1546

Llanfaethlu WWTW
Anglesey

Mitigation: Analysis and Report Preparation
MAP2: Phase 4

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Llanfaethlu WWTW, Anglesey

Archaeological MAP2 Phase 4 Report (Analysis and Report Preparation)

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Report No. 1546

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CONTENTS

List of Tables:

FIGURE LIST

PLATES LIST

Plate 19: Post-ex shot showing pits [160], [154] and [156]. Scale 1.0m. (Photographic archive ref. G2482_239);

Plate 20: NE facing section through [156]. Scale 0.30m. (Photographic archive ref. G2482_233);

Plate 21: SE facing section through [154]. Scale 0.30m. (Photographic archive ref. G2482_229);

Plate 22: SW facing section through [154] and [160]. Scale 0.30m. (Photographic archive ref. G2482_230);

Plate 23: Mid-excavation shot of [162]. Scale 1.0m. (Photographic archive ref. G2482_238);

Plate 24: Post-excavation shot of [134]. Scale 1.0m. (Photographic archive ref. G2482_211);

Plate 25: NW facing section through [136]. Scale 1.0m. (Photographic archive ref. G2482_206);

Plate 26: SE facing section through [115]. (ID board incorrect). Scale 0.30m. (Photographic archive ref G2482_169);

Plate 27: SE facing section through [104]. Scale 1.0m. (Photographic archive ref. G2482_ 163);

Plate 28: SE facing section through [212]. Scale 0.30m. (Photographic archive ref. G2482_317);

Plate 29: SE facing section through [224]. Scale 0.30m. (Photographic archive ref. G2482_329);

Plate 30: Pre-excavation shot of feature group [202]. Scale 1.0 x 1.0m. (Photographic archive ref. G2482_298);

Plate 31: SSE facing section through [232]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_331);

Plate 32: Pre-excavation shot of (116). Scale 1.0m. (Photographic archive ref. G2482_174);

Plate 33: SE facing section through [215]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_319);

Plate 34: E facing section through [229]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_338);

Plate 35: SSW facing section through [235] & [255]. Scale 1.0m. (Photographic archive ref. G2482_368);

Plate 36: Post-excavation shot of [239] and [247]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_366);

Plate 37: W facing section through [239]. Scale 0.30m. (Photographic archive ref. G2482_348);

Plate 38: E facing section through [252]. Scale 1.0m. (Photographic archive ref. G2482_359);

Plate 39: Post-excavation shot of [252] and [247] (ID board incorrect). Scale 1.0m. (Photographic archive ref. G2482_359);

Plate 40: SE facing section across [62]. Scale 1.0m. (Photographic archive ref. G2482_108);

Plate 41: NE facing section through [38]. Scale 1.0m. (Photographic archive ref. G2482_058);

Plate 42: NE facing section through [56] and (40). Scale 1.0m. (Photographic archive ref. G2482_91);

Plate 43: NE facing section through [30] and [260]. Scale 1.0m. (Photographic archive ref. G2482_075);

Plate 44: View of [58] and [59]. Scale 1.0m. (Photographic archive ref. G2482_100);

Plate 45: Stones within [58] and [59]. Scale 1.0m. (Photographic archive ref. G2482_097);

Plate 46: SSW facing section through terminus of [70]. Scale 1.0m. (Photographic archive ref. G2482_136);

Plate 47: NW facing section through [28]. Scale 1.0m. (Photographic archive ref. G2482_048);

Plate 48: NW facing section through [31]. Scale 1.0m. (Photographic archive ref. G2482_054);

Plate 49: Stone lining of NW terminal of [30]. Scale 0.30m. (Photographic archive ref. G2482_073).

CRYNHODEB DAD-TECHNEGOL

Comisiynwyd Ymddiriedolaeth Archaeolegol Gwynedd gan Dwr Cymru/Welsh Water i gwblhau rhaglen o liniaru archaeolegol ar safle estyniad i waith trin dŵr gwastraff presennol yn Llanfaethlu, Ynys Môn. Roedd y safle wedi'i leoli o fewn system gaeau ôl-ganoloesol, ac o fewn ardal o archaeoleg gynhanesyddol a chanoloesol hysbys.

Mae canlyniadau radio carbon yn dangos bod y safle wedi'i feddiannau am gyfnodau yn ystod yr Oes Fesolithig Hwyr (c. 6500 – 4500 CC), yr Oes Neolithig Gynnar (4000 – 3000 CC) ac yr Oes Efydd Hwyr (1500 – 650 CC). Roedd yr annedd yn ystod y cyfnodau hyn dros dro ac ar raddfa fechan. Mae Llanfaethlu WWTW yn safle aml-gyfnod o bwys lleol a chenedlaethol yn enwedig o'i gymryd ar y cyd y safle cyfagos o Ysgol Rhyd Y Llan.

NON-TECHNICAL SUMMARY

Gwynedd Archaeological Trust was commissioned by Dwr Cymru/Welsh Water to complete a programme of archaeological mitigation on the site of an extension to an existing wastewater treatment works at Llanfaethlu, Ynys Môn. The site was located within a post-medieval field system, and within an area of significant known prehistoric and medieval archaeology.

The radiocarbon results show that the site was occupied at intervals during the Later Mesolithic (c.6500 – 4000 BC), the Earlier Neolithic (4000 – 3000 BC) and the Later Bronze Age (1500 – 650 BC). The habitation during these periods was temporary and small scale. Llanfaethlu WWTW is a locally and nationally important multi-period site especially when taken in conjunction with the nearby site of Ysgol Rhyd Y Llan.

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by *Dwr Cymru Welsh Water (DCWW)* to complete a programme of archaeological mitigation for the site of an extension to an existing wastewater treatment works (WWTW) at Llanfaethlu, Ynys Môn (NGR SH31758711; Figure 01). The site is located within an area of significant known prehistoric and medieval archaeology.

The archaeological mitigation was completed between December 2016 and February 2017 and comprised a controlled strip of an extension area for the existing WWTW that included a temporary compound and permanent access road (refer to GAT Report 1382). Two areas of presumed prehistoric activity were identified, a burnt spread with a couple of small associated postholes (sub-area A) and a larger area (sub-area B) comprising a series of pits, gullies and burnt areas. In addition a former northeast - southwest orientated post-medieval boundary (sub-area C) and a northwest - southeast orientated linear of unknown date (sub-area D) were also investigated. A total of 96 bulk soil samples and 48 artefacts were recovered from deposits across the site. Based on the results of the mitigation, recommendations were made for the post excavation assessment of the recovered ecofacts and artefacts from the site (refer to GAT Report 1427).

The project has been monitored by the Gwynedd Archaeological Planning Service (GAPS). The current phase of works has been undertaken in accordance with an approved project design submitted by GAT (cf. Appendix I).

The post-excavation work has been undertaken as a phased process in accordance with guidelines specified in Management of Archaeological Projects – MAP2 (English Heritage, 1991), and relevant guidelines from Management of Research Projects in the Historic Environment (English Heritage 2015). Five project phases are specified in MAP2 (English Heritage, 1991):

- MAP2 Phase 1: Project Planning
- MAP2 Phase 2: Fieldwork
- MAP2 Phase 3: Assessment of Potential for Analysis
- MAP2 Phase 4: Analysis and Report Preparation
- MAP2 Phase 5: Dissemination

The current report relates to the analysis, dating, report preparation and dissemination as specified by MAP2 Phases 4 and 5, and also incorporates the results from the preceding phases.

The archaeological mitigation and post-excavation has been undertaken in accordance with the following guidelines:

- English Heritage, 2015, Management of Research Projects in the Historic Environment (MoRPHE).
- English Heritage, 1991, Management of Archaeological Projects.
- English Heritage, 2011, Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation. English Heritage Publications. Swindon.
- Royal Commission on Ancient and Historic Monuments of Wales 2015 Guidelines for digital archives.
- Standard and Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 1995, rev. 2001, 2008 and 2014).
- Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2009 and 2014).
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2008 and 2014).

1.1 Aims and Objectives

The aim and objective of the post-excavation and analysis was to place the mitigation results in context, with reference to the known archaeological record and the *Research Framework for the Archaeology of Wales: Refresh of the Welsh Research Agenda for Palaeolithic & Mesolithic Archaeology 2016* (Dr Martin Bates et al) *Neolithic and Earlier Bronze Age 2017* (Dr Amelia Pannett).

2 ARCHAEOLOGICAL RESULTS

(*Reproduced from GAT Report 1382*)

2.1 Archaeological Mitigation

The extension area was 2491m^2 in size. An archaeological controlled strip was undertaken for the entire area. Deposits were reduced in spits using a tracked excavator fitted with a toothless bucket down to the glacial horizon, an archaeological horizon or 0.50m below ground level, whichever was encountered first.

All archaeological features and deposits encountered were hand cleaned and investigated in order to determine extent, function, date and stratigraphic relationships. All attendances, subsurface activity, contexts records, registers of artefacts and ecofacts were recorded using GAT pro-formas. Photographs were taken using a *Nikon D40X and D3000* set to maximum resolution in RAW format (3872 × 2592 10 effective megapixels). A total of 375 images were taken and archived under project code G2482 (reference: G2482_001 to G2482_375, cf. Appendix II); a selection of archived images are reproduced as plates. The stratigraphic matrix is reproduced in Appendix III.

Smaller features, such as pits and postholes, were subject to an initial 50% excavation, followed by a 100% excavation if they proved to be archaeological. A minimum of 10% of larger features such as linears were investigated.

The sampling strategy for bulk soil samples was based on the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant deposits were sampled. The primary aim of the sampling strategy was to recover carbonised plant remains suitable for radiocarbon dating. The samples simultaneously enabled the recovery of any small artefacts and ecofacts not recovered during excavation. A sample of 40 litres was taken from each context, or 100% from small features.

2.2 Results

For the purposes of this section, context numbers within square brackets (e.g. [05]) represent the cuts of features and context numbers within round brackets (e.g. (08)) represent deposits and fills. Feature numbers have been assigned to certain groups of contexts and these also appear in square brackets. The site is divided into four sub-areas, A to D.

2.2.1 Sub - area A

Sub - area A comprised a small cluster of prehistoric features located adjacent to the northwest boundary of the site. The features consisted of two post holes [19] and [24] associated with a spread of burnt stone and charcoal (08) which continued beyond the limit of excavation to the north east. These features are likely to represent a phase of occupational activity

2.2.2 Sub - area B

Sub - area B comprised a more extensive quantity of predominantly prehistoric features located adjacent to the northwest boundary of the site. The area was u-shaped in plan with an area in the centre left unexcavated, following consultation with DCWW and GAPS. The features are likely to represent an area of habitation, though the precise function of many of the individual features was unclear. Several of the features continued beyond the limit of excavation to the northwest (Figure 02).

Table 1: Features in Sub-area B

Context No.	Description	Part of group	Archaeological?	Provisional Date
72	Gully	N/A	Yes	Prehistoric
75	Pit	N/A	Yes	Prehistoric
78	Bioturbation	N/A	No	Unknown
80	Colluvial deposit	N/A	N/A	Unknown
95	Charcoal rich pit	N/A	Yes	Prehistoric
97	Shallow gully	[105]	Yes	Prehistoric
99	Pit	[105]	Yes	Prehistoric
104	Pit	N/A	Yes	Prehistoric
108	Pit	[105]	Yes	Prehistoric
110	Pit	N/A	Yes	Prehistoric
115	Gully	N/A	Yes	Prehistoric
116	Burnt deposit	N/A	Yes	Prehistoric
118	Burnt deposit	N/A	Yes	Prehistoric
121	Oval pit	[105]	Yes	Prehistoric
125	Small pit	[105]	Yes	Prehistoric
127	Bioturbation	[105]	No	Prehistoric
129	Small pit	N/A	Yes	Prehistoric
130	Small pit	N/A	Yes	Prehistoric
132	Bioturbation	[105]	No	Prehistoric
134	Short linear gully	N/A	Yes	Prehistoric
136	Pit	N/A	Yes	Prehistoric
140	Pit	N/A	Yes	Prehistoric
141	Pit	[105]	Yes	Prehistoric

Context No.	Description	Part of group	Archaeological?	Provisional Date
147	Pit	[105]	Yes	Prehistoric
149	Pit	[105]	Yes	Prehistoric
151	Pit	N/A	Yes	Unknown
154	Pit	N/A	Yes	Prehistoric
156	Pit	N/A	Yes	Prehistoric
160	Pit	N/A	Yes	Prehistoric
162	Pit	N/A	Yes	Unknown
165	Truncated pit	N/A	Yes	Prehistoric
169	Bioturbation	[183]	No	Unknown
171	Pit	N/A	Yes	Prehistoric
177	Bioturbation	[183]	No	Unknown
178	Pit/posthole	[183]	Yes	Prehistoric
179	Bioturbation	[183]	No	Unknown
181	Bioturbation	[183]	No	Unknown
184	Bioturbation	N/A	No	Unknown
191	Bioturbation	N/A	No	Unknown
195	Bioturbation	N/A	No	Unknown
197	Bioturbation	N/A	No	Unknown
199	Bioturbation	N/A	No	Unknown
204	Pit	N/A	Yes	Post-Medieval
209	Bioturbation	N/A	No	Unknown
212	Pit	N/A	Yes	Prehistoric
215	Curvilinear ditch	[202]	Yes	Prehistoric
218	Charcoal rich deposit	N/A	Yes	Prehistoric
220	Bioturbation	N/A	No	Unknown
222	Curvilinear ditch	[202]	Yes	Prehistoric
223	Pit	N/A	Yes	Prehistoric
224	Pit	N/A	Yes	Prehistoric
226	Curvilinear ditch	[202]	Yes	Prehistoric
229	Curvilinear ditch	[202]	Yes	Prehistoric
232	Hearth	N/A	Yes	Prehistoric
235	Linear	N/A	Yes	Prehistoric
237	Pit	N/A	Yes	Prehistoric
239	Linear	N/A	Yes	Prehistoric
242	Bioturbation	N/A	?	Unknown
247	Posthole	N/A	Yes	Prehistoric
249	Bioturbation	N/A	No	Unknown
252	Pit	N/A	Yes	Prehistoric
255	Linear	N/A	Yes	Prehistoric
60	Bioturbation	N/A	No	Unknown
62	Post-medieval ditch	N/A	Yes	Post-Medieval

At the centre of the area lay a pair of fairly shallow curvilinear features [229]/[226] and [222]/[215] containing charcoal rich deposits and encircling a central cut hearth [232]. Several additional short gullies were found ([239], [115], [134] and [072]), scattered across the sub-area.

A total of 20 pits of varying shape and size were identified across this sub-area, many of which were discreet features, however some occurred in intercutting clusters, for example group no. [105] which comprised five intercutting pits and a short gully cut within areas of bioturbation.

Six areas of definite bioturbation were also identified within the sub-area these were very irregular with diffuse interfaces. Although apparently not directly archaeological in nature some of these features were found to contain prehistoric artefacts. These features likely represent clearance prior to the occupation of the site as well as perhaps regrowth following abandonment; as such these features hold relevance to the interpretation of the site.

A linear ditch [62] was identified extending 20.7m southeast from the northwest limit of the work area. This feature was shown in section to be cut through the subsoil, indicating a relatively modern date.

2.2.3 Sub - area C

The remnants of a former northeast - southwest orientated field boundary were identified subdividing the work area; this feature may be depicted on the Llanfaethly Tithe Map of 1840 as well as the First to Third edition Ordnance Survey maps, but is no longer visible at surface level today. Following the controlled strip, remnants of this feature were seen sporadically across the entire width of the work area (40m), and it continued beyond the limit of excavation at either end. The feature comprised a mixture of parallel low banks and ditches.

2.2.4 Sub - area D

A northwest - southeast orientated linear ditch (feature no. [30]) was identified that extended diagonally across much of the work area. This feature was 40.5m long and was targeted by five hand excavated 1.0m wide slots. It became progressively narrower and shallower as it progressed northwest and had a variable profile. This feature was cut into the natural and was sealed by the subsoil. The date of this feature is unknown.

2.3 MAP2 Phase 3 Assessment of Potential for Analysis

(*Reproduced from GAT Report 1427*)

An assessment of the potential for analysis was conducted on the lithic and ceramic artefacts as well as of the charred macroplant and charcoal recovered from site during excavation as part of the archaeological mitigation and flotation/wet sieving of the bulk samples.

2.3.1 Lithic Artefact Assessment

The flint and chert artefacts were assessed by George Smith, a specialist working on behalf of GAT. The lithics were assessed according to their form and function and the details of this are given in the table below:

Table 2: Lithic Artefacts Register

Find No.	Context No.	Sub Area	Context type	Material	Description
02	(11)	C	Sole fill of post-medieval ditch [10].	Chert	Possible chert debitage
03	(08)	A	Burnt deposit.	Chert	Possible chert debitage x10.
04	(08)	A	Burnt deposit.	Flint	Orange flint flake.
05	(08)	A	Burnt deposit.	Flint	Half beach pebble - Possible scraper
06	(08)	A	Burnt deposit.	Chert	Scraper
08	(08)	A	Burnt deposit.	Chert	Chert debitage X2.
09	(01)	N/A	Topsoil	Chert	Possible chert scrapper?
10	(26)	A	Deposit (probably natural)	Chert	Chert debitage X26.
11	(39)	C	Sole fill of NE/SW post-medieval linear [38].	Flint	Worked flint - Blade section? Orange - Red in colour.
12	(40)	C	Upper fill of post-medieval ditch [56].	Flint	Worked flint - Blade section? Orange -red
19	Unstratified	N/A	N/A	Flint	Flint flake X2
20	(57)	C	Fill of post-medieval ditch [56].	Flint	Debitage? X3
21	(54)	C	Fill of post-medieval ditch [53].	Flint	Flint debitage X1 Red.
22	(79)	B	Charcoal rich fill of bioturbation [78].	Flint	Blue/Grey flint scraper.
24	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Orange-brown scraper
26	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	Chert debitage
28	(216)	B	Sole fill of curvilinear ditch	Flint	Possible blade

Find No.	Context No.	Sub Area	Context type	Material	Description
			[215].		
29	(216)	B	Sole fill of curvilinear ditch [215].	Chert	Debitage
30	Unstratified	N/A	N/A	Chert	Debitage
31	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Flint flake
32	(118)	B	Burnt deposit.	Flint	Reworked & discarded blade
33	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	Possible chert debitage
34	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Possible scrapper
35	(116)	B	Burnt deposit.	Flint	Flint flake - Brown-grey.
36	(135)	B	Uppermost fill of gully [134].	Chert	2X black chert flakes
37	(135)	B	Uppermost fill of gully [134].	Chert	1X Struck black chert - Flake
38	(142)	B	Fill of pit [141]	Flint	Blue-grey struck flint.
39	(152)	B	Sole fill of small pit [151].	Flint	Light grey blue struck flint.
40	(159)	B	Uppermost fill of pit [156].	Flint	Grey -orange flint flake.
41	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Pink flint flake.
42	(233)	B	Fill of possible hearth	Flint	Small flint core.
43	(196)	B	Sole fill of bioturbation [195].	Flint	Pale blue grey, Flake - Possible broken blade.
44	(238)	B	Sole fill of pit [237].	Flint	Pale blue-grey flake
45	(219)	B	Fill of curvilinear ditch terminus [222].	Flint	Possible flint core
46	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Flint flake.
47	(240)	B	Secondary fill of linear [239].	Chert	Chert -Possible core.
49	(08)	A	Burnt deposit.	Flint	Flint flake.
50	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale green-orange flint flake with cortex
51	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale orange flint flake with cortex
52	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale grey flint flake with cortex
53	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	3 pieces of struck chert
54	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Struck grey flint.
55	(135)	B	Uppermost fill of gully [134].	Chert	black chert flake

2.3.2 Results of the Specialist Assessment

Taken from George Smith, Preliminary Lithics Assessment – GAT Report 1427 (Appendix IV)

The assessment determined that there is a clear divide in the lithic assemblage between Sub - areas A and B. The pieces from Sub-area A are few in number and not diagnostic but are predominantly broad flakes of chert extracted from the burnt spread (08), which may be the remnants of a midden. The chert is of poor flaking quality in comparison to the beach flint. The continued rise of sea levels after the end of the Last Ice Age which reached a maximum during the Early Neolithic period may have made the beach flint inaccessible and mitigated a change to using chert instead.

In Sub - area B the assemblage recovered from hand excavation and more notably from the residue sorting of the ecofact samples has a bias toward flint and shows evidence of microlithic point manufacture. The lithic assemblage in this part of the site is suggestive of Later or Final Mesolithic date but given that the period of Mesolithic/Neolithic transition has yet to be defined or identified in terms of lithic assemblage or type or location of activity (Prehistoric Society 1999; IFA Wales/Cymru) this observation has to be provisional until radiocarbon dates are available. If radiocarbon dating does confirm that this is a Later Mesolithic site then it is of great significance as:

- Sub-area B is an area of habitation;
- Its proximity to and possible relation with the more extensive Early and Middle Neolithic activity area 300m to the west (Rees and Jones 2015-16); and
- Mesolithic activity on Ynys Môn and in north west Wales has been concentrated along the coast, identified through surface collections of lithics that suggest temporary activity or camp sites.

It should be noted though the comparative paucity of lithic evidence from the majority of features in Sub - area B which indicates a relative lack of flint working. In addition, there were no concentration of flint within specific features that suggests the artefacts were incorporated within the fills by chance rather than deliberate deposition.

No further work on the lithic assemblage is recommended.

2.4 Ceramic Artefact Assessment

2.4.1 Introduction

The ceramic artefacts were initially examined by Frances Lynch and further in house assessment was undertaken by GAT with reference to comparative sites, such as, Parc Bryn Cegin (Lynch, in Kenny and Davidson 2006, 3-25). The artefacts were examined and described in terms of evidence of form, function, provenance and date. Those fragments too small to present defining characteristics are not discussed in detail. The ceramic artefacts recovered from the excavation are detailed in the table below.

Table 3: Ceramic Artefact Register

Finds No.	Context No.	Sub Area	Context type	Description
07	(08)	A	Burnt deposit.	Prehistoric pot sherds x4 & broken fragments.
16	(257)	B	Colluvial deposit	Possible pot fragments x4
17	(257)	B	Colluvial deposit	Possible pot fragment
25	(153)	B	Colluvial deposit overlying area of prehistoric activity	Prehistoric pot x3.
23	(89)	B	Fill of shallow pit [108].	Prehistoric pot.
15	(35)	N/A	Fill of shallow pit [34].	Very badly preserved Pot fragments
27	Unstratified	N/A	N/A	Small Prehistoric pot fragment.
14	(33)	D	Primary fill of ditch [31]. [Slot 2.]	Small pot sherd.
48	(248)	B	Sole fill of posthole [247].	Sherds of pot x2.

2.4.2 Results of the Ceramic Assessment

All of the pottery sherds recovered were small and retained only limited diagnostic features. Five of the pottery sherds were of sufficient size to be discussed in terms of their characteristics and these are described below. Two of these were from the same context (Finds 16 and 17) and are considered likely to be from the same original vessel. The remaining pottery sherds were considered too small and fragmentary to merit detailed consideration.

The assessment determined that the sherds were of broadly Neolithic date, being of limited value in terms of their datable characteristics and morphology. Most of the sherds are very small, heavily abraded and undiagnostic, suggesting that they are essentially the remains of domestic rubbish.

No further work on the pottery is recommended, but the ceramic artefacts will be retained by GAT, or offered to Oriel Ynys Môn as part of the archiving process.

2.5 Ecofact Assessment Report (AOC Report No 24185) (Appendix V)

2.5.1 Introduction

A total of 94 flots were sent to AOC Archaeology Group to be assessed by Jackaline Robertson. The aim of the assessment was to establish the potential of the environmental evidence to contribute to understanding the function of the features uncovered during the archaeological mitigation as well as establishing the chronology of the site through radiocarbon dating.

2.5.2 Results

The carbonised macroplant assemblage totalled 424 remains and was recovered from 57 flots. The assemblage was a combination of cultivated cereal crops, wild food remains, woodland and weed taxa. The most common variety was hazelnut shells with 340 fragments present in 48 contexts. The feature with the greatest concentration of hazelnut shells with 108 shell fragments recovered was from pit [178], located at the centre of Sub-area B. In addition, 12 cereal caryopses and one glume were recovered from eight contexts. This included one barley caryopsis (Hordeum sp) and two wheat caryopses (Triticum sp). The cereal remains were scattered throughout the site in small numbers with no evidence of deliberate or selective disposal.

The charcoal assemblage totalled 264.9g and fragments suitable for species identification were recovered from 71 contexts. It was noted that some of the charcoal has been vitrified which may make further analysis of affected fragments difficult. The largest single quantity of charcoal of 77.0g was retrieved from fill (106) of pit [104], while key features at the centre of the centre of the area of habitation, notably the gullies [97], [222] and [226] also produced good quantities of charcoal.

2.5.3 Conclusion and Recommendations

It was recommended that the macroplant assemblage was fully identified and does not require any further work.

Both hazelnut shell and charcoal provide good targets for radiocarbon dating. The charcoal fragments should be identified to species to allow selection of the most suitable fragments for dating. Once contexts have been selected for dating a single fragment of charcoal should be identified to species from those samples.

If charred macroplant was selected for dating it was recommended that hazelnut shell be ranked above the cereal caryopses. This is because the cereal caryopses, given their generally poor condition and low numbers, may not contain sufficient carbon.

2.6 Ecofact Analysis: Radiocarbon Dating

Based on the results of the assessment of the artefactual and ecofactual evidence recovered from site and on recommendations by AOC Archaeology 10 key features from Sub - areas A and B were submitted to Scottish Universities Environmental Research Centre (SUERC) for radiocarbon dating. The submitted samples are listed in Table 4.

Table 4: Samples Submitted for Radiocarbon Dating

Sample No.	Context No.	Pottery	Flint	Chert	Charcoal	Macroplant
1	8	Y	Y	Y	Y	Y
3	25	N	Y	N	Y	Y
18	77	N	Y	N	Y	Y
22	100	N	Y	Y	Y	Y
32	114	N	N	N	Y	Y
86	234	N	Y	N	Y	N
61	188	N	Y	N	Y	Y
81	219	N	Y	N	Y	Y
87	227	N	N	N	Y	Y
100	254	N	N	N	Y	Y

These contexts were chosen ahead of other adjacent features or fills for radiocarbon dating as, for example, fill (77) from the pit [75] which is very similar to fill (74) from the adjacent gully [72], if they are contemporary then one feature/fill will date the other and in affect duplicate samples would not be beneficial in such circumstances. The sequence in which the fills of both features were deposited would suggest they were backfilled simultaneously and a radiocarbon date from one such fill would date this activity for both features. The same argument can be applied to other adjacent features, such as, [239] and [252] (Figure 03).

Other key factors involved in the sampling strategy included targeting key features, such as, the basal fill (234) of the hearth [232] located at the centre of Sub - area B along with the curvilinear features [229/226] and [222/215] that flanked it. The radiocarbon dates should underscore important stratigraphical relationships, for example, between the deposit (08) and posthole [24] in Sub-area A (Figure 04).

The features chosen for radiocarbon dating all have charcoal or charred macroplant present within their fills to aid the process and the majority of the fills chosen also produced flint, chert or pottery. By targeting these fills it was hoped that the radiocarbon dates would corroborate the artefactual and ecofactual evidence to confirm that this was a site of habitation during the Late Mesolithic and Early Neolithic.

A copy of the results is included in Appendix VI and summarised below.

The charred material was calibrated at SUERC's laboratory following the age ranges determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4). The radiocarbon date (^{14}C) is quoted in conventional years BP, before 1950 AD. The results as follows:

Table 5: Radiocarbon Date Results

Lab No	Context No	Sample No	Material / species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date 68.2%	Calibrated date 95.4%
SUERC-87250 (GU51569)	08	01	Charcoal : Birch	2721 ± 24	-27.5 ‰	895 (68.2%) 835calBC	911 (95.4%) 816calBC
SUERC-87254 (GU51570)	25	03	Charcoal : Birch	2715 ± 24	-25.6 ‰	895 (35.2%) 864calBC 857 (33.0%) 830calBC	907 (95.4%) 814calBC
SUERC-87255 (GU51571)	77	18	Charcoal : Hazel	5853 ± 23	-25.9 ‰	4769 (13.9%) 4753calBC 4745 (54.3%) 4694calBC	4791 (95.1%) 4625calBC 4628 (0.3%) 4625calBC
SUERC-87256 (GU51572)	100	22	Nut shell : Hazel	6605 ± 25	-25.4 ‰	5610 (17.0%) 5592calBC 5564 (51.2%) 5516calBC	5616 (24.9%) 5582calBC 5575 (70.5%) 5488calBC
SUERC-87257 (GU51573)	114	32	Nut shell : Hazel	5796 ± 22	-30.3 ‰	4696 (68.2%) 4615calBC	4716 (93.8%) 4557calBC 4567 (1.6%) 4557calBC
SUERC-87258 (GU51574)	188	61	Nut shell : Hazel	6937 ± 23	-26.3 ‰	5844 (68.2%) 5769calBC	5880 (95.4%) 5745calBC
SUERC-87259 (GU51575)	219	81	Nut shell : Hazel	5003 ± 22	-23.6 ‰	3891 (4.4%) 3885calBC 3798 (42.8%)	3928 (19.1%) 3877calBC 3805 (76.3%)

Lab No	Context No	Sample No	Material / species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date 68.2%	Calibrated date 95.4%
						3761calBC 3742 (21.0%) 3712calBC	3708calBC
SUERC-87260 (GU51576)	234	86	Charcoal : Alder	5016 ± 23	-27.2 ‰	3925 (31.2%) 3878calBC 3804 (34.9%) 3765calBC 3722 (2.1%) 3718calBC	3939 (40.0%) 3869calBC 3813 (55.4%) 3711calBC
SUERC-87264 (GU51577)	227	87	Nut shell : Hazel	5023 ± 24	-26.9 ‰	3932 (41.3%) 3876calBC 3806 (26.9%) 3772calBC	3943 (50.2%) 3857calBC 3838 (0.3%) 3836calBC 3822 (44.8%) 3712calBC
SUERC-87265 (GU51578)	254	100	Nut shell : Hazel	5039 ± 25	-24.7 ‰	3937 (51.7%) 3871calBC 3812 (16.5%) 3788calBC	3947 (95.4%) 3772calBC

The radiocarbon results identify that the site was occupied during three distinct periods of prehistory, the Later Mesolithic (c.6500 – 4000 BC), the Earlier Neolithic (4000 – 3000 BC) and the Later Bronze Age (1500 – 650 BC). The Mesolithic and Neolithic dates are concentrated within Sub – area B while the Later Bronze Age dates are exclusively from Sub – area A.

The close grouping of the features in Sub – area B within a relatively confined space had implied that there was some broad contemporaneity or at least a degree of continuity within this corner of the site but this supposition is not supported by the radiocarbon results. There was not a continuous period of occupation across the site or within Sub – area B, as the radiocarbon results have revealed that there were considerable gaps between the phases of occupation; potentially of several hundred years. Even within the Later Mesolithic dates, there are two distinct concentrations of activity of 5900 – 5500 cal. BC and 4800 – 4600 cal.

BC. The Earlier Neolithic dates, while closer to the start of this period at 3900 – 3700 cal. BC, this activity occurred around seven hundred years after the last use of the site during the preceding Later Mesolithic period.

The multiple phases of activity across the site, including within Sub – area B can be asserted with confidence as the ecofactual material chosen for radiocarbon dating were from species (such as hazelnut shell and alder) that can be demonstrated to have had a short life and/or roundwood from the tops of fast growing trees. This material was sourced from secure contexts, typically primary fills, within a well understood site matrix. It was also sent to a laboratory (SUERC) with modern AMS radiocarbon dating machines.

2.7 MAP2 Phase 4: Environmental Analysis Report (AOC Project no: 24185 – Appendix VII)

2.7.1 Introduction

A total of 69 flots was submitted for environmental analysis from GAT, from the archaeological mitigation at DCWW Llanfaethlu Waste Water Treatment Works. The samples were collected from a series of prehistoric pits, postholes, ditches, hearths, gullies, burnt deposits, curvilinear and linear features. A selection of the contexts were dated to the Later Mesolithic, Earlier Neolithic and Later Bronze Age. The environmental analysis focused on the ecofactual material from prehistoric contexts.

The ecofact remains were composed of small quantities of carbonised macroplant and charcoal. The environmental analysis report sets out to understand the function of the archaeological features and to identify any chronological patterns in the exploitation of plants at this multi-phase prehistoric site.

2.7.2 Results

The macroplant assemblage was comprised of cultivated cereal crops, wild food remains, woodland and weed taxa. Of this assemblage the evidence for cultivated cereal crops was limited to 12 cereal caryopses, the majority of which were recovered from the Later Bronze Age contexts of Sub – area A, with only one example being noted from a Neolithic context from fill (254) of pit [252]. Cereal identification was limited to one barley caryopsis (Hordeum sp), one wheat caryopses and one glume (Triticum sp). The remaining ten caryopses could not be identified further due to poor preservation.

The most frequent example of wood food remains were hazelnut shell (*Corylus avellana* L) with 340 shell fragments present within 38 contexts. They were identified in contexts exclusively from Sub – area B, with the largest concentration being recovered from fill (175) of the pit [178] located at the centre of the area excavated.

The charcoal assemblage consisted of 495 fragments identified to species, with the most common being oak (56%) and hazel (30%). The assemblage was recovered from 51 contexts.

2.7.3 Conclusions

The report determined that the small accumulation of cereal caryopses and charcoal in the contexts of Sub – area A represented re-deposited domestic food and fuel waste. While those features that could be assigned to the Mesolithic or Neolithic (through a combination of stratigraphy, diagnostic artefacts and radiocarbon dates) in Sub – area B also broadly represented evidence for the deposition of domestic food waste and fuel debris. Several of the features within this area of the excavation also had evidence of small discrete structural elements such as the remains of a stake or post, burnt in-situ, represented by a concentration of oak or hazel charcoal. This evidence for structural remains was present, intermittently across Sub – area B.

The AOC Archaeology report determined that Llanfaethlu WWTW was a multi-phase prehistoric site which was periodically in use during the Later Mesolithic, Earlier Neolithic and Later Bronze Age. While the ecofact assemblage is small it does provide some interesting information concerning how plants were exploited at this site. The ecofact evidence suggests that the Mesolithic community occupied this site for short periods of time and exploited the surrounding landscape to provide wood for fuel and nuts and berries for food. The presence of cereal caryopses in the Neolithic and Bronze Age indicates that communities became more settled as arable land increased and cereal crops were introduced to the diet. The most noticeable change in the occupation of this site was the absence of hazel from any of the Bronze Age features. This could be indicative of changes within the local environment or a reflection of cultural choice in choosing which species are selected for food and fuel. Both the macroplant and charcoal assemblages demonstrate that during the prehistoric period this was a domestic settlement subject to social and agricultural changes as communities became less mobile in the later phases of occupation. This would have affected the surrounding environment as more arable land was brought under cultivation to meet increasing demand for cultivated crops.

2.8 MAP2 Phase 4: Lithics Report (Appendix VIII)

2.8.1 Introduction

This report is an amendment and update of the assessment of the lithic assemblage undertaken in 2018 and takes into account the additional information provided by the radiocarbon dating and the AOC Archaeology Environmental Analysis Report.

2.8.2 Discussion

Sub – area A produced a limited assemblage none of which were diagnostic of date or function but there is a clear contrast with the material from Sub - area B. Chert is the main material and the few flakes area very broad, indicating that the objects from Sub - areas A and B belong to different periods of activity, despite their proximity. All but one of the pieces from Sub - area A came from (08) and so is closely contextually related to that spread, perhaps an eroded midden. Hazel wood charcoal samples from that spread and from a closely related post-hole were radiocarbon dated. These produced statistically identical dates within c. 910-810 cal. BC, the Later Bronze Age. Charred cereal remains were also identified supporting the idea that the main spread (08) was part of a midden. Although the lithic objects were just waste pieces it is useful to record that some lithic material appeared to have been used in this period. The use of just chert, an easily available local material suggests it was being used quite casually, perhaps just utilising flakes, without producing specific tools.

Sub – area B comprised a discrete group of features regarded provisionally as an area of settlement activity with some probable structural features, post-holes, slots and gullies. The lithic assemblage was found thinly but widely scattered through most of the numerous pits and linear features. The larger proportion of the lithic material, numerically, and the only diagnostic pieces came from sieving of soil samples, which highlights the importance of soil sampling to provide a proper understanding of the activities present. The three diagnostic pieces are all of Later Mesolithic type. Despite the amount of activity represented there was no pottery from any of these features to suggest Neolithic or more recent activity.

Radiocarbon dates were taken from a selection of 8 features across Sub – area B and if taken as representative, indicated three periods of activity, first, within c. 5900-5500 cal. BC, second, within c. 4800-4600 cal. BC, and third within c. 3900-3700 cal. BC. Those diagnostic lithic objects present would fit best with the earlier two of those periods, that is Later Mesolithic and in fact two of those objects came from pits ([99] and [178]) that did produce dates within that period. Pit [178] also produced the largest number of pieces of hazel

nutshell of all the features. The third and later period of dated activity belongs to the Earlier Neolithic. The dated pits were well scattered, so there was it appears that the areas of different periods of activity overlapped. However, the features with Later Mesolithic dates and objects lie predominantly to the east side of the area investigated while the features with Earlier Neolithic dates come from the west side where there are somewhat different features, including three ditches, one of which is curvilinear and surrounds a hearth, and perhaps represents a structure.

The limited Mesolithic lithic assemblage recovered from Sub – area B, in particular the sieved samples from pits [99] and [154], both of which produced microlithic points, would imply the production of microliths on the site. This has to be countered with the fact that such evidence was not forthcoming from the other pits. Overall the assemblage does not show a preponderance of narrow blade or even blade manufacture, with only two out of six complete flakes from the hand-collected objects of blade proportions and only three of nine complete flakes of the sieved material. Narrow blade points of lanceolate or convex backed shape form a typical part of the Later or Final Mesolithic period (Jacobi 1980).

3 CONCLUSIONS

3.1 Discussion

The archaeological mitigation undertaken by GAT during groundworks for an extension to an existing wastewater treatment works (WWTW) at Llanfaethlu, Ynys Môn uncovered two areas of presumed prehistoric activity at the northern and western limits of the controlled strip. Sub – area A comprised a burnt spread with a couple of small associated postholes and to the immediate west Sub – area B consisted of a series of pits, gullies and burnt areas. The subsequent post-excavation programme of assessment and analysis of the ecofactual and artefactual assemblage of Llanfaethlu WWTW has confirmed that this is a multi-period site with occupation during the Mesolithic, Neolithic and Bronze Age.

