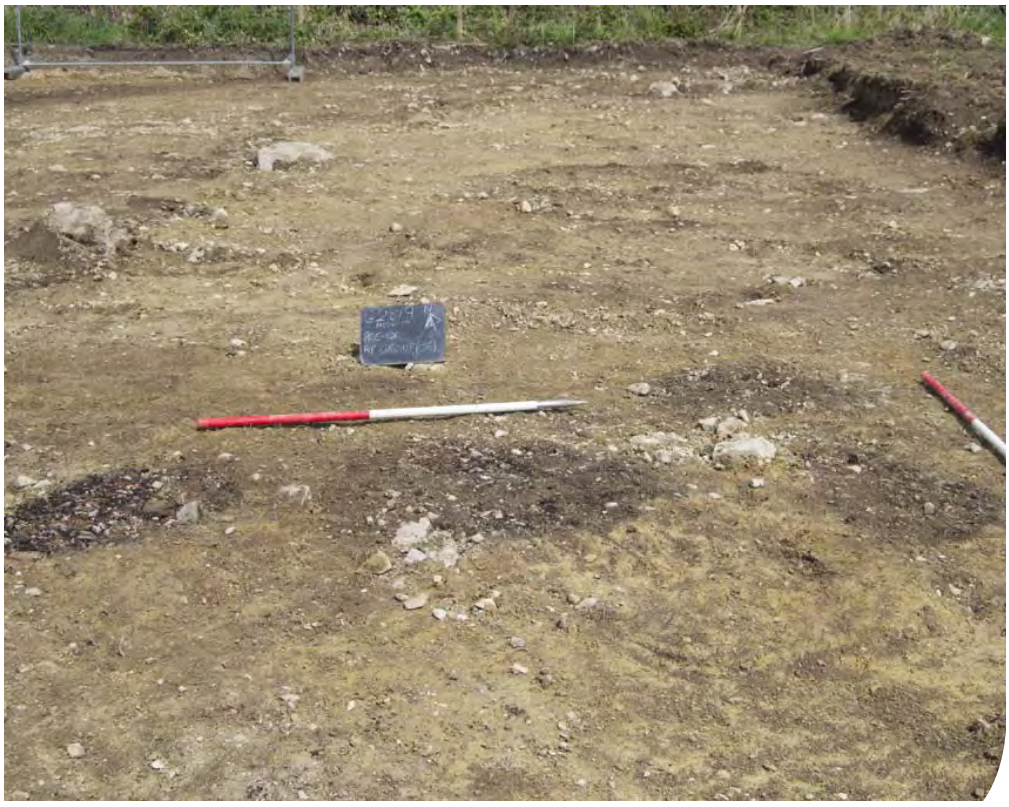
Bryn Estate, Llanfaethlu, Ynys Môn

Lliniaru Archeolegol / Archaeological Mitigation

MAP2 Phase 4 Report



Archaeoleg Gwynedd
Heneb
Gwynedd Archaeology

Bryn Estate, Llanfaethlu, Ynys Môn

Lliniaru Archeolegol / Archaeological Mitigation
MAP2 Phase 4 Report

Yr Amgylchedd Hanesyddol yn Cofnodi Prif Gyfeirnod /
Historic Environment Record Event Primary Reference Number: 46738

Rhif Prosiect / Project No. HD24 -015

Rhif Adroddiad / Report No. 1777

Wedi'i baratoi ar gyfer / Prepared for: Ingram Property Development Ltd

Mai / May / 2024

Ysgrifenwyd gan / Written by: Carolina Esgk_p_cq Ferreira and Michael Sion Lynes

Delwedd clawr blaen / Front Cover image: Pre-excavation view of Pit Group 06; scale 2x1m; view from SW (archive reference: G2819_19).

Heneb: Ymddiriedolaeth Archaeoleg Cymru.

Heneb yw'r enw masnachu Ymddiriedolaeth Archaeolegol Cymru

Cwmni Cyfyngedig (1198990) ynghyd ag Elusen Gofrestredig (504616) yw'r Ymddiriedolaeth

Heneb: Trust for Welsh Archaeology.

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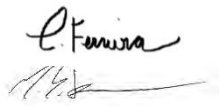
Originated by	Document Author	Carolina Ferreira Michael S Lynes		28/01/2025
Reviewed by	Document Reviewer	Robert Evans		28/01/2025
Approved by	Principal Archaeologist	John Roberts		28/01/2025

Revision History			
Rev No.	**Summary of Changes**	**Ref Section**	**Purpose of Issue**
1	Non technical to include post-excavation results summary.	Non Tech Summary	Planning section approval
2	Removal of Nexus report	2.2	Planning section approval
3	Revision of wording on interpretation of the four pits	6.1	Planning section approval
4	Changes to numbering and headings, conclusion is now section 7	6	Planning section approval
5	Inclusion of Discussion	6	Planning section approval

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CRYNHODEB ANHECHNEGOL

Comisiynwyd Heneb: Archaeoleg Gwynedd gan Ingram Property Development Ltd i ymgymryd ag lliniaru archeolegol (lleingloddiad/maplunio/cofnod) yn Ystad Bryn, Llanfaethlu, Ynys Môn cyn datblygiad tai. Cynhaliwyd y lliniaru archeolegol rhwng 25 Ebrill a 16 Mai 2024, a datgelodd nifer fach o nodweddion archeolegol cynhanesyddol ar ffurf dau ffwrn pridd posibl a dwy nodwedd gysylltiedig, yn ogystal â thair ffin cae ôl-ganoloesol a draen tir. Dehonglwyd dwy nodwedd fel tafliadau llwyni. Dehonglwyd bod y ffwrn pridd posibl yn dyddio o'r Oes Efydd neu'n gynharach. Mae'r ffiniau cae a'r draen tir yn ymwneud â chynnal a chadw ffiniau, newidiadau mewn rhaniadau tir dros amser a gwelliannau tir ar raddfa fach. Cadarnhaodd canlyniadau ôl-gloddio o'r asesiad paleoamgylcheddol a dyddiadau radiocarbon bod y pyllau yn dyddio o ganol i ddiwedd yr Oes Efydd ac yn debygol o fod yn gyfoes â'i gilydd. Dehonglwyd y pyllau hyn fel ffwrn pridd yn ymwneud â gweithgaredd anheddu cyfagos, yn seiliedig ar dystiolaeth o enghreifftiau tebyg a nodwyd yn y dirwedd gyfagos ac yng Ngwynedd.

NON-TECHNICAL SUMMARY

Heneb: Gwynedd Archaeology was commissioned by Ingram Property Development Ltd to undertake archaeological mitigation (strip/map/record) at Bryn Estate, Llanfaethlu, Ynys Môn in advance of a housing development. The archaeological mitigation was undertaken between the 25th April and 16th May 2024, and revealed a small number of prehistoric archaeological features in the form of two possible earth ovens and two associated features, as well as three post-medieval field boundaries and a land drain. Two features were interpreted as shrub throws. It was interpreted that the possible earth ovens are of Bronze Age date or earlier. The field boundaries and land drain relate to boundary upkeep, changes in land divisions over time and small-scale land improvements. Post-excavation results from the palaeoenvironmental assessment and radiocarbon dates confirmed the pits were mid to late Bronze Age in date and likely fairly contemporary with one another. These pits were interpreted as earth ovens relating to nearby settlement activity, based on the evidence of similar examples noted in the surrounding landscape and in Gwynedd.

FIGURES

PLATES

Plate 1: Pre-commencement view of area to be soil stripped; scale NE; view from (archive reference: G2819_01).

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Plate 12: North northeast facing section of linear 07; scale SSW; view from 7 (archive reference: G2819_24).

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Plate 14: General view of entire site from northern corner; scale N; view from (archive reference: G2819_40).

1 INTRODUCTION

Heneb: Gwynedd Archaeology (*Archaeological Services*) was commissioned by *Ingram Property Development Ltd* to undertake archaeological mitigation (strip/map/record) at Bryn Estate, Llanfaethlu, Ynys Môn LL65 4PG (NGR SH3129186818; Figure 01) in advance of a housing development. The development area is a single parcel of flat rough scrub land bounded by hedgerows and measures c. 0.39ha. The proposed development consists of nine affordable residential properties with associated landscaping and drainage (Figure 02). The planning application FPL/2020/247 by Ingram Property Development Ltd is an update to a previous application which increases the number of proposed dwellings from six to nine.

The strip/map/record was undertaken between the 25th April and 16th May 2024. The archaeological mitigation monitored the reduction of the contemporary ground surface to the foundation level of the proposed development as set out in planning application FPL/2020/247. The archaeological works were monitored by Heneb: Gwynedd Archaeology Planning and undertaken in accordance with an approved written scheme of investigation (Appendix I).

Heneb is a Registered Organisation with the Chartered Institute for Archaeologists and the project was planned and conducted in accordance with the following archaeological standards and guidance:

- 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 Excavation (Chartered Institute for Archaeologists 2023a);
- Universal Guidance for Archaeological Excavation (Chartered Institute for Archaeologists 2023b).
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists 2020a); and
- Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists 2020b).

In line with the regional Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession; the HER Event Primary Reference Number for this project is 46738.

1.1 Aims and Objectives

The key aims and objectives were to:

- establish the date and nature of any archaeological remains identified within the strip/map/record area and assess their implications for understanding local historical development, in conjunction with the known archaeological record, which includes prehistoric to post-medieval activity within the surrounding area;
- To place the results in context, reference shall be made to *A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document February 2017* (IFA Wales/Cymru 2017); and
- If no additional archaeological activity is identified, establish why this may be the case.

1.2 Acknowledgements

GA would like to thank everyone who was involved in the project;

- Client: Ingram Property Development Ltd.
- GA field team: Robert Evans and Anne Marie Oates.

GA would also like to thank the following specialists for their contribution to the post-excavation assessment and analysis:

- Jackaline Robertson, AOC Archaeology Group Ecofact Assessment Report; and
- SUERC Radiocarbon Laboratory Radiocarbon Dating Certificates Report

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

Llanfaethlu is a small village situated along the A5025 road on the north-western side of the Isle of Anglesey. The village is predominantly Welsh-speaking and takes its name from the small Church of Saint Maethlu situated on the north-northwestern side of the village. The historic and archaeological background of the proposed development site and the wider area is discussed below.

2.2 Archaeological / Historical Evidence

2.2.1 Prehistoric

Until recent excavations were carried out within the vicinity of the village of Llanfaethlu, the only known evidence for nearby prehistoric activity was the Bronze Age Maen Hir Standing Stone situated next to Capel Soar (PRN 2021, Cadw Scheduled Monument ref. AN083). However, recent excavations have identified that the village of Llanfaethlu has been the focus for settlement activity since at least the Neolithic period. Archaeological works were conducted in advance of the construction of the new Ysgol Rhyd y Llan (Ysgol y Llannau) which is located 315 metres to the northeast of the proposed development site (NGR SH3140487093). Excavations there revealed three rare Neolithic rectangular structures along with associated pits and hearths (PRN 90236, PRN 90234, PRN 90235, PRN 90233) (C. R. Archaeology 2014 and 2015). In addition to the features mentioned above, later features were also identified including Bronze Age post holes and Iron Age gullies and ditches (Nexus Heritage 2020, 20).

Other prehistoric features were identified prior to the construction of a new Dwr Cymru (Welsh Water) wastewater treatment plant situated on the eastern side of the village (NGR SH3175687104). Archaeological works there undertaken by Gwynedd Archaeological Trust (HER Event 45045) revealed further evidence for prehistoric settlement in the form of two post holes and an associated burnt spread (PRN 90331) along with a concentration of other settlement features which are thought to be Neolithic in origin (PRN 90330) (Reilly and Davidson, 2017).

Archaeological evaluations were carried out in a field adjacent to Ysgol Rhyd y Llan (NGR SH3162287105) by Wessex Archaeology in advance of proposed improvements to the A5025 in 2017. The archaeological works identified features dating back to the Iron Age including a gully (PRN 70031), a ditch (70037) and a foundation/waste disposal site (PRN 70030) suggesting that the area of Llanfaethlu has a long and complex settlement history (Tuck, 2017).

2.2.2 Roman / Romano British

The evidence for Roman activity within the village consists of artefact find spots. These include a hoard of 39 coins at (PRN 2046; NGR SH3187) 340 metres to the southwest, and a nearby possible Roman stone lamp and a copper brooch (PRN 2032; NGR SH3186). It has been suggested that the area of the village was utilised by the Romans for copper ore smelting after a copper ore cake stamped with what was interpreted as the letter ‘L’, was discovered at NGR SH3186. In addition, antiquarian accounts describe copper slag and charcoal being visible in the fields around the village after ploughing (Lewis 1833, 115).

2.2.3 Medieval - Post-Medieval

The evidence for early medieval activity within the vicinity of the village consists of two cemetery sites. A group of five stone cist graves containing poorly preserved articulated skeletons (PRN 2028) were discovered in 1860 during the construction of a new road to Carreglwyd (Stanley 1868). The cemetery is situated at NGR SH31018719, 420 metres northwest of the proposed development site. The second early medieval cemetery, 'Hen Siop' (PRN 2029), is located at NGR SH31938729, 770 metres to the northeast of the proposed development site. Several cists were reported as being found here while removing a fence in the 19th century and subsequent excavation in 1894 uncovered 5 stone-lined graves between 5 and 6 feet long (Griffith 1895).

The grade II* listed St. Maethlu Parish Church (PRN 6983; LB 5301; NGR SH3126187087) is situated almost at the centre of the village, 280 metres to the north-northwest of the proposed development site. The church is medieval in origin with parts of it dating to the 13th century. The church also has elements which are 15th and 17th century in date and it was heavily restored during the 19th century (RCAHMW 1937).

An examination of the Llanfaethlu Tithe Map of 1840 (Figure 05) shows the development area to be located in the northeastern corner of a large sub-rectangular field (Plot 451). The Ordnance Survey First to Third Edition Ordnance Survey 1-inch to 25-mile County Series Map Sheets depicting the development area (Sheet VI.5; 1889, 1900 and 1924 respectively; cf. Figures 06, 07 and 08) show that the large field was subdivided in the mid-late 19th century with the proposed development site then forming the eastern end of a narrower rectangular field. This narrower field was further subdivided towards the end of the 20th century with the smaller eastern plot being the location of the development area in question (see Sec 2.2 above).

Post-medieval sites of interest are listed below along with their distance from the proposed development site:

- The grade II listed building Capel Ebenezer (PRN 7742; LB 24793; NGR SH3134386878) located 85 meters to the northeast;
- The grade II listed building Outbuilding, Ebenezer Chapel (PRN 66631; LB 24803; NGR SH3132886883) located 73 meters to the northeast;
- The grade II listed building Gate and gateposts, wall and railings, Ebenezer Chapel (PRN 66651; LB 24804; NGR SH3135886901) located 105 metres to the northeast;

- The grade II listed building Rectory, South of Church, Llanfaethlu (PRN 11188; LB 5302; NGR SH3112086770) located 139 metres to the west-southwest; and
- Bryn Goleu, Llanfaethlu (post-medieval post office) (PRN 11178; NGR SH31358691) a former post office located 73m to the northeast.

3 FIELDWORK METHODOLOGY

3.1 Introduction

The strip/map/record programme aimed to expose and characterise archaeological activity within the area outlined on Figure 01. This involved the reduction of the ground level to natural glacial deposits under archaeological supervision, with all resultant archaeological features mapped and recorded. The ground reduction was undertaken using machinery and operators supplied by *Ingram Property Development Ltd*; the fieldwork was completed between 25th April and 16th May 2024.

All fieldwork was completed in accordance with industry standards and the GA Fieldwork Manual. The following methodology was applied:

The development area was excavated using a 13T mechanical excavator fitted with a toothless bucket as far as the glacial horizon or an archaeological horizon, whichever was encountered first.

All attendances, subsurface activity, photographs, and context records have been recorded using GA pro-formas. The records include topsoil and subsoil depths, as well as the composition of the glacial horizon. All encountered subsurface features have been recorded on GA pro-formas with detailed notations and have been recorded photographically with an appropriate scale, located via GPS and a measured survey completed using a Trimble R8 GPS unit (Figure 03).

Photographic images were taken using a digital SLR camera using a digital SLR (Nikon D3100) camera set to maximum resolution (4,644 x 3,084) in RAW format and archived in TIFF format using Adobe Photoshop. A total of 54 photographic images were taken (archive reference numbers G2819_001 to G2819_054; see Appendix II for the photographic metadata). The photographic record has been digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process.

All archaeological features/deposits/structures encountered were manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy was generally applied: 50% sample of each sub-circular feature, 10% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). Discrete features that were identified were 100% excavated. A total of 7 features were identified, excavated and recorded using GA pro-formas (see Appendix IV for context register; Figures 03 and 04). Environmental samples were taken of discrete contexts within

significant features, in order to provide material for palaeoenvironmental analysis and samples for radiocarbon dating (see Appendix IV for ecofact register);

Individual contexts were given unique identifying numbers (Appendix III). Context numbers for cut features are within square brackets and denote pits and ditches identified during the excavations. Context numbers within round brackets denote layers, fills and deposits. Recovered ecofacts were given individual identity numbers and cross referenced to the context in which they were found (Appendix IV); and

Plans and sections were drawn at a minimum 1:10 scale using GA A4, A3 or A2 pro-forma *permatrace*. A total of 1 post-excavation plan and 4 section drawings were produced (see Appendix IV for drawing register; Figure 04).

3.2 Selection Strategy

As defined in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists 2020b, Sec 3.3.1), a project-specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologists (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 GAPS, 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 selection has taken into account:
- 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 reproduced as Appendix III.

3.3 Working Project Archive

3.3.1 Written Record

The written record was maintained using GA pro-formas and comprised the following:

- 18 Context sheets
- 4 Day record sheets
- 14 Photographic record sheets (images G2819_001 - G2819_054)
- 1 Drawing register sheet
- 1 Ecofact register sheet

3.3.2 Drawn Record

The drawn record was completed on GA pro-forma *permatrace* and comprised the following:

- 5 drawings on 2 sheets of A4 and A3 *permatrace*.

The information from these is listed in Appendices II and IV.

3.4 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 the Trust project database; the digital dataset has been stored on a dedicated GA server, with the location confirmed in the GA project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data has been confirmed in a supplementary Selection Strategy document appended to the final report.

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).

4 FIELDWORK RESULTS

4.1 Introduction

The development area is located at the Bryn Estate, Llanfaethlu, Ynys Môn LL65 4PG (Figure 01). The site consists of a 0.39ha sub-rectangular parcel of flat rough scrub land bounded by hedgerows (Plates 1, 2 and 14).

Four cut archaeological features were identified at the north-western end of the excavation area that appear to be two possible Bronze Age earth ovens [09] and [11] and two associated pits [13] and [15]. In addition, two post-medieval field boundaries [07] and [18], and a possible former hedgerow [16], were identified during the excavation along with a post-medieval field drain [17] and two shrub throws [04] and [05] (Figure 03).

A total of four ecofact samples were recovered from the fills of the possible earth ovens [09], [11] and associated features [13] and [15] (see Appendix IV). The samples were collected for artefact recovery, environmental analysis and radiocarbon dating. The collection, processing and analysis of the samples provide the potential to reveal further information regarding their date and function and to enable an assessment of their relative significance within the wider landscape.

