

Llain y Pebyll, Bethesda

Briff Gwylio Archaeolegol /
Archaeological Watching brief



Archaeoleg Gwynedd
Heneb
Gwynedd Archaeology

Llain y Pebyll, Bethesda

Briff Gwyllo Archaeolegol / Archaeological Watching brief

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View from: NE (archive reference: G26809_152).

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CRYNHODEB ANHECHNEGOL

Comisiynwyd Heneb: Archaeoleg Gwynedd gan Williams Homes (Bala) Cyf i gyflawni briff gwylio archaeolegol ar gyfer datblygiad tai yn Llain y Pebyll, Bethesda. Datgelodd gwyliadwriaeth cychwynnol o byllau prawf halogi tir ac fe ddarganfuwyd slab sylfaen y gasomedr o'r hen weithfeydd nwy. Yn ystod y briff gwylio prif waith y safle, datguddiwyd tanc olew tanddaearol mawr wedi'i adeiladu o frics, ynghyd â phibellau cysylltiedig. Awgrymir yn y dehongliadau y gallai'r tanc olew tanddaearol fod wedi bod yn gysylltiedig â'r iard nwyddau rheilffordd, a leolwyd i'r de yn hanesyddol.

NON-TECHNICAL SUMMARY

Heneb: Gwynedd Archaeology was commissioned by Williams Homes (Bala) Ltd to undertake an archaeological watching brief for a housing development at Llain y Pebyll, Bethesda. Initial monitoring of trial pits revealed ground contamination and uncovered the foundation slab of the former gasworks gasometer. The main groundworks watching brief uncovered a large underground brick-built oil tank along with associated piping. Interpretations suggest that the underground oil tank may have been historically linked to the railway goods yard, which was located to the south.

1 INTRODUCTION

Heneb: Gwynedd Archaeology was commissioned by Williams Homes (Bala) Ltd to undertake an archaeological watching brief for a housing development at Llain y Pebyll, Bethesda (NGR SH61826704; postcode LL57 3NQ; Figure 01). The development is situated within a 0.14ha plot alongside Bangor Road and will include the construction of seven dwellings for the elderly, along with parking facilities and a turning area (Figure 02).

The watching brief consisted of two parts:

- A ground investigation trial pit programme aimed at identifying ground conditions and detecting any soil contamination.
- Monitoring all groundworks to identify any remains of the former 19th-century gasworks that once occupied the site.

The watching brief was completed under planning reference C20/0018/13/LL, following the conditions set by the regional Planning Archaeologist, Heneb: Gwynedd Planning Services (formerly GAPS). The regional Planning Archaeologist noted that:

The proposal requires wholesale groundworks of the site, which comprises largely scrub land which was once a gasworks (as recorded on early OS mapping, as far back as the 1st edition). Various stages of the gasworks can be seen throughout historic mapping, with the gradual removal of the buildings associated with the works – although it is not known to what extent and how comprehensive the dismantling of the structures was. As a result, it is difficult to assess what remains of these buildings below ground level, and as such there is a potential for industrial archaeology throughout the site. There looks to be little recorded history on the gasworks, and its relationship with the old rail system that ran directly behind it. As such, it is considered appropriate that a programme of mitigation be implemented during the development, in the event of planning consent being granted.

The ground investigation programme was undertaken between the 13th of December 2021 and the 17th of January 2022; the watching brief was undertaken at intervals between January 2022 and the 11th of September 2024.

The archaeological was undertaken in accordance with the following guidelines:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 2 (The Welsh Archaeological Trusts, 2022);

- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard for archaeological monitoring & recording (Chartered Institute for Archaeologists, 2023);
- Universal Guidance for archaeological monitoring & recording (Chartered Institute for Archaeologists, 2023);
- Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2020b); and
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2020b).
- Understanding Historic Buildings: A Guide to Good Recording Practice (Historic England, 2016).

Heneb: Gwynedd Archaeology is part of Heneb: Trust for Welsh Archaeology, which is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).

1.1 Aims and Objectives

The key aims and objectives were to:

- Identify and record any archaeological activity identified during the groundworks. Known archaeological activity within the development area includes a former gasworks visible on historic mapping and the objective would be to establish the date and nature of any archaeological remains identified within the watching brief areas and assess their implications for understanding the industrial archaeology of Bethesda, in conjunction with the known archaeological record.
- to place the results in context (if applicable), with reference made to *A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document* (March 2017);
- if no additional archaeological activity is identified, establish why this may be the case.

1.2 Acknowledgements

Heneb: Gwynedd Archaeology would like to thank the following for their contribution and support:

- Heneb: Gwynedd Archaeology project team: Bethan Jones, Jessie Baumgardner and Michael S Lynes;
- Client: Williams Homes (Bala); and
- Heneb: Gwynedd Archaeology Planning: Tom Fildes.

1.3 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (The Welsh Archaeological Trusts, 2022). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The Gwynedd HER Event Primary Reference Number is **46017**. The Gwynedd Archaeology HER was also responsible for supplying Primary Reference Numbers (PRN) for any new assets identified and recorded.

2 HISTORICAL BACKGROUND

Bethesda is a small town located in Gwynedd, North Wales, and its development is closely tied to the slate industry, which dominated the area from the early 19th century onwards. The town's name is derived from a local chapel, Bethesda Chapel, established in the early 19th century, and it soon became synonymous with the burgeoning slate industry in the region.

2.1 Bethesda Overview

The region around Bethesda was sparsely populated before the Industrial Revolution, primarily consisting of agricultural settlements. However, the area began to grow rapidly with the rise of the slate industry in the early 1800s. Bethesda's history is intimately linked with the Penrhyn Quarry, which was one of the largest slate quarries in the world at its peak. The quarry began operations around 1782 and became the primary employer in the region, leading to significant population growth and the development of the town itself (Richards, 2007).

The rapid expansion of the Penrhyn Quarry led to Bethesda becoming a significant industrial town in the 19th century. By the mid-19th century, the quarry employed thousands of workers, and the slate produced was exported worldwide. The prosperity of the slate industry, however, was accompanied by intense labour disputes. The most notable was the Great Strike of 1900-1903, one of the longest industrial disputes in British history. The strike was rooted in demands for better wages and working conditions and was met with fierce opposition from the quarry owners, notably the Penrhyn family (Jones, 1982).

Despite the harsh working conditions, Bethesda developed a rich cultural life. The town was a stronghold of the Welsh language and Nonconformist religion, with numerous chapels playing a central role in community life. The growth of educational and social institutions, such as the establishment of the first secondary school in 1898, reflected the community's commitment to self-improvement and education (Evans, 1998).

The decline of the slate industry in the 20th century had a profound impact on Bethesda. After World War I, demand for slate decreased dramatically, and many workers emigrated to other parts of the UK or abroad. The Penrhyn Quarry continued to operate but at a reduced capacity, and by the mid-20th century, much of the town's economic base had shifted away from slate. This decline led to significant social and economic challenges, including unemployment and depopulation (Williams, 2001).

In recent decades, Bethesda has seen a revival, partly due to tourism and the promotion of the area's natural beauty, including the nearby Snowdonia National Park. The town has also

become known for its vibrant arts scene and as a hub for outdoor activities, such as rock climbing and hiking. The Penrhyn Quarry, though much reduced, still operates, and its historical significance has been recognized with its inclusion in the UNESCO Slate Landscape of Northwest Wales World Heritage Site in 2021 (UNESCO, 2021).

2.2 Bethesda Gasworks

The development site is located on a former 19th century gasworks site on the outskirts of Bethesda. The only detailed documented information regarding the gasworks is shown on historic mapping. The First, Second and Third Edition Ordnance Survey 1-inch to 25-mile Caernarvonshire County Series Maps (Sheets XII.5 & XII.6); published in 1889, 1900 and 1914 respectively (Figures 03, 04 and 05), detail the layout and development of the gasworks.

The gasworks encompass the entire development plot and appear fully established by the First Edition, with the circular gasometer holder visible at the southwestern end of the plot and various buildings occupying the remainder. The First to Third Edition maps cover a twenty-five-year period and whilst the gas holder remains in place, it is evident that additional structures were built within the plot as time progressed, as well as other buildings disappearing from use. Apart from the gas holder, the specific use of individual buildings is not evident from the maps. The gasworks were located alongside the main road through Bethesda and were in close proximity to the goods yard rail line at the former Bethesda Station. The plot was also in use for period during the 1980s as a Renault Car Garage.

2.3 General History of the Bethesda Gasworks

The Bethesda gasworks was located at Llain y Pebyll, a site situated to the east of the town center near the River Ogwen. This location provided a practical setting for the gas production facility, as it was close to the main transportation routes and water supply necessary for gas manufacturing. The site's position enabled efficient distribution of gas to the local community and supported the town's infrastructure needs during its industrial peak (Davies, 2004).

The Bethesda gasworks was established in the mid-19th century to support the growing town and its industrial base. Gasworks were common in industrial towns during this period, providing essential services such as gas lighting and heating. In Bethesda, the facility likely began operations around the 1860s, primarily using coal to produce gas for lighting streets, homes, and businesses (Smith, 1995).

The gasworks played a significant role in improving the quality of life in Bethesda. Gas lighting allowed for safer and more functional nighttime environments, which was particularly important in a town heavily involved in the slate industry. The availability of gas lighting not only extended working hours but also facilitated social and cultural activities in the evenings, contributing to the community's overall development (Davies, 2004).

With the advent of electricity in the early 20th century, the demand for coal gas declined. By the 1920s and 1930s, electricity began to replace gas as the primary source of lighting and heating in many towns, including Bethesda. The Bethesda gasworks, like many others, saw a reduction in operations and eventually ceased to function as a gas production facility (Jones, 1987). The decline of the gasworks reflected broader technological shifts and the changing needs of the town as it moved away from its industrial roots.

3 METHODOLOGY

3.1 Watching Brief

An archaeological watching brief is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2023). The watching brief was undertaken on an intensive basis and included but not be limited to foundation footings, access and landscaping.

An archaeological watching brief can be divided into four categories:

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

The archaeological watching brief was conducted in the development area for the proposed housing development located at NGR SH61826704 as depicted on [Figure 01](#) and was conducted on an intensive basis.

3.2 Fieldwork Methodology

The watching brief monitored all groundworks during a housing development at Llain y Pebyll, Bethesda. All groundworks were completed by Williams Homes (Bala) Ltd. A 13-tonne tracked excavator with a 1.8m wide toothless bucket was used during the main groundworks and a JCB 3CX with a toothless ditching bucket during the ground investigation phase.

- All attendances and photographs were recorded using Heneb: Gwynedd Archaeology pro-formas (see [Appendix II](#) for photo register). The records include topsoil and subsoil depths as well as the composition of the glacial horizon. All encountered subsurface features was recorded on Heneb: Gwynedd Archaeology pro-formas with detailed notations recorded photographically with an appropriate scale, located via GPS and a measured survey completed, either hand drawn or using a Trimble R8 GPS unit;
- Photographic images were taken using a digital SLR camera set to maximum resolution in RAW format; a photographic record was maintained on site using Heneb: Gwynedd Archaeology pro-formas and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images were archived in TIFF format using Affinity software; the archive numbering system ran from G2680_001 to G2680_152. Scale bars of appropriate size and quantity were used, both for general images and for individual features/feature groups; and

3.3 Data Management Plan

The fieldwork data has been used as the basis for the physical and digital dataset archives and used to compile the project report. The physical archive has been stored in a designated project folder and the location confirmed in Heneb's project database; the digital dataset has been stored on a dedicated Heneb server, with the location confirmed in the Heneb project database via a specific hyperlink. There is no de-selected digital data.

External datasets for the regional HER and RCAHMW are as follows:

- HER: digital report (PDF format) and Event PRN summary (Microsoft Excel format); the report and dataset have been prepared in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 2); and
- RCAHMW: a digital report (PDF format) and digital archive dataset have been prepared in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*.

