

AN HERITAGE IMPACT STATEMENT CONCERNING A
PROPOSED DATA CENTRE AT TYN-Y-CAEAU,
MARGAM

August 2024

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1 INTRODUCTION

Paul Stamper Heritage has been instructed via The Urbanists (acting as planning Consultants, Urban Designers and Landscape Architects for Western Bio-Energy) to deliver an Heritage Impact Statement relating to a proposed data centre at Tyn-Y-Caeau, Margam, located just west of Margam Bio Energy Plant and Western Bio Energy Plant. This is a preliminary assessment, made in the absence of detailed plans on the proposals, which will be updated for the final application submission.

A site visit was made on 21 August 2024.

A note on the report's authorship appears as an appendix.

2 THE SITE

The proposed data centre lies on flat, rough, grassland on the west side of the busy A48 and M4 corridor east of Port Talbot. The Neath Port Talbot Landscape Assessment (2004) places the Site within Landscape Character Area (LCA) 1: Margam Marsh. Some infrastructure for the Site, notably the stub of an access road off that leading to the Margam Green Energy Plant, is in place.

Immediately east of the A48 and M4 the ground rises steeply as a wooded ridge (Margam Mountain), a non-statutory registered Historic Landscape. This is described by Glamorgan Gwent Archaeological Trust (GGAT) as 'a distinctive block of South Wales uplands on the south-west fringe of the Glamorgan Blaenau, where they meet the Bro and overlook and visually dominate the narrow coastal plain near the modern port and industrial town of Port Talbot.'

The Port Talbot industrial zone, and notably the TATA steelwork, runs north-south behind the Site and is visually prominent.



Figure 1. The Site (ringed) relative to the Port Talbot/TATA industrial zone to the west; the adjacent A48/M4 corridor; and to the east of that the wooded slope of Margam Mountain wrapping around Margam Country Park (Google Earth 2024).



Figure 2. The Site (ringed) relative to the A48/M4 corridor and the three industrial complexes to its west (Margam Green Energy Plant) and south-west (Western Bio-Energy, and BOC Gas and Energy) (Google Earth 2024).



Figure 3. Looking roughly east from the entrance to the Site to Margam Mountain rising behind the A48/M4 corridor.

3 THE PROPOSAL

The wider context to the data centre proposal was outlined to PSH by The Urbanists thus:

WBE owns and operates the Western Wood [Biomass] Energy Plant at Margam, one of two existing biomass facilities located close together. It sits to the west of the Margam Interchange on the M4, to the south of Margam, to the east of Port Talbot Steelworks and to the north of BOC Gas and Gear, Margam Crematorium and Elgwys Nunydd Reservoir. The existing biomass power plant was built in 2008. Privately owned, it was the first commercial-scale biomass facility built in the UK. It can export 15MWh of electricity to the grid (enough to power about 40,000 homes), while in parallel offering forestry management, harvesting and fuel processing capabilities. The energy produced can also be traded as a commodity, depending on fluctuations in demand. As well as electricity the facility can also export 35MWh of heat to a local heating network.

The facility employs 25 people directly and supports an estimated 150 jobs indirectly. In order to secure a sustainable future for the business and protect the existing jobs both on-site and in the supply chain, WBE is looking for means to diversify the business. This includes a range of uses that would contribute towards the decarbonisation of the local and national economy:

- *Co-location with other energy-intensive uses, such as hydrogen pyrolysis.*
- *Means of storing the power generated to moderate supply to the wider grid, such as battery storage.*
- *Capturing externalities and using this to create new products, such as carbon capture and utilisation.*
- *Ways of utilising both the electricity and heat generated on-site to power high energy facilities such as a data centre.*

Paul Stamper Heritage was provided with an initial capacity study from a Data Centre architect. This provides an idea of the scale of the data centre facility and a possible configuration. It has been done without the benefit of the many surveys and assessments likely to be required in navigating the planning process, and is therefore subject to change. The maximum building heights proposed for the Site are 18m. Based on a 10-12MW facility, key elements include:

- Main data halls and equipment.
- Offices
- Generators
- Delivery bay
- Parking c.20-25 cars

The Site is wrapped around by the Strategic Employment Site 'EC1/2' for 6 hectares (ha) of B1, B2 and B8 use classes, allocated through the adopted Neath Port Talbot Local Development Plan (LDP) 2011 – 2026. Planning permission has been granted (ref: P2021/1255) for a metal processing facility on totalling 28,500sqm of floorspace of which includes a processing plant, warehouse and store, office building, amenity building, laboratory, services building, substation and associated infrastructure.