The topsoil (01) (Plate 3) over the site measured 0.1-0.15m deep and was a firm medium brown sandy silt with few stone inclusions. The subsoil (02) (Plate 3) below was 0.2-0.25m deep and composed of light greyish-brown sandy silt with a higher amount of stone inclusions. The subsoil was shallower towards the southern end of the site where the ground sloped slightly. The natural (03) (Plate 3) gravelly sandy clay glacial substrate was in general greyish-yellow in colour, becoming greyer and stonier towards the southern end of the site.

4.1.1 Possible prehistoric earth ovens and associated features (Figures 03 and 04; Plates 4 – 9)

The four pits [09], [11], [13] and [15] (Group No. 06) were located in close proximity within an area measuring 4m^2 at the north-western side of the site (Figures 03 and 04; Plates 4 - 10). All four pits generally measured c.0.6m in diameter and contained fire-cracked burnt stone and charcoal. No finds were recovered from any of the features however all four have been provisionally interpreted to be Bronze Age or earlier in date based on similar dated examples found elsewhere in the region.

Pit [09] (Plates 4 and 5) was sub-oval in plan, with sharp, smooth, but slightly irregular sides and a flattish/slightly concave base. The pit measured 0.7m long by 0.65m wide and 0.16m

deep. It was filled by a firm, dark greyish, brown sandy silt (08) which was described as charcoal-rich (5%). The fill included frequent burnt stones (30%) that were mainly sub-angular and appeared sedimentary in character, as well as being friable with a reddish hue. A sample was taken from fill (08) (Sample 1) for further analysis. The feature has been interpreted as a possible earth oven and has been assigned PRN 103769.

Approximately 0.25m southwest of pit [09] lay pit [11] (Plates 4 and 6). Pit [11] was sub-circular in plan with smooth steep sides and a fairly concave base. It measured 0.9m long by 0.7m wide and was 0.16m deep. It was filled with a firm, dark orange, brown silty sand (10) with frequent fragmented fire-cracked burnt stone (30%) and charcoal (5%). The fill displayed evidence for bioturbation and its upper levels may have also been truncated by later agricultural activity. A sample was taken from fill (10) (Sample 2) for further analysis. The feature has also been interpreted as a possible earth oven and has been assigned PRN 103770.

Pits [13] and [15] (Plates 4 and 7) were located c.0.45m south-southwest of pit [11]. Pit [13] measured 0.7m long by 0.5m wide and 0.09m deep, it was sub-rectangular in plan with rounded corners, and had an irregular shallow uneven base filled by loose, mid-orange, brown silty sand (12) with frequent fire-cracked burnt stone (20%) and charcoal (2%). A sample was taken from fill (12) (Sample 3) for further analysis. The feature has been interpreted as a possible natural hollow infilled by material from the nearby earth ovens [09] and [11] and has been assigned PRN 103771.

Lastly, pit [15] (Plates 4 and 7) measured 0.6m long by 0.55m wide and 0.11m deep. It was sub-circular in plan with irregular shallow sides and a slightly concave base. The pit was filled by loose, light orange, brown silty sand with clay (14) with moderate burnt (20%) and unburnt stone inclusions and occasional charcoal flecks (<1%). A sample was taken from fill (14) (Sample 4) for further analysis. The feature has also been interpreted as a possible natural hollow in which earth oven material has accumulated and has been assigned PRN 103772.

4.1.1.1 Interpretation of Pit Group 06

Though rare, earth ovens have been identified on prehistoric sites across the British Isles. Dated examples suggest that their main period of use in northwest Wales was during the Bronze Age, though earlier, Neolithic, examples are known as are Iron Age examples from further afield. They are characterised by their appearance as pits filled with burnt stone and charcoal and are thought to be the remains of a type of cooking pit. The ovens are thought to have utilised heated stones as a heat source, with the food to be cooked placed above the hot

stones before the pit was temporarily sealed with vegetation or turf to contain the heat for the duration of the cooking episode. Examples such as the two possible earth ovens found on the proposed development site that display no evidence of in-situ burning in the pit presumably used stones that were heated on a nearby fire before they were placed into the pit.

Similar examples of Bronze Age, and sometimes earlier, Neolithic, earth ovens to those found at Llamfathlu have been identified elsewhere on Ynys Môn and in Gwynedd. At Parc Cybi, Holyhead, Anglesey (Kenney 2020), a possible Bronze Age earth oven [32189] was identified based on the presence of heat-cracked stones, a charcoal-rich basal fill and a lack of reddening of the sides of the pit. The pit formed part of a cluster situated by a burnt mound, and it was thought that two other pits [31283] and [31523] may have been used to hold water for cooking or bathing.

Four pits containing burnt stone and charcoal at the school development site at Newborough, Anglesey (Evans and Roberts 2019), were also interpreted as earth ovens. Based on their proximity to nearby Bronze Age settlement evidence, they were also assigned to the same general period.

On the mainland at Parc Bryn Cegin, Bangor, Gwynedd (Kenney 2008, 70-71), similar pits containing burnt stone were identified, some of which were radiocarbon dated to the Early Neolithic, with others dating to the Bronze Age. The Bronze Age pits were scattered over a large area. They were not associated with burnt mounds and it is believed that they represent evidence for short-term settlement episodes during the period. The Early Neolithic examples, which tended to be much smaller, were also interpreted as evidence of short-lived activity at the site.

Another possible earth oven (Feature 19; PRN 62271) was discovered during excavations at Penrhyn Castle near Bangor, Gwynedd. It was characterised by the presence of charcoal (c.2%) and small to large, rounded cobbles and sub-angular stones in the fill (06). No evidence of burning in situ was noted and it was interpreted that this was possibly as a result of the burnt material being placed in the pit (Jones and Evans 2016, 14, GAT Report 1341).

4.1.2 Post-Medieval features (Figure 03; Plates 10 – 12)

Four linear features were identified during the topsoil and subsoil strip of the excavation area and they have been generally assigned to the post-medieval period. A shallow straight linear [07] (Figure 03; Plates 11 and 12) was uncovered at the eastern edge of the site, it measured c.22m long by 1.4m wide and 0.05m deep and was filled with a dark orange, brown silty clay

with small stone inclusions. The feature was heavily bioturbated and shallow. It has been interpreted as the surviving traces of a relict field boundary.

A second shallow straight linear [16] (Figure 03; Plate 13) was located crossing the north-western corner of site, orientated northeast/southwest. The feature measured c.12m long by 1.4m wide and 0.06m deep. The fill consisted of loose orange, brown silty clay with small stone inclusions and was heavily bioturbated. There was no clear cut and it has been interpreted as the traces of a former field boundary hedgerow and has been assigned PRN 103773.

A much bioturbated linear [18] was located running parallel with the existing southern field boundary of the site. It was c.30m long, 1.4m wide and 0.25m deep. The fill was loose orange, brown silty clay with small to medium-sized stone inclusions and was described as humic and unlikely to be of antiquity. The feature has been interpreted as a possible former field boundary that was replaced on the same alignment by the current boundary located immediately to its south-southwest.

Linears [07] and [18] appear to respect the current boundaries due to their relative orientation and are therefore likely former field boundaries that were subsequently removed and replaced. It is therefore probable that these two linears are post-medieval or modern in date. On the other hand, the orientation and location of linear [16] suggests that it predates the 1840 Llanfaethlu Tithe Map and formed part of an earlier land division system, although likely still post-medieval in date.

A straight linear stone-filled field drain [17] was identified running SW-NE in the northwestern corner of the development area (Figure 03). Its visible length was recorded as 32m though it clearly continued off beyond the northern and western edges of the excavated area. It was approximately 0.30m wide and 0.20m deep. The drain did not contain a ceramic pipe and it is thought that it therefore represents small-scale land improvement activity during the 19th century or earlier.

4.1.3 Shrub throws (Figure 03)

Two features [04] and [05] are thought to be shrub or tree throws, areas of ground disturbed by the removal of the roots of a shrub or tree. They were identified 2m apart on the central-eastern side of the proposed development site. Both features were irregularly shaped, approximately 0.6m in diameter with irregular sides and shallow irregular bases between 0.12m and 0.17m deep. They were both filled with mid-orangey brown silty clay with occasional small to medium rounded and sub-angular stones. No finds were recovered from either feature.

Their location within the confines of the current field boundaries may suggest the former presence of an earlier field boundary here.

5 POST-EXCAVATION RESULTS

5.1 Ecofact Assessment

A total of 4 ecofact samples were recovered during the archaeological mitigation at Bryn Estate, Llanfaethlu (Table 5.1). The primary aim of the ecofact assessment was to recover charred macroplant remains to provide additional interpretative material, both for individual features and the site as a whole, for radiocarbon dating and also to recover any additional artefacts.

Table 5.1 Ecofact samples

Sample No.	Context No.	Description of feature	Reason for sample
01	08	Firm dark greyish brown silty sand fill of a possible earth oven [9]	Interpretation and dating
02	10	Firm dark orange brown silty sand fill of possible earth oven [11]	Interpretation and dating
03	12	Loose mid orange brown sandy silt fill of a possible natural hollow [13]	Interpretation and dating
04	14	Loose light orange brown silty sand with clay fill of a possible natural hollow [15]	Interpretation and dating

The ecofact post-excavation assessment was completed as a two stage process:

- The bulk samples were processed in house by GAT. This consisted of flotation and wet sieving using a 500 micron mesh to collect the residue, with the flot collected in a 250 micron mesh. The residues were sorted to recover artefacts and non-floating ecofacts. Once sorted the residues were discarded.
- Flots containing recovered charcoal and macroplant remains were sent for specialist assessment to AOC Archaeology Group (Appendix V). The submitted material was scanned using a binocular stereo microscope at x10 – x40 magnification. The only ecofacts recovered were charcoal. Charcoal fragments larger than 4mm were examined using a Leica stereo microscope at magnifications of x10 – x55. Charcoal identifications were confirmed by analysing the transverse, tangential, and radial sections of each fragment and using keys and texts (Schweingruber 1990; Hather 2000). Taxonomy and nomenclature follow Stace (2010). The palaeoenvironmental assessment report also included recommendations for any subsequent analysis and radiocarbon dating.

5.1.1 Bulk sample processing

During the course of the in house processing of the bulk samples, charcoal and or charred macroplant remains were recovered from two possible earth ovens ([09] and [11], and from two possibly natural hollows ([13] and [15]). Flots from the 4 samples were submitted to AOC Archaeology Group for palaeoenvironmental assessment and analysis.

5.1.2 Palaeoenvironmental assessment

The results of the palaeoenvironmental assessment by AOC Archaeology Group confirmed that the 4 samples submitted for analysis contained identifiable charcoal fragments (Appendix V; Table 5.2).

Table 5.2 Paleoenvironmental assessment results

Sample	Feature	Context	Volume (L)	Species	Name	Frag	RW	Weight
1	Pit	08	20	*Corylus avellana* L.	Hazel	8	2	
1	Pit	08	20	*Maloideae*/ *Sorbus* sp.	Apple/pear/hawthorn/rowan	3		
1	Pit	08	20	*Prunus* sp.	Cherry	1		
1	Pit	08	20	*Quercus* sp.	Oak	3	3	18
2	Pit	10	20	*Alnus glutinosa* L. Gaertn	Alder	1		
2	Pit	10	20	*Corylus avellana* L.	Hazel	3	5	
2	Pit	10	20	*Maloideae*/ *Sorbus* sp.	Apple/pear/hawthorn/rowan	1		
2	Pit	10	20	*Quercus* sp.	Oak	5	5	39.9
3	Pit	12	10	*Betula* sp.	Birch	1		
3	Pit	12	10	*Corylus avellana* L.	Hazel	2		
3	Pit	12	10	*Prunus* sp.	Cherry	1		
3	Pit	12	10	*Quercus* sp.	Oak	6		5.2
4	Pit	14	10	*Alnus glutinosa* L. Gaertn	Alder	2		
4	Pit	14	10	*Corylus avellana* L.	Hazel	5	1	
4	Pit	14	10	*Maloideae*/ *Sorbus* sp.	Apple/pear/hawthorn/rowan	1		
4	Pit	14	10	*Prunus* sp.	Cherry	1		
4	Pit	14	10	*Quercus* sp.	Oak	9	1	31.3
Key: Frag= fragment, RW= roundwood, the total weight of the sample recorded in grams, provided in the last row of the table.								

The palaeoenvironmental assessment report stated that all 4 samples only contained charcoal, with preservation of the fragments being variable from poor to good, with most being recorded as poor. The charcoal assemblage was described as small with a total of 70 charcoal fragments recovered from the four pits ([09], [11], [13] and [15]), and these were identified to species. Species in the assemblage included oak ((*Quercus* sp.), (46%)) and hazel ((*Corylus avellana* L.), (37%)) which were predominant, with much smaller quantities of apple/pear/hawthorn/rowan (*Maloideae*/*Sorbus* sp.), (7%)), alder ((*Alnus glutinosa* (L.) Gaertn), (4%)), cherry ((*Prunus* sp.), (4%)), and birch ((*Betula* sp.), (2%)). All species were identified as native to the area, reflecting the various habitats that defined the immediate and surrounding landscape, including damper habitats by presence of alder and birch, and drier habitats including hedgerows, scrub and more open woods favoured by hazel, apple/pear/hawthorn/rowan, and cherry. The presence of mixed wood species from each pit indicated the assemblage was formed through the burning and disposal of fuel refuse, rather than as a result of domestic activities. The absence of any domestic debris within the features such as cereals, hazelnut shell and bone suggest these fire pits were not used for preparing food.

The assessment stated that the charcoal contents from all four pits were either fuel waste or fuel debris, and this was further supported by the lack evidence for domestic debris such as cereals, hazelnut shells or bone, and small structural elements such as posts, stakes or wooden artefacts. Pit [11] contained the largest quantity of charcoal, with Pit [12] containing the smallest amount of charcoal, both have been interpreted as fuel waste. Charcoal from fills (08) and (14) of pits [09] and [15] have been interpreted as fuel debris, although fill (14) has been defined as residual debris.

The report concluded the dominant species were oak and hazel suggesting that these were more easily accessible in the surrounding landscape or preferred for use as fuel, with the other tree species having a more marginal role. It was noted that much of the assemblage was formed of small branchwood, perhaps representing a bias towards material that was more easily collectable, thereby avoiding the problem of having to fell trees. An additional advantage to deliberately selecting branchwood is that larger timbers can be reserved for providing building materials, and woodlands can be better managed to maintain regular access to material for fuel. Additionally, the report stated that given the small size of the assemblage, further analysis is not recommended.

A copy of the assessment report by AOC Archaeology Group is included as Appendix V. The remaining ecofacts will be accessioned to Oriel Môn Museum, Anglesey.

5.2 Ecofact Analysis: Radiocarbon Dating

Radiocarbon dating was proposed for selected charcoal fragments and charred macroplant remains, based on recommendations by AOC Archaeology Group (Appendix VI). Eight samples were submitted to the Scottish Universities Environmental Research Centre (SUERC) Accelerator Mass Spectrometry (AMS) Laboratory, East Kilbride. The purpose of the radiocarbon dating was to provide calibrated date ranges for the selected material in order to identify the chronology of activities and events represented by selected features (Group No. 06). Eight charcoal samples, two from each of the four archaeological contexts selected, were submitted. Their details are shown in Table 5.3 below.

Table 5.3 Charcoal fragments submitted for radiocarbon dating

Sample No	Context No	Context description	Material / species	Common Name
1	08	Firm dark greyish brown silty sand fill of a possible earth oven [9]	*Corylus avellana* L.	Hazel
2	08	Firm dark greyish brown silty sand fill of a possible earth oven [9]	*Maloideae*/*Sorbus* sp.	Apple/pear/hawthorn/ rowan
3	10	Firm dark orange brown silty sand fill of possible earth oven [11]	*Alnus glutinosa* L. Gaertn	Alder
4	10	Firm dark orange brown silty sand fill of possible earth oven [11]	*Corylus avellana* L.	Hazel
5	12	Loose mid orange brown sandy silt fill of a possible natural hollow [13]	*Betula* sp.	Birch
6	12	Loose mid orange brown sandy silt fill of a possible natural hollow [13]	*Prunus* sp.	Cherry
7	14	Loose light orange brown silty sand with clay fill of a possible natural hollow [15]	*Alnus glutinosa* L. Gaertn	Alder
8	14	Loose light orange brown silty sand with clay fill of a possible natural hollow [15]	*Corylus avellana* L.	Hazel

The radiocarbon ages established for the submitted samples are expressed as conventional years BP (before 1950 AD) with errors quoted at one standard deviation. These radiocarbon ages have been calibrated to a conventional calendar timescale by SUERC using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal4 with reference to the IntCal13 atmospheric calibration curve. The calibrated date range is expressed at 95.4% confidence.

The full results were of the radiocarbon dating program are shown in (Table 5.4):

Table 5.4 Radiocarbon dating results

Lab No	Sample No	Context No	Context description	Material/ species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date (95.4% probability)
SUERC-129798 (GU69867)	1	08	Firm dark greyish brown silty sand fill of a possible earth oven [9]	Charcoal roundwood: *Corylus avellana* L. (Hazel)	2910 ± 24	-25.4	1133 - 1014 calBC
SUERC-94825 (GU55725)	2	08	Firm dark greyish brown silty sand fill of a possible earth oven [9]	Charcoal: *Maloideae*/*Sorbus* sp. (Apple/pear/hawthorn/rowan)	2925 ± 23	-25.5	1214 - 1046 calBC
SUERC-94826 (GU55726)	3	10	Firm dark orange brown silty sand fill of possible earth oven [11]	Charcoal: *Alnus glutinosa* L. Gaertn (Alder)	2926 ± 24	-27.7	1216 - 1046 calBC
SUERC-94827 (GU55727)	4	10	Firm dark orange brown silty sand fill of possible earth oven [11]	Charcoal roundwood : *Corylus avellana* L. (Hazel)	2842 ± 24	-26.5	1057 - 921 calBC
SUERC-94828 (GU55728)	5	12	Loose mid orange brown sandy silt fill of a possible natural hollow [13]	Charcoal: *Betula* sp. (Birch)	3003 ± 24	-27.0	1305 - 1157 calBC
SUERC-94829 (GU55729)	6	12	Loose mid orange brown sandy silt fill of a possible natural hollow [13]	Charcoal: *Prunus* sp. (Cherry)	3040 ± 24	-25.7	1324 - 1220 calBC

Lab No	Sample No	Context No	Context description	Material/ species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date (95.4% probability)
SUERC-94830 (GU55730)	7	14	Loose light orange brown silty sand with clay fill of a possible natural hollow [15]	Charcoal: *Alnus glutinosa* L. Gaertn (Alder)	2912 ± 24	-27.9	1133 - 1015 calBC
SUERC-94834 (GU55731)	8	14	Loose light orange brown silty sand with clay fill of a possible natural hollow [15]	Charcoal roundwood: *Corylus avellana* L. (Hazel)	2916 ± 23	-24.0	1209 - 1016 calBC

The results reflect a broad chronology within the mid to late Bronze Age and generally correspond with the archaeology encountered. These results are discussed in detail below (para. 6.1).

6 DISCUSSION

6.1 Bronze Age Activity

A group of four pits discovered during the mitigation phase at Bryn Estate, Llanfaethlu were initially interpreted as two prehistoric earth ovens and associated pits. These were likely dated to the Bronze Age based on similar examples found across Ynys Môn and Gwynedd in North Wales. The radiocarbon dating results returned a mid to late Bronze Age date, with a chronology ranging from 1324 – 921calBC indicating these pits were used for an extended period.

