

Carrog, Llanbadrig

GEOPHYSICAL SURVEY AND INTERPRETATION OF STUDY AREA NEAR CARROG FARM, LLANBADRIG

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Geophysical Survey and Interpretation of Surveyed area near Carrog farm, Llanbadrig

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Summary

In 2022 Monolith Archaeology were commissioned by members of the 'Cymedeithas Hanes Mechell' group to conduct geophysical survey at an area near Llanfechell on the island of Anglesey, North Wales (Owen and Woods 2022).

During this timeframe, Monolith were also requested by Robin Grove White of Brynddu Estate, Llanfechell, to investigate an area to the northwest of Carrog Farm, Llanfechell, as part of an extension into the area studied

The survey results identified a number of anomalies which are archaeological in nature – including a possible trackway, linear boundaries, and possible activity.

Acknowledgements

The authors of this report wish to thank the landowners, Robin and Helen Grove-White of Brynddu estate for their contributions to the research of this project, and their enthusiasm and willingness to support it throughout.

The authors also wish to thank Gareth Jones, tenant farmer of *Carrog* farm, for allowing permission for access of the survey areas during this exercise.

1.0 Introduction

- **1.0.1** Monolith Archaeology was contacted by Robin Grove White in order to undertake geophysical magnetometer survey along the northern and southern sides of a field boundary to the northwest of *Carrog* farm, Llanfechell (SH 37335 92224). The field is located between 30m and 35m OD on a raised hill overlooking the village of Llanfechell towards the southwest. Of the two fields, the southern field had been recently ploughed, whereas the northern field was used for grazing (Owen & Woods, 2022).
- **1.0.2** Commissioning of this work followed a request by the landowner during a research project on lands adjoining the *Brynddu* estate which is to form part of a community heritage event later in 2022.
- **1.0.3** The immediate area around the survey area has several reported archaeological discoveries including a late prehistoric settlement and barrow cemetery, as well as plausible cropmark evidence for further unexplored archaeology nearby.

Furthermore, the farm sits within a landscape with established archaeology spanning from prehistory until the modern day – these include a destroyed megalithic tomb, several standing stones and an early medieval to medieval church of possible monastic origins.

1.0.4 The research reported here, and the preparation of this document was undertaken in light of the following best practice guidelines:



- Schmidt, A. & Ernenwein, E. Guide to Good Practice: Geophysical Data in Archaeology, 2nd Edition. Archaeological Data Service, https://guides.archaeologydataservice.ac.uk/g2gp/Geophysics Toc
- CIfA 2020. Standard and guidance for historic environment desk-based assessment. Chartered Institute for Archaeologists, Reading.
- CIfA 2020. *Standard and guidance for archaeological geophysical survey.* Chartered Institute for Archaeologists, Reading.
- RCAHMW 2015. RCAHMW Guideline for Digital Archives. RCAHMW.

2.0 Background

2.1 Exercise Background

2.1.1 This geophysical survey exercise is part of an extended research project looking at the historical and archaeological character of the Llanfechell area as part of a community led heritage exercise.

Monolith Archaeology was approached by Robin Grove White to explore an area of land to the north of *Carrog* farm during a one-week surveying programme using extra time allocated following the early completion of the recently completed geophysical survey work at lands near *Brynddu* estate, Llanfechell (Owen and Woods 2022).

Data from this investigation will also be added to the extant historical and archaeological record of this area as part of a community archaeological exercise at nearby Llanfechell.

2.1.2 The area studied has received extensive archaeological attention in recent decades and has produced material indicative of a strong archaeological presence in the area. As such the use of non-invasive archaeological data gathering methods will serve to mitigate any potential damage to extant sites, while also identifying potential new archaeology within its surroundings.

2.2 Geology

- **2.2.1** The geological composition of the survey areas can be described as follows:
 - Superficial geology this consists of a Devensian Diamicton till, a superficial sedimentary deposit formed between 116 and 11.8 thousand years ago during the Quaternary period.
 - Bedrock The bedrock here consists of Mica schist and psammite belonging to the New Harbour Group, a type of metamorphic bedrock which was formed between 635 and 541 million years ago during what is known as the Ediacaran period.