The potential use of an existing building on the site (a house and modern studio apartment block) remains under consideration, although it is likely the studio apartment block would be demolished.

There is an extant planning application on the site [Application reference P2022/1061 (Neath Port Talbot)] for a truck stop as follows: 'Change of use of dwellinghouse with detached studio apartments and associated land to a truck stop to include guest house (previously approved under planning permission reference P2005/0449) with addition of a café and erection of rear single-storey extension to accommodate spa facilities, together with formation of an HGV parking area with electric vehicle charging hub points, internal access road & associated infrastructure.' The planning authority reports (27 August 2024) that 'The application is still in progress, pending consideration. No outcome as of yet.'

4 THE ZONE OF THEORETICAL VISIBILITY (ZTV)

An assessment which heritage assets might, hypothetically, be impacted upon by the data centre, was informed by a ZTV produced by Tyler Grange produced to narrow the area of study and determine potential landscape and visual receptors (reproduced here as Figure 4). This was extremely useful given the Site's very specific topography.

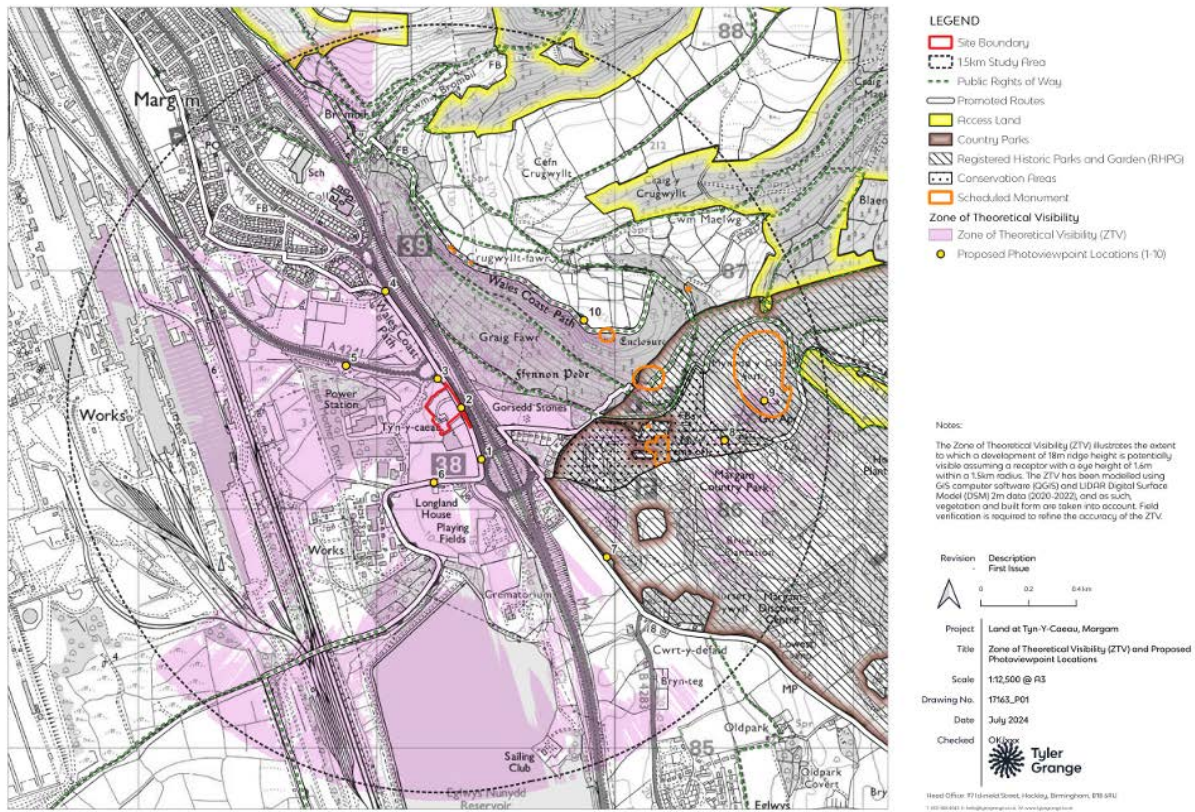


Figure 4. The site (outlined in red) and its Zone of Theoretical Visibility (Tyler Grange)