Radiocarbon dates from the fills (08) and (10) of the suspected earth ovens [09] and [11] confirm they are broadly contemporary. The two samples from the fill of pit [09], hazel charcoal and apple/pear/hawthorn/rowan returned 1133 - 1014calBC and 1214 - 1046calBC dates respectively. Similarly, the alder and hazel charcoal samples from the fill (10) of pit [11] dated the deposit to 1216 - 1046calBC and 1057 - 921calBC. The spatial proximity of the earth ovens and their similar dates, suggests these were open and in use at more or less the same time.

The radiocarbon dates from the associated pits [13] and [15] confirmed they may well have been contemporary with the earth ovens. Two charcoal samples taken from fill (12) of pit [13] returned two dates 1305 - 1157calBC and 1324 - 1220calBC, with dates from the alder charcoal taken from fill (13) of pit [14] ranging from 1133 - 1015calBC and 1209 - 1016calBC. The results place both of these pits within the same timeframe as the earth ovens, suggesting these may have served a purpose relating to that of the earth ovens.

The results from the palaeoenvironmental assessment confirmed that all pits contained fuel waste or debris predominantly from branch wood, with no other macroplant remains recovered. As such, it was suggested that none of the pits were used for domestic activities including food preparation. Instead, it was proposed that the small charcoal assemblage was formed through the burning and disposal of fuel refuse (Robertson 2024; Appendix V).

None of the four pits had any evidence of a clay lining nor *in situ* heat affected surface, the composition of the deposits were mostly of heat affected stone and charcoal which is consistent with that of earth ovens encountered in the surrounding area, with both local and regional examples noted at sites such as Parc Cybi (Kenney 2020), Newborough (Evans and Roberts 2019), Parc Bryn Cegin (Kenney 2008) and Penrhyn Castle (Jones and Evans 2016). The results do not rule out the initial interpretation however it is unusual for there to be no associated macroplant material. This could be explained by the lack of time to accumulate food debris or that perhaps the food had been cooked in a vessel of some kind. The lack of

macroplant in any of the pits may indicate other possible activities. For example, evidence for pieces of cherts from the wastewater treatment site (Dwr Cymru) were recently dated to the late Bronze Age, suggesting lithic flakes were still being utilised in later prehistory (Reilly 2020, 34). It is therefore suggested that the pits likely relate to nearby settlement activity within the area in the mid to late Bronze Age, however the original reason for this activity remains an open question.

Prehistoric activities within the vicinity of Llanfaethlu village and the development site include the Bronze Age Maen Hir Standing Stone situated next to Capel Soar (PRN 2021, Cadw Scheduled Monument ref. AN083), a Neolithic settlement as well as Bronze Age post holes and Iron Age gullies and ditches situated c.300m northeast of the development site (C. R. Archaeology 2014 and 2015; Nexus Heritage 2020, 20), as well as prehistoric settlement possibly Neolithic in origin located at the wastewater treatment plant on the eastern side of Llanfaethlu village (Reilly and Davidson 2017). In consideration of the wider prehistoric landscape, the four pits although found in isolation are likely associated with nearby settlement activity and can be viewed as part of the broader history of the area, contributing to our growing knowledge and understanding of the mid to late Bronze Age, which remains relatively limited.

6.2 Research Framework

The results from the archaeological mitigation have made an important contribution to local and regional archaeology, as well as to the national *Research Framework for the Archaeology of Wales*, through the provision of raw data and chronology.

6.2.1 Late Bronze Age activity

Research Framework for the Archaeology of Wales, Version 04, April 2022, Third Review Documents 2024: Later Bronze and Iron Age (IFA Wales/Cymru 2024) has compiled a list of proposed new research themes and priorities:

Improving and refining chronology in 1st millennium BC Wales:

- Changing the scale of excavation
- Innovative dating solutions offer a way forward
- Greater granularity required in understanding regional settlement chronologies
- Carbonised plant remains are a key resource for dating Welsh sites

'*Carbonised plant remains are a key resource for dating Welsh sites: one of the very few aspects of prehistoric material that actually survives well in the soils of Wales. It provides a better understanding of landscape and economy and excellent dating potential. Settlements are potential repositories of Wales' early crops and provide the story of the development of farming in the country. Therefore, this is another strong reason for continued excavation of settlement sites'*

The excavation at Bryn Estate has successfully provided radiocarbon dates to confirm further presence of mid to late Bronze Age activity in the Llanfaethlu area and on Ynys Môn in general, with some important implications. The archaeological and ecofactual evidence though limited, has provided insight to our understanding of landscape and economy in the late Bronze Age, including how communities interacted and managed their environment, and more directly, answers to preference for certain wood species and the types of habitats that human communities interacted with on a daily basis.

6.2.2 Post-medieval Activity

A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document February 2017 Post Medieval (IFA Wales/Cymru 2017) suggest consideration to be given to investigating settlement and land-use tenurial changes to gain a better understanding of agricultural practice, rural settlement and rural communities in Wales. This includes exploring the relationships between people and their environments and landscapes, relationships between documentary and physical evidence, and the use of palaeoenvironmental evidence

to investigate rural practices including hedging which are important (Bezant and Bailey 2017, 10 – 11).

Additionally, the research framework states (IFA Wales/Cymru 2017) states:

'*The majority of threat led research in this period has been limited…, with those features of supporting infrastructure (particularly agriculture and food production) and communities being left largely uninvestigated in this sphere, simply because of the nature of change. There are opportunities to consider the relationship between industry and agriculture in this period, specifically in terms of the industrialisation of agriculture and the development of model farms ….. The agricultural sector remained important in Wales in the period between 1750 and 1899 and saw many fundamental changes in this period, including enclosure, the development of courtyard farms and even of mechanised farming in some places. Improved transport links altered much of the character of Welsh agriculture in this period. Study of the many new farmyards and agricultural buildings of this period should be a high priority.*' (Gerrard and Bailey 2017, 4 – 5)

Evidence for post-medieval and/or modern activity in the form of field boundaries and a land drain was encountered. These appear to relate to changes in land divisions over time, boundary upkeep, and small-scale land improvement. These findings therefore provide insight into the changes in post-medieval agricultural practices and land-use tenurial changes in rural Wales.

7 CONCLUSION

The mitigation programme conducted at the plot of land at Bryn Estate, Llanfaethlu identified a small number of prehistoric archaeological features in the form of two possible earth ovens and associated features, as well as three post-medieval field boundaries and a land drain. Two features were interpreted as shrub throws.

The pits and associated features were found in isolation, with no evidence of burnt mound activity or further possible prehistoric activity identified during the excavation. This did not however rule out the possibility that these pits relate to short-lived activity within the area during the Bronze Age or earlier. Nearby prehistoric settlement evidence has been identified during recent archaeological works including the Neolithic and Bronze Age settlements at Ysgol Rhyd y Llan (C. R. Archaeology 2014 and 2015) and the Dwr Cymru plant (Reilly and Davidson 2017), and the Capel Soar Bronze Age standing stone (PRN 2021) is situated 800m east-southeast of the excavation area. Given the nature of the features and the evidence for nearby Bronze Age and earlier activity, it was interpreted that the pit group/cluster probably date to the Bronze Age or earlier.

The results from the palaeoenvironmental assessment and radiocarbon dates confirm these pits are mid to late Bronze Age in date, and likely associated with nearby settlement activity. These pits were used for an extended period of time likely in a domestic cooking capacity.

The results of the mitigation potentially provide further information to supplement our current understanding of the nature of the archaeological record for the Bronze Age period and the distribution of earth ovens across Ynys Môn and Gwynedd in North Wales. Earth ovens relating to likely Bronze Age domestic activities are currently known from sites such as Parc Cybi (Kenney 2020), Newborough (Evans and Roberts 2019), Parc Bryn Cegin (Kenney 2008) and Penrhyn Castle (Jones and Evans 2016).

In consideration of the wider prehistoric landscape, the four pits although found in isolation can be viewed as part of the broader history of the area, as well as contributing to our growing knowledge and understanding of the late Bronze Age, which unlike the broader prehistory of the area, remains relatively limited.

Evidence for post-medieval and/or modern activity in the form of field boundaries and a land drain was encountered. These appear to relate to changes in land divisions over time, boundary upkeep, and small-scale land improvement. These findings provide insight into the changes in post-medieval agricultural practices and land-use tenurial changes in rural Wales.

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FIGURE 01

Reproduction of Clients Drawing Showing Site Location, Drawing No. A.01.1 (Highlighted in Red); Scale 1:1250 @ A3.

This drawing is to be read in conjunction with the written specification provided by WMDesign.
Structural Engineers drawings details and calculations shall take precedence over the Architectural drawings.
If in doubt ASK

Safety Health and Environmental Information Box		
In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.		
Construction Risks	Maintenance/cleaning Risks	Demolition/adaptation Risks

Rev	Change	Description	Initials	Date

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CIAT CHARTERED PRACTICE

Residential Development on Land Adjacent to Bryn, Llanfaethlu, Anglesey

Site Location Plan

Ingram Property Development Ltd

project	drawing status	date	
SH1774	**Planning**	**20/06/2023**	
originator	scale @ A3	number	rev
NM	**1:1250**	**A.01.1**	

FIGURE 02

Reproduction of Clients Drawing Showing Proposed Site Layout for Affordable Home Scheme, Drawing No. A.02.1; Scale 1:200 @ A1.

N

Gaps in fencing here for hedgehog highway size 130x130mm

1000mm wide access path to playing field

Site Section B

Gaps in fencing here for hedgehog highway size 130x130mm

Native Hedgerow

Gaps in fencing here for hedgehog highway size 130x130mm

Provision of new stay 3500mm long minimum

3x3m patio area

Existing overhead cables to be diverted by Scottish Power

Rain Garden

1.8m high palisade fence panels and concrete posts

Rain Garden

Single species hedge

Native hedgerow

600 wide service strip

Porous paving to parking areas

Porous driveway block pavours Marshals Driveline 200x100x60mm

Overhead electricity cables to be moved

Gaps in fencing here for hedgehog highway size 130x130mm

1.8m high palisade fence panels and concrete posts

Native hedgerow

Gaps in fencing here for hedgehog highway size 130x130mm

1.8m high palisade fence panels and concrete posts

Site Section A

Asgard steel Secure by Design shed on concrete base

1.5m wide access path to rear garden of Plot 2

Provision of new stay 3500mm long minimum

Plot 6
3 Bed Semi House
FFL 77.750

Plot 7
3 Bed Semi House
FFL 77.750

Plot 8
3 Bed Semi House
FFL 77.150

Plot 9
3 Bed Semi House
FFL 77.150

Plot 5
2 Bed Semi House
FFL 77.300

Plot 4
2 Bed Semi House
FFL 77.300

Plot 3
2 Bed Semi House
FFL 77.000

Plot 2
2 Bed Semi House
FFL 77.000

Plot 1
2 Bed Semi House
FFL 77.000

Asgard steel Secure by Design shed on concrete base

Area around swayle to be planted with wildflower meadow mix

Sorbus Aucuparia

Acer Campestre

Porous driveway block pavours Marshals Driveline 200x100x60mm

100.64m² approx swayle to Drainage Engineers details

Sorbus Aucuparia

New footway to be 1500mm wide to match the existing estate

Works construction compound

Visitor Parking

31.33m² approx swayle to Drainage Engineers details

Acer Campestre

385.64m² Public Open Space

2 No, Sorbus Aucuparia

Public Open Space

2 no, Acer Campestre

Porous driveway block pavours Marshals Driveline 200x100x60mm

Acer palmatum 'Inaba-shidare'

1 no. Prunus avium 'Stella'

Rain Garden

900mm wide path

Planting bed

Single species hedge

Tactile paving and crossing area

Porous driveway block pavours Marshals Driveline 200x100x60mm

1.2m high post and wire livestock fence and concrete posts.

Planting bed

Single species hedge

Rain Garden

Porous driveway block pavours Marshals Driveline 200x100x60mm

Planting bed

Single species hedge

Trees as noted adjacent

Public open space 190m² approx

Planting beds (see adjacent for mix)

Native hedgerow (see adjacent notes for details)

Lawned areas

Pod driveway access and parking, Porous driveway block pave mix - Marshals Driveline Prions '**brindle**' 200 x 100 x 60mm, and Marshals Driveline Prions '**bracken**' 200 x 100 x 60mm

Existing playing field access to be maintained 1.5m wide

House paving, Marshalls Saxon flag paving - Natural

Visitor parking

Adoptable footway 215m² approx

Adoptable estate road 456m² approx

On plot small rain gardens in accordance with the 'Rain Garden guide' by Bob Bray, Dusty Gedge, Gary Grant & Lani Leathway

1.8m high palisade fence panels and concrete posts

1.2m high stockproof fence by Jacksons or similar and approved

1.5m high palisade fence panels with 300mm trellis on top and concrete posts

1.2m high post and wire livestock fence and concrete posts

This drawing is to be read in conjunction with the written specification provided by WMDesign.
Structural Engineers drawings details and calculations shall take precedence over the Architectural drawings.
If in doubt ASK

Safety Health and Environmental Information Box

In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

Rev	Change	Description	Initials	Date
01	Ch-01	Various changes to accord with the landscape proposal by Land Studio	NM	13/06/2023

DESIGN AND ARCHITECTURE LIMITED.

M-SParc, Parc Gwyddoniaeth Menai, Gaerwen, Anglesey, LL60 6AG

t: 01248 717230 e: office@wmdesign.co.uk w: www.wmdesign.co.uk

CIAT CHARTERED PRACTICE

Residential Development on Land Adjacent to Bryn, Llanfaethlu, Anglesey

Proposed Site Layout Affordable Scheme

Ingram Property Development Ltd

project	drawing status	date	
SH1774	**Planning**	**20/06/2023**	
originator	scale @ A1	number	rev
NM	**1:200**	**A.02.1**	**01**

FIGURE 03

Plan of excavation area and archaeological features. Drawing No. G2819/BEL/02. Scale: 1:400.

231,250

231,300

231,350

386,850

386,800

[16]

[17]

[09] [15]

[11] [13]

[07]

[05]

[04]

[18]

Figure 03: Plan of excavation area and archaeological features.

[05] Archgaeological feature wtih context number

Limit of excavation area

Development plot

Co-ordinate System OSGB 1936 / British National Grid EPSG:27700

N

0 2.5 5 10

metres

Archaeoleg Gwynedd
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CLIENT: Ingram Property Development Ltd

SITE: Bryn Estate,
Llanfaethlu,
Ynys Môn, LL65 4PG

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:400	29/05/24	NMC	JR
PROJECT NO:	DRAWING NO:		REVISION:
HD24-015	BEL/03		A

FIGURE 04

Post-excavation plan and sections of earth ovens [09], [11] and associated features [13] and [15].

Figure 4.1

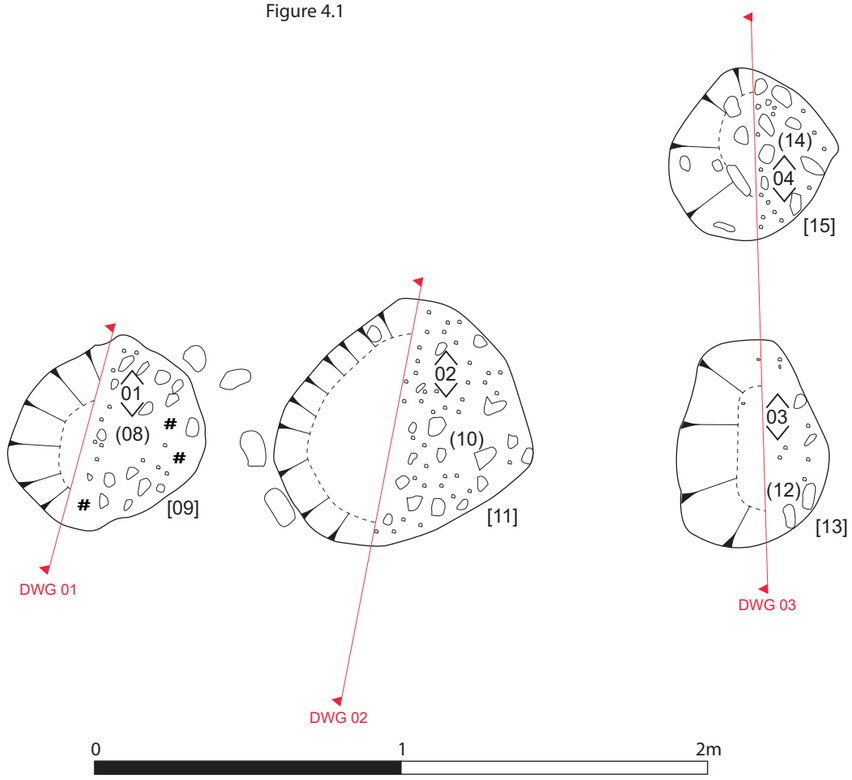


Figure 4.2

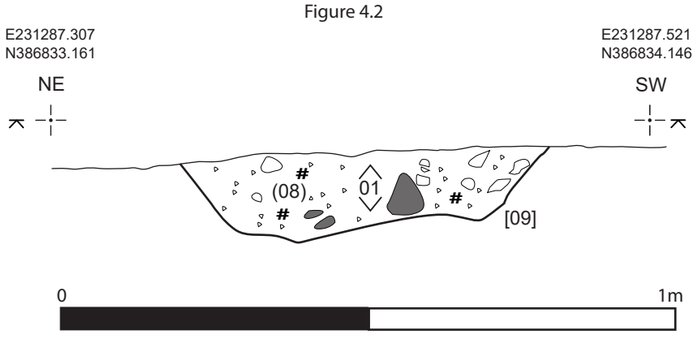


Figure 4.3

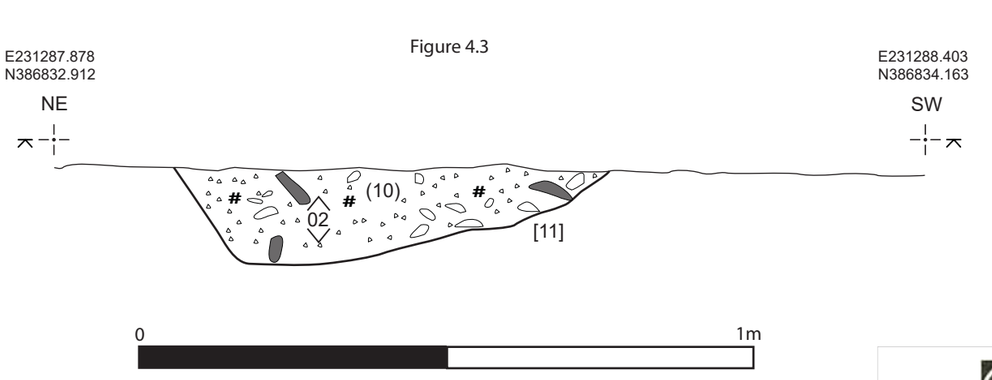
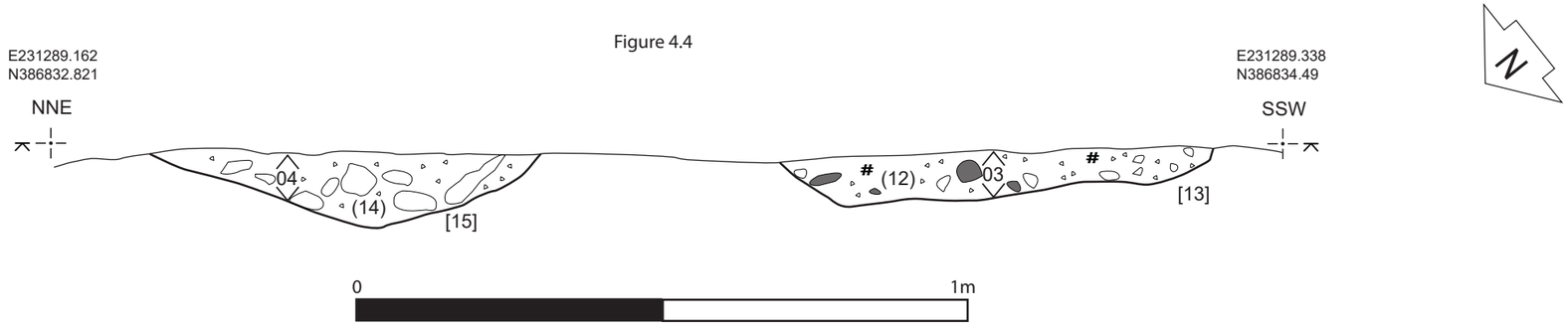


Figure 4.4



Archaeolegol Gwynedd
Heneb
Gwynedd Archaeology

Figure 4.1 to 4.4: Post-excavation site plan and sections of pits [09], [11], [15] and [13]. Scales of sections 1:10@A4 and plans 1:20@A3

Key

- Section Line
- # Charcoal
- Stones
- Burnt stone

Date: 28/05/2024

Author: MSL

Office: Heneb / GA

Drawing: G2819/ HD24-015: Plan and sections of [09], [11], [15] and [13].