The dataset includes:

- Photographic metadata (Microsoft Access);
- Photographic archive (TIFF format);
- Project Information form (Microsoft Excel);
- File Information form (Microsoft Excel) – Microsoft Word report text final;
- File Information form (Microsoft Excel) – Photographic metadata (general);
- File Information form (Microsoft Excel) – Adobe PDF report final; and
- File Information form (Microsoft Excel) - Photographic metadata (detail).

3.4 Selection Strategy

As defined in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020) section 3.3.1, a project specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologist (CIfA), have stated that it is “widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation”. The aim of selection is to ensure that all the elements retained from the Working Project Archive for inclusion in the Archaeological Archive are appropriate to establish the significance of the project and support “future research, outreach, engagement, display and learning activities”. Selection should be “focused on selecting what is to be retained to support these future needs, rather than deciding what can be dispersed” and can be qualified by a selection strategy, which details the project-specific selection process, agreed by all parties (including Heneb: Gwynedd Archaeology Planning, client and/or landowner), which will be applied to a Working Project Archive prior to its transfer into curatorial care as the Archaeological Archive.

- The aims and objectives of the project.
- The brief and/or Written Scheme of Investigation (WSI)).
- The Collecting Institution’s collection policy and/or deposition guidelines.
- Regional & relevant thematic or period specific research frameworks.
- The project’s Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

The project specific selection strategy is summarised in [Appendix III](#)

4 RESULTS

4.1 Ground Investigation Trial Pits

The ground investigation trial pit element of Llain y Pebyll watching brief comprised of three trial pits dug between the 4th and 5th of January 2022. The purpose of the trial pits was to investigate the level of possible contamination on the plot, alongside any evidence of archaeological remains associated with the gasworks.

4.1.1 Trial Pit 01

Trial pit 01 was 3.1m in length, 1.5m wide and had a depth of 0.8m. The Trial Pit was orientated on a SE-NW axis. The topsoil consisted of brownish mid-grey clay silty with frequent rooting, reaching a depth of 0.27m. Below the topsoil lay a concrete layer (0.14m thick) which lay on a level of redeposited made ground. The made ground consisted of a mixture of stoney material and grey compact clay. The natural horizon was encountered at a depth of 0.8m, consisting of yellow clay with a grey hue. Within this trial pit the foundation wall of gasometer was initially revealed. (Plates 01-02).

4.1.2 Trial Pit 02

Trial Pit 02 was 2.5m in length, 1.6m wide and had a depth of 1.5m. The Trial Pit was orientated on a NW-SE axis. Similar to Trial Pit 01, the topsoil was a mid-brown clayey silt with frequent rooting (90%), reaching a depth of 0.12m. 0.85m below surface level, a demolition layer consisting of building rubble was encountered. The demolition layer consisted of a mixture of grey coloured frogged bricks, sand and concrete fragments. Below the layer of building rubble was a dark grey redeposited clay with degraded compact concrete. The natural horizon was encountered at depth of 1.25m with yellow sandy clay with small stony inclusions. (Plates 03 and 04).

4.1.3 Trial Pit 03

Trial Pit 03 was 2.6m in length, 1.1m wide at a depth of 1.5m. The Trial Pit was orientated on a NE-SW axis. The topsoil had a depth of 0.2m, mid-brown in colour and clayey silt in consistency with frequent rooting. The topsoil was capping made ground consisting of building rubble material with a depth of 0.9m. The building rubble consisted of broken red bricks and dark humic redeposited clay. In this layer, ground contamination associated with the former gasworks was encountered. The presence of oil alongside 'Blue Billy', which is a compound of

iron, carbon and nitrogen with a distinctive bright blue colouration was encountered. 'Blue Billy' is particularly associated with land contamination reminiscent from coal gasification and gasworks from the early 19th century. The natural horizon was encountered at a depth of 0.9m and consisted of a mid-yellow clay with grey hue. (Plates 05 and 06).

4.2 Groundworks

4.2.1 19th Century gasworks gasometer

Within the garden area of Plot 07, the full remains of the foundations of the 19th-century gasworks gasometer, as noted on the Ordnance Survey 25-inch to 1-mile historic maps from 1889-1914 ([Figures 03, 04](#) and [05](#)), were encountered and appeared to be in a good state of preservation (NGR SH 6181667026). The structure is circular in form, with a diameter of 14.10m, exposed to a maximum depth of 1.3m, and a breadth of 0.65m around the circumference. The NE quadrant of the gasometer had been truncated by the current gas services station ([Figure 06](#)).

The gasometer's exterior consisted of rounded cobbles, fieldstone, and occasional slate slabs, bonded together with concrete mortar of a grey hue and frequent small pebble inclusions. As the exterior was exposed within the natural ground, it suggests that the building's remains were likely subterranean when in use (Plate pic 07). The surface of the gasometer bore the remains of concrete, indicating the likelihood that the gasometer was demolished at some point, leaving the subterranean part intact.

The interior of the gasometer was constructed with two layers of red brick, with the core laid horizontally, followed by a vertical brick lining (Plate pic 08). The exposed interior edge had a thin layer of concrete plaster, which was used to bond an iron facing, also in a good state of preservation (Plate pic 09).

Three square-shaped concrete blocks were noted at the SE, SW, and NW points of the gasometer, each measuring 0.8 x 0.7m. Four iron fittings were noted at each corner of the blocks. It is quite possible that these are remnants of the main supports for the gasometer's structure, possibly suggesting the former gasworks iron frame. The blocks appear to support former iron RSJ beams, which were aligned vertically along the interior edge of the gasometer (Plate 11). These likely supported the movable cab when the gasometer was in use.

The northwestern concrete block was more substantial in size and appeared to be attached to a rectangular concrete platform with an L-shaped edge on the western side. A square iron fitting was noted here (Plate 10). The platform measured 2.45m x 2.1m. Its provenance is unknown but may have served as an entrance for the gasometer. The gasometer has been assigned PRN number 110674 by the Gwynedd HER.

4.2.2 Small structure

In the western corner of Plot 06 (NGR SH 61767 67061) , the remains of a small double layered brick-built structure was encountered ([Figure 06](#)). This is likely belonging to the pen-like buildings as noted on the 1st Edition OS maps 1889-1900. The estimated length of the structure 6 x 8m, with a width of 0.37m and revealed depth of 1.12m. Some lime plaster was visible on the interior face at SE part of the structure (Plate 12). Unfortunately, the structure was heavily damaged as it was evidently used as storage for scrap metal disposal, such as used kitchen goods, house-hold appliances dating from the 70s and 80s. Broken bits of Asbestos was also present in the vicinity, therefore unable to ascertain a full record (Plate 13). The small structure has been assigned PRN number 110676 by the Gwynedd HER.

4.2.3 Large circular brick-built pit / tank and pipes

A watching brief was undertaken during the main drainage work, which began to the south of House 5 and ran in front of Houses 6 and 7, connecting to the main drainage services located in Llain y Pebyll. A proposed system of four manholes, interconnected by large high-density polyethylene pipes, was constructed ([Figure 06](#)). This involved the excavation of pads for the manholes and trenches connecting each one. The ground throughout the area from House 05 to House 07 consisted of made ground with large depths of building rubble, suggesting previous landscaping.

A 13-tonne tracked excavator, fitted with a toothless bucket, was used during the drainage work until the natural horizon was reached. Working from northwest to southeast, on the western side of the site, the excavation was carried out in stages. The made ground had an average depth of 1-1.5m and consisted of redeposited natural material, bands of slate waste, mortar, and old demolition debris such as pipes (Plates 14 and 15). The natural ground varied in depth but was identifiable by patches of clean, burnt red-orange coloured clay with 20-30% small to mid-sized angular stone inclusions (Plates 14 and 16).

The first four meters of excavation revealed solely construction rubble and made ground, but approximately six meters from the pre-installed manhole, large cast iron pipes began to appear, embedded in clean sand at a depth of 0.1-0.2m from the surface (Plates 17, 18, and 19). Most of the pipework was located in front of House 6, with some solid cast iron pipes measuring up to 3.5m in length (Plate 20), and others made of mild steel wrapped in felt (Plate 18).

Moving further southeast, directly in front of House 7, the pipe trench encountered a curvilinear brick-built feature with black oil seeping through it (NGR: SH 61822 67034) (Plate 21). As this feature was located at the proposed manhole site, it was decided to fully expose it. The circular feature was large in circumference and contained a central dividing wall, filled with oil and capped by timbers (Plates 22, 24, 25). The main structure was built with a double layer of bricks, although a possible rough fieldstone outer cladding was present and shown in the pipe trench section (Plate 23). A sondage was dug against the inner dividing wall, revealing that the structure contained 2.0-2.5m of old oil/bitumen. Due to the health hazards associated with the structure, observation was minimal. However, during the emptying process, it was confirmed that the structure had a circumference of approximately 15m (Plates 26, 27 and 28). A cast iron pipe was discovered running into the northern end of the structure, similar to the pipes found earlier in the pipe trenches (Plate 29). In addition, two oval brick tablets were discovered

during excavation of the structure with '22x16' engraved into both of them (Plate 30 and 31). The circular oil tank/pit has been assigned PRN number 110675 by the Gwynedd HER.

5 CONCLUSION

Heneb: Gwynedd Archaeology was commissioned by Williams Homes (Bala) Ltd to undertake an archaeological watching brief for a housing development at Llain y Pebyll, Bethesda. The watching brief comprised two parts: a trial pit programme that took place in 2022 to investigate ground contamination, and the monitoring of the main groundworks with the aim of identifying any remains of the former 19th-century gasworks. Results from the ground investigation revealed the foundation of the historic gasometer and contamination likely caused by activity related to the gasworks.

The watching brief during the main groundworks identified the full extent of the gasometer running into the modern gas valve compound, along with a possible associated auxiliary building. Furthermore, a large brick-built structure was uncovered during drainage works in 2024, as well as associated pipework leading to the structure within the pipe trench. The brick-built tank, which held nearly 15 lorry loads of old oil/bitumen, may have been linked to the railway goods yard located directly to the south.

The results from the watching brief suggest that the site was not only used solely for the gasworks but may have also been used at an earlier stage in conjunction with the railway for oil storage. Alternatively, the two may have been used at the same time and are contemporary with each other.