This is according to data acquired from the British Geology Survey's Geology of Britain



2.3 Archaeological Background

- **2.3.1** The archaeological background of the *Carrog* study area is well attested following archaeological investigations by Gwynedd Archaeological Trust since 2010 (Smith). Aerial and LiDAR studies, combined with geophysical survey and subsequent excavation, have confirmed the archaeological character of several features and anomalies identified during this exercise.
- **2.3.2** The site sits within a wider area of significant archaeological study, evident given the number of projects which have taken place here in recent decades. The extant archaeological record shows human activity in this area since at least the Neolithic, with part of the study area showing occupation from at least this period.
- **2.3.3** The regions importance continued into the Bronze Age period and later prehistoric periods with evidence of ritual and secular activity within and around the study area. Its importance would continue following the establishment of a monastic community within the village of Llanfechell to the southwest, which would later develop into a locally significant market centre by the 18th century.

3.0 Aims and Objectives

- **3.0.1** The aims of the current work are as follows:
 - To determine the presence of previously unrecorded archaeology present within the study area.
 - To initially assess its potential significance within the wider context of both the Llanfechell and Anglesey as a whole,
 - To identify areas where potential development may risk damaging or destroying unrecorded archaeology residing within the soil.

4.0 Methodology

4.0.1 Given the sensitive archaeological nature of the site, this work employed the use of non-invasive archaeological data gathering methods. This consisted of Desk Based Assessment and geophysical survey.

4.1 Desk Based Research

- **4.1.1** The Historic Environmental Records (HER) digital archive at Archwilio was consulted to identify extant and previously identified sites within the immediate surroundings of the survey area to help establish a wider archaeological context.
- **4.1.2** Archival records from Anglesey Archives for the study area were consulted, as well as digitised records of the property kindly provided by the *Brynddu* estate. These would be studied in order to identify potential toponymic (a study of proper place name) evidence



which may prove useful when studying the sites.

- **4.1.3** Extant archaeological reports were also consulted to establish and help identify known archaeology within the immediate study area. This would also be used to interpret the geophysical data produced as part of this exercise in order to possibly provide further context.
- **4.1.4** Studies of historic aerial photography, mapping data and LiDAR data (1m GSM) were also used to help identify any changes within the study area, as well as identify any potential unrecorded archaeology within.

4.2 Archive

- **4.2.1** A paper record of this report will be provided to both Gwynedd Archaeological Trusts Historic Environmental Records (HER), Anglesey Archives and approached landowner(s) Robin Grove White, Helen Grove White (*Brynddu*) and Gareth Jones (tenant farmer, *Carrog*). This information will also be made publicly available through the Archwilio website.
- **4.2.2** A database will be produced on Microsoft Excel containing a photographic and digital imagery register of the recorded data. All works produced will also be backed up as a separate digital copy.

4.3 Geophysics

(This geophysical methodology follows from the extant methodology used for the study of the lands surrounding the *Brynddu* estate and Llanfechell glebe lands and is reproduced as seen in the original document – Owen and Woods 2022).

- **4.3.1** Geophysical survey of the site was carried out by a series of 30m-by-30m grids two lines to the north and south of a field boundary within the study area
- . All corners of surveyed areas were measured with tapes from extant field boundaries, which when coupled with readings from a handheld GPS, would be inputted into the Ordnance Survey system, allowing for their accurate placement within the landscape.
- **4.3.2** The method of geophysical survey utilised was gradiometer (magnetometry) survey. A gradiometer survey is a widely used method of non-invasive archaeological prospection within the field and is effective at detecting areas of burnt material, pits and ditches. It does this by detecting iron content within the ground and 6% of the earth's crust is made up of iron particles which are dispersed throughout the rock, clay and minerals as chemical compounds.
- **4.3.3** Human activity can redistribute these iron particles which can cause anomalies within the magnetic field of the earth which are detectable using magnetometers. Magnetometry



survey is particularly good at revealing any signs of burning within the survey area and any ditches or banks which are no longer visible above ground along with any metal artefacts beneath the surface.

