

**Heritage Settings Assessment:  
On Land at Gelli Bwch Farm, Jersey Marine,  
Neath, Neath Port Talbot**

February 2023



Report No. 2169

By

John Davey



# Heritage Settings Assessment:

## On Land at Gelli Bwch Farm, Jersey Marine, Neath, Neath Port Talbot.

February 2023

Simply Planning Ltd

By

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## **Summary**

Archaeology Wales (AW) was commissioned by Simply Planning Ltd in February 2023 to carry out a Settings Assessment (SA) on the impact of a proposed ground mounted solar PV array on the setting of the Scheduled Monument of Gelli Bwch Round Cairn (GM290). The proposal is currently in the pre-application consultation phase (planning ref. P2022/1050). The Local Planning Authority is Neath Port Talbot County Borough Council (NPTCBC). Cadw have requested a settings assessment be undertaken in accordance with the methodology outlined in the Welsh Government's best practice guidance *Setting of Historic Assets in Wales* (2017).

The site is an irregular rectangular section of land covering 4.9 hectares that is currently utilised as open grassland surrounded by woodland. It is currently proposed that there will be 2594 individual photovoltaic modules, potentially mounted using adjustable piles screwed directly into the soil rather than being set in concrete footings, and with a height of approximately 2.5 – 3m above ground level. There will be a single inverter/transformer enclosure, which may require ground levelling and footings on installation, four new access gates, two new access tracks leading to the site from the north and an encircling security fence.

The assessment has determined that the setting of the Gelli Bwch Round Cairn (GM290) has been altered over the last two centuries through largescale industrial and other modern development, most notably around Briton Ferry and Jersey Marine. The regeneration of scrub and woodland to the east of the monument has also impacted on its intended views from the east and south. The proposed development lies within the backdrop of intended views to the monument from the east and southeast. However, the monument was deliberately positioned on a false crest indicating that this potential impact of the development will be negligible. Other intended views away from the monument to the south will not be impacted by the proposed development.

The proposed development lies within an historic field system dating from at least the mid-19th century or earlier. The origin of this field system remains unclear, but it could provide evidence for the original context of the monument. Nevertheless, the development is designed to fit within the existing fields, and it is understood that all external field boundaries will be retained and enhanced.

Research for this assessment has indicated the possibility that there may originally have been a third Cairn associated with the Gelli Bwch, rendering this a potential cairn cemetery rather than a pair. Further work is needed to confirm this, but LiDAR suggests the third may be a ring cairn lying approximately 40m northeast of Gelli Bwch I (GM290). No trace of this possible cairn is visible on the ground, which is covered by overgrowth and scrub. The proposed development will not impact on the setting of this previously unrecorded monument, but rather has presented the opportunity to better understand its relationship with Gelli Bwch I and II cairns.

## **Crynodeb Annhechnegol**

Comisiynwyd Archaeology Wales (AW) gan Simply Planning Cyf ym mis Chwefror 2023 i gynnal Asesiad Lleoliad ar effaith casgliad o baneli solar ffotofoltäig wedi'u gosod yn y tir yn lleoliad heneb gofrestredig Carnedd Gron Gelli Bwch (GM290). Mae'r cynnig yn y cyfnod ymgynghori cyn gwneud cais ar hyn o bryd (cyfeirnod cynllunio P2022/1050). Yr Awdurdod Cynllunio Lleol yw Cyngor Bwrdeistref Sirol Castell Nedd Port Talbot. Mae Cadw wedi gwneud cais i asesiad gael ei gynnal yn unol â'r fethodoleg a amlinellir yng nghanllawiau arferion gorau Llywodraeth Cymru, Lleoliad Asedau Hanesyddol yng Nghymru (2017).

Mae'r safle yn ddarn o dir petryal afreolaidd sy'n cwmpasu 4.9 erw sy'n cael ei ddefnyddio ar hyn o bryd fel tir glas agored gyda choedwig o'i gwmpas. Cynigir ar hyn o bryd y bydd 2594 o fodiwlau ffotofoltäig unigol, y mae'n bosibl y byddant yn cael eu gosod gan ddefnyddio pinnau y gellir eu haddasu sydd wedi eu sgrwio'n uniongyrchol i'r pridd yn hytrach na'u bod wedi'u gosod mewn sylfeini concriid, i uchder o tua 2.5-3m uwchlaw lefel y tir. Bydd un man caeëdig ar gyfer gwrthdröydd/trawsnewidydd, y mae'n bosibl y byddai angen lefelu'r tir a gosod sylfeini ar gyfer ei osod, pedair giât fynediad newydd, dau lwybr mynediad newydd i'r safle o'r gogledd a ffens ddiogelwch i'w amgylchynu.

Mae'r asesiad wedi pennu bod lleoliad Carnedd Gron Gelli Bwch (GM290) wedi'i addasu dros y ddwy ganrif ddiwethaf drwy waith datblygu diwydiannol ar raddfa fawr a datblygiadau modern eraill, yn fwyaf nodedig o gwmpas Llansawel a Phentrecaseg. Mae'r gwaith o adfywio'r prysgwydd a'r coetir i'r dwyrain o'r heneb hefyd wedi effeithio ar ei olygfeydd bwriadedig o'r dwyrain a'r de. Mae'r datblygiad arfaethedig yn gorwedd o fewn cefndir y golygfeydd bwriadedig i'r heneb o'r dwyrain a'r de-ddwyrain. Fodd bynnag, roedd yr heneb wedi'i gosod yn fwriadol ar grib ffals gan nodi y bydd yr effaith bosibl hon ar y datblygiad yn fach. Ni fydd golygfeydd bwriadedig eraill, i ffwrdd o'r heneb i'r de, yn cael eu heffeithio gan y datblygiad arfaethedig.

Mae'r datblygiad arfaethedig yn gorwedd o fewn system hanesyddol o gaeau sy'n dyddio o ganol y 19eg ganrif o leiaf neu'n gynt. Mae tarddiad y system hon o gaeau yn parhau i fod yn aneglur, ond gallai ddarparu tystiolaeth o gyd-destun gwreiddiol yr heneb. Fodd bynnag, dyluniwyd y datblygiad i ffitio o fewn y caeau presennol, a deëllir y bydd holl ffiniau allanol y caeau yn cael eu cadw a'u gwella.

Mae'r gwaith ymchwil ar gyfer yr asesiad hwn wedi nodi'r posibilrwydd y gallai bod trydedd Carnedd o bosibl sy'n gysylltiedig â Gelli Bwch, sy'n golygu y gallai fod yn fynwent carneddau yn hytrach nag yn bâr. Mae angen gwneud rhagor o waith i gadarnhau hyn, ond mae LiDAR yn awgrymu y gallai'r drydedd fod yn garnedd siâp cylch sydd i'w gweld ar y tir, wedi'i gorchuddio â gordyfiant a phrysgwydd. Ni fydd y datblygiad arfaethedig yn effeithio ar leoliad yr heneb hon nas cofnodwyd o'r blaen, ond yn hytrach mae wedi cyflwyno cyfle i ddeall ei pherthynas â charneddau I a II Gelli Bwch yn well.

## **1. Introduction**

### **1.1. Background**

- 1.1.1. In January 2023 Archaeology Wales (henceforth – AW) was commissioned by Simply Planning to carry out a Settings Assessment in relation to the proposed construction of a ground mounted solar PV array with a generating capacity of up to 1.41 MW at land at Sun Fields, Dream Fields Lane, from B4290 to Gelli Bwch Farm, Jersey Marine, Neath, Neath Port Talbot, SA10 6JU (henceforth – the site) (Figures 1 and 2). The development is still in the pre-planning phase.
- 1.1.2. Numerous historical assets were identified by Cadw as being located within 3km of the proposed development. These were Carreg Hir Standing Stone, Pen-Rhiw-Tyn (GM170), Gelli-Bwch Round Cairn (GM290), Llandarcy Round Cairn (GM291), St Margeret’s Chapel (GM362), Tennant Canal: Skewen Cutting and Tramroad Bridge (GM394), Briton Ferry Dock Entrance (GM445) and Ynysmaerdy Railway Incline (GM489). The Registered Historic Park and Garden of Jersey Park (PGW(GM)62(NEP) is also within 3km of the proposed development site.
- 1.1.3. The consultation letter dated 22<sup>nd</sup> December 2022, noted that aside from GM 290 Gelli-Bwch Round Cairn, intervening topography, buildings and vegetation block all views between the assets and the proposed development site. Cadw concluded that:
- ...any application for this development should be accompanied by an assessment of the impact of the proposed development on the setting of the scheduled monument, prepared by a competent and qualified historic environment expert in accordance with the methodology outlined in the Welsh Government’s best-practice guidance settings of Historic Assets in Wales.*
- 1.1.4. This assessment has been undertaken in line with relative legislation and in accordance with the guidance set out in *Managing Heritage Impact Assessment in Wales* (Cadw 2017).

### **1.2. Site Location**

- 1.2.1. The proposed development site covers an area of approximately 4.9 hectares and sits within a rural setting. The site lies approximately 125m south of Llandarcy and approximately 1km west of the M4 motorway.
- 1.2.2. The underlying geology for the proposed development site comprises of Rhondda Member – Sandstone; a sedimentary bedrock formed between 315.2 and 308 million years ago during the Carboniferous period. This is overlain by superficial deposits of Devensian Till – Diamicton; a sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period (BGS 2023).

## 2. Legislation and Guidance

2.1.1. This assessment has been undertaken in line with the relevant legislation and guidance relating to the historic environment, which is outlined below.