The assessment of lithic and ecofact assemblage recovered from Llanfaethlu WWTW provided more insight about this area of prehistoric habitation, and indicated that Sub – areas A and B had been occupied during the Later Mesolithic and Earlier Neolithic. The radiocarbon results along with the analysis of the lithics and of the carbonised macroplant and charcoal remains have refined our understanding of the nature of the site and the periods of activity even further.

The radiocarbon results unequivocally show that the site was occupied at intervals during the Later Mesolithic (c.6500 – 4000 BC), the Earlier Neolithic (4000 – 3000 BC) and the Later Bronze Age (1500 – 650 BC). Contrary to the assessment of the artefacts recovered from site during excavation and the processing of the bulk soil samples, the radiocarbon results would seem to indicate distinct periods of activity, separated by hundreds (in certain cases thousands) of years within a comparatively small area.

The assessment of the artefact assemblage, in particular the flints, recovered from Sub – area B, implied activity during the Later Mesolithic/Earlier Neolithic, potentially the Mesolithic/Neolithic transition (GAT Report 1427). The radiocarbon dates though returned results that suggest three specific periods of activity during 5900-5500 cal. BC, 4800-4600 cal. BC and 3900-3700 cal. BC. These periods of occupation still fall within the time span indicated by the lithic assemblage but they do not overlap nor are they sufficiently close together to be able to suggest that the site was inhabited during the Mesolithic/Neolithic transition.

3.1.1 Mesolithic Activity

The Mesolithic occupation of the site, as indicated by the artefactual and radiocarbon evidence, would appear to predominantly lie along the eastern side of Sub – area B, very close yet distinct from the later Neolithic activity. The Mesolithic features were primarily random pits and gullies, some of which, such as the gully [75] and adjacent pit [72] that were carefully and simultaneously backfilled with charcoal rich fills, are stratigraphically linked. The C14 dating of fill (77) from the gully [75] thus securely dating both features to the Later Mesolithic. Equally by association, the features in the immediate vicinity of [99] most likely date to the 6th millennium BC.

Features associated with Mesolithic activity contained evidence for domestic food waste and fuel debris with the most common food source being hazelnut shells and blackberry seeds. Evidence for structural remains from this period is limited to oak charcoal from pit [178] that could have been derived from the burning of a small discrete structural element such as a post or a stake.

The Mesolithic activity present within Sub – area B, based on the available artefactual, ecofactual and dating evidence, was limited, small scale most probably seasonal being separated by hundreds of years. It does though show the continuation of use of narrow blade points throughout both periods of Mesolithic activity as well as evidence of microlithic point manufacture. This type of lithic technology along with the preponderance of hazelnut shells as a food source is typical of the Later or Final Mesolithic period.

Later Mesolithic activity was also uncovered at the adjacent school site of Ysgol Rhyd Y Llan, approximately 300m to the west. The site produced (in far greater quantities) locally sourced beach flint, hazelnut shells and over one hundred pieces of Late Mesolithic flint (Rees & Jones, 2017, 18-25). The earlier phases of occupation at the school site could well be broadly contemporary with the activity at the GAT excavation and may well have been the camp sites/habitation of the same band of hunter/gatherers.

Later Mesolithic sites have also been identified to the south and west of Llanfaethlu along the western coast of Ynys Môn and on Ynys Gybi. At the site of Trwyn Du, Aberffraw during a rescue excavation of a probable Bronze Age cairn (NPRN 302323) Mesolithic occupation was identified beneath the cairn. The layer produced over 5,000 pieces of flint including points and scrapers, as well as other implements, including two stone axes. It also included hazelnut fragments that were radiocarbon dated to the 7th millennium BC; thus pre-dating the earliest activity at Sub – area B.

Limited activity from the Later Mesolithic was uncovered at Parc Cybi, Holyhead in the form of a shallow linear hollow from which pieces of flint and chert were recovered. The lithics included a scalar/bipolar core, narrow blade microlith and large chert flake (Kenney, 2011, 13). The presence of Later Mesolithic lithics at Parc Cybi indicates activity in the area during that era but it does not suggest habitation or other forms of occupation (Kenney, 2011, 142).

3.1.2 Neolithic Activity

The Neolithic occupation of the site as indicated by the artefactual and radiocarbon evidence was focused at the centre and western half of the ground stripped for Sub – area B and most likely continued further west beyond the limits of excavation. The artefactual evidence for occupation from this period was sparse, being confined to a limited number of small, largely undiagnostic pottery sherds and a handful of worked pieces of flint. The results of targeted radiocarbon dating of key features though confirmed that the shallow curvilinear ditches ([215/222] & [226/229]) alongside the hearth [232] at the centre and the pit [252] (and by association the linear [239]) were or Earlier Neolithic date (3900-3700 cal. BC). These features were most probably structural in nature, given their profile and further substantiated by the environmental analysis report which identified small discrete structural elements such as a post or stake in features [235] located to the immediate west of the ditch [226/229] and the posthole [247] positioned to the immediate south of the C14 dated pit [252] and associated linear [239]. The remains are not substantial which would imply a simple shelter. This evidence alongside the limited artefactual and environmental remains would suggest that this was inhabited for a relatively short period of time.

The charred macroplant remains retrieved from the Earlier Neolithic occupation while limited is insightful. The use of cereal from this era was noted but little more could be extrapolated. The more evident presence of hazelnut shell fragments in a Neolithic context as well as in the preceding period is interesting but a common association with both the Mesolithic and Neolithic. The ecofactual evidence may well be more skewered toward the greater propensity of hazelnut, simply as it tends to survive well in most environmental conditions, compared to the less resilient cereal caryopses. Despite this is does show how the Neolithic population who occupied the site continued to make use of this wild resource to supplement their diet.

Recent archaeological mitigation of the immediate hinterland of the site, around the village of Llanfaethlu, has revealed that the area was a hub of prehistoric settlement and activity. The most notable, especially in relation to Llanfaethlu WWTW, is the adjacent school site of Ysgol Rhyd Y Llan, where the remains of four Earlier Neolithic houses were identified. The four house structures are an unprecedented discovery in north Wales and might be broadly

contemporary with the habitation site in Sub – area B, as they typically date to the first half of the 4th millennium BC. Contrary to the evidence recovered from Llanfaethlu WWTW, the settlement evidence, along with the artefactual and ecofactual evidence, from Ysgol Rhyd Y Llan is considerably more substantial, that indicates consistent and long term occupation, potentially over hundreds if not thousands of years. As in addition to the four house structures there were Neolithic flint scatters and several Later Neolithic pit groups scattered across the width of the site (Rees & Jones, 2017, 18-25).

In addition to the activity at Ysgol Rhyd Y Llan, Wessex Archaeology excavated a series of trial trenches at key points along the route or the A5025 road improvements during archaeological evaluation f between August and October 2016. In Trench 109, in a field to the west of and immediately adjacent to the GAT excavation, Neolithic activity was uncovered in the form of a curvilinear feature that may have formed part of an arc of a ring ditch. The western terminal of the ditch was later re-cut and may have incorporated postholes and a beam slot. The re-cut produced small fragments of Grooved Ware pottery, while a flint core and flint flake were uncovered in adjacent features. In addition, the remains of hazelnut shells were recovered from the fill of the curvilinear ditch (Wessex Archaeology, 2017, 34-35). While the fragments of Grooved Ware would indicate activity during the Later Neolithic, the nature of the archaeology and the presence of hazelnut shells are broadly comparable to that identified within the GAT excavation.

Of greater relevance to the type Earlier Neolithic habitation identified at Llanfaethlu WWTW are the remains uncovered at Parc Cybi, Holyhead and the hilltop enclosure at Carrog, Llanbadrig, Ynys Môn.

Parc Cybi, like Ysgol Rhyd Y Llan had a Neolithic house structure, built in close proximity to the chambered tomb at Trefignath. The tomb had been excavated during an earlier archaeological investigation and a radiocarbon date of 3980-3690 cal. BC (Smith and Lynch 1987) had been recovered. The substantial (15.2m long and 6m wide) Neolithic house at Parc Cybi has been C14 dated to between 3725-3655 cal. BC. The Earlier Neolithic habitation at Llanfaethlu WWTW is contemporary with the use of the chambered tomb but earlier than the house structure.

At Parc Cybi though a comparable site as to what was uncovered in Sub – Area B was identified and dates from the Earlier Neolithic. The activity was located and most likely preserved within a large hollow on a southwest facing slope (PRN 18406). An area of relict soil measuring approximately 8m x 7.5m and up to 0.15m deep had survived within this hollow and from this a quantity of Earlier Neolithic pottery sherds and flint artefacts were recovered. Associated with this relic soil and hollow were three hearths and a spread of post

and stakeholes. These features may represent a temporary shelter or wind breaks (Kenney, 2011, 22-23). The artefactual evidence and radiocarbon dates place this activity to about 3700 to 3600 cal. BC. While this is somewhat later than the dates for similar features at Sub – Area B, the nature of the habitation is comparable and again strongly implies limited, temporary occupation.

During investigative excavation at the hilltop enclosure at Carrog, Llanbadrig, Ynys Môn, a series of shallow, sub-circular pits and probable hearths were uncovered that most likely lay beneath and as such pre-date, the enclosures' bank. The features produced waste flakes of flint and black chert along with a handful of sherds of plain-rimmed Earlier Neolithic pottery (Smith, G. H. et al 2104, 62). A pit from this group of features had a concentration of hazelnut shells within its backfill and produced a radiocarbon date of 3640-3500 cal. BC (Smith, G. H. et al 2104, 74). The nature of the archaeology uncovered at Carrog, Llanbadrig while it post-dates the activity in Sub – Area B, in the main the type of habitation and the associated artefactual and ecofactual evidence is very similar.

3.1.3 Bronze Age Activity

In Sub – area A the midden material (08) and backfilled postholes [19] and [24] were simultaneously deposited and backfilled during a succinct period of activity 910-810 cal. BC; the Later Bronze Age. While a small quantity of pieces of chert were recovered from this area, it is a local and readily available resource, which shows lithics were still being utilised as flakes during later prehistory.

Sub – area A returned the majority (nine of the 13) of the sites cereal remains, with examples of wheat and barley being present. As there were only limited remains it was not possible to determine if this was a producer and/or consumer site (Robertson, 2019, 12).

There is limited known Later Bronze Age activity and monuments in the immediate vicinity of Llanfaethlu WWTW. To the southeast of the treatment works, off the A5025, there is the standing stone Capel Soar (NPRN 302298) that nominally dates from the Bronze Age.

During archaeological work for the A5025 road improvements, Wessex Archaeology excavated a series of trial trenches at key points along the route between August and October 2016. In Trench 109, in a field to the west of and immediately adjacent to the GAT excavation, uncovered features that were predominantly Neolithic and Iron Age in origin but one of the features associated with Iron Age activity, posthole 10903, returned a Later Bronze Age/Early Iron Age radiocarbon date (Wessex Archaeology, 2017, 21-25).

Tentatively then there may be additional Later Bronze Age activity in the immediate hinterland of Llanfaethlu WWTW.

In Ynys Môn there is increasing evidence for activity and habitation throughout the Bronze Age (2500 – 650 BC) including during the Later Bronze Age (1500 – 650 BC), most notably at Parc Cybi, Holyhead. At this site on Ynys Gybi there were the remains of a bunt mound and cist burials from the Earlier Bronze Age (2500 – 1500BC), a 'D'-shaped ceremonial monument and a ring-ditch for a Bronze Age barrow and a Bronze Age roundhouse (Kenney, 2011, 33-56).

Further south at the site of New Ysgol Bro Aberffraw Primary School, Newborough, archaeological mitigation uncovered quite extensive prehistoric, most likely Bronze Age, occupation at the northeastern edge of the site. This included postholes for a prehistoric eight or nine post granary and a four post granary from which pottery of suspected Bronze Age date was recovered, and immediately adjacent to these granaries four pits interpreted as earth ovens were identified (Evans & Roberts, 2019, 10-11). In the subsequent mitigation for the construction works an additional 33 features were uncovered during the controlled strip/targeted excavation, which included a disparate spread of sub-circular pits and postholes, and five linear gullies and ditches (*ibid*, 11). A posthole within this group of disparate features produced 14 sherds of Later Bronze Age pottery (*ibid*, 24). While the composition of the archaeology found at Llanfaethlu WWTW is different to that of the school site in Newborough, it does highlight the increasing evidence for the diversity and increasing number of habitation sites which date from the Later Bronze Age on Ynys Môn.

As outlined in *The Research Framework for the Archaeology of Wales* a greater understanding of settlement chronology as well as settlement and land use is required for the Late Bronze Age and Iron Age in Wales. As such, where suitable materials survive radiocarbon dating should be undertaken (Gale 2010, 2-3). The artefactual and ecofactual evidence might be limited but this possible midden deposit and associated features do contribute to securely dated sites from the Later Bronze Age on Ynys Môn.

3.2 Concluding Remarks

The archaeology identified at Llanfaethlu WWTW, while limited in scope for artefactual and ecofactual evidence, is an important multi-period site that was inhabited at regular intervals during the Later Mesolithic, Earlier Neolithic and Later Bronze Age. The archaeological evidence at this site contributes to all of these periods of prehistory on a local and national level. It contributes to the increasing knowledge of the varied type of habitation that occurred during the Mesolithic, Neolithic and Bronze Age on Ynys Môn, in particular, the varied nature of Neolithic settlement, from large house like structures, to seemingly random groups of pits and postholes, to temporary occupation or campsites as illustrated in Sub – area B. The archaeological mitigation also highlights the importance of sampling features for ephemeral prehistoric sites, to provide a more rounded and substantive understanding of the technology, lithic or otherwise, used on site as well as providing ecofactual evidence for the fauna harnessed for food and fuel.

The archaeological mitigation at Llanfaethlu WWTW has identified and successfully investigated a multi-period site of some note and significance, especially when taken in conjunction with the discoveries made at the nearby site of Ysgol Rhyd Y Llan and the archaeological evaluation associated with the new route for the A5025. When viewed together the archaeological excavations and evaluation provide an almost unbroken link of habitation from the Later Mesolithic through to the Late Iron Age for Llanfaethlu, elevating the village and its immediate surroundings to an area of national importance.

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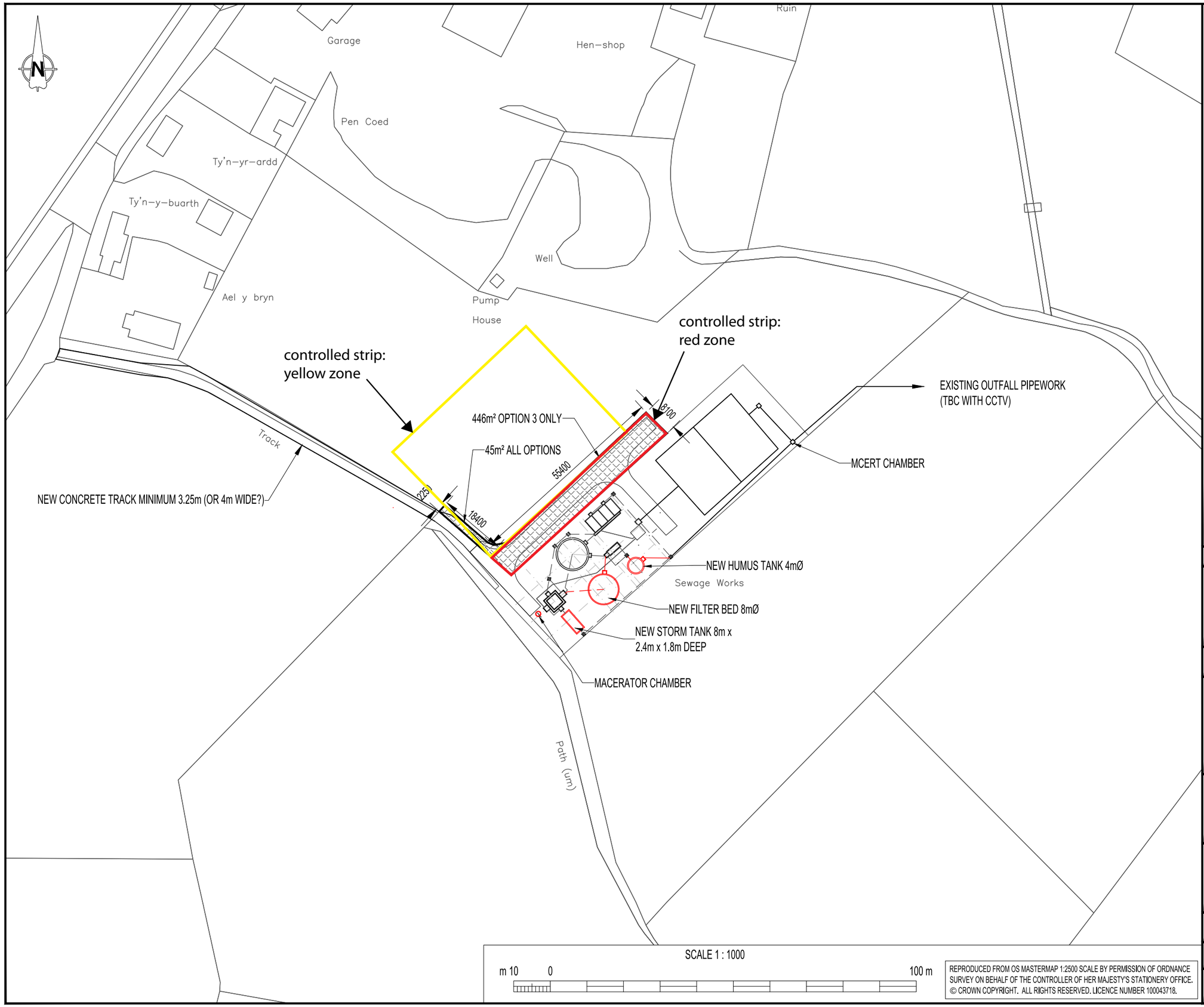
Figure 01

Site location Map



NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS SHOWN OTHERWISE.
2. THIS DESIGN IS PROPOSED ON THE BASIS OF CLIENT BRIEF, SPECIFICATIONS, BEST PRACTICE AND RISK REDUCTION / ELIMINATION. THE DESIGNER MUST BE CONSULTED ON ANY PROPOSED CHANGES, BEFORE THEY ARE CONSIDERED FOR IMPLEMENTATION.

KEY

APPROXIMATE AREA TO BE PURCHASED

SITE LOCATION

GRID REFERENCE: 231500, 387136
SITE ADDRESS: LLANFAETHLU WwTW, LLANFAETHLU LL65 4PH

REV.	DATE	DESCRIPTION	DSGN'D	CHK'D	APP'D
P00	26-09-16	FIRST ISSUE	VJ	DRD	KJP

CLIENT

Dŵr Cymru
Welsh Water

PRINCIPAL DESIGNER

DWR CYMRU WELSH WATER

waterco consultants

Waterco Ltd., Eden Court,
Lon Parcwr Business Park, Ruthin LL15 1NJ
tel (+44) 1824 702220
www.waterco.co.uk

SCHEME

LLANFAETHLU WwTW

TITLE

OPTION 3
ADDITIONAL LAND PURCHASE

STATUS

PRELIMINARY

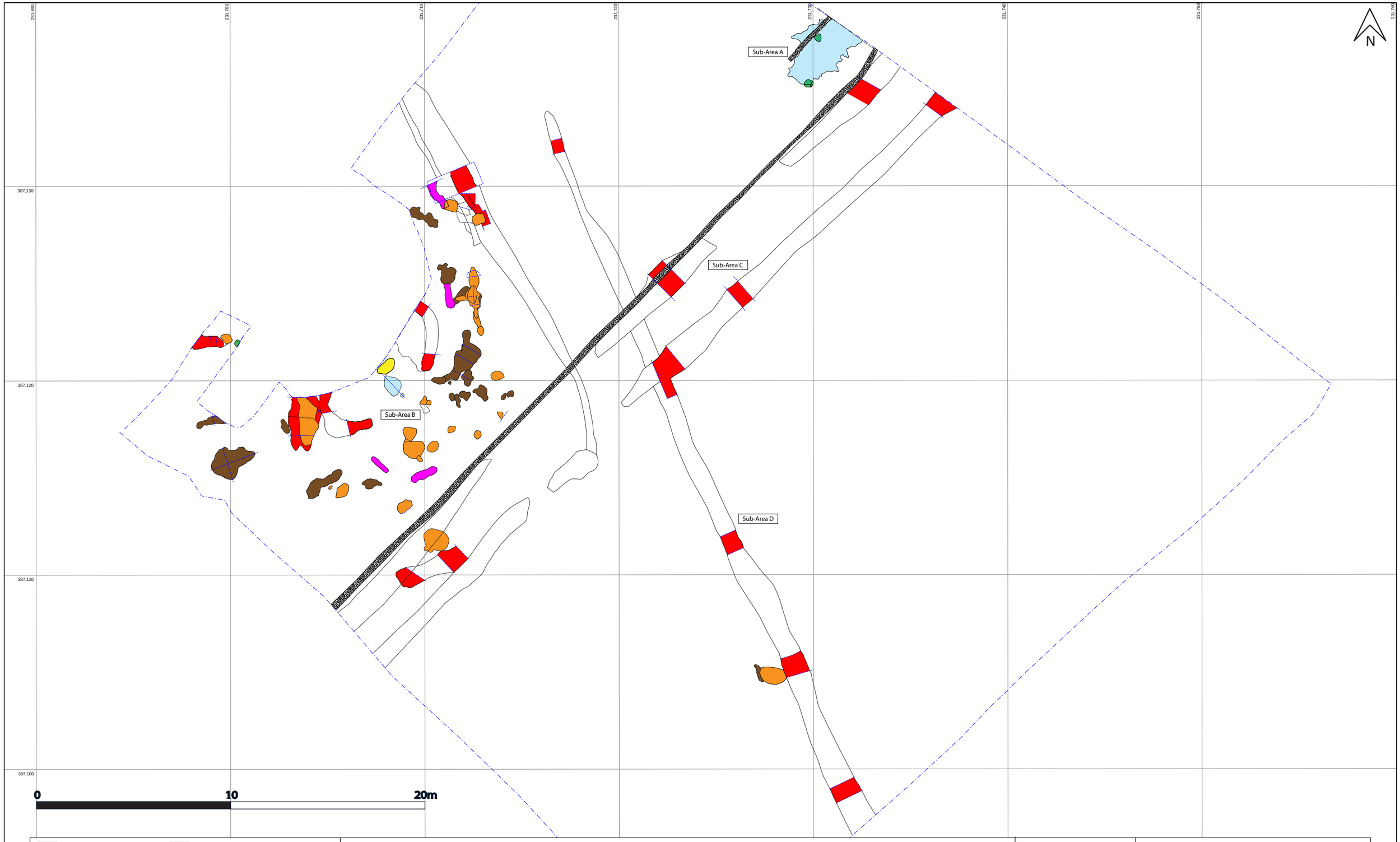
DESIGNED	CHECKED	APPROVED	SCALE / SHEET SIZE
VJ	DRD	KJP	1 : 1000 / A3

DRAWING NO. w2313-9100

REV P00

Figure 02

Distribution and type of archaeological features within the mitigation (controlled strip) area



Posthole
Pit
Ditch
Bioturbation
Gully
Hearth
Burnt Spread
Limit of Excavation

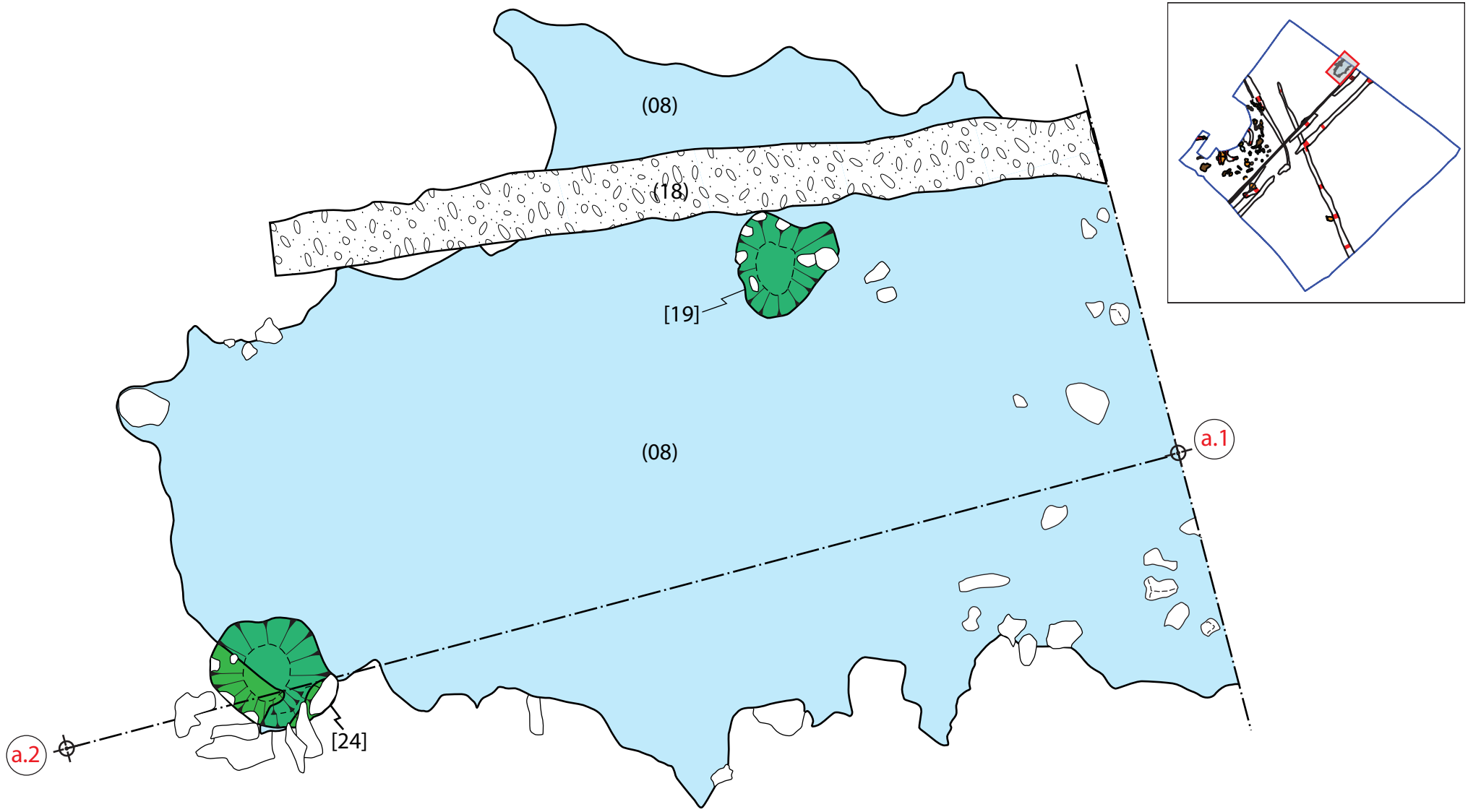
Figure 02: Distribution and type of archaeological features within the mitigation (controlled strip) area

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Figure 03

Distribution of archaeological features and areas of bioturbation within sub-area B



Posthole

Burnt Spread

Land Drain

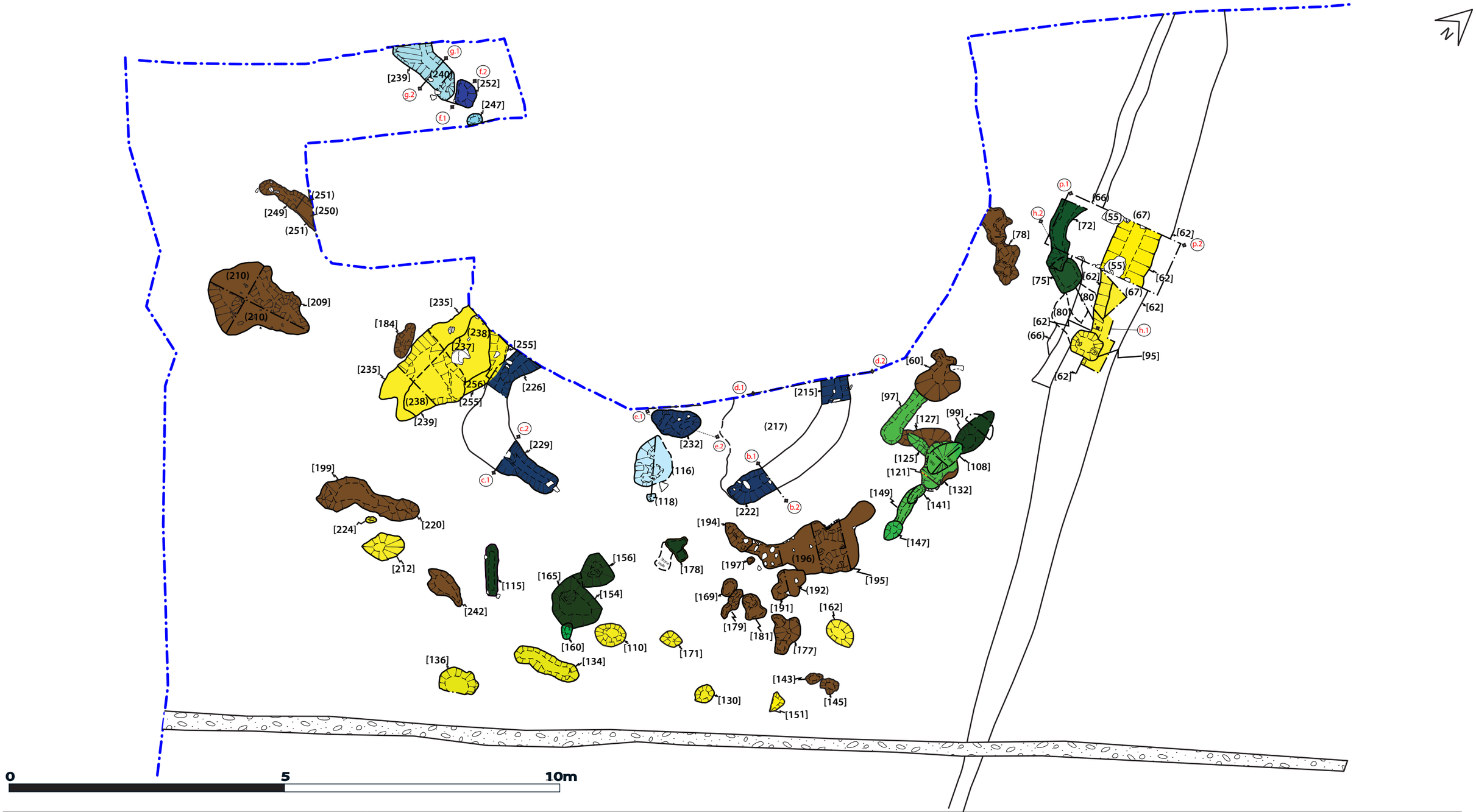
Figure 03: Distribution of archaeological features within sub-area A

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Figure 04

Distribution of archaeological features within sub-area A



- Mesolithic feature
- Probable Mesolithic feature
- Early Neolithic feature
- Probable Early Neolithic feature
- Undated feature
- Bioturbation
- Limit of Excavation

Figure 04: Distribution of archaeological features and areas of bioturbation within sub-area B

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Plate 01: Commencement of controlled strip. No scale. (Photographic archive ref. G2482_005)

Plate 02: Topsoil and subsoil bunds at NW edge of controlled strip. No scale. (Photographic archive ref. G2482_016)

Plate 03: Field of pasture before controlled strip. No scale. (Photographic archive ref. G2482_003)

Plate 04: Access to area of work via stone path off A5025. No scale (Photographic archive ref. G2482_001)

Plate 05: NNE facing section showing layers (01),(14),(15),(16). Scale 1.0m. (Photographic archive ref. G2482_012)

Plate 06: Mid-excavation shot of [19]. Scale 0.30m.(Photographic archive ref. G2482_036)

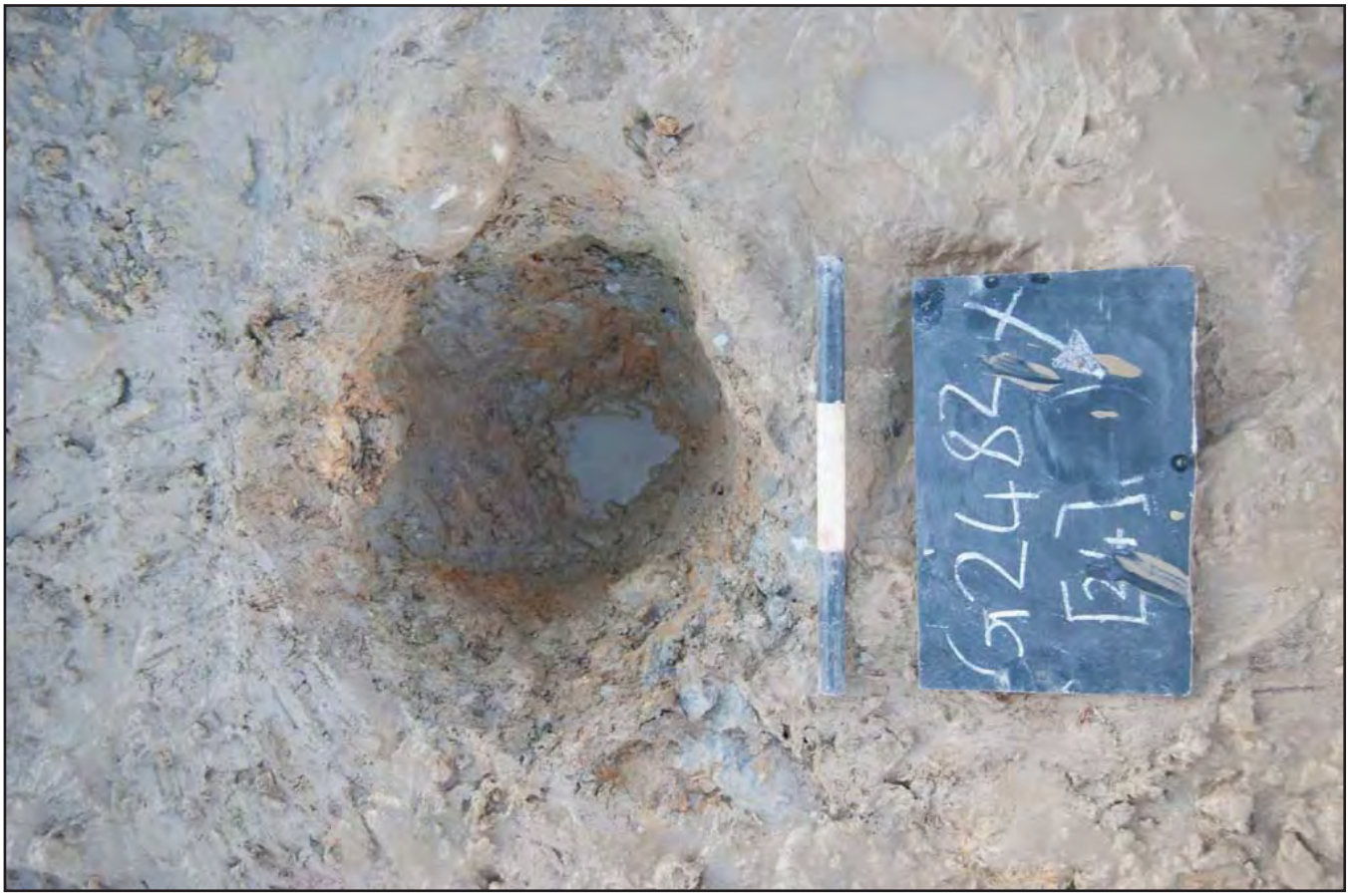


Plate 07: Post-excavation shot of [24]. Scale 0.30m. (Photographic archive ref. G2482_045)

Plate 08: Pre-excavation shot of (08) and [18]. Scale 2 x 1.0m. (Photographic archive ref. G2482_019)

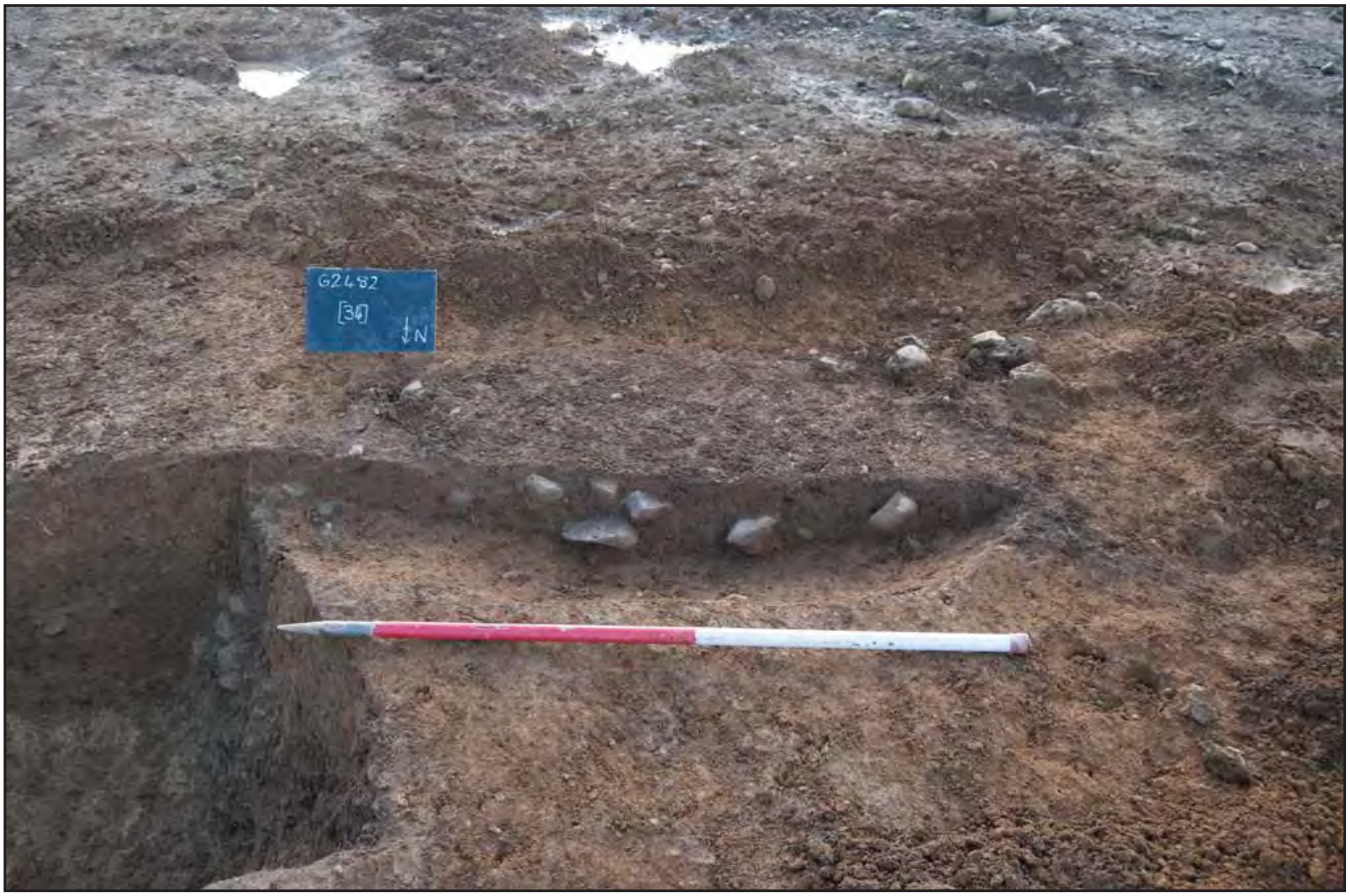


Plate 09: N facing section through [34]. Scale 1.0m. (Photographic archive ref. G2482_056)