Scale: 1:10 and 1:20 @A3

FIGURE 05

Reproduction of Llanfaethlu Tithe Map of 1840 (Anglesey Archives, Llangefni). Scale: As shown@A3

Figure 05: Reproduction of Llanfaethly Tithe Map of 1840 (Anglesey Archives, Llangefni). Scale: As shown@A3

FIGURE 06

First Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1889. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

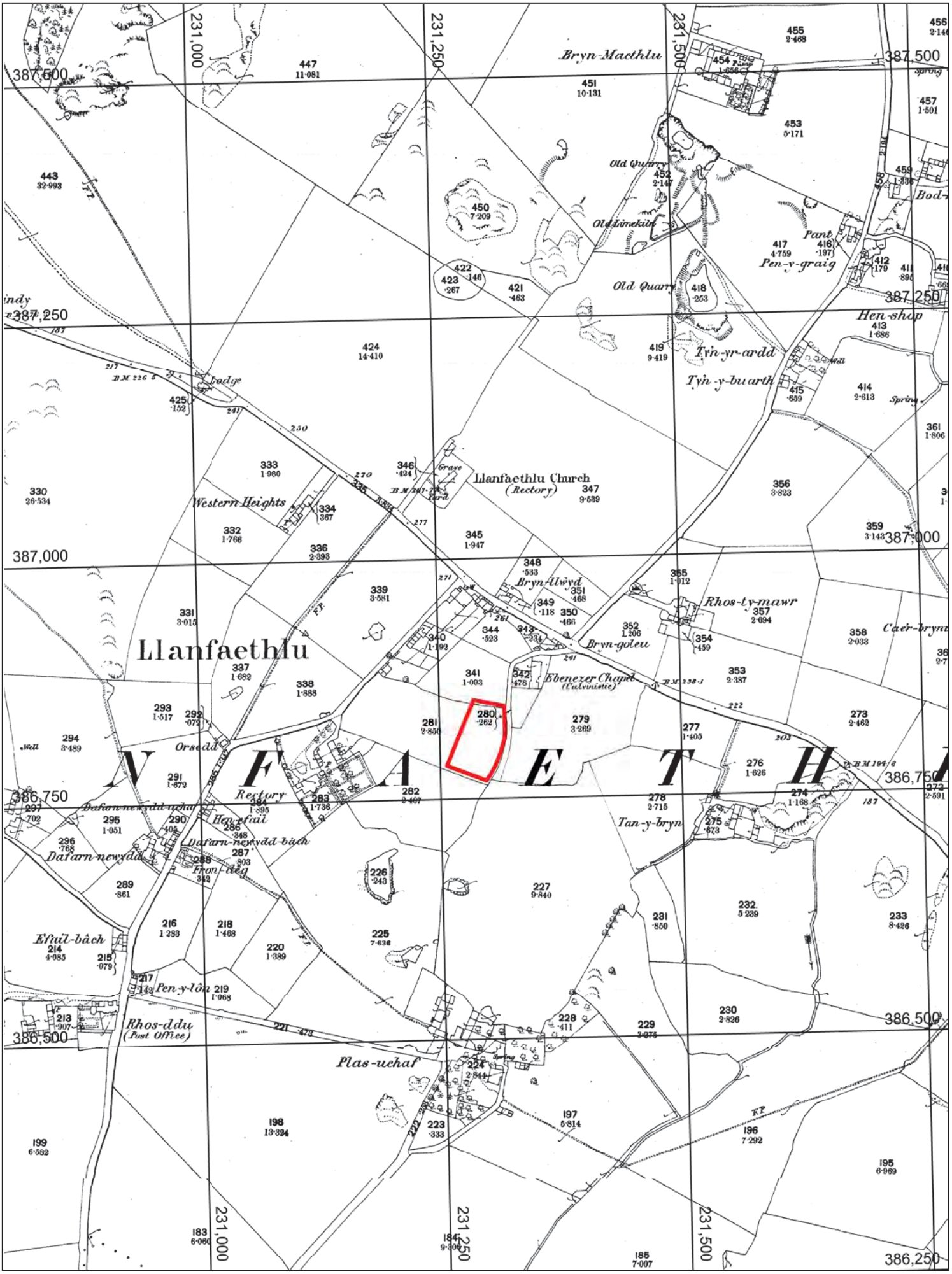


Figure 06: First Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1889. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

FIGURE 07

Second Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1900. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

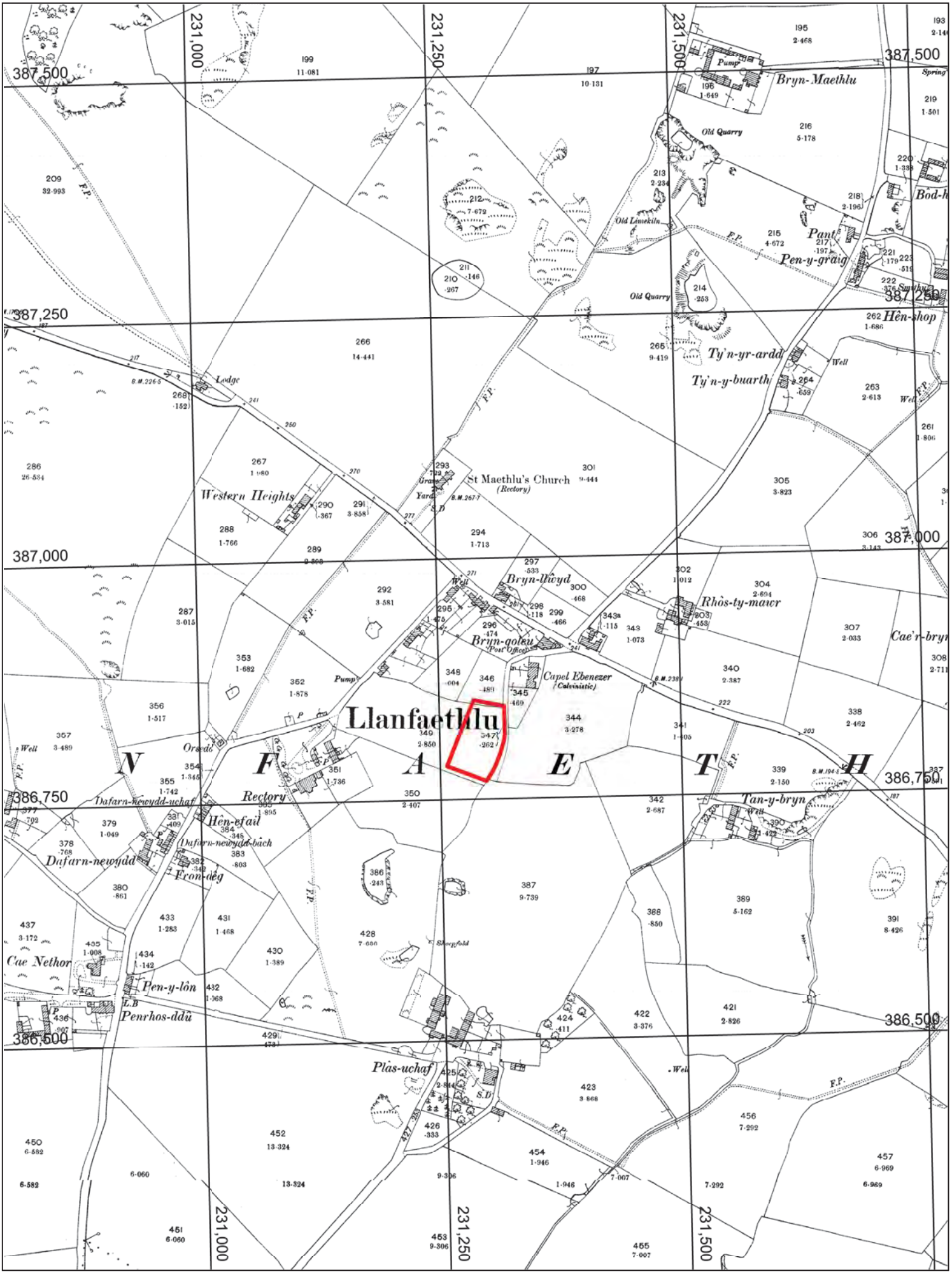


Figure 07: Second Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1900. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

FIGURE 08

Third Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1924. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

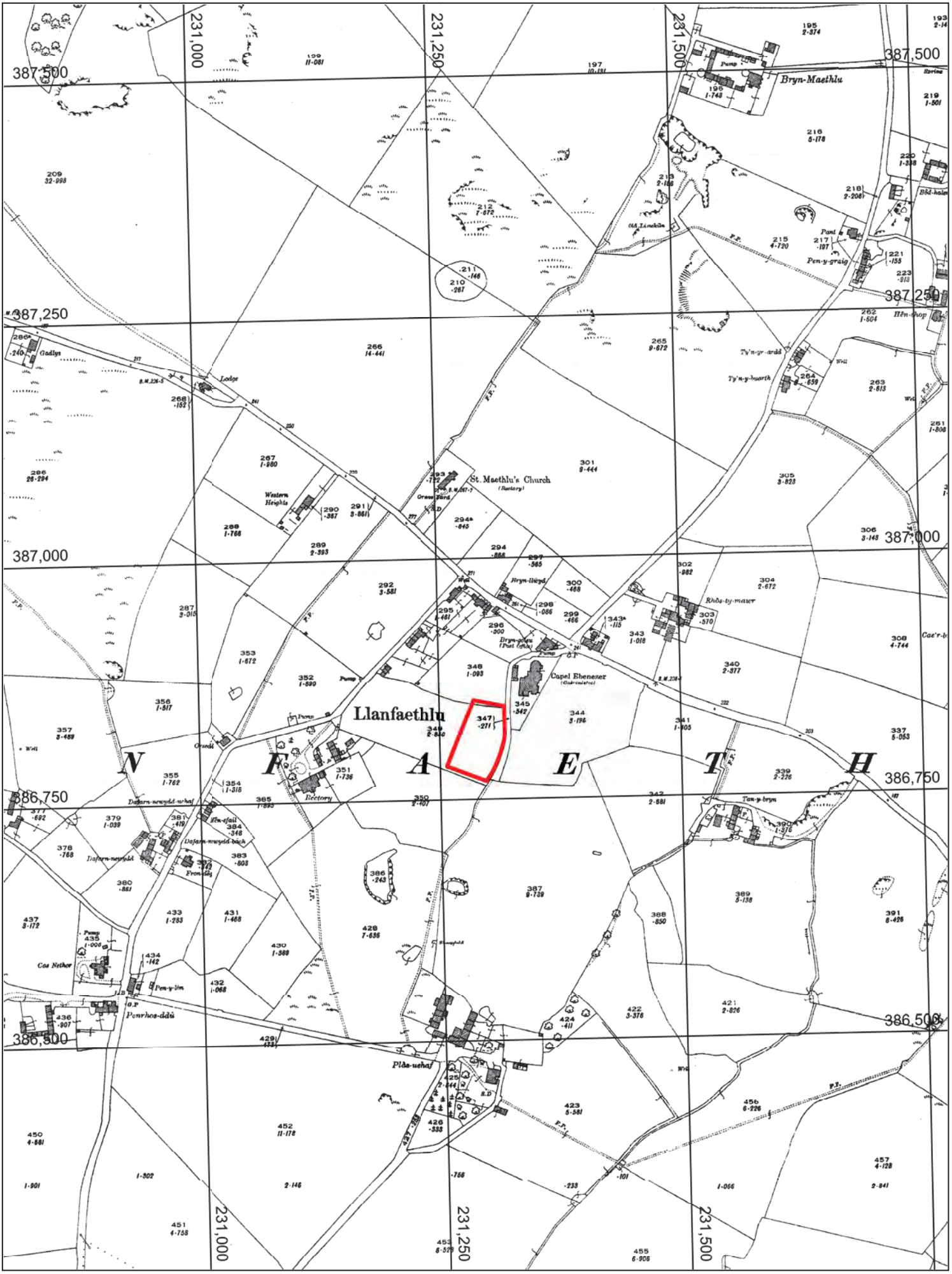


Figure 08: Third Edition Anglesey Ordnance Survey 25-inch to 1-mile County Series Map Sheet VI.5, published 1924. Mitigation area highlighted in red. Scale: 1 to 5000@A4.

Plate 1: Pre-commencement view of area to be soil stripped; scale 2x1m; view from NE (archive reference: G2819_01).

Plate 2: Pre-commencement view of area to be soil stripped; scale Not used; view from SW (archive reference: G2819_04).

Plate 3: View of section through topsoil (01) and subsoil (02) at southern end of site; scale NE (archive reference: G2819_50).

Plate 4: Pre-excavation view of Pit Group 06; scale 2x1m; view from SW (archive reference: G2819_19).

Plate 5: Mid-excavation view of pit [09]; scale NW; view from [09] (archive reference: G2819_27).

Plate 6: View of northwest facing section through pit [11]; scale NW; view from (10), [11] (archive reference: G2819_31).

Plate 7: View of northwest facing section through pits [13] and [15]; scale NW; view from (12), [13], (14), [15] (archive reference: G2819_32).

Plate 8: Post-excavation view of possible earth ovens/pits [09], [11], [13] and [15]; scale NW; view from Pit Group 06 (archive reference: G2819_36).

Plate 9: Post-excavation view of possible earth ovens/pits [09], [11], [13] and [15]; scale SW; view from Pit Group 06 (archive reference: G2819_38).

Plate 10: General view of Pit Group 06 in context, showing relationship to site; scale WNW; view from Pit Group 06 (archive reference: G2819_39).

Plate 11: View of probable field boundary 16; scale NE; view from 16 (archive reference: G2819_29).

Plate 12: North northeast facing section of linear 07; scale SSW; view from 7 (archive reference: G2819_24).

Plate 13: View of linear 07 at northeastern boundary, north of haul road; scale NNE; view from 7 (archive reference: G2819_25).

Plate 14: General view of entire site from northern corner; scale N; view from (archive reference: G2819_40).

APPENDIX I

Heneb: Gwynedd Archaeology Written Scheme of Investigation

BRYN ESTATE LLANFAETHLU, YNYS MÔN (G2819)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MITIGATION

STRIP/MAP/RECORD

Historic Environment Record Event Primary Reference Number 46738

Prepared for Ingram Property Development Ltd

January 2024

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Approvals Table				
	Role	**Printed Name**	**Signature**	**Date**
Originated by	Document Author	Michael S Lynes		10/01/2024
Reviewed by	Document Reviewer	John Roberts		10/01/2024
Approved by	Principal Archaeologist	John Roberts		10/01/2024

Revision History			
Rev No.	**Summary of Changes**	**Ref Section**	**Purpose of Issue**

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

BRYN ESTATE LLANFAETHLU, YNYS MÔN (G2819)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MITIGATION (Strip/Map/Record)

Prepared for *Ingram Property Development Ltd*, January 2024

CONTENTS

1 INTRODUCTION

Gwynedd Archaeological Trust Contracts Section (GAT) has been commissioned by *Ingram Property Development Ltd* to undertake archaeological mitigation (strip/map/record) at Bryn Estate, Llanfaethlu, Ynys Môn LL65 4PG (NGR SH3129186818; Figure 01) in advance of a housing development. The development area is a single parcel of land comprising flat rough scrub bounded by hedgerows and measures c.0.39ha in size. The development includes the construction of nine residential properties with associated landscaping and drainage (Figure 02). The mitigation will be undertaken in late February/early March 2024 as part of planning application FPL/2020/247, with an estimated duration of 10 days and 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 Excavation (Chartered Institute for Archaeologists, 2023).
- Universal Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 2023).
- Standard And Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020); and
- Standard And Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2020).

An access road has already been established through the centre of the development area as part of the original planning consent; the strip/map/record will exclude this access road but include all remaining areas within the development footprint.

GAT 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 Archaeologists.

1.1 Aims and Objectives

The key aims and objectives are to:

- establish the date and nature of any archaeological remains identified within the strip/map/record area and assess their implications for understanding local historical development, in conjunction with the known archaeological record, which includes prehistoric to post-medieval activity within the surrounding area;
- To place the results in context, reference shall be made to *A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document* (March 2017); and
- If no additional archaeological activity is identified, establish why this may be the case.

1.2 Monitoring Arrangements

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

- Tom Fildes | tom.fildes@heneb.co.uk | 07920264232

1.3 Historic Environment Record

In line with the GAT 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, 2022). In line with this guidance, all submitted reporting will need to include the equivalent of a non-technical summary in Welsh and English at the front of the report combined with short bilingual summaries of the principal Historic Assets recorded during the event. These requirements are mandatory. The GAT HER enquiry number is GATHER1979 and the event primary reference number is 46738.

The GAT HER will also be responsible for supplying Primary Reference Numbers (PRN) for new assets identified and recorded.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

Llanfaethlu is a small village situated on the north-western side of the Isle of Anglesey, and along the A4025 road. The village is predominantly Welsh speaking and takes its name from the small Church of Saint Maethlu situated on the north-northwestern side of the village. The following categories will discuss both the historic and archaeological work carried out on the proposed development site and the wider area.

2.2 Heritage Impact Statement (*Nexus Heritage*, 2020)

An archaeological Heritage Impact Statement was conducted by Nexus Heritage in 2020 which included and a walkover and a desk-based assessment of the site and wider area (Nexus Heritage Report No: 3503.R01a).

The assessment included a 1km radial buffer search centred on the development site for all known archaeological assets recorded in the regional and/or national databases. The report identified 82 historic assets within 1km radial buffer zone surrounding the development. The assessment concluded that there are no registered Scheduled Monuments, Listed Buildings, World Heritage Sites (or WHS Buffer Zones), Conservation Areas, Registered Parks and Gardens or Registered Battlefields wholly or partly within in the site (Nexus Heritage Report No: 3503.R01a: 75; cf. Appendix III).

The assessment examined the Ordnance Survey County map series 1:2,500 scale maps of 1889, 1900, 1924, 1975, 1995, and 1:20,000 scale maps of 2000 and 2006 the Ordnance Surveyor's Drawing of 1818 (Surveyor, Robert Dawson) along with the Llanfaethlu Parish Tithe Map of 1840 (Nexus Heritage Report No: 3503.R01a: 22-32; cf. Appendix III). The historic mapping between 1889 and 1975 showed the development area as part of a larger rectangular field system, with a boundary forming the western end of the development area added between 1975 and 1995.