2.1.2. National planning guidance, concerning the treatment of archaeological remains, listed buildings, conservation areas and the wider historic built environment in Wales, is detailed in Chapter 6 of Planning Policy Wales (PPW), Edition 11 (February 2021). Chapter 6 of the Planning Policy outlines the policy relating to Distinctive and Natural Places which includes the Historic Environment. Paragraph 6.1.7 states that:

*“It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.”*

2.1.3. Archaeology Wales works to the standards and guidance published by the Chartered Institute for Archaeologists and The Setting of Historic Assets in Wales guidance issued by Cadw.

2.1.4. The assessment involved consultation of available archaeological and historical information based on a study area that extended for a 3km radius from the centre of the proposed development area. In addition to the desk-based assessment, a site walkover was undertaken on 14<sup>th</sup> February 2023.

2.1.5. The principal sources of in archaeological and historical formation comprised:

- Cadw inventory of designated historic assets.
- Glamorgan-Gwent Archaeological Trust (GGAT) Historic Environment Record (HER), which holds information on known archaeological sites, monuments and finds, as well as previous archaeological investigations (GGAT Enquiry Ref. 6867).
- The National Monuments Record of Wales (NMRW).
- Available historic mapping (Ordnance Survey and Tithe).
- NRW LiDAR coverage of the site and its environs, at available 1m DSM resolution; Accessed 27/02/2023.
- Aerial photographs held by the Central Register of Aerial Photography for Wales, Cardiff (CRAPW)

2.1.6. The Planning (Listed Buildings and Conservation Areas) Act 1990 is the primary legislative instrument addressing the treatment of listed buildings through the planning process in Wales. Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 sets out the statutory duty of the decision-maker, where proposed development would affect a listed building or its setting. This includes preserving the building, its setting or any special architectural and historical features that are of interest.



- 2.1.7. The policy sets out the need for planning proposals to have fully considered the impact of the development on the historic environment, with guidance on how to do this given in Technical Advice Note 24 (TAN 24). Within TAN 24 the process of conducting a Heritage Impact Assessment is set out. Cadw have set out guidance on how to conduct an assessment in their document *Managing Heritage Impact Assessment in Wales* (2017). This assessment has been prepared in accordance with that guidance.
- 2.1.8. Neath Port Talbot County Borough Council's (NPTCBC) approach to the historic environment is outlined in Policy SP21, Built Environment and Historic Heritage, of the Local Development Plan (LPD), adopted in January 2016. In relation to changes to Scheduled Monuments, it states that applicants are expected to ensure that:
- "The built environment and historic heritage will, where appropriate, be conserved and enhanced through the following measures: 1. Encouraging high quality design standards in all development proposals; 2. Protecting arterial gateways from intrusive and inappropriate development; 3. Safeguarding features of historic and cultural importance; 4. The identification of ...designated sites to enable their protection and where appropriate enhancement: [including] Scheduled Ancient Monuments."*
- 2.1.9. NPTCBC has also produced Supplementary Planning Guidance concerning the historic environment: Local Development Plan 2011-2026. The Historic Environment. Supplementary Planning Guidance (Consultation Draft- January 2019).
- 2.1.10. The Chartered Institute for Archaeologists has also recently published guidelines on how to conduct a cultural heritage impact assessment and these have also been consulted during the preparation of this report (CIfA 2021).

### **3. Methodology**

- 3.1.1. The primary objective of this assessment is to assess the impact of the development proposals on the historic asset, specifically the Scheduled Monument of Gelli-Bwch Round Cairn (GM290; GGAT00640w). It will gather enough information to understand the significance of the heritage asset affected and assess the impact of the proposals on the asset. This will help inform future decision making, design solutions and potential mitigation strategies.
- 3.1.2. This report provides information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource.
- 3.1.3. The production of this report follows the guidance set out in Setting of Historic Assets in Wales (Cadw 2017). This details a four-stage approach:
- 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.

3.1.4. In order to identify and assess the significance of the asset, the assessment considers the following:

- The significance of the existing site and its setting, and its relationship to adjacent and non-designated heritage assets, through assessment of various readily available primary sources:
  - Assessment of all available reports and archives including unpublished and unprocessed material affecting the site and its setting. Archaeology Wales commissioned a search of records held on the Glamorgan Gwent Archaeological Trust Historic Environment Record (HER) within 1km search area of the site under HER Enquiry Reference Number: 6966. The search was completed on the 8<sup>th</sup> February 2023.
  - Assessment of all relevant extant photographic evidence, including available historic photos.
  - Map regression analysis using all relevant cartographic sources e.g., all editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
  - Historic documents (e.g., Charters, registers, estate papers).
- The significance of the assets in their local, regional and national context and in light of the findings of the assessment.

3.1.5. Assessing the significance of the asset in this way will allow any potential impacts of the proposed development, both beneficial and harmful, on the asset and its setting to be identified.

## **4. The Development Proposals**

4.1.1. The proposed development area is 4.9 hectares of roughly rectangular grass field with irregular boundaries. It sits approximately 125m south of Llandarcy and approximately 1km west of the M4 motorway. The land is located on the south side of an unnamed road that runs from Llandarcy Village to Jersey Marine, immediately southwest of Henbarc Farm, and sits upon an undulating plateau of land that rises above the village of Jersey Marine west of the River Neath. The southwest side of the site is generally higher in elevation, with the ground sloping down to the north and northeast at the northern end and to the south at the southern end.

4.1.2. The main access to the site is from the unclassified minor road to the north of the

site. The site boundary encompasses one formerly enclosed pasture field adjacent to the road to the north, plus sections of three adjacent fields to its southwest, south and southeast. Ancient woodland, recorded on historic maps from at least 1844, forms the site's border against the road on the north-northwest side, beyond the adjacent field to the northwest, and to the southwest (Plate 1). The northeast boundary of the site follows the former track from the road to Gelli-Bwch Farm (GGAT02639w) and is also populated by mature trees (Plate 2). The proposed development site boundary then continues southeast, ignoring the field boundaries and forming an irregular rectangular shape measuring 270m long northwest to southeast by 196m wide northeast to southwest. The internal boundaries are generally comprised of bracken margins with relict earthwork banks (Plate 3).

- 4.1.3. The proposals are for the construction of a of a ground mounted solar PV array with a generating capacity of up to 1.41 MW and is likely to include the following: 1) photovoltaic panels; 2) power storage units; 3) mounting frames; 4) inverters; transformers and associated cabling; 5) security fencing; 6) service and access road and gates (Figure 3).
- 4.1.4. It is currently proposed that there will be 2594 individual photovoltaic modules, potentially mounted using adjustable pins screwed directly into the soil rather than being set in concrete footings, and with a height of approximately 2.5 – 3m above ground level. There will be a single inverter/transformer enclosure, which may require ground levelling and footings on installation, four new access gates, two new access tracks leading to the site from the north and an encircling security fence (Figure 3).
- 4.1.5. It is possible that construction may involve any of the following activities:
  - Removal of historic field boundaries
  - Construction of infrastructure
  - Service installation
  - Site Access tracks for the construction and operational phases
- 4.1.6. The proposed development has the potential to generate indirect (visual) impacts on neighbouring archaeological sites, such as altering the visual setting or tranquillity of the sites and landscapes. In particular, this refers to the Gelli-Bwch Round Cairn (GM290), which will have limited visibility with the southern section of the site. The proposed development will be otherwise largely screened from nearby heritage sites, such as the neighbouring Llandarcy Conservation Area, Scheduled Monuments and Registered Park and Garden, by its elevation in comparison to those sites, as well as by the intervening built environment and existing mature trees.

## **5. Stage 1: Identifying Affected Historic Assets**

- 5.1.1. Initial scoping was conducted using ZTV analysis. A model was produced using 1m DSM data. Thirteen viewpoints were placed across the proposed development area, located on parts of the site where the proposed solar panels and inverter/transformer enclosure are proposed to be located, with a development height of 3m. The output, covering a 3km radius around the site, is shown in Figure 4, overlaid with contour and spatial data for designated assets within 3km of the site. The ZTV model is not definitive, but it does provide a worst-case scenario for the visual impacts of the development.
- 5.1.2. Assets relating to Gelli-Bwch Round Cairn (GM290; GGAT00640w) appear very likely to be impacted, with theoretical visibility towards 10 of the 13 viewpoints, mostly located in the southern and central parts of the site, from the northwest side of the Cairn (Plate 4). Views from the southeast side of the Cairn are unaffected. It is these views towards the southeast, across Baglan Bay towards Mynydd Dinas and Mynydd y Gaer (Plate 5) that represent the significant views from Gelli Bwch Round Cairn.
- 5.1.3. A small area within the southeast boundary of the Llandarcy Conservation Area (CA) may theoretically be impacted, with visibility towards four viewpoints in the northern part of the site. However, this part of the CA is on private land and has no public access. There is limited intervisibility with the site from publicly accessible parts of the CA due to intervening topography, built environment and mature trees (Plate 6). However, there is a small area of seasonal visibility on the southern extent of the CA but this would be mitigated by the proposed planting. Similarly, the model indicates that the east side of the Jersey Park Registered Historic Park and Garden (PGW(Gm)62(NEP)) may be impacted, with theoretical views towards three viewpoints within the site. However, a site visit for an associated desk-based assessment (Muller 2023) demonstrated that due to intervening trees, built environment and the great distance between the two sites, this impact will be negligible (Plate 7). No other designated assets will be impacted.
- 5.1.4. A follow-up site visit was conducted to confirm the levels of visibility on the ground.
- 5.1.5. Cadw, in a consultation response letter dated to the 22<sup>nd</sup> December 2022, highlighted the following designated assets located within 3km of the site:

### **Scheduled Ancient Monuments:**

- GM170 Carreg Hir Standing Stone, Pen-Rhiw-Tyn
- GM290 Gelli-Bwch Round Cairn
- GM291 Llandarcy Round Cairn
- GM362 St Margaret's Chapel
- GM394 Tennant Canal: Skewen Cutting and tramroad bridge
- GM445 Briton Ferry Dock Entrance

- GM489 Ynysmaerdy Railway Incline

#### **Registered Historic Parks and Gardens:**

- PGW(Gm)62(NEP) Jersey Park

5.1.6. The consultation response stated that:

*“The proposed development is likely to be visible from scheduled monument GM290 Gelli-Bwch Round Cairn, which is located some 450m to the east. It is not currently thought that the proposed development will be located in the significant view from the cairn and therefore any adverse impact caused by it will not be of sufficient scale to require an EIA to be produced: However, section 6.1.23 of Planning Policy Wales 2021 indicates that this will be a material consideration in the determination of any application for this development. Application. Consequently, whilst an EIA is not required, any application for this development should be accompanied by an assessment of the impact of the proposed development on the setting of the scheduled monument, prepared by a competent and qualified historic environment expert in accordance with the methodology outlined in the Welsh Government’s best-practice guidance Setting of Historic Assets in Wales (2017).”*

5.1.7. It indicated that intervening topography, buildings and vegetation block all views between all of the designated assets, except scheduled monument GM290: Gelli-Bwch Round Cairn. Consequently, the proposed development will have no impact on the settings of these designated historic assets other than GM290.

## **6. Stage 2: The Setting**

### **6.1. Gelli-Bwch Round Cairn (GM290; GGAT00640w)**

6.1.1. Gelli-Bwch Round Cairn (GM290), located 440m to the southeast of the site, is the closest designated heritage asset to the proposed development. It is recorded on the Glamorgan Gwent Archaeological Trust Historic Environment Record (GGATHER) as Gelli Bwch I (GGAT00640w) and it forms a pair with the unscheduled and badly damaged Gelli Bwch II (GGAT00641w), which lies 55m to the south southeast on the same knoll (Plate 8).

6.1.2. The Scheduled Monument (GM290; GGAT00640w) consists of the remains of a circular burial cairn dating to the Bronze Age. The scheduled Monument Description states:

*“The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits, together with environmental and structural evidence. Cairns may be part of a larger cluster of monuments and their importance can further enhanced by their group value.*

*The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive” (Cadw 1962).*

- 6.1.3. The cairn measures 18.3m in diameter and 1.5m high. The top of the monument now bears a central stone filled hollow; this disturbance being the result of antiquarian excavation. It sits on a high summit with 360° views, although the most significant views are to the east across the Vale of Neath towards Foel Fynyddau and Mynydd y Gaer. Both of these hills are located between 4.6km and 6.2km east and southeast of Gelli Bwch Round Cairn and contain significant prehistoric monuments intended to be intervisible with it. A further significant view is to the south across Baglan Bay and the Severn Estuary (Plate 8).
- 6.1.4. A second unscheduled cairn: Gelli Bwch II (GGAT00641w) sits on the south-southwest side of the same hill, but at a lower elevation (Plate 8) and has no intervisibility with the proposed development site. Nevertheless, it forms part of the setting of the Scheduled Monument. It is described on the GGAT HER as one of a pair of cairns, badly damaged to the southeast where it is crossed by an east-northeast to west-southwest oriented wall. To the north of this wall, the remains of the cairn can be made out as an earthwork demarcating approximately half a circle.

#### **The Original Landscape Setting**

- 6.1.5. The pair of round cairns at Gelli Bwch Farm are set within a wider prehistoric funerary landscape comprising Bronze Age cairn fields and round barrows, but also pre-existing monuments such as long barrows, chambered tombs and henges. A survey of prehistoric funerary monuments in Glamorgan and Gwent was carried out by GGAT and published in 2003 (Evans and Lewis 2003). This survey noted that the Gelli Bwch pair of cairns are situated within an upland area where their position would have been chosen to have significant intervisibility, usually with better views of monuments on adjacent ridges than those on the same ridge (Evans and Lewis 2003, 25). This is clearly the case with the Gelli Bwch pair of cairns. They are not located at the highest point of the local region; this is found on the hill above Gelligeridig Wood, of which the proposed development site forms the eastern slopes. They are rather located on the lip of the scarp that overlooks the Vale of Neath and intended to be most prominent when viewed from the direction of contemporary prehistoric monuments on Foel Fynyddau and Mynydd y Gaer 5 – 6km to the east.
- 6.1.6. This point is reinforced by the carefully chosen location of the neighbouring scheduled round cairn at Llandarcy (GM291). This cairn is located 660m north of the Gelli Bwch Round Cairn (GM290) at the lower north end of the Llandarcy ridge. It is not visible from the site and nor is it clearly visible from Gelli Bwch Cairn (Plate 9). Its position is such that it can only clearly be seen from the east across the Vale of Neath. In general, the survey of prehistoric funerary monuments in Glamorgan and Gwent revealed a preference of level sites for all classes of funerary monument, and a preference for a southern aspect on sloping sites for cairns, as opposed to barrows and other monument types (Evans and Lewis 2003, 26).

- 6.1.7. The natural topography of the Gelli Bwch Farm region is such that it occupies an undulating promontory or headland of higher ground between the Crymlyn Bog to the west, the Vale of Neath to the east, and Baglan Bay to the south. There is as yet no direct evidence for the vegetation cover of the region in the Bronze Age; this would require a targeted programme of palaeoenvironmental investigation. Nevertheless, the Bronze Age represented a period in which uplands were increasingly colonised and where systems of enclosed fields were expanding. It is reasonable to speculate then that the contemporary landscape associated with the Round Cairn, may have comprised enclosed pasture fields surrounded by hedge banks and interspersed with isolated dispersed farmsteads. The gently undulating uplands may also have been surrounded by steep wooded scarp slopes and unenclosed seasonal wetlands in the flat vales below. This landscape picture is not dissimilar to that of the medieval and post-medieval periods, prior to the advent of industrial development in the region. It is interesting to note that a recent programme of OSL dating on hedge banks in Devon and Cornwall has demonstrated that many extant field banks in Southwest Britain can now be shown to have originated in the Bronze and Iron Ages (Vervust *et al.* 2020).

#### **Changes to Use and Function**

- 6.1.8. Gelli Bwch Round Cairn (GM290) is presumed to have originally been intended to function as a sepulchral cairn. The presence of stony hollows in the summit is typical of antiquarian excavations into such monuments in order to recover grave goods associated with the burials. However, there is no record of any such excavation at Gelli Bwch and no record of any burials that may have been unearthed at the time. Nevertheless, its scale and position are consistent with an interpretation as a burial mound. The monument is located on the edge of the headland looking across to neighbouring land masses and laying territorial and ancestral claim to the land. The neighbouring Llandarcy Round Cairn (GM291) is smaller in scale but includes an upright stone slab measuring 0.40m high by 1.8m long, which extends out of the side of the cairn by 0.9m. The slab is thought to represent the remains of a stone cist (Plate 10). The Gelli Bwch Round Cairn (GM290) does not have any visible traces of a former cist or surrounding kerb. However, the Gelli Bwch cairn is larger than the Llandarcy example and a cist or chamber could certainly survive enclosed within it.
- 6.1.9. There is no evidence for a change of use of the Gelli Bwch Round Cairn (GM290) over time. However, Bronze Age Cairns and Round Barrows frequently became incorporated into later boundaries (Goodier 1984). It is not clear whether this is due to their distinctive topographical positions: typically on ridges, watersheds or hill tops; natural features that lend themselves to use as parishes boundaries; or whether the later boundaries perpetuate an earlier territorial claim marked by the monuments. Whilst the Gelli Bwch cairn does not lie directly on any parish or estate boundary, it does lie close to the boundary between Gelli Bwch Farm and Pant y Sais Farm, as shown on the Tithe Map of the parish of Cadoxton juxta Neath in the County of Glamorgan, 1844.

- 6.1.10. The Gelli Bwch Round Cairn (GM290) is first depicted on historic maps on the Ordnance Survey 1<sup>st</sup> Series Map, Sheet 37, dated 1830 (Figure 5). The Gelli Bwch II cairn (GGAT00641) is also shown, as well as a possible third cairn to the north-northeast. The Cairns are not shown on the Tithe map of 1844 (Figure 6), but the field in which they are set (Plot 338) is called Cae pen yr allt, which can be approximately translated as 'Field at the top of the hill'. The field was utilised as meadow at that time by the occupier Mrs Edwards. The landowner was Lord Dynevor. The first edition OS county series 6inch map (Glamorgan Sheet XXIV, 1884), surveyed in 1876/1877 shows just two cairns set within the same enclosed field shown on the Tithe map. The southern cairn: the unscheduled Gelli Bwch II (GGAT00641) is hard against the southeast boundary of this field and it is this field wall that appears to have slighted one side of the cairn. Subsequent County Series maps show that the field gradually reverts to rough pasture and scrub over the early part of 20<sup>th</sup> century, until by the 1951 edition, the field has been subdivided into two, with regenerated woodland in the northeast part and rough pasture in the southwest. It is the southwest part that contained the two Gelli Bwch Cairns. The same situation was depicted on the OS 1:10,000 plan of 1964.
- 6.1.11. Satellite imagery of the cairns is readily available on Google Earth from 1999 onwards. This image shows that the regenerated woodland in the northern part of the field had been removed by 1999, with the field reverting to its original unified size. The approximate position of the possible former third cairn to the north of Gelli Bwch Round Cairn (GM290) depicted on the OS 1st series map of 1830 is potentially visible as a circular patch of gorse or scrub. The same patch is also visible on 1m DSM LiDAR data, although was not visible during a site visit, due to the reduced level of any possible former earthwork, now masked by scrub. The field comprises rough pasture overgrown with scrub to the southwest of the unscheduled Gelli Bwch II. Subsequent satellite imagery shows the field becoming increasingly overgrown so that it is no longer possible to see the location of the potential former third cairn.