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FIGURE 01

Location of development/watching brief area (outline in red). Based on ordinance survey 1:10000 County series map sheet SH66. Scale 1:7500@A4

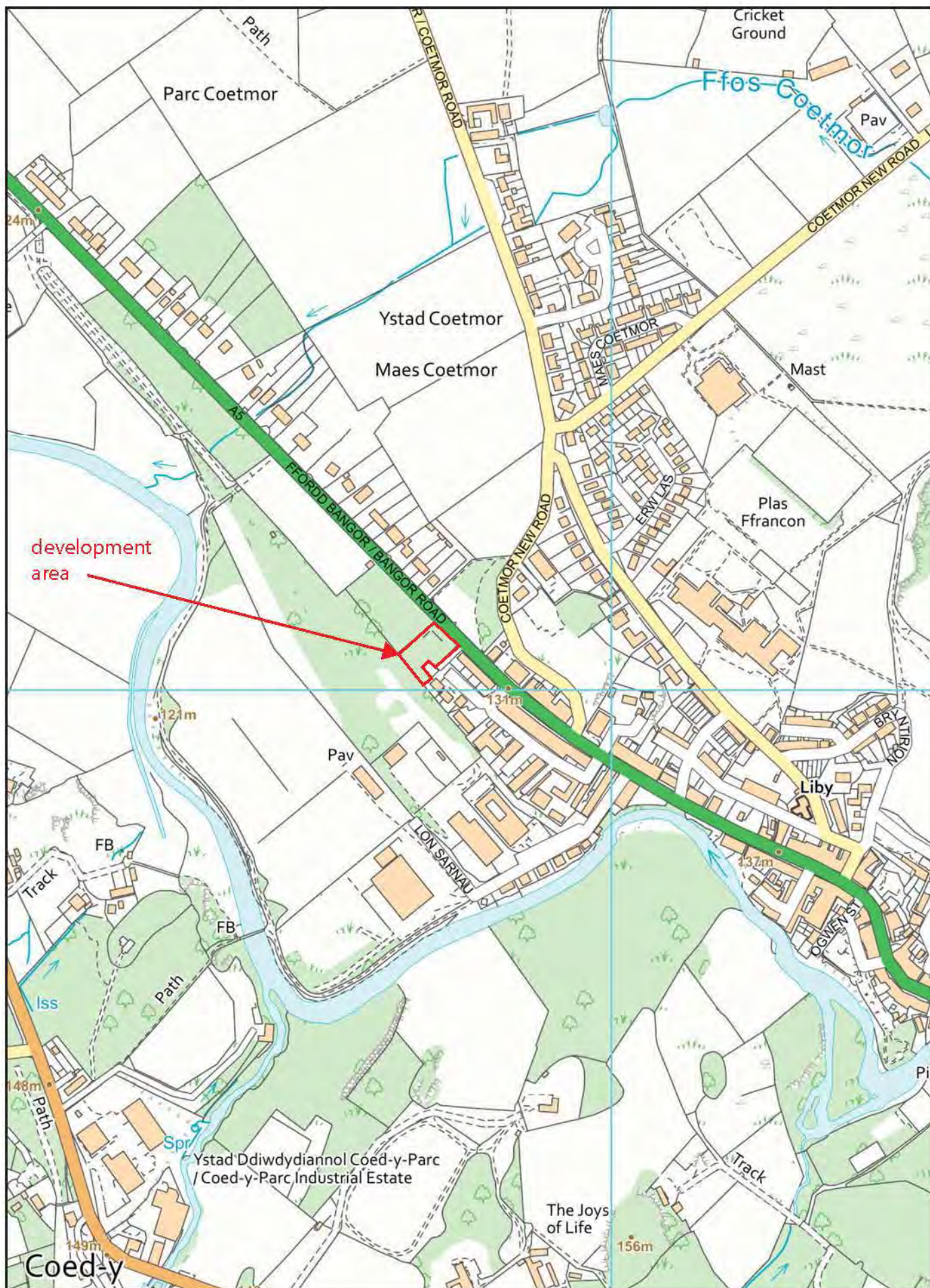


FIGURE 01 Location of development area. Based on ordinance survey 1:10000 County series map sheet SH66. Scale 1:5000@A4. Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O © Crown copyright and database rights 2023 OS 100020577. Contains National Statistics data © Crown copyright and database right 2023.

FIGURE 02

Reproduction of Ainsley Gommon Architects Drawing No. C982 003.

Scale: 1:200@A3.



SCALE: 1 : 200



FIGURE 03

**Reproduction of Ordnance Survey First Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1889.
Scale 1:5000@ A4.**

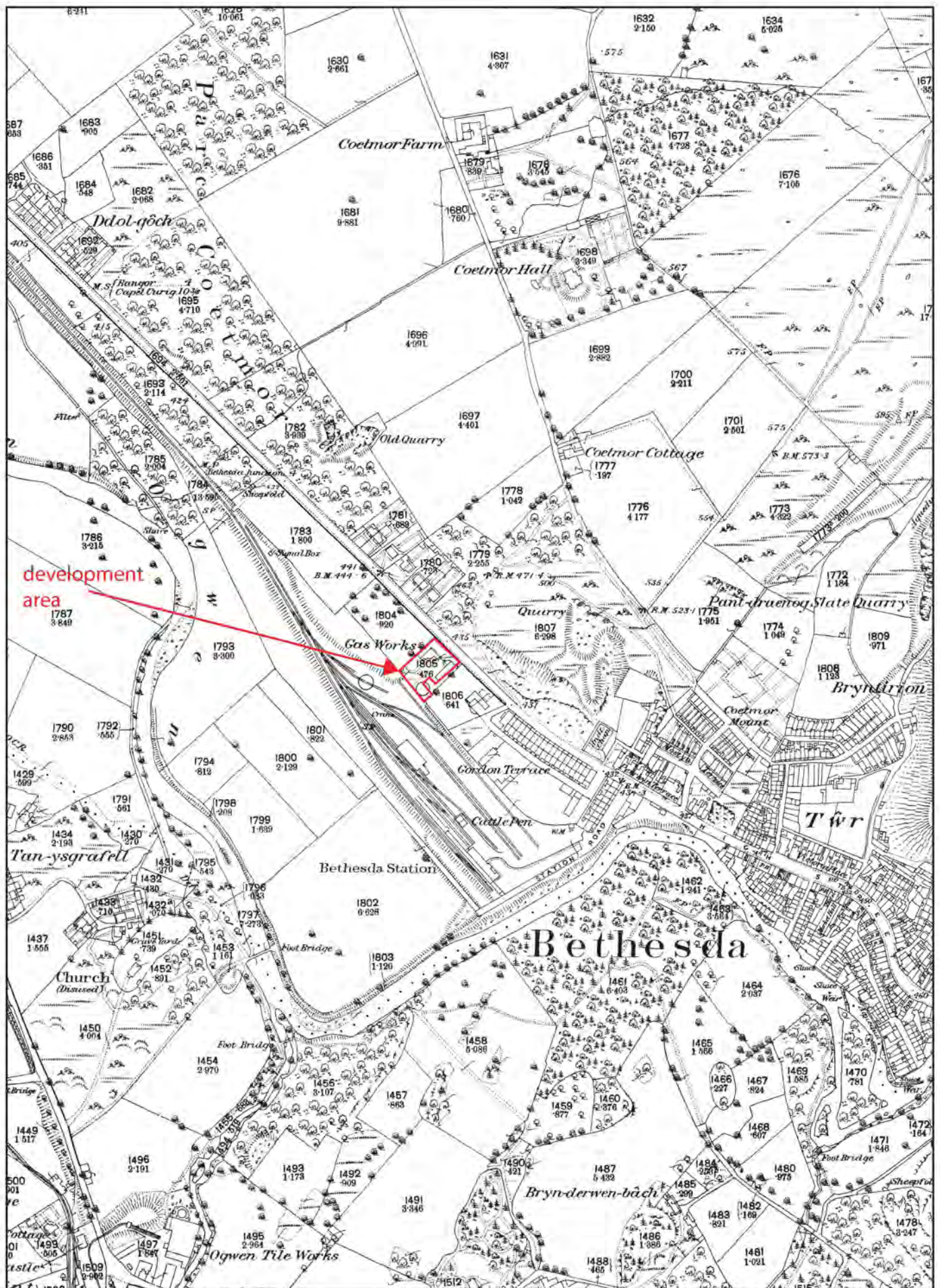


FIGURE 03 Reproduction of Ordnance Survey First Edition 1-inch to 25-mile Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1889. Scale 1:5000@ A4.

FIGURE 04

**Reproduction of Ordnance Survey Second Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1900.
Scale 1:5000@ A4.**



FIGURE 04 Reproduction of Ordnance Survey First Edition 1-inch to 25-mile Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1900. Scale 1:5000@ A4.

FIGURE 05

**Reproduction of Ordnance Survey Third Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1914.
Scale 1: 5000@ A4.**

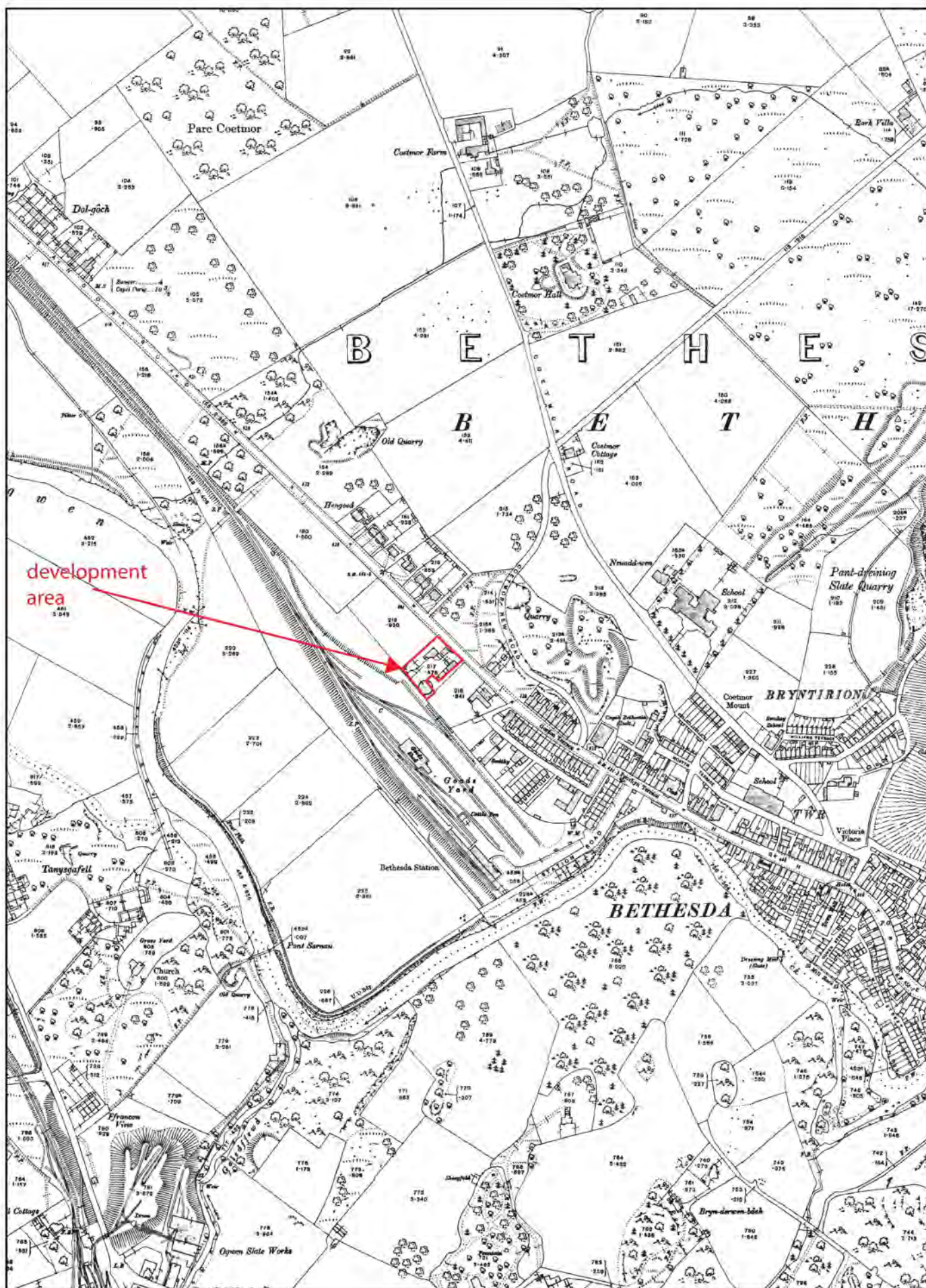


FIGURE 05 Reproduction of Ordnance Survey Second Edition 1-inch to 25-mile Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1914. Scale 1: 5000@ A4.

FIGURE 06

Annotated client produced drainage layout plan of Llain y Pebyll showing location of gasometer (Red), tank/pit filled with oil (Blue) and remains of building present on First Edition OS map (Yellow). Cadarn Consulting Engineers. Drawing 015119. Scale: 1:100@A1.