Twentieth century aerial photographs and LiDAR were also examined for possible archaeological assets; no assets were identified on the photographs, whilst the. LiDAR data showed a small area of tipped material present towards the eastern boundary.

2.3 Archaeological and Historical Background

2.3.1 Prehistoric

Until recent excavations carried out within the vicinity of the village, the only known prehistoric monument is the Bronze Age Maen Hir (Standing Stone) situated next to Capel Soar (PRN 2021, Cadw Scheduled Monument ref. AN083). However, recent excavations have identified the village of Llanfaethlu having much earlier origins, dating from the Neolithic period. This was identified during the construction of the new Ysgol Rhyd y Llan (Ysgol y Llannau) which is located 315m to the northeast of the site at (NGR SH3140487093). The ground reduction of the site revealed three Neolithic rectangular structures along with associated pits and hearths (PRN 90236, PRN 90234, PRN 90235, PRN 90233) (C.R. Archaeology, 2014 and 2015). In addition to the features mentioned, much later features were also identified from the Bronze Age post holes to Iron Age gullies and ditches (Nexus Heritage Report No: 3503.R01a. Page: 20).

Other prehistoric features identified were during the construction of the new Dwr Cymru (Welsh Water) wastewater treatment plant situated on the eastern side of the village (NGR SH3175687104). The work was undertaken by Gwynedd Archaeological Trust (Event 45045) which uncovered further evidence for prehistoric settlement in the form of site of two post holes and associated burnt spread (PRN 90331) along with a concentration of features relating to settlement suggesting Neolithic in origin (PRN 90330) (Reilly, S., and Davidson, J., 2017).

Additional evaluation work carried out by Wessex Archaeology on the A5025 in 2017, situated within the field adjacent to Ysgol Rhyd y Llan at (NGR SH3162287105) identified features dating back to the Iron Age. These include a gully (PRN 70031), a ditch (70037) and a foundation / waste disposal site (PRN 70030) suggesting that the village of Llanfaethlu has quite a long and complex history.

2.3.2 Roman / Romano British

As stated in the regional Historic Environment Record, he evidence for Roman activity within the village is displayed through find spots. These include a coin hoard consisting of 39 early coins at (NGR SH3187) 340m to the southwest (PRN 2046). In addition, a possible Roman stone lamp (PRN2032) was located in close vicinity to the coin hoard along with a copper broach at (NGR SH3186). Most significantly, it has been suggested that the village was utilised by the Romans for copper ore smelting with a copper ore cake discovered at (NGR SH3186) stamped with what was interpreted as the letter ‘L’. In addition, antiquarian accounts describe the presence of copper slag and charcoal appearing within the land after ploughing.

2.3.3 Medieval/Post-Medieval

As stated in the regional Historic Environment Record, the early medieval evidence within the vicinity of the village is limited to two cemetery sites. The first is represented by a series of cist graves, five in total, discovered during 1860 while constructing a new road to Carreglwyd (PRN 2028). The site is situated at (NGR SH31018719), 420m northwest of the proposed construction site and consisted of articulated skeletons in a poor state. The second early medieval site is located at (NGR SH31938729), 770m to the northeast of the site and is recorded as the 'Hen Siop' early medieval cemetery (PRN 2029). The site is described as having four or five graves, orientated east/west and was discovered close to the surface while removal of a fence. The graves measured between 5 to 6 foot long and was part of a series of other graves which were covered up. The discovery of the graves were found sometime during the mid to late 19th century.

As stated in the regional Historic Environment Record, the Grade II* listed (Source ID: 5301) St. Maethlu Parish Church (PRN 6983) situated at (NGR SH3126187087) has medieval origins, having part of the church dating to c.13th century. However, the church has parts that are 15th and 17th century in date while being restored during the 19th century. during the Situated almost at the centre of the village, the church stands c.280m to the north-northwest of the site.

The post-medieval sites of interest are listed below along with distance from the site:

- The Grade II (Source ID: 24793) Capel Ebenezer (PRN 7742) located 85m to the northeast of the site at (NGR SH3134386878).
- The Grade II (Source ID: 24803) Outbuilding, Ebenezer Chapel (PRN 66631) located 73m to the northeast of the site at (NGR SH3132886883).
- The Grade II (Source ID: 24804) Gate and gateposts, wall and railings, Ebenezer Chapel (PRN 66651) located 105m to the northeast of the site at (NGR SH3135886901).
- Bryn Goleu, Llanfaethlu (post medieval post office) (PRN 11178) a former post office located at (NGR SH31358691).
- The Grade II listed (Source ID: 5302) Rectory, South of Church, Llanfaethlu (PRN 11188). Rectory associated with the church of St. Maethlu.

3 METHODOLOGY

3.1 Introduction

The strip/map/record programme aims to expose and characterise any archaeological activity identified with the c.0.39ha development footprint, as defined in Figure 01. This will involve the reduction of the ground level under archaeological control, with any resultant features mapped and recorded. The ground reduction will be undertaken by machinery and operators supplied by the *Ingram Property Development Ltd*; the fieldwork is scheduled for February/early March 2024, with an expected duration of 10No days.

An access road has already been established through the centre of the development area as part of the original planning consent; the strip/map/record will exclude this access road but include all remaining areas within the development footprint.

The following methodology will apply:

- The development will be excavated by machinery fitted with a toothless bucket as far as the glacial horizon or an archaeological horizon, whichever is encountered first;
- All attendances, subsurface activity, photographs, and contexts records will be recorded using GAT pro-formas (cf. Appendix I and II). The records will include topsoil and subsoil depths, as well as the composition of the glacial horizon. All encountered subsurface features will be recorded on GAT pro-formas with detailed notations and will be 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 will be taken using a digital SLR camera set to maximum resolution in RAW format; the photographic record will be 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 **G2819_001**. A photographic ID board will be used during the strip/map/record to record site code, image orientation and any relevant context numbers.
- 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 more discrete features are identified, these will be 100% excavated;

- Any required plans or sections to be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace.

Should dateable artefacts, human remains and/or ecofacts be recovered, a post-excavation assessment will be prepared as the initial fieldwork report (MAP2 Phase 3), leading to an Updated Project Design (UPD) for analysis and final reporting (MAP2 Phase 4). Alternatively, depending on quantity and extent of the artefacts and ecofacts, a post-excavation statement will be prepared, followed by MAP2 Phase 4. Additional time, resourcing and costs will be required to undertake any post-excavation programme of works.

3.2 Human Remains

If any human remains are identified that cannot be preserved in situ, any excavation 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).

3.3 Ecofacts

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for assessment and analysis, bulk ecofact samples will be taken by the GAT Project Archaeologist team using 10 litre sampling buckets. The deposits will be assessed and analysed for plant species and charcoal, with the results used to inform agrarian practices and wood fuel use, as well as possibly dating. Initial assessment would be completed by the GAT Project Archaeologist team using wet sieving, with the subsequent species identification assessment completed by an ecofact specialist (Jackeline Robertson | AOC Archaeology | telephone: 0208 843 7380). Any deposits deemed suitable for dating will be submitted to a laboratory specialising in radiocarbon dating (e.g., SUERC).

Any ecofact assessment/analysis will require additional resourcing and cost.

3.4 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. Any artefacts recovered will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.

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).

Any artefact assessment/analysis will require additional resourcing and cost.

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 Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ), 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 client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn). 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 Oriel Ynys Môn in accordance with their guidelines.

3.5 Working Project Archive

Following the completion of the fieldwork, a working project archive will be created based on following task list;

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;
3. Survey data: downloaded using a Computer Aided Design package;
4. Sections (if relevant): all cross referenced and complete;
5. Plans (if relevant): all cross referenced and complete;
6. Artefacts (if relevant): quantified and identified; register completed;
7. Ecofacts (if relevant): quantified and register completed;
8. Context register (if relevant): quantified and register completed.

All relevant site archive data will be added to a digital project register specific to this project, which will be prepared in *Microsoft Excel.*

The site archive data will then be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results.

3.6 Data Management Plan

The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated GAT server, with the location confirmed in the GAT project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in a supplementary Selection Strategy document appended to the final report.

A draft report will be submitted within one month of fieldwork completion and a final report will be submitted to the regional Historic Environment Record within six months of project completion. The 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. Figures – to include:
    a. Site location plan;
    b. Scaled plan(s) (if relevant);
    c. Scaled section(s) (if relevant);
9. Plates – to include selected photographic archive images illustrating the following:
    a. Site location;
    b. Ground conditions and general stratigraphy;
    c. Detail of investigated features, including plan and section images;
10. Appendix I – approved GAT written scheme of investigation;
11. Appendix II – photographic metadata;
12. Appendix III – context register;
13. Appendix IV – drawing register (if relevant);

14. Appendix V – artefact register (if relevant);

15. Appendix VI – ecofact register (if relevant);

16. Appendix VII – GAT selection strategy – final version.

On final approval, the following dissemination and archiving of the report and digital dataset will apply:

- A digital report(s) 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 2); 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).

3.7 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 GAPS, 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 selection strategy is summarised in Appendix IV and will be finalised in the mitigation report; the strategy will take into account:

- 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 projects Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

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(s). There will be 2No project archaeologists in attendance, who will be responsible for following:

- All archaeological mitigation duties on site;
- Client/sub-contractor liaison;
- GAPS liaison, with regular updates;
- specialist liaison (if relevant);
- completing all on site pro-formas and the fieldwork archive itemised above, including the digital project register;
- 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 report for project manager review and approval, to then be submitted as per the arrangements defined above.

5 HEALTH AND SAFETY

A site-specific risk assessment will be prepared by GAT and supplied to the client and sub-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 GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook which were prepared by *WorkNest*. All work will be undertaken in accordance with the client and site contractors' Health and Safety requirements.

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 Ecclesiastical Insurance Office Plc.

Policy Type Public Liability

Policy Number 000375 Expiry Date 22/08/2024

7.2 Employers Liability

Limit Of Indemnity- £10,000,000 Any One Occurrence. Insurer Ecclesiastical Insurance Office Plc.

Policy Type Public Liability

Policy Number 000375 Expiry Date 22/08/2024

7.3 Professional Indemnity

Limit Of Indemnity- £5,000,000 In Respect Of Each And Every Claim Insurer AXA Insurance UK Plc

Policy Type

Professional Indemnity Policy Number Tg0275

Expiry Date 22/08/2024

8 SOURCES CONSULTED

1. C.R. Archaeology, 2014, Results of Archaeological Works at Proposed Site for Ysgol Llannau, Llanfaethlu, unpublished C.R Archaeology Report No. CR82-2014.
2. C.R. Archaeology, 2015a, Results of Evaluation Trenching at the Proposed Site for Ysgol Llannau, Llanfaethlu. Unpublished report for Isle of Anglesey County Council, report no. CR84-2015.
3. C.R. Archaeology, 2015b, Results of Targeted Archaeological Excavation of Area of Neolithic Activity at the Proposed Site for Ysgol Llannau, Llanfaethlu. Unpublished report for Isle of Anglesey County Council.
4. English Heritage, 1991, Management of Archaeological Projects.
5. English Heritage, 2015, Management of Research Projects in the Historic Environment (MoRPHE). Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (Version 2).
6. Griffith, J.L., 1895, Anglesey Stone-lined Graves at Llanfaethlu in Anglesey. Archaeologia Cambrensis Vol XII.
7. Lewis, S., 1833, A Topographical Dictionary of Wales.
8. Nexus Heritage, 2020. Land at Bryn Estate, Llanfaethlu, Anglesey: Heritage Impact Statement. Unpublished report No: 3503.R01a.
9. The Royal Commission on the Ancient and Historical Monuments of Wales, 1937, An Inventory of the Ancient Monuments in Anglesey
10. Royal Commission on Ancient and Historic Monuments of Wales, 2015 Guidelines for digital archives.
11. Standard and Guidance for Archaeological Field Excavation (Chartered Institute for Archaeologists, 2023).
12. Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2020).
13. Standard And Guidance for Archaeological Monitoring and Recording (Chartered Institute for Archaeologists, 2023).
14. Stanley, W. O., 1868, Anctent Internments & Sepulchral Ums m Anglesey & North Wales. Archaeologia Cambrens1s Vol LV.
15. Reilly, S., and Davidson, J., 2017, DCWW Llanfaethlu Waste Water Treatment Works: Archaeological Mitigation. GAT Unpublished report No. 1382.

16. Tuck, A., 2017, Wylfa Newydd: A5025 Highway Improvements Isle of Anglesey. Evaluation Report.

FIGURE 01

Reproduction of WM Design and Architecture Limited Drawing No. A.01.1, with the site location highlighted red; Scale 1:1250 @ A3.

This drawing is to be read in conjunction with the written specification provided by WMDesign.
Structural Engineers drawings details and calculations shall take precedence over the Architectural drawings.
If in doubt ASK

Safety Health and Environmental Information Box		
In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.		
Construction Risks	Maintenance/cleaning Risks	Demolition/adaptation Risks

Rev	Change	Description	Initials	Date

DESIGN AND ARCHITECTURE LIMITED.

M-SParc, Parc Gwyddoniaeth Menai, Gaerwen, Anglesey, LL60 6AG

t: 01248 717230 e: office@wmdesign.co.uk w: www.wmdesign.co.uk

CIAT CHARTERED PRACTICE

Residential Development on Land Adjacent to Bryn, Llanfaethlu, Anglesey

Site Location Plan

Ingram Property Development Ltd

project	drawing status	date	
SH1774	**Planning**	**20/06/2023**	
originator	scale @ A3	number	rev
NM	**1:1250**	**A.01.1**	

FIGURE 02

Reproduction of WM Design and Architecture Limited Drawing No. A.02.1; Scale 1:200 @ A1.

N

Gaps in fencing here for hedgehog highway size 130x130mm

1000mm wide access path to playing field

Site Section B

Gaps in fencing here for hedgehog highway size 130x130mm

Native Hedgerow

Gaps in fencing here for hedgehog highway size 130x130mm

Provision of new stay 3500mm long minimum

3x3m patio area

Existing overhead cables to be diverted by Scottish Power

Rain Garden

1.8m high palisade fence panels and concrete posts

Rain Garden

Single species hedge

Native hedgerow

600 wide service strip

Porous paving to parking areas

Porous driveway block pavours Marshals Driveline 200x100x60mm

Overhead electricity cables to be moved

Gaps in fencing here for hedgehog highway size 130x130mm

1.8m high palisade fence panels and concrete posts

Native hedgerow

Gaps in fencing here for hedgehog highway size 130x130mm

1.8m high palisade fence panels and concrete posts

Site Section A

Asgard steel Secure by Design shed on concrete base

1.5m wide access path to rear garden of Plot 2

Provision of new stay 3500mm long minimum

Plot 6
3 Bed Semi House
FFL 77.750

Plot 7
3 Bed Semi House
FFL 77.750

Plot 8
3 Bed Semi House
FFL 77.150

Plot 9
3 Bed Semi House
FFL 77.150

Plot 5
2 Bed Semi House
FFL 77.300

Plot 4
2 Bed Semi House
FFL 77.300

Plot 3
2 Bed Semi House
FFL 77.000

Plot 2
2 Bed Semi House
FFL 77.000

Plot 1
2 Bed Semi House
FFL 77.000

Asgard steel Secure by Design shed on concrete base

Area around swayle to be planted with wildflower meadow mix

Sorbus Aucuparia

Acer Campestre

Porous driveway block pavours Marshals Driveline 200x100x60mm

100.64m² approx swayle to Drainage Engineers details

Sorbus Aucuparia

New footway to be 1500mm wide to match the existing estate

Works construction compound

Visitor Parking

31.33m² approx swayle to Drainage Engineers details

Acer Campestre

385.64m² Public Open Space

2 No, Sorbus Aucuparia

Public Open Space

2 no, Acer Campestre

Porous driveway block pavours Marshals Driveline 200x100x60mm

Acer palmatum 'Inaba-shidare'

1 no. Prunus avium 'Stella'

Rain Garden

900mm wide path

Planting bed

Single species hedge

Tactile paving and crossing area

Porous driveway block pavours Marshals Driveline 200x100x60mm

1.2m high post and wire livestock fence and concrete posts.

Planting bed

Single species hedge

Rain Garden

Porous driveway block pavours Marshals Driveline 200x100x60mm

Planting bed

Single species hedge

Trees as noted adjacent

Public open space 190m² approx

Planting beds (see adjacent for mix)

Native hedgerow (see adjacent notes for details)

Lawned areas

Pod driveway access and parking, Porous driveway block pave mix - Marshals Driveline Prions '**brindle**' 200 x 100 x 60mm, and Marshals Driveline Prions '**bracken**' 200 x 100 x 60mm

Existing playing field access to be maintained 1.5m wide

House paving, Marshalls Saxon flag paving - Natural

Visitor parking

Adoptable footway 215m² approx

Adoptable estate road 456m² approx

On plot small rain gardens in accordance with the 'Rain Garden guide' by Bob Bray, Dusty Gedge, Gary Grant & Lani Leathway

1.8m high palisade fence panels and concrete posts

1.2m high stockproof fence by Jacksons or similar and approved

1.5m high palisade fence panels with 300mm trellis on top and concrete posts

1.2m high post and wire livestock fence and concrete posts

This drawing is to be read in conjunction with the written specification provided by WMDesign.
Structural Engineers drawings details and calculations shall take precedence over the Architectural drawings.
If in doubt ASK

Safety Health and Environmental Information Box

In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

Rev	Change	Description	Initials	Date
01	Ch-01	Various changes to accord with the landscape proposal by Land Studio	NM	13/06/2023

DESIGN AND ARCHITECTURE LIMITED.

M-SParc, Parc Gwyddoniaeth Menai, Gaerwen, Anglesey, LL60 6AG

t: 01248 717230 e: office@wmdesign.co.uk w: www.wmdesign.co.uk

CIAT CHARTERED PRACTICE

Residential Development on Land Adjacent to Bryn, Llanfaethlu, Anglesey

Proposed Site Layout Affordable Scheme

Ingram Property Development Ltd

project	drawing status	date	
SH1774	**Planning**	**20/06/2023**	
originator	scale @ A1	number	rev
NM	**1:200**	**A.02.1**	**01**

APPENDIX I

Gwynedd Archaeological Trust Photographic Metadata pro-forma

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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.

Project Name:			Project Number:				
Photo No.	**Sub - Division**	**Description**	**Contexts**	**Scales**	**View From**	**Initials**	**Date**

APPENDIX II

Gwynedd Archaeological Trust Context Sheet pro-forma

GWYNEDD ARCHAEOLOGICAL TRUST **CONTEXT RECORD FORM**

SITE CODE	GRID SQUARE	SITE SUB-DIV	CONTEXT NUMBER
CATEGORY/TYPE	PROVISIONAL DATE/PERIOD/PHASE		
LENGTH	BREADTH	DIAMETER	DEPTH/HEIGHT
DEPOSIT			CUT
1. Compaction			1. Shape in plan
2. Colour			2. Corners
3. Matrix Composition			3. Break of slope top
4. Inclusions			4. Sides
5. Clarity of Interface			5. Break of slope base
6. Other comments			6. Base
7. Methods & conditions			7. Orientation
			8. Truncated (if known)
			9. Other comments
			Draw sketches overleaf

FILLED BY

This | | context

FILL OF

Stratigraphic matrix

PLANS	SECTIONS
Sheet No.	Sheet No.
Drawing No.	Drawing No.

PHOTOGRAPHS - Film No./ Frame No.

SAMPLE Nos.	FIND Nos.