Tyler Grange Group Limited has also been instructed to undertake a Landscape and Visual Appraisal (LVA). This will consider the potential change experienced by visual receptors from publicly accessible locations within the Margam Park area. The LVA will not, however, make judgements on change experienced by heritage assets, their significance or their setting which is the purpose of the present report.

5 SETTING: POLICY AND GUIDANCE

It is concluded below that the Data Centre would cause no direct harm to any heritage assets, and thus the main consideration requiring assessment is whether it would have any adverse impact on the setting of the heritage assets noted above.

Guidance of the definition of setting, and how to assess impact, is provided by Cadw's best-practice guidance *Setting of Heritage Assets in Wales* (2017), available at [Setting of Historic Assets | Cadw \(gov.wales\)](https://www.gov.wales/government/setting-of-heritage-assets-in-wales).

Setting is defined there as the surroundings in which a historic asset is understood, experienced and appreciated, including present and past relationships to the surrounding

landscape. The importance of setting lies in what it contributes to the significance of an historic asset.

The guidance goes on to explain that, while setting is primarily visual, it can also include other features like tranquillity or remoteness. Its extent is not fixed and may change as the monument and its surroundings evolve. The setting of a historic asset can include physical elements of its surroundings, relationships with other historic features, natural or topographic features and its wider relationship and visibility within its landscape. In other words, setting often extends beyond the property boundary of an individual historic asset into a broader landscape context.

The Guidance sets out a staged methodology for assessing the impact of change or development within the setting of historic Assets. four stages are defined:

Stage 1: Identify the historic assets that might be affected by a proposed change or development.

Stage 2: Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced.

Stage 3: Evaluate the potential impact of a proposed change or development on that significance.

Stage 4: If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance.

This is the methodology used in the present study.

6 DESIGNATED HERITAGE ASSETS

On the basis of desk-top studies including the 2022 ES reported below, the impact of the proposed development was assessed on the following designated assets.

- PGW (Gm) 52 Margam Registered Park and Gardens. Registered Grade I.
- Margam Castle and associated structures. 1.3km east from the Site. Castle and Orangery listed Grade I.
- GM005 Margam Abbey. 900m east of the Site. A scheduled monument, with the former abbey church listed Grade I.
- GM162 Mynydd y Castell Camp. 1.4km east of the Site. A scheduled monument.
- GM163 Hen Eglwys. 850m east from the Site. A scheduled monument.
- GM488 Chain Home Low Radar Station. 725m north of the Site. A scheduled monument.