#### **Changes to the Landscape Setting**

- 6.1.12. There have clearly been significant changes within the Vale of Neath and Baglan Bay during the era of industrialisation of the Swansea region during the 18<sup>th</sup> and 19<sup>th</sup> centuries. At the time of the Tithe map in 1844, the area surrounding the cairns largely comprised agricultural enclosures and unenclosed woodland. However, further afield to the west, chemical works, copperworks, gas works, quarries, and a canal wharf associated with the urban areas of Swansea and Briton Ferry are shown. Similarly, the town of Port Talbot had expanded in population and industrial development.
- 6.1.13. There are twenty-two post-medieval and eight modern archaeological monuments listed on the GGAT HER within 1km of the development site, many of which relate to nearby industrial activity dating from the 19<sup>th</sup> century onwards.
- 6.1.14. To the southeast of the site, the Tennant Canal links the River Neath with the River



Tawe; running directly beneath the scarp slope upon which the Gelli Bwch Round Cairn sits just 200m away. The Tennant Canal developed from the earlier Glan-y-wern Canal, which was built across Crymlyn Bog to transport coal from a colliery on its northern edge, to a creek on the River Neath called Red Jacket Pill. It closed after 20 years but was incorporated by William Tennant into the Tennant Canal in 1821, and it eventually ran from the mouth of the River Tawe, near Swansea, to Aberdulais Basin where it met the Neath Canal (Swansea 2023).

- 6.1.15. By the time of the 1<sup>st</sup> edition OS County Series map of 1884 the Vale of Neath Section of the Great Western Railway is shown following the approximate line of the Tennant Canal. This line opened in 1863 as the Swansea and Neath Railway and amalgamated with Great Western Railway in 1865. This rapidly led to the development of a settlement at Jersey Marine with the establishment of Briton Ferry Road Station and the Jersey Marine Hotel. The Crymlyn Burrows Colliery lay close by to the east, approximately 1km south-southwest of the Gelli Bwch Round Cairn. The village of Jersey Marine lies less than 500m southwest of the proposed development site. Evidence of early industrial activity in the form of old collieries (GGAT03149w; GGAT07414w), a coal pit (GGAT07400w) and a lime kiln (GGAT06233w) lie around the village, while the remainder of the heritage assets within the village refer to its subsequent development as a settlement and holiday resort. In particular, there is Crymlyn Primary School, Jersey Marine (GGAT09367w), a small, traditional village school dating from the original phase of development in c. 1907. It is included in the Neath Port Talbot list of Buildings of Local Importance and Designated Canal Structures (Neath Port Talbot Council). There are two post-medieval houses: Pant y Sais (GGAT02640w) and SS79SW 8 Burrows Lodge (GGAT03148w). The Jersey Marine Tower (GGAT02035w; LB11846): a four-storey octagonal, castellated tower built sometime before 1867, once housed a camera obscura. Adjacent to that are the remains of a handball court (GGAT02810w; LB11850), dated to 1864.
- 6.1.16. The Briton Ferry Copper Works and the Red Jacket Copper Works were established in the 19<sup>th</sup> century approximately 600m east of the Gelli Bwch Round Cairn (GM290), served by the canalised Red Jacket Pill. The Briton Ferry Copper Works (GGAT03145w) were built in 1853 by a partnership of Sweetland, Tuttle & Co and one of the Bankart brothers of the neighbouring Red Jacket Copper Works. The works were sold in 1880 to the Cape Copper Company and closed c. 1926. The copper works were built in 1849 by London solicitor Frederick Bankart with his two sons acting as agents. Both the works and coal pit were visible on the 1st edition OS map (1882) but gone by the second (1899). Approximately 2km east of the cairn, the industrial town and port of Briton Ferry was in rapid growth during the mid to late 19<sup>th</sup> century with major iron and tin works, a colliery and gas works.
- 6.1.17. A Tramroad (GGAT07413w), present on the Ordinance survey County Series second edition map, crossed over the Tennant canal at Jersey Marine.
- 6.1.18. Just north and northwest of the development site is the former location of the UK's first oil refinery at Llandarcy (GGAT05026w), opened in 1919 and covering 400

hectares. In 1995 BP closed the refinery (Evans 2022) and all trace of it has now largely removed and is being redeveloped for housing. This major development has no intervisibility with the Gelli Bwch Round Cairn.

- 6.1.19. The nearby model village of Llandarcy (GGAT05027w) was built in 1921 and officially opened in 1922, providing houses for the workforce of the refinery. The village was named after the founder of the company, William Knox D'Arcy. It lies immediately south of the refinery site and ranges between 180m to 300m northeast of the proposed development site. The village consisted of 120 houses and two blocks of flats; a community hall with shop; tennis courts and a bowling green. The Llandarcy Institute (GGAT09357w): a 20<sup>th</sup> century village hall and meeting rooms, was centrally located within the Village. This village is now designated as a Conservation Area (WAL/NPT/3), but has no intervisibility with the Gelli Bwch Round Cairn, and limited intervisibility with the proposed development site.
- 6.1.20. The Swansea Bay Golf Club, established 1892, moved to Crymlyn Burrows circa 1899 – 1907. By the late 20<sup>th</sup> century golfing had expanded with the establishment of the Earlswood Golf Course occupying the neighbouring ridge to Gelli Bwch, approximately 500m to the southeast. The name Earlswood is the Anglicisation of the Welsh *Coed yr iarll*, the name of two farms occupying the ridge from at least the 19<sup>th</sup> century. Aerial photographs available from the National Library of Scotland, dated 1949, show that the A483 was under construction along the Crymlyn burrows to the south and east of the Earlswood Ridge by that time. The road opened in the mid-1950s and linked with the M4. The route of the M4 at Briton Ferry was established by 1966, as the A48 initially, although the Briton Ferry Bridge section was not classified as a motorway until 1993 and ran 700m east of Gelli Bwch Round Cairn at its closest.

### **Current Landscape Setting**

- 6.1.21. Gelli Bwch Round Cairn (GM290) appears to have been intended to be prominently visible from the neighbouring ridge at Earlswood, with longer views to the east and south across the bay. Views to and from the east are now impacted by industrial, transport and housing development at Briton Ferry. This is particularly noticeable in views towards the site from the elevated section of the M4 as it approaches Briton Ferry Bridge from the east. However, the round cairn itself is partially visible from the east at this point, albeit overgrown with scrub and difficult to distinguish from its surroundings. Modern pylons running across the Earlswood Ridge and a modern communications tower now dominate this view. However, the development site is not visible. The Round Cairn occupies a false crest, which blocks the view of the development site, despite it being at a slightly higher elevation. The development site will therefore not impact on this intended view. The only remaining clear long-distance views from the cairn are towards the south and east across the bay, with the proposed development again hidden behind the false crest. There are also short views back towards the west from the cairn itself, which incorporate the southern part of the proposed development site (Plate 4). These views, whilst not being the

intended view from the monument, do still retain a sense of the potential original landscape context of small, enclosed fields.

- 6.1.22. The trees that partially inhibit the primary intended view east from the Gelli Bwch Round Cairn (GM290) have grown up progressively to the south of Gelli Bwch Farm, and along the steep slopes south of the monument during the 20<sup>th</sup> century. These now form the dominant aspect of the Gelli Bwch hill when viewed from the southeast and east. The monument itself is thus rendered barely distinguishable from its surroundings.
- 6.1.23. There is no public access to the Gelli Bwch Round Cairn, being situated within privately owned farmland. The only access is from the farmhouse itself.
- 6.1.24. The immediate setting of the monument in the neighbouring field to the north has been altered by recent earth moving activities, including the movement of tracked plant and the clearance of vegetation. The recent removal of former hedged boundaries has also been undertaken within the proposed development site, approximately 450m west of the monument (Plate 5).
- 6.1.25. The presence of the Gelli Bwch Round Cairn does not appear to have influenced the character of the surrounding landscape other than perhaps by reducing the productivity of the pasture and encouraging regeneration of scrub and woodland over the past century. However, this process has also been influenced by the marginal location of the site on the edge of a steep uncultivable slope.
- 6.1.26. Historic and intended views to and from the Gelli Bwch Round Cairn have changed over time. Initially, in the Iron Age, hills to the east of the site that had contained earlier Bronze Age cairn fields were subsequently dominated by hillforts, notably at Buarth y Gaer, Mynydd y Gaer (GM054), Mynydd y Gaer (Lower) Camp (GM055) and Craig Ty-Isaf Camp (GM263). All were located between 3.75km and 4.5km to the east and east-southeast of Gelli Bwch. Further afield, just under 12km to the southeast, the Iron Age hillfort at Mynedd y Castell is prominent. These later monuments were also placed to be highly intervisible in the landscape and were often built on sites where Bronze Age Cairns already existed. Subsequent predominantly modern changes to the landscape setting have not necessarily been designed or influenced by the presence of the Gelli Bwch Round Cairn but have primarily been the result of industrial development.
- 6.1.27. The intended views to and from the Iron Age hillforts are long distance views. Due to the presence of mature woodland to the east and southeast of the Gelli Bwch Round Cairn, the monument is rendered indistinguishable from its immediate surroundings at this distance. Equally the proposed development will form a negligible component of the backdrop to the monument at this distance. The more prominent hillforts are visible from the Round Cairn, in views that will be unaffected by the proposed development.
- 6.1.28. It appears that the layout of the Geli Bwch Round Cairns evolved in association with one, or possibly two other cairns: Gelli Bwch II (GGAT00641w) and a further possible

cairn to the north. These are depicted on the OS 1st series map of 1830 (Figure 5) and barely visible on LiDAR imagery (Figure 7). The three monuments together were aligned along the false crest of the Gelli Bwch ridge, at the top of the scarp slope and were intended to be prominent and visible from the east and southeast. The neighbouring Llandarcy Round Cairn (GM291) was also located deliberately on the adjacent Llandarcy ridge to make a similar statement.