- [illegible]

- [illegible]

-
- RE2
- STN 0MS/2
 281.851 (280mE)
 36.144 (26BmH)
 47.807mH

-
- Slate roof
Height 1.5m
- 47.4
- 47.32x23

-

-

- [illegible]

- [illegible]

- [illegible]

20. UNLESS OTHERWISE SPECIFIED, THE FOLLOWING SHALL BE THE MINIMUM REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF THE STRUCTURES TO BE BUILT:
21. UNLESS OTHERWISE SPECIFIED, THE FOLLOWING SHALL BE THE MINIMUM REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF THE STRUCTURES TO BE BUILT:

- [illegible]

- LLAIN Y PEBYLL, BETHESDA

- PROPOSED SECTION 104
DRAINAGE LAYOUT

- | | | | | | |
|--------|-------|------|----|---------|---|
| 015119 | CCE | VI | XX | 40:4001 | C |
| | 90:30 | 0002 | SI | P14 | |

- | | | | |
|-------|----------|-------|----|
| T.W.W | 20/11/20 | 1:100 | A1 |
|-------|----------|-------|----|

- ## CADARIN

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|---------------------|---------------------|--|

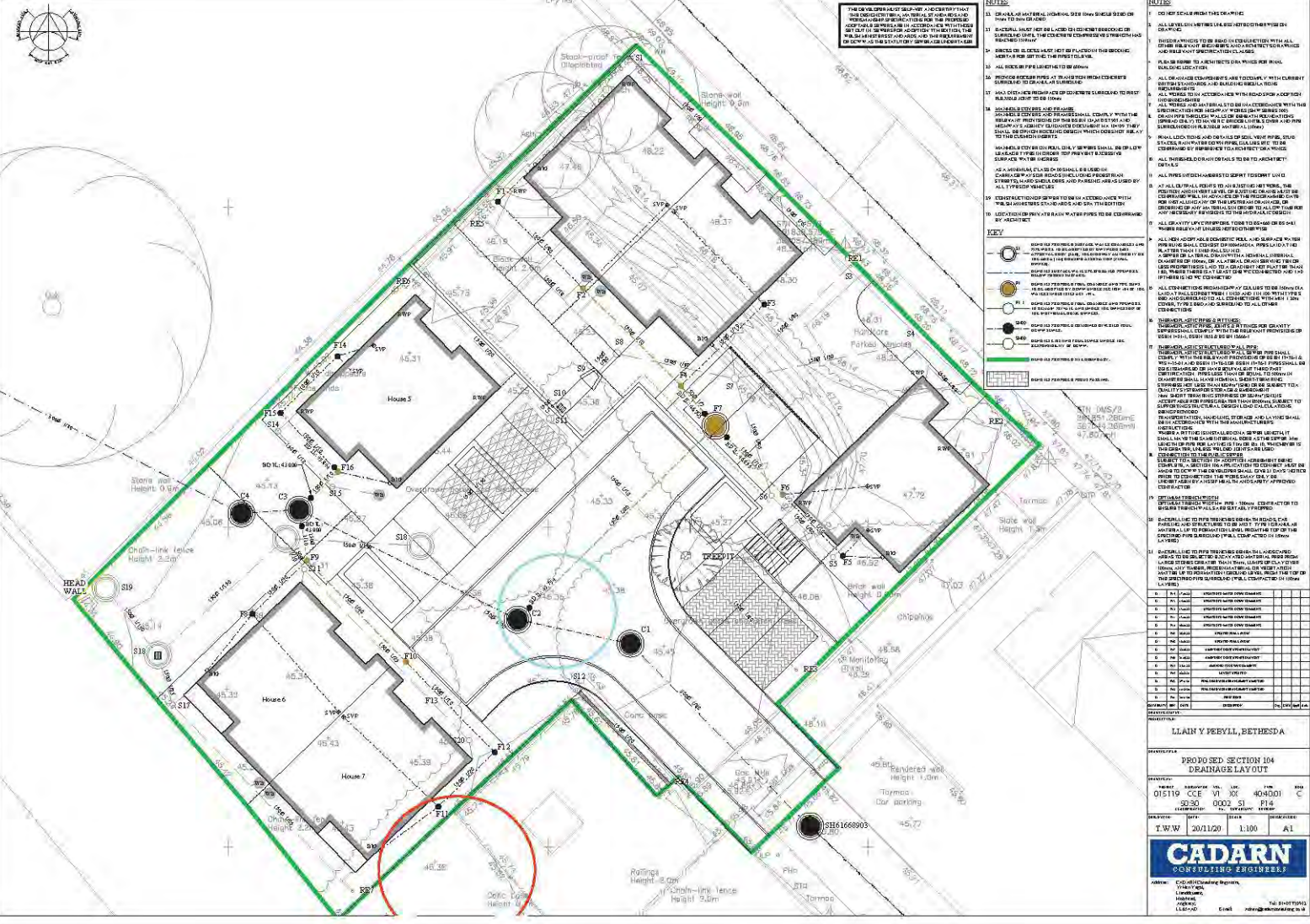




Plate 01: View of concrete foundation block of historic gas tank from the southeast-; scale: 1x1m. View from: SE (archive reference: G26809_008).



Plate 02: View of TP01 extension showing concrete layer of gas works yard surrounding the historic gasometer-; scale: 1x1m. View from: SE (archive reference: G26809_009).



Plate 03: Working shot of TP02-; scale: Not used. View from: NW (archive reference: G26809_013).



Plate 04: Post-excitation view of TP02 showing extent of construction rubble (concrete bricks) in section-; scale: 1x1m. View from: SW (archive reference: G26809_014).



Plate 05: Mid-ex view showing extent of building rubble under topsoil in TP03-; scale: 1x1m. View from: NE (archive reference: G26809_018).



Plate 06: View of section within TP03-; scale: 1x1m. View from: NW (archive reference: G26809_020).



Plate 07: View of rubble stone exterior wall of circular gas work building-; scale: 1x1m. View from: W (archive reference: G26809_041).



Plate 08: View of internal side of gasometer-; scale: 1x1m. View from: E (archive reference: G26809_069).



Plate 09: View of internal side of gasometer-; scale: 1x1m. View from: NW (archive reference: G26809_070).



Plate 10: View of metal fitting (iron) attached to concrete block (southern end) close up-; scale: 1x1m. View from: NE (archive reference: G26809_068).



Plate 11: Concrete footing and ironwork within gasometer-; scale: 1x1m. View from: NE (archive reference: G26809_054).



Plate 12: Slate and brick wall belonging to structure in 1st edition OS map 1900-; scale: 1x1m. View from: N (archive reference: G26809_044).



Plate 13: Scrap metal waste taken from western corner; scale: Not used. View from: N (archive reference: G26809_047).



Plate 14: View of the first three metre pipe trench down to clean natural; scale: 1x1m. View from: E (archive reference: G26809_098).



Plate 15: Representative section showing made ground and sand to the left from uncovered cast iron pipe-; scale: 1x1m. View from: NE (archive reference: G26809_102).



Plate 16: View of pipe trench terminal to depth, just before reaching new manhole-; scale: 1x1m. View from: NE (archive reference: G26809_111).



Plate 17: 250mm dia cast iron pipe with 90° bend exposed within pipe trench-; scale: 1x1m.
View from: NNW (archive reference: G26809_100).



Plate 18: Additional two pipes discovered within pipe trench, one cast 90° bend and one mild steel wrapped in felt-; scale: 1x1m. View from: NE (archive reference: G26809_103).



Plate 19: View of old cast iron pipe within pipe trench-; scale: 1x1m. View from: WNW
(archive reference: G26809_105).



Plate 20: View of 4m length of cast iron pipe removed-; scale: 1x1m. View from: NW
(archive reference: G26809_108).



Plate 21: View of second red brick tablet with faint markings of 22x16 found on reverse; scale: 1x0.5m. View from: SSW (archive reference: G26809_125).



Plate 22: View of timbers capping top of tank/pit; scale: Not used. View from: SSW (archive reference: G26809_123).



Plate 23: View of possible stone cladding seen in pipe trench section-; scale: 1x1m. View from: SE (archive reference: G26809_122).



Plate 24: General view of circular brick structure full of oil-; scale: 1x1m. View from: E (archive reference: G26809_132).



Plate 25: View of circular structure (tank/pit) from the south-; scale: Not used. View from: S (archive reference: G26809_138).



Plate 26: View of structure and oil removal-; scale: Not used. View from: SSE (archive reference: G26809_147).



Plate 27: View of structure and oil removal-; scale: Not used. View from: SSW (archive reference: G26809_148).



Plate 28: View of structure and oil removal-; scale: Not used. View from: SE (archive reference: G26809_149).



Plate 29: Close-up view of structure and oil removal, from street level-; scale: Not used. View from: NE (archive reference: G26809_152).

APPENDIX I

Heneb: Gwynedd Archaeology (Previously, Gwynedd Archaeological Trust) approved Written Scheme of Investigation, January 2021.

LLAIN Y PEBYLL, BETHESDA (G2680)

WRITTEN SCHEME OF INVESTIGATION FOR AN
ARCHAEOLOGICAL WATCHING BRIEF

Prepared for

Williams Homes (Bala) Ltd

January 2021



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name

Signature

Date

**WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL WATCHING
BRIEF**

Prepared for *Williams Homes (Bala) Ltd*, January 2021

Historic Environment Record Enquiry No. GATHER1373 Event Primary Reference Number
46017

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1 INTRODUCTION

Gwynedd Archaeological Trust has been commissioned by Williams Homes (Bala) Ltd to undertake an archaeological watching brief for a housing development at Llain y Pebyll, Bethesda (NGR SH61826704; postcode LL57 3NQ; [Figure 1](#)). The development will be located within a 0.14ha plot located alongside Bangor Road and will include the erection of 7no. dwellings for the elderly together with parking accommodation and a turning facility ([Figure 02](#)). The development will be undertaken from February 2021, with the watching brief monitoring the foundation level groundworks.

The watching brief will be completed in accordance with the following guidance:

- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- *Standard and Guidance for Archaeological Watching Brief* (Chartered Institute for Archaeologists, 2014); and
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020).

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for.

1.1 Fieldwork Aims and Objectives

The key aims and objectives of the watching brief are to:

- identify and record any archaeological activity identified during the groundworks. Known archaeological activity within the development area includes a former gasworks visible on historic mapping and the objective would be to establish the date and nature of any archaeological remains identified within the watching brief areas and assess their implications for understanding the industrial archaeology of Bethesda, in conjunction with the known archaeological record; and
- if no archaeological activity is identified, establish why this may be the case.

1.2 Monitoring Arrangements

The watching brief will be monitored by the Gwynedd archaeological Planning Service (GAPS); the content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue.

The GAPS Archaeologist will need to be informed of the project timetable and of the subsequent progress and findings. This will allow the GAPS Archaeologist time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for further archaeological works (if required) as features of potential archaeological significance are encountered.

1.3 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The GAT HER Enquiry Number for this project is GATHER1373 and the Event PRN is 46017. The GAT HER will also be responsible for supplying the Primary Reference Numbers (PRN) for any new identified and recorded assets.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The development site is the location of a former gasworks, as evidenced by historic mapping. The first, second and third edition Ordnance Survey 1-inch to 25-mile Caernarvonshire County Series Map Sheets for the area (Sheets XII.5 & XII.6); published in 1889, 1900 and 1914 respectively ([Figures 03](#), [04](#) and [05](#)), detail the layout and development of the gasworks. The gasworks encompass the entire development plot and appear fully established by the first edition, with the circular gas holder visible at the southwestern end of the plot and various buildings occupying the remainder. The first to third edition maps cover a twenty-five year period and whilst the gas holder remains in place, it is evident that additional structures were built within the plot as time progressed, as well as other buildings disappearing from use. Apart from the gas holder, the specific use of individual buildings is not evident from the mapping. The gas works were located alongside the main road through Bethesda and were in close proximity to Bethesda train station.

3 METHODOLOGY

3.1 Introduction

An archaeological watching brief is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2014). The watching brief will monitor the foundation level groundworks for the housing development; these groundworks will start from February 2021. GAPS have stated that the watching brief should be supported by sufficient desk-based research to aid interpretation of any archaeological evidence encountered.