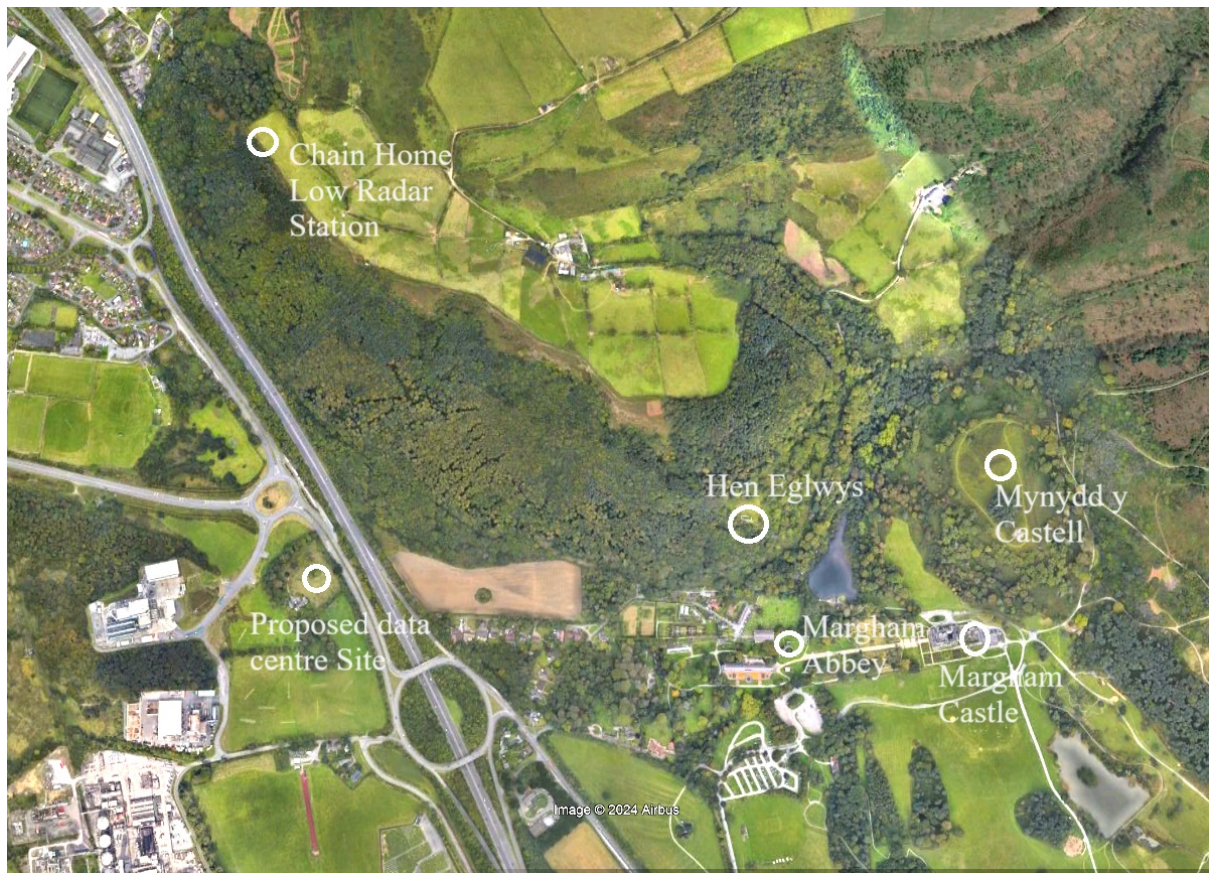


Figure 5. Google Earth 2022 imagery marked with the location of the proposed data centre Site and the principal heritage assets discussed.

Margham Park

Margam Park is an 18th-century and later landscape park which evolved from a 100-acre hunting park created in 1558 associated with the new house being fashioned from parts of Margam Abbey. It is included on Cadw's Register of Historic Parks and Gardens at Grade I. Much of it is also a conservation area.¹ Since 1977 it has been open as a public park, Margham County Park.

The registered park's western part is formed by the densely wooded slopes of Margam Mountain, with the boundary of the registered park following the east side of the A48. However, notwithstanding this proximity, given the existing road corridor (A48 and M4), and the industrial landscape beyond, we do not believe the data centre would cause further harm to this part of the registered landscape.

From within the main body of the historic parkland, and importantly from the gardens around the Castle, there are glimpsed views of Port Talbot and the uppermost parts of the TATA works. However, the topography precludes any sight of the proposed data centre's Site and there would therefore be no harm to the setting of the registered landscape.

¹ See mapping via [Archwilio](#)



Figure 6. View roughly west from the Castle gardens with the upper section of the TATA complex glimpsed left of centre, immediately right of the single tree.



Figure 7. A view taken further back to the east from Figure 6. A clearer view is emerging of the western fringe of Port Talbot.

The ZTV suggests the possibility that from some small areas of high ground within the park it may be possible to see the Site. Even if this proved to be the case, the data centre would be seen as a minor component of the extensive industrial zone behind and to either side of it. Given that, we do not believe the data centre would cause further harm to the setting of the gardens around Margam Castle or the wider registered landscape.

Margam Castle

The predecessor house here, initially fashioned from parts of Margam Abbey, was replaced between 1830 and 1835 by Margam Castle (or Margam Park), designed principally by the country house architect Thomas Hopper. It is listed Grade I, and was recently described by *Country Life* as ‘a Picturesque creation ... [one of] a group of vast Regency country houses in a Gothic idiom’. Having stood empty since the Second World War the house was acquired by Glamorgan County Council in 1973. Margam Castle was gutted by fire in 1977; since then restoration work has been carried out in stages.