- 6.1.29. The three or four cairns, including Llandarcy, were not necessarily built at the same time. The cairn cemetery would have developed over time during the Bronze Age. The Llandarcy Cairn has an upright stone projecting from the mound, thought to represent part of a cist (Plate 10). This type of chambered tomb potentially dates from the early Bronze Age. Gelli Bwch I (GM290) is larger in scale than Llandarcy (GM291) and may also represent an early Bronze Age chambered tomb or cist burial. Gelli Bwch II (GGAT00641) and the putative third Gelli Bwch cairn may have been added subsequently, later in the Bronze Age.
- 6.1.30. The relationship between the four possible cairns in the local Gelli Bwch/Llandarcy group also developed over time. The two potentially earlier Cairns were not intervisible with each other, both were intended to be seen from the east and located on separate but parallel and neighbouring ridges. The later Gelli Bwch II and the potential third Gelli Bwch cairn were intended to be intervisible with each other, arranged in a slightly offset line on the same ridge set approximately 40 – 55m apart.
- 6.1.31. The possible third Gelli Bwch cairn has now been all but lost, however, its scale and form as seen on LiDAR imagery is consistent with its having been a Ring Cairn (Evans and Lewis 2005, 26). The remaining three cairns in the local group have also been greatly reduced in size and damaged over time. Llandarcy Round Cairn (GM291) measures only 7.6m in diameter by 0.9m high but is likely to have originally been much larger as evidenced by one of the internal upright cist stones now being exposed in the side of the monument. Gelli Bwch I (GM290) is larger at 18.3m in diameter by 1.5m high, but again, the presence of hollows in its summit indicate that it has been damaged through antiquarian exploration. Gelli Bwch II (GGAT00641w) is smaller and badly damaged to the southeast, where it is crossed by an east-northeast to west-southwest oriented wall. To the north of this wall, the remains of the cairn survive as half a circle.
- 6.1.32. It is possible that the cairns were originally set within the fringes of an upland prehistoric field system enclosed by hedge banks. For this reason, the current enclosed fields on or near the site may contribute to the setting of the local cairns as a backdrop.
- 6.1.33. The cairns' original location was within a quiet rural setting comprising pasture fields and dispersed settlements. As such the distant sound from the M4 and A48 is intrusive.

#### **Identification of Important Viewpoints**

- 6.1.34. The discussion of the landscape setting has established the evidential basis for the

important viewpoints to and from the Gelli Bwch Round Cairn (GM290). These comprise long views towards Foel Fynyddau and Mynydd y Gaer 5 – 6km to the east, Mynedd y Castell just under 12km to the southeast, and views south and southwest towards Swansea Bay and the night sky are also intended. The important views back towards the monument would have been from the east and the local ridge at Earlswood to the southeast. Even when the monuments were at their full and newest extent, comprising clean piles of grey stone more readily distinguishable from their surroundings, they are unlikely to have been clearly visible from the more distant cairn fields or later hillforts located 4 – 12km to the east and east-southeast. Today the Gelli Bwch cairns are indistinguishable from their surroundings of mature woodland and scrub that dominate the hill.

- 6.1.35. The views from the neighbouring ridge at Earlswood towards the site also have wooded steep slopes below and to the fore. These views are potentially relatively unaltered from prehistoric times, however, the monuments themselves are much reduced and covered in scrub, rendering them less distinguishable, even from directly across the adjacent valley.
- 6.1.36. There are partial views from the monument to the proposed development site. It is possible that these fields once formed part of the contemporary backdrop to the Gelli Bwch Cairn field, although this was not the primary intended view. The cairns were positioned on a false crest so that the fields were not visible from neighbouring areas, although the proposed development site is partially visible from the Gelli Bwch Round Cairn itself (Plate 4). Views back towards the monument from the proposed development site show that it is now barely distinguishable from the scrubby surroundings (Plate 5).

## **7. Stage 3: Evaluation of the Potential Impact**

### **7.1. Gelli Bwch Round Cairn (GM290)**

- 7.1.1. The prominent position of Gelli Bwch Round Cairn on the edge of a steep slope means that it has long views across the surrounding landscape to the south and east.
- 7.1.2. The proposed development area lies 450m west of the monument at its closest point. From the monument the ground falls away gently to the west, before rising again to the centre of the development area, from which it again falls away gently to the north. This topography means that the southern part of the proposed development area can currently be seen from the monument as a grass strip in the middle distance within a patchwork of wooded areas (Plate 4). The northern part of the proposed development site can be glimpsed but is largely obscured by the western site boundary which currently comprises an incomplete line of mature trees.
- 7.1.3. Factors to be considered when assessing the impact of a proposed change or development within the setting of a historic asset include:

**The visual impact of the proposed change or development relative to the scale of the historic asset and its setting**

- 7.1.4. The distance of the proposed development means that it occupies only a small arc in the views from the monument towards the west. The impact of this view will be lessened by the fact that the solar panels will be angled towards the south, perpendicular to the view from the monument. This will serve to reduce the reflectivity of the development when viewed from the monument, as well as allow for strips of green field to be viewed between each row of the solar array. Furthermore, only the southern part of the solar array will be clearly visible, the northern part being further obscured by the existing tree line.

**The visual impact of the proposed change or development relative to the location of the historic asset**

- 7.1.5. The proposed development will lie behind the Gelli Bwch Round Cairn when viewed from the primary intended direction (from the east). The monument occupies a false crest which means that the proposed development, even though it is slightly higher than the monument, it will not be visible behind the false crest when viewed from lower levels around Briton Ferry and the M4 corridor. Furthermore, at the distance of the intended views (4 – 5km), the scale of the development will be very small in any restricted views of this backdrop. Equally, when viewed from the neighbouring Earlswood ridge, which is generally lower than the false crest at Gelli Bwch, the proposed development site will not be visible. The site will be visible from the higher points of the Earlswood ridge, although the Gelli Bwch Round Cairn will not be directly in the line of sight at these points, rather offset to the east. The possibility of a third Cairn at Gelli Bwch, forming a putative cairn cemetery of offset linear form, suggests that the southerly aspect of the cemetery was intended as a view from the monument towards Swansea Bay and the southern sky, rather than a view back towards the monument itself. This intended view will be unaffected by the proposed development.

**Whether the proposed change or development would dominate the historic asset or detract from our ability to understand and appreciate it — for example, its functional or physical relationship with the surrounding landscape and associated structures and/or buried remains**

- 7.1.6. The proposed development will lie within enclosed fields that have been shown from historic mapping to be largely unaltered from the mid-19<sup>th</sup> century. Excavation of hedge banks coupled with OSL dating on the other side of the Severn Estuary in Devon and Cornwall has indicated that some extant field boundaries can be shown to have originated in the Bronze Age, contemporary with the Gelli Bwch Round Cairn (Vervust et al. 2020). The Gelli Bwch enclosed fields therefore have the potential to provide a socio-economic context for the Round Cairn. Some internal hedges have been removed on the site in advance of the development, nevertheless, it is expected that external field boundaries will remain and may potentially be enhanced

to further screen the development.

**The presence, extent, character and scale of the existing built environment within the surroundings of the historic asset and how the proposed change or development compares with this**

- 7.1.7. The proposed development is much smaller in scale than modern industrial, urban and transport infrastructure developments that dominate the modern landscape to the east, south and southwest. Furthermore, these largescale existing industrial landscapes lie within the intended views from the monument to the east and south. The proposed development is designed to fit within the existing fieldscape and lies in the opposite direction from the intended views from the monument.

**The lifespan of the proposed change or development and whether or not the impact might be reversible**

- 7.1.8. The development proposals are currently in the pre-submission phase and there is no known fixed timescale for the lifespan of the development. Nevertheless, the lifespan of solar arrays is generally impermanent and counted in decades rather than centuries. It is also proposed that the solar panels will be mounted on screw-in piles rather than concrete footings, further enabling a complete reversion to a pastoral landscape at the end of the life of the development.

**The extent of tree cover, whether it is deciduous or evergreen, and its likely longevity**

- 7.1.9. There is currently good tree cover around all sides of the proposed development site in the form of mature trees occupying grown out hedges. It is understood that this tree cover will be retained and enhanced where necessary as part of the Green Infrastructure proposals accompanying the development.

**The impact of artificial lighting — for example, on night-time views**

- 7.1.10. There is unlikely to be significant artificial lighting in association with the proposed development, other than at times of construction and maintenance.