Plate 10: Post-ex shot of gully [72]. Scale 1.0m. (Photographic archive ref. G2482_133)

Plate 11: SE facing baulk section through [72]. Scale 1.0m. (Photographic archive ref. G2482_130)

Plate 12: N facing section through [62], (80), [75] and [72]. Scale 1.0m. (Photographic archive ref. G2482_121)

Plate 13: NW facing section through [95]. Scale 1.0m. (Photographic archive ref. G2482_139)

Plate 14: Mid-excavation shot of intercutting features [105] Scale 2 x 1.0m. (Photographic archive ref. G2482_153)

Plate 15: SE facing section through [171]. Scale 0.30m. (Photographic archive ref. G2482_245)

Plate 16: S facing section through [197]. Scale 0.30m. (Photographic archive ref. G2482_286)

Plate 17: Post-excavation shot of [151]. Scale 0.30m. (Photographic archive ref. G2482_225)

Plate 18: SE facing section through [110]. Scale 0.30m. (Photographic archive ref. G2482_165)

Plate 19: Post-ex shot showing pits [160], [154] and [156]. Scale 1.0m. (Photographic archive ref. G2482_239)

Plate 20: NE facing section through [156]. Scale 0.30m. (Photographic archive ref. G2482_233)

Plate 21: SE facing section through [154]. Scale 0.30m. (Photographic archive ref. G2482_229)

Plate 22: SW facing section through [154] and [160]. Scale 0.30m. (Photographic archive ref. G2482_230)

Plate 23: Mid-excavation shot of [162]. Scale 1.0m. (Photographic archive ref. G2482_238)

Plate 24: Post-excavation shot of [134]. Scale 1.0m. (Photographic archive ref. G2482_211)

Plate 25: NW facing section through [136]. Scale 1.0m. (Photographic archive ref. G2482_206)

Plate 26: SE facing section through [115]. (ID board incorrect). Scale 0.30m. (Photographic archive ref G2482_169)

Plate 27: SE facing section through [104]. Scale 1.0m. (Photographic archive ref. G2482_ 163)

Plate 28: SE facing section through [212]. Scale 0.30m. (Photographic archive ref. G2482_317)

Plate 29: SE facing section through [224]. Scale 0.30m. (Photographic archive ref. G2482_329)

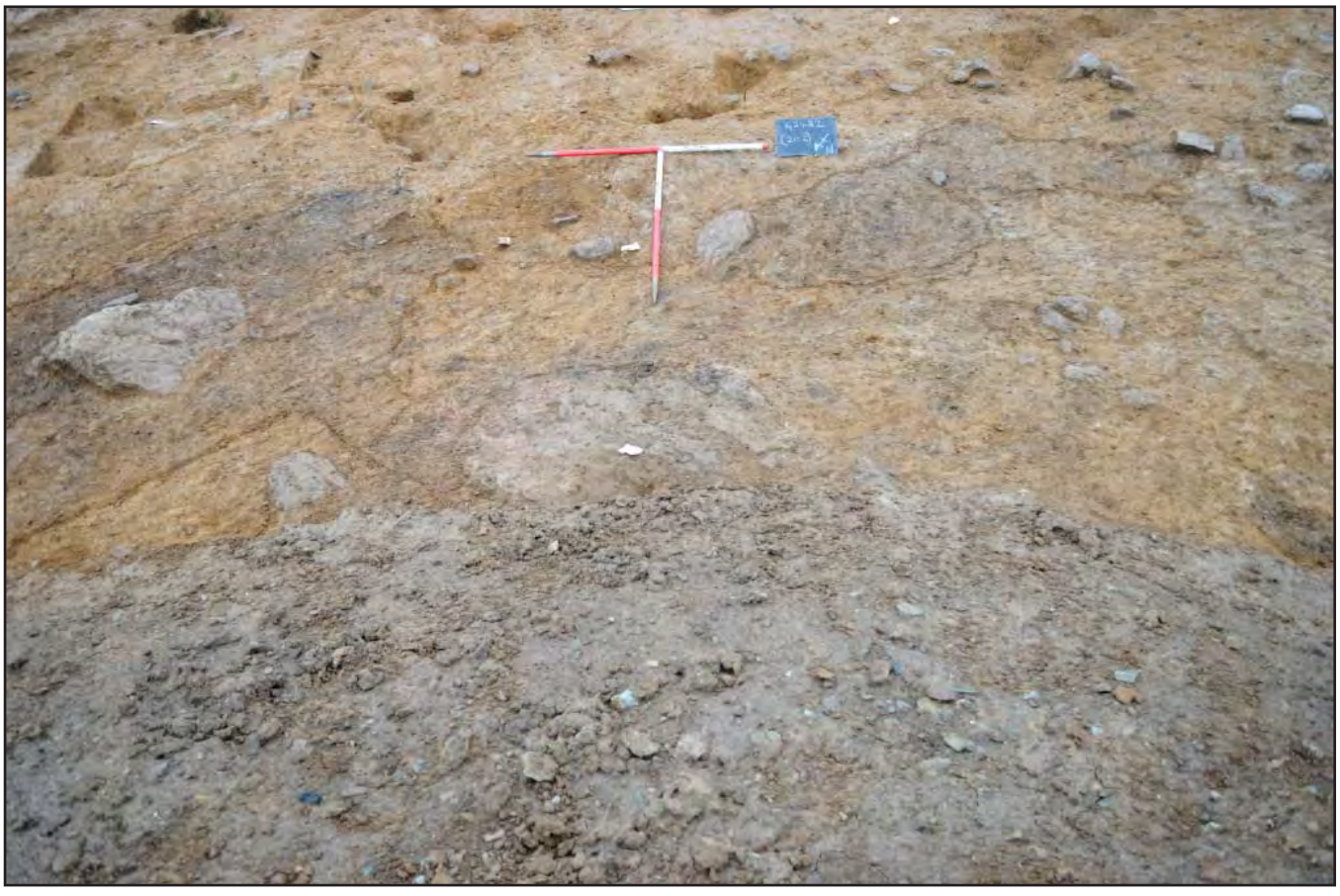


Plate 30: Pre-excavation shot of feature group [202]. Scale 1.0 x 1.0m. (Photographic archive ref. G2482_298)

Plate 31: SSE facing section through [232]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_331)

Plate 32: Pre-excavation shot of (116). Scale 1.0m. (Photographic archive ref. G2482_174)

Plate 33: SE facing section through [215]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_319)

Plate 34: E facing section through [229]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_338)

Plate 35: SSW facing section through [235] & [255]. Scale 1.0m. (Photographic archive ref. G2482_368)

Plate 36: Post-excavation shot of [239] and [247]. Scale 0.30m & 1.0m. (Photographic archive ref. G2482_366)

Plate 37: W facing section through [239]. Scale 0.30m. (Photographic archive ref. G2482_348)

Plate 38: E facing section through [252]. Scale 1.0m. (Photographic archive ref. G2482_359)

Plate 39: Post-excavation shot of [252] and [247] (ID board incorrect). Scale 1.0m. (Photographic archive ref. G2482_359)

Plate 40: SE facing section across [62]. Scale 1.0m. (Photographic archive ref. G2482_108)

Plate 41: NE facing section through [38]. Scale 1.0m. (Photographic archive ref. G2482_058)

Plate 42: NE facing section through [56] and (40). Scale 1.0m. (Photographic archive ref. G2482_91)

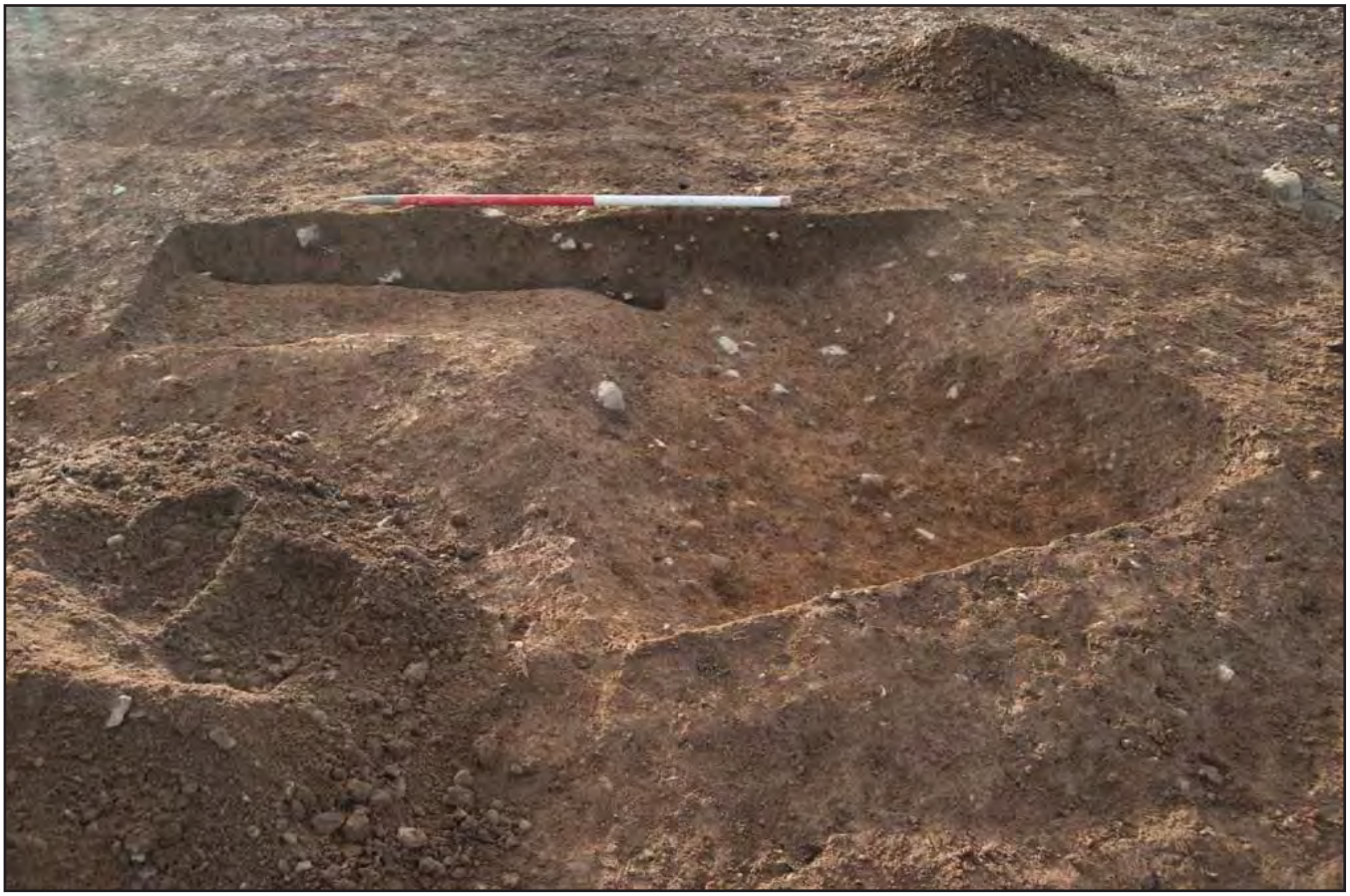


Plate 43: NE facing section through [30] and [260]. Scale 1.0m. (Photographic archive ref. G2482_075)

Plate 44: View of [58] and [59]. Scale 1.0m. (Photographic archive ref. G2482_100)

Plate 45: Stones within [58] and [59]. Scale 1.0m. (Photographic archive ref. G2482_097)

Plate 46: SSW facing section through terminus of [70]. Scale 1.0m. (Photographic archive ref. G2482_136)

Plate 47: NW facing section through [28]. Scale 1.0m. (Photographic archive ref. G2482_048)

Plate 48: NW facing section through [31]. Scale 1.0m. (Photographic archive ref. G2482_054)

Plate 49: Stone lining of NW terminal of [30]. Scale 0.30m. (Photographic archive ref. G2482_073)

APPENDIX I

Reproduction of MAP2 Phase 4 Written Scheme of Investigation

LLANFAETHLU WWTW (G2482)

PROJECT DESIGN FOR ANALYSIS AND REPORT PREPARATION (MAP2 PHASE 4)

Prepared for

Dwr Cymru Welsh Water (DCWW)

September 2018

Ymddiriedolaeth Archaeolegol Gwynedd

Gwynedd Archaeological Trust

LLANFEUTHLU WWTW

PROJECT DESIGN FOR ANALYSIS AND REPORT PREPARATION (MAP2 PHASE 4)

Prepared for Dwr Cymru Welsh Water (DCWW), September 2018

Contents

List of Tables:

Approvals Table				
	Role	**Printed Name**	**Signature**	**Date**
Originated by	Document Author	STUART REILLY	Stuart Reilly	26/09/18
Reviewed by	Document Reviewer	JOHN ROBERTS		26/09/18
Approved by	Principal Archaeologist	JOHN ROBERTS		26/09/18

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

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been commissioned by *Dwr Cymru Welsh Water (DCWW)* to complete a programme of archaeological mitigation for the site of an extension to an existing wastewater treatment works (WWTW) at Llanfaethlu, Ynys Môn (NGR SH31758711; Figure 01). The site is located within a post-medieval field system, within an area of significant known prehistoric and medieval archaeology.

This project design for the post-excavation Analysis and Report Preparation (MAP2 Phase 4) follows a programme of archaeological mitigation completed between 8th December 2016 and 27th February 2017, the interim results of which may be found in GAT report 1382. Two areas of presumed prehistoric activity were identified, a burnt spread with a couple of small associated postholes (sub-area A) and a larger area (sub-area B) comprising a series of pits, gullies and burnt areas. In addition a former northeast - southwest orientated post-medieval boundary (sub-area C) and a northwest - southeast orientated linear of unknown date (sub-area D) were also investigated. A total of 96 bulk soil samples and 48 artefacts were recovered from deposits across the site.

As part of the MAP2 Phase 3 Assessment of Potential for Analysis, GAT processed the bulk samples through flotation, wet sieving and residue sorting. The recovered charred macroplant material and charcoal were submitted to *AOC Archaeology* for specialist assessment. The lithics recovered from excavation and wet sieving were examined and assessed by George Smith while the ceramic artefacts were initially examined by Frances Lynch and further in house assessment was undertaken by GAT. The results of the assessment may be found in GAT report 1427.

The post-excavation work will be undertaken as a phased process in accordance with guidelines specified in *Management of Archaeological Projects – MAP2* (English Heritage, 1991), and relevant guidelines from *Management of Research Projects in the Historic Environment* (Historic England 2015). Five project phases are specified in *MAP2* (English Heritage, 1991):

- MAP2 Phase 1: Project Planning
- MAP2 Phase 2: Fieldwork
- MAP2 Phase 3: Assessment of Potential for Analysis
- MAP2 Phase 4: Analysis and Report Preparation
- MAP2 Phase 5: Dissemination

The current design specifically relates to the analysis and report preparation (MAP2 Phase 4). It encapsulates the recommendations of the nominated specialists, the reason(s) for the analysis, the project aims this will address and the timescale of when the results of the analysis will be received.

Reference has also been made to the following guidelines:

- Campbell, G., Moffett, L. and Straker, V., 2011. *Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation* (2nd edition). Historic England.
- *Standard and Guidance for Archaeological Excavation* (Chartered Institute for Archaeologists, 1995, rev. 2001, 2008 and 2014).
- *Standard and Guidance for Archaeological Watching Brief* (Chartered Institute for Archaeologists, 1995, rev. 2001, 2008 and 2014).
- *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (Chartered Institute for Archaeologists, 2009 and 2014).
- *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (Chartered Institute for Archaeologists, 2008 and 2014).
- *Royal Commission for Ancient and Historic Monuments Wales Guidelines for Digital Archives Version 1*

NB. All phases of this project are being monitored by the Gwynedd Archaeological Planning Services (GAPS). The content of this and any future project designs and reporting must be approved by GAPS.

2 ARCHAEOLOGICAL RESULTS

(*Reproduced from GAT Report 1382*)

2.1 Archaeological Mitigation

The extension area was 2491m^2 in size. An archaeological controlled strip was undertaken for the entire area. Deposits were reduced in spits using a tracked excavator fitted with a toothless bucket down to the glacial horizon, an archaeological horizon or 0.50m below ground level, whichever was encountered first.

All archaeological features and deposits encountered were hand cleaned and investigated in order to determine extent, function, date and stratigraphic relationships. Smaller features, such as pits and postholes, were subject to an initial 50% excavation, followed by a 100% excavation if they proved to be archaeological. A minimum of 10% of larger features such as linears were investigated.

The sampling strategy for bulk soil samples was based on the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant deposits were sampled. The primary aim of the sampling strategy was to recover carbonised plant remains suitable for radiocarbon dating. The samples simultaneously enabled the recovery of any small artefacts and ecofacts not recovered during excavation. A sample of 40 litres was taken from each context, or 100% from small features.

2.2 Results

For the purposes of this section, context numbers within square brackets (e.g. [05]) represent the cuts of features and context numbers within round brackets (e.g. (08)) represent deposits and fills. Feature numbers have been assigned to certain groups of contexts and these also appear in square brackets. The site is divided into four sub-areas, A to D.

2.2.1 Sub-area A

Sub-area A comprised a small cluster of prehistoric features located adjacent to the northwest boundary of the site. The features consisted of two post holes [19] and [24] associated with a spread of burnt stone and charcoal (08) which continued beyond the limit of excavation to the north east. These features are likely to represent a phase of occupational activity.

2.2.2 Sub-area B

Sub-area B comprised a more extensive quantity of predominantly prehistoric features located adjacent to the northwest boundary of the site. The area was u-shaped in plan with an area in the centre left unexcavated, following consultation with DCWW and GAPS. The features are likely to represent an area of habitation, though the precise function of many of the individual features was unclear. Several of the features continued beyond the limit of excavation to the northwest (Figure 02).

Table 1: Features in Sub-area B

Context No.	Description	Part of group	Archaeological?	Provisional Date
72	Gully	N/A	Yes	Prehistoric
75	Pit	N/A	Yes	Prehistoric
78	Bioturbation	N/A	No	Unknown
80	Colluvial deposit	N/A	N/A	Unknown
95	Charcoal rich pit	N/A	Yes	Prehistoric
97	Shallow gully	[105]	Yes	Prehistoric
99	Pit	[105]	Yes	Prehistoric
104	Pit	N/A	Yes	Prehistoric
108	Pit	[105]	Yes	Prehistoric
110	Pit	N/A	Yes	Prehistoric
115	Gully	N/A	Yes	Prehistoric
116	Burnt deposit	N/A	Yes	Prehistoric
118	Burnt deposit	N/A	Yes	Prehistoric
121	Oval pit	[105]	Yes	Prehistoric
125	Small pit	[105]	Yes	Prehistoric
127	Bioturbation	[105]	No	Prehistoric
129	Small pit	N/A	Yes	Prehistoric
130	Small pit	N/A	Yes	Prehistoric
132	Bioturbation	[105]	No	Prehistoric
134	Short linear gully	N/A	Yes	Prehistoric
136	Pit	N/A	Yes	Prehistoric
140	Pit	N/A	Yes	Prehistoric
141	Pit	[105]	Yes	Prehistoric
147	Pit	[105]	Yes	Prehistoric
149	Pit	[105]	Yes	Prehistoric
151	Pit	N/A	Yes	Unknown
154	Pit	N/A	Yes	Prehistoric
156	Pit	N/A	Yes	Prehistoric
160	Pit	N/A	Yes	Prehistoric
162	Pit	N/A	Yes	Unknown
165	Truncated pit	N/A	Yes	Prehistoric

Context No.	Description	Part of group	Archaeological?	Provisional Date
169	Bioturbation	[183]	No	Unknown
171	Pit	N/A	Yes	Prehistoric
177	Bioturbation	[183]	No	Unknown
178	Pit/posthole	[183]	Yes	Prehistoric
179	Bioturbation	[183]	No	Unknown
181	Bioturbation	[183]	No	Unknown
184	Bioturbation	N/A	No	Unknown
191	Bioturbation	N/A	No	Unknown
195	Bioturbation	N/A	No	Unknown
197	Bioturbation	N/A	No	Unknown
199	Bioturbation	N/A	No	Unknown
204	Pit	N/A	Yes	Post-Medieval
209	Bioturbation	N/A	No	Unknown
212	Pit	N/A	Yes	Prehistoric
215	Curvilinear ditch	[202]	Yes	Prehistoric
218	Charcoal rich deposit	N/A	Yes	Prehistoric
220	Bioturbation	N/A	No	Unknown
222	Curvilinear ditch	[202]	Yes	Prehistoric
223	Pit	N/A	Yes	Prehistoric
224	Pit	N/A	Yes	Prehistoric
226	Curvilinear ditch	[202]	Yes	Prehistoric
229	Curvilinear ditch	[202]	Yes	Prehistoric
232	Hearth	N/A	Yes	Prehistoric
235	Linear	N/A	Yes	Prehistoric
237	Pit	N/A	Yes	Prehistoric
239	Linear	N/A	Yes	Prehistoric
242	Bioturbation	N/A	?	Unknown
247	Posthole	N/A	Yes	Prehistoric
249	Bioturbation	N/A	No	Unknown
252	Pit	N/A	Yes	Prehistoric
255	Linear	N/A	Yes	Prehistoric
60	Bioturbation	N/A	No	Unknown
62	Post-medieval ditch	N/A	Yes	Post-Medieval

At the centre of the area lay a pair of fairly shallow curvilinear features [229]/[226] and [222]/[215] containing charcoal rich deposits and encircling a central cut hearth [232]. Several additional short gullies were found ([239], [115], [134] and [072]), scattered across the sub-area.

A total of 20 pits of varying shape and size were identified across this sub-area, many of which were discreet features, however some occurred in intercutting clusters, for example

group no. [105] which comprised five intercutting pits and a short gully cut within areas of bioturbation.

Six areas of definite bioturbation were also identified within the sub-area these were very irregular with diffuse interfaces. Although apparently not directly archaeological in nature some of these features were found to contain prehistoric artefacts. These features likely represent clearance prior to the occupation of the site as well as perhaps regrowth following abandonment; as such these features hold relevance to the interpretation of the site.

A linear ditch [62] was identified extending 20.7m southeast from the northwest limit of the work area. This feature was shown in section to be cut through the subsoil, indicating a relatively modern date.

2.2.3 Sub-area C

The remnants of a former northeast - southwest orientated field boundary were identified subdividing the work area; this feature may be depicted on the Llanfaethly Tithe Map of 1840 as well as the First to Third edition Ordnance Survey maps, but is no longer visible at surface level today. Following the controlled strip, remnants of this feature were seen sporadically across the entire width of the work area (40m), and it continued beyond the limit of excavation at either end. The feature comprised a mixture of parallel low banks and ditches.

2.2.4 Sub-area D

A northwest - southeast orientated linear ditch (feature no. [30]) was identified that extended diagonally across much of the work area. This feature was 40.5m long and was targeted by five hand excavated 1.0m wide slots. It became progressively narrower and shallower as it progressed northwest and had a variable profile. This feature was cut into the natural and was sealed by the subsoil. The date of this feature is unknown.

2.3 MAP2 Phase 3 Assessment of Potential for Analysis

(*Reproduced from GAT Report 1427*)

An assessment of the potential for analysis was conducted on the lithic and ceramic artefacts as well as of the charred macroplant and charcoal recovered from site during excavation as part of the archaeological mitigation and flotation/wet sieving of the bulk samples.

2.3.1 Lithic Artefact Assessment

The flint and chert artefacts were assessed by George Smith, a specialist working on behalf of GAT. The lithics were assessed according to their form and function and the details of this are given in the table below:

Table 2: Lithic Artefacts Register

Find No.	Context No.	Sub Area	Context type	Material	Description
02	(11)	C	Sole fill of post-medieval ditch [10].	Chert	Possible chert debitage
03	(08)	A	Burnt deposit.	Chert	Possible chert debitage x10.
04	(08)	A	Burnt deposit.	Flint	Orange flint flake.
05	(08)	A	Burnt deposit.	Flint	Half beach pebble - Possible scraper
06	(08)	A	Burnt deposit.	Chert	Scraper
08	(08)	A	Burnt deposit.	Chert	Chert debitage X2.
09	(01)	N/A	Topsoil	Chert	Possible chert scrapper?
10	(26)	A	Deposit (probably natural)	Chert	Chert debitage X26.
11	(39)	C	Sole fill of NE/SW post-medieval linear [38].	Flint	Worked flint - Blade section? Orange - Red in colour.
12	(40)	C	Upper fill of post-medieval ditch [56].	Flint	Worked flint - Blade section? Orange -red
19	Unstratified	N/A	N/A	Flint	Flint flake X2
20	(57)	C	Fill of post-medieval ditch [56].	Flint	Debitage? X3
21	(54)	C	Fill of post-medieval ditch [53].	Flint	Flint debitage X1 Red.
22	(79)	B	Charcoal rich fill of bioturbation [78].	Flint	Blue/Grey flint scraper.
24	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Orange-brown scraper
26	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	Chert debitage
28	(216)	B	Sole fill of curvilinear ditch	Flint	Possible blade

Find No.	Context No.	Sub Area	Context type	Material	Description
			[215].		
29	(216)	B	Sole fill of curvilinear ditch [215].	Chert	Debitage
30	Unstratified	N/A	N/A	Chert	Debitage
31	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Flint flake
32	(118)	B	Burnt deposit.	Flint	Reworked & discarded blade
33	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	Possible chert debitage
34	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Possible scrapper
35	(116)	B	Burnt deposit.	Flint	Flint flake - Brown-grey.
36	(135)	B	Uppermost fill of gully [134].	Chert	2X black chert flakes
37	(135)	B	Uppermost fill of gully [134].	Chert	1X Struck black chert - Flake
38	(142)	B	Fill of pit [141]	Flint	Blue-grey struck flint.
39	(152)	B	Sole fill of small pit [151].	Flint	Light grey blue struck flint.
40	(159)	B	Uppermost fill of pit [156].	Flint	Grey -orange flint flake.
41	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Pink flint flake.
42	(233)	B	Fill of possible hearth	Flint	Small flint core.
43	(196)	B	Sole fill of bioturbation [195].	Flint	Pale blue grey, Flake - Possible broken blade.
44	(238)	B	Sole fill of pit [237].	Flint	Pale blue-grey flake
45	(219)	B	Fill of curvilinear ditch terminus [222].	Flint	Possible flint core
46	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Flint flake.
47	(240)	B	Secondary fill of linear [239].	Chert	Chert -Possible core.
49	(08)	A	Burnt deposit.	Flint	Flint flake.
50	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale green-orange flint flake with cortex
51	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale orange flint flake with cortex
52	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	pale grey flint flake with cortex
53	(153)	B	Colluvial deposit overlying area of prehistoric activity	Chert	3 pieces of struck chert
54	(153)	B	Colluvial deposit overlying area of prehistoric activity	Flint	Struck grey flint.
55	(135)	B	Uppermost fill of gully [134].	Chert	black chert flake

2.3.2 Results of the Specialist Assessment

Taken from George Smith, Preliminary Lithics Assessment – GAT Report 1427

The assessment determined that there is a clear divide in the lithic assemblage between Sub-Areas A and B. The pieces from Sub-area A are few in number and not diagnostic but are predominantly broad flakes of chert extracted from the burnt spread (08), which may be the remnants of a midden. The chert is of poor flaking quality in comparison to the beach flint. The continued rise of sea levels after the end of the Last Ice Age which reached a maximum during the Early Neolithic period may have made the beach flint inaccessible and mitigated a change to using chert instead.

In Sub-area B the assemblage recovered from hand excavation and more notably from the residue sorting of the ecofact samples has a bias toward flint and shows evidence of microlithic point manufacture. The lithic assemblage in this part of the site is suggestive of Later or Final Mesolithic date but given that the period of Mesolithic/Neolithic transition has yet to be defined or identified in terms of lithic assemblage or type or location of activity (Prehistoric Society 1999; IFA Wales/Cymru) this observation has to be provisional until radiocarbon dates are available. If radiocarbon dating does confirm that this is a Later Mesolithic site then it is of great significance as:

- Sub-area B is an area of habitation;
- Its proximity to and possible relation with the more extensive Early and Middle Neolithic activity area 300m to the west (Rees and Jones 2015-16); and
- Mesolithic activity on Anglesey and in north west Wales has been concentrated along the coast, identified through surface collections of lithics that suggest temporary activity or camp sites.

It should be noted though the comparative paucity of lithic evidence from the majority of features in Sub-area B which indicates a relative lack of flint working. In addition, there were no concentration of flint within specific features that suggests the artefacts were incorporated within the fills by chance rather than deliberate deposition.

No further work on the lithic assemblage is recommended.

2.4 Ceramic Artefact Assessment

2.4.1 Introduction

The ceramic artefacts were initially examined by Frances Lynch and further in house assessment was undertaken by GAT with reference to comparative sites, such as, Parc Bryn Cegin (Lynch, in Kenny and Davidson 2006, 3-25). The artefacts were examined and described in terms of evidence of form, function, provenance and date. Those fragments too small to present defining characteristics are not discussed in detail. The ceramic artefacts recovered from the excavation are detailed in the table below.

Table 3: Ceramic Artefact Register

Finds No.	Context No.	Sub Area	Context type	Description
07	(08)	A	Burnt deposit.	Prehistoric pot sherds x4 & broken fragments.
16	(257)	B	Colluvial deposit	Possible pot fragments x4
17	(257)	B	Colluvial deposit	Possible pot fragment
25	(153)	B	Colluvial deposit overlying area of prehistoric activity	Prehistoric pot x3.
23	(89)	B	Fill of shallow pit [108].	Prehistoric pot.
15	(35)	N/A	Fill of shallow pit [34].	Very badly preserved Pot fragments
27	Unstratified	N/A	N/A	Small Prehistoric pot fragment.
14	(33)	D	Primary fill of ditch [31]. [Slot 2.]	Small pot sherd.
48	(248)	B	Sole fill of posthole [247].	Sherds of pot x2.

2.4.2 Results of the Ceramic Assessment

All of the pottery sherds recovered were small and retained only limited diagnostic features. Five of the pottery sherds were of sufficient size to be discussed in terms of their characteristics and these are described below. Two of these were from the same context (Finds 16 and 17) and are considered likely to be from the same original vessel. The remaining pottery sherds were considered too small and fragmentary to merit detailed consideration.

The assessment determined that the sherds were of broadly Neolithic date, being of limited value in terms of their datable characteristics and morphology. Most of the sherds are very small, heavily abraded and undiagnostic, suggesting that they are essentially the remains of domestic rubbish.

No further work on the pottery is recommended, but the ceramic artefacts will be retained by GAT, or offered to Oriel Ynys Môn as part of the archiving process.

2.5 Ecofact Assessment Report (AOC Report No 24185)

2.5.1 Introduction

A total of 94 flots were sent to AOC Archaeology Group to be assessed by Jackaline Robertson. The aim of the assessment was to establish the potential of the environmental evidence to contribute to understanding the function of the features uncovered during the archaeological mitigation as well as establishing the chronology of the site through radiocarbon dating.

2.5.2 Results

The carbonised macroplant assemblage totalled 424 remains and was recovered from 57 flots. The assemblage was a combination of cultivated cereal crops, wild food remains, woodland and weed taxa. The most common variety was hazelnut shells with 340 fragments present in 48 contexts. The feature with the greatest concentration of hazelnut shells with 108 shell fragments recovered was from pit [178], located at the centre of Sub-area B. In addition, 12 cereal caryopses and one glume were recovered from eight contexts. This included one barley caryopsis (Hordeum sp) and two wheat caryopses (Triticum sp). The cereal remains were scattered throughout the site in small numbers with no evidence of deliberate or selective disposal.

The charcoal assemblage totalled 264.9g and fragments suitable for species identification were recovered from 71 contexts. It was noted that some of the charcoal has been vitrified which may make further analysis of affected fragments difficult. The largest single quantity of charcoal of 77.0g was retrieved from fill (106) of pit [104], while key features at the centre of the centre of the area of habitation, notably the gullies [97], [222] and [226] also produced good quantities of charcoal.

2.5.3 Conclusion and Recommendations

It was recommended that the macroplant assemblage was fully identified and does not require any further work.

Both hazelnut shell and charcoal provide good targets for radiocarbon dating. The charcoal fragments should be identified to species to allow selection of the most suitable fragments for dating. Once contexts have been selected for dating a single fragment of charcoal should be identified to species from those samples.

If charred macroplant was selected for dating it was recommended that hazelnut shell be ranked above the cereal caryopses. This is because the cereal caryopses, given their generally poor condition and low numbers, may not contain sufficient carbon.

3 METHODOLOGY – MAP2 PHASE 4 ANALYSIS AND REPORT PREPARATION

3.1 Sampling Strategy for Radiocarbon Dating Features in Sub-areas A and B

Based on the results of the assessment of the artefactual and ecofactual evidence recovered from site it is proposed that 10 key features from Sub-areas A and B are submitted to Scottish Universities Environmental Research Centre (SUERC) for radiocarbon dating. The proposed samples are listed in Table 4.

Table 4: Samples Recommended for Radiocarbon Dating

Sample No.	Context No.	Pottery	Flint	Chert	Charcoal	Macroplant
1	8	Y	Y	Y	Y	Y
3	25	N	Y	N	Y	Y
18	77	N	Y	N	Y	Y
22	100	N	Y	Y	Y	Y
32	114	N	N	N	Y	Y
86	234	N	Y	N	Y	N
61	188	N	Y	N	Y	Y
81	219	N	Y	N	Y	Y
87	227	N	N	N	Y	Y
100	254	N	N	N	Y	Y

These contexts were chosen ahead of other adjacent features or fills for radiocarbon dating as, for example, fill (77) from the pit [75] which is very similar to fill (74) from the adjacent gully [72], if they are contemporary then one feature/fill will date the other and in affect duplicate samples would not be beneficial in such circumstances. The sequence in which the fills of both features were deposited would suggest they were backfilled simultaneously and a radiocarbon date from one such fill would date this activity for both features. The same argument can be applied to other adjacent features, such as, [239] and [252] (Figure 03).

Other key factors involved in the sampling strategy included targeting key features, such as, the basal fill (234) of the hearth [232] located at the centre of Sub-area B along with the curvilinear features [229/226] and [222/215] that flanked it. It is also intended that radiocarbon dates will underscore important stratigraphical relationships, for example, between the deposit (08) and posthole [24] in Sub-area A (Figure 04).

The features chosen for radiocarbon dating all have charcoal or charred macroplant present within their fills to aid the process and the majority of the fills chosen also produced flint, chert or pottery. By targeting these fills it is hoped that the radiocarbon dates will corroborate the artefactual and ecofactual evidence to confirm that this was a site of habitation during the Late Mesolithic and Early Neolithic.

If the radiocarbon dates obtained from the selected features support the lithic and ecofact assessments this would be of local and national significance as it would help to track changes in lithic technologies during the Mesolithic/Neolithic transition. It would also contribute to broadening the scope of Early Neolithic habitation sites, as potentially represented by the archaeology in Sub-area A and confirm the presence of a Mesolithic site more inland than coastal in nature.

As outlined in *GAT Report 1427* the archaeological evidence uncovered at Llanfaethlu WWTW will not be considered in isolation. In the immediate vicinity of this site, comparable archaeology has been recently uncovered during archaeological work for the A5025 road improvements by Wessex Archaeology and at the community school of Llanfaethlu by CR Archaeology. The results from these developments combine to create an area of prehistoric archaeology within the vicinity of the village of Llanfaethlu that is of both regional and national importance.

4 METHODOLOGY: REPORTING

A final archive report will be prepared incorporating the results of the fieldwork (MAP2 Phase 2), as well as interpretation and discussion of the implications from the assessment and analysis (MAP2 Phases 3 and 4). The interim and assessment of potential reports contain outline narratives for the site. These will need integrating and expanding, and closer consideration of the features is likely to lead to an improvement in the understanding of the stratigraphy of the site. The context of the artefacts and ecofacts and their distribution over the site and their implications for the function of the site will be considered.

In addition to the site narratives and specific discussion of detailed features a full discussion investigating the issues raised by the excavation will be written. This will include research into comparable sites (e.g. the archaeological excavation at the community school of Llanfaethlu) to allow full interpretation of the features and comparisons and contrasts with contemporary sites. This will enable the site to be placed in its local and regional context.

The report will be produced in the following form:

1. Front cover;

2. Inner cover;

3. Figures and Plates List

4. Non-technical summary;

5. Introduction;

6. Methodology – including specialist methodology;

7. Results;

8. Conclusions and recommendations for dissemination (MAP2 Phase 5); Note the conclusion will include a contextualisation of the results

9. Figures; including:

- location plan;
- site plan;
- selected plans/sections;

10. Plates

11. Appendix I (GAT project design)

12. Appendix II (Specialist Report on radiocarbon dating);

13. Back cover

A full archive will also be prepared. A draft copy of the report will be sent to the regional curatorial archaeologist (GAPS) and to the client for review by **January 2019**. Once approved, a final report will be submitted to all parties as well as the Historic Environment Record; the archive will be sent to the *Royal Commission for Ancient and Historic Monuments Wales (RCAHMW)*.

The following dissemination will apply:

1. A digital report will be provided to GAPS (draft report then final report).

2. A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust; this will be submitted within six months of report completion (final report only).

3. A digital report and archive (including photographic and drawn) data will be provided to *RCAHMW* (final report only). Submission of digital information to the Royal Commission on the Ancient and Historical Monuments of Wales shall be undertaken in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata

4. A digital report(s) plus paper report(s) (if requested) will be provided to the client (draft report then final report).

5. It is proposed ultimately to publish a summary of the work in *Archaeology in Wales*, the journal for the Council of British Archaeology Wales. This will be undertaken as part of MAP2 Phase 5.