3.2 Desk-Based Research

The desk-based research will involve a study of the following resources:

1. The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) will be examined for information concerning the watching brief area, defined as the highlighted area in [Figure 01](#). Examination of the core HER will be undertaken, including the 6-inch and 25-inch County Series Ordnance Survey maps and any secondary information held within the HER;
2. The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be checked for sites additional to the HER;
3. Aerial photographs from the National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be examined for potential features. This will include 1946 RAF vertical aerial photographs;
4. The online catalogue search of the National Library of Wales (Penglais Rd, Aberystwyth SY23 3BU); and

Archive data, including primary and secondary sources, historic maps and estate maps will be examined at the regional archives, if open and accessible. Archive data will include historic mapping such as the local tithe map and schedule.

3.3 Watching Brief

The following methodology will apply:

- The watching brief will be undertaken on an intensive basis;
- The watching brief will monitor the foundation level groundworks as far as the glacial horizon, archaeological horizon or limit of excavation, whichever is encountered first. *The project archaeologist will be afforded sufficient time and opportunity to investigate any archaeological activity, or suspected archaeological activity, encountered. It is recommended that a toothless bucket is used whenever possible during the groundworks;*
- During the watching brief all attendances and any identified features will be recorded using GAT watching brief pro-formas ([Appendix I](#));
- Photographic images will be taken using a digital SLR camera set to maximum resolution in RAW format; a photographic record will be maintained on site using GAT pro-formas ([Appendix II](#)) and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from **G2680_001**. When practical, a photographic ID board will be used during the watching brief inspection to record site code, image orientation and any relevant context numbers;
- Any subsurface features will be recorded photographically, with detailed notations and a measured survey (completed using a *Trimble R8* GPS unit);
- Any archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy will generally apply: 50% sample of each sub-circular feature, 10% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). However, if discrete features are identified these will be 100% excavated as will any exposed segments of linear features. It is possible structures associated the gasworks will be identified; it may not be practical to excavate such features, but they will need to be cleaned sufficiently that their form and orientation can be recorded. *In the event of the identification of extensive/complex remains, additional time, resourcing and costs may be required for GAT to complete an appropriate programme of works;*

- Any required plans or sections to be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace; and
- Should dateable artefacts, human remains and/or ecofacts be recovered, an interim report will be submitted summarising the results of the watching brief, along with an assessment of potential for analysis post-excavation project design (in line with the MAP2 process). *Additional time, resourcing and costs will be required to undertake any post-excavation programme of works.*

3.4 Human Remains

It is not expected that human remains/burials will be present on site due to the industrial archaeology that characterises former site use. However, if any human remains identified are to be excavated, and cannot be preserved in situ this will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a Ministry of Justice licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner within GAT premises. If significant quantities of human remains are encountered, a human osteologist should be contacted and appointed to advise the team during the fieldwork. The osteologist will be an external appointment: Dr. Genevieve Tellier | Tel: 01286 238827 | email: northwalesosteology@outlook.com who will assist in devising the excavation, recording and sampling strategy for features containing human remains. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Chartered Institute for Archaeologists, 2017).

3.5 Ecofacts

Due to the existing ground conditions (post-industrial scrub) and the former use of the site as a gasworks, it is unlikely that waterlogged/organic deposits will be encountered or suitable deposits for ecofact sampling identified. If they are however, bulk samples will not be taken by GAT from any waterlogged/organic deposits, but the GAT archaeologist will monitor and record the depth and context of the deposit or deposits. Based on initial results and potential, e.g., an extensive depth of waterlogged deposits, recourse may be made to a specialist (via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: lucy.whittingham@aocarchaeology.com) for advice on a palaeoenvironmental assessment and analysis strategy.

For any ecofact samples taken from human burials, this will be completed in accordance with an appointed osteologist's guidance.

3.6 Artefacts

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19th and 20th century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation, in particular the advice provided within *First Aid for Finds* (Watkinson and Neal 2001).

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: lucy.whittingham@aocarchaeology.com).

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Storiol Museum and Art Gallery, Ffordd Gwynedd, Bangor, Gwynedd, LL57 1DT), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters, and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via Williams Homes (Bala) Ltd) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Storiol Museum and Art Gallery). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Storiol Museum and Art Gallery will in accordance with *Guidelines for the Preparation and deposition of Archaeological Archives: An agreement between and Gwynedd Museums Service* (Gwynedd Council, 2009).

3.7 Data Management Plan

3.8 Working Project Archive Selection Strategy and Data Management Plan

As stated in Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2020), para. 3.3.1, "Project specifications, research designs or similar documents should include a project- specific Selection Strategy and a Data Management Plan. The Chartered Institute for Archaeologists states that "(I)t is widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation" (<https://www.archaeologists.net/selection-toolkit>). The working project archive in this instance will comprise digital data including photographic data, documentation and written data, as well as paper records, including project pro-formas. The Data Management Plan will be stored on a project specific form in the GAT project database (format: *Microsoft Access*) and the Selection Strategy will be based on a GAT pro-forma (format *Microsoft Word*; cf. [Appendix IV](#)) that will be appended to the final report.

This working project archive data will be processed as follows:

1. Pro-formas: all cross referenced and scanned for digital archiving;
2. Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*;

Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Data Management Plan; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Data Management Plan via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below.

The project report will include the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusion
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – photographic metadata
10. Appendix III – drawing register
11. Appendix IV - GAT Selection Strategy
12. Back cover.

Illustrations will include plans of the location of the study area and archaeological sites.

Historical maps, when appropriate and if copyright permissions allow, will be included.

The following dissemination and archiving of the report and digital dataset will be applied:

- A digital report will be provided to the client and GAPS (draft report then final report);
- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and will include:
 - Photographic metadata (Microsoft Access);
 - Photographic archive (TIFF format);
 - Project Information form (Excel);
 - File Information form (Excel) – Microsoft Word report text final;
 - File Information form (Excel) – Photographic metadata (general);
 - File Information form (Excel) – Adobe PDF report final; and
 - File Information form (Excel) - Photographic metadata (detail).

4 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section with attendances on-site undertaken by a GAT Project Archaeologist. The Project Archaeologist will be responsible for the, including:

The Project Archaeologist will be responsible for the following:

- All archaeological watching brief duties on site;
- Client/contractor liaison;
- GAPS liaison, with regular updates;
- specialist liaison (if relevant);
- completing all on site pro-formas and the fieldwork archive;
- sourcing Primary Reference Numbers (PRN) from the GAT HER for any new features identified;
- completing an event summary and creating or updating PRN data, dependent on results; and
- for submitting a draft final report (or interim report) for project manager review and approval, to then be submitted as per the arrangements defined above.

5 HEALTH AND SAFETY

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and site contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. GAT staff will abide by Trust Covid-19 guidelines and Covid-19 site requirements as defined by *Williams Homes (Bala) Ltd*. The development area was a former industrial site (gasworks) and due consideration to any associated risk will be defined in the project specific risk assessment.

6 SOCIAL MEDIA

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.

7 INSURANCE

7.1 Public/Products Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2021

7.2 Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2021

7.3 Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER PL-PSC10002389775/00

EXPIRY DATE 22/07/2021

8 SOURCES CONSULTED

1. Brunning, R and Watson, J 2010, *Waterlogged Wood: Guidelines on the Recording*,
2. Chartered Institute for Archaeologists, 2014, *Standard and Guidance for Archaeological Watching Brief*
3. Chartered Institute for Archaeologists, 2014, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
4. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
5. Chartered Institute for Archaeologists, 2017, *Updated Guidelines to the Standards for Recording Human Remains*
6. English Heritage, 1991, *Management of Archaeological Projects (MAP2)*
7. English Heritage, 2011, *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*
8. Gwynedd Museum Service, 2009, *Guidelines For The Preparation and Deposition of Archaeological Archives: An agreement between Gwynedd Museums Service and Gwynedd Council*
9. Historic England, 2012, *Waterlogged Organic Artefacts Guidelines on their Recovery, Analysis and Conservation*
10. Historic England, 2015, *Management of Research Projects in the Historic Environment (MoRPHE)*
11. Ordnance Survey County Series Map 1-inch to 25-mile (Sheets XII.6 and XII.5) First Edition published 1889
12. Ordnance Survey County Series Map 1-inch to 25-mile (Sheets XII.6 and XII.5) Second Edition published 1900
13. Ordnance Survey County Series Map 1-inch to 25-mile (Sheets XII.6 and XII.5) Third Edition published 1914
14. Royal Commission on Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives*
15. The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*
16. Watkinson, D and Neal, V, 2001, *First aid for finds* (3rd edition)

FIGURE 01

Location of development/watching brief area (outline in red). Based on ordinance survey 1:10000 County series map sheet SH66. Scale 1:7500@A4

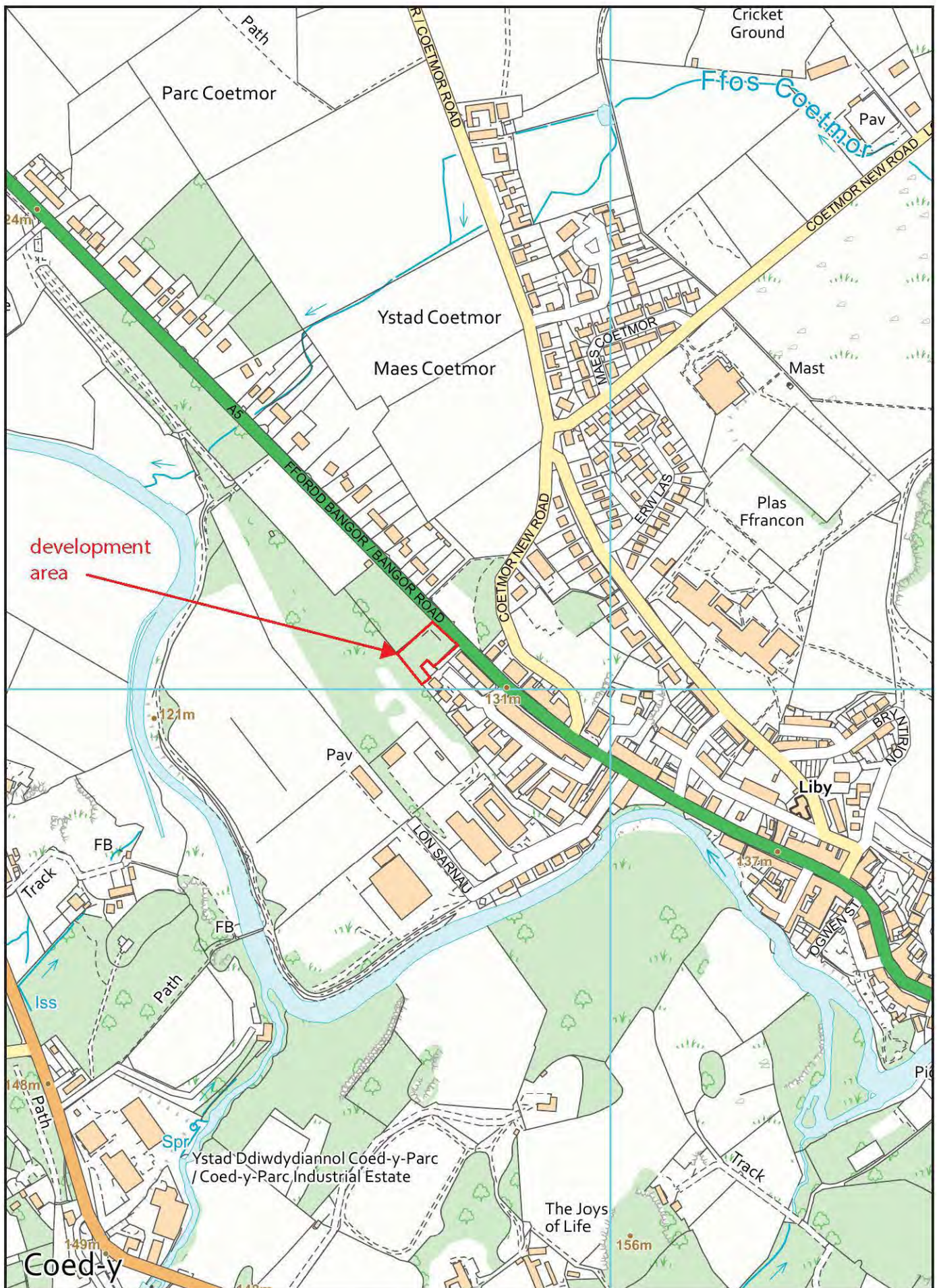


FIGURE 01 Location of development area. Based on ordinance survey 1:10000 County series map sheet SH66.
 Scale 1:5000@A4. Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O
 © Crown Copyright and database right 2018, license AL100020895

FIGURE 02

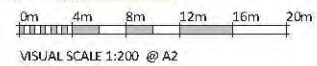
Reproduction of Ainsley Gommon Architects Drawing No. C982 003.

