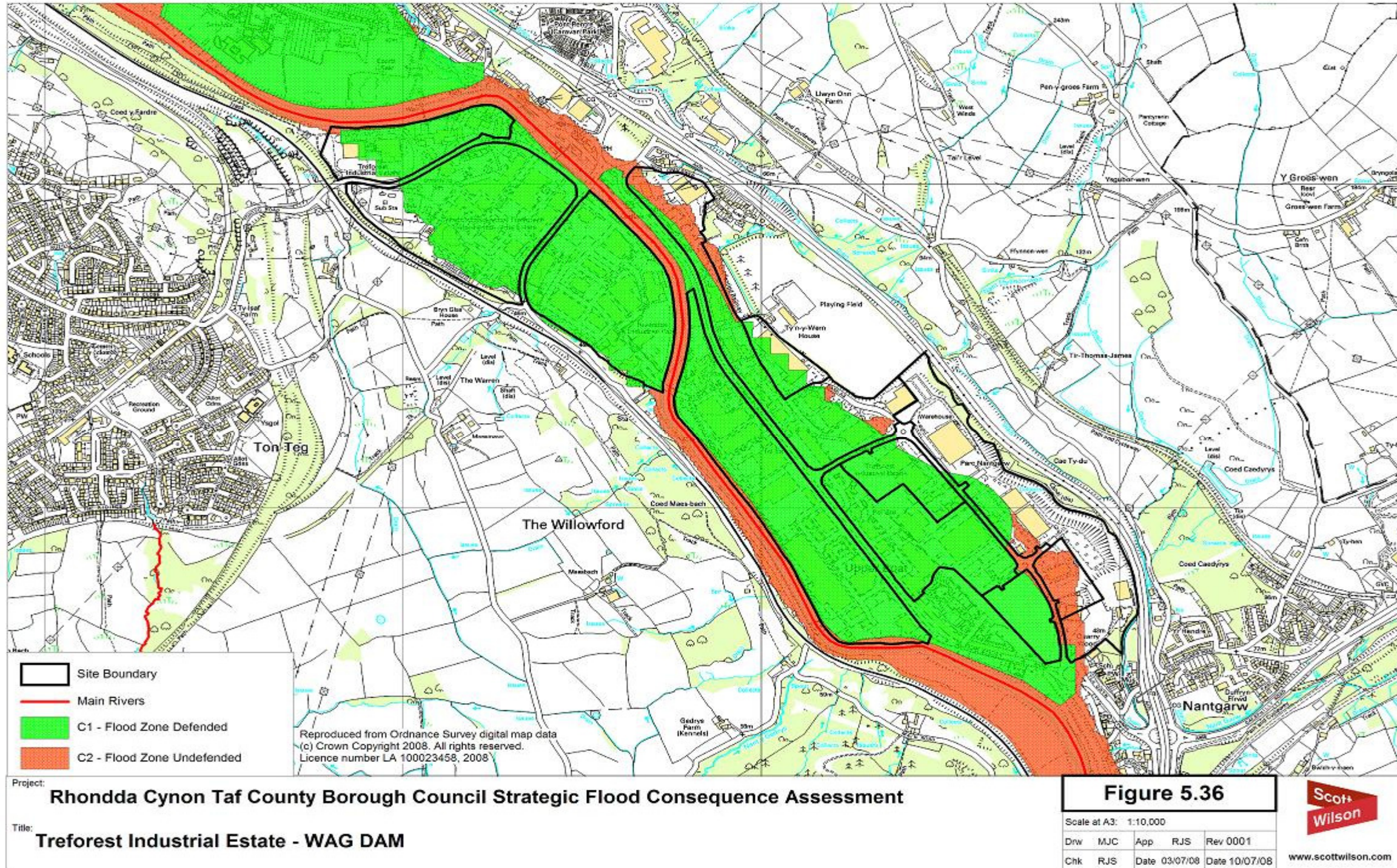


Figure 5-37: Treforest Industrial Estate the Environment Agency Flood Zones 2 and 3.