The above assessment of any potential impact of the proposed data centre on the setting of Margam Castle’s gardens also holds good for the Castle itself. We do not believe there will be any harm.



Figure 8. Margam Castle from the south-east.

Other buildings

There are a number of other listed buildings and structures within the park, most notably the Grade I-listed Orangery of the later 1780s by Anthony Keck. This, the longest such structure in Britain, stands alongside the Abbey ruins, and its setting will similarly suffer no harm from the construction of the data centre.



Figure 9. The Orangery, seen from the north-east.

We believe that conclusion to hold equally well for the park's many other listed structures.

Margam Abbey

A predecessor house to the present Margam Castle was fashioned from parts the Cistercian monastery founded in 1147 after it was dissolved in the 1530s. The truncated monastic church was largely retained at that time, and survives as Margam's parish church which is listed Grade I as an important example of early Cistercian architecture. Other parts of the monastic complex remain as ruins, notably its polygonal early 13th-century chapter house.

The proposed Site of the centre is not visible at ground level from the Abbey buildings.



Figure 10. The interior of the former abbey church (source: Country Life).



Figure 11. Margam Abbey's ruinous chapter house.

Mynydd y Castell

This scheduled Iron Age hill fort stands on the summit of an isolated hill east of and above Margan Castle. It is defined by a single rampart (hard to see given the heavy bracken growth), and measures c.270m N-S by 140m. At the south end of the site is a brick structure, probably a 19th-century reservoir.

When visited the enclosure was heavily overgrown by bracken, and trees further obscured the view outwards to the west. Even so, the nature of the topography means that only distant views of Port Talbot could be obtained (Figure 12), not the remainder of the industrial landscape to the east including the Site. Accordingly we assess the construction of the data centre would cause no harm to the setting of the scheduled monument.



Figure 12. The view west over a former reservoir within the defended enclosure, with Port Talbot glimpsed in the distance.

Hen Eglwys

The scheduled monument comprises the remains of a late prehistoric defended enclosure (700 BC – AD 43) and the ruins of a medieval chapel.

The enclosure encircles a promontory with wide views out to the south and east. 114m east-west by c. 81m north-south, it encloses the promontory with two earthen banks and ditches on the west, north and eastern sides forming inner and outer defences. The southern side is protected by a steep drop and a possible entrance exists on the eastern side. The north-eastern

section of earthworks is truncated by a modern track. In the south-eastern part of the enclosure, within the inner bank, excavation revealed a stone-lined rectangular well of unknown date (now backfilled).

The later chapel – also known as Capel Mair – is located within the southern part of the enclosure. The east, west and south walls still stand to almost their full height. The west wall includes a door opening with a window above which retains some tracery. The east wall contains a window of similar but rather more elaborate design, its tracery also now incomplete. The south wall has two small windows towards the west end, a door and a larger and clearly more elaborate window toward the east end. In the south-east corner of the chapel there is a small opening for a piscina. Part of the top of the opening survives, showing an ogival trefoil design.



Figure 13. The chapel from the south-east.

When visited the enclosure was heavily overgrown by bracken, and trees further obscured the view outwards to the west. Even so, the nature of the topography means that only distant views of Port Talbot could be obtained, not the remainder of the industrial landscape to the east including the Site. Accordingly the construction of the data centre would cause no harm to the setting of the scheduled monument.

Chain Home Low Radar Station

Second World War radar station, part of the 'Home Chain Low', designed to guard against enemy surface craft and submarines in the British Channel, stands 725m north of the Site set on the high scarp of the Margam ridge. The site, which is scheduled, consists of three

squarish concrete buildings with flat roofs. The largest building, to the north of the site, was the operations room with its radar mounted on a metal gantry above the roof. The remains of the gantry survived at July 2003.²

The original Chain Home Radar system was developed to detect enemy aircraft, but whilst it was extremely effective at identifying aeroplanes at a distance and flying at high altitudes, it could not see them when they flew low on bombing missions. The development of Chain Home Low Radar filled in this gap, using smaller, higher-frequency antennas which could be manoeuvred easily to pick up signals. These were initially fitted on to existing Chain Home Radar stations, but there were still gaps in reception, so separate Chain Home Low Radar stations were built to fill them in. The station at Margam is one of these, probably constructed by the army between 1941 and 1943.³

The Site was not visited on 21 August 2024. While it seems likely that the proposed data centre would be visible from the vicinity of the radar station, it would be within the highly developed modern transport and industrial landscape already discussed. Given that, we do not believe the data centre would cause further harm to the setting of the scheduled monument.