Scale: 1:200@A3



SITE - PROPOSED SITE PLAN

SCALE: 1:200



REV	DESCRIPTION	DATE	BY

PROJECT
LLAIN Y PEBYLL
for NORTH WALES HOUSING

DRAWING TITLE
PROPOSED SITE PLAN

SCALE	DRAWN	CHECKED
1:200 @ A2	09/05/20	09
STATUS	PLANNING	
003	003	

AG AINSLEY COMMON ARCHITECTS
THE GLOUCESTER BUILDING, 100, GLOUCESTER ROAD, GLoucester, GL1 2AA
Tel: 01202 512 111 Fax: 01202 512 112 Email: info@ainsleycommon.co.uk
Website: www.ainsleycommon.co.uk
PREFILED: 09/05/2020 10:40:47

A2

FIGURE 03

**Reproduction of Ordnance Survey First Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1889.
Scale 1:5000@ A4.**

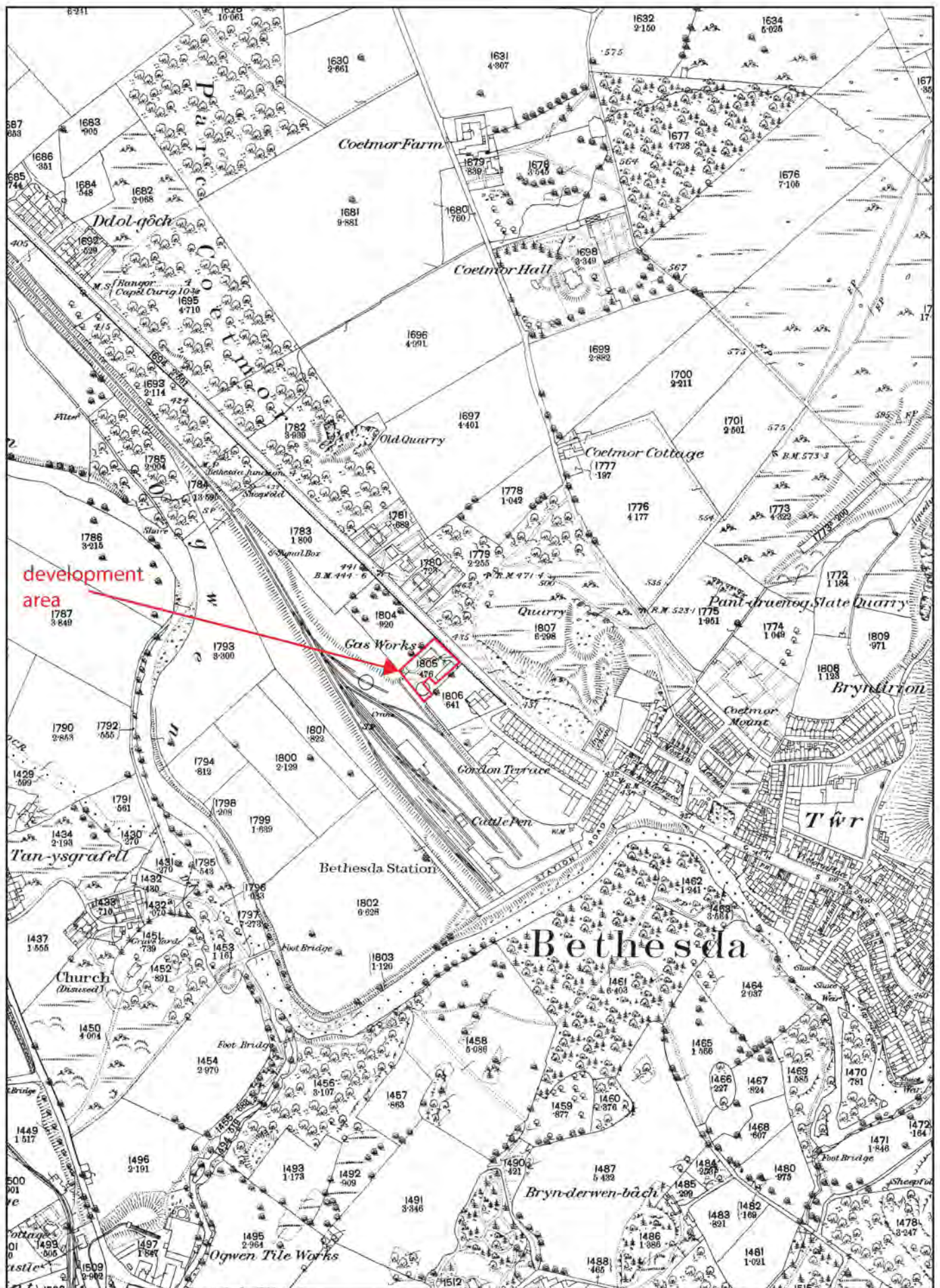


FIGURE 03 Reproduction of Ordnance Survey First Edition 1-inch to 25-mile Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1889. Scale 1:5000@ A4.

FIGURE 04

**Reproduction of Ordnance Survey First Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1900.
Scale 1:5000@ A4.**

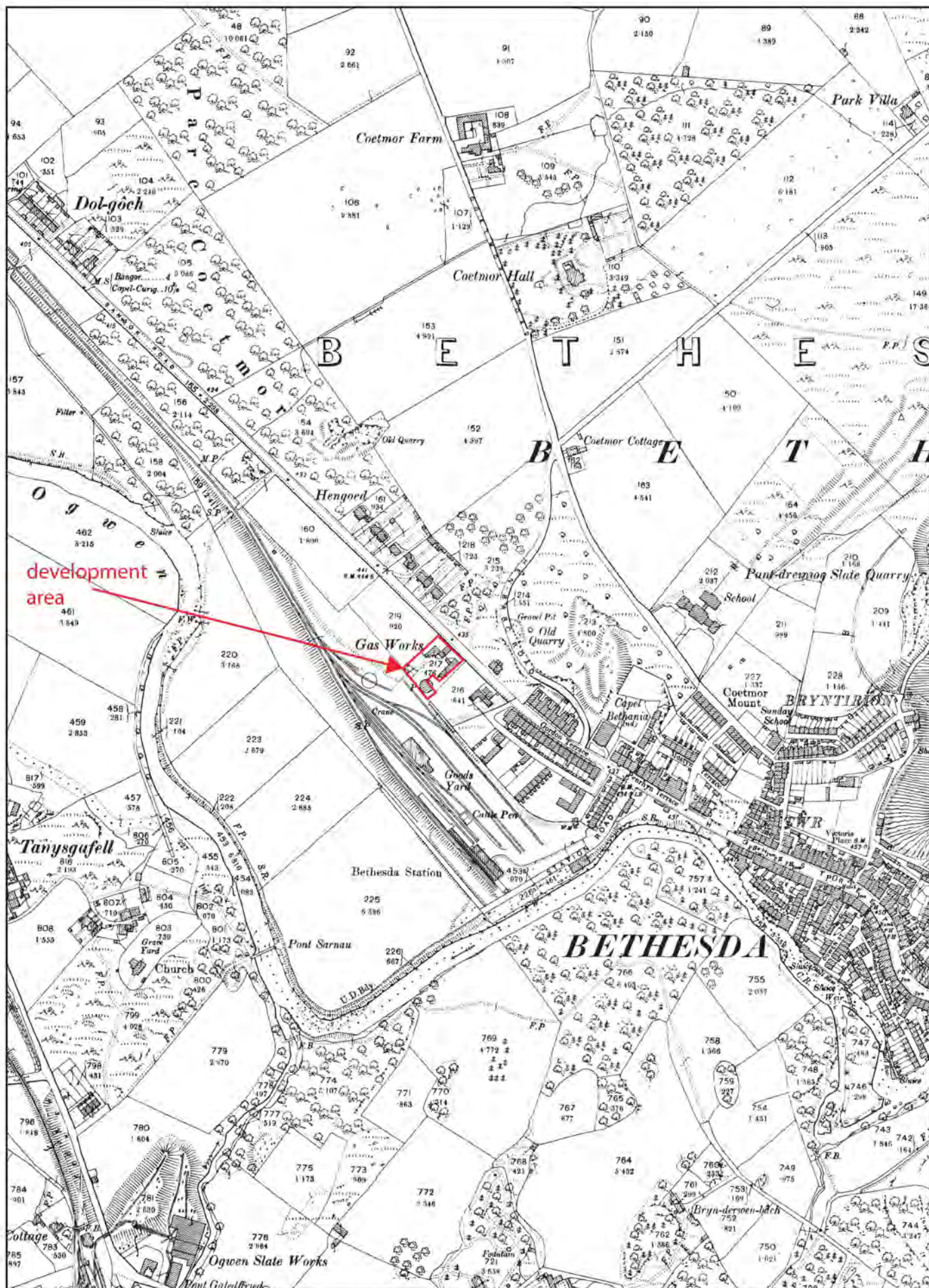


FIGURE 04 Reproduction of Ordnance Survey First Edition 1-inch to 25-mile Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1900. Scale 1:5000@ A4.

FIGURE 05

**Reproduction of Ordnance Survey Second Edition 1-inch to 25-mile
Caernarvonshire County Series Map Sheets XII.5 & XII.6, published 1914.**

Scale 1: 5000@ A4.



Series Map Sheets XII.5 & XII.6, published 1914. Scale 1: 5000@ A4.

APPENDIX I

Gwynedd Archaeological Watching pro-forma

WATCHING BRIEF DAY RECORD

*Date**Project name**Project number**Compiler**Location**Description*

Times of travelling and on-site

Drawn record details

Photographic record details

APPENDIX II

Gwynedd Archaeological Trust Photographic Metadata pro-forma

Digital Photographic Record

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.

Delete any unwanted photos **immediately** from the camera.

Regularly upload photographs to computer.

[illegible]

APPENDIX III

Gwynedd Archaeological Trust Selection Strategy pro-forma

G2680_Llain_y_Pebyll

27/01/2021 v1.0

Selection Strategy

Project Information

Project Management

Project Manager John Roberts

Archaeological Archive Manager

Organisation Gwynedd Archaeological Trust

Stakeholders

Date Contacted

Collecting Institution(s)

Project Lead / Project Assurance

Landowner / Developer

Other

Resources

Resources required

Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.

Context

Describe below the context of this Selection Strategy. You should refer to:

- The aims and objectives of the project;
- Local Authority guidance (including the brief);
- Research Frameworks;
- The repository collection development policy and/or deposition policy;
- Material-specific guidance documents.

Note: This section may be copied from your Project Design/WSI to ensure all Stakeholders receive this context information.

1 – Digital Data

Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

Selection

Location of Data Management Plan (DMP)

Selection of digital data elements should be considered in your project's DMP. For the purpose of the Selection Strategy, you can either copy the selection section of your DMP below, or attach it as an appendix to this document. Please indicate here if the DMP is attached.

P:\Project Database

The selection strategy in your DMP should:

- 1.1 Define what digital data will be selected for inclusion in the archaeological archive, how this will be done, and why. Do not forget to consider that specialists may have digital data that should be included in the archaeological archive.
- 1.2 Identify the selection review points during the project (i.e. project planning, data gathering, analysis and reporting and archive compilation).
- 1.3 Reference all relevant standards, policies or guidelines (e.g. digital repository deposition requirements) and specialist advice sought.
- 1.4 Identify any selection decisions that differ from standard guidelines and explain why.