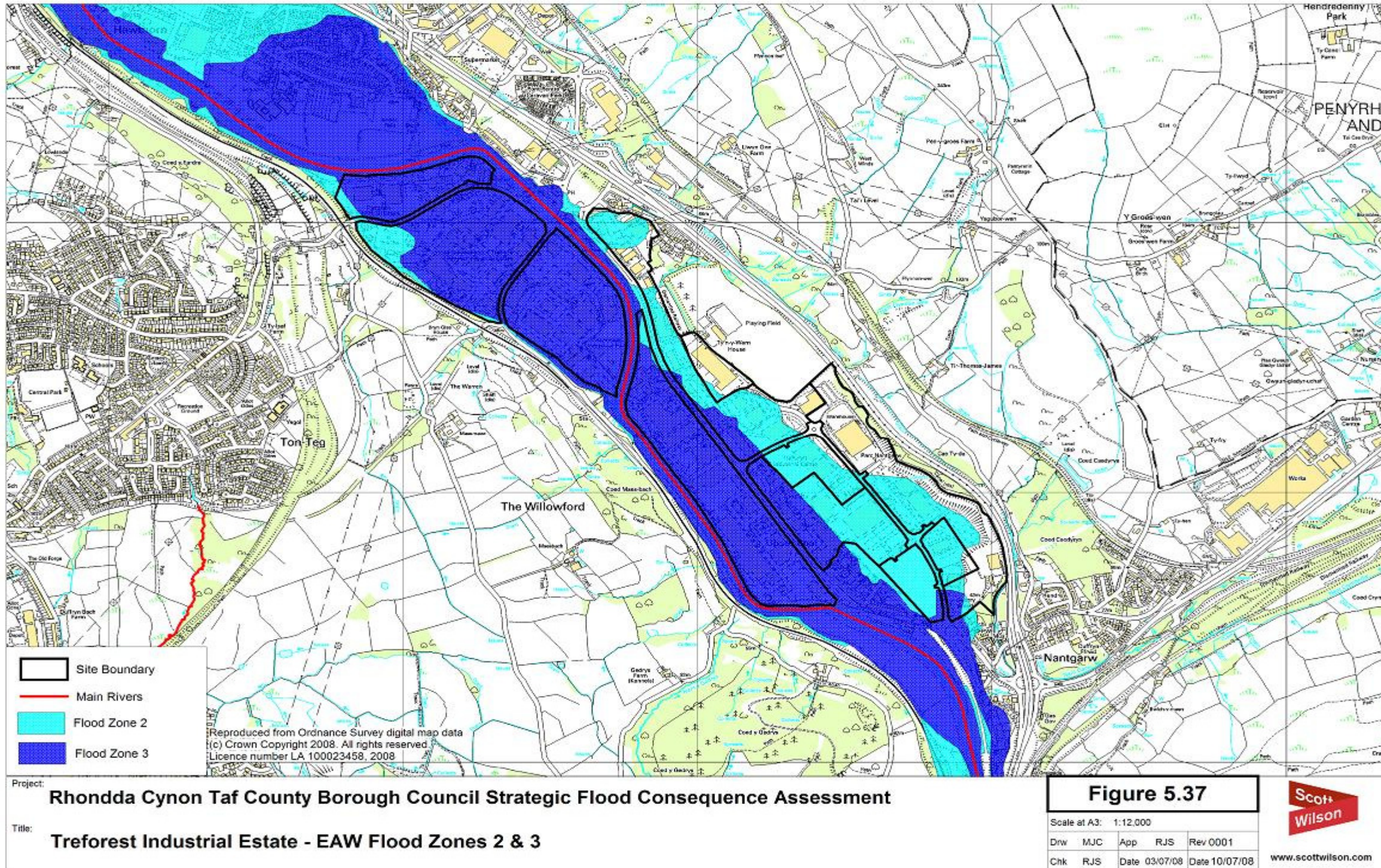


Figure 5-38: Treforest Industrial Estate the Environment Agency Q100 Flood Outline With Defences.