Figure 14. Chain Home Low Radar Station (source: [Margam_Radar_Station.pdf](#) ([ggat.org.uk](#)))

² [GGAT02995w](#) ([archwilio.org.uk](#))

³ [Margam_Radar_Station.pdf](#) ([ggat.org.uk](#))

7 NON-DESIGNATED HERITAGE ASSETS

Margam Mountain Historic Landscape

'Margam Mountain Historic Landscape' is included on the non-statutory Register of Historic Landscapes in Wales. This is an advisory register that is intended to inform policy making and decision making at a strategic level and to inform environmental impact assessment. The guidance states that development proposals should ensure that any affected historic landscape areas are taken into account and that the integrity and coherence of the areas is maintained.

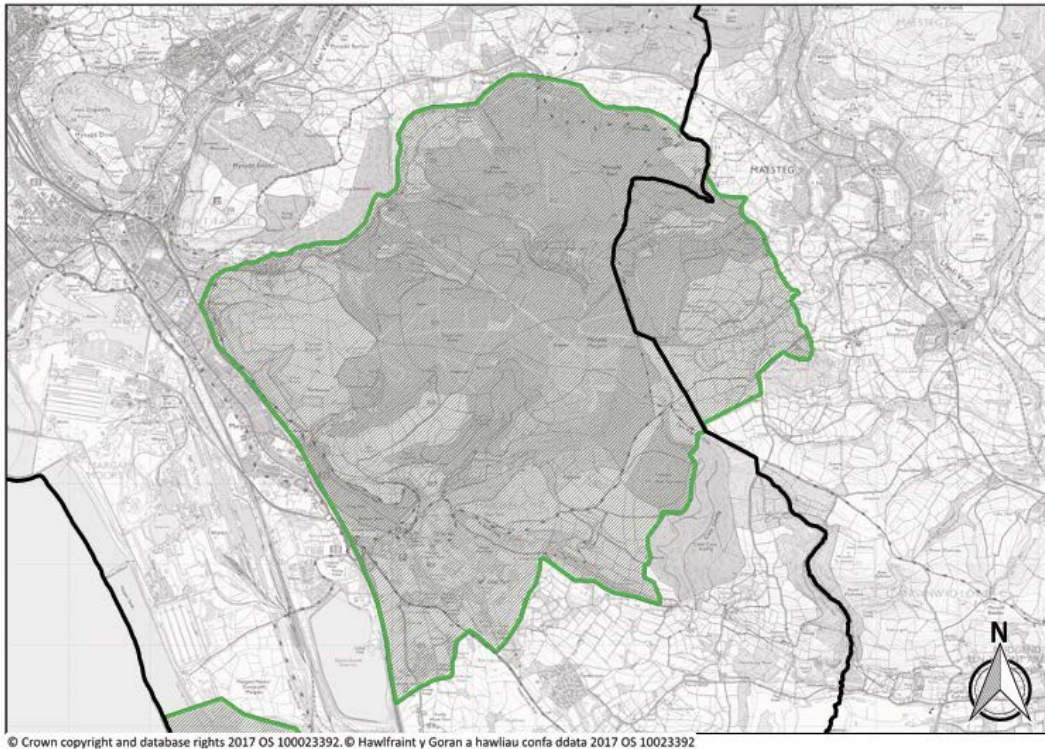


Figure 15. Margam Mountain Historic Landscape (source: Neath Port Talbot County Borough Council, Local Development Plan 2011-2026: The Historic Environment SPG April 2019)

The proposed data centre will have no direct impact on the *integrity and coherence* of the Margam Mountain Historic Landscape. Any indirect impact, notably on its setting, will be negligible, given how the west edge of the non-designated area is formed by the A48/M4 corridor, with the Port Talbot industrial zone beyond to the west.