FEATURE No		GROUP No	CONSISTS OF
INTERPRETATION/DISCUSSION		SAME AS	

	CHECKED BY (initials/date)	INITIALS/DATE

SKETCH

DESCRIPTION/INTERPRETATION CONTINUED

APPENDIX IV

Gwynedd Archaeological Trust Selection Strategy pro-forma

G2819_Bryn_Estate_Llanfaethlu 10/01/2024 v1.0

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	Gwynedd Archaeological Trust

Stakeholders		**Date Contacted**
Collecting Institution(s)	GAT Historic Environment Record	10/01/2024
	RCAHMW	On completion of Project Archive
	Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ	If applicable, post-fieldwork based on artefact recovery
Project Lead / Project Assurance	Gwynedd Archaeological Planning Services	tbc
Landowner / Developer	Ingram Property Development Ltd	n/a

Resources

Resources required Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.

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.

Gwynedd Archaeological Trust Contracts Section (GAT) has been commissioned by Ingram Property Development Ltd to undertake archaeological mitigation (strip/map/record) at Bryn Estate, Llanfaethlu, Ynys Môn LL65 4PG (NGR SH3129186818; Figure 01) in advance of a housing development. The development area is a single parcel of land comprising flat rough scrub bounded by hedgerows and measures c. 0.39ha in size. The development includes the construction of nine residential properties with associated landscaping and drainage (Figure 02). The mitigation will be undertaken in late February/early March 2024 as part of planning application FPL/2020/247, with an estimated duration of 10 days and in accordance with the following guidelines.

Source: Gwynedd Archaeological Trust. 2024. Bryn estate Llanfaethlu, Ynys Môn Written Scheme of Investigation For Archaeological Mitigation. Prepared for Ingram Property Development Ltd. January2024. Project G2819.

1 – Digital Data

Stakeholders

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

John Roberts (GAT Principal Archaeologist)

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.

All digital data will be collected, stored and selected in lines with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

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.

Following the completion of the fieldwork, a working project archive will be created based on following task
list;
1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in Microsoft Access and cross-referenced with all pro-formas;
3. Survey data: downloaded using a Computer Aided Design package;
4. Sections (if relevant): all cross referenced and complete;
5. Plans (if relevant): all cross referenced and complete;
6. Artefacts (if relevant): quantified and identified; register completed;
7. Ecofacts (if relevant): quantified and register completed;
8. Context register (if relevant): quantified and register completed.
All relevant site archive data will be added to a digital project register specific to this project, which will be
prepared in Microsoft Excel. This data will then be used as the basis for the physical and digital dataset
archives. 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 Trust project database; the digital
dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project
database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the
dissemination strategy below. De-selected digital data will be confirmed in an updated digital management
plan appended to the final report

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.

It is envisaged that the de-selected material will be retained on the GAT servers for 2 years following the completion of the project at which point they will be reviewed and deleted as necessary in line with the GAT DMP.

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).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;
Gareth Edwards, Head of Knowledge and Understanding, RCAHMW

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.

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

De-Selected Documents

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

It is envisaged that the material de-selected from inclusion in the preserved archive will be duplicates or re-productions created during the analysis phase of the project. De-selected material will therefor either be retained to supplement GAT's research files or recycled.

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	Bulk Finds	**Section 3.**	

Stakeholders

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

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;
Jenny Emmett – Senior Planning Archaeologist, Gwynedd Archaeological Planning Service;
Ian Jones, *Curatorial Officer at Oriel Ynys Môn*

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.
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.
The artefacts will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within First Aid for Finds (Rescue 1999) and Historic England.
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 Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ), where they can receive specialist treatment and study.
GAT will contact the landowner via client for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn). 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 Oriel in accordance with their guidelines.

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.

The full material archive returned to the GAT offices will be reviewed following analysis: Stakeholders (see above) will make selection decisions based on specialists reports and selection recommendations and SDMS collecting policy. The selection will take place during archive completion.

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.

Any uncollected material will be left on-site to be incorporated into backfill.

De-Selected Material

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

All bulk finds will be assessed and recorded to appropriate standards. De-selected material will be returned to the landowner as agreed by the landowner and curatorial archaeologist.

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 Photographic Metadata

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
1	G2819	Bryn Estate Llanfaethlu		Pre-commencement view of area to be soil stripped		NE	2x1m	AMO	24/04/2024	1
2	G2819	Bryn Estate Llanfaethlu		Pre-commencement view of area to be soil stripped		NW	2x1m	AMO	24/04/2024	
3	G2819	Bryn Estate Llanfaethlu		Pre-commencement view of area to be soil stripped		SW	Not used	AMO	24/04/2024	
4	G2819	Bryn Estate Llanfaethlu		Pre-commencement view of area to be soil stripped		NE	Not used	AMO	24/04/2024	2
5	G2819	Bryn Estate Llanfaethlu		View of bund at edge of site		SW	Not used	AMO	24/04/2024	
6	G2819	Bryn Estate Llanfaethlu		View along haul road		ESE	Not used	AMO	24/04/2024	
7	G2819	Bryn Estate Llanfaethlu		Pre-commencement view of boundary		SW	Not used	AMO	24/04/2024	
8	G2819	Bryn Estate Llanfaethlu		View of stripped area at southwest end of site		SE	2x1m	AMO	25/04/2024	
9	G2819	Bryn Estate Llanfaethlu		Stripped area at northwest of site		SW	2x1m	AMO	25/04/2024	

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
10	G2819	Bryn Estate Llanfaethlu		Southeast facing section at western baulk	(01), (02)	SE	1x1m	AMO	25/04/2024	
11	G2819	Bryn Estate Llanfaethlu		Southeast facing section at western baulk	(01), (02)	SE	1x1m	AMO	25/04/2024	
12	G2819	Bryn Estate Llanfaethlu		View of stripped area to south of haul road		NE	2x1m	AMO	26/05/2024	
13	G2819	Bryn Estate Llanfaethlu		View of stripped area to south of haul road		N	2x1m	AMO	26/05/2024	
14	G2819	Bryn Estate Llanfaethlu		View of stripped area to south of haul road		SSW	1x1m	AMO	26/05/2024	
15	G2819	Bryn Estate Llanfaethlu		View of stripped area to south of haul road		S	Not used	AMO	26/05/2024	
16	G2819	Bryn Estate Llanfaethlu		Pre-excavation view of possible pit	(04)	SW	1x1m	AMO	26/05/2024	
17	G2819	Bryn Estate Llanfaethlu		Pre-excavation view of possible pit	(05)	SW	1x1m	AMO	02/05/2024	
18	G2819	Bryn Estate Llanfaethlu		View of stripped area at northwest end of site		SW	2x1m	AMO	02/05/2024	

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
19	G2819	Bryn Estate Llanfaethlu		Pre-excavation view of Pit Group 06	(06)	SW	2x1m	AMO	02/05/2024	
20	G2819	Bryn Estate Llanfaethlu		Pre-excavation view of Pit Group 06	(06)	S	2x1m	AMO	02/05/2024	
21	G2819	Bryn Estate Llanfaethlu		Northwest facing section of shrub boles	(04)	NW	1x1m	AMO	02/05/2024	
22	G2819	Bryn Estate Llanfaethlu		West northwest facing section of shrub boles	(05)	NW	1x1m	AMO	03/05/2024	
23	G2819	Bryn Estate Llanfaethlu		View of linear at northeastern boundary, north of haul road	(07)		2x1m	AMO	03/05/2024	
24	G2819	Bryn Estate Llanfaethlu		XX facing section of linear 07	(07)		1x1m	AMO	03/05/2024	11
25	G2819	Bryn Estate Llanfaethlu		View of linear 07 at northeastern boundary, north of haul road	(07)		2x1m	AMO	03/05/2024	12
26	G2819	Bryn Estate Llanfaethlu	103,769	Mid-excavation view of pit [09]	[09]	NW	1x1m	AMO	03/05/2024	
27	G2819	Bryn Estate Llanfaethlu	103,769	Mid-excavation view of pit [09]	[09]	NW	1x1m	AMO	03/05/2024	4

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
28	G2819	Bryn Estate Llanfaethlu		View of probable field boundary (16)	(16)	SW	2x1m	AMO	03/05/2024	
29	G2819	Bryn Estate Llanfaethlu		View of probable field boundary (16)	(16)	NE	2x1m	AMO	03/05/2024	10
30	G2819	Bryn Estate Llanfaethlu		View of location of field boundary (16)	(16)	SE	2x1m	AMO	03/05/2024	
31	G2819	Bryn Estate Llanfaethlu	103,770	View of northwest facing section through pit [11]	(10), [11]	NW	1x1m	RE	03/05/2024	5
32	G2819	Bryn Estate Llanfaethlu	103,771 103,772	View of northwest facing section through pits [13] and [15]	(12), [13], (14), [15]	NW	1x1m	RE	08/05/2024	6
33	G2819	Bryn Estate Llanfaethlu		General view of soil strip in the southeast corner of site showing root boles - no archaeology		W	Not used	RE	08/05/2024	
34	G2819	Bryn Estate Llanfaethlu		General view of soil strip from south corner of site		S	Not used	RE	08/05/2024	
35	G2819	Bryn Estate Llanfaethlu		General view of soil strip of southeast corner of site, from the east		ESE	Not used	RE	08/05/2024	
36	G2819	Bryn Estate Llanfaethlu	103,769 103,770 103,771 103,772	Post-excavation view of possible earth ovens/pits [09], [11], [13] and [15]	Pit Group 06	NW	2x1m	RE	08/05/2024	7

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
37	G2819	Bryn Estate Llanfaethlu	103,769 103,770 103,771 103,772	Post-excavation view of possible earth ovens/pits [09], [11], [13] and [15]	Pit Group 06	SE	2x1m	RE	08/05/2024	
38	G2819	Bryn Estate Llanfaethlu	103,769 103,770 103,771 103,772	Post-excavation view of possible earth ovens/pits [09], [11], [13] and [15]	Pit Group 06	SW	2x1m	RE	08/05/2024	8
39	G2819	Bryn Estate Llanfaethlu	103,769 103,770 103,771 103,772	General view of Pit Group 06 in context, showing relationship to site	Pit Group 06	WNW	2x1m	RE	08/05/2024	9
40	G2819	Bryn Estate Llanfaethlu		General view of entire site from northern corner		N	Not used	RE	08/05/2024	13
41	G2819	Bryn Estate Llanfaethlu		General view of soil strip from western corner of site		W	Not used	RE	08/05/2024	
42	G2819	Bryn Estate Llanfaethlu		General view of soil strip from eastern corner of site		ESE	Not used	RE	08/05/2024	
43	G2819	Bryn Estate Llanfaethlu		View of field drain (17)	(17), (03)	SW	1x1m	RE	08/05/2024	
44	G2819	Bryn Estate Llanfaethlu		View of field drain (17)	(17), (03)	NE	1x1m	RE	08/05/2024	

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
45	G2819	Bryn Estate Llanfaethlu		General view of topsoil strip		S	Not used	RE	09/05/2024	
46	G2819	Bryn Estate Llanfaethlu		General view of soil strip of southeast corner of site, adjacent to bund		SW		RE	09/05/2024	
47	G2819	Bryn Estate Llanfaethlu		General view of soil strip of southeast corner of site, adjacent to bund		NE	Not used	RE	09/05/2024	
48	G2819	Bryn Estate Llanfaethlu		General view of soil strip of southeastern area of site		ESE	Not used	RE	16/05/2024	
49	G2819	Bryn Estate Llanfaethlu		General view of soil strip showing glacial clay/natural		E	1x1m	RE	16/05/2024	
50	G2819	Bryn Estate Llanfaethlu		View of section through topsoil (01) and subsoil (02) at southern end of site	(01), (02) and (03)	NE	1x1m, 1x0.3m	RE	16/05/2024	3
51	G2819	Bryn Estate Llanfaethlu		General view of soil strip of southeastern corner, from the south		S	Not used	RE	16/05/2024	
52	G2819	Bryn Estate Llanfaethlu		General view of former topsoil dump removal in southeastern corner of site		ESE	Not used	RE	16/05/2024	
53	G2819	Bryn Estate Llanfaethlu		View of southeast area post topsoil strip		E	Not used	RE	16/05/2024	

PHOTO RECORD NUMBER	PROJECT NUMBER	SITE NAME	PRN	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	Plates
54	G2819	Bryn Estate Llanfaethlu		View of southeast area post topsoil strip		N	Not used	RE	16/05/2024	

APPENDIX III

Heneb: Gwynedd Archaeology Selection Strategy Final

G2819_Bryn_Estate_Llanfaethlu 29/05/2024 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	Gwynedd Archaeological Trust

Stakeholders		**Date Contacted**
Collecting Institution(s)	Gwynedd Historic Environment Record	10/01/2024
	RCAHMW	On completion of Project Archive
	Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ	n/a
Project Lead / Project Assurance	Heneb: Gwynedd Archaeology Planning	tbc
Landowner / Developer	Ingram Property Development Ltd	n/a

Resources

Resources required Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.

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.

Heneb: Gwynedd Archaeology (GA) was commissioned by *Ingram Property Development Ltd* to undertake an archaeological mitigation (strip/map/record) at Bryn Estate, Llanfaethlu, Ynys Môn LL65 4PG (NGR SH3129186818; Figure 01) in advance of a housing development. The development area is a single parcel of land and measures c. 0.39ha of flat rough scrub and bounded by hedgerows. The proposed development pertained to the construction of nine 'affordable' residential properties, in addition to landscaping and drainage (Figure 02). The planning application put fourth by the client, Mr Nigel Ingram, FPL/2020/247 was an updated application, increasing the amount of dwellings from six to nine.
The strip/map/record was undertaken between the 25th April and 16th May 2024. The strip/map/record was monitored by Heneb: Gwynedd Archaeology Planning and undertaken in accordance with an approved written scheme of investigation (Appendix I). In line with the regional Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession; the HER Event Primary Reference Number for this project is 46738. The archaeological mitigation monitored the foundation level for all intrusive groundworks in accordance with planning application FPL/2020/247.

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Source: Guimaraes Ferreira, C and Lynes, M.S., 2024. Gwynedd Archaeological Trust. 2024. Bryn estate Llanfaethlu, Ynys Môn: Archaeological Mitigation. Prepared for Ingram Property Development Ltd. January 2024. Project G2819. GA Report 1777.

1 – Digital Data

Stakeholders

John Roberts (GA Regional Head (Archaeological Services) & Principal Archaeologist)
Sean Derby, (Historic Environment Record Archaeologist), Gwynedd Historic Environment Record;
Helen Rowe (Senior Archivist), Royal Commission on Ancient and Historical Monuments of Wales.

Selection

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

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

- G2819_Bryn_Estate_Llanfaethlu_Written Scheme of Investigation (Microsoft Word and Adobe PDF);
- G2819_Photographic_Metadata (Microsoft Access);
- GAT_1777 (Microsoft Word and Adobe PDF);
- Photographic archive (54 images in TIFF format);
- Photographic archive (54 images in RAW format);
- Photographic archive (54 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
- File Information form (Excel) - Photographic metadata (detail).

The digital archive has been stored on a dedicated Heneb server, with the location confirmed in the GA project database via a specific hyperlink.

De-Selected Digital Data

It is envisaged that the de-selected material will be retained on the GA servers for 2 years following the completion of the project at which point they will be reviewed and deleted as necessary in line with the GA DMP.

The following client data will not form part of the preserved archive and have been deselected:

- G2819 site location plan supplied by client
- G2819 proposed site plan supplied by client

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

- G2819_combined_figures.pdf
- G2819_combined_plates.pdf
- G2819_Figures_and_Plates_List.docx
- G2819_Appendix_I.pdf
- G2819_Appendix_II.docx
- G2819_Appendix_II.pdf
- G2819_rear_cover.pdf
- G2819_front_cover.pdf
- G2819_inner_cover.pdf
- Plates 01-02.pdf
- Plates 03-04.pdf
- Plates 05-06.pdf
- Plates 07-08.pdf
- Plates 09-10.pdf
- Plates 11-12.pdf
- Plate 13.pdf

2 – Documents

Stakeholders

John Roberts (GA Regional Head (Archaeological Services) & Principal Archaeologist)
Sean Derby, (Historic Environment Record Archaeologist), Gwynedd Historic Environment Record;
Helen Rowe (Senior Archivist), Royal Commission on Ancient and Historical Monuments of Wales.

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:

- G2819 day sheets x4
- G2819 context sheets x18
- G2819 drawing register sheets x 1
- G2819 context register sheets x 1
- G2819 photographic register sheets x 3
- G2819 permatrace A4 sheets x 1
- G2819 permatrace A3 sheets x 1

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

De-Selected Documents

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

There is no de-selected data

APPENDIX IV

Heneb: Gwynedd Archaeology Site Registers

APPENDIX IV

Site Registers

Context Register

Context No.	Type	Description	Initials	Date
01	Deposit	Topsoil	AMO	03/05/2024
02	Deposit	Subsoil	AMO	03/05/2024
03	Deposit	Natural	AMO	03/05/2024
04	Fill	Fill of shrub bole	AMO	03/05/2024
05	Fill	Fill of shrub bole	AMO	03/05/2024
06	Group	Pit Group	AMO	03/05/2024
07	Fill	Fill of shallow linear at eastern boundary	AMO	03/05/2024
08	Fill	Fill of pit	RE	03/05/2024
09	Cut	Cut of pit	RE	03/05/2024
10	Fill	Fill of pit	RE	03/05/2024
11	Cut	Cut of pit	RE	03/05/2024
12	Fill	Fill of pit	RE	03/05/2024
13	Cut	Cut of pit	RE	03/05/2024
14	Fill	Fill of pit	RE	03/05/2024
15	Cut	Cut of pit	RE	03/05/2024
16	Cut	Fill of shallow linear [07]	RE	03/05/2024
17	Structure	Land drain	RE	03/05/2024
18	Structure	Field boundary along southeast edge of site	RE	03/05/2024

Sample Register

Sample No.	Context No.	Context Type	Purpose of Sample	No. of tubs	% of deposit sampled	Drawing No.
01	8	Fill of pit	Macrofossils and charcoal C14 dating	2	70%	4
02	10	Fill of pit	Macrofossils and charcoal C14 dating	2	70%	4
03	12	Fill of pit	Macrofossils and charcoal C14 dating	1	50%	4
04	14	Fill of pit	Macrofossils and charcoal C14 dating	1	50%	4

Drawing Register

DWG No.	Sheet No.	Size	Scale	Description
1	1	A4	1:10	NW facing section of pit [09]
2	1	A4	1:10	NW facing section of pit [09]
3	1	A4	1:10	NNW facing section of pits [13] and [15]
4	2	A3	1:20	Plan of possible earth ovens [09], [11], [13] and [15]

APPENDIX V

AOC Archaeology Group Palaeoenvironmental Assessment Report

The charcoal from Bryn Estate, Llanfaethlu (G2819, AOC:27895): an assessment

Jackaline Robertson

Introduction and quantification

In September 2024, four bulk samples from the archaeological work undertaken at Bryn Estate, Llanfaethlu were submitted for environmental analysis. The samples were collected from a series of pits associated with burnt mounds. The ecofact assemblage was composed of charcoal recovered from all four pits. The aim of this assessment was to identify the charcoal to species, and to assess its suitability for radiocarbon dating and further analysis with reference to the Research Framework for the Archaeology of Wales (Accessed September 2024).

Methodology

This assessment was undertaken in line with published standards and guidelines (CIfA 2014). The bulk samples were processed by Heneb Gwynedd Archaeology Trust and the wash-overs were submitted to AOC Archaeology Group for environmental assessment. The wash-overs were assessed using a binocular stereo microscope at x10 – x40 magnification. The only ecofacts recovered were charcoal.