De-Selected Digital Data

The procedure for dealing with De-selected digital data and what specialist advice informed this process should be recorded in your DMP. Please copy this information here or attach your DMP as an appendix to this document.

tbc

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

--

Selection

Describe your Selection Strategy for the Documents elements of the archaeological archive. To do this you must:

- 2.1 Define which documents will be selected for inclusion in the archaeological archive, how this will be done, and why. Do not forget to consider that specialists may have documents that should be included in the archaeological archive.
- 2.2 Identify the selection review points during the project (e.g. project planning, data gathering, analysis and reporting and archive compilation).
- 2.3 Reference all relevant standards, policies or guidelines (e.g. digital repository deposition requirements) and specialist advice sought.
- 2.4 Identify any selection decisions that differ from standard guidelines and explain why.

--

De-Selected Documents

Describe the procedure for dealing with De-selected material and what specialist advice has informed this procedure.

--

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

3 – Materials

Note: This step should be completed for each material component of the archaeological archive. Copy this table for the various materials as required, providing the 'Material Type' and a section identifier (eg. '3.1') for each.

Material type

Section 3.

Stakeholders

Name the individual(s) responsible for the Materials Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

Selection

Describe your Selection Strategy for each material type and or object type. To do this you must:

- 3.1 State the Selection Strategy you are applying to each category of material, how this will be done, and why.
- 3.2 Identify the selection review points during the project (e.g. project planning, data gathering, analysis and reporting and archive compilation).
- 3.3 Reference all relevant standards, policies or guidelines (e.g. thematic, period, and regional, Research Frameworks, repository deposition policies) and specialist advice sought.
- 3.4 Identify any selection decisions that differ from standard guidelines and explain why.

The Materials Selection Template may be useful in structuring this section.

Uncollected Material

If you are practising selection in the field, describe the process that will be applied. To do this you must:

- Detail how you will characterise, quantify and record all uncollected material on site.
- Explain how you will dispose of, or re-distribute, uncollected material.

De-Selected Material

Describe what you will do with the de-selected material. All processed material should have been adequately recorded before de-selection.

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

Materials Selection Template

This table may be inserted into Section 3 of the main [Selection Strategy Template](#) to help present differing selection strategies for different material types

Find Type	Selection Strategy	Stakeholders	Review Points

APPENDIX II

Heneb: Gwynedd Archaeology Trust Photographic Metadata

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_001	GI works		Pre-commencement view of site from entrance	E	Not used	M.S.Lynes	04/01/2022	Heneb: Gwynedd Archaeology	
G2680_002	GI works		Pre-commencement view of site from the southeast	SE	Not used	M.S.Lynes	04/01/2022	Heneb: Gwynedd Archaeology	
G2680_003	GI works		Pre-commencement view of site from the southwest	SW	Not used	M.S.Lynes	04/01/2022	Heneb: Gwynedd Archaeology	
G2680_004	GI works		Pre-commencement view of site from the west	W	Not used	M.S.Lynes	04/01/2022	Heneb: Gwynedd Archaeology	
G2680_005	GI works		Pre-commencement view of site from the north	N	Not used	M.S.Lynes	04/01/2022	Heneb: Gwynedd Archaeology	
G2680_006	GI works		Pre-commencement view of TP01	SE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_007	GI works		Post excavation view of TP01 to depth showing concrete foundation block of historic gasometer	SE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_008	GI works		View of concrete foundation block of historic gas tank from the southeast	SE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	01
G2680_009	GI works		View of TP01 extension showing concrete layer of gas works yard surrounding the historic gasometer	SE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	02

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_010	GI works		Close-up view of gasometer foundation with RSJ in situ	SE	Not used	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_011	GI works		Pre-commencement view of TP02 from the northwest	NW	Not used	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_012	GI works		Pre-commencement view of TP02 from the northwest	NW	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_013	GI works		Working shot of TP02	NW	Not used	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	03
G2680_014	GI works		Post-excavation view of TP02 showing extent of construction rubble (concrete bricks) in section.	NW	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	04
G2680_015	GI works		Post-excavation view of TP02 showing extent of construction rubble (concrete bricks) in section.	SW	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_016	GI works		Pre-commencement view of TP03 from the northeast	NE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_017	GI works		Mid-ex view showing extent of building rubble under topsoil in TP03	NE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_018	GI works		Mid-ex view showing extent of building rubble under topsoil in TP03	NE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	05
G2680_019	GI works		Post-excavation view of TP03 to required depth	NE	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	
G2680_020	GI works		View of section in TP03	NW	1x1m	M.S.Lynes	05/01/2022	Heneb: Gwynedd Archaeology	06
G2680_021	Watching Brief		Breeze block wall	SSE	1x1m	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_022	Watching Brief		Breeze block wall	SE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_023	Watching Brief		Breeze block wall	SE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_024	Watching Brief		Vegetation removal between walls	SE	1x1m	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_025	Watching Brief		Vegetation removal between walls	W	1x1m	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_026	Watching Brief		Excavation (W corner of site)	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_027	Watching Brief		Excavation (W corner of site) Demo Layers	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_028	Watching Brief		Excavation (W corner of site) Demo Layers	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_029	Watching Brief		Excavation (W corner of site) Demo Layers	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_030	Watching Brief		Excavation (W corner of site) Demo Layers	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_031	Watching Brief		Rubbish in excavation	N	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_032	Watching Brief		To construction depth W corner	NE	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_033	Watching Brief		Concentration of stone	NW	1x1m	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_034	Watching Brief		Concentration of stone	SW	-	Carol Ryan Young	28/03/2022	Heneb: Gwynedd Archaeology	
G2680_035	Watching Brief		View of trench cut into SW quadrant of site	NE	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_036	Watching Brief		View of former demolition/rubbish dump along NE facing sec. of trench	NE	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_037	Watching Brief		View of trench looking towards NE end of site	SW	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_038	Watching Brief		View of topsoil strip at S end of site pre-ex	S	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_039	Watching Brief	110674	Curved foundation of circular gas work building of bricks, mortar and slate	NE	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_040	Watching Brief	110674	Curved foundation of circular gas work building of bricks, mortar and slate	S	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_041	Watching Brief	110674	View of rubble stone exterior wall of circular gas work building	W	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	07
G2680_042	Watching Brief	110674	Close-up view of mortar used on circular gas work structure	W	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_043	Watching Brief	110674	View of trench cut along southern edge of site showing contaminated soils and gasometer in background	NW	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_044	Watching Brief	110676	Slate and brick wall belonging to structure in 1st edition OS map 1900	N	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	12
G2680_045	Watching Brief	110676	View of brick wall probably part of structure small structure along NW edge of site	SE	1m	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_046	Watching Brief	110676	Oblique view showing both walls of small structure including disturbance from scrap dump	E	n/a	Bethan Jones	05/03/2022	Heneb: Gwynedd Archaeology	
G2680_047	Watching Brief	110676	Scrap metal waste taken from western corner	N	n/a	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	13
G2680_048	Watching Brief	110676	View of pipework running along SE face of boundary	SE	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_049	Watching Brief		Extent of excavation for Japanese knotweed	NE	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_050	Watching Brief	110676	View of brick wall within western corner of structure	NE	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_051	Watching Brief	110674	View of circular edge of gasometer structure	S	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_052	Watching Brief	110674	Portrait view of circular edge of gasometer	S	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_053	Watching Brief	110674	View of brickwork on interior of gasometer	NE	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	
G2680_054	Watching Brief	110674	Concrete footing and ironwork within gasometer	NE	1m	Bethan Jones	05/04/2022	Heneb: Gwynedd Archaeology	11

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_055	Watching Brief	110674	View of full extent of gasometer	SE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_056	Watching Brief	110674	View of full extent of gasometer	N	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_057	Watching Brief	110674	View of full extent of gasometer	W	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_058	Watching Brief	110674	View of full extent of gasometer	NE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_059	Watching Brief	110674	View of full extent of gasometer	NE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_060	Watching Brief	110674	View of concrete platform with footing at north end of gasometer	S	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_061	Watching Brief	110674	View of concrete platform with footing at north end of gasometer	NE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_062	Watching Brief		Excavation at east of garden plot 6-7 showing gas pipe in natural (southern edge of gasometer)	E	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_063	Watching Brief	110674	View of interior of gasometer	E	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_064	Watching Brief	110674	View of interior of gasometer	NW	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_065	Watching Brief	110674	View of interior of gasometer with metal bar at eastern end	W	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_066	Watching Brief	110674	Closer view of metal fitting attached to concrete block at eastern end	W	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_067	Watching Brief	110674	View of metal fitting (iron) attached to concrete block (southern end)	NE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	
G2680_068	Watching Brief	110674	View of metal fitting (iron) attached to concrete block (southern end) close up	NE	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	10
G2680_069	Watching Brief	110674	View of internal side of gasometer	E	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	08
G2680_070	Watching Brief	110674	View of internal side of gasometer	NW	1m	Bethan Jones	05/10/2022	Heneb: Gwynedd Archaeology	09
G2680_071	Watching Brief	110674	Shot of stripped area within interior of gasometer	SE	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	
G2680_072	Watching Brief	110674	Concrete slabs/blocks to NW of gasometer	SE	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	
G2680_073	Watching Brief	110674	NW edge of gasometer wall with concrete blocks in background	E	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_074	Watching Brief	110674	Working shot - general view of stripped area to NW of gasometer	SE	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	
G2680_075	Watching Brief	110674	General shot of area to NW of gasometer	SE	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	
G2680_076	Watching Brief	110674	View of large cobbles on outer edge of wall gasometer	NW	n/a	Anne Marie Oattes	05/11/2022	Heneb: Gwynedd Archaeology	
G2680_077	Watching Brief	110674	View of interior of gasometer excavated to construction depth	NW	n/a	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_078	Watching Brief	110674	View of interior of gasometer excavated to construction depth	NE	n/a	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_079	Watching Brief	110674	View of [003] with gas sub- station on right of picture	SE	n/a	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_080	Watching Brief	110674	View of concrete block to NW of gasometer	SE	2 x 1m	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_081	Watching Brief	110674	View of concrete blocks to NW of gasometer	SE	2 x 1m	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_082	Watching Brief	110674	Concrete blocks and base of gasometer	SE	n/a	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	
G2680_083	Watching Brief		SW facing at LOE (today) showing demolition material	SW	1 x 1m	Anne Marie Oattes	05/12/2022	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_084	Watching Brief		Pre-ex shot of area to be excavated for retaining wall	E	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_085	Watching Brief		View of spoil heap to be removed at NE of site	SE	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_086	Watching Brief		Working shot showing demolition material	E	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_087	Watching Brief		SW facing section of excavated area for retaining wall to construction depth	SW	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_088	Watching Brief		Base of excavated area for retaining wall to construction depth	SE	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_089	Watching Brief		Base of excavated area for retaining wall to construction depth	SE	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_090	Watching Brief		NE facing section at SE boundary of site	NE	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_091	Watching Brief		Area to NW of gasometer after concrete blocks removed	NW	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_092	Watching Brief		Area to NW of gasometer after concrete blocks removed	N	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_093	Watching Brief		View to NE general shot	SW	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	