5 SOURCES CONSULTED

Campbell, G. Moffett, L. and Straker, V. 2011, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (2nd edition)

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Gibson, A. and Woods, A. 1997 *Prehistoric Pottery for the Archaeologist* (2nd edition)

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Rees, C. and Jones, M. 2017 *Wales' earliest village? Exploring a Neolithic neighbourhood at Llanfaethlu.* Current Archaeology 332

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Reilly, S and Evans, R. 2018 *Llanfaethlu Waste Water Treatment Works Archaeological MAP2 Phase 3 Report (assessment of Potential for Analysis).* Unpublished GAT Report No. **1427**

Research Framework for the Archaeology of Wales, 2016, *Refresh of the Welsh Research Agenda for Palaeolithic & Mesolithic Archaeology 2016*

Research Framework for the Archaeology of Wales 2017, *Neolithic and Early Bronze Age*

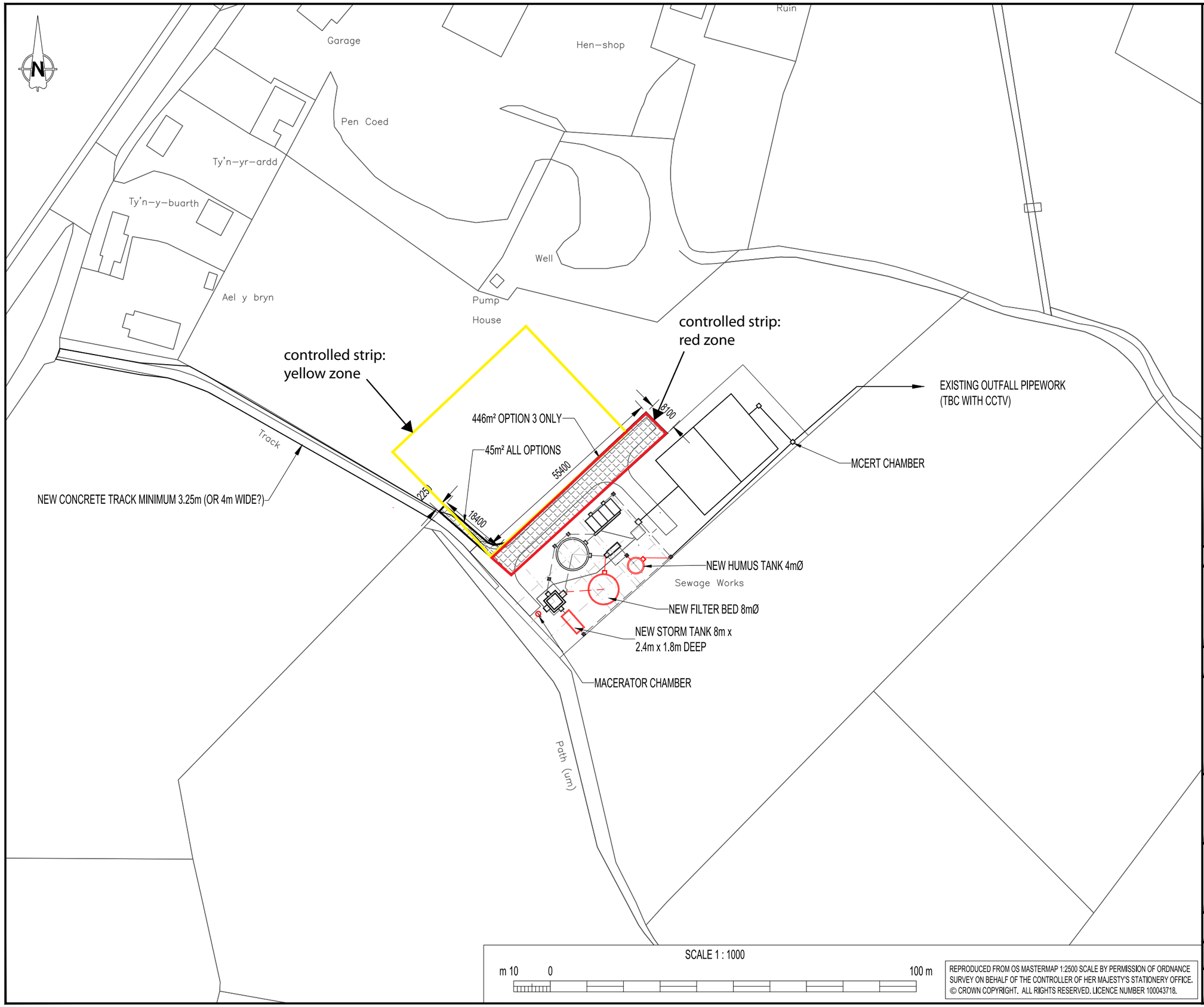
Robertson, J. 2018 DCWW *Llanfaethlu Waste Water Treatment Works.* Unpublished AOC Report No. 24185 (Appendix IV)

Royal Commission on the Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives*

Smith, G.H. 2018 *Lithics preliminary Report*. Unpublished GAT Report (Appendix II)

Figure 01

Site location Map



NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS SHOWN OTHERWISE.
2. THIS DESIGN IS PROPOSED ON THE BASIS OF CLIENT BRIEF, SPECIFICATIONS, BEST PRACTICE AND RISK REDUCTION / ELIMINATION. THE DESIGNER MUST BE CONSULTED ON ANY PROPOSED CHANGES, BEFORE THEY ARE CONSIDERED FOR IMPLEMENTATION.

KEY

APPROXIMATE AREA TO BE PURCHASED

SITE LOCATION

GRID REFERENCE: 231500, 387136
SITE ADDRESS: LLANFAETHLU WwTW, LLANFAETHLU LL65 4PH

REV.	DATE	DESCRIPTION	DSGN'D	CHK'D	APP'D
P00	26-09-16	FIRST ISSUE	VJ	DRD	KJP

CLIENT

Dŵr Cymru
Welsh Water

PRINCIPAL DESIGNER

DWR CYMRU WELSH WATER

waterco consultants

Waterco Ltd., Eden Court,
Lon Parcwr Business Park, Ruthin LL15 1NJ
tel (+44) 1824 702220
www.waterco.co.uk

SCHEME

LLANFAETHLU WwTW

TITLE

OPTION 3
ADDITIONAL LAND PURCHASE

STATUS

PRELIMINARY

DESIGNED	CHECKED	APPROVED	SCALE / SHEET SIZE
VJ	DRD	KJP	1 : 1000 / A3

DRAWING NO. w2313-9100

REV P00

Figure 02

Distribution and type of archaeological features within the mitigation (controlled strip) area

231,690
231,700
231,710
231,720
231,730
231,740
231,750
231,760

387,130
387,120
387,110
387,100

Sub-Area A
Sub-Area B
Sub-Area C
Sub-Area D

N

0
10
20m

- Posthole
- Pit
- Ditch
- Bioturbation
- Gully
- Hearth
- Burnt Spread
- Limit of Excavation

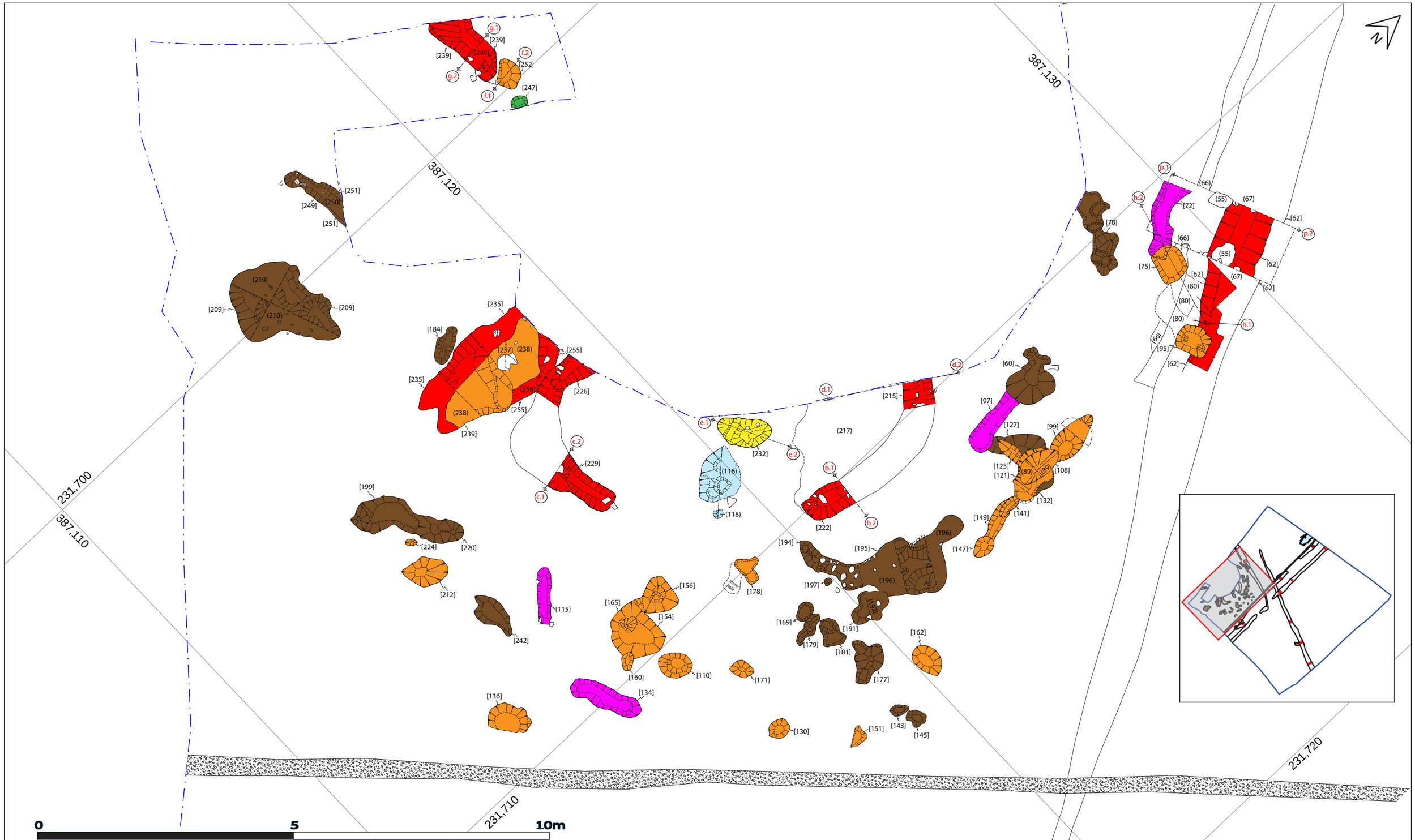
Figure 02: Distribution and type of archaeological features within the mitigation (controlled strip) area

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Figure 03

Distribution of archaeological features and areas of bioturbation within sub-area B



Posthole
Pit
Ditch
Bioturbation
Gully
Hearth
Burnt Spread
Limit of Excavation

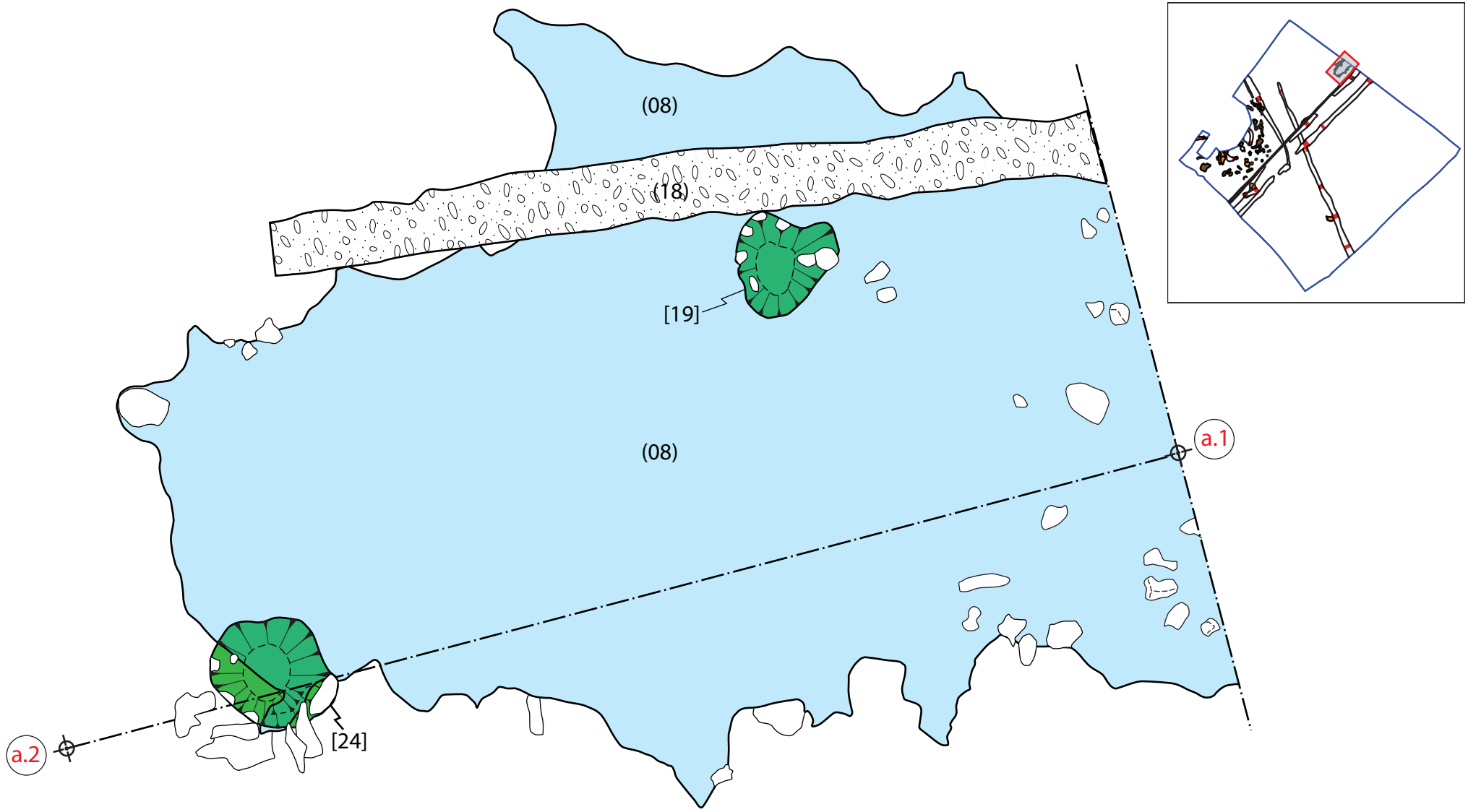
Figure 03: Distribution of archaeological features and areas of bioturbation within sub-area B

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Figure 04

Distribution of archaeological features within sub-area A



Posthole
Burnt Spread
Land Drain

Figure 04: Distribution of archaeological features within sub-area A

PROJECT: G2482
AUTHOR: CRY
DATE: 28/04/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

APPENDIX II

Reproduction of Gwynedd Archaeological Trust Photographic Metadata

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_001	Llanfaethlu Water Treatment Works	Controlled Strip	Condition Survey - Entrance from A5025	N/A	N/A	W	08/12/2016	J Davidson	Plate 04
G2482_002	Llanfaethlu Water Treatment Works	Controlled Strip	Condition Survey - Gateway to field	N/A	1x1m	NE	08/12/2016	J Davidson	
G2482_003	Llanfaethlu Water Treatment Works	Controlled Strip	Condition Survey - General view of work area	N/A	N/A	NW	08/12/2016	J Davidson	Plate 03
G2482_004	Llanfaethlu Water Treatment Works	Controlled Strip	Condition Survey - General view of work area	N/A	N/A	SW	08/12/2016	J Davidson	
G2482_005	Llanfaethlu Water Treatment Works	Controlled Strip	Working shot - Commencement of Controlled Strip	N/A	N/A	SW	08/12/2016	J Davidson	Plate 01

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_006	Llanfaethlu Water Treatment Works	Controlled Strip	Working shot showing wet conditions in NW corner	N/A	N/A	SW	08/12/2016	J Davidson	
G2482_007	Llanfaethlu Water Treatment Works	Controlled Strip	SE facing baulk section through linear [06]	(01), (02), [06], (07)	1x1m	NW	08/12/2016	B M Jones	
G2482_008	Llanfaethlu Water Treatment Works	Controlled Strip	Post-ex shot of slot through ditch [06]	(01), (02), [06], (07)	1x1m	NW	08/12/2016	B M Jones	
G2482_009	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through linear [10] and field drain [12]	[10], (11), [12]	1x1m	SE	09/12/2016	B M Jones	
G2482_010	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through linear [10] and field drain [12]	[10], (11), [12]	1x1m	SE	09/12/2016	B M Jones	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_011	Llanfaethlu Water Treatment Works	Controlled Strip	Rep. Sec. at the deepest section of the site (NW end)	(01), (14), (15), (16)	1x1m	E	13/12/2016	B M Jones	
G2482_012	Llanfaethlu Water Treatment Works	Controlled Strip	Rep. Sec. at the deepest section of the site (NW end)	(01), (14), (15), (16)	1x1m	E	13/12/2016	B M Jones	Plate 05
G2482_013	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	1x1m	S	13/12/2016	B M Jones	
G2482_014	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	1x1m	W	13/12/2016	B M Jones	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_015	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	1x1m	E	13/12/2016	B M Jones	
G2482_016	Llanfaethlu Water Treatment Works	Controlled Strip	General site view	N/A	N/A	NE	14/12/2016	B M Jones	Plate 02
G2482_017	Llanfaethlu Water Treatment Works	Controlled Strip	General site view	N/A	N/A	N	14/12/2016	B M Jones	
G2482_018	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	2x1m	S	14/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_019	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	2x1m	S	14/12/2016	J Davidson	Plate 08
G2482_020	Llanfaethlu Water Treatment Works	Controlled Strip	Pre. Ex. Shot of burnt deposit (08) and field drain [18]	(08), [18]	2x1m	S	14/12/2016	J Davidson	
G2482_021	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through burnt deposit (08)	(08)	1x1m	NW	15/12/2016	J Davidson	
G2482_022	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through burnt deposit (08)	(08)	1x1m	NW	15/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_023	Llanfaethlu Water Treatment Works	Controlled Strip	Pre-ex. Shot of posthole [19]	[19], (20), (23)	1x0.2m	NW	15/12/2016	J Davidson	
G2482_024	Llanfaethlu Water Treatment Works	Controlled Strip	Pre-ex. Shot of posthole [19]	[19], (20), (23)	1x0.2m	NW	15/12/2016	J Davidson	
G2482_025	Llanfaethlu Water Treatment Works	Controlled Strip	Pre-ex. Shot of feature (21)	(21)	1x0.2m	NW	15/12/2016	J Davidson	
G2482_026	Llanfaethlu Water Treatment Works	Controlled Strip	Pre-ex. Shot of feature (21)	(21)	1x0.2m	NW	15/12/2016	J Davidson	
G2482_027	Llanfaethlu Water Treatment Works	Controlled Strip	Pre-ex. Shot of posthole [19] and feature (21)	[19], (20), (23), (21)	1x0.2m	NW	15/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_028	Llanfaethlu Water Treatment Works	Controlled Strip	SW. facing baulk section through burnt deposit (08) and field drain [18]	(08), [18], (27), (01)	1x1m	SW	16/12/2016	J Davidson	
G2482_029	Llanfaethlu Water Treatment Works	Controlled Strip	SW. facing baulk section through burnt deposit (08) and field drain [18]	(08), [18], (27), (01)	1x1m	SW	16/12/2016	J Davidson	
G2482_030	Llanfaethlu Water Treatment Works	Controlled Strip	Working shot - Area at the NE end on the area not excavated to 0.5m, but natural not reached	N/A	N/A	S	16/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_031	Llanfaethlu Water Treatment Works	Controlled Strip	Working shot - Planning	N/A	N/A	S	16/12/2016	J Davidson	
G2482_032	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through posthole [19] and deposit (22)	[19], (20), (23), (22)	1x1m	NW	19/12/2016	J Davidson	
G2482_033	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through posthole [19] and deposit (22)	[19], (20), (23), (22)	1x1m	NW	19/12/2016	J Davidson	
G2482_034	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through posthole [19]	[19], (20), (23)	1x0.3m	NW	19/12/2016	J Davidson	
G2482_035	Llanfaethlu Water Treatment Works	Controlled Strip	NW facing section through posthole [19]	[19], (20), (23)	1x0.3m	NW	19/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_036	Llanfaethlu Water Treatment Works	Controlled Strip	Mid-ex shot of posthole [19]showing possible post-pad in situ	[19], (20)	1x0.2m	NW	19/12/2016	J Davidson	Plate 06
G2482_037	Llanfaethlu Water Treatment Works	Controlled Strip	Mid-ex shot of posthole [19]showing possible post-pad in situ	[19], (20)	1x0.2m	NW	19/12/2016	J Davidson	
G2482_038	Llanfaethlu Water Treatment Works	Controlled Strip	Post-ex shot of posthole [19]	[19]	1x0.3m	NW	19/12/2016	J Davidson	
G2482_039	Llanfaethlu Water Treatment Works	Controlled Strip	General pre-ex view of features revealed in recent Controlled Strip area	N/A	N/A	SE	21/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_040	Llanfaethlu Water Treatment Works	Controlled Strip	General pre-ex view of features revealed in recent Controlled Strip area	N/A	N/A	NW	21/12/2016	J Davidson	
G2482_041	Llanfaethlu Water Treatment Works	Controlled Strip	General view of features revealed in recent Controlled Strip area	N/A	N/A	NW	21/12/2016	J Davidson	
G2482_042	Llanfaethlu Water Treatment Works	Controlled Strip	Mid-ex NW facing section through pit [24]	[24] (25)	1x0.3m	NW	21/12/2016	B M Jones	
G2482_043	Llanfaethlu Water Treatment Works	Controlled Strip	Mid-ex shot of pit [24] with packing stone in situ	[24] (25)	1x0.3m	SW	21/12/2016	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_044	Llanfaethlu Water Treatment Works	Controlled Strip	Portrait view of mid-ex shot of pit [24] (with photoboard)	[24]	1x0.3m	SW	21/12/2016	J Davidson	
G2482_045	Llanfaethlu Water Treatment Works	Controlled Strip	Portrait post-ex shot pf pit [24] (with photoboard)	[24]	1x0.3m	SW	21/12/2016	J Davidson	Plate 07
G2482_046	Llanfaethlu Water Treatment Works	Controlled Strip	Post-ex shot of pit [24]	[24]	1x0.3m	SW	21/12/2016	J Davidson	
G2482_047	Llanfaethlu	Controlled Strip	NW facing section through ditch [28]	[28] (29)	1x1m	NW	05/01/2017	J Davidson	
G2482_048	Llanfaethlu	Controlled Strip	NW facing section through ditch [28]	[28] (29)	1x1m	NW	05/01/2017	J Davidson	Plate 47

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_049	Llanfaethlu	Controlled Strip	Slot through ditch [28] location shot	[28] (29)	1x1m	SE	05/01/2017	J Davidson	
G2482_050	Llanfaethlu	Controlled Strip	Slot through deposit (26)	(26)	1x1m	SW	05/01/2017	J Davidson	
G2482_051	Llanfaethlu	Controlled Strip	Slot through deposit (26)	(26)	1x1m	NW	05/01/2017	J Davidson	
G2482_052	Llanfaethlu	Controlled Strip	Slot through deposit (26)	(26)	1x1m	NW	05/01/2017	J Davidson	
G2482_053	Llanfaethlu	Controlled Strip	NW facing section through ditch [31]	[31] (32) (33)	1x1m	NW	09/01/2017	N McGuinnes	
G2482_054	Llanfaethlu	Controlled Strip	NW facing section through ditch [31] (no board)	[31] (32) (33)	1x1m	NW	09/01/2017	N McGuinnes	Plate 48

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_055	Llanfaethlu	Controlled Strip	N facing section through [34]	[34] (35) [31] (32) (33)	1x1m	N	09/01/2017	N McGuinnes	
G2482_056	Llanfaethlu	Controlled Strip	N facing section through [34] (no board)	[31] (32) (33) [31] (32) (33)	1x1m	N	09/01/2017	N McGuinnes	Plate 09
G2482_057	Llanfaethlu	Controlled Strip	Ditch [31] and pit [34]	[34] (35) [31] (32) (33)	1x1m	W	09/01/2017	N McGuinnes	
G2482_058	Llanfaethlu	Controlled Strip	Slot through ditch [38]	[38] [39]	1x1m	NE	09/01/2017	J Davidson	Plate 41
G2482_059	Llanfaethlu	Controlled Strip	Slot through ditch [38]	[38] [39]	1x1m	NE	09/01/2017	J Davidson	
G2482_060	Llanfaethlu	Controlled Strip	Slot through ditch [38] (ID board)	[38] [39]	1x1m	NE	09/01/2017	J Davidson	
G2482_061	Llanfaethlu	Controlled Strip	Post-ex pit [34]	[34] [36] (37)	1x1m	N	10/01/2017	N McGuinnes	
G2482_062	Llanfaethlu	Controlled Strip	Post-ex pit [34] (no board)	[34] [36] (37)	1x1m	N	10/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_063	Llanfaethlu	Controlled Strip	Pre-ex [36]	[36] (37)	1x1m	N	10/01/2017	N McGuinnes	
G2482_064	Llanfaethlu	Controlled Strip	Pre-ex [36] (no board)	[36] (37)	1x1m	N	10/01/2017	N McGuinnes	
G2482_065	Llanfaethlu	Controlled Strip	Slot 3 through linear [42] - feature no. [30]	[42] (43) (44) 30	1x1m	NW	10/01/2017	J Davidson	
G2482_066	Llanfaethlu	Controlled Strip	Slot 3 through linear [42] - feature no. [30]	[42] (43) (44) 30	1x1m	NW	10/01/2017	J Davidson	
G2482_067	Llanfaethlu	Controlled Strip	Slot 3 through linear [42] - feature no. [30]	[42] (43) (44) 30	1x1m	NW	10/01/2017	J Davidson	
G2482_068	Llanfaethlu	Controlled Strip	Slot 3 through linear [42] - feature no. [30]	[42] (43) (44) 30	1x1m	NW	10/01/2017	J Davidson	
G2482_069	Llanfaethlu	Controlled Strip	Half section through pit [45]	[45] (46)	1x 0.3m	N	11/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_070	Llanfaethlu	Controlled Strip	Half section through pit [45] (no board)	[45] (46)	1x 0.3m	N	11/01/2017	N McGuinnes	
G2482_071	Llanfaethlu	Controlled Strip	Post-ex pit [45]	[45] (46)	1x 0.3m	N	11/01/2017	N McGuinnes	
G2482_072	Llanfaethlu	Controlled Strip	Post-ex pit [45] (no board)	[45] (46)	1x 0.3m	N	11/01/2017	N McGuinnes	
G2482_073	Llanfaethlu	Controlled Strip	Mid-ex linear [47]	[47] (48)	1x 0.3m	NW	11/01/2017	AM Oates	Plate 49
G2482_074	Llanfaethlu	Controlled Strip	L-shaped slot through intercutting linear [50] [53]	[50] (51) (52) [53] (54)	1x1m	NE	11/01/2017	J Davidson	
G2482_075	Llanfaethlu	Controlled Strip	L-shaped slot through intercutting linear [50] [53]	[50] (51) (52) [53] (54)	1x1m	NE	11/01/2017	J Davidson	Plate 43

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_076	Llanfaethlu	Controlled Strip	L-shaped slot through intercutting linear [50] [53]	[50] (51) (52) [53] (54)	1x1m	SW	11/01/2017	J Davidson	
G2482_077	Llanfaethlu	Controlled Strip	L-shaped slot through intercutting linear [50] [53]	[50] (51) (52) [53] (54)	1x1m	NW	11/01/2017	J Davidson	
G2482_078	Llanfaethlu	Controlled Strip	NE facing section through [53]	[53] (54)	1x1m	SW	12/01/2017	J Davidson	
G2482_079	Llanfaethlu	Controlled Strip	NE facing section through [53]	[53] (54)	1x1m	SW	12/01/2017	J Davidson	
G2482_080	Llanfaethlu	Controlled Strip	NW facing section linear [47] (with ID board)	[47] (48)	1x1m	NW	12/01/2017	A M Oattes	
G2482_081	Llanfaethlu	Controlled Strip	NW facing section linear [47]	[47] (48)	1x1m	NW	12/01/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_082	Llanfaethlu	Controlled Strip	Bank (55) from the NW	(55) (66) (67)	1x2m	NW	12/01/2017	N McGuinnes	
G2482_083	Llanfaethlu	Controlled Strip	Bank (55) from the E	(55) (67)	1x2m	E	12/01/2017	N McGuinnes	
G2482_084	Llanfaethlu	Controlled Strip	Bank (55) from the SE	(55) (67)	1x2m	SE	12/01/2017	N McGuinnes	
G2482_085	Llanfaethlu	Controlled Strip	Intervention in bank (55) mid-ex	(55) (67)	1x1m	NE	12/01/2017	N McGuinnes	
G2482_086	Llanfaethlu	Controlled Strip	Intervention in bank (55) mid-ex	(55) (67)	1x1m	SW	12/01/2017	N McGuinnes	
G2482_087	Llanfaethlu	Controlled Strip	Pre-ex shot of linear [56] and stones (40)	[56] (57) (40)	1x1m	SW	12/01/2017	J Davidson	
G2482_088	Llanfaethlu	Controlled Strip	Pre-ex shot of linear [56] and stones (40)	[56] (57) (40)	1x1m	NW	12/01/2017	J Davidson	
G2482_089	Llanfaethlu	Controlled Strip	Pre-ex shot of linear [56] and stones (40)	[56] (57) (40)	1x1m	NW	12/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_090	Llanfaethlu	Controlled Strip	Section cut through linear [56] and stones (40)	[56] (57) (40)	1x1m	NE	13/01/2017	J Davidson	
G2482_091	Llanfaethlu	Controlled Strip	Section cut through linear [56] and stones (40)	[56] (57) (40)	1x1m	NE	13/01/2017	J Davidson	Plate 42
G2482_092	Llanfaethlu	Controlled Strip	Slot through linear [56] and stones (40)	[56] (57) (40)	1x1m	NE	13/01/2017	J Davidson	
G2482_093	Llanfaethlu	Controlled Strip	Slot through linear [56] and stones (40)	[56] (57) (40)	1x1m	SW	13/01/2017	J Davidson	
G2482_094	Llanfaethlu	Controlled Strip	Intervention across bank (55) post-ex	(55) [62] (63)	1x1m	NE	13/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_095	Llanfaethlu	Controlled Strip	Intervention across bank (55) post-ex (no id board)	(55) [62] (63)	1x1m	NE	13/01/2017	N McGuinnes	
G2482_096	Llanfaethlu	Controlled Strip	Shot of earth bank and stones in 1m wide clear area	(59)	1x1m	SE	13/01/2017	A M Oattes	
G2482_097	Llanfaethlu	Controlled Strip	Shot of earth bank and stones in 1m wide clear area (no board)	(59)	1x1m	SE	13/01/2017	A M Oattes	Plate 45
G2482_098	Llanfaethlu	Controlled Strip	Shot of earth bank and stones in 1m wide clear area	(58)	1x1m	SE	13/01/2017	A M Oattes	
G2482_099	Llanfaethlu	Controlled Strip	Shot of earth bank and stones in 1m wide clear area (no board)	(58)	1x1m	SE	13/01/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_100	Llanfaethlu	Controlled Strip	View to NE of (58) and (59) ditches to NE	(58) (59) [13] (12)	1x1m	SW	13/01/2017	A M Oattes	Plate 44
G2482_101	Llanfaethlu	Controlled Strip	SW facing section through (59) (ID says (58))	(59)	1x1m	SW	13/01/2017	A M Oattes	
G2482_102	Llanfaethlu	Controlled Strip	SW facing section through (58) (ID says (59))	(58) [13] (12)	1x1m	SW	13/01/2017	A M Oattes	
G2482_103	Llanfaethlu	Controlled Strip	NW facing section through possible pit [60]	[60] (61)	1x0.2m	NW	13/01/2017	J Davidson	
G2482_104	Llanfaethlu	Controlled Strip	NW facing section through possible pit [60]	[60] (61)	1x0.2m	NW	13/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_105	Llanfaethlu	Controlled Strip	NW facing section through possible pit [60]	[60] (61)	1x0.2m	NW	13/01/2017	J Davidson	
G2482_106	Llanfaethlu	Controlled Strip	Ditch [62] post-ex and (55) bank/fill ?	[62] (55)	1x1m	NE	16/01/2017	N McGuinnes	
G2482_107	Llanfaethlu	Controlled Strip	Ditch [62] post-ex and (55) bank/fill ? (no board)	[62] (55)	1x1m	NE	16/01/2017	N McGuinnes	
G2482_108	Llanfaethlu	Controlled Strip	SE facing section across (55) bank/fill and ditch [62] (no board)	[62] (55) (63) (64) (65) (66) (67) (68) (69)	1x1m	SE	16/01/2017	N McGuinnes	Plate 40
G2482_109	Llanfaethlu	Controlled Strip	SE facing section across (55) bank/fill and ditch [62]	[62] (55) (63) (64) (65) (66) (67) (68) (69)	1x1m	SE	16/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_110	Llanfaethlu	Controlled Strip	NW facing section through banks and ceramic land drain	(58) (59) [13] (12)	2x1m	NW	16/01/2017	AM Oates	
G2482_111	Llanfaethlu	Controlled Strip	Closer view of NW facing section through banks and ceramic land drain	(58) (59) [13] (12)	2x1m	NW	16/01/2017	AM Oates	
G2482_112	Llanfaethlu	Controlled Strip	Pre-ex. Shot of feature [78]	[78] (79)	1x1m	N	19/01/2017	J Davidson	
G2482_113	Llanfaethlu	Controlled Strip	Pre-ex. Shot of linear [72] & [78]	[72] (82) [78] (79)	1x1m	NW	19/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_114	Llanfaethlu	Controlled Strip	Ditch [62] after further machining and removal of (55)	[62] (63)	1x1m	NW	19/01/2017	J Davidson	
G2482_115	Llanfaethlu	Controlled Strip	NE facing section through ditch [70]	[70] (71)	1x1m	SW	19/01/2017	A M Oattes	
G2482_116	Llanfaethlu	Controlled Strip	NE facing section through ditch [70]	[70] (71)	1x1m	NE	19/01/2017	A M Oattes	
G2482_117	Llanfaethlu	Controlled Strip	Post-ex shot of feature [78]	[78]	1x1m	NW	20/01/2017	J Davidson	
G2482_118	Llanfaethlu	Controlled Strip	Post-ex shot of feature [78]	[78] (79)	1x1m	NE	20/01/2017	J Davidson	
G2482_119	Llanfaethlu	Controlled Strip	Post-ex shot of feature [78]	[78] (79)	1x1m	NE	20/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_120	Llanfaethlu	Controlled Strip	East facing baulk section through feature [78]	[78] (79)	1x1m	E	20/01/2017	J Davidson	
G2482_121	Llanfaethlu	Controlled Strip	Slot across [62], (80), [75] and [72]	[62], (63), (80), [75], (76), (77), (81), [72], (73), (74), (82)	1x1m	N	20/01/2017	N McGuinnes	Plate 12
G2482_122	Llanfaethlu	Controlled Strip	Slot across [62], (80), [75] and [72]. No ID board	[62], (63), (80), [75], (76), (77), (81), [72], (73), (74), (82)	1x1m	N	20/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_123	Llanfaethlu	Controlled Strip	Post-ex shot of feature [60]. ID board	[60]	1x1m	NW	20/01/2017	J Davidson	
G2482_124	Llanfaethlu	Controlled Strip	Post-ex shot of feature [60]. No ID board	[60]	1x1m	NW	20/01/2017	J Davidson	
G2482_125	Llanfaethlu	Controlled Strip	Post-ex shot of pit [75]. ID board	[75]	1x1m	N	20/01/2017	N McGuinnes	
G2482_126	Llanfaethlu	Controlled Strip	Post-ex shot of pit [75]. No ID board	[75]	1x1m	N	20/01/2017	N McGuinnes	
G2482_127	Llanfaethlu	Controlled Strip	N facing longitudinal section along terminus of [72]. ID board	[72], (73), (74), (82)	1x1m	N	23/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_128	Llanfaethlu	Controlled Strip	N facing longitudinal section along terminus of [72]. No ID board	[72], (73), (74), (82)	1x1m	N	23/01/2017	N McGuinnes	
G2482_129	Llanfaethlu	Controlled Strip	SE facing baulk section through gully [72]. No ID board	[72], (73), (74), (82)	1x0.3m	SE	23/01/2017	N McGuinnes	
G2482_130	Llanfaethlu	Controlled Strip	SE facing baulk section through gully [72]. ID board	[72], (73), (74), (82)	1x0.3m	SE	23/01/2017	N McGuinnes	Plate 11
G2482_131	Llanfaethlu	Controlled Strip	Post-ex shot of gully [72]. No ID board	[72], [75]	1x1m	NE	23/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_132	Llanfaethlu	Controlled Strip	Post-ex shot of gully [72]. ID board	[72], [75]	1x1m	NE	23/01/2017	N McGuinnes	
G2482_133	Llanfaethlu	Controlled Strip	Post-ex shot of gully [72]. ID board	[72], [75]	1x1m	SE	23/01/2017	N McGuinnes	Plate 10
G2482_134	Llanfaethlu	Controlled Strip	Post-ex shot of gully [72]. No ID board	[72], [75]	1x1m	SE	23/01/2017	N McGuinnes	
G2482_135	Llanfaethlu	Controlled Strip	SSW facing section through linear [90]. ID board	[90], (91), (92)	1x1m	SSW	24/01/2017	AM Oates	
G2482_136	Llanfaethlu	Controlled Strip	SSW facing section through linear [90]. No ID board	[90], (91), (92)	1x1m	SSW	24/01/2017	A M Oattes	Plate 46
G2482_137	Llanfaethlu	Controlled Strip	Pre-ex shot of pit [95]. ID board	[95], (96), [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_138	Llanfaethlu	Controlled Strip	Pre-ex shot of pit [95]. No ID board	[95], (96), [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	
G2482_139	Llanfaethlu	Controlled Strip	NW facing section through pit [95]. ID board	[95], (96), [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	Plate 13
G2482_140	Llanfaethlu	Controlled Strip	NW facing section through pit [95]. No ID board	[95], (96), [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	
G2482_141	Llanfaethlu	Controlled Strip	N facing section through gully [97]. ID board	[97], (98)	1x0.3m	N	24/01/2017	J Davidson	
G2482_142	Llanfaethlu	Controlled Strip	N facing section through gully [97]. ID board	[97], (98)	1x0.3m	N	24/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_143	Llanfaethlu	Controlled Strip	N facing section through gully [97]. No ID board	[97], (98)	1x0.3m	N	24/01/2017	J Davidson	
G2482_144	Llanfaethlu	Controlled Strip	N facing section through gully [99]. ID board	[99], (100), (101)	1x0.3m	N	24/01/2017	J Davidson	
G2482_145	Llanfaethlu	Controlled Strip	N facing section through gully [99]. No ID board	[99], (100), (101)	1x0.3m	N	24/01/2017	J Davidson	
G2482_146	Llanfaethlu	Controlled Strip	Post-ex shot of pit [95]. ID board	[95], [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	
G2482_147	Llanfaethlu	Controlled Strip	Post-ex shot of pit [95]. No ID board	[95], [62], (63)	1x1m	NW	24/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_148	Llanfaethlu	Controlled Strip	Pre-ex shot of possible pit [104]. ID board	[104], (106), (107)	1x1m	SE	25/01/2017	A M Oattes	
G2482_149	Llanfaethlu	Controlled Strip	Pre-ex shot of possible pit [104]. No ID board	[104], (106), (107)	1x1m	SE	25/01/2017	A M Oattes	
G2482_150	Llanfaethlu	Controlled Strip	Southern part of possible prehistoric activity area following first clean		2x1m	SE	25/01/2017	N McGuinnes	
G2482_151	Llanfaethlu	Controlled Strip	Southern part of possible prehistoric activity area following first clean		2x1m	S	25/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_152	Llanfaethlu	Controlled Strip	Mid-ex shot of intercutting features [105]	[105]	2x1m	NNW	25/01/2017	J Davidson	
G2482_153	Llanfaethlu	Controlled Strip	Mid-ex shot of intercutting features [105]	[105]	2x1m	NNW	25/01/2017	J Davidson	Plate 14
G2482_154	Llanfaethlu	Controlled Strip	East facing section through intercutting pit group [105]	[105], [99], (100), (89), [108], [121], (122)	1x1m	E	25/01/2017	J Davidson	
G2482_155	Llanfaethlu	Controlled Strip	East facing section through intercutting pit group [105]	[105], [99], (100), (89), [108], [121], (122)	1x1m	E	25/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_156	Llanfaethlu	Controlled Strip	South facing section through intercutting pit group [105]	[105], [99], (100), [125], (126), (89), [108], [121], (122)	1x1m	S	25/01/2017	J Davidson	
G2482_157	Llanfaethlu	Controlled Strip	South facing section through intercutting pit group [105]	[105], [99], (100), [125], (126), (89), [108], [121], (122)	1x1m	S	25/01/2017	J Davidson	
G2482_158	Llanfaethlu	Controlled Strip	East facing section through intercutting gully [97]	[105], [97], (98)	1x1m	E	25/01/2017	J Davidson	
G2482_159	Llanfaethlu	Controlled Strip	East facing section through intercutting gully [97]	[105], [97], (98)	1x1m	E	25/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_160	Llanfaethlu	Controlled Strip	Southeast facing, mid-ex section through pit [104]. ID board	[104], (106), (107)	1x1m	SE	26/01/2017	A M Oattes	
G2482_161	Llanfaethlu	Controlled Strip	Southeast facing, mid-ex section through pit [104]. No ID board	[104], (106), (107)	1x1m	SE	26/01/2017	A M Oattes	
G2482_162	Llanfaethlu	Controlled Strip	Southeast facing section through pit [104]. ID board	[104], (106), (107)	1x1m	SE	26/01/2017	A M Oattes	
G2482_163	Llanfaethlu	Controlled Strip	Southeast facing section through pit [104]. No ID board	[104], (106), (107)	1x1m	SE	26/01/2017	A M Oattes	Plate 27
G2482_164	Llanfaethlu	Controlled Strip	Pre-ex shot of pit [110]	[110], (111)	1x0.3m	S	26/01/2017	S Reilly	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_165	Llanfaethlu	Controlled Strip	Southeast facing section through pit [110]	[110], (111)	1x0.3m	SE	26/01/2017	S Reilly	Plate 18
G2482_166	Llanfaethlu	Controlled Strip	Pre-ex shot of gully [115]. ID board incorrect	[115], (114)	1x1m	SE	27/01/2017	N McGuinnes	
G2482_167	Llanfaethlu	Controlled Strip	Pre-ex shot of gully [115]. No ID board	[115], (114)	1x1m	SE	27/01/2017	N McGuinnes	
G2482_168	Llanfaethlu	Controlled Strip	Southeast facing section through gully [115]. No ID board	[115], (114)	1x1m	SE	27/01/2017	N McGuinnes	
G2482_169	Llanfaethlu	Controlled Strip	Southeast facing section through gully [115]. ID board incorrect	[115], (114)	1x1m	SE	27/01/2017	N McGuinnes	Plate 26