Charcoal fragments larger than 4mm were examined using a Leica stereo microscope at magnifications of x10 – x55. Charcoal identifications were confirmed by analysing the transverse, tangential, and radial sections of each fragment and using keys and texts (Schweingruber 1990; Hather 2000). Taxonomy and nomenclature follow Stace (2010).

Results and observations

The charcoal

Charcoal (94.4g) was recovered from all four pits and 70 fragments were identified to species. The species were alder (*Alnus glutinosa* (L.) Gaertn), birch (*Betula* sp.), hazel (*Corylus avellana* L.), apple/pear/hawthorn/rowan (*Maloideae*/*Sorbus* sp.), cherry (*Prunus* sp.), and oak (*Quercus* sp.). The dominant species were oak (46%) and hazel (37%), with much smaller quantities of apple/pear/hawthorn/rowan (7%), alder (4%), cherry (4%), and birch (2%). Both oak (12%) and hazel roundwood (11%) were present. Preservation of the fragments ranged from poor to good, with most being recorded as poor. Those described as poor were either vitrified or noticeably friable, with evidence of oxidisation.

Modern contamination

Modern contamination in the form of roots, seeds, and insects was present in all four samples, however, there is no evidence that the archaeological security of any of these features has been noticeably compromised.

Summary of the contextual units

Pit (008) Sample <1>

The charcoal (18.0g) was dominated by hazel (50%) and oak (30%), with smaller inclusions of apple/pear/hawthorn/rowan (15%) and cherry (5%). Both oak (15%) and hazel (10%) roundwood were present. The charcoal from this pit is fuel debris. The non-oak species are all suitable for radiocarbon dating.

Pit (010) Sample <2>

The charcoal (39.9g) was composed of oak (50%), hazel (40%), alder (5%), and apple/pear/hawthorn/rowan (5%). Oak (25%) and hazel (25%) roundwood were noted within the assemblage. This large quantity of charcoal is fuel waste. The non-oak charcoal is recommended for dating.

Pit (012) Sample <3>

This pit had the smallest quantity of charcoal (5.2g) and the species were oak (60%), hazel (20%), birch (10%), and cherry (10%). These fragments are the remnants of fuel waste. The birch, hazel, and cherry fragments are suitable for radiocarbon dating.

Pit (014) Sample <4>

The charcoal (31.3g) was dominated by oak (50%) and hazel (30%) with smaller quantities of alder (10%), apple/pear/hawthorn/rowan (5%), and cherry (5%). Both hazel (5%) and oak (5%) roundwood were present. The charcoal is residual fuel debris. The non-oak charcoal species are recommended for dating.

Discussion

The charcoal

These tree species are all native and likely grew in the surrounding landscape. Alder and birch are normally found in damp habitats, while hazel, apple/pear/hawthorn/rowan, and cherry grow in hedgerows, scrub, or more open woods, and oak is adaptable to a variety of growing and soil conditions (Linford 2009; Stace 2010). Many of these tree species tend to favour drier habitats, indicating the fuel materials were primarily sourced from drier landscapes, although the presence of both alder and birch suggests there is some evidence for damper habitats possibly located some distance from the main site. The recovery of mixed

wood species from each pit indicates this assemblage has formed through the burning and disposal of fuel refuse. The absence of any domestic debris within the features such as cereals, hazelnut shell and bone suggest these fire pits were not used to prepare food. Nor is there any evidence for the burning of small structural elements such as posts, stakes or wooden artefacts.

The dominance of oak and hazel within the charcoal assemblage suggests that these two species were either more easily accessible in the surrounding landscape or were preferred for use as fuel, with the other tree species having a more marginal role. It was noted that much of the assemblage was formed of small branchwood, perhaps representing a bias towards material that was more easily collectable, thereby avoiding the problem of having to fell trees. An additional advantage to deliberately selecting branchwood is that larger timbers can be reserved for providing building materials, and woodlands can be better managed to maintain regular access to material for fuel.

Conclusions

The charcoal assemblage has been fully assessed and further species identifications are not needed. While the charcoal assemblage is small, it is still possible to draw some conclusions about how woodland was used at this site. A range of tree species, particularly oak and hazel, were used for fuel, with the other species having a much more marginal role. Given the small size of the assemblage, further analysis is not recommended. The non-oak species are all suitable for radiocarbon dating. Oak is not recommended for dating at this site as it a slow-growing species and does not always provide a dependable date range. The charcoal is stored in a dry and stable condition and is suitable for long-term archiving.

Bibliography

Chartered Institute for Archaeologists (CIfA) 2014. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials.*

Hather, J. G. (2000). *The Identification of the Northern European Woods: a guide for archaeologists and conservators*. London: Routledge.

Linford, J. (2009). *A Concise Guide to Trees.* Bicester: Baker and Taylor (UK) Ltd.

Research Framework for the Archaeology of Wales. Accessed September 2024. (https://www.archaeoleg.org.uk)

Schweingruber, F. H. (1990). *Microscopic Wood Anatomy*. Birmensdorf: Eidgenössische Forschungsanstalt WSL.

Stace, C. (2010). *New Flora of the British Isles* (3rd ed.). Cambridge: Cambridge University Press.

Table 1. Charcoal Species

Sample	Feature	Context	Volume (L)	Species	Name	Frag	RW	Weight
1	Pit	8	20	*Corylus avellana* L.	Hazel	8	2	
1	Pit	8	20	*Maloideae*/*Sorbus* sp.	Apple/pear/hawthorn/rowan	3		
1	Pit	8	20	*Prunus* sp.	Cherry	1		
1	Pit	8	20	*Quercus* sp.	Oak	3	3	18
2	Pit	10	20	*Alnus glutinosa* L. Gaertn	Alder	1		
2	Pit	10	20	*Corylus avellana* L.	Hazel	3	5	
2	Pit	10	20	*Maloideae*/*Sorbus* sp.	Apple/pear/hawthorn/rowan	1		
2	Pit	10	20	*Quercus* sp.	Oak	5	5	39.9
3	Pit	12	10	*Betula* sp.	Birch	1		
3	Pit	12	10	*Corylus avellana* L.	Hazel	2		
3	Pit	12	10	*Prunus* sp.	Cherry	1		
3	Pit	12	10	*Quercus* sp.	Oak	6		5.2
4	Pit	14	10	*Alnus glutinosa* L. Gaertn	Alder	2		
4	Pit	14	10	*Corylus avellana* L.	Hazel	5	1	
4	Pit	14	10	*Maloideae*/*Sorbus* sp.	Apple/pear/hawthorn/rowan	1		
4	Pit	14	10	*Prunus* sp.	Cherry	1		
4	Pit	14	10	*Quercus* sp.	Oak	9	1	31.3

Key: Frag= fragment, RW= roundwood, the total weight of the sample recorded in grams, provided in the last row of the table.

APPENDIX VI

SUERC Radiocarbon Laboratory Certificates

SUERC | RADIOCARBON LABORATORY

Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Prof. Darren F Mark Tel: +44 (0)1355 223332 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129798 (GU69867)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	8
Sample Reference	1
Material	Charcoal roundwood : Hazel
$\delta^{13}C$ relative to VPDB	-25.4 ‰
Radiocarbon Age BP	2910 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

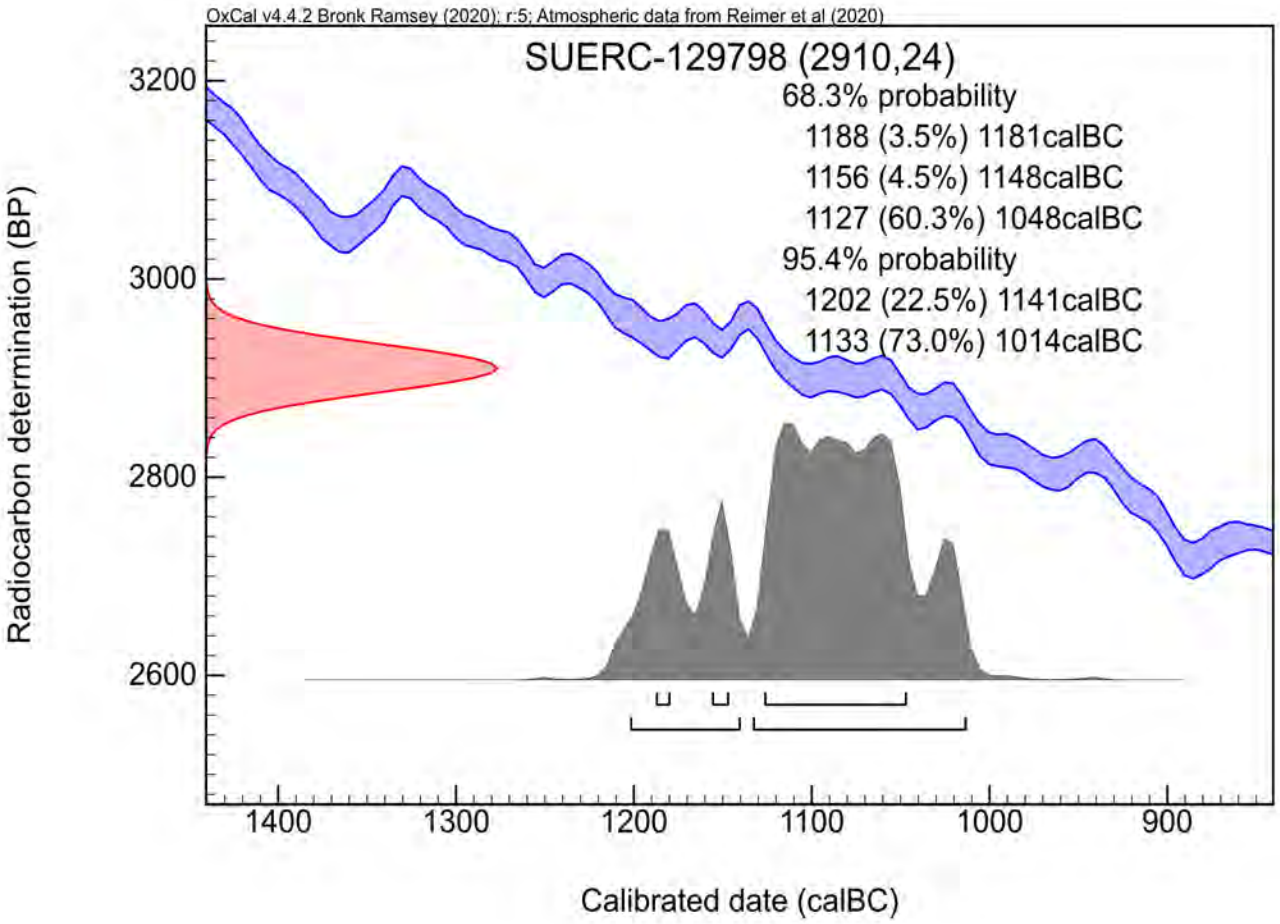
Samples with a SUERC coding are measured at the SUERC AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

SUERC | RADIOCARBON LABORATORY

Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Prof. Darren F Mark Tel: +44 (0)1355 223332 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129799 (GU69868)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	8
Sample Reference	2
Material	Charcoal : Apple/pear/hawthorn/rowan
$\delta^{13}C$ relative to VPDB	-25.5 ‰
Radiocarbon Age BP	2925 ± 23

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

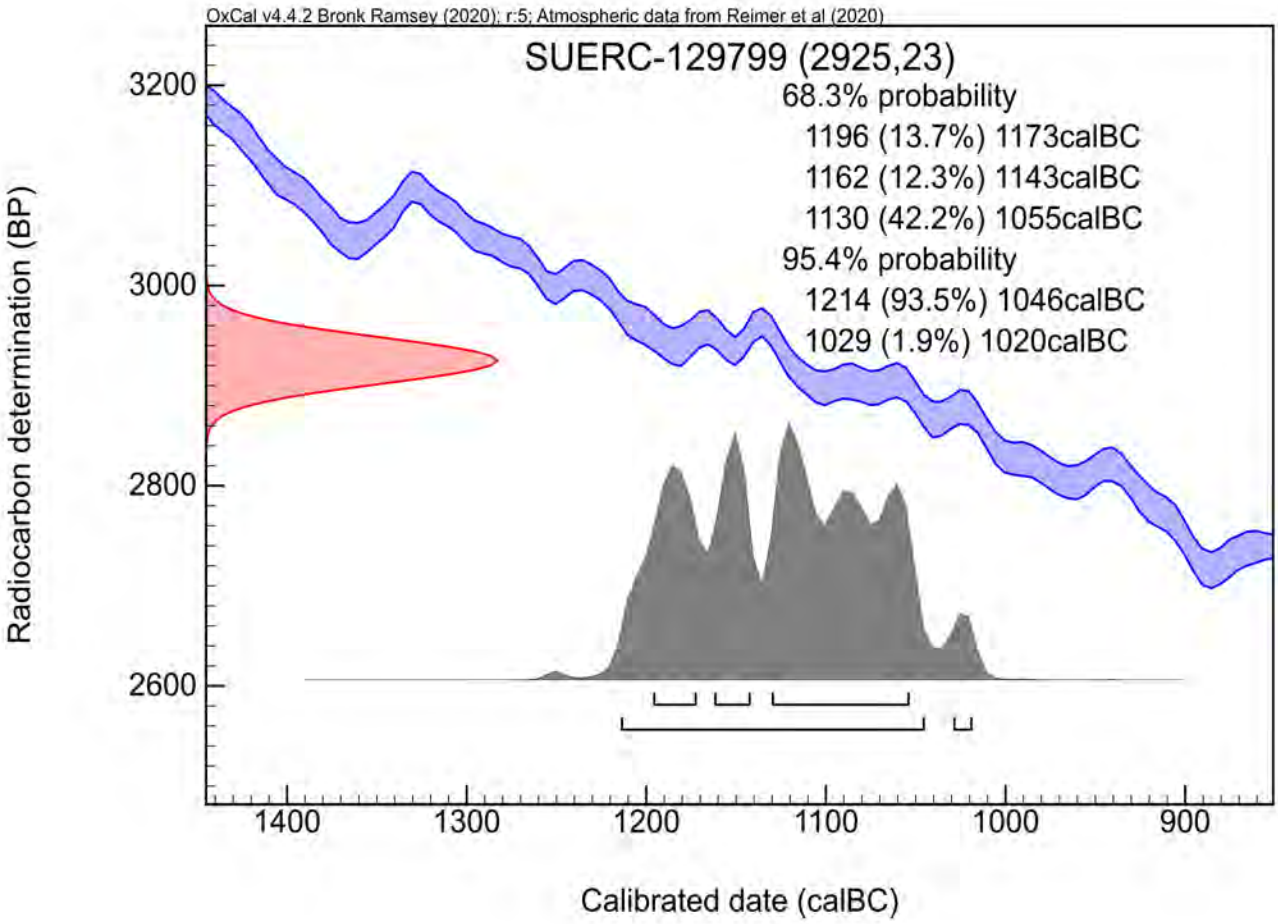
Samples with a SUERC coding are measured at the SUERC AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129800 (GU69869)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	10
Sample Reference	3
Material	Charcoal : Alder
$\delta^{13}C$ relative to VPDB	-27.7 ‰
Radiocarbon Age BP	2926 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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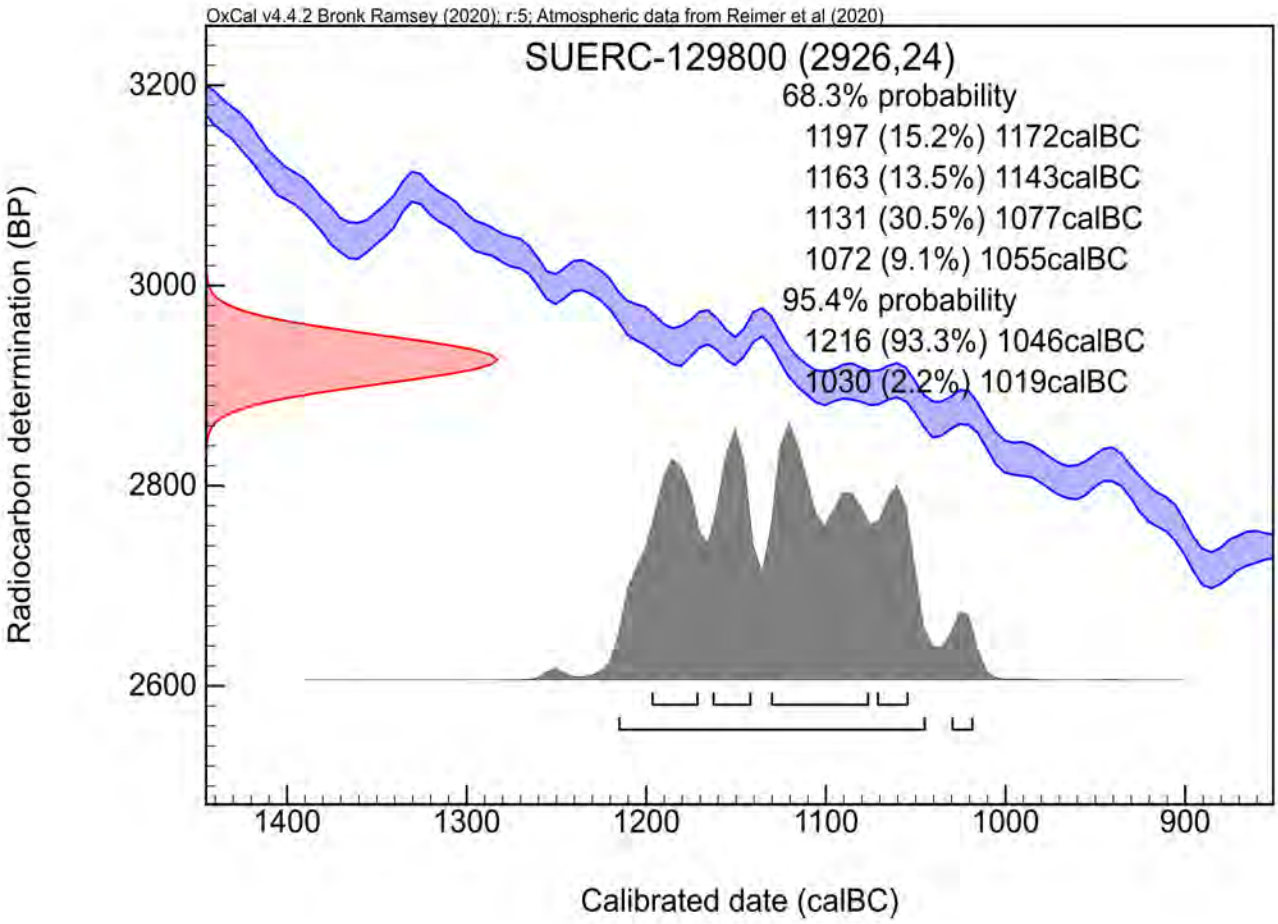