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G2680_094	Watching Brief		General view of site	N	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_095	Watching Brief		General shot of site view from the N	N	n/a	Anne Marie Oattes	16/05/2022	Heneb: Gwynedd Archaeology	
G2680_096	Watching Brief		Working shot of made ground	SW	Not used	M.S.Lynes	20/08/2024	Heneb: Gwynedd Archaeology	
G2680_097	Watching Brief		View of the first three metre pipe trench down to clean natural	E	1x1m	M.S.Lynes	20/08/2024	Heneb: Gwynedd Archaeology	
G2680_098	Watching Brief		View of the first three metre pipe trench down to clean natural	E	1x1m	M.S.Lynes	20/08/2024	Heneb: Gwynedd Archaeology	14
G2680_099	Watching Brief		Working shot showing made ground	W	Not used	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	
G2680_100	Watching Brief		250mm dia cast iron pipe with 90° bend exposed within pipe trench	NNW	1x1m	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	17
G2680_101	Watching Brief		View of pipe trench down to natural, 8m from manhole	W	1x1m	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	
G2680_102	Watching Brief		Representative section showing made ground and sand to the left from uncovered cast iron pipe	NE	1x1m	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	15

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_103	Watching Brief		Additional two pipes discovered within pipe trench, one cast 90° bend and one mild steel wrapped in felt	NE	1x1m	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	18
G2680_104	Watching Brief		Oblique view of made ground build-up	SW	Not used	M.S.Lynes	21/08/2024	Heneb: Gwynedd Archaeology	
G2680_105	Watching Brief		View of old cast iron pipe within pipe trench	WNW	1x1m	M.S.Lynes	22/08/2024	Heneb: Gwynedd Archaeology	19
G2680_106	Watching Brief		Working shot of pipe trench adjacent to House 6 with cast iron pipe exposed	WNW	Not used	M.S.Lynes	22/08/2024	Heneb: Gwynedd Archaeology	
G2680_107	Watching Brief		View of pipe trench showing cast iron pipe cut with sand fill exposed	WNW	1x1m	M.S.Lynes	22/08/2024	Heneb: Gwynedd Archaeology	
G2680_108	Watching Brief		View of 4m length of cast iron pipe removed	NW	1x1m	M.S.Lynes	22/08/2024	Heneb: Gwynedd Archaeology	20
G2680_109	Watching Brief		Representative section showing made ground depth, adjacent to House 6	NE	1x1m	M.S.Lynes	22/08/2024	Heneb: Gwynedd Archaeology	
G2680_110	Watching Brief		Cast iron pipe found in top layer of manhole location running towards House 6	NE	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_111	Watching Brief		View of pipe trench terminal to depth, just before reaching new manhole	NE	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	16

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_112	Watching Brief	110675	Working shot of pipe trench with black oil present behind curvilinear structure covered in oil	WSW	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_113	Watching Brief	110675	View of circular structure made of brick, with possible rough fieldstone cladding	SW	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	21
G2680_114	Watching Brief	110675	Close-up view of circular structure made of brick, with possible rough fieldstone cladding	SW	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_115	Watching Brief	110675	Working shot of circular structure exposure adjacent to House 7	S	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_116	Watching Brief	110675	Working shot of circular structure exposure	SW	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_117	Watching Brief	110675	Working shot of circular structure exposure	SW	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_118	Watching Brief	110675	Working shot of circular structure exposure	SE	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_119	Watching Brief	110675	Working shot of circular structure exposure	NE	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_120	Watching Brief	110675	Working shot of circular structure exposure	SW	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	

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G2680_121	Watching Brief	110675	View of exposed section of circular tank/pit filled with oil	NW	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_122	Watching Brief	110675	View of possible stone cladding seen in pipe trench section	SE	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	23
G2680_123	Watching Brief	110675	View of timbers capping top of tank/pit	SSW	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	22
G2680_124	Watching Brief	110675	View of oval red brick tablet with 22x16 engraved on to it, found within circular structure	SSW	1x0.5m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	30
G2680_125	Watching Brief	110675	View of second red brick tablet with faint markings of 22x16 found on reverse	SSW	1x0.5m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	21
G2680_126	Watching Brief	110675	Working shot of circular structure exposure from the SSE	SSE	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_127	Watching Brief	110675	View of central dividing wall discovered within structure	WNW	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_128	Watching Brief	110675	View of central dividing wall discovered within structure	WSW	1x1m	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	
G2680_129	Watching Brief	110675	View of sondage dug against central wall to examine depth (2.5m deep)	NE	Not used	M.S.Lynes	23/08/2024	Heneb: Gwynedd Archaeology	

PHOTO RECORD NUMBER*	PROJECT PHASE	PRN No.	DESCRIPTION*	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	COPYRIGHT*	Plates
G2680_130	Watching Brief	110675	Working shot of ground reduction within circular structure, northern side	W	Not used	M.S.Lynes	27/08/2024	Heneb: Gwynedd Archaeology	
G2680_131	Watching Brief	110675	View of 4-6m long steel girder found within northern side of circular structure	W	Not used	M.S.Lynes	27/08/2024	Heneb: Gwynedd Archaeology	
G2680_132	Watching Brief	110675	General view of circular brick structure full of oil	E	1x1m	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	24
G2680_133	Watching Brief	110675	View down into northern half of circular structure	SE	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_134	Watching Brief	110675	View down into southern half of circular structure	NE	1x1m	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_135	Watching Brief	110675	View down into southern half of circular structure	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_136	Watching Brief	110675	View down into northern half of circular structure	SE	1x1m	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_137	Watching Brief	110675	View down into northern half of circular structure	S	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_138	Watching Brief	110675	View of circular structure (tank/pit) from the south	S	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	25

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G2680_139	Watching Brief	110675	View of circular structure (tank/pit) from the south	S	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_140	Watching Brief	110675	Location shot of circular structure (tank/pit) from the south	S	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_141	Watching Brief	110675	Location shot of circular structure (tank/pit) from the south	S	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_142	Watching Brief	110675	View of circular structure (tank/pit) from the north	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_143	Watching Brief	110675	Close-up view of circular structure (tank/pit) from the north	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_144	Watching Brief	110675	Location shot of circular structure (tank/pit) from the north	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_145	Watching Brief	110675	View of timbers and debris located adjacent to structure	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_146	Watching Brief	110675	Close-up pipe/machinery positioned next to edge of structure	N	Not used	Jessie Baumgardner	05/09/2024	Heneb: Gwynedd Archaeology	
G2680_147	Watching Brief	110675	View of structure and oil removal	SSE	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	26
G2680_148	Watching Brief	110675	View of structure and oil removal	SSW	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	27

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G2680_149	Watching Brief	110675	View of structure and oil removal	SE	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	28
G2680_150	Watching Brief	110675	View of structure and oil removal	SE	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	
G2680_151	Watching Brief	110675	View of structure and oil removal, from street level	N	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	
G2680_152	Watching Brief	110675	Close-up view of structure and oil removal, from street level	NE	Not used	Jessie Baumgardner	09/09/2024	Heneb: Gwynedd Archaeology	29

APPENDIX III

Heneb: Gwynedd Archaeology Selection Strategy V.2 Final

HD24-007_Llain y Pebyll

26/09/2024 v2.0

Selection Strategy

Project Information

Project Management

Project Manager John Roberts john.roberts@heneb.co.uk

Archaeological Archive Manager John Roberts john.roberts@heneb.co.uk

Organisation Heneb: Gwynedd Archaeology

Stakeholders

Collecting Institution(s)		Date Contacted
	Gwynedd Historic Environment Record	26/09/2024
	RCAHMW	On completion of Project Archive
Project Lead / Project Assurance	Heneb: Gwynedd Archaeological Planning Services	n/a
Landowner / Developer	Williams Homes (Bala) Ltd	n/a

Resources

No unusual resources required outside of GA normal operating equipment and personnel.

Context

The full aims and objectives of this project are detailed in the final report.

Heneb: Gwynedd Archaeology was commissioned by Williams Homes (Bala) Ltd to undertake an archaeological watching brief for a housing development at Llain y Pebyll, Bethesda (NGR SH61826704; postcode LL57 3NQ; Figure 01). The development is located within a 0.14ha plot located alongside Bangor Road and will include the erection of seven dwellings for the elderly, together with parking accommodation and a turning facility (Figure 02). The watching brief comprised of two parts:

- A ground investigation trial pit programme aimed at the identification of ground conditions and the presence of soil contamination and to
- To monitor all groundworks with the aim to identify any remains of the former 19th century gas works which occupied the site.

The watching brief was completed under planning reference C20/0018/13/LL and conditions set out by the regional Planning Archaeologist, Heneb Gwynedd Planning Services (formerly GAPS). The regional Planning Archaeologist noted that:

The proposal requires wholesale groundworks of the site, which comprises largely scrub land which was once a gas works (as recorded on early OS mapping, as far back as the 1st edition). Various stages of the gas works can be seen throughout historic mapping, with the gradual removal of the buildings associated with the works – although it is not known to what extent and how comprehensive the dismantling of the structures was. As a result, it is difficult to assess what remains of these buildings below ground level, and as such there is potential for industrial archaeology throughout the site. There seems to be little recorded history on the gas works, and its relationship with the old rail system that ran directly behind it. As such, it is considered appropriate that a programme of mitigation be implemented during the development, in the event of planning consent being granted.

As such, the initial programme of ground investigation work was undertaken between the 13th of December 2021 until the 17th January 2022 and the watching brief at intermittent intervals, between January 2022 until the 11th of September 2024.

Source: Heneb Gwynedd Archaeology. 2024. Llain y Pebyll: Watching Brief (HD24-007): Final Report No.1613. Williams Homes (Bala) Ltd. September 2024. Project HD24-007.

1 – Digital Data

Stakeholders

John Roberts – Head of Archaeology, Heneb: Gwynedd Archaeology;
Sean Derby – Gwynedd Historic Environment Record;
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*.

Selection

All digital data has been collected, stored and selected in lines with the Heneb: Gwynedd Archaeology's Data Management Plan located on Heneb servers (available on request).

The final version of all born digital documents have been selected for inclusion in the Preserved Archive; these comprise:

HD24-007_G2680_Llain_y_Pebyll__Waterfront_Written Scheme of Investigation (Microsoft Word and Adobe PDF);

HD24-007_G2680_Llain_y_Pebyll__Photographic_Metadata (Microsoft Access);

GA_1613 (Microsoft Word and Adobe PDF);

Photographic archive (152 images in TIFF format);

Photographic archive (152 images in RAW format);

Photographic archive (152 images in JPEG format);

A digital archive dataset has been created for the Royal Commission on Ancient and Historic Monuments Wales, in accordance with the RCAHMW Guidelines for Digital Archives Version 1. The dataset has been prepared in the format required by RCAHMW and comprise:

- Photographic metadata (Microsoft Access);
- Photographic archive (TIFF format);
- Project Information form (Excel);
- File Information form (Excel) – Microsoft Word report text final;
- File Information form (Excel) – Photographic metadata (general);
- File Information form (Excel) – Adobe PDF report final; and

De-Selected Digital Data

The following Heneb: Gwynedd Archaeology data generated for the report will not form part of the preserved archive and have been deselected:

- HD24-007 / G2680_combined_figures.pdf
- HD24-007 / G2680_combined_plates.pdf
- HD24-007 / G2680_Figures_and_Plates_List.docx
- HD24-007 / G2680_Appendix_I.pdf
- HD24-007 / G2680_Appendix_II.docx
- HD24-007 / G2680_Appendix_III.pdf
- HD24-007 / G2680_rear_cover.pdf
- HD24-007 / G2680_front_cover.pdf
- HD24-007 / G2680_inner_cover.pdf
- Plate 01.pdf to Plate 29.pdf

Amendments

None

2 – Documents

Stakeholders

John Roberts – Head of Archaeology, Heneb: Gwynedd Archaeology;
Sean Derby – Gwynedd Historic Environment Record;
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*.

Selection

Following the completion of the fieldwork, all documentary material created, generated and/or annotated during data gathering and fieldwork has been selected for inclusion in the preserved archive, and comprises:

- HD24-007 / G2680 Day Sheets x 7
- HD24-007 / G2680 Photographic register sheets x 8

The physical archive has been stored in a designated project folder and the location confirmed in the Gwynedd Archaeology (GA) project database

De-Selected Documents

There is no de-selected data

Amendments

None



Archaeoleg Gwynedd

Heneb

Gwynedd Archaeology

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