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_170	Llanfaethlu	Controlled Strip	Post-ex shot of pit [104]. ID board	[104]	1x1m	SE	27/01/2017	AM Oates	
G2482_171	Llanfaethlu	Controlled Strip	Post-ex shot of pit [104]. No ID board	[104]	1x1m	SE	27/01/2017	AM Oates	
G2482_172	Llanfaethlu	Controlled Strip	Post-ex shot of pit [99].	[99], [105]	1x1m	S	27/01/2017	J Davidson	
G2482_173	Llanfaethlu	Controlled Strip	Post-ex shot of pit [99].	[99], [105]	1x1m	S	27/01/2017	J Davidson	
G2482_174	Llanfaethlu	Controlled Strip	Pre-ex shot of burnt deposit (116), possible pit [117] and burnt deposit (118)	(116), [117], (118)	1x1m	SW	27/01/2017	B M Jones	Plate 32
G2482_175	Llanfaethlu	Controlled Strip	Post-ex shot of gully [115]. ID board incorrect	[115], (120)	1x1m	SE	27/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_176	Llanfaethlu	Controlled Strip	Post-ex shot of gully [115].	[115], (120)	1x1m	SE	27/01/2017	N McGuinnes	
G2482_177	Llanfaethlu	Controlled Strip	Pre-ex shot of leached deposit (120). ID board	[115], (120), (124)	1x1m	NW	27/01/2017	N McGuinnes	
G2482_178	Llanfaethlu	Controlled Strip	Pre-ex shot of leached deposit (120). No ID board	[115], (120), (124)	1x1m	SE	27/01/2017	N McGuinnes	
G2482_179	Llanfaethlu	Controlled Strip	Southwest facing section through burnt deposit (116), possible pit [117] and burnt deposit (118)	(116), [117], (118)	1x1m	SW	27/01/2017	B M Jones	
G2482_180	Llanfaethlu	Controlled Strip	Pre-ex shot of deposit (123)	(123)	1x1m	SE	27/01/2017	S Reilly	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_181	Llanfaethlu	Controlled Strip	Mid-ex shot of pit group [105], showing [121] and [99]. ID Board	[105], [121], [99]	1x1m	NNE	30/01/2017	J Davidson	
G2482_182	Llanfaethlu	Controlled Strip	Mid-ex shot of pit group [105], showing [121] and [99]. ID board	[105], [121], [99]	1x1m	ENE	30/01/2017	J Davidson	
G2482_183	Llanfaethlu	Controlled Strip	Mid-ex shot of pit group [105], showing [121] and [99]. No ID board	[105], [121], [99]	1x1m	ENE	30/01/2017	J Davidson	
G2482_184	Llanfaethlu	Controlled Strip	Mid-ex shot of gully [97]. ID board	[105], [97]	1x1m	NNE	30/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_185	Llanfaethlu	Controlled Strip	Mid-ex shot of gully [97]. No ID board	[105], [97]	1x1m	NNE	30/01/2017	J Davidson	
G2482_186	Llanfaethlu	Controlled Strip	Post-ex shot of gully [97]. ID board	[105], [97]	1x1m	NNE	30/01/2017	J Davidson	
G2482_187	Llanfaethlu	Controlled Strip	Post-ex shot of gully [97]. No ID board	[105], [97]	1x1m	NNE	30/01/2017	J Davidson	
G2482_188	Llanfaethlu	Controlled Strip	Post-ex shot of pit [125]. ID board	[105], [125]	1x0.3m	SSW	30/01/2017	J Davidson	
G2482_189	Llanfaethlu	Controlled Strip	Post-ex shot of pit [125]. No ID board	[105], [125]	1x0.3m	SSW	30/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_190	Llanfaethlu	Controlled Strip	Southwest facing section through burnt deposit (116) and [129]. ID board	[117], (116), [129]	1x0.3m	SW	31/01/2017	B M Jones	
G2482_191	Llanfaethlu	Controlled Strip	East facing section through pit [130]. ID board	[130], (131)	1x0.3m	E	31/01/2017	N McGuinnes	
G2482_192	Llanfaethlu	Controlled Strip	East facing section through pit [130]. ID board	[130], (131)	1x0.3m	E	31/01/2017	N McGuinnes	
G2482_193	Llanfaethlu	Controlled Strip	Post-ex shot of pit [127]. No ID board	[105], [127]	1x1m	E	31/01/2017	J Davidson	
G2482_194	Llanfaethlu	Controlled Strip	Post-ex shot of pit [127]. No ID board	[105], [127]	1x1m	E	31/01/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_195	Llanfaethlu	Controlled Strip	Post-ex shot of cut [129], in the centre of burnt deposit (116). ID Board	[129], (116)	1x0.3m	SW	31/01/2017	B M Jones	
G2482_196	Llanfaethlu	Controlled Strip	Pre-ex shot of the southern portion of pit group [105]. No ID board	[105]	1x1m	E	31/01/2017	J Davidson	
G2482_197	Llanfaethlu	Controlled Strip	North facing section through pit [132]. No ID board	[105], [132], (133)	1x0.3m	N	31/01/2017	J Davidson	
G2482_198	Llanfaethlu	Controlled Strip	Post-ex shot of pit [130]. ID board	[130]	1x0.3m	E	31/01/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_199	Llanfaethlu	Controlled Strip	Post-ex shot of pit [130]. No ID board	[130]	1x0.3m	E	31/01/2017	N McGuinnes	
G2482_200	Llanfaethlu	Controlled Strip	Pre-ex shot of gully [134]. ID board	[134], (135)	1x1m	NE	01/02/2017	N McGuinnes	
G2482_201	Llanfaethlu	Controlled Strip	Pre-ex shot of gully [134]. No ID board	[134], (135)	1x1m	NE	01/02/2017	N McGuinnes	
G2482_202	Llanfaethlu	Controlled Strip	Pre-ex shot of pit [136]. ID board	[136], (137)	1x1m	SE	01/02/2017	A M Oattes	
G2482_203	Llanfaethlu	Controlled Strip	Pre-ex shot of pit [136]. No ID board	[136], (137)	1x1m	SE	01/02/2017	A M Oattes	
G2482_204	Llanfaethlu	Controlled Strip	West facing section across gully [134] (does not show true extent of cut). ID board	[134], (135)	1x1m	W	01/02/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_205	Llanfaethlu	Controlled Strip	West facing section across gully [134] (does not show true extent of cut). ID board	[134], (135)	1x1m	W	01/02/2017	N McGuinnes	
G2482_206	Llanfaethlu	Controlled Strip	Northwest facing section through pit [136]. ID board	[136], (137), (134)	1x1m	SE	01/02/2017	A M Oattes	Plate 25
G2482_207	Llanfaethlu	Controlled Strip	Northwest facing section through pit [136]. No ID board	[136], (137), (134)	1x1m	SE	01/02/2017	A M Oattes	
G2482_208	Llanfaethlu	Controlled Strip	Post-ex shot of pit [136]. ID board	[136]	1x1m	NW	01/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_209	Llanfaethlu	Controlled Strip	Post-ex shot of pit [136]. No ID board	[136]	1x1m	NW	01/02/2017	A M Oattes	
G2482_210	Llanfaethlu	Controlled Strip	Post-ex shot of pit [136]. No ID board	[136]	1x1m	NW	01/02/2017	A M Oattes	
G2482_211	Llanfaethlu	Controlled Strip	Post-ex shot of gully [134]. No ID board	[134]	1x1m	S	01/02/2017	N McGuinnes	Plate 24
G2482_212	Llanfaethlu	Controlled Strip	Post-ex shot of gully [134]. No ID board	[134]	1x1m	W	01/02/2017	N McGuinnes	
G2482_213	Llanfaethlu	Controlled Strip	Post-ex shot of gully [134]. No ID board	[134]	1x1m	N	01/02/2017	N McGuinnes	
G2482_214	Llanfaethlu	Controlled Strip	Post-ex shot of gully [134]. No ID board	[134]	1x1m	E	01/02/2017	N McGuinnes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_215	Llanfaethlu	Controlled Strip	Mid-ex shot of [141]. No ID board	[141], (142), [105]	1x0.3m	E	02/02/2017	J Davidson	
G2482_216	Llanfaethlu	Controlled Strip	Mid-ex shot of [141]. No ID board	[141], (142), [105]	1x0.3m	E	02/02/2017	J Davidson	
G2482_217	Llanfaethlu	Controlled Strip	Mid-ex shot of [143] and [145]. ID board	[143], (144), [145], (146)	1x1m	SE	02/02/2017	A M Oattes	
G2482_218	Llanfaethlu	Controlled Strip	Mid-ex shot of [143] and [145]. No ID board	[143], (144), [145], (146)	1x1m	SE	02/02/2017	A M Oattes	
G2482_219	Llanfaethlu	Controlled Strip	East facing section through the southern portion of pit group [105]	[105], [147], [149], [141], [132]	1x1m	E	02/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_220	Llanfaethlu	Controlled Strip	East facing section through the southern portion of pit group [105]	[105], [147], [149], [141], [132]	1x1m	N	02/02/2017	J Davidson	
G2482_221	Llanfaethlu	Controlled Strip	Post-ex shot of [143] and [145]. ID board	[143], (144), [145], (146)	1x1m	SSE	02/02/2017	A M Oattes	
G2482_222	Llanfaethlu	Controlled Strip	Post-ex shot of [143] and [145]. No ID board	[143], (144), [145], (146)	1x1m	SSE	02/02/2017	A M Oattes	
G2482_223	Llanfaethlu	Controlled Strip	Mid-ex shot of small rectangular feature [151]. ID board	[151]	1x0.3m	SE	02/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_224	Llanfaethlu	Controlled Strip	Mid-ex shot of small rectangular feature [151]. No ID board	[151]	1x0.3m	SE	02/02/2017	A M Oattes	
G2482_225	Llanfaethlu	Controlled Strip	Post-ex shot of small rectangular feature [151]. No ID board	[151]	1x0.3m	SE	06/02/2017	A M Oattes	Plate 17
G2482_226	Llanfaethlu	Controlled Strip	Post-ex shot of small rectangular feature [151]. No ID board	[151]	1x0.3m	SE	06/02/2017	A M Oattes	
G2482_227	Llanfaethlu	Controlled Strip	Mid-ex shot of pit [154]. No ID board	[154], (155), [160], (161)	1x1m	SE	06/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_228	Llanfaethlu	Controlled Strip	Mid-ex shot of pit [154]. No ID board	[154], (155), [160], (161)	1x1m	SE	06/02/2017	J Davidson	
G2482_229	Llanfaethlu	Controlled Strip	Southeast facing section through pit [154]. No ID board	[154], (155)	1x0.3m	SE	06/02/2017	J Davidson	Plate 21
G2482_230	Llanfaethlu	Controlled Strip	Southwest facing section through pits [154] and [160]. No ID board	[154], (155), [160, (161)	1x0.3m	SW	06/02/2017	J Davidson	Plate 22
G2482_231	Llanfaethlu	Controlled Strip	Northwest facing section through pit [154]. No ID board	[154], (155)	1x0.3m	NW	06/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_232	Llanfaethlu	Controlled Strip	Northeast facing section through pit [154]. No ID board	[154], (155)	1x0.3m	NE	06/02/2017	J Davidson	
G2482_233	Llanfaethlu	Controlled Strip	Northeast facing section through pit [156]. No ID board	[156], (157), (158), (159)	1x0.3m	NE	06/02/2017	J Davidson	Plate 20
G2482_234	Llanfaethlu	Controlled Strip	Northeast facing section through pit [156]. No ID board	[156], (157), (158), (159)	1x0.3m	NE	06/02/2017	J Davidson	
G2482_235	Llanfaethlu	Controlled Strip	Post-ex shot of small pit [160]. ID board	[160]	1x0.3m	NE	07/02/2017	J Davidson	
G2482_236	Llanfaethlu	Controlled Strip	Post-ex shot of small pit [160]. ID board	[160]	1x0.3m	NE	07/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_237	Llanfaethlu	Controlled Strip	Mid-ex shot of [162]. ID board	[162], (163)	1x1m	N	07/02/2017	A M Oattes	
G2482_238	Llanfaethlu	Controlled Strip	Mid-ex shot of [162]. No ID board	[162], (163)	1x1m	N	07/02/2017	A M Oattes	Plate 23
G2482_239	Llanfaethlu	Controlled Strip	Post-ex shot showing pits [160], [154] and [156]. No ID board	[160], [154], [156]	1x1m	SE	07/02/2017	J Davidson	Plate 19
G2482_240	Llanfaethlu	Controlled Strip	Post-ex shot showing pits [160], [154] and [156]. ID board	[160], [154], [156]	1x1m	SE	07/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_241	Llanfaethlu	Controlled Strip	Pre-ex shot of central cleaned area showing possible features. ID board		2x1m	SSE	07/02/2017	M S Lynes	
G2482_242	Llanfaethlu	Controlled Strip	Pre-ex shot of central cleaned area showing possible features. No ID board		2x1m	SSE	07/02/2017	M S Lynes	
G2482_243	Llanfaethlu	Controlled Strip	Post-ex shotof pit [162]. ID board	[162]	1x1m	N	07/02/2017	A M Oattes	
G2482_244	Llanfaethlu	Controlled Strip	Post-ex shotof pit [162]. No ID board	[162]	1x1m	N	07/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_245	Llanfaethlu	Controlled Strip	Southeast facing section through [171]. ID board	[171], (172)	1x0.3m	SSE	08/02/2017	A M Oattes	Plate 15
G2482_246	Llanfaethlu	Controlled Strip	Southeast facing section through [171]. No ID board	[171], (172)	1x0.3m	SSE	08/02/2017	A M Oattes	
G2482_247	Llanfaethlu	Controlled Strip	South-southeast facing section through [173]. ID board	[173], (174)	1x0.3m	SSE	08/02/2017	A M Oattes	
G2482_248	Llanfaethlu	Controlled Strip	South-southeast facing section through [173]. No ID board	[173], (174)	1x0.3m	SSE	08/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_249	Llanfaethlu	Controlled Strip	South-southeast facing section through [169]. ID board	[169], (170)	1x0.3m	SSE	08/02/2017	M S Lynes	
G2482_250	Llanfaethlu	Controlled Strip	South-southeast facing section through [169]. No ID board	[169], (170)	1x0.3m	SSE	08/02/2017	M S Lynes	
G2482_251	Llanfaethlu	Controlled Strip	South-southeast facing section through [177]. ID board	[177], (176)	1x0.3m	SSE	08/02/2017	J Davidson	
G2482_252	Llanfaethlu	Controlled Strip	South-southeast facing section through [177]. No ID board	[177], (176)	1x0.3m	SSE	08/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_253	Llanfaethlu	Controlled Strip	South-southeast facing section through [178]. ID board	[178], (174), (175), (188)	1x0.3m	SSE	08/02/2017	M S Lynes	
G2482_254	Llanfaethlu	Controlled Strip	South-southeast facing section through [178]. No ID board	[178], (174), (175), (188)	1x0.3m	SSE	08/02/2017	M S Lynes	
G2482_255	Llanfaethlu	Controlled Strip	Post-ex shot of [171]. ID board	[171]	1x0.3m	SE	08/02/2017	A M Oattes	
G2482_256	Llanfaethlu	Controlled Strip	Post-ex shot of [171]. No ID board	[171]	1x0.3m	SE	08/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_257	Llanfaethlu	Controlled Strip	South-southeast facing section through group [183]. ID board	[183]	1x1m	SSE	09/02/2017	J Davidson	
G2482_258	Llanfaethlu	Controlled Strip	South-southeast facing section through group [183]. No ID board	[183]	1x1m	SSE	09/02/2017	J Davidson	
G2482_259	Llanfaethlu	Controlled Strip	South-southeast facing section through pit [181]. ID board	[181], (182)	1x0.3m	SSE	09/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_260	Llanfaethlu	Controlled Strip	South-southeast facing section through pit [181]. No ID board	[181], (182)	1x0.3m	SSE	09/02/2017	J Davidson	
G2482_261	Llanfaethlu	Controlled Strip	Post-ex shot of pit [178]. ID board	[178]	1x0.3m	SSE	13/02/2017	M S Lynes	
G2482_262	Llanfaethlu	Controlled Strip	Post-ex shot of pit [178]. No ID board	[178]	1x0.3m	SSE	13/02/2017	M S Lynes	
G2482_263	Llanfaethlu	Controlled Strip	Post-ex shot of pits [179] and [181]. ID board	[179], [181]	1x0.3m	SSE	13/02/2017	M S Lynes	
G2482_264	Llanfaethlu	Controlled Strip	Post-ex shot of pits [179] and [181]. No ID board	[179], [181]	1x0.3m	SSE	13/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_265	Llanfaethlu	Controlled Strip	Post-ex shot of feature [177]. ID board	[177]	1x0.3m	SSE	13/02/2017	M S Lynes	
G2482_266	Llanfaethlu	Controlled Strip	Post-ex shot of feature [177]. No ID board	[177]	1x0.3m	SSE	13/02/2017	M S Lynes	
G2482_267	Llanfaethlu	Controlled Strip	Northwest facing section through feature [184]. ID board	[184], (185)	1x0.3m	NW	14/02/2017	K Owen	
G2482_268	Llanfaethlu	Controlled Strip	Northwest facing section through feature [184]. ID board	[184], (185)	1x0.3m	NW	14/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_269	Llanfaethlu	Controlled Strip	Northwest facing section through feature [184]. No ID board	[184], (185)	1x0.3m	NW	14/02/2017	K Owen	
G2482_270	Llanfaethlu	Controlled Strip	Mid-ex south facing section through [194]. ID board	[194], (190), (193)	1x0.3m	NW	14/02/2017	M S Lynes	
G2482_271	Llanfaethlu	Controlled Strip	Mid-ex south facing section through [194]. ID board	[194], (190), (193)	1x0.3m	NW	14/02/2017	M S Lynes	
G2482_272	Llanfaethlu	Controlled Strip	South facing section through [194]. No ID board	[194], (190), (193)	1x0.3m	NW	14/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_273	Llanfaethlu	Controlled Strip	Southwest facing section through pit [191]. ID board	[191], (192)	1x0.3m	SW	14/02/2017	J Davidson	
G2482_274	Llanfaethlu	Controlled Strip	Southwest facing section through pit [191]. No ID board	[191], (192)	1x0.3m	SW	14/02/2017	J Davidson	
G2482_275	Llanfaethlu	Controlled Strip	South facing section through pit [194]. ID board	[194], (190), (193)	1x0.3m	S	14/02/2017	M S Lynes	
G2482_275	Llanfaethlu	Controlled Strip	Post-ex shot of the southern part of pit cluster [105].No ID board. Re-numbered shot	[105], [147], [149], [141], [232]	1x1m	W	02/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_276	Llanfaethlu	Controlled Strip	South facing section through pit [194]. ID board	[194], (190), (193)	1x0.3m	S	14/02/2017	M S Lynes	
G2482_277	Llanfaethlu	Controlled Strip	Post-ex shot of feature [184]. ID board	[184]	1x0.3m	SW	14/02/2017	K Owen	
G2482_278	Llanfaethlu	Controlled Strip	Post-ex shot of feature [184]. No ID board	[184]	1x0.3m	SW	14/02/2017	K Owen	
G2482_279	Llanfaethlu	Controlled Strip	Post-ex shot of pit [194]. ID board	[194]	1x0.3m	S	14/02/2017	M S Lynes	
G2482_280	Llanfaethlu	Controlled Strip	Post-ex shot of pit [194]. No ID board	[194]	1x0.3m	S	14/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_281	Llanfaethlu	Controlled Strip	Post-ex shot of features [181], [184] and [185]. ID board	[181], (182) [184], [185], (186)	2x1m	NW	14/02/2017	J Davidson	
G2482_282	Llanfaethlu	Controlled Strip	Northwest facing section through features [181] and [185]. ID board	[181], (182),[185], (186)	2x1m	NW	14/02/2017	J Davidson	
G2482_283	Llanfaethlu	Controlled Strip	Northwest facing section through feature [185]. ID board	[185], (186)	1x1m	NW	14/02/2017	J Davidson	
G2482_284	Llanfaethlu	Controlled Strip	Northwest facing section through feature [185]. No ID board	[185], (186)	1x1m	NW	14/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_285	Llanfaethlu	Controlled Strip	South facing section through feature [197]. ID board	[197], (198)	1x0.3m	S	14/02/2017	J Davidson	
G2482_286	Llanfaethlu	Controlled Strip	South facing section through feature [197]. ID board	[197], (198)	1x0.3m	S	14/02/2017	J Davidson	Plate 16
G2482_287	Llanfaethlu	Controlled Strip	South facing section through feature [197]. No ID board	[197], (198)	1x0.3m	S	14/02/2017	J Davidson	
G2482_288	Llanfaethlu	Controlled Strip	Post-ex shot of feature [197]. ID board	[197], (198)	1x0.3m	S	15/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_289	Llanfaethlu	Controlled Strip	Post-ex shot of feature [197]. No ID board	[197], (198)	1x0.3m	S	15/02/2017	J Davidson	
G2482_290	Llanfaethlu	Controlled Strip	Northeast facing section through feature [199]. ID board	[199], (200)	1x0.3m	NE	15/02/2017	J Davidson	
G2482_291	Llanfaethlu	Controlled Strip	Northeast facing section through feature [199]. No ID board	[199], (200)	1x0.3m	NE	15/02/2017	J Davidson	
G2482_292	Llanfaethlu	Controlled Strip	Post-ex shot of feature [199]. ID board	[199]	1x0.3m	NE	16/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_293	Llanfaethlu	Controlled Strip	Post-ex shot of feature [199]. No ID board	[199]	1x0.3m	NE	16/02/2017	J Davidson	
G2482_294	Llanfaethlu	Controlled Strip	Pre-ex shot of burnt deposits (203) and (207). ID board	(203), (207)	1x0.3m	NNE	16/02/2017	J Davidson	
G2482_295	Llanfaethlu	Controlled Strip	Pre-ex shot of burnt deposits (203) and (207). No ID board	(203), (207)	1x0.3m	NNE	16/02/2017	J Davidson	
G2482_296	Llanfaethlu	Controlled Strip	Pre-ex shot of burnt deposits (203) and (207). ID board	(203), (207)	1x0.3m	NW	16/02/2017	J Davidson	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_297	Llanfaethlu	Controlled Strip	Pre-ex shot of burnt deposits (203) and (207). No ID board	(203), (207)	1x0.3m	NW	16/02/2017	J Davidson	
G2482_298	Llanfaethlu	Controlled Strip	Pre-ex shot of feature group [202], central area. ID board	[202]	2x1m	NW	16/02/2017	K Owen	Plate 30
G2482_299	Llanfaethlu	Controlled Strip	Pre-ex shot of feature group [202], northeast area. ID board	[202]	2x1m	NW	16/02/2017	K Owen	
G2482_300	Llanfaethlu	Controlled Strip	Pre-ex shot of feature group [202], northwest area. ID board	[202]	2x1m	NW	16/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_301	Llanfaethlu	Controlled Strip	Pre-ex shot of feature group [202], general shot. ID board	[202]	2x1m	N	16/02/2017	K Owen	
G2482_302	Llanfaethlu	Controlled Strip	Pre-ex shot of feature group [202], general shot. ID board	[202]	-	W	16/02/2017	K Owen	
G2482_303	Llanfaethlu	Controlled Strip	Southeast facing section through feature [204]. ID board	[204], (205), (206)	2x1m	SE	17/02/2017	A M Oattes	
G2482_304	Llanfaethlu	Controlled Strip	Southeast facing section through feature [204]. No ID board	[204], (205), (206)	2x1m	SE	17/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_305	Llanfaethlu	Controlled Strip	Mid-ex shot following the removal of 25% of (207) showing (203). ID board	(203), (207)	1x1m	E	17/02/2017	M S Lynes	
G2482_306	Llanfaethlu	Controlled Strip	Mid-ex shot following the removal of 25% of (207) showing (203). No ID board	(203), (207)	1x1m	E	17/02/2017	M S Lynes	
G2482_307	Llanfaethlu	Controlled Strip	Southwest facing section through [209]. ID board	[209], (210), (211)	2x1m	SW	20/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_308	Llanfaethlu	Controlled Strip	Northwest facing section through [209]. ID board	[209], (210), (211)	2x1m	NW	20/02/2017	K Owen	
G2482_309	Llanfaethlu	Controlled Strip	Southeast facing section through [209]. ID board	[209], (210), (211)	2x1m	SE	20/02/2017	K Owen	
G2482_310	Llanfaethlu	Controlled Strip	Southwest facing section through [209]. No ID board	[209], (210), (211)	2x1m	SW	20/02/2017	K Owen	
G2482_311	Llanfaethlu	Controlled Strip	Southeast facing section through [209]. No ID board	[209], (210), (211)	2x1m	SE	20/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_312	Llanfaethlu	Controlled Strip	Northwest facing section through [209]. No ID board	[209], (210), (211)	2x1m	NW	20/02/2017	K Owen	
G2482_313	Llanfaethlu	Controlled Strip	General view of [209]. ID board	[209], (210), (211)	2x1m	SW	20/02/2017	K Owen	
G2482_314	Llanfaethlu	Controlled Strip	General view of [209]. No ID board	[209], (210), (211)	2x1m	SW	20/02/2017	K Owen	
G2482_315	Llanfaethlu	Controlled Strip	Southeast facing section through feature [204]. ID board	[204], (205), (206)	1x1m	SE	20/02/2017	A M Oattes	
G2482_316	Llanfaethlu	Controlled Strip	Southeast facing section through feature [204]. No ID board	[204], (205), (206)	1x1m	SE	20/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_317	Llanfaethlu	Controlled Strip	Southeast facing section through feature [212]. ID board	[212], (207), (212), (214)	1x0.3m	SE	20/02/2017	M S Lynes	Plate 28
G2482_318	Llanfaethlu	Controlled Strip	Southeast facing section through feature [212]. No ID board	[212], (207), (212), (214)	1x0.3m	SE	20/02/2017	M S Lynes	
G2482_319	Llanfaethlu	Controlled Strip	Southeast facing section through ditch [215]. ID board	[215], (216), (217)	1x0.3m, 1x1m	SE	20/02/2017	R Evans	Plate 33
G2482_320	Llanfaethlu	Controlled Strip	Southeast facing section through ditch [215]. No ID board	[215], (216), (217)	1x0.3m, 1x1m	SE	20/02/2017	R Evans	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_321	Llanfaethlu	Controlled Strip	Northwest facing section through ditch [215]. ID board	[215], (216), (217)	1x0.3m, 1x1m	NW	20/02/2017	R Evans	
G2482_322	Llanfaethlu	Controlled Strip	Northwest facing section through ditch [215]. No ID board	[215], (216), (217)	1x0.3m, 1x1m	NW	20/02/2017	R Evans	
G2482_323	Llanfaethlu	Controlled Strip	Northeast facing section through feature [220]. ID board	[220], (221), (208)	1x0.3m	NE	21/02/2017	M S Lynes	
G2482_324	Llanfaethlu	Controlled Strip	Northeast facing section through feature [220]. No ID board	[220], (221), (208)	1x0.3m	NE	21/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_325	Llanfaethlu	Controlled Strip	South facing section through ditch terminus [222]. ID board	[222], (219)	1x0.3m	S	21/02/2017	R Evans	
G2482_326	Llanfaethlu	Controlled Strip	South facing section through ditch terminus [222]. No ID board	[222], (219)	1x0.3m	S	21/02/2017	R Evans	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_327	Llanfaethlu	Controlled Strip	Post-ex shot of feature [220] with layer (221) still in situ running southwest. Also, pre-ex shot of feature [224].ID board	[220], (221), [224]	1x0.3m	NE	21/02/2017	M S Lynes	
G2482_328	Llanfaethlu	Controlled Strip	Post-ex shot of feature [220] with layer (221) still in situ running southwest. Also, pre-ex shot of feature [224]. No ID board	[220], (221), [224]	1x0.3m	NE	21/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_329	Llanfaethlu	Controlled Strip	Southeast facing section through feature [224]. ID board	[224]	1x0.3m	SE	21/02/2017	M S Lynes	Plate 29
G2482_330	Llanfaethlu	Controlled Strip	Southeast facing section through feature [224]. No ID board	[224]	1x0.3m	SE	21/02/2017	M S Lynes	
G2482_331	Llanfaethlu	Controlled Strip	South-southeast facing section through [232] possible hearth and (233) and (234). ID board	[232], (233), (234)	1x1m, 1x0.3m	SSE	21/02/2017	R Evans	Plate 31

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_332	Llanfaethlu	Controlled Strip	South-southeast facing section through [232] possible hearth and (233) and (234). No ID board	[232], (233), (234)	1x1m, 1x0.3m	SSE	21/02/2017	R Evans	
G2482_333	Llanfaethlu	Controlled Strip	South-southeast facing section through curvilinear [226]; at the northwest end. ID board	[226], (227), (228)	1x1m, 1x0.3m	SSE	21/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_334	Llanfaethlu	Controlled Strip	Overview of curvilinear [226]; at the northwest end. ID board	[226], (227), (228)	1x1m, 1x0.3m	SSE	21/02/2017	K Owen	
G2482_335	Llanfaethlu	Controlled Strip	South-southeast facing section through curvilinear [226]. No ID board	[226], (227), (228)	1x1m, 1x0.3m	SSE	21/02/2017	K Owen	
G2482_336	Llanfaethlu	Controlled Strip	Overview of curvilinear [226]. No ID board	[226], (227), (228)	1x1m, 1x0.3m	SSE	21/02/2017	K Owen	
G2482_337	Llanfaethlu	Controlled Strip	East facing section through curvilinear [229]. ID board	[229], (230), (231)	1x1m, 1x0.3m	E	21/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_338	Llanfaethlu	Controlled Strip	East facing section through curvilinear [229]. No ID board	[229], (230), (231)	1x1m, 1x0.3m	E	21/02/2017	K Owen	Plate 34
G2482_339	Llanfaethlu	Controlled Strip	Post-ex shot of feature [224]. ID board	[224]	1x0.3m	SE	21/02/2017	M S Lynes	
G2482_340	Llanfaethlu	Controlled Strip	Post-ex shot of feature [224]. No ID board	[224]	1x0.3m	SE	21/02/2017	M S Lynes	
G2482_341	Llanfaethlu	Controlled Strip	Post-ex shot of possible hearth [232]. ID board	[232]	1x1m	ESE	22/02/2017	R Evans	
G2482_342	Llanfaethlu	Controlled Strip	Post-ex shot of possible hearth [232]. No ID board	[232]	1x1m	ESE	22/02/2017	R Evans	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_343	Llanfaethlu	Controlled Strip	Northwest facing section through feature [235] and [237]. ID board	[235], (236), [237], (238)	1x1m	NW	22/02/2017	A M Oattes	
G2482_344	Llanfaethlu	Controlled Strip	Northwest facing section through feature [235] and [237]. No ID board	[235], (236), [237], (238)	1x1m	NW	22/02/2017	A M Oattes	
G2482_345	Llanfaethlu	Controlled Strip	Pre-ex shot of linear [239] and feature [241]. No ID board	[239], [241]	1x1m	W	22/02/2017	S Reilly	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_346	Llanfaethlu	Controlled Strip	Northeast facing section through feature [242]. ID board	[242], (243), (244)	1x0.3m	NE	22/02/2017	M S Lynes	
G2482_347	Llanfaethlu	Controlled Strip	Northeast facing section through feature [242]. No ID board	[242], (243), (244)	1x0.3m	NE	22/02/2017	M S Lynes	
G2482_348	Llanfaethlu	Controlled Strip	West facing section through feature [239]. ID board	[239]	1x0.3m	W	22/02/2017	S Reilly	Plate 37

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_349	Llanfaethlu	Controlled Strip	Southeast facing baulk section through feature [239]. No ID board	[239]	1x0.3m	SE	22/02/2017	S Reilly	
G2482_350	Llanfaethlu	Controlled Strip	Post-ex shot of feature [242]. ID board	[242]	1x0.3m	NE	22/02/2017	M S Lynes	
G2482_351	Llanfaethlu	Controlled Strip	Post-ex shot of feature [242]. No ID board	[242]	1x0.3m	NE	22/02/2017	M S Lynes	
G2482_352	Llanfaethlu	Controlled Strip	Post-ex shot of feature [212]. ID board	[212]	1x0.3m	SE	24/02/2017	M S Lynes	
G2482_353	Llanfaethlu	Controlled Strip	Post-ex shot of feature [212]. No ID board	[212]	1x0.3m	SE	24/02/2017	M S Lynes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_354	Llanfaethlu	Controlled Strip	Mid-ex shot showing [237], north facing section through [235] and [237]. ID board	[235], (236), [237], (238)	1x1m	N	24/02/2017	A M Oattes	
G2482_355	Llanfaethlu	Controlled Strip	Mid-ex shot following the removal of (238) [237], north facing section through [235] and [237]. No ID board	[235], (236), [237]	1x1m	N	24/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_356	Llanfaethlu	Controlled Strip	South facing section through [235] and [237]. ID board	[235], (236), [237]. (238)	1x1m	S	24/02/2017	A M Oattes	
G2482_357	Llanfaethlu	Controlled Strip	South facing section through [235] and [237]. No ID board	[235], (236), [237]. (238)	1x1m	S	24/02/2017	A M Oattes	
G2482_358	Llanfaethlu	Controlled Strip	East facing section through [252] . ID board	[252]	1x1m	E	24/02/2017	S Reilly	Plate 38
G2482_359	Llanfaethlu	Controlled Strip	Post-ex shot of terminus of [252] and posthole [247] . ID board	[252], [257]	1x1m	NNE	24/02/2017	S Reilly	Plate 39

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_360	Llanfaethlu	Controlled Strip	East-southeast facing section through short linear [249]. ID board	[249], (250), (251)	1x0.3m	ESE	24/02/2017	K Owen	
G2482_361	Llanfaethlu	Controlled Strip	Overall shot of short linear [249]. ID board	[249], (250), (251)	1x0.3m	ESE	24/02/2017	K Owen	
G2482_362	Llanfaethlu	Controlled Strip	East-southeast facing section through short linear [249]. No ID board	[249], (250), (251)	1x0.3m	ESE	24/02/2017	K Owen	
G2482_363	Llanfaethlu	Controlled Strip	Overall shot of short linear [249]. No ID board	[249], (250), (251)	1x0.3m	ESE	24/02/2017	K Owen	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_364	Llanfaethlu	Controlled Strip	Mid-ex shot of [237] and [235],following the partial removal of (238 to show the cobbles. ID board	[235], (236), [237]. (238)	1x0.3m	S	24/02/2017	A M Oattes	
G2482_365	Llanfaethlu	Controlled Strip	Mid-ex shot of [237] and [235],following the partial removal of (238 to show the cobbles. No ID board	[235], (236), [237]. (238)	1x0.3m	S	24/02/2017	A M Oattes	

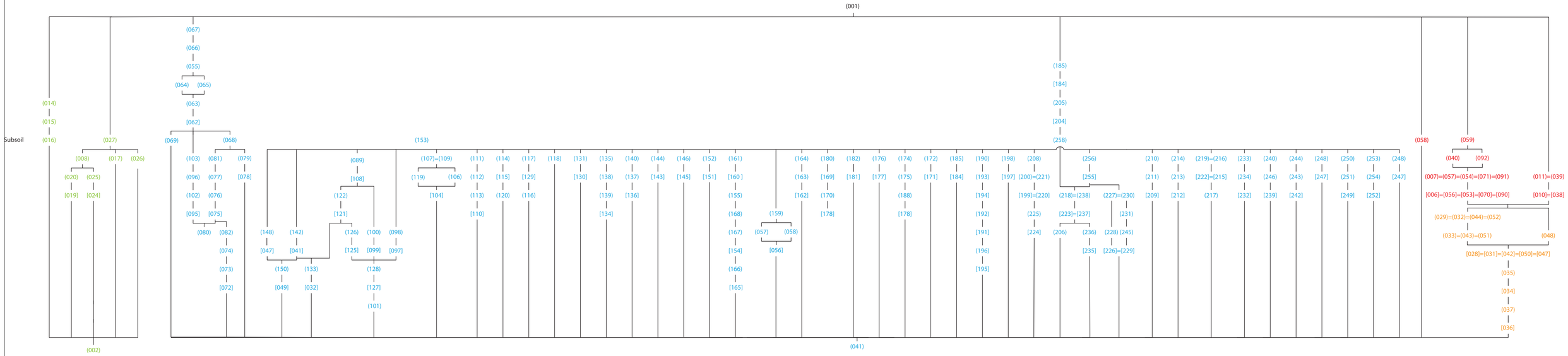
File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_366	Llanfaethlu	Controlled Strip	Post-ex shot of [239] and [247] (landscape view). ID board	[252], [257]	1x0.3m	SE	27/02/2017	S Reilly	Plate 36
G2482_367	Llanfaethlu	Controlled Strip	Post-ex shot of [239] and [247] (portrait view). ID board	[252], [257]	1x0.3m	SE	27/02/2017	S Reilly	
G2482_368	Llanfaethlu	Controlled Strip	South-southwest facing section through [235], [255] with linear [209]. ID board	[235], (236), [255], (236), [209]	1x1m	SSE	27/02/2017	A M Oattes	Plate 35

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_369	Llanfaethlu	Controlled Strip	South-southwest facing section through [235], [255] with linear [209]. ID board	[235], (236), [255], (236), [209]	1x1m	SSE	27/02/2017	A M Oattes	
G2482_370	Llanfaethlu	Controlled Strip	South-southwest facing section through [235], [255] with linear [209]. No ID board	[235], (236), [255], (236), [209]	1x1m	SSE	27/02/2017	A M Oattes	
G2482_371	Llanfaethlu	Controlled Strip	South-southwest facing section through [235], [255] with linear [209]. No ID board	[235], (236), [255], (236), [209]	1x1m	SSE	27/02/2017	A M Oattes	

File reference	Project name	Project phase	Description	Contexts	Scale (s)	View from	Date	Originating person	Plates
G2482_372	Llanfaethlu	Controlled Strip	Post-ex shot of features [209], [235] and [255]. ID board	[209], [235], [255]	1x1m	SSW	27/02/2017	M S Lynes	
G2482_373	Llanfaethlu	Controlled Strip	Post-ex shot of features [209], [235] and [255]. No ID board	[209], [235], [255]	1x1m	SSW	27/02/2017	M S Lynes	
G2482_374	Llanfaethlu	Controlled Strip	Post-ex shot of pit [110]. ID board. Re-numbered shot	[110]	1x1m	SSW	27/01/2017	S Reilly	
G2482_375	Llanfaethlu	Controlled Strip	Post-ex shot of [143] and [145]. No ID board. RE-numbered shot	[143], [145]	1x1m	SE	03/02/2017	A M Oattes	

APPENDIX III

Reproduction of Gwynedd Archaeological Trust Stratigraphic Matrix



Sub area A
Sub area B
Sub area C
Sub area D

Appendix 7- Stratigraphic Matrix

PROJECT: G2482
AUTHOR: JD
DATE: 08/05/2017

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

APPENDIX IV

Reproduction of Lithic Assessment by G. Smith

GWYNEDD ARCHAEOLOGICAL TRUST

DCWW, LLANFAETHLU

GAT PROJECT G2482

LITHICS, PRELIMINARY REPORT

George Smith February 12th 2018

INTRODUCTION

This report provides a description and analysis of lithic materials from the GAT Llanfaethlu excavations. The interpretation and discussion is only preliminary at this stage, requiring re-consideration when combined with the forthcoming additional information from study of the ceramics, palaeobotanical evidence and the radiocarbon dating. The general wider interpretation also needs comparison with the final results, when forthcoming, from the nearby Llanfaethlu School excavation by CR Archaeology, which includes a considerable lithic assemblage (Rees and Jones 2015-16).