- **4.3.4** The Bartington fluxgate 602 dual probe gradiometer was used to survey the site. This instrument consists of 2 high stability fluxgate Grad-01-1000 sensors fixed with a 1m separation and attached to a DL601 data logger. The range of the probes was set to 100 nano-Tesla's and the instrument was adjusted at the same zero point at each individual survey area and was re-adjusted after every third grid to ensure an accurate and consistent measurement across the entire survey.
- **4.3.5** Data collection is included with the Bartington Grad 601 in the form of a built-in data logger.
- **4.3.6** Surveys were carried out with the following settings: 1 metre traverse by 0.25m standard interval, in a zig-zag formation. Samples were taken at 0.25m intervals (four samples per one metre). The compass bearing for each starting point of the grid was set to the north. The range for the device was set at 100Nt.
- **4.3.7** Geophysical survey has proven a successful prospective tool in studying the extant archaeology of this area. The results of geophysical survey at *Carrog* suggest that the geology of the area is receptive to geophysical survey, as surveys of this site show little background noise (Smith, 2010, p. 28). This clarity is also seen on survey results at both the Llanfechell Triangle and *Penbodeistedd* standing stone immediately north of the study area (Woods, 2022, forthcoming).

4.3.8 Data presentation

4.3.8.1 Data from the data logger would be transferred to a computer using the proprietary Grad601 Communication Application, and later uploaded onto Geoplot (version 3). This would produce a black and white visual representation of the data useful for visualising and further interpretation/analysis.

4.3 Timetable for proposed works

4.3.1 The geophysical survey was conducted over a two-day period, taking place during another archaeological exercise headed by Mônolith Archaeology in the region (Owen and Woods 2022). Initial preparation of this report as produced one week prior to the original works taking place. Results from the surveys would be updated daily following processing of said geophysical results.

4.4 Staffing

4.4.1 This stage of the project was managed and lead by both Arwyn Owen (BA Welsh History and Archaeology from Bangor University with an ongoing MA by Research qualification from Manchester Metropolitan University) and Mike Woods (Msci in Archaeology from the University of Central Lancashire and current PhD student in Archaeology for Manchester Metropolitan University).



4.8 Health and Safety

- **4.8.1** A full Risk Assessment was produced prior to work taking place. Staff were made familiar of its contents.
- 4.8.2 A First Aid kit was made available on site.

5.0 Results

5.1. Desk Based Research

5.1.1 HER Study

- **5.1.1.1** A study of recorded historical and archaeological features within a 2km radius of the survey area identified a total of 89 records (see Appendix 1, p. 17)
- **5.1.1.2** Of these records the majority of sites highlighted are of post medieval to modern date (42/87 or approximately 48%). However, the area does possess a significant prehistoric to early historic archaeological presence, with 18 sites identified spanning from Neolithic to Romano British date (approximately 21%), with one of these sites (see **5.1.1.3**) located within 100m of the survey area.
- **5.1.1.3** Concentrated archaeological remains of prehistoric date within the surrounding area of Llanfechell is indicative of significant ritual activity taking place here at this time. Of particular interest to the study area is the presence of ritual and settlement activity to the west and north of *Carrog* farm a short distance from the survey area. Aerial photography identified three ring ditches to the southwest of the farm which, when surveyed with geophysical equipment, confirmed the presence of these ditches in the ground, which are suggestive of a possible barrow cemetery (Smith, 2010, pp. 27-30).

Of particular interest, regarding the location of the survey area, is the known and published study of an archaeological site within 100m of the survey area. The site was first identified in 1996 as a visible cropmark to the northwest of the farm. Geophysical survey identified a small, defended upland settlement (Smith, 2010, pp. 27-30; Figs 31 and 32). Subsequent excavation identified a multi-period settlement site with evidence of occupation since at least the Neolithic period, with the site later reused and consolidated into a defended homestead during the late Bronze Age to early Iron Age period (Smith, et al., 2013).