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129801 (GU69870)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	10
Sample Reference	4
Material	Charcoal roundwood : Hazel
$\delta^{13}C$ relative to VPDB	-26.5 ‰
Radiocarbon Age BP	2842 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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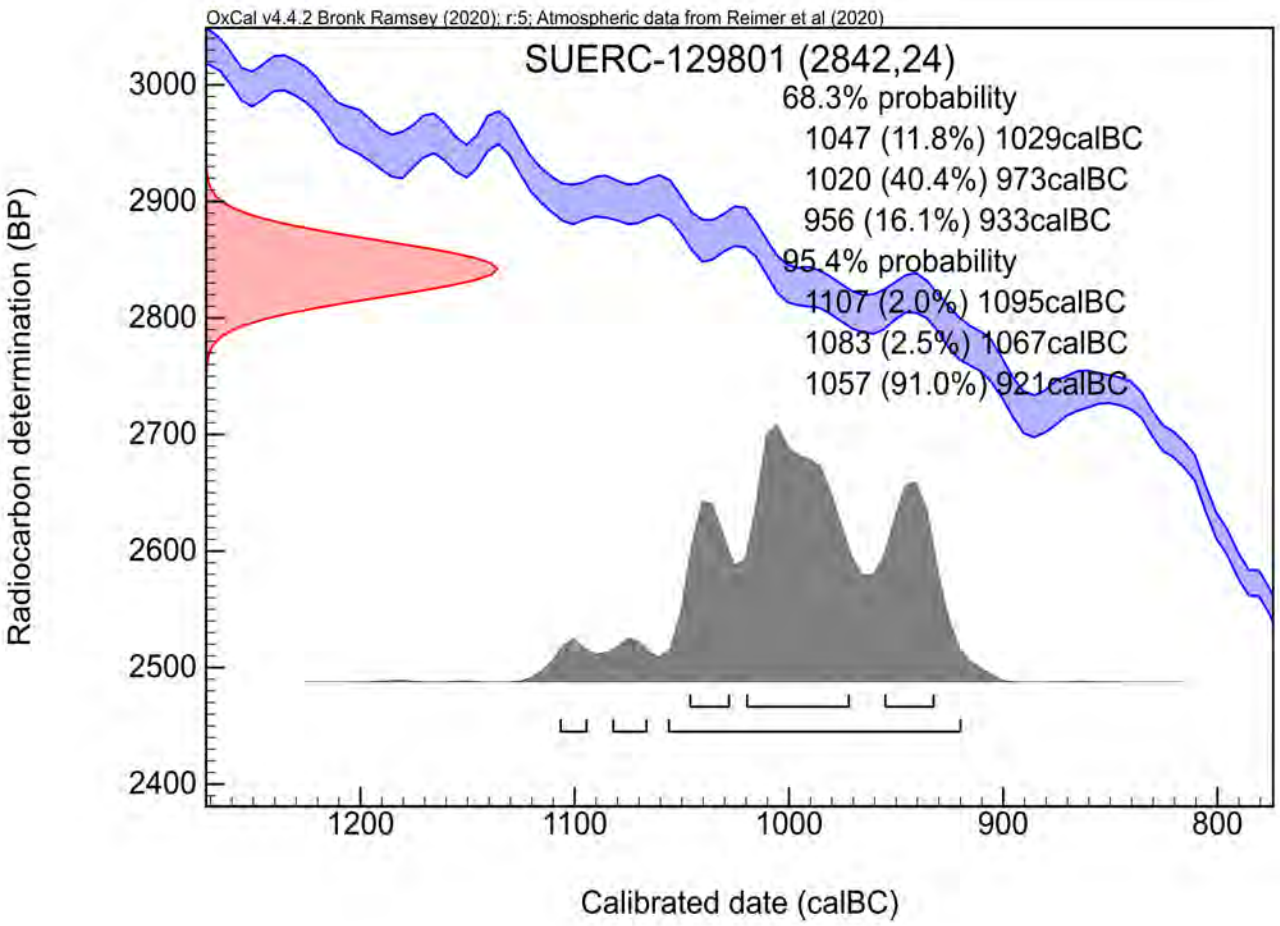

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The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129805 (GU69871)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	12
Sample Reference	5
Material	Charcoal : Birch
$\delta^{13}C$ relative to VPDB	-27.0 ‰
Radiocarbon Age BP	3003 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

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Conventional age and calibration age ranges calculated by :

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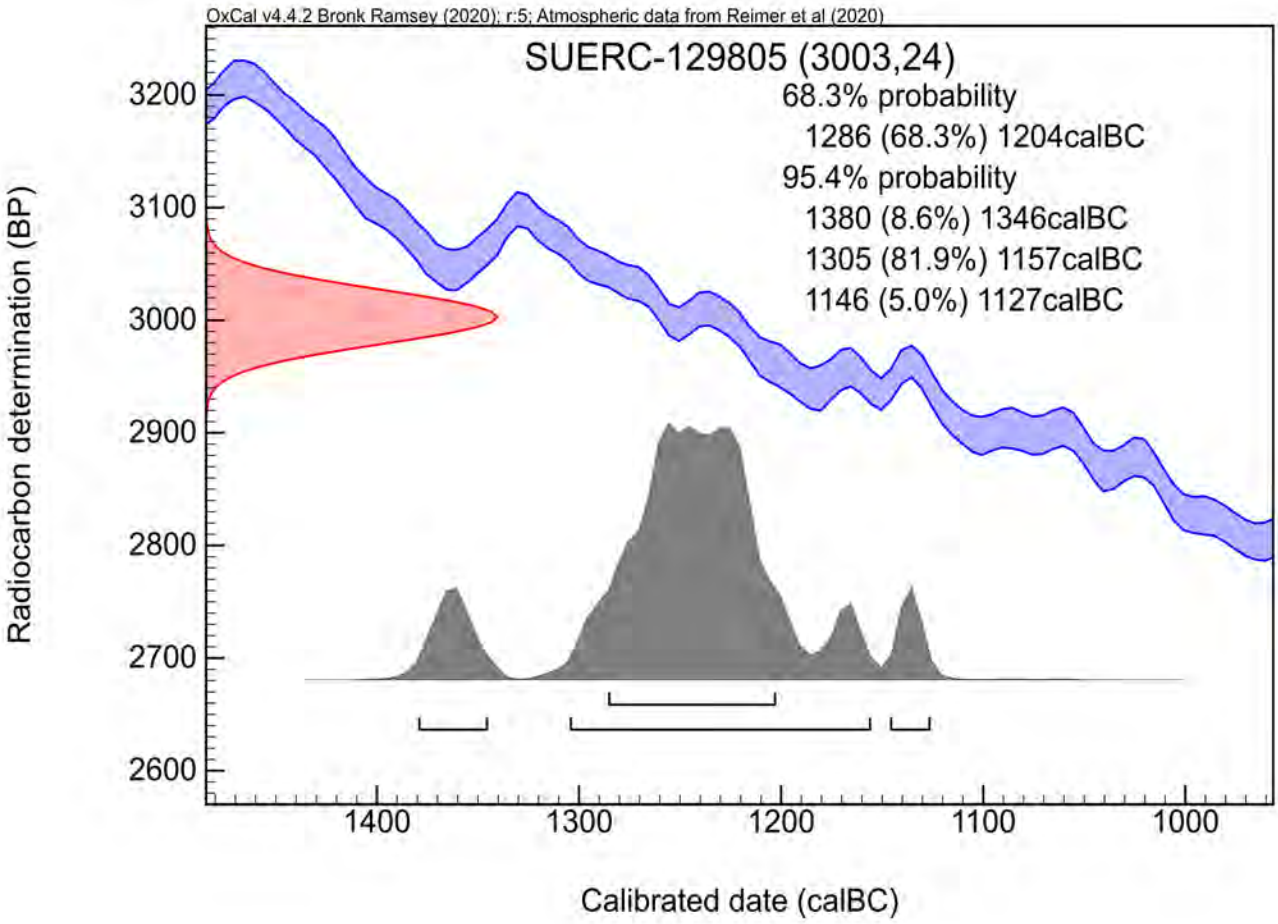

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129806 (GU69872)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	12
Sample Reference	6
Material	Charcoal : Cherry
$\delta^{13}C$ relative to VPDB	-25.7 ‰
Radiocarbon Age BP	3040 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

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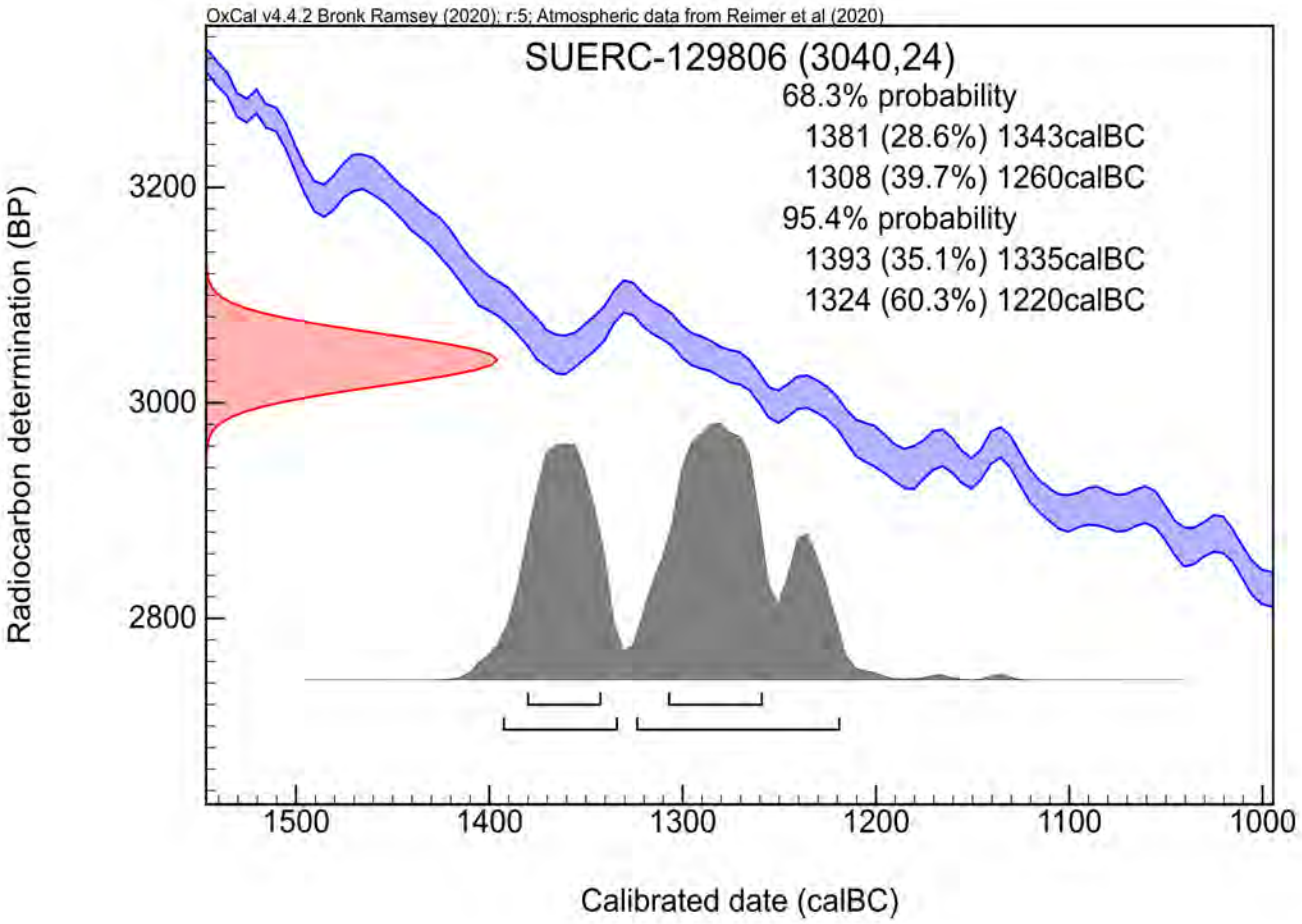

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The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129807 (GU69873)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	14
Sample Reference	7
Material	Charcoal : Alder
$\delta^{13}C$ relative to VPDB	-27.9 ‰
Radiocarbon Age BP	2912 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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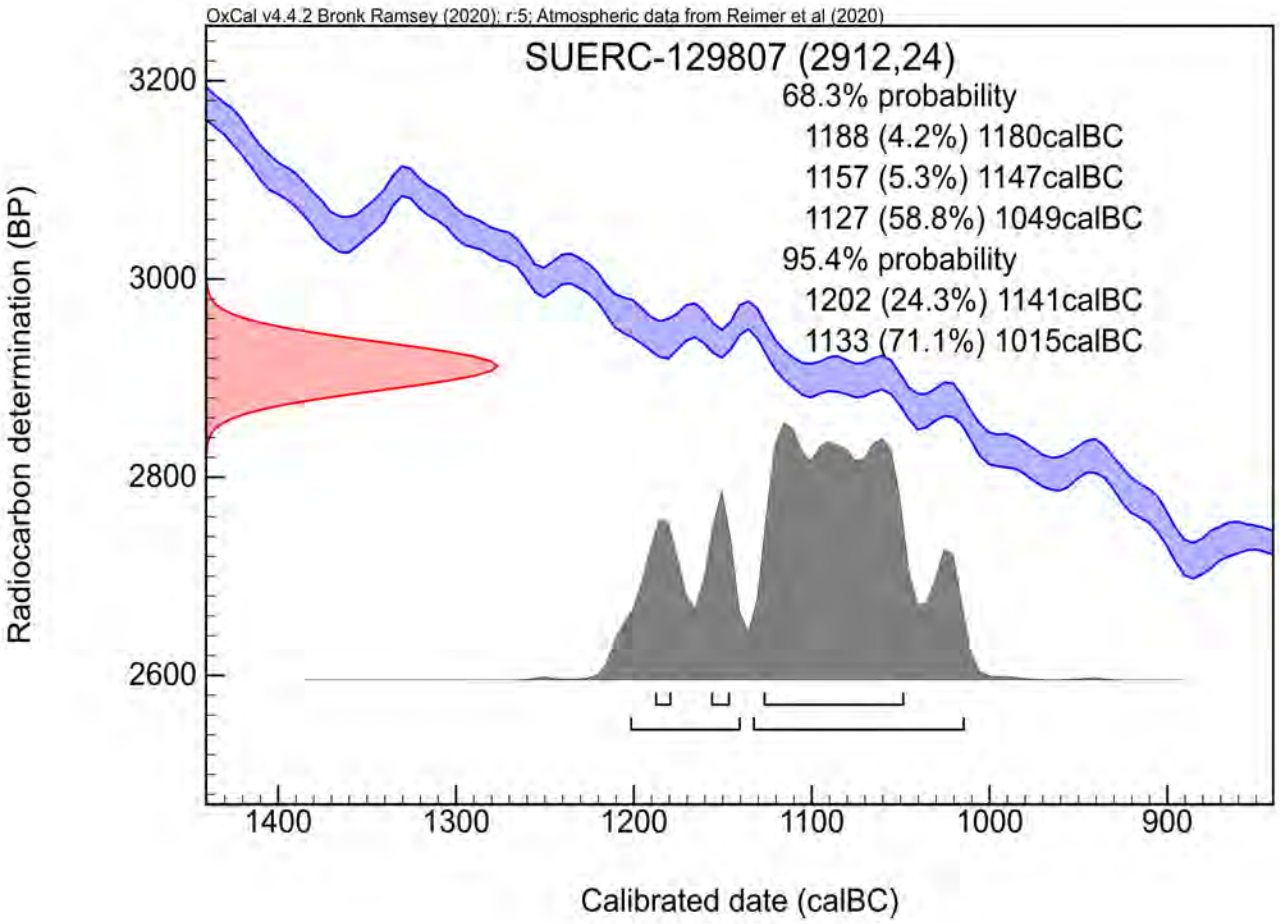

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RADIOCARBON DATING CERTIFICATE

16 December 2024

Laboratory Code	SUERC-129808 (GU69874)
Submitter	Jackaline Robertson AOC Holdings Ltd Unit A7 Edgefield Road Industrial Estate Loanhead EH20 9SY
Site Reference	HD24-015 / G2819
Context Reference	14
Sample Reference	8
Material	Charcoal roundwood : Hazel
$\delta^{13}C$ relative to VPDB	-24.0 ‰
Radiocarbon Age BP	2916 ± 23

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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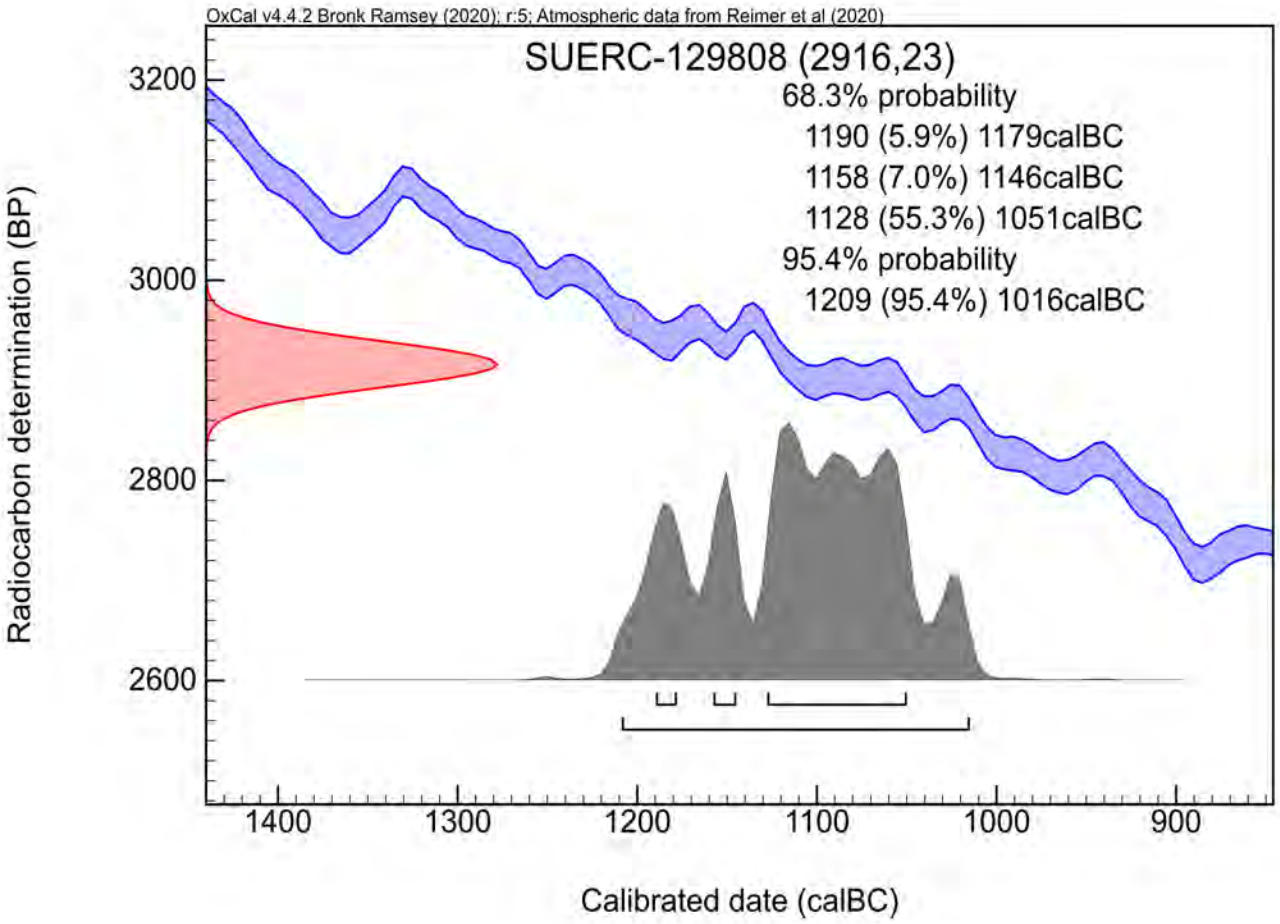

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† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

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