The assemblage from the GAT excavation is too small to allow any statistical analysis of the technology or typology so only general observations are made here. The overall assemblage derives from two different methods of retrieval, first from hand excavation and second from floatation sieving. This creates different retrieval rate by size of material, which affects the interpretation, so the material from each retrieval method is kept separate. Record numbers were listed as SF1, SF2 etc. (Small Find). Some record numbers included several pieces and these were given sub-numbers such as SF76.1, SF76.2 etc.

The excavation uncovered three main areas of activity and so the lithic material is considered in relation to those groups. First Area A was a discrete spread of burnt material, associated with two shallow pits. Area B consisted of a group of closely associated features,

including gulleys, slots, post-holes and a hearth, altogether regarded as a probable settlement area. Areas C and D consisted of separate lengths of similar linear features identified as post-medieval field ditches. Only a very few objects came from these features but only small areas of them were excavated. A few pieces were recorded from unstratified or uncertain contexts and a few others were identified as just natural objects and are not included in the report.

RAW MATERIAL AND TECHNOLOGY

The amounts of material from the different areas, separated by retrieval method are shown in Table 1. In the hand excavated material flint and chert pieces were present in similar proportions overall but differed between areas. However, in the sieved material flint predominates showing the way that flint is able to be worked more finely, producing many small flakes and chips.

	AREA A		AREA B		AREA C		AREA D	
	Flint	Chert	Flint	Chert	Flint	Chert	Flint	Chert
Hand excavation	2	35	31	9	4	-	1	-
Sieving	-	1	71	4	-	-	2	1

The flint, where cortex is present, is all from small pebbles or larger rolled cobbles, all ultimately deriving from fluvio-glacial deposits, mainly collected from beaches. It is of mixed colour and generally poor flaking quality.

The black chert is mostly of poor flaking quality and most of the pieces are irregular chunks but there is the occasional piece of better quality. Even so there are no pieces with secondary working and must only have produced thick, sharp-edged flakes or fragments for

utilisation. Most is plain black chert, cobbles of which occur in the glacial sediments of the coastal cliffs, beaches and subsoils of north Anglesey. There are also a few pieces of banded chert such as can be obtained from *in situ* deposits found in outcrops and coastal cliff exposures of limestone in the south-east of Anglesey.

The quality and small size of the flint core material limits the size of the usable flakes but it seems to have been worked successfully although there are a few scalar pieces resulting from direct shattering of pebbles in anvil fashion rather than conventionally struck from cores with prepared striking platforms.

AREA A

Table 2 Summary of objects from Area A

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Core/frag/reject			1	
Flake			1	
Flake frag			5	1
Irregular frag/chip	1	1	28	
Split pebble	1			

The types of object from this area are summarised in Table 2. The most noticeable feature here is that these are nearly all of chert. The one core, of banded chert, is short (33mm), unidirectional and has been struck with a hard hammer, producing broad flakes. The one

complete flake is broad but thin. All but one of the pieces came from the burnt spread (8). One piece, only a small flint chip, came from the fill of pit 24.

AREA B

Table 3 Summary of objects from Area B

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Core/frag/reject	2	1	2	-
Flake	8	7	4	-
Flake frag	2	14	3	1
Irregular frag/chip	11	45	-	3
Split pebble	1	-	-	-
Retouched piece	1	4	-	-
Utilised piece	3	-	-	1
Scalar piece	2	-	-	-

The types of object from this area are summarised in Table 3. This is the largest and most useful assemblage and is dominated by the use of flint. Numerically most of these came from the sieved samples but these are mainly small pieces under 10mm maximum length and some are small chips under 5mm maximum length. The flakes and fragments are mainly tertiary pieces, that is with no cortex remaining but there are five cores. Three of the cores are of flint of which two are irregular rejects and one, from a pebble, is flat and partly

prismatic, and produce blade flakes (Fig. X, 1). The other two cores, of chert, are just fragments. It is noticeable that although the flint raw material was just small pebbles there is a lack of unused complete or split pebble fragments, suggesting that selection and primary working took place elsewhere, probably during the initial collection of raw material.

There are four possibly utilised pieces, three of flint and one of chert, all blades with microchipping on sharp edges. The retouched pieces are the most diagnostic. One piece, from hand excavation, is a small flint convex scraper, made on the side of a thick split pebble fragment (Fig. X, 2). The soil sample sieving produce four more flint retouched pieces. Two are blades snapped from notches, e.g. Fig. X, 3. The other two are narrow blade microlithic points. One is a complete lanceolate shape, retouched alternately on two sides (Fig. X, 5). The other is the tip of a probably convex backed piece, retouched on one side (Fig. X, 6).

AREAS C AND D

Table 4 Summary of objects from Areas C and D

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Flake frag			1	-
Irregular frag/chip	3		-	-
Retouched piece		2	-	-
Scalar piece	2		-	-

The few objects are summarised in Table 4. There are no usefully diagnostic objects from Area C although two scalar pieces of waste flint show the use of small pebbles, as in Area B.

Area D, however, produced two pieces of flint waste from microlith manufacture. One is the tip of a narrow blade that has been snapped off by means of a retouched notch (Fig. X, 4) and the other is a tiny fragment that is probably part of a similar piece. Although these pieces are in a secondary context they fit with the assemblage from Area B.

DISCUSSION

Although Area A has only a few pieces, and none diagnostic there is a clear contrast with the material from Area B in the predominance of chert and the suggestion of the use of broad flakes rather than blades, indicating that they belong to a different periods of activity, despite their proximity. All but one of the pieces from Area A came from the 'burnt spread' (8) and so are closely contextually related to that spread, perhaps an eroded midden, the date and origin of which may be identified by further analysis of its contents. The major use of black chert might suggest comparison with the lithic assemblage from Early Neolithic activity area found beneath the chambered tomb of Trefignath on Holy Island, 8km to the south-west (Smith and Lynch 1987). The change to the use of the less desirable chert as a raw material might be because formerly accessible areas of beach of flint became unavailable as sea levels rose to their maximum during the Early Neolithic period.

Area B comprises a discrete group of features regarded provisionally as an area of settlement activity with some probable structural features, post-holes, slots and gulleys, but of unknown date. This should be elucidated by analysis of the features, plus radiocarbon dating and study of charred plant evidence. The lithic assemblage highlights the importance of soil sampling to provide a proper understanding of the activities present. On the evidence of hand-collection alone the material provides little of diagnostic use as to site period or function with only a small scraper and two utilised flakes. The sieved material however provides a controlled collection to a smaller retrieval size. This material shows evidence of microlithic point manufacture, with two narrow blade points (under 10mm wide) and two notched snapped blades from which a narrow blade point might have been made. Overall, however, the assemblage does not show a preponderance of narrow blade or even blade manufacture, with only two out of six complete flakes from the hand-collected objects of blade proportions and only three of nine complete flakes of the sieved material. The complete flakes may just represent rejects wider than required, with all the narrow blades

further worked. For instance the core (Fig. 1, 1) clearly produced blades and the utilised pieces and notched piece (Fig. 1, 3) are of blade proportions. Also, all the nine complete breadths of flake fragments in the sieved material are less than 10mm. Narrow blade points of lanceolate or convex backed shape form a typical part of the Later or Final Mesolithic period (Jacobi 1980).

Although there are some ceramic objects from the activity area here, these appear to be just parts of deliberate hearth lining, rather than of pottery as such. All the lithic evidence suggests that that the activity area here is of Later or Final Mesolithic date but the period of Mesolithic/Neolithic transition is a one that has yet to be defined or identified in terms of lithic assemblage or type or location of activity (Prehistoric Society 1999; IFA Wales/Cymru). If the activity here is confirmed by radiocarbon dating to be of that transitional period then it would be of great significance, firstly because the features seem to represent some kind of structure and secondly for its possible relation to the more extensive Early and Middle Neolithic activity area 300m to the west (Rees and Jones 2015-16). Mesolithic activity on Anglesey and within north-west Wales has so far been identified almost entirely in coastal locations and mostly from surface collections of lithics, so far thought to represent just surface scatters of temporary activity or camp sites. Some research has identified river valleys as rich habitats for hunter-gatherers, as shown by excavations at Rhuddlan, Denbighshire (Quinnell and Blockley 1994), perhaps leading to the development of more permanent settlement. This has been supported by more recent surveys of river valleys in Pembrokeshire (David and Painter 2015). The inland location at Llanfaethlu is different and the dating and palaeobotanical evidence from the features in Area B is of great interest.

It must be recognised how little lithic evidence there is from a considerable number of features in Area B, which shows that there was relatively little flint working there was. Also to consider is that the largest part of the originally present lithic material may have been incorporated in the topsoil and that could only have been checked by surface collection or gridded topsoil sampling before excavation. Although the lithic assemblage is small, the objects were thinly scattered in a large number of features. There were no significant concentrations in any particular features, suggesting that they were incorporated by chance with no deliberate deposition, or concentration of activity. In terms of quantity it was the sieved soil samples that produced the most material and perhaps the quantities of soil sampled could be calculated to provide a better estimation of the probable original quantities and distribution of lithic material.

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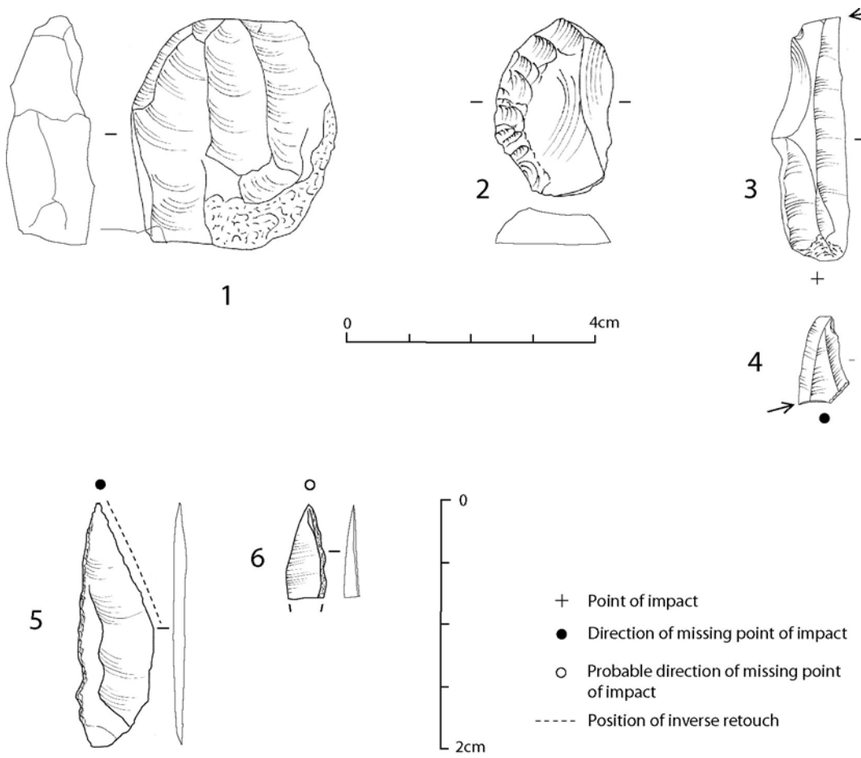


Fig. 1 Worked flint
Area B 1 core, sf42; 2 convex scraper, sf24; 3 notched, snapped blade, butt fragment sf67.1
5 microlith point sf71; 6 microlith point sf75.8.
Area D 4 notched flake tip fragment sf76.1.

APPENDIX V

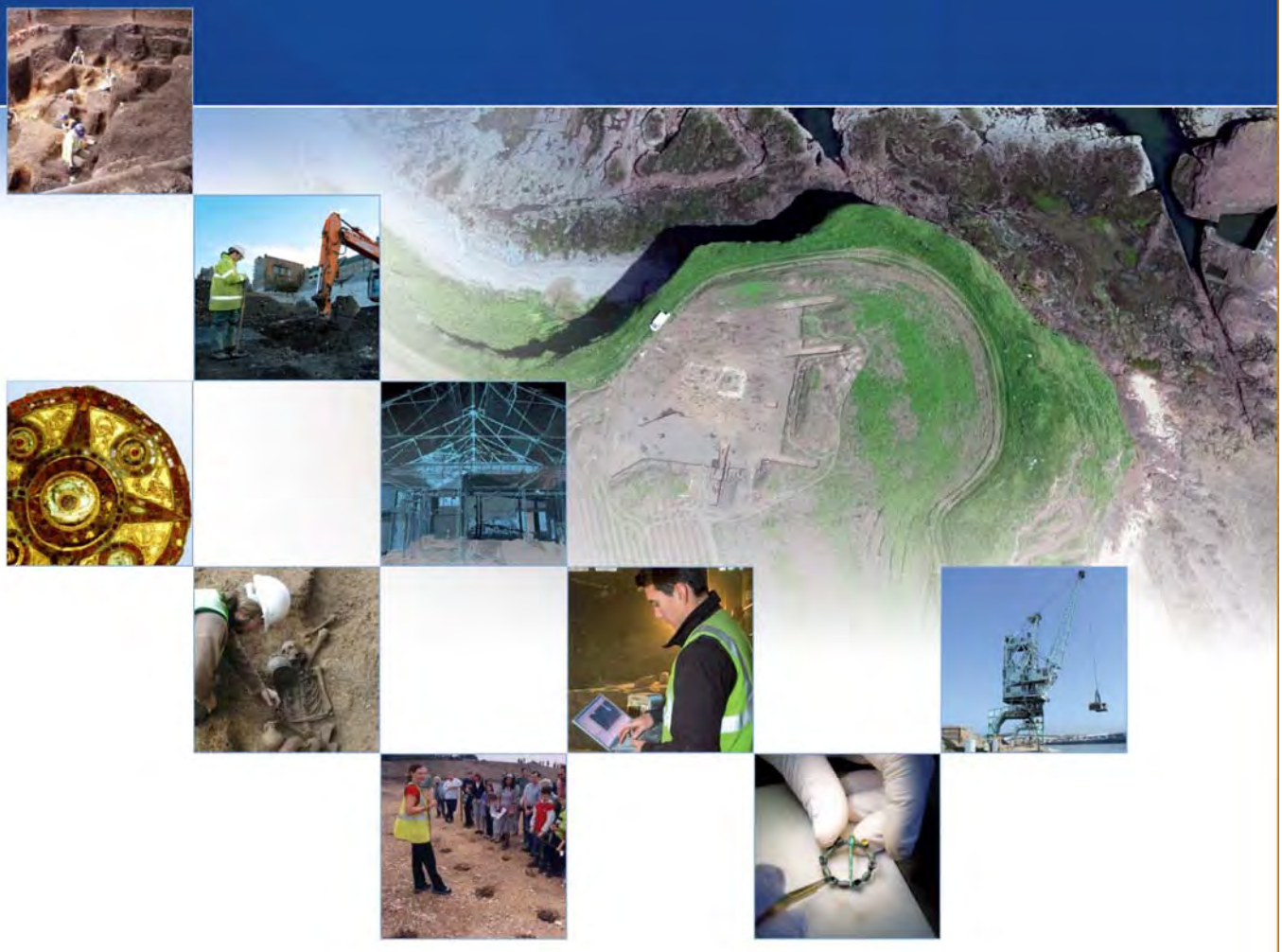
Reproduction on AOC Assessment Report

DCWW Llanfaethlu
Waste Water Treatment Works

AOC Project no: 24185

Site Code: G2482

Date: March 2018



AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

DCWW Llanfaethlu
Waste Water Treatment Works

On Behalf of:	**Gwynedd Archaeological Trust (GAT)**
AOC Project No:	**24185**
Prepared by:	**Jackaline Robertson**
Date of Report:	**March 2018**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Jackaline Robertson **Date: Feb 2018**

Approved by: Ciara Clarke **Date: 15 March 2018**

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EH20 9SY

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www.**aocarchaeology**.com

Factual data

A total of 94 flots were submitted for environmental assessment from Gwynedd Archaeological Trust, from the archaeological mitigation at DCWW Llanfaethlu Waste Water Treatment Works. The samples were collected from a series of pits, postholes, ditches, hearths, gullies, burnt deposits, curvilinear and linear features. Most of these features are believed to be prehistoric but a small number may be medieval to post medieval. The aim of this assessment was to assess the environmental evidence to establish its potential (1) to contribute to understanding the function of these features and (2) towards establishing the chronology of the site through radiocarbon dating.

Methodology

Several flots had been sub-divided within the same bag and these were treated as different samples where they were marked as flot 1 and 2. The dry samples were sieved using a 4mm, 2mm and 1mm system of stack sieves. The flots were subsequently analysed using a low power microscope and identifications of macrofossils were examined at magnifications of x10 and up to x100 where necessary. Identifications were confirmed using modern reference material and seed atlases stored at AOC Edinburgh (Cappers *et al* 2006; Jacomet 2006). Taxonomic and nomenclature for plants follows Stace (2010). Charcoal 4mm and larger was collected for future species identification.

Results

The results are recorded in table 1 the carbonised macroplant and table 2 the charcoal. Nomenclature for plants follows Stace (2010).

The macroplant assemblage

The carbonised macroplant assemblage totalled 424 remains and was recovered from 57 flots. Preservation ranged from poor to good. The assemblage was formed of cultivated cereal crops, wild food remains, woodland and weed taxa.

There were 12 cereal caryopses and one glume recovered across eight contexts. This includes one barley caryopsis (*Hordeum* sp) and two wheat caryopses (T*riticum* sp). The remaining ten caryopses could not be identified further due to poor preservation. The cereal remains were scattered throughout the site in small numbers with no evidence of deliberate or selective disposal.

The wild food remains comprised hazelnut shell (*Corylus avellana* L) and blackberry stones (*Rubus fruticosus* agg). Hazelnut shell was the predominant component of this assemblage; 340 fragments present in 48 contexts. These were concentrated within pit/posthole [178] from which 108 shell fragments were recovered. A total of 22 blackberry stones were noted across six contexts.

Evidence of woodland material was retrieved from four contexts in the form of six buds.

The weed taxa assemblage was small and 43 remains were observed in 17 samples, comprising 29 bedstraw schizocarps (*Galium* sp), one floating water-plantain seed (*Luronium natan*s L), one cornsalad fruit (*Valerianella* sp) and one

vetch seed (*Vicia* sp). The remaining 11 weed taxa could not be identified further. Floating water-plantain is usually found in ponds and canals, bedstraw tends to favour damp habitats, cornsalad and vetch are found in a range of landscapes such as arable and waste ground.

The charcoal assemblage

The charcoal assemblage totalled 264.9g and fragments suitable for species identification were recovered from 71 contexts. It was noted that some of the charcoal has been vitrified which may make further analysis of affected fragments difficult.

Modern Contamination

Small quantities of roots, modern seeds, insects along with live worms and springtails were noted but there is no evidence that the archaeological security of any of the ecofactual finds has been compromised.

Recommendations

The macroplant assemblage has been fully identified and does not require any further work.

Both hazel nut shell and charcoal provide good targets for radiocarbon dating. The charcoal fragments should be identified to species to allow selection of the most suitable fragments for dating.

- Once contexts have been selected for dating a single fragment of charcoal should be identified to species from those samples.
- If charred macroplant is selected for dating it is recommended that hazelnut shell be ranked above the cereal caryopses. This is because the cereal caryopses, given their generally poor condition and low numbers, may not contain sufficient carbon.
- Once the dating is completed the remainder of the charcoal assemblage should be analysed. This will make it possible to identify how wood species were utilised at this site, identify the presence of *in situ* structural elements, fuel debris and the nature of the surrounding landscape.
- Once the radiocarbon dates and charcoal identifications are complete the two ecofact assemblages can then be analysed in conjunction with each other to understand the development of this site in terms of exploitation of plants for food, building material and fuel from the pre-historic to the post medieval period.

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APPENDIX VI

Reproduction of SUERC Radiocarbon Results

Scottish Universities Environmental Research Centre
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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87250 (GU51569)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	8
Sample Reference	1
Material	Charcoal : Birch
$\delta^{13}C$ relative to VPDB	-27.5 ‰
Radiocarbon Age BP	2721 ± 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.

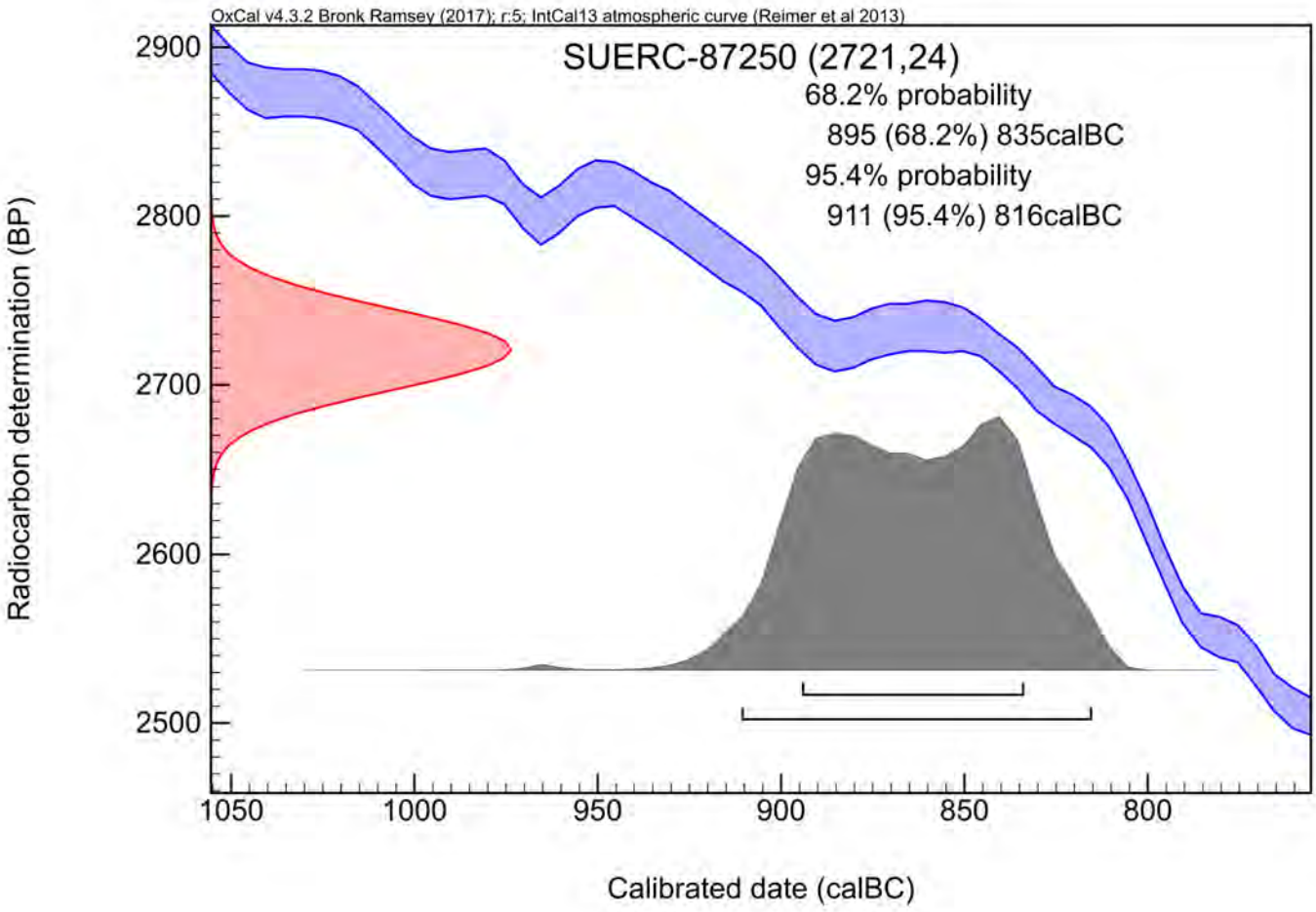
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87254 (GU51570)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	25
Sample Reference	3
Material	Charcoal : Birch
$\delta^{13}C$ relative to VPDB	-25.6 ‰
Radiocarbon Age BP	2715 ± 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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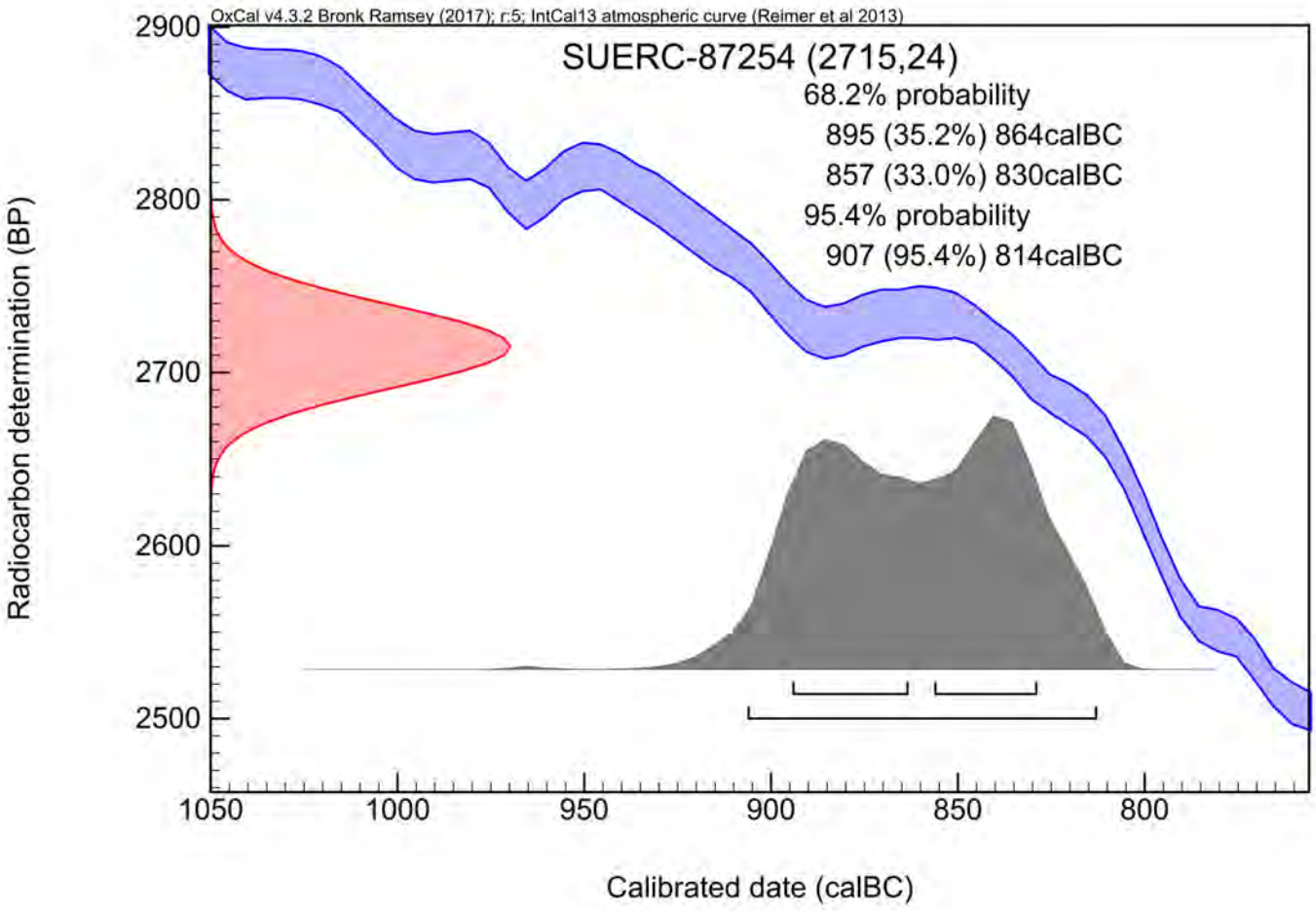

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The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87255 (GU51571)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	77
Sample Reference	18
Material	Charcoal : Hazel
$\delta^{13}C$ relative to VPDB	-25.9 ‰
Radiocarbon Age BP	5853 ± 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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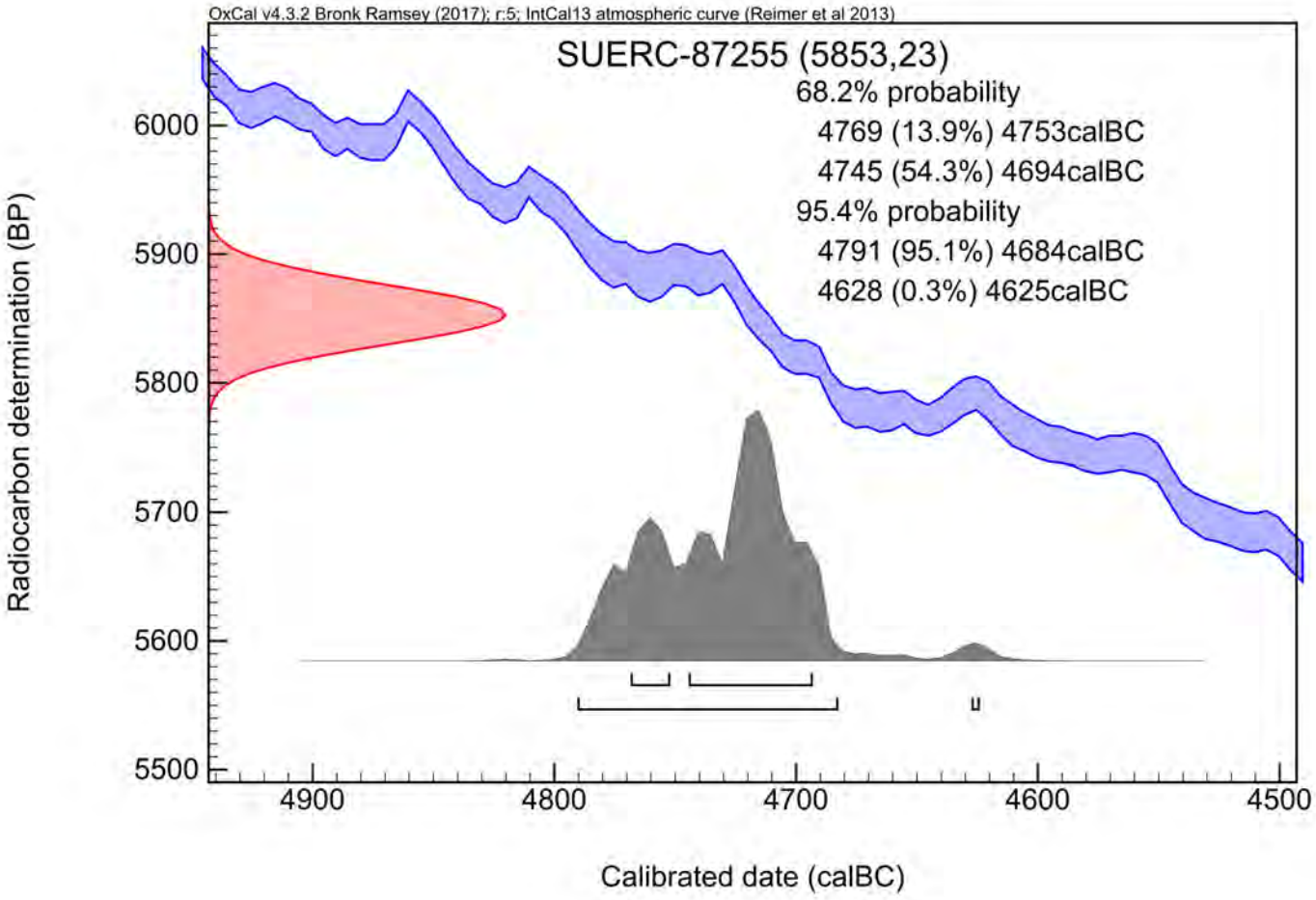

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The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87256 (GU51572)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	100
Sample Reference	22
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-25.4 ‰
Radiocarbon Age BP	6605 ± 25

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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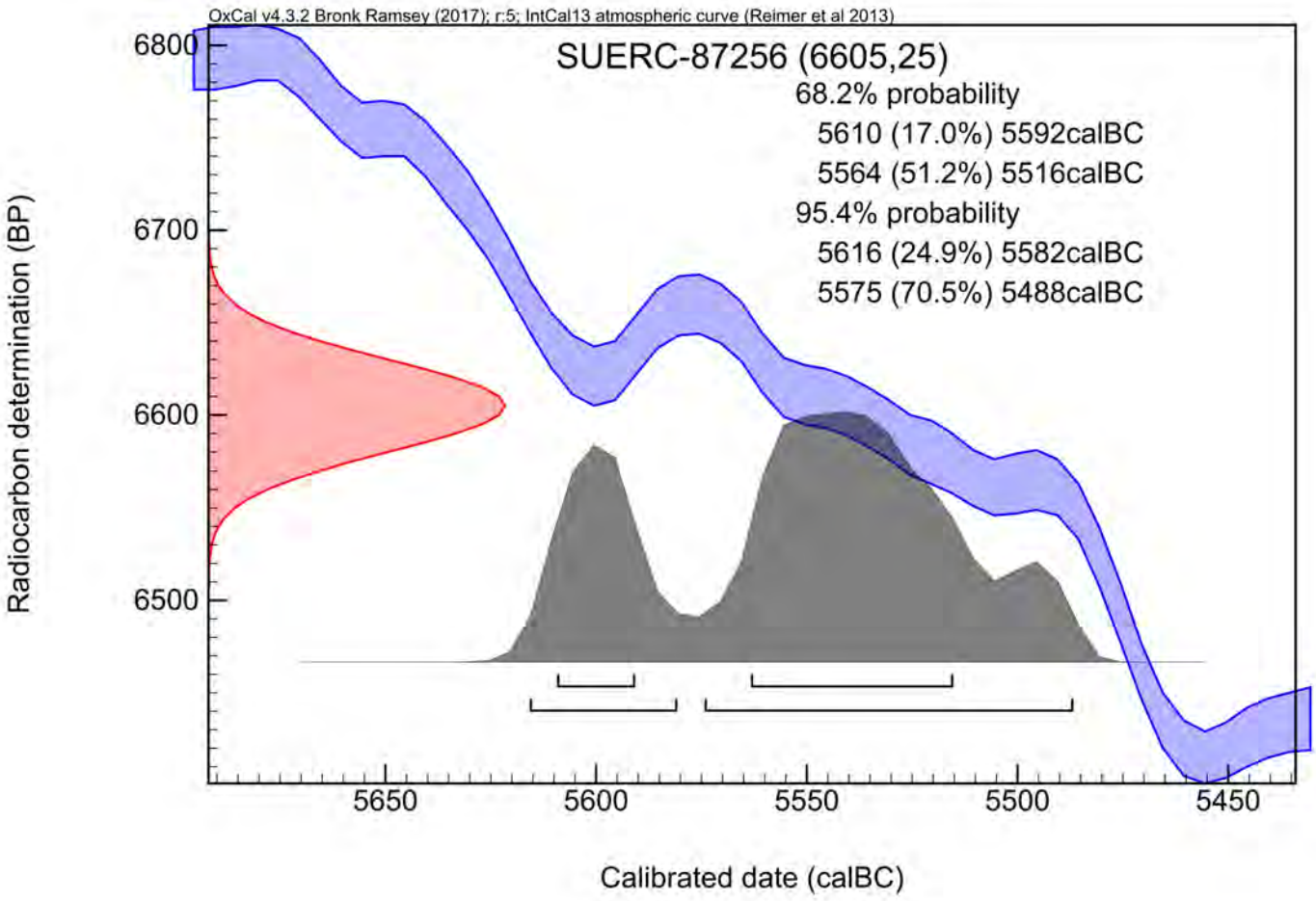