**The capability of a landscape setting to absorb change or new development without the erosion of its key characteristics**

- 7.1.11. The current and historic rural landscape setting of the site and the monument is restricted to the undulating plateau in the area of Gelli Bwch and Henbarc Farms. All other surrounding landscapes have been progressively developed from the 18<sup>th</sup> century for industrial, housing, transport and leisure purposes. The proposed development will reduce the remaining rural landscape area by approximately 5%. However, this development will be set within and partially screened by existing field boundaries, reducing its visual impact.

**The cumulative effect of the proposed change or development — sometimes relatively small changes, or a series of small changes, can have a major impact on our ability to understand, appreciate and experience a historic asset**

- 7.1.12. The mitigation associated with the proposed development has in fact opened up the possibility for better understanding the Gelli Bwch Round Cairn (GM290) and its setting. The examination of historic maps, coupled with existing LiDAR data has allowed the potential discovery of a third cairn, a possible ring cairn, associated with the scheduled monument and forming an essential part of its setting. Further work would be necessary however, such as a full archaeological survey, potentially coupled with targeted excavation, to demonstrate whether there are the identifiable remains of a third cairn here.

## **8. Stage 4: Mitigation**

- 8.1.1. As discussed above, the principal intended views to and from the monument will not be impacted by the proposed development. This is partly because the monument occupies a false crest rendering the slightly higher ground behind, occupied by the proposed development, invisible when viewed as intended. These long intended, views, over a distance of 4 – 5km, also mean that the scale of any small part of the development that may be visible will have an almost negligible visual impact. Any residual impact can be mitigated through the retention and enhancement of green infrastructure around the site.
- 8.1.2. The monument is also currently largely indistinguishable from its surroundings when viewed from the east and southeast due to the encroachment of scrub over the monument and its immediate vicinity, reducing the heritage value of these views. Existing modern structures such as electricity pylons and communications antennae have also served to reduce the heritage value of these views.
- 8.1.3. The proposed development has been designed so that the rows of solar panels will be aligned in a direction perpendicular to that of the view from Gelli Bwch Round Cairn. This is not an intended view from the monument, although the existing fieldscape does provide potential historical context for the monument. The south facing alignment of the panels will reduce their reflexivity when viewed from the direction of the monument, as well as providing a glimpse of the green fields between the rows, breaking up and reducing the visual impact. The scale of the impact on the view towards the development site from the monument is further reduced by the intervening distance and the presence of mature trees around the site boundary. This view is of low significance for the setting of the monument and the impact from the development is also assessed to be low. Nevertheless, any residual impact can be mitigated through the retention and enhancement of the green infrastructure surround the site.



## 9. Conclusions

- 9.1.1. The above assessment has determined that the setting of the Gelli Bwch Round Cairn (GM290) has been altered in the last two centuries through largescale industrial and other modern development, most notably around Briton Ferry and Jersey Marine. The regeneration of scrub and woodland on, and to the immediate east of, the monument has also impacted on its setting, notably intended views from the east and south.
- 9.1.2. The proposed development lies within the backdrop to intended views to the monument from the east and southeast. However, the monument was deliberately positioned on a false crest indicating that the proposed development would not be visible in the background as a part of those intended views except from the higher ground at a distance of 5 – 12km. At this distance the potential visual impact from the proposed development on the setting of the monument would be negligible. Other intended views, away from the monument to the south, will not be impacted by the proposed development.
- 9.1.3. The proposed development site lies within a historic field system that can be shown from historic maps to date from at least the mid-19<sup>th</sup> century or earlier. The origin of this field system remains undated, but there is a potential that it could provide socio-economic and landscape context for the original setting of the monument. Nevertheless, the development is designed to fit within the existing fields, and it is understood that all external field boundaries will be retained and enhanced.
- 9.1.4. Research for this assessment through the examination of historic maps and LiDAR data has indicated the possibility that there may originally have been a third cairn associated with the Gelli Bwch pair, rendering Gelli Bwch a potential cairn cemetery rather than a pair as defined by Evans and Lewis (2003). Further work is needed to confirm this interpretation, but the LiDAR evidence suggests that the third cairn may lie approximately 40m northeast of Gelli Bwch I (GM290) and measures approximately 20m in diameter. Its scale and form may suggest that it might be a ring cairn, although the LiDAR multishade plot also hints at internal kerb stones potentially defining a former cist or chamber. No trace of this putative cairn is visible on the ground, due to the possible site being covered by overgrowth and scrub. The proposed development will not impact on the setting of this previously unrecorded monument, but rather has presented the opportunity to better understand its relationship with the Gelli Bwch I and II cairns, with which it may form an offset linear cemetery.

## 10. Sources

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## **Maps Consulted**

Ordnance Survey 1st Series Map, Sheet 37, 1830, 1:63,360.

Tithe Map of the parish of Cadoxton juxta Neath in the County of Glamorgan, 1844.

Ordnance Survey County Series, First Edition, Glamorgan Sheet XXIV, 1884 (surveyed 1876/1877). 6inch to the mile.

Ordnance Survey County Series Second Edition, Glamorgan Sheet XXIV.NE, 1900. 6inch to the mile. 6inch to the mile.

Ordnance Survey County Series Edition of 1918 Glamorgan XXIV. Revised: 1914, Published: 1918. 6inch to the mile.

Ordnance Survey Edition of 1921, Glamorgan Sheet XXIV, 6inch to the mile.

Ordnance Survey County Series Edition of 1946, Glamorgan Sheet XXIV.3, Revision of 1941, 25 inches to the mile

Ordnance Survey Provisional Edition, Glamorgan Sheet XXIV.NE, 1951. 6inch to the mile.

Ordnance Survey. Glamorgan. Sheet SS 79 SW and part of SS 78 NW, 1964. 1:10,000

## **Aerial and Satellite Photography**

### ***Google Earth Imagery***

1945 – image: Geoinformation Group 2023 51° 38' 13.73" N; 3° 51' 32.94" W eye alt 590m

1999 – image: Infoterra Ltd & Bluesky 51° 38' 13.73" N; 3° 51' 32.94" W eye alt 590m

2010 – image: Getmapping 51° 38' 13.73" N; 3° 51' 32.94" W eye alt 590m

2018 – image: google earth 51° 38' 13.73" N; 3° 51' 32.94" W eye alt 590m

2023 – image: CNES/Airbus 51° 38' 13.73" N; 3° 51' 32.94" W eye alt 590m

**Cambridge University Collection of Aerial Photographs (500m search radius)**

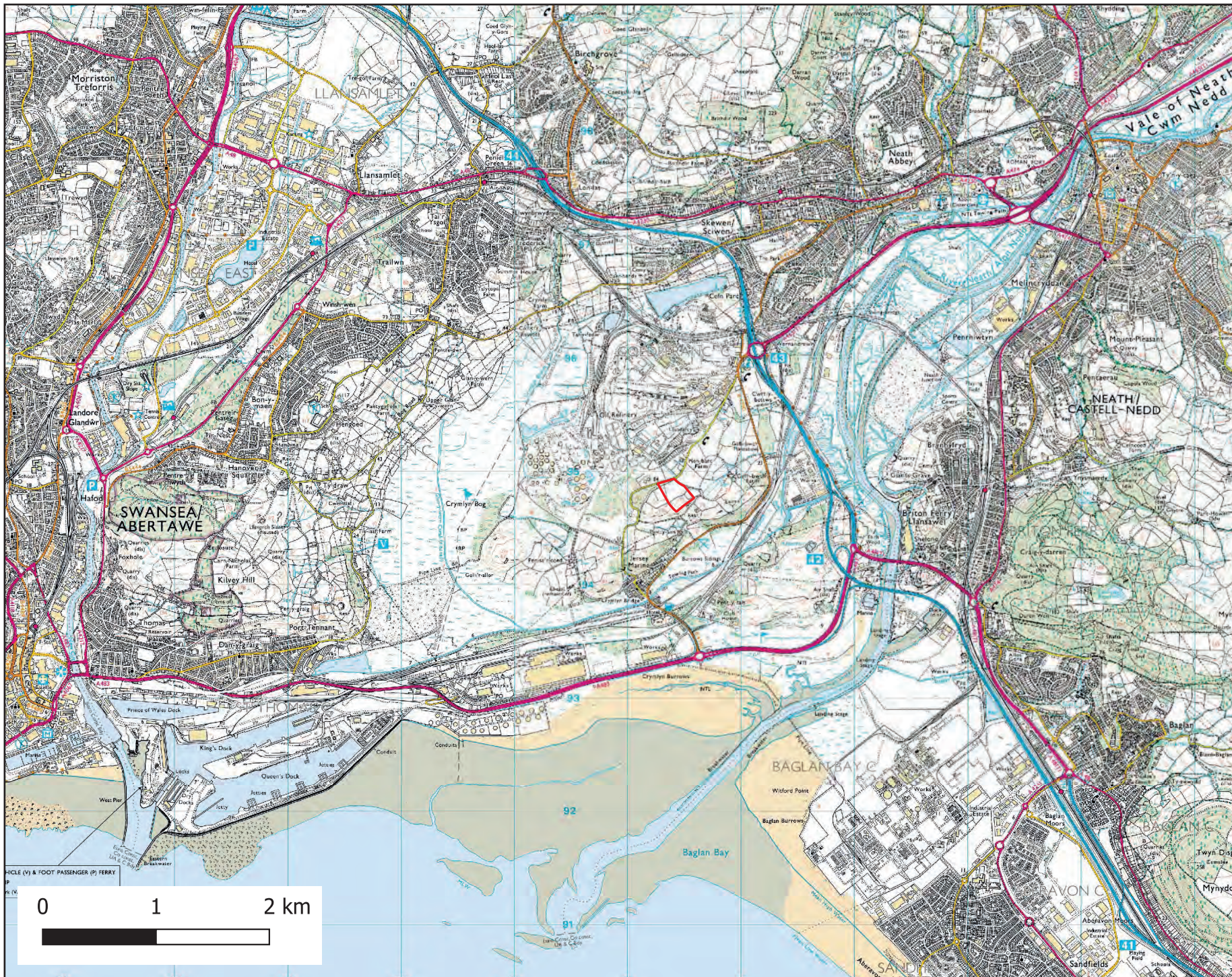
| Catalogue ID | type     | subject                             | Copyright owner         | Film Type       | Eastings | Northings | Year |
|--------------|----------|-------------------------------------|-------------------------|-----------------|----------|-----------|------|
| RC8kAV007    | Vertical | Neath Estuary                       | Subject to confirmation | Colour positive | 271473   | 194658    | 1987 |
| RC8kW268     | Vertical | Vegetation, Crymlyn Bog and Burrows | Subject to confirmation | Colour positive | 271174   | 194819    | 1983 |
| ZknGB25      | Vertical | Crymlyn Bog NNR                     | Subject to confirmation | Colour negative | 271136   | 194564    | 1997 |
| ZknGB25      | Vertical | Crymlyn Bog NNR                     | Subject to confirmation |                 | 271136   | 194564    | 1997 |
| ZknMO24      | Vertical | Crymlyn Bog                         | Subject to confirmation |                 | 271300   | 195039    | 2001 |