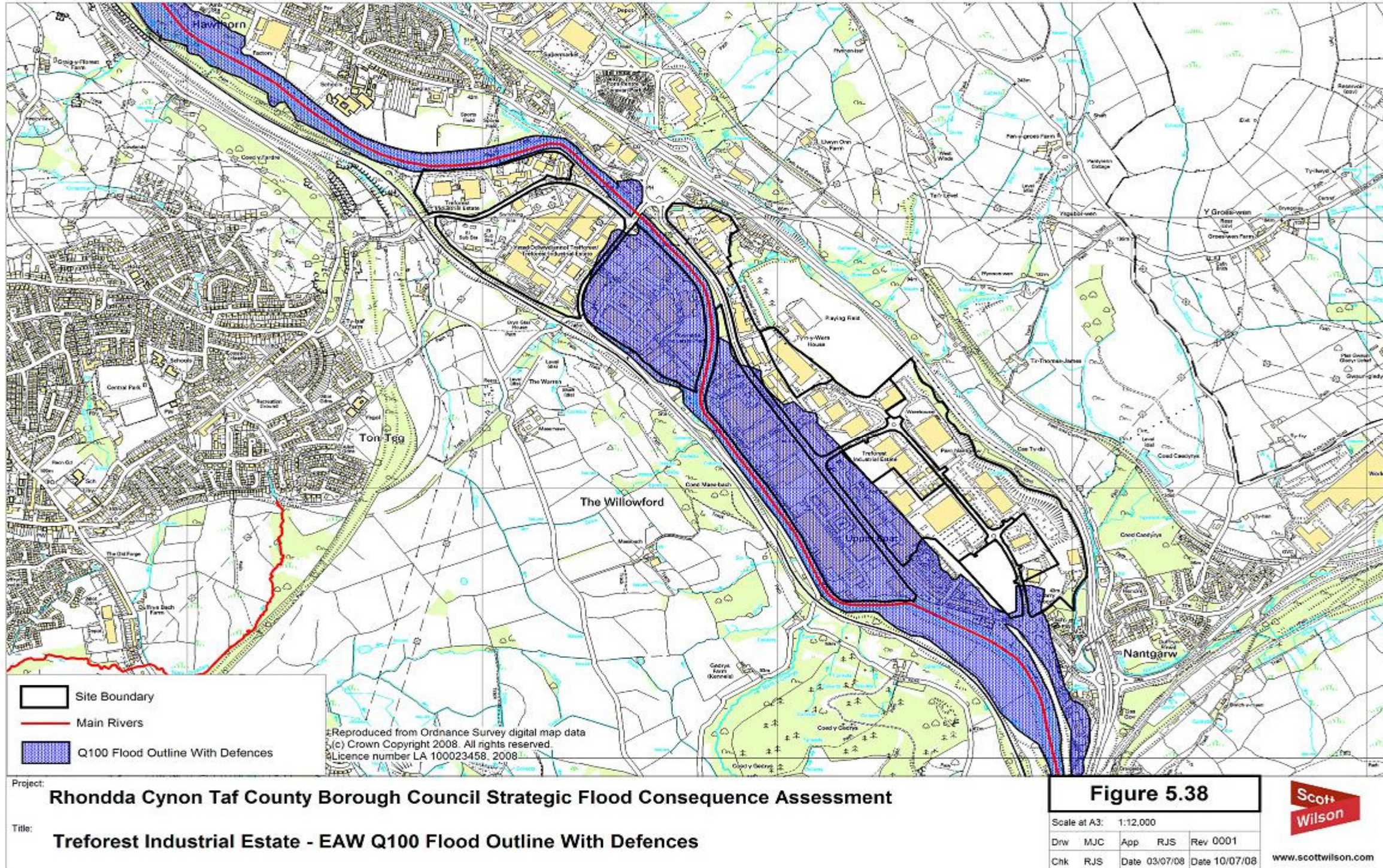
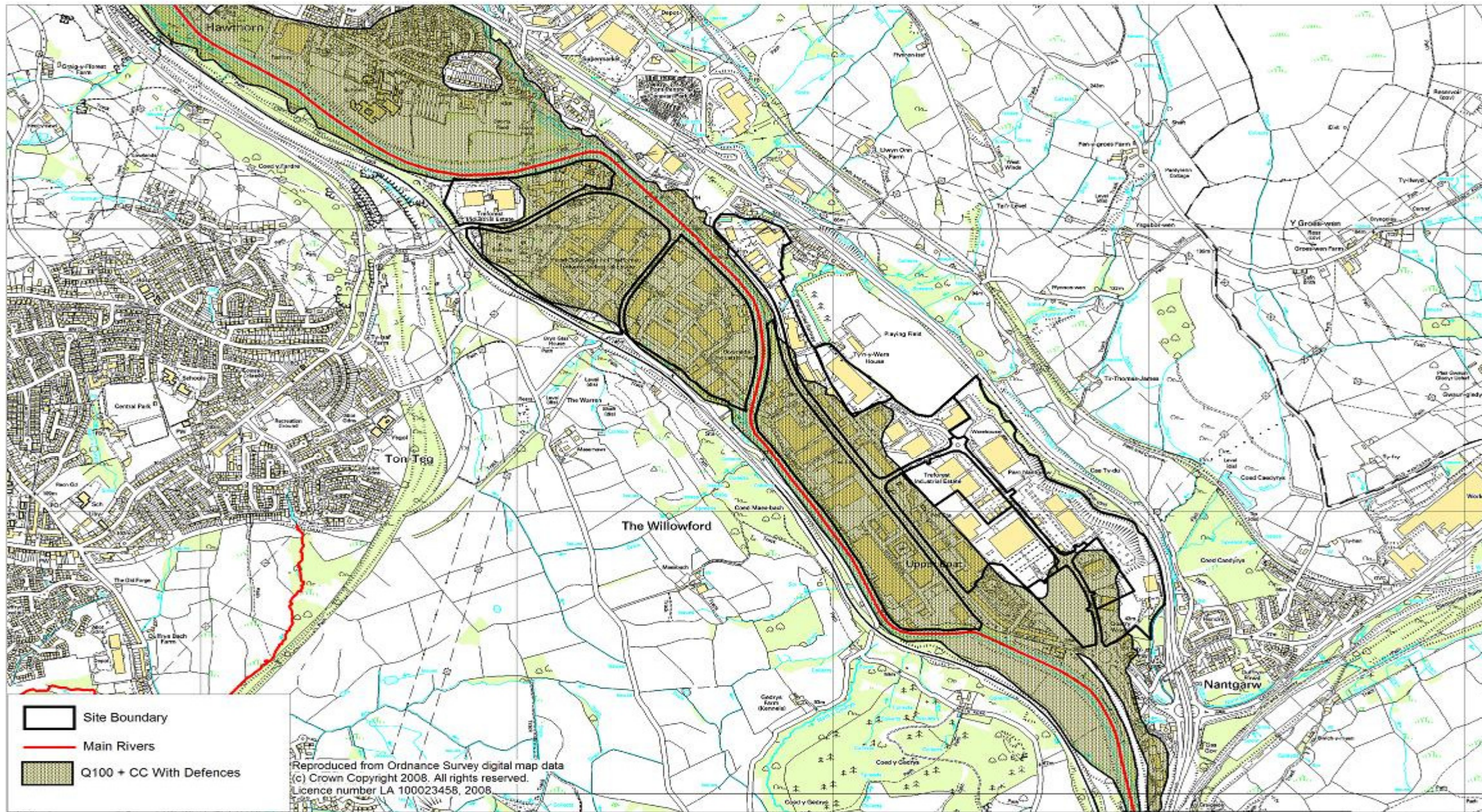


Figure 5-39: Treforest Industrial Estate the Environment Agency Q100+20% Flood Outline With Defences.



Project: **Rhondda Cynon Taf County Borough Council Strategic Flood Consequence Assessment**  
 Title: **Treforest Industrial Estate - EAW Q100 + CC Flood Outline With Defences**

<b>Figure 5.39</b>			
Scale at A3: 1:12,000			
Drw	MJC	App	RJS Rev 0001
Chk	RJS	Date 03/07/08	Date 10/07/08

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