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87257 (GU51573)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	114
Sample Reference	32
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-30.3 ‰
Radiocarbon Age BP	5796 ± 22

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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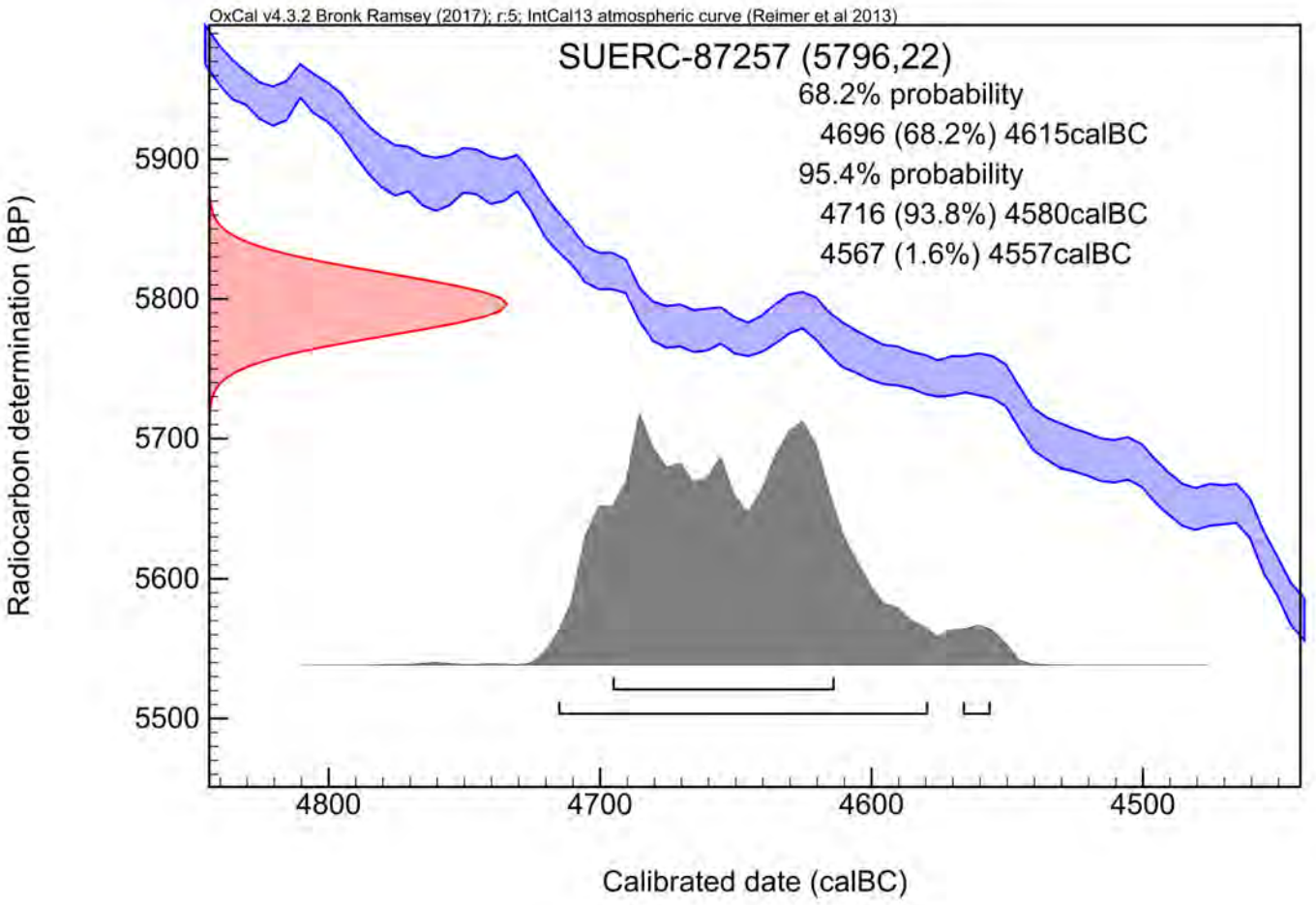

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The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87258 (GU51574)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	188
Sample Reference	61
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-26.3 ‰
Radiocarbon Age BP	6937 ± 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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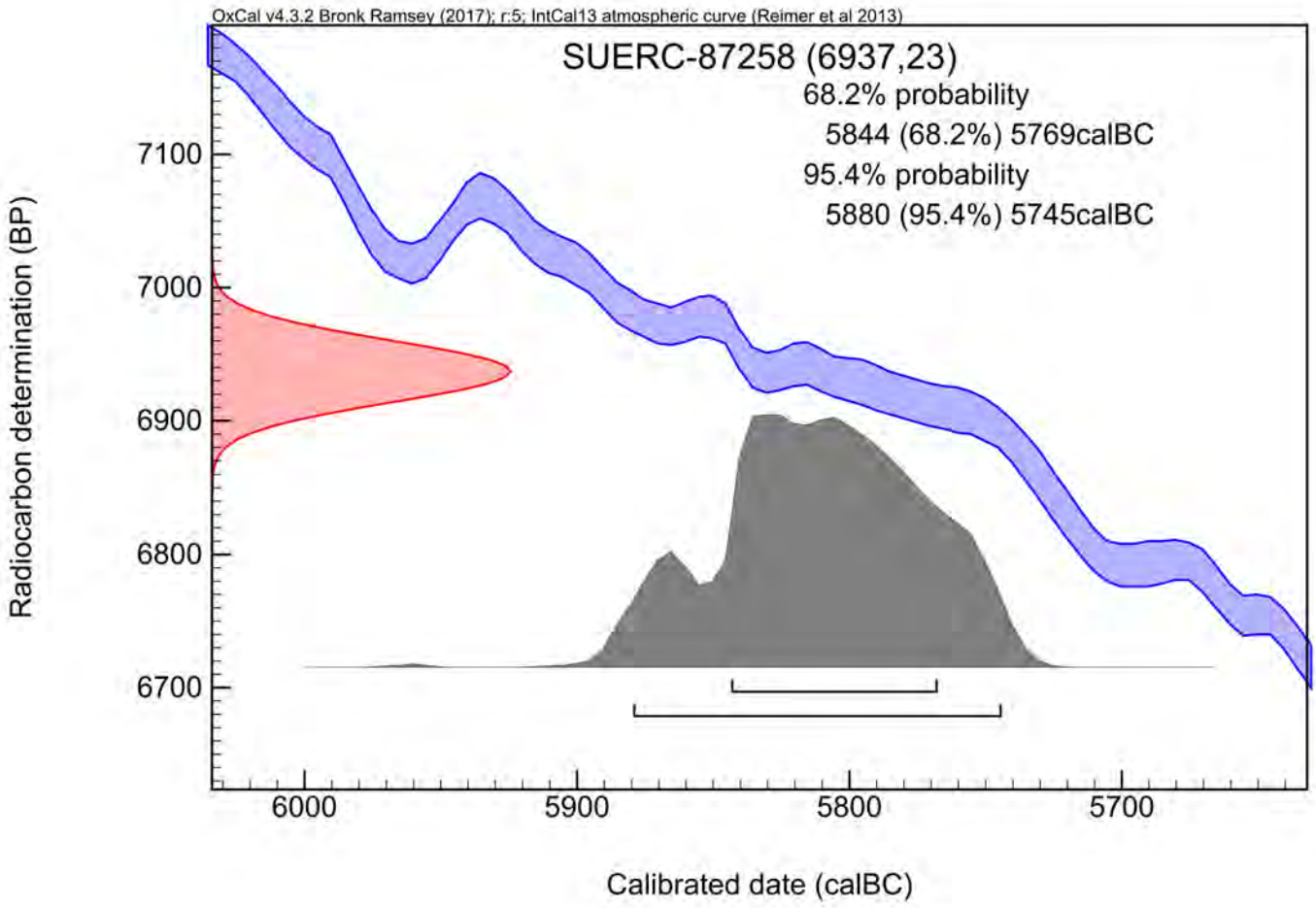

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87259 (GU51575)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	219
Sample Reference	81
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-23.6 ‰
Radiocarbon Age BP	5003 ± 22

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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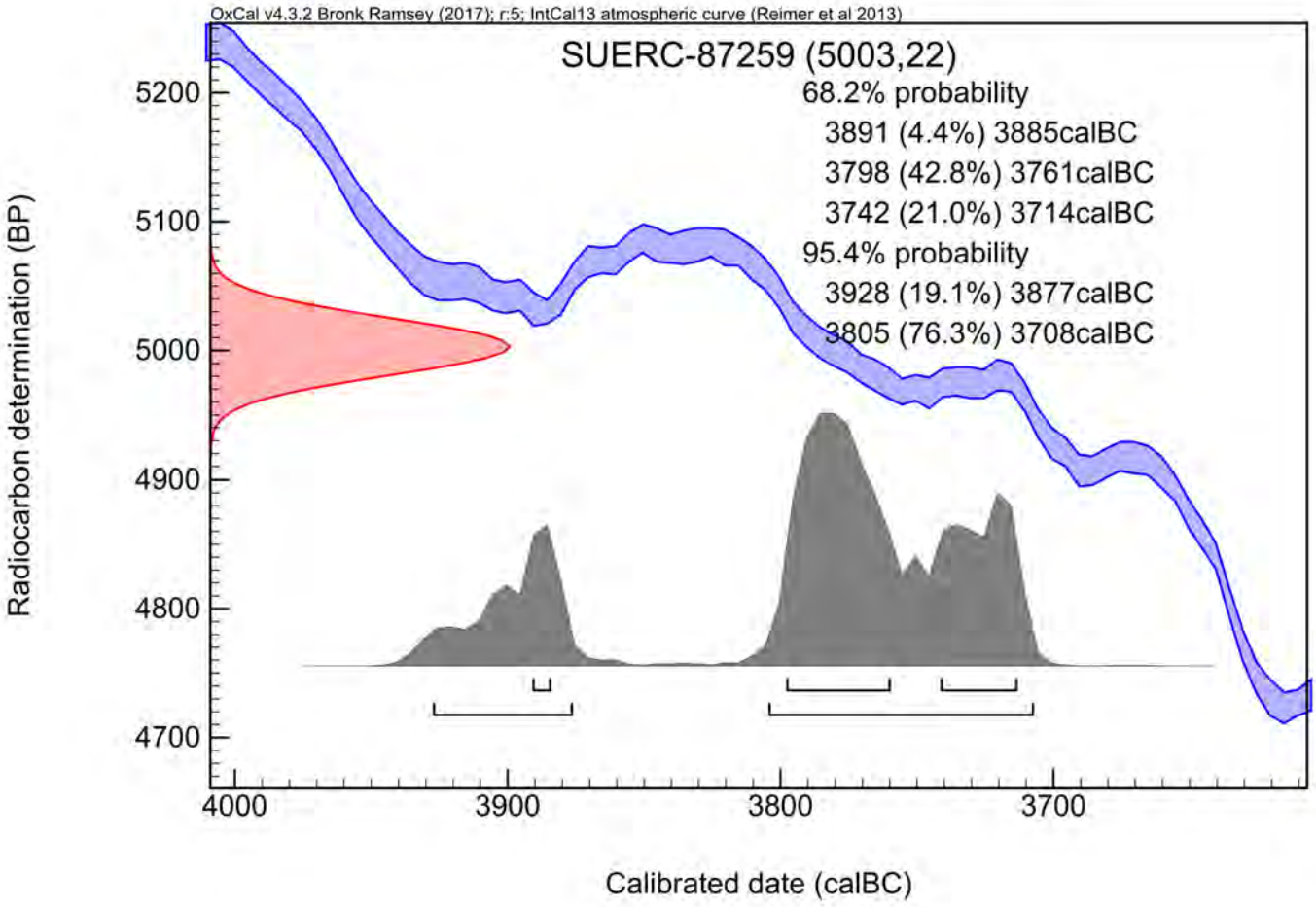

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87260 (GU51576)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	234
Sample Reference	86
Material	Charcoal : Alder
$\delta^{13}C$ relative to VPDB	-27.2 ‰
Radiocarbon Age BP	5016 ± 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.

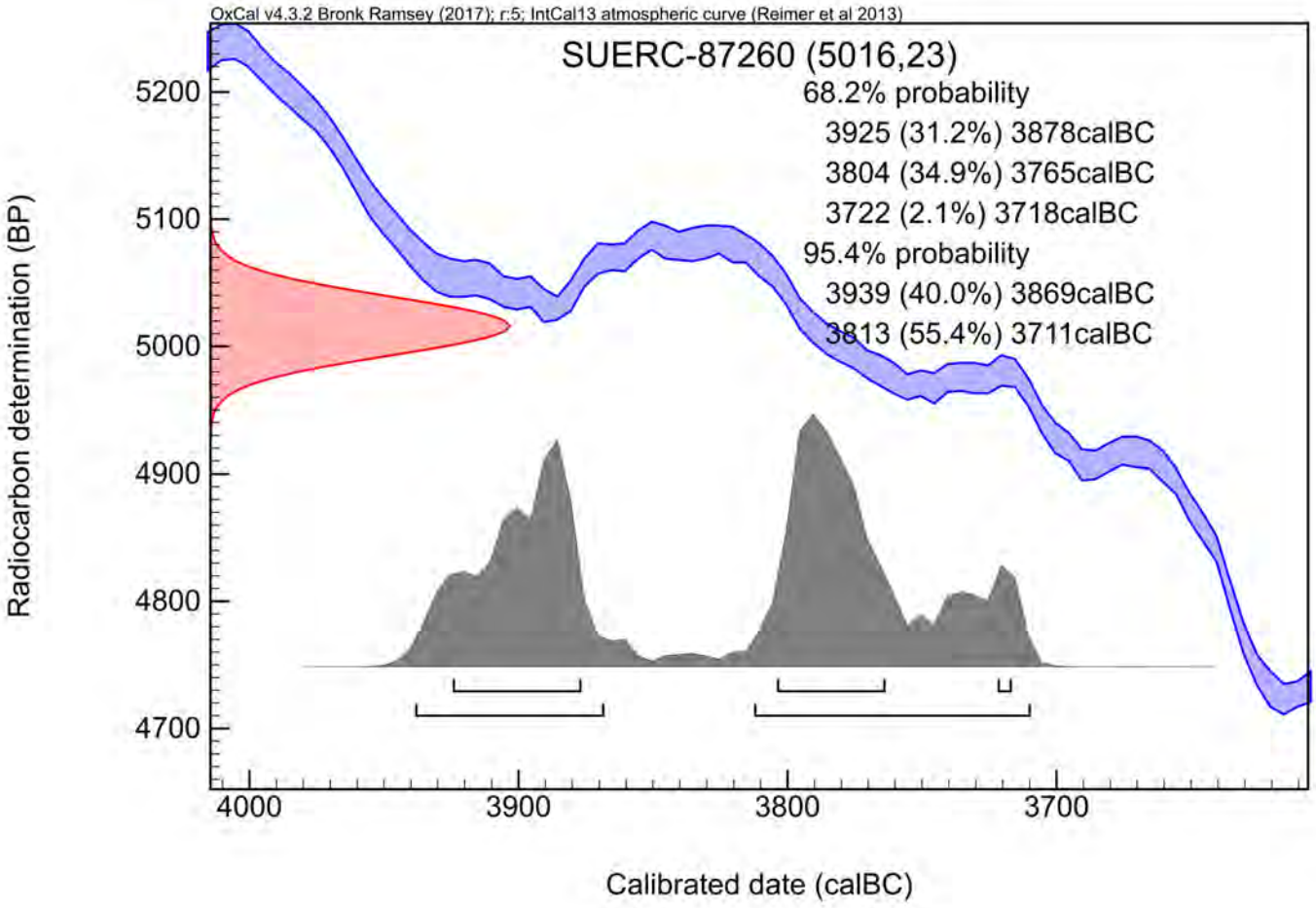
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87264 (GU51577)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	227
Sample Reference	87
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-26.9 ‰
Radiocarbon Age BP	5023 ± 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.

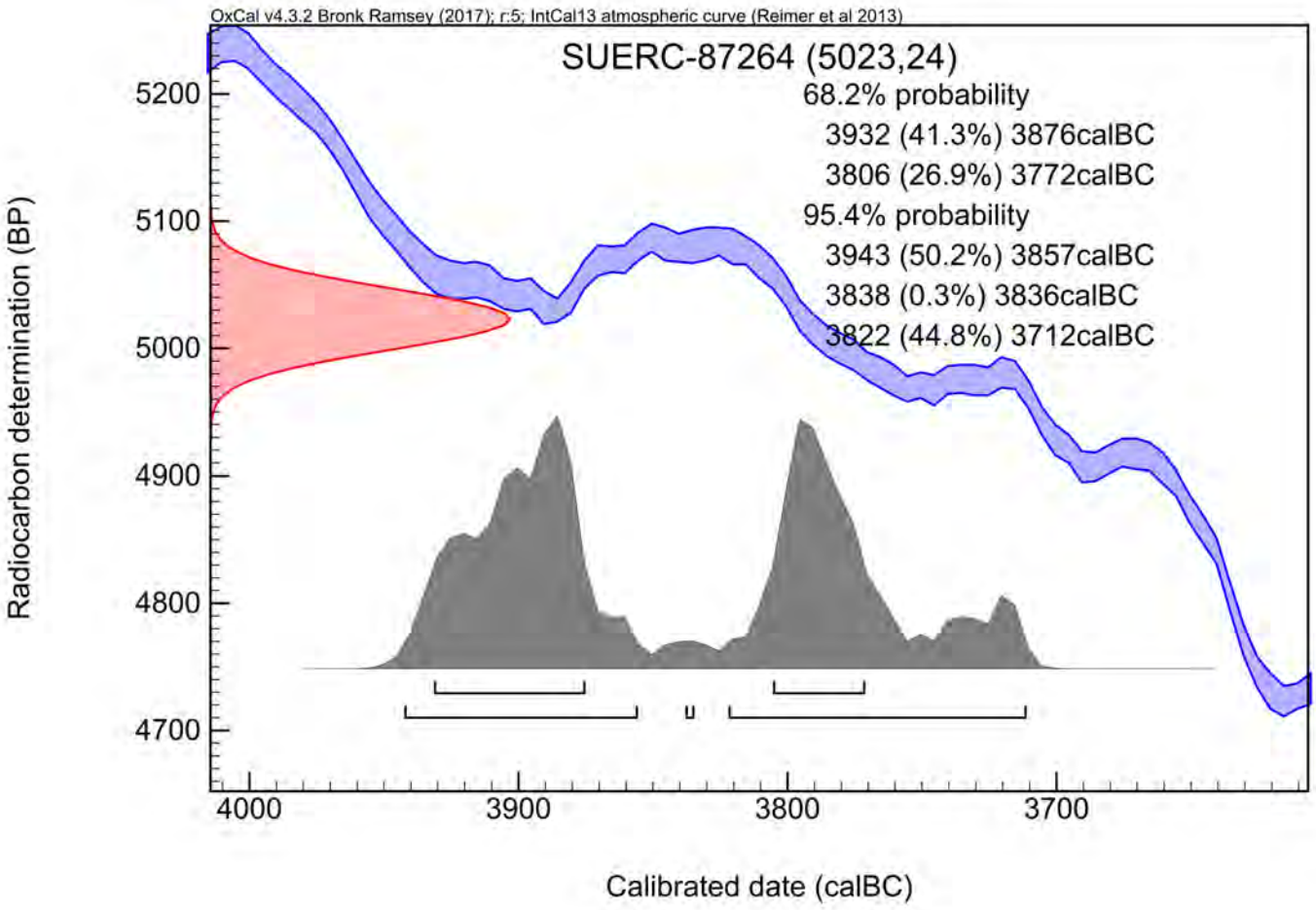
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 IntCal13 atmospheric calibration curve†

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

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

Laboratory Code	SUERC-87265 (GU51578)
Submitter	Jackaline Robertson AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	24185
Context Reference	254
Sample Reference	100
Material	Nut shell : Hazel
$\delta^{13}C$ relative to VPDB	-24.7 ‰
Radiocarbon Age BP	5039 ± 25

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.

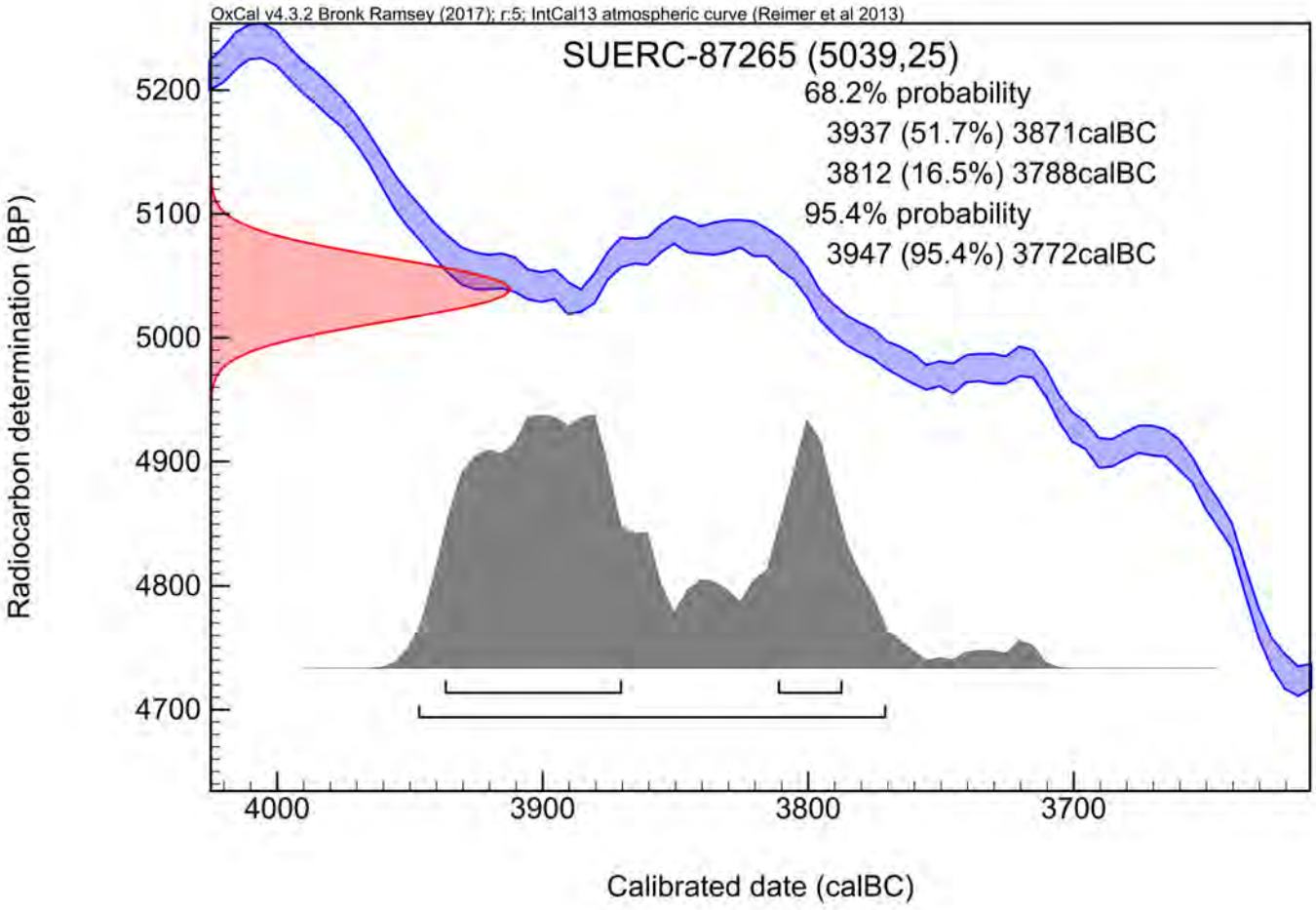
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 IntCal13 atmospheric calibration curve†

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

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

APPENDIX VII

Reproduction of Environmental Analysis Report (AOC Project no: 24185

DCWW Llanfaethlu
Waste Water Treatment Works

AOC Project no: 24185

Site Code: G2482

Date: November 2019

AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

DCWW Llanfaethlu
Waste Water Treatment Works

On Behalf of:	**Gwynedd Archaeological Trust (GAT)**
AOC Project No:	**24185**
Prepared by:	**Jackaline Robertson**
Date of Report:	**November 2019**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Jackaline Robertson **Date: November 2019**

Approved by: Ciara Clarke **Date: 11/12/2019**

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Factual data

A total of 69 flots was submitted for environmental analysis from Gwynedd Archaeological Trust, from the archaeological mitigation at DCWW Llanfaethlu Waste Water Treatment Works. The samples were collected from a series of prehistoric pits, postholes, ditches, hearths, gullies, burnt deposits, curvilinear and linear features. These features were dated to the Mesolithic, Neolithic and Bronze Age. There was also evidence of post medieval activity but none of the samples analysed within this report are considered to belong to this later phase.

The ecofact remains were composed of small quantities of carbonised macroplant and charcoal. The archaeobotanical work was undertaken in two stages. In this report results from both stages have been combined towards understanding the function of the archaeological features and to identify any chronological patterns in the exploitation of plants at this multi-phase prehistoric site.

Methodology

The samples were separated into fractions using a 4mm, 2mm and 1mm system of stack sieves and these were analysed using a low power microscope. Macrofossils were examined at magnifications of x10 and up to x100 where necessary. Identifications of macroplants were confirmed using modern reference material and seed atlases stored at AOC Edinburgh (Cappers *et al* 2006; Jacomet 2006).

A maximum of 20 charcoal fragments larger than 4mm were selected from each suitable context for species identification. The charcoal was identified to species using keys and texts including Schweingruber (1990). The assemblage was concentrated within a small number of contexts. Those deposits which contained small quantities of two or more species were typically designated as fuel waste, whereas larger concentrations of single species were considered likely to represent burning of structural timbers.

Results

The results are recorded in Table 1 (carbonised macroplant) and Table 2 (charcoal). Nomenclature for plants follows Stace (2010).

The macroplant assemblage

The carbonised macroplant assemblage totalled 424 remains and was recovered from 45 flots. Preservation of these finds ranged from poor to good. The assemblage was composed of cultivated cereal crops, wild food remains, woodland and weed taxa

There were 12 cereal caryopses and one glume recovered from eight contexts. Nine of the cereal remains where scattered among the four Bronze Age Deposits. One caryopsis was noted within a Neolithic pit. The remaining three cereal caryopses were recovered from three undated prehistoric features. There was no evidence of cereal remains from the earlier Mesolithic contexts. The cereal was identified as one barley caryopsis (*Hordeum* sp), one wheat caryopses and one glume (*Triticum* sp). The remaining ten caryopses could not be identified further due to poor preservation.

There were 340 hazelnut shell (*Corylus avellana* L) fragments present in 38 contexts. These were concentrated within the Mesolithic pit/posthole [178] from which 108 shell fragments were recovered. The rest of the 232 hazelnut shells were scattered among the Mesolithic, Neolithic and undated prehistoric features in smaller quantities. There were no hazelnut shells recovered from any of the Bronze Age deposits.

There were 22 blackberry seeds (*Rubus fruticosus* agg) scattered in small numbers among six contexts. The blackberry was recovered from two Mesolithic features and four undated prehistoric deposits.

Evidence of woodland material was retrieved from three contexts dated to the Neolithic, Bronze Age and prehistoric in the form of six buds none of which could be identified further.

The weed taxa assemblage was small, and 43 remains were observed in 17 samples scattered among all phases of occupation. These were 29 bedstraw schizocarps (*Galium* sp), one floating water-plantain seed (*Luronium natan*s L), one cornsalad fruit (*Valerianella* sp) and one vetch seed (*Vicia* sp). The remaining 11 weed taxa could not be identified further.

The charcoal assemblage

The charcoal assemblage totalled 264.9g and 495 fragments were identified to species from 51 contexts. The species identified were alder (*Alnus glutinosa* L), birch (*Betula* sp), hazel (*Corylus avellana* L), heather (*Calluna vulgaris* L), cherry (*Prunus* sp), oak (*Quercus* sp) and elm (*Ulmus* sp). The dominant species was oak (56%) followed by hazel (30%), cherry (5%), birch (4%), alder (3%) heather (1%) and elm (1%). Roundwood formed 11% of the identified assemblage and was composed of hazel (7.8%), birch (1%), cherry (1%), heather (0.8%) and oak (0.2%).

Summary of contexts

The results are discussed below by area and chronological order. A small number of features have been dated as Mesolithic, Neolithic and Bronze Age but the remaining deposits are described as prehistoric. The Bronze Age deposits all appear to be confined within area A whereas the Mesolithic and Neolithic features are concentrated within area B.

Sub-area A

Bronze Age

Burnt deposit [008]

Macroplant: There were six carbonised cereal caryopses of which one was identified as barley. There were also two buds.

Charcoal: The charcoal (2.4g) was oak (50%), heather (40%) and birch (10%). The heather was composed entirely of small twig fragments.

Synthesis: This small accumulation of cereal caryopses and charcoal derived from re-deposited domestic food and fuel waste. The buds could have been an accidental inclusion of the wood species. There is no evidence to suggest this material represents *in situ* activity.

Posthole [019] context [020]

Macroplant: There was one poorly preserved cereal caryopsis and weed seed neither of which could be identified further.

Charcoal: There were two fragments of oak charcoal (0.4g).

Synthesis: It was believed during excavation that the post from this feature had been forcibly removed and it is likely this resulted in the re-deposition of some domestic waste.

Posthole [024] context [025]

Macroplant: There was one wheat glume.

Charcoal: The charcoal (1.4g) was birch (86%) and oak (14%). The birch was composed entirely of roundwood.

Synthesis: During excavation this posthole was believed to have been removed and the small quantity of ecofacts recovered represent re-deposited domestic debris.

Pit [034] context [035]

Macroplant: There was one wheat caryopsis.

Charcoal: The charcoal (1.8g) was alder (40%), oak (40%) and cherry (20%).

Synthesis: This small accumulation of cereal and charcoal is a mix of re-deposited domestic food and fuel debris.

Sub-area B

Mesolithic

Gully [072] contexts [073], [074]

Macroplant: From the primary fill [073] there were two fragments of hazelnut shell, two blackberry seeds and two weed taxa which could not be identified further. From the secondary fill [074] three fragments of hazelnut shell were recovered.

Charcoal: The charcoal (2.9g) from context [073] was hazel (67%), oak (20%) and elm (13%). The lower deposit [074] had 4.0g of charcoal identified as hazel (50%) and oak (50%) of which there was also one piece each of hazel and oak roundwood.

Synthesis: This small accumulation of domestic food and fuel debris accumulated in this gully during the backfilling of this feature. The weed taxa are likely intrusive.

Pit [075] contexts [076], [077]

Macroplant: A single fragment of hazelnut shell was recovered from primary fill [076]. From the secondary fill [077] there were three fragments of hazelnut shell, three blackberry seeds and one weed taxa.

Charcoal: The charcoal (0.3g) from [076] was composed of one fragment of hazel and two pieces of oak. The charcoal (1.1g) from [077] was oak (66%), hazel (17%) and cherry (17%).

Synthesis: The backfilling of pit [075] and gully [072] are believed to have occurred at the same time using the same material. The presence of food remains such as hazelnut shell and blackberry seeds along with fuel debris present in both features helps to corroborate this interpretation and emphasises the close relationship between these two features.

Pit [099] context [100]

Macroplant: There were eight fragments of hazelnut shell and three weed taxa.

Charcoal: The charcoal (1.7g) was oak (60%) and hazel (40%).

Synthesis: The hazelnut shell and charcoal are re-deposited food and fuel debris. The weed taxa are probably invasive.

Pit [108] context [089]

Macroplant: There were four fragments of hazelnut shell.

Charcoal: The charcoal (2.6g) was hazel (80%), cherry (10%) and oak (10%).

Synthesis: The hazelnut shell and charcoal are a small mix of re-deposited food and fuel residue.

Gully [115] context [114]

Macroplant: There were seven fragments of hazelnut shell.

Charcoal: There was a single fragment of hazel charcoal (0.2g).

Synthesis: These ecofacts are re-deposited domestic debris.

Pit [178] contexts [175], [188]

Macroplant: A single fragment of hazelnut shell was recovered from [175]. The primary fill [188] contained 108 hazelnut shell fragments which was the largest number recovered from any feature on site.

Charcoal: From [175] there were five fragments of oak charcoal (0.4g). The charcoal (7.2g) from [188] was composed entirely of oak.

Synthesis: The hazelnut shell and oak from [175] is likely re-deposited material from [188]. The large quantity of hazelnut shell in [188] represents the deliberate disposal of food waste. The oak charcoal from this pit could have derived from the burning of a small discrete structural element such as a post or a stake.

Neolithic

Ditch [222] context [219]

Macroplant: There were 14 fragments of hazelnut shell.

Charcoal: The charcoal (5.2g) was oak (70%), birch (25%) and alder (5%).

Synthesis: This small mix of hazelnut shell and charcoal is re-deposited domestic food and fuel debris.

Ditch [226] context [227]

Macroplant: There were 20 hazelnut shell fragments, two buds and one bedstraw schizocarp.

Charcoal: The charcoal (15.5g) was hazel (80%), cherry (10%) and oak (10%).

Synthesis: The hazelnut shell and charcoal are domestic food and fuel waste. The weed taxon is intrusive

Pit [252] contexts [253], [254]

Macroplant: From [253] there were three hazelnut shell fragments and one bedstraw. In [254] there was one cereal caryopsis, 39 fragments of hazelnut shell, six bedstraw and two weed taxa.

Charcoal: The charcoal (4.6g) in [253] was hazel (65%) and oak (35%). The charcoal (16.5g) in [254] was oak (60%), hazel (35%) and cherry (5%). Roundwood formed 45% of the assemblage and was identified as hazel (35%), cherry (5%) and oak (5%).

Synthesis: During excavation the charcoal from this pit was described as possible deriving from a post. The mixed wood species present in this feature are more likely to have accumulated through the disposal of fuel debris rather than from the burning of a small discrete structural element. The cereal caryopsis and hazelnut shell are food waste. The weed taxa are intrusive.

Prehistoric

Pit [095] context [096]

Macroplant: There was no macroplant recovered from this pit.

Charcoal: The charcoal (12.3g) was cherry (75%), hazel (15%) and oak (10%). Roundwood formed 15% of the assemblage and was identified as cherry (10%) and hazel (5%).

Synthesis: The charcoal assemblage is typical of fuel debris.

Gully [097] context [098]

Macroplant: There was no macroplant present in this feature.

Charcoal: The charcoal (8.2g) was oak (95%) and hazel (5%).

Synthesis: The oak charcoal could have derived from a small stake or post and the hazel is re-deposited fuel waste.

Pit [104] context [106], [109], [119]

Macroplant: A total of seven hazelnuts were scattered among contexts [106], [109] and [119]. The only other find was 11 bedstraw schizocarps in [109].

Charcoal: The charcoal (77.0g) from [106] was formed entirely of oak. The charcoal (27.3g) in [109] was hazel (30%) and oak (70%). There was no suitable charcoal recovered from [119] for species identification.

Synthesis: The hazelnuts are likely re-deposited food waste. The bedstraw is an invasive weed species which was either growing on the site or was introduced accidently before being accidently charred. The large concentration of oak charcoal in [106] could have derived from the burning of a small discrete structural element such as a post or stake. The charcoal from [109] is fuel debris.

Pit [110] contexts [111], [112], [113]

Macroplant: A total of seven macroplants were recovered from this pit. There was one hazelnut shell in [111], four hazelnut shells in [112] and one cereal caryopsis and one hazelnut shell in [113].

Charcoal: No suitable charcoal was recovered from [111]. There were two fragments of hazel and one piece of oak charcoal (0.1g) in [112]. Context [113] had 7.3g of charcoal identified as oak (60%) and hazel (40%). Hazel roundwood formed 30% of the identified assemblage.

Synthesis: The cereal, hazelnut shell and charcoal are a small mix of re-deposited domestic food and fuel waste.

Burnt deposit [116]

Macroplant: There were 12 fragments of hazelnut shell.

Charcoal: The charcoal (4.2g) was hazel (60%), oak (20%), alder (10%) and birch (10%). There was a single piece of hazel roundwood.

Synthesis: Given the proximity of this burnt deposit it is likely the hazel shell and charcoal are food and fuel debris overspill which has been trampled into this surface during cleaning of this feature.

Pit [121] context [122]

Macroplant: There were seven blackberry seeds, one bedstraw and one vetch.

Charcoal: The charcoal (0.8g) was oak (60%), birch (20%) and hazel (20%).

Synthesis: The blackberry could be the remains of food debris and the bedstraw and vetch are invasive weed taxa. The charcoal is re-deposited fuel debris.

Pit [127] context [128]

Macroplant: There was one cereal caryopsis and 12 fragments of hazelnut shell.

Charcoal: The charcoal (1.5g) was oak (60%), hazel (30%) and birch (10%). Hazel round wood formed 10% of the identified assemblage.

Synthesis: This small accumulation of cereal, hazelnut shell and charcoal has derived from re-deposited domestic food and fuel waste.