**West Glamorgan Archives**

| Reference no:       | Title or description:                                                                                                                                                | Date:        | Location:               |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|
| <u>D/D SCS 17/1</u> | Oral History collection: George Gorvett (born 1894, Gelli-bwch Farm, near Skewen) interviewed by Syd Johnston of Neath about his life and work on the Swansea Canal. | 1981         | West Glamorgan Archives |
| <u>D/D T 219</u>    | Lease for 21 years; Arthur de Cardonnel, baron Dynevor, to Cape Copper Co. Ltd.; Henbarc, Gelli Bwch, Cwrt-y-bettws, and Gwern Andrew farms. 10 Nov. 1888            | 10 Nov. 1888 | West Glamorgan Archives |

## Figures



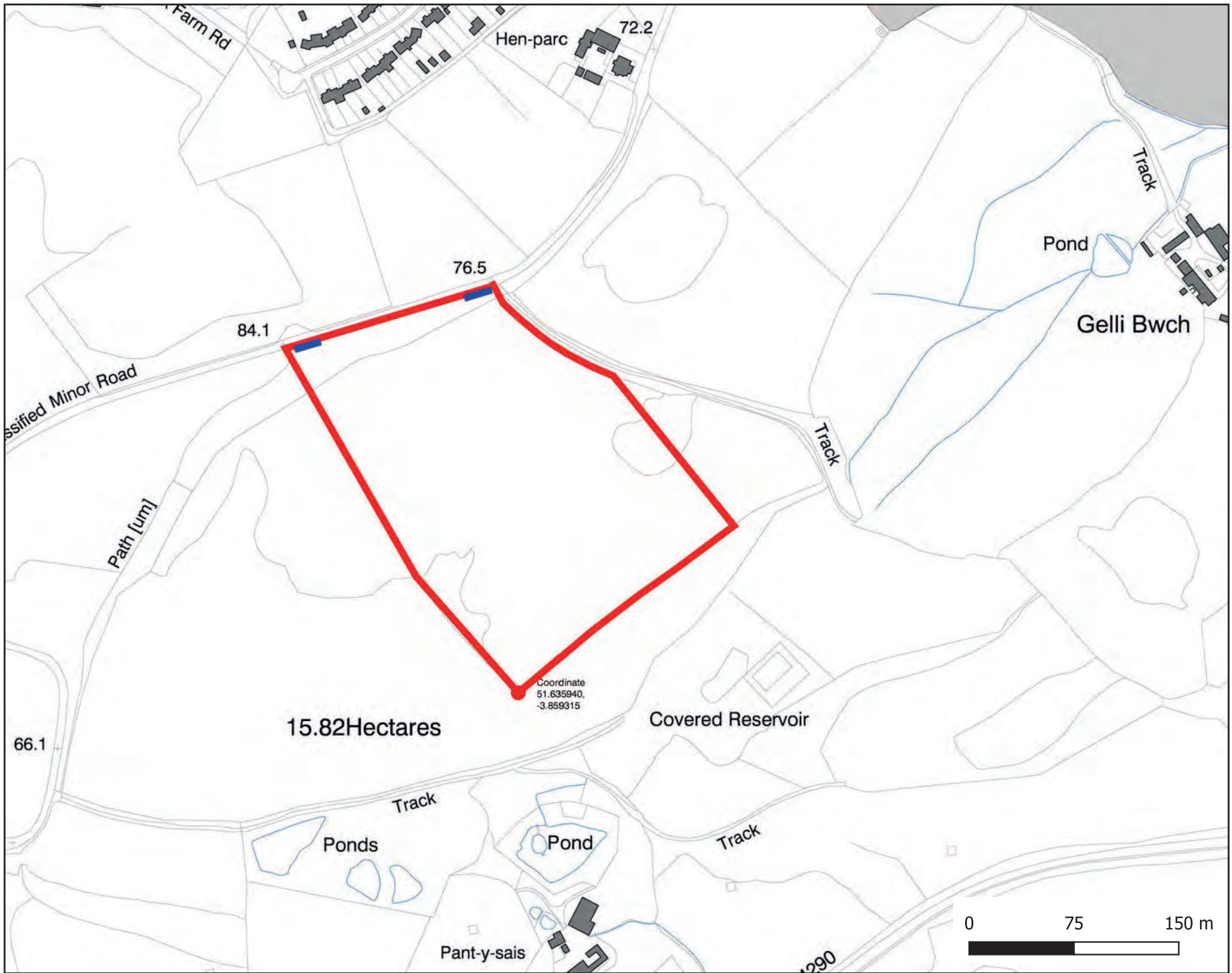


 Site location

Figure 1: Location Plan

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 Site location

Figure 1: Detailed Site Location Plan

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Figure 3: Proposed Development Plan



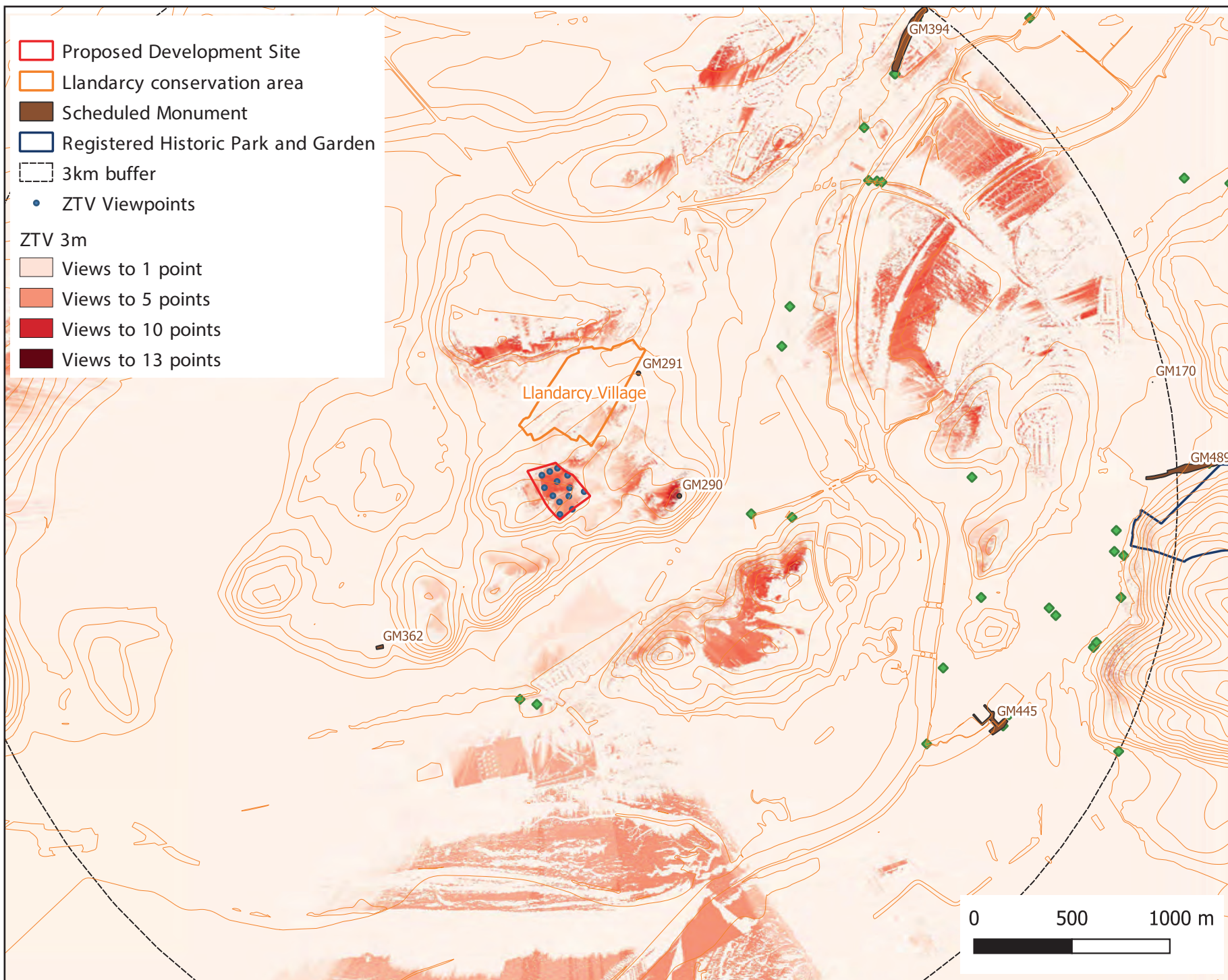


Figure 4: 3m ZTV analysis plotted against OS Countour data and Designated Heritage Assets within 3km