Former dwelling at Tyn-y-Caeau

A former detached two-storey house with basement level, together with a modern two-storey detached annexe, enlarged in accord with a Guest House planning permission from 2005, stand at the southern edge of the site. The house was not entered. Outwardly it appears to be of broadly mid-19th-century date. However, it is said to have 17th-century origins, and that it

was enlarged c.1795 for the Rev. Dr. John Hunt (incumbent of Margam 1794-1816).⁴ Late 19th-century OS mapping shows farm buildings behind.⁵ These do not survive.



Figure 16. Former dwelling at Tyn-y-Caeau (Evans Banks Planning).

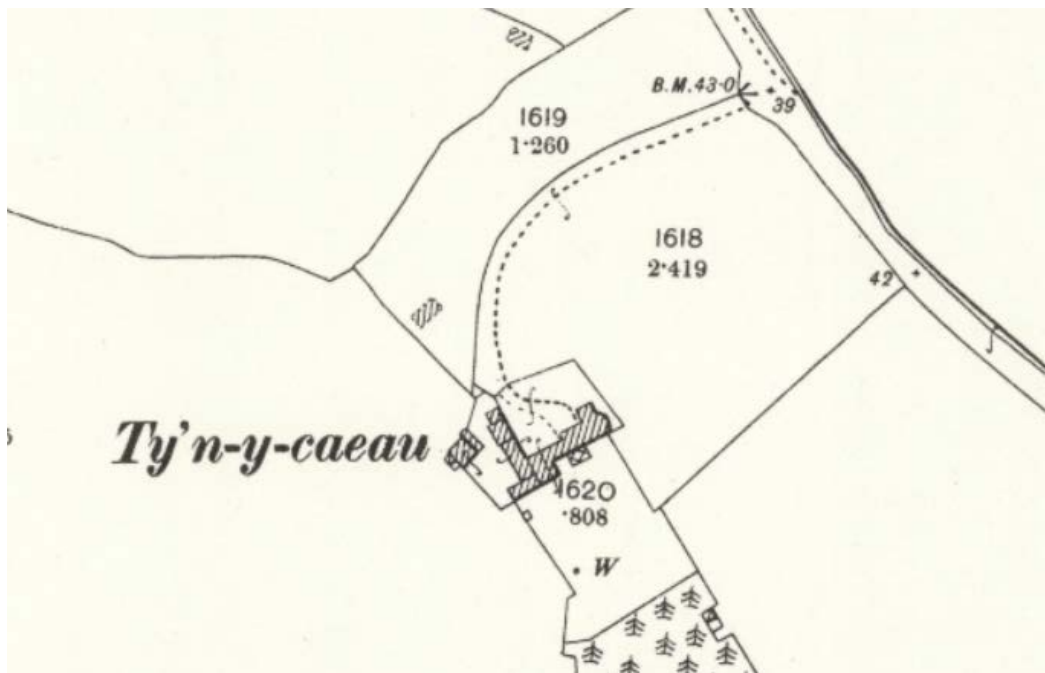


Figure 17. The house, facing towards the road, with an L-plan range to the rear (OS 25 inch, Glamorgan sheet XXXIII.7, surveyed 1897, published 1899). The approach drive curves across the application Site.

⁴ [Ty'n-y-Caeau | Coflein](#)

⁵ <https://archwilio.org.uk/her/chi3/report/page.php?watprn=GGAT09515w>

The building does not appear on the April 2029 list of ‘Buildings of Local Importance’ published by Neath Port Talbot County Borough Council.⁶

In 2022 a planning application was made to develop the facility to form a guest house with addition of a cafe etc together with formation of an HGV Parking Area with Electric Vehicle Charging Hub Points, Internal Access Road & Associated Infrastructure at Land at Tyn y Caeau, Margam Road, Margam, Port Talbot. This has yet to be determined, as noted above.

Under the present proposals the house will be refurbished as offices and meeting rooms, with ancillary supporting facilities (lavatories, kitchen). It is anticipated that any external changes would be minimal, although the modern annexe would be demolished, improving the authenticity of the farmhouse and enhancing its setting. It is accepted that the proposed data centre would stand close to the east side of Tyn-y-Caeau and impact on its setting. It is accepted that this change to the setting will cause ‘less than substantial harm’ to the building, albeit towards the lower end of the scale. However, offset against that must be set the building’s refurbishment to give it a beneficial use going in to the future, and the removal of the modern annexe. On balance it is therefore concluded that overall any harm caused by the proposed data centre would be slight.