Pit/bioturbation [132] context [133]

Macroplant: There were 14 charred macroplants composed of seven hazelnut shell fragments, two buds and one bedstraw.

Charcoal: The charcoal (0.6g) was oak (80%) and hazel (20%).

Synthesis: The hazelnut shell is probably food and or kindling residue whereas the buds and bedstraw are invasive.

Gully [134] contexts [135], [138], [139]

Macroplant: From the upper fill [135] there was one hazelnut shell fragment and one seed which could not be identified further.

Charcoal: The charcoal (1.0g) from [135] was identified as hazel. From secondary fill [138] the charcoal (0.7g) was oak. In basal fill [139] the charcoal (0.5g) was oak (75%) and hazel (25%).

Synthesis: The charcoal from this gully has probably experienced some degree of re-working between the three fills. The hazelnut shell and charcoal are likely re-deposited food and fuel debris.

Pit [136] contexts [137], [140]

Macroplant: There were six hazelnut shell fragments, one from the primary fill [137] and five in the upper context [140].

Charcoal: From [137] the charcoal (0.1g) was oak (75%) and hazel (25%). The charcoal (0.2g) in [140] was oak (40%), elm (40%) and hazel (20%).

Synthesis: This small mix of hazelnut shell fragments and charcoal is re-deposited food and fuel debris.

Pit [141] context [142]

Macroplant: There were four blackberry seeds and one bedstraw.

Charcoal: The charcoal (0.4g) was composed of oak.

Synthesis: The blackberry seeds and charcoal fragments are re-deposited food and fuel waste. The weed species are intrusive.

Pit [149] context [150]

Macroplant: There was no carbonised macroplant recovered from this pit.

Charcoal: There were three fragments of oak charcoal (0.2g).

Synthesis: The oak charcoal is re-deposited and is of little interpretive value.

Pit [154] context [155]

Macroplant: There were 11 fragments of hazelnut shell.

Charcoal: The charcoal (0.9g) was oak (90%) and hazel roundwood (10%).

Synthesis: These remains are re-deposited food and fuel waste.

Pit [156] context [159]

Macroplant: There was one fragment of hazelnut shell.

Charcoal: There were two fragments of oak charcoal (0.2g).

Synthesis: These remains are re-deposited food and fuel waste.

Pit/bioturbation [184] context [185]

Macroplant: There was no macroplant recovered from this feature.

Charcoal: The charcoal (0.3g) was cherry (40%), oak (40%) and hazel (20%). Cherry roundwood formed 20% of the identified assemblage.

Synthesis: The charcoal is re-deposited fuel debris.

Pit [212] context [213]

Macroplant: There was a single fragment of hazelnut shell.

Charcoal: There was no suitable charcoal recovered from this pit for species identification.

Synthesis: This material of little interpretative value.

Ditch [215] context [216]

Macroplant: There were two fragments of hazelnut shell.

Charcoal: The charcoal (1.3g) was oak (50%), hazel (30%) and birch (20%). Hazel roundwood formed 20% of the assemblage.

Synthesis: This small accumulation of hazelnut shell and charcoal is re-deposited food and fuel debris.

Pit [224] context [225]

Macroplant: There were three fragments of hazelnut shell and seven bedstraw schizocarps.

Charcoal: The charcoal (2.2g) was composed entirely of small fragments of oak.

Synthesis: The hazelnut shell is re-deposited food remains and the weed taxa intrusive. During excavation it was believed that the charcoal from this deposit held the remnants of a post or stake. The oak charcoal from this pit while small in quantity could be the remnants of a small discrete structural element.

Ditch [229] context [230]

Macroplant: There was three hazelnut shells, two blackberry seeds and one cornsalad fruit.

Charcoal: The charcoal (2.4g) was oak (70%), alder (20%) and hazel (10%).

Synthesis: The hazelnut shell, blackberry and charcoal are re-deposited food and fuel debris. The Cornsalad fruit is intrusive.

Hearth [232] contexts [233], [234]

Macroplant: There was no macroplant recovered from this feature.

Charcoal: From the upper fill [233] the charcoal (1.4g) was oak (60%), birch (20%) and hazel (20%). The charcoal [3.2g) from the primary fill [234] was alder (60%) and oak (40%).

Synthesis: The charcoal is fuel debris used within this hearth. These fragments were likely overlooked during the cleaning of this feature.

Linear [235] context [236]

Macroplant: There were 27 fragments of hazelnut shell.

Charcoal: The charcoal (20.2g) was composed of hazel.

Synthesis: The hazelnut shell is probably food waste. The hazel charcoal could have derived from a small structural element such as a post or stake.

Linear [239] contexts [240], [246]

Macroplant: There were nine fragments of hazelnut shell in the secondary fill [240]. In primary fill [246] there was one cereal caryopsis and eight fragments of hazelnut shell.

Charcoal: The charcoal (1.1g) in [240] was oak (70%) and hazel (30%). From [246] the charcoal (0.3g) was oak.

Synthesis: These remains are re-deposited food and fuel waste.

Posthole [247] context [248]

Macroplant: There was no macroplant present in this feature.

Charcoal: The charcoal (16.8g) was composed entirely of oak.

Synthesis: The oak charcoal is likely part of a post or stake burnt *in situ*.

Date Unknown

Ditch [031] context [033]

Macroplant: There was a single floating water-plantain seed.

Charcoal: There was one fragment of hazel and oak (0.2g).

Synthesis: Floating water-plantain is an aquatic plant which usually favours lakes or ponds with slow moving water. The presence of this species suggests that this site was located near to a body of water. The charcoal is of little interpretive value and is probably re-deposited fuel debris.

Pit [151] context [152]

Macroplant: There was one fragment of hazelnut shell.

Charcoal: No suitable charcoal was recovered from this context.

Synthesis: This material is of little interpretive value.

Pit [194] context [193]

Macroplant: There were six fragments of hazelnut shell.

Charcoal: The charcoal (0.5g) was hazel (71%) and oak (29%).

Synthesis: This material is re-deposited food and fuel waste.

Pit [197] context [198]

Macroplant: There were three fragments of hazelnut shell.

Charcoal: The charcoal (3.0g) was hazel (70%), alder (20%) and oak (10%). Hazel roundwood formed 20% of the assemblage.

Synthesis: This small assemblage of hazelnut and charcoal is re-deposited food and fuel waste.

Calluvial [217]

Macroplant: There was one fragment of hazelnut shell.

Charcoal: The charcoal (0.8g) was hazel (43%), oak (43%) and alder (14%).

Synthesis: This small assemblage of hazelnut and charcoal is re-deposited food and fuel waste.

Discussion

The cereal

There was no evidence of any cereal remains in any of the Mesolithic features. The absence of cultivated cereal crops in Mesolithic Wales is not unexpected. These communities throughout Britain practised a hunter gather lifestyle dictated by following seasonally available resources such as red deer which by necessity involved more of a transitory existence (David 2007, 189; Reynier 2005; 100). Mesolithic communities in Wales tended to be mobile and were therefore not stationary long enough to practise agriculture on any significant scale.

There were 13 cereal remains of which one was noted in the Neolithic deposit, there were nine in the Bronze Age features and three in contexts described as prehistoric. The species present were barley and wheat but given the small size of the cereal assemblage it is not possible to determine which species was the more economically important or if species exploitation changed as the site developed over time. Both cereal caryopses and chaff fragments were noted but there was not enough evidence to determine if this was a producer and/or consumer site.

The recovery of cereal remains in the Neolithic and Bronze Age is not unexpected and is a common find in most British sites of a similar date. This increase in cereal production from the end of the Mesolithic is due in part to the creation of more settled communities which were able to farm the land for extended periods of time. This pattern of land exploitation was noted at the excavated sites at Trefignath and Din Dryfol in Anglesey which recorded an increase in cereal pollen after the end of the Mesolithic period which correlates with an increase in available arable land (Smith *et al* 1987; 43).

Wild resources

Hazelnut shells were recovered from both the Mesolithic and Neolithic features but were absent from the Bronze Age deposits. Hazelnut shells are a common find at most British prehistoric sites given the easy accessibility of this seasonal resource within the landscape and the denseness of the shell which tends to survive well in most environmental conditions (Bishop *et al* 2009; Bishop *et al* 2014). The presence of hazelnut during both the Mesolithic and Neolithic periods demonstrates that this food resource remained consistently available during these two periods of time. The hazelnut shell fragments were all highly fragmented indicating that these are the remains of food and possible fuel debris rather than having derived from large scale processing or long-term storage (Bishop 2019).

The absence of hazelnut in the Bronze Age period is of note and this could reflect changes in either cultural dietary preferences or that this species was perhaps not as easily accessible within the surrounding landscape. Hazel charcoal is also not present within the Bronze Age ecofact record which would appear to reinforce the argument that hazel was not as easily accessible as it previously had been. However, given the small size of the ecofact assemblage this interpretation must be viewed with some caution. It is possible though perhaps unlikely that all evidence of hazel has been accidently removed from this later phase during re-working of these deposits.

Blackberries were noted in the Mesolithic contexts but not in those dated to the two later phases. This fruit would have been available seasonally and easily exploited from the surrounding landscape. The absence of this food resource from the two later phases could be due to changes in diet, that it was no longer available or possible evidence that this species has been removed from the archaeobotanical record by re-working of the later phases.

During the Mesolithic period both hazelnuts and blackberries were exploited as a food resource. Similar findings for the exploitation of wild food resources have been reported at other sites in Trefignath Anglesey and in Western Wales (Greig 1987, 42; Dark 2007, 183). Given the small numbers of nuts and fruits recovered from Llanfaethlu this could be indicative of short-term occupation during the Mesolithic period.

Weed taxa

The weed assemblage while small in both number and species variety were recovered from all three occupation phases. The most common find was bedstraw which tends to favour damp habitats. This species typically has hooked bristles which become easily attached to clothes and animal hair. It is likely the bedstraw was an invasive weed which was transported to this site by this method before being dislodged and

accidently charred. Bedstraw has previously been recorded at Goldcliff East and its potential economic value was noted (Dark 2007, 182). This species if boiled or roasted can be rendered into an edible food source or drink and due to its supposed diuretic properties; it can be used as a medicine (Dark 2007, 182). Given the small number of bedstraw shizocarps present what role if any this plant had is impossible to state, but it is likely these remains represent invasive weed taxa.

The floating water-plantain which is an aquatic plant was probably introduced accidently to the site from a nearby slow-moving water source such as a lake or pond where it would have grown. The cornsalad and vetch favour a range of habitats including waste ground or rocky outcrops and both species appear intrusive. These were either growing directly on the site or were located nearby before being accidently charred. Given the small size of the weed assemblage there is no evidence to suggest any of these plants were deliberately collected.

The charcoal

The charcoal assemblage is composed of re-deposited fuel debris along with some evidence to suggest the burning of small discrete structural elements made from oak and hazel. The tree species are all common finds within the prehistoric landscape of Wales (David 2007, 120; Gale 2007, 185-186). Hazel tends to grow in hedgerows; alder and birch normally favour more damp habitats whereas oak will grow wherever the soil and climate will allow, elm is found in hedgerows, woodland and copses and cherry prefers good soil conditions in fairly open areas (Linford 2009). Heather can be found on a variety of landscapes including heaths, moors, rocky places, bogs and open woodland and tends to favour sandy or peaty soils (Stace 2010, 528).

The wood species recovered from all three phases remained relatively consistent with only two noticeable exceptions. Hazel was absent in the Bronze Age contexts whereas heather which was present in a single sample was not observed within any deposits from the two earlier phases. The absence of hazel within the Bronze Age could be due to several factors. It is possible there is a bias within the small charcoal assemblage and that hazel has been permanently removed during re-working of contexts. This would appear unlikely as hazelnut shells also disappear during this period. It is possible hazel wood and nuts were deliberately not collected during this period but given the presence of this species within most British prehistoric ecofact assemblages this too seems unlikely. It is possible that access to hazel may have become difficult if the surrounding landscape had changed in the later prehistoric period. The recovery of heather in the Bronze Age could indicate that additional material was being sourced for fuel and possible construction.

Conclusion

This was a multi-phase prehistoric site which was periodically in use during the Mesolithic, Neolithic and Bronze Age. While the ecofact assemblage is small it does provide some interesting information concerning how plants were exploited at this site. The ecofact evidence suggests that the Mesolithic community occupied this site for short periods of time and exploited the surrounding landscape to provide wood for fuel

and nuts and berries for food. The presence of cereal caryopses in the Neolithic and Bronze Age indicates that communities became more settled as arable land increased and cereal crops were introduced to the diet. The most noticeable change in the occupation of this site was the absence of hazel from any of the Bronze Age features. This could be indicative of changes within the local environment or a reflection of cultural choice in choosing which species are selected for food and fuel. Both the macroplant and charcoal assemblages demonstrate that during the prehistoric period this was a domestic settlement subject to social and agricultural changes as communities became less mobile in the later phases of occupation. This would have affected the surrounding environment as more arable land was brought under cultivation to meet increasing demand for cultivated crops.

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Project G2482: Table 1 macroplant

Area			A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Date			BA	Pre-H	BA	Pre-H	Pre-H	Pre-H	Pre-H	Meso	Meso	Pre-H	Meso	Pre-H	Meso	Neo	Neo	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H
Sample			1	2	3	6	13	14	17	18	22	21	32	62	61	81	87	99	100	30	23	29	25	26	27	33	31	35	47	37	41	40	43
Feature			Burnt deposit	PH 19	PH 24	Pit 34	Gully 72	Gully 72	Pit 75	Pit 75	Pit 99	Pit 108	Gully 115	Pit 178	Pit 178	Ditch 222	Ditch 226	Pit 252	Neo	Pit 104	Pit 104	Pit 104	Pit 110	Pit 110	Pit 110	Burnt Deposit	Pit 121	Pit 127	Pit 132	Gully 134	Pit 136	Pit 136	Pit 141
Context			8	20	25	35	73	74	76	77	100	89	114	175	188	219	227	253	254	106	109	119	111	112	113	116	122	128	133	135	137	140	142
Flot vol (ml)			120	10	20	30	90	60	15	15	50	50	40	35	80	70	210	85	190	780	400	60	<10	25	50	200	30	70	40	40	20	45	40
% Sort			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Species	**Name**	**Part**																															
Agriculture																																	
Hordeum sp.	Barley	Caryopsis/es	1																														
Triticum sp.	Wheat	Caryopsis/es				1																											
Triticum sp.	Wheat	Glume			1																												
Cerealia sp.	Cereal	Caryopsis/es	5	1															1						1			1					
Wild food																																	
Corylus avellana L.	Hazel	Nutshell frg(s)					2	3	1	3	8	4	7	1	108	14	20	3	39	2	2	3	1	4	1	12		12	7	1	1	5	
Rubus fruticosus agg	Blackberry	Seed(s)					2			3																	7		4				4
Woodland																																	
Bud	Bud	Bud	2														2												2				
Weed taxa																																	
Galium sp.	Bedstraws	Schizocarp(s)															1	1	6		11						1		1				1
Luronium natans L.	Floating Water-plantain	Seed(s)																															
Valerianella sp.	Cornsalads	Fruit(s)																															
Vicia sp.	Vetch	Seed(s)																									1						
Unknown	indet	Seed/fruit		1			3			1	3								2											1			

/Project G2482: Table 1 macroplant

Area			B	B	B	B	B	B	B	B	B	B	B	B	B	B
Date			Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Pre-H	Unknown	Unknown	Unknown	Unknown	Unknown
Sample			51	52	74	76	84	88	91	94	95	5	49	69	70	77
Feature			Pit 154	Pit 156	Pit 212	Ditch 215	Pit 224	Ditch 229	Linear 235	Linear 239	Linear 239	Ditch 31	Pit 151	Pit 194	Pit 197	Calluvial
Context			155	159	213	216	225	230	236	240	246	33	152	193	198	217
Flot vol (ml)			80	20	<10	50	65	20	170	55	20	40	<10	<10	35	30
% Sort			100	100	100	100	100	100	100	100	100	100	100	100	100	100
Species	**Name**	**Part**														
Agriculture																
Hordeum sp.	Barley	Caryopsis/es														
Triticum sp.	Wheat	Caryopsis/es														
Triticum sp.	Wheat	Glume														
Cerealia sp.	Cereal	Caryopsis/es									1					
Wild food																
Corylus avellana L.	Hazel	Nutshell frg(s)	11	1	1	2	3	3	27	9	8		1	6	3	1
Rubus fruticosus agg	Blackberry	Seed(s)						2								
Woodland																
Bud	Bud	Bud														
Weed taxa																
Galium sp.	Bedstraws	Schizocarp(s)					7									
Luronium natans L.	Floating Water-plantain	Seed(s)										1				
Valerianella sp.	Cornsalads	Fruit(s)						1								
Vicia sp.	Vetch	Seed(s)														
Unknown	indet	Seed/fruit														

Project G2482: Table 2 Charcoal

Date	Area	Sample	Feature	Context	Species	Name	Frag	RW	Weight (g)
BA	A	1	Burnt deposit	8	*Betula* sp.	Birch	1		
BA	A	1	Burnt deposit	8	*Calluna vulgaris* sp.	Heather		4	
BA	A	1	Burnt deposit	8	*Quercus* sp.	Oak	5		2.4
BA	A	2	PH 019	20	*Quercus* sp.	Oak	2		0.4
BA	A	3	PH 024	25	*Betula* sp.	Birch		6	1.4
BA	A	3	PH 024	25	*Quercus* sp.	Oak	1		
BA	A	6	Pit 034	35	*Alnus glutinosa* L.	Alder	2		
BA	A	6	Pit 034	35	*Prunus* sp.	Cherry	1		
BA	A	6	Pit 034	35	*Quercus* sp.	Oak	2		1.8
Meso	B	13	Gully 72	73	*Corylus avellana* L.	Hazel	10		
Meso	B	13	Gully 72	73	*Quercus* sp.	Oak	3		
Meso	B	13	Gully 72	73	*Ulmus* sp.	Elm	2		2.9
Meso	B	14	Gully 72	74	*Corylus avellana* L.	Hazel	4	1	
Meso	B	14	Gully 72	74	*Quercus* sp.	Oak	4	1	4
Meso	B	17	Pit 75	76	*Corylus avellana* L.	Hazel	1		
Meso	B	17	Pit 75	76	*Quercus* sp.	Oak	2		0.3
Meso	B	18	Pit 75	77	*Corylus avellana* L.	Hazel	1		
Meso	B	18	Pit 75	77	*Prunus* sp.	Cherry	1		
Meso	B	18	Pit 75	77	*Quercus* sp.	Oak	4		1.1
Meso	B	22	Pit 99	100	*Corylus avellana* L.	Hazel	4		
Meso	B	22	Pit 99	100	*Quercus* sp.	Oak	6		1.7
Meso	B	21	Pit 108	89	*Corylus avellana* L.	Hazel	8		
Meso	B	21	Pit 108	89	*Prunus* sp.	Cherry	1		
Meso	B	21	Pit 108	89	*Quercus* sp.	Oak	1		2.6
Meso	B	32	Gully 115	114	*Corylus avellana* L.	Hazel	1		0.2
Meso	B	62	Pit 178	175	*Quercus* sp.	Oak	5		0.4
Meso	B	61	Pit 178	188	*Quercus* sp.	Oak	20		7.2
Neo	B	81	Ditch 222	219	*Alnus glutinosa* L.	Alder	1		
Neo	B	81	Ditch 222	219	*Betula* sp.	Birch	5		
Neo	B	81	Ditch 222	219	*Quercus* sp.	Oak	14		5.2
Neo	B	87	Ditch 226	227	*Corylus avellana* L.	Hazel	7	9	
Neo	B	87	Ditch 226	227	*Prunus* sp.	Cherry	1	1	
Neo	B	87	Ditch 226	227	*Quercus* sp.	Oak	2		15.5
Neo	B	99	Pit 252	253	*Corylus avellana* L.	Hazel	13		
Neo	B	99	Pit 252	253	*Quercus* sp.	Oak	7		4.6
Neo	B	100	Pit 252	254	*Corylus avellana* L.	Hazel		7	
Neo	B	100	Pit 252	254	*Prunus* sp.	Cherry		1	
Neo	B	100	Pit 252	254	*Quercus* sp.	Oak	11	1	16.5
PreH	B	19	Pit 95	96	*Corylus avellana* L.	Hazel	2	1	
PreH	B	19	Pit 95	96	*Prunus* sp.	Cherry	13	2	
PreH	B	19	Pit 95	96	*Quercus* sp.	Oak	2		12.3
PreH	B	24	Gully 97	98	*Corylus avellana* L.	Hazel	1		
PreH	B	24	Gully 97	98	*Quercus* sp.	Oak	19		8.2
PreH	B	30	Pit 104	106	*Quercus* sp.	Oak	20		77
PreH	B	23	Pit 104	109	*Corylus avellana* L.	Hazel	3		
PreH	B	23	Pit 104	109	*Quercus* sp.	Oak	7		27.3
PreH	B	26	Pit 110	112	*Corylus avellana* L.	Hazel	2		
PreH	B	26	Pit 110	112	*Quercus* sp.	Oak	1		0.1
PreH	B	27	Pit 110	113	*Corylus avellana* L.	Hazel	1	3	
PreH	B	27	Pit 110	113	*Quercus* sp.	Oak	6		7.3
PreH	B	33	Burnt deposit	116	*Alnus glutinosa* L.	Alder	1		
PreH	B	33	Burnt deposit	116	*Betula* sp.	Birch	1		
PreH	B	33	Burnt deposit	116	*Corylus avellana* L.	Hazel	5	1	
PreH	B	33	Burnt deposit	116	*Quercus* sp.	Oak	2		4.2
PreH	B	31	Pit 121	122	*Betula* sp.	Birch	1		
PreH	B	31	Pit 121	122	*Corylus avellana* L.	Hazel	1		
PreH	B	31	Pit 121	122	*Quercus* sp.	Oak	3		0.8
PreH	B	35	Pit 127	128	*Betula* sp.	Birch	1		
PreH	B	35	Pit 127	128	*Corylus avellana* L.	Hazel	2	1	
PreH	B	35	Pit 127	128	*Quercus* sp.	Oak	6		1.5
PreH	B	47	Pit/bio 132	133	*Corylus avellana* L.	Hazel	1		
PreH	B	47	Pit/bio 132	133	*Quercus* sp.	Oak	4		0.6
PreH	B	37	Gully 134	135	*Corylus avellana* L.	Hazel	5		1
PreH	B	38	Gully 134	138	*Quercus* sp.	Oak	7		0.3
PreH	B	39	Gully 134	139	*Corylus avellana* L.	Hazel	1		
PreH	B	39	Gully 134	139	*Quercus* sp.	Oak	3		0.5
PreH	B	41	Pit 136	137	*Corylus avellana* L.	Hazel	1		

Date	Area	Sample	Feature	Context	Species	Name	Frag	RW	Weight (g)
PreH	B	41	Pit 136	137	*Quercus* sp.	Oak	3		0.1
PreH	B	40	Pit 136	140	*Corylus avellana* L.	Hazel	1		
PreH	B	40	Pit 136	140	*Ulmus* sp.	Elm	2		
PreH	B	40	Pit 136	140	*Quercus* sp.	Oak	2		0.2
PreH	B	43	Pit 141	142	*Quercus* sp.	Oak	5		0.4
PreH	B	48	Pit 149	150	*Quercus* sp.	Oak	3		0.2
PreH	B	51	Pit 154	155	*Corylus avellana* L.	Hazel		1	
PreH	B	51	Pit 154	155	*Quercus* sp.	Oak	9		0.8
PreH	B	52	Pit 156	159	*Quercus* sp.	Oak	2		0.2
PreH	B	68	Pit/bio 184	185	*Corylus avellana* L.	Hazel	1		
PreH	B	68	Pit/bio 184	185	*Prunus* sp.	Cherry	1	1	
PreH	B	68	Pit/bio 184	185	*Quercus* sp.	Oak	2		0.3
PreH	B	76	Ditch 215	216	*Betula* sp.	Birch	2		
PreH	B	76	Ditch 215	216	*Corylus avellana* L.	Hazel	1	2	
PreH	B	76	Ditch 215	216	*Quercus* sp.	Oak	5		1.3
PreH	B	84	Pit 224	225	*Quercus* sp.	Oak	15		2.2
PreH	B	85	Hearth 232	233	*Betula* sp.	Birch	2		
PreH	B	85	Hearth 232	233	*Corylus avellana* L.	Hazel	2		
PreH	B	85	Hearth 232	233	*Quercus* sp.	Oak	6		1.4
PreH	B	86	Hearth 232	234	*Alnus glutinosa* L.	Alder	9		
PreH	B	86	Hearth 232	234	*Quercus* sp.	Oak	6		3.2
PreH	B	88	Ditch 229	230	*Alnus glutinosa* L.	Alder	2		
PreH	B	88	Ditch 229	230	*Corylus avellana* L.	Hazel	1		
PreH	B	88	Ditch 229	230	*Quercus* sp.	Oak	7		2.4
PreH	B	91	Linear 235	236	*Corylus avellana* L.	Hazel	9	11	20.2
PreH	B	94	Linear 239	240	*Corylus avellana* L.	Hazel	3		
PreH	B	94	Linear 239	240	*Quercus* sp.	Oak	7		1.1
PreH	B	95	Linear 239	246	*Quercus* sp.	Oak	5		0.3
PreH	B	96	Posthole 247	248	*Quercus* sp.	Oak	20		16.8
Unknown	B	5	Ditch 31	33	*Corylus avellana* L.	Hazel	1		
Unknown	B	5	Ditch 31	33	*Quercus* sp.	Oak	1		0.2
Unknown	B	69	Pit 194	193	*Corylus avellana* L.	Hazel	10		
Unknown	B	69	Pit 194	193	*Quercus* sp.	Oak	4		0.5
Unknown	B	70	Pit 197	198	*Alnus glutinosa* L.	Alder	2		
Unknown	B	70	Pit 197	198	*Corylus avellana* L.	Hazel	5	2	
Unknown	B	70	Pit 197	198	*Quercus* sp.	Oak	1		3
Unknown	B	77	Calluvial	217	*Alnus glutinosa* L.	Alder	1		
Unknown	B	77	Calluvial	217	*Corylus avellana* L.	Hazel	3		
Unknown	B	77	Calluvial	217	*Quercus* sp.	Oak	3		0.8

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APPENDIX VIII

Reproduction of Lithic Analysis Report by G.Smith

GWYNEDD ARCHAEOLOGICAL TRUST

DCWW, LLANFAETHLU
GAT PROJECT G2482

LITHICS REPORT
George Smith 23/09/19

INTRODUCTION

This report provides a description and analysis of lithic materials from the GAT Llanfaethlu WTW excavations. The interpretation and discussion revises the preliminary report produced in 2018, taking into account the additional information provided by the radiocarbon dating and the specialist report on the palaeobotanical material. The wider interpretation needs comparison and integration with the final results, when forthcoming, from the nearby Llanfaethlu School excavation (Rees and Jones 2015-16). That excavation produced evidence of extensive occupation, including considerable lithic material from periods overlapping with the activities discussed below.

The assemblage from the GAT excavation is too small to allow any statistical analysis of the technology or typology so only general observations are made here. The overall assemblage derives from two different methods of retrieval, first from hand excavation and second from floatation sieving. This creates different retrieval rates by size of material, which affects the interpretation, so the material from each retrieval method is kept separate. Record numbers were listed as SF1, SF2 etc (Small Find). Some record numbers included several pieces and these were given sub-numbers such as SF76.1, SF76.2 etc.

The excavation identified three main areas of activity and so the lithic material is considered in relation to those groups. First Area A was a discrete spread of burnt material, associated with two shallow pits. Area B consisted of a group of closely associated features, including gulleys, slots, post-holes and a hearth, altogether regarded as a probable settlement area. Areas C and D consisted of two separate groups of similar linear features identified as post-medieval field ditches. Only a very few objects came from these features but only small areas of them were

excavated. A few pieces were recorded from unstratified or uncertain contexts and a few others were identified as just natural objects and are not included in the report.

RAW MATERIAL AND TECHNOLOGY

The raw materials used were flint and black chert. The amounts of material from the different areas, separated by retrieval method are shown in Table 1 showing different proportions by area. The predominance of flint in the sieved material from Area B can be put down to the way that flint is able to be worked more finely, producing many small flakes and chips and their better retention from sieving.

Table 1 Distribution of raw material

	AREA A		*AREA B*		*AREAS C and D*	
	Flint	*Chert*	*Flint*	*Chert*	*Flint*	*Chert*
Hand excavation	2	9	21	9	5	23
Sieving	1	-	74	9	2	-

The flint, where cortex is present, is all from small pebbles or larger rolled cobbles, all ultimately deriving from fluvio-glacial deposits, probably mainly collected from beaches. It is of mixed colour and mixed quality. The black chert is also of poor flaking quality and most of the pieces are irregular chunks, but there is the occasional piece of better quality. Even so there are no pieces with secondary working and the chert must only have produced thick, sharp-edged flakes or fragments for utilisation. Most is plain black chert, cobbles of which occur in the glacial sediments of the coastal cliffs, beaches and subsoils of north Anglesey (REF). There are also a few pieces of banded chert such as can be obtained from *in situ* deposits found in outcrops and coastal cliff exposures of limestone in the south-east of Anglesey.

The quality and small size of the flint core material limits the size of the usable flakes but it seems to have been worked conventionally with very few scalar pieces resulting from direct shattering of pebbles by anvil percussion.

AREA A

Table 2 Summary of objects from Area A

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Flake	1		2	
Flake frag			5	1
Irregular frag			2	
Split pebble	1			
Microfrag/chip		1		

The types of object from this area are summarised in Table 2. Notably nearly all are of chert. All but one of the pieces came from the burnt spread (8). The only other piece, a flint chip, came from the fill of pit 24. There is nothing specifically diagnostic of function or period. The three complete flakes are all broad, approximately as broad as long and this would suggest a relatively late date.

AREA B

Table 3 Summary of objects from Area B

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Core/frag/reject	2	1	2	
Flake	7	11	3	1
Flake frag	4	16	4	1
Irregular frag	2	7		
Split pebble	1			
Retouched piece	1	3		
Utilised piece	4	1		1
Microfrag/chip		35		6

The types of object from this area are summarised in Table 3. This is the largest and most useful assemblage and is dominated by the use of flint. Numerically most of these came from the sieved samples but these are mainly small pieces under 10mm maximum length and some are small chips under 5mm maximum length. The flakes and fragments are mainly tertiary pieces, that is with no cortex remaining but there are five cores. Three of the cores are of flint of which two are irregular rejects and one, from a pebble, is flat and partly prismatic, and produced blade flakes (Fig. X, 1). The other two cores, of chert, are just fragments. It is noticeable that although the flint raw material was just small pebbles, unused complete or split pebble fragments are almost absent, suggesting that selection and primary working took place elsewhere, probably during the initial collection of raw material.

There are four retouched pieces, all of flint. One, from hand excavation, is a small convex 'thumb' scraper, made on the side of a thick split pebble fragment (Fig. X, 2). The soil sample sieving produced three more retouched pieces. Two are narrow blade microlithic points. One is a complete lanceolate shape, retouched alternately on two sides (Fig. X, 5). The other is the broken-off tip of a probably convex backed piece, retouched on one side (Fig. X, 6). The third is a notched and snapped blade Fig. X, 3. There are also six probably utilised pieces, five of flint and one of chert. Four are flakes are cutting tools with microchipping and sometimes gloss on sharp edges. One is a probable piercer, with microchipping around a chance angular point.

AREAS C AND D

4 Summary of objects from Areas C and D

	Flint		*Chert*	
	Hand excavation	*Sieving*	*Hand excavation*	*Sieving*
Core			1	
Flake	1			
Flake frag	1	1		
Irregular frag/chip	1		22	
Retouched piece		1		
Scalar piece	1			
Split pebble	1			

The few objects are summarised in Table 4. All came from widely separated cuttings through the post-medieval field ditches. Those from Area C contain no usefully diagnostic objects. However, one cutting in Area D produced one piece of flint resulting from microlith manufacture. This is the tip of a narrow blade that has been snapped off by means of a retouched notch (Fig. X, 4). Although in a residual context, this piece would fit with the assemblage described above, from Area B. However, the lack of lithic objects from most trenches cut through the post-medieval ditches shows that the activity in Area B was quite localised and not part of much more widespread activity.

DISCUSSION

Area A This area produced only a few pieces, and none diagnostic of date or function, there is a clear contrast with the material from Area B. Chert is the main material and the few flakes area very broad, indicating that the objects from Areas A and B belong to a different periods of activity, despite their proximity. All but one of the pieces from Area A came from the 'burnt spread' (8) and so are closely contextually related to that spread, perhaps an eroded midden. Hazel wood charcoal samples from that spread and from a closely related post-hole were radiocarbon dated. These produced statistically identical dates within *c*. 910-810 cal BC, the Late Bronze Age. Charred cereal remains were also identified supporting the idea that the main spread (8) was part of a midden. Although the lithic objects were just waste pieces it is useful to record that some lithic material appeared to have been used in this period. The use of just chert, an easily available local material suggests it was being used quite casually, perhaps just utilising flakes, without producing specific tools.

Area B comprised a discrete group of features regarded provisionally as an area of settlement activity with some probable structural features, post-holes, slots and gulleys. The lithic assemblage was found thinly but widely scattered through most of the numerous pits and linear features. The larger proportion of the lithic material, numerically, and the only diagnostic pieces came from sieving of soil samples, which highlights the importance of soil sampling to provide a proper understanding of the activities present. The three diagnostic pieces are all of Later Mesolithic type. Despite the amount of activity represented there was no pottery from any of these features to suggest Neolithic or more recent activity.

Subsequently, eight samples from this area were radiocarbon dated, (see radiocarbon report and general discussion, below). Six were on hazel nutshell charcoal, one of hazel wood charcoal and one of alder wood charcoal. These dates, if taken as representative, indicated three periods of activity, first, within *c.* 5900-5500 cal BC, second, within *c*. 4800-4600 cal BC, and third within *c*. 3900-3700 cal BC. Those diagnostic lithic objects present would fit best with the earlier two of those periods, that is Later Mesolithic and in fact two of those objects came from pits (99 and 178) that did produce dates within that period. Pit 178 also produced the largest number of pieces of hazel nutshell of all the features. The third and later period of dated activity belongs to the Early Neolithic. The dated pits were well scattered, so there was it appears that the areas of different periods of activity overlapped. However, the features with Later Mesolithic dates and objects lie predominantly to the east side of the area investigated while the features with Early Neolithic dates come from the west side where there are somewhat different features, including three ditches, one of which is curvilinear and surrounds a hearth, and perhaps represents a structure, and this ditch produced three of the Early Neolithic dates. Flotation of samples from these areas produced some carbonised cereal remains, some of which occurred alongside hazel nutshell.

If the whole pit fills had been sieved then a much larger sample of the lithics would have been produced, a factor particularly important for Mesolithic assemblages, and that would have allowed statistical analysis of the waste material, which might have provided some suggestion of differences between the debitage from pits of different periods. For instance, sieved samples from pits 99 and 154, both of which produced microlithic points, contained the microfragments of flint with butts of straight-snapped narrow flint blades (under 8mm width), suggesting the production of microliths. However, such evidence was not forthcoming from other pits. It may be then, that the Mesolithic activity was fairly limited. From the evidence of hand-collection alone the material provides little of diagnostic use as to site period or function with only one small scraper and six utilised flakes. The material that was sieved however does, provide a controlled collection with a smaller retrieval size. This material shows evidence of microlithic point manufacture, with two narrow blade points (under 10mm wide) and a notched snapped blade from which a narrow blade point might have been made. Overall, however, the assemblage does not show a preponderance of narrow blade or even blade manufacture, with only two out of six complete flakes from the hand-collected objects of blade proportions and only three of nine complete flakes of the sieved material. The complete flakes may just represent rejects wider than required, with all the narrow blades further worked. For instance the core (Fig. X, 1)

clearly produced blades and the utilised pieces and the notched piece (Fig. X, 3) are all of blade proportions. Also, all the nine complete breadths of flake fragments in the sieved material are less than 10mm but these sizes are probably selected by the sieving itself. Narrow blade points of lanceolate or convex backed shape form a typical part of the Later or Final Mesolithic period (Jacobi 1980).

Overall, the close grouping of all these features could be expected to suggest some contemporaneity or at least continuity, neither of which is supported by the range of radiocarbon dates, the periods of which are separated by some hundreds of years. What caused this close grouping is not evident as there seems no topographic feature that could have attracted it. The possible midden in Area A seems likely to be linked to the presence of a spring close by, which might have enabled burnt mound type activity but this spring is some way from Area B. It must be noted, however, that a much larger focus of Later Mesolithic activity seems to have been present about 300m to the east at the main Llanfaethlu site, with a major focus of Neolithic activity (Rees and Jones 2015-16), analysis of which might throw some light on the activity here. Despite these questions, the identification of Early Neolithic activity here might be significant. First because it is seems to represent a different type of activity, with possible small settlement structures without pottery but with cereal evidence. Secondly, the dates obtained here of *c*. 3900-3700 cal BC are of the earliest Neolithic period, contemporary with an area of Neolithic activity predating the Early Neolithic chambered tomb at Trefignath, Holyhead, with a date of *c*. 3980-3690 cal BC (Smith and Lynch 1987) but predating the Neolithic building found near the tomb, with dates between 3725-3655cal BC (Kenney forthcoming) and pre-dating the Early Neolithic building at Parc Bryn Cegin, Bangor, which was occupied from *c*. 3760-3700 cal BC (Kenney 2008) and probably predating the houses at the main Llanfaethlu site itself. While there is no evidence that there was any kind direct of continuity here between the Later Mesolithic and the Early Neolithic activity, the contiguity of the activity is unexplained. The Mesolithic/Neolithic transition is one that has yet to be defined or identified in terms of lithic assemblage or type or location of activity although there have been previous suggestions of sites where it might have been identified, for instance at a possible feasting deposit at Coneybury, Wiltshire, a pit which contained both domestic cattle and wild deer remains, probably deposited by different social groups and dated within 3950-3700 cal BC (Gron *et al* 2018). It seems certain that the collection of wild foods, such as the hazelnuts found in association with cereals at the present site, and hunting of fish and mammals, meant the continued use of temporary settlement as here and as also found at the Carrog, Llanbadrig, 8km to the east, where radiocarbon dates of mid and late

4th millennium were obtained from a group of shallow pits probably resulting from roasting hazelnuts (Smith *et al* 2014)

The identification of a major Mesolithic activity area at the main Llanfaethlu site, 300m to the west together with further activity here is significant for Anglesey and North West Wales where Mesolithic activity is known mainly from surface collections of lithics, with no supporting structural, dating or environmental evidence. The analysis of the Llanfaethlu evidence may provide new insights into the nature of Later Mesolithic activity and of its relationship to the subsequent Neolithic settlement.

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