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Proposed Development Site



Figure 5: Extract from the Ordnance Survey 1st Series Sheet 37, 1830

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Figure 6: Extract from the Tithe Map of the parish of Cadoxton juxta Neath in the County of Glamorgan, 1844



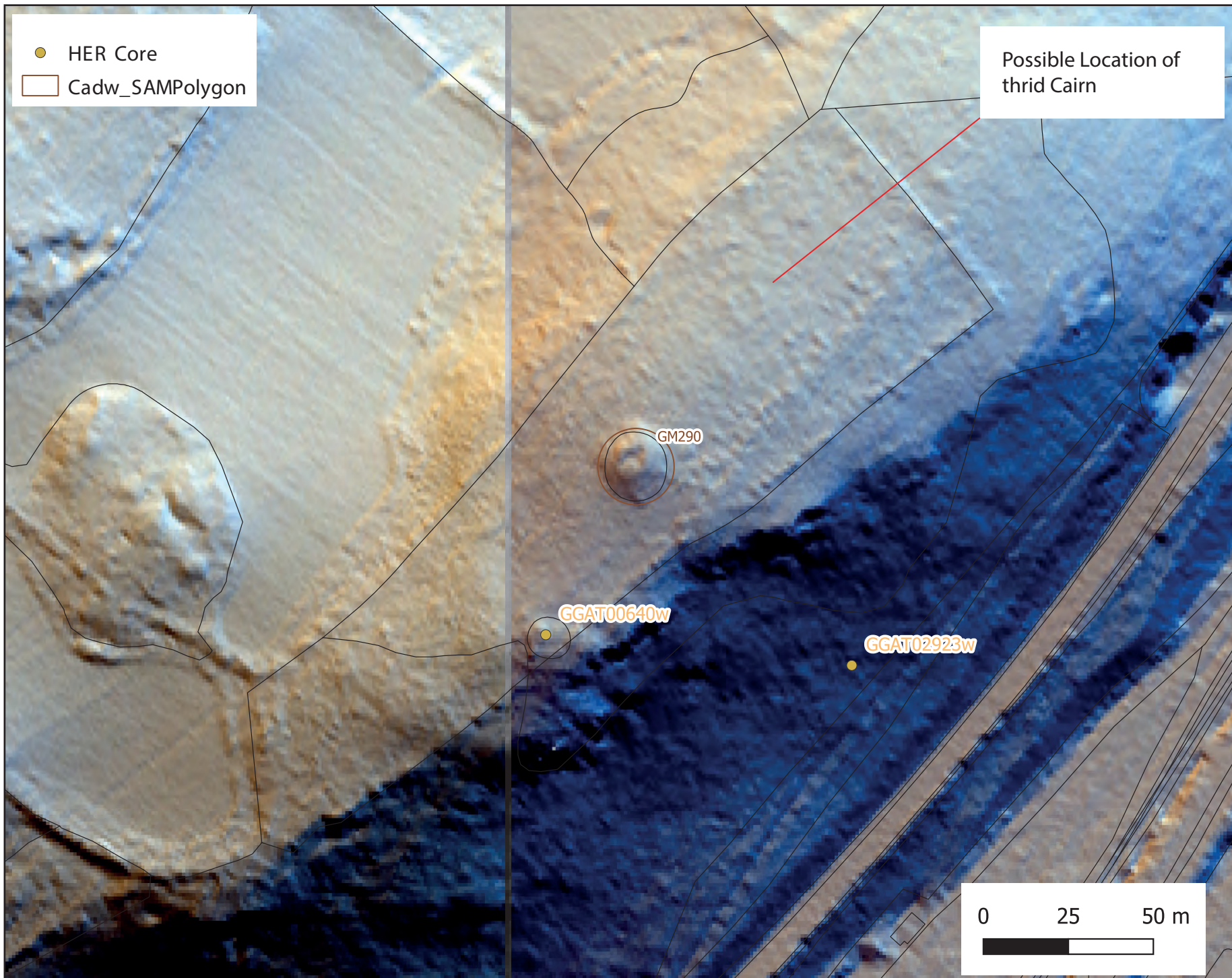


Figure 7: LiDAR 1m DTM Multishade Plot



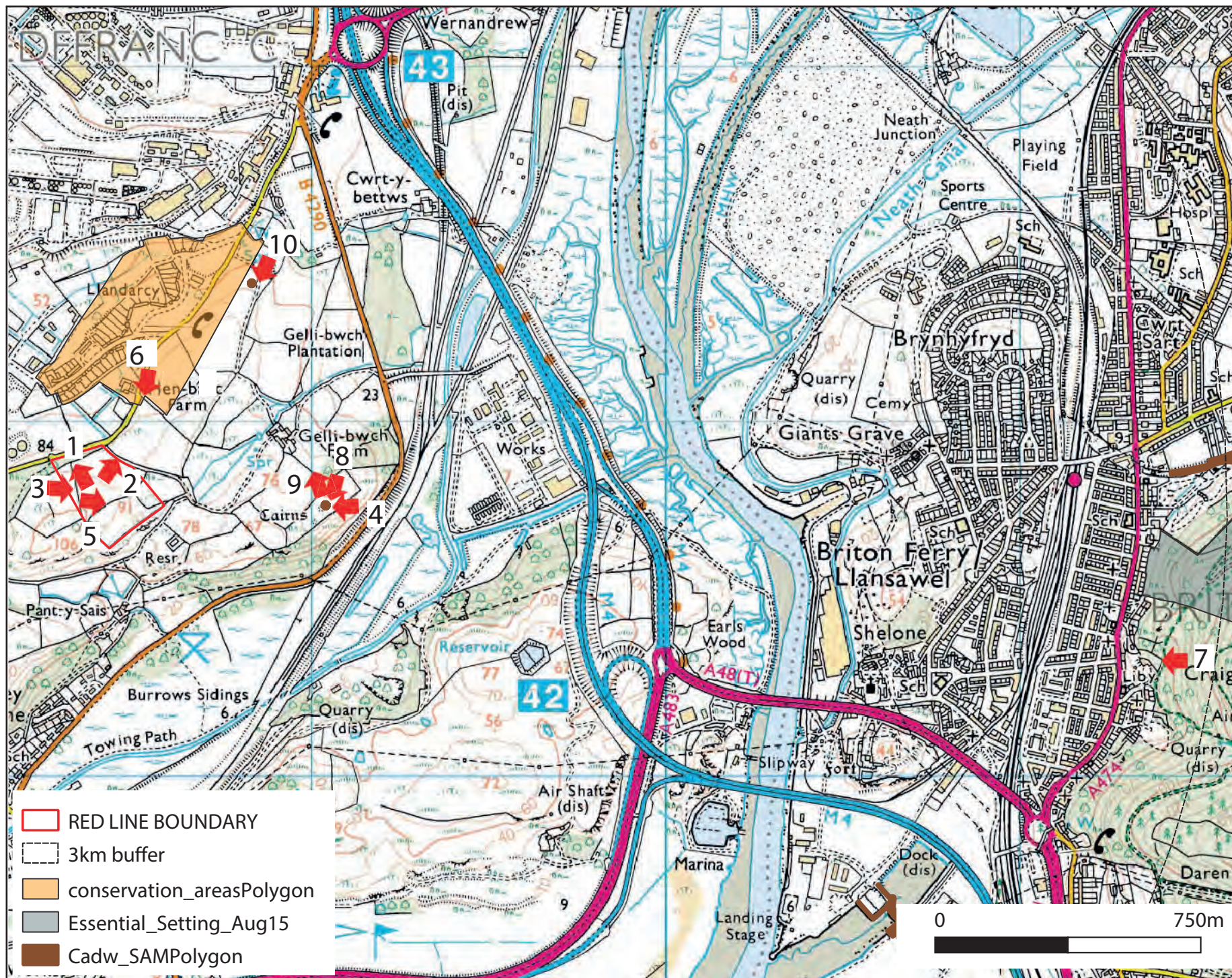


Figure 8: Photo Location Plan

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## Plates



*Plate 1. The northern boundary of the proposed Development site, looking north.*



*Plate 2. The north-eastern boundary of the proposed development site, looking north-east.*





*Plate 3. An internal former field boundary within the site, view to the east southeast.*



*Plate 4. View from Gelli Bwch Round Cairn (GM290) towards the site, view to the west.*





*Plate 5. View east from the site towards Gelli Bwch Round Cairn (GM290).*



*Plate 6. Obstructed view from Llandarcy Conservation Area (WAL/NPT/3), view to the southwest.*





*Plate 7. Obstructed view towards the site from Jersey Park Registered Historic Park and Garden (PGW(GM)62(NEP), view to the west.*



*Plate 8. View of Gelli Bwch II Cairn (GGAT00641w) from Gelli Bwch I Round Cairn (GM290), view to the southwest.*





*Plate 9. View north northwest from Gelli Bwch Round Cairn (GM290) towards Gelli Bwch Farm and Llandarcy Round Cairn (GM291).*



*Plate 10. Obstructed view southwest from Llandarcy Round Cairn (GM291) towards the site.*