Historic mine workings

Historic mine workings would potentially be reckoned non-designated heritage assets. However, the ES stated (para. 9.3.1) that there are no recorded workings underlying the Site, shallow or otherwise, and that the Coal Authority’s interactive map shows that there are no ‘probable’ workings present, i.e., suspected shallow mine workings for which there is no record.

Archaeology

No archaeological sites are known in the Site’s immediate vicinity.

8 PREVIOUS ASSESSMENT

In 2022 Evans Banks Planning Ltd. submitted an ‘Environmental Statement’ (ES) in line with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 to accompany an application for Full Planning Permission for the ‘Formation of a Truck Stop, (including of Minor works undertaken approved granted Planning Permission under P2005/0449 for a Guest House) with Addition of a Café and erection of rear single-storey extension to accommodate spa facilities, together with formation of a HGV Parking Area with Electric Vehicle Charging Hub Points, Internal Access Road & Associated Infrastructure’ at Land at Tyn-y-Caeau, Margam Road, Margam, Port Talbot. This is the application noted above.

This Environmental Statement originally formed part of an Appeal to Planning Inspectorate for a similar scheme at this site, which followed the refusal of planning permission in October 2020.

⁶ https://www.npt.gov.uk/media/11629/spg_historic_environment_april19.pdf

This is the Site under consideration in the present report.

In consultation with Cadw the ES considered three scheduled monuments, and one registered landscape, and one Grade I-listed building:

- GM163 Hen Eglwys
- GM477 Half Moon Camp
- GM488 Chain Home Low Radar Station
- PGW (Gm) 52 Margam Registered Parks and Gardens
- Margam Park (Grade I)

It should be noted that the ES (para 10.3.1) states (with our italics for emphasis): ‘The above scheduled monuments are located inside 600m of the proposed development *and will be visible from them.*’ In fact, the evidence presented in this report suggests otherwise.

That notwithstanding, the ES reported (para 10.2.1): ‘Having carefully considered the information provided within the PAC [Pre-Application Consultation], CADW had no objections to the impact of the proposed development on the scheduled monuments or registered historic parks and gardens.’ Here an important caveat is acknowledged, that the present application is for a development of up to 18m rather than one of perhaps two storeys (c.6m plus roof).

Cadw’s response letter was reproduced in full in Evans Banks Planning Ltd.’s 2022 ‘Pre-Application Consultation Statement’ pages 24-5.

9 CONCLUSIONS

In conclusion we assess that, on the basis of the evidence at our disposal, the proposed development (a data centre) would cause no harm, either directly or in terms of setting, to designated heritage assets and only slight or negligible harm to non-designated assets.

APPENDIX: REPORT AUTHORSHIP: DR PAUL STAMPER

Dr Paul Stamper is a specialist in the English landscape and its buildings. He is a Fellow of the Society of Antiquaries, a Visiting Fellow at the Centre for Regional and Local History at the University of Leicester, and has taught at the universities of Oxford, Bristol, and most recently Cambridge. He is a former Vice President of the Society for Medieval Archaeology and of the Royal Archaeological Institute, and a former President of the Medieval Settlement Research Group. He has published extensively through monographs, articles and book reviews.

Since 1981 he has been directly employed in researching and managing England's historic environment, firstly with the Victoria County History and for 20 years with English Heritage/Historic England. There he had various roles after joining in 1996, latterly as Senior Adviser in the Designation Department responsible for overseeing the writing and later revision of the 44 designation selection guides covering all aspects of the historic environment: archaeology; historic buildings; designed landscapes; and battlefields.

After leaving Historic England in 2016 he set up his own consultancy, Paul Stamper Heritage <https://paulstamperheritage.wordpress.com>. Most of its work involves assessing the significance of historic buildings and landscapes, and the likely impact of proposed changes. In 2021, while continuing to act in a private capacity, he became a consultant to Montagu Evans LLP, specialising in change and development in historic parks and landscapes.