5.1.1.4 A number of other prehistoric sites are recorded within 2km of the study area. These include the destroyed megalithic tomb at Cromlech Farm, approximately 1381m northwest of the study area (Smith, 2009); as well as historical references to fragments of another possible destroyed megalithic tomb within the fabric of Llanfechell Church (Baynes, 1912, p. 51).

Later ritual activity includes the presence of several prehistoric standing stones within the study area. These include a possible three possible standing stone arranged in a group approximately 1072m to the southwest (RCHAMW, 1937, p. 78). Currently, the date of these stones as prehistoric is tentative, although geophysical survey conducted in 2021 identified



anomalies indicative of possible prehistoric ritual activity adjacent to this site (Woods). Other monuments, such as the standing stone of *Penbodeistedd* provided a conclusive Bronze Age date for said monument when excavated (Smith, 2011).

A small number of rock art sites are known within the area as well. These include cup marks recorded at and around the site of the destroyed megalithic tomb near *Cromlech* farm (Nash, et al., 2005, p. 13), as well as a cup and ring marked packing stone recovered during the *Penbodeistedd* standing stone excavation (Smith, 2011, pp. 8; 11-13).

Further evidence of prehistoric funerary activity includes the round barrow at *Pen y Morwydd* (RCHAMW, 1937, p. 145), which would have been visible from the survey area although the view is now blocked by trees near the farm.

5.1.1.5 A small number of enclosures are also recorded within the survey area, many of which are of unknown date. Those which have been excavated, such as *Carrog*, indicate activity spanning from the Neolithic up to the late Bronze Age period and (potentially) into the Early Iron Age period (Smith, 2011). At least two are recorded near the site based on LiDAR data, with two possible examples, a rectilinear and curvilinear earthwork, recorded up to approximately 225m further north (HER).

Other earthworks nearby include a polygonal enclosure at *Llifad*, which is assumed to be of late prehistoric to Romano British date (RCHAMW, 1937, p. 38), comparable to other native = defended settlement sites on Anglesey of this period (Wessex Archaeology, 2013, p. 10).

5.1.1.6 Approximately 1037m southwest of the survey area is *St Mechell's Church*. The site, designated as a Grade II* listed church (PRN 6993) remains in active use. There is evidence of a church on this site since at least the thirteenth century, based on the 1254 Norwich Taxation (Lunt, 1926, p. 196). However, several elements, such as Its nave and western area of the chancel (RCHAMW, 1937) its decorated font (Thurlby, 2006, p. 226) and possibly thebase of its western tower (Davidson, 1998, p. 151) are of twelfth century date.

The porch of the church contains an expanded arm cross slab of mid to late 13th century date (Cooke, 2011) which was assumedly part of the church. Given its continued use, the structure was considerably modified between the 17th and 19th centuries which significantly altered its character (Davidson, 1998, pp. 151-2).

Its curvilinear churchyard suggests an early date for the site; a feature seen at other early dedicated church sites on Anglesey.

5.1.1.7 Historic records attest to the presence of a large stone cross approximately 32.5m southeast of the church, once located atop a large stone adjacent to the property of Mr Nigel Thomas and Mrs Sally Thomas of Llanfechell (pers. corr.). The large stone is locally known as '*Penygroes*' (the pinnacle/top of the cross), suggesting a religious origin (http://www.cymdeithashanesmechell.co.uk/). A stone slab, set within the eastern side of the churchyard, is said to be a surviving fragment of this cross slab. The slab is badly worn



with no discernible decoration.

5.1.1.8 The nearby property of *Brynddu* is regarded as one of the oldest properties in thearea. While sections of the present structure date back to at least the 18th century. (RCHAMW, 2003), records suggest that a property has been on this site since at least the 16th century (Griffith, 1914, p. 32).

5.1.1.9 A number of properties of at least 19th century date are recorded near the survey area. These include *Carrog* farm, which appears on both the 1889 OS maps and first edition OS maps of the area (d. 1818).

5.1.2 Archival Research

5.1.2.1 The Brynddu estate records the names of the survey area fields as follows:

The northern part of the survey area is referred to as **Cae Ceffylau**, translated as *field of the horses*. This name presumably implies the nature of the field as a place for enclosing horses.

The southern part of the survey area is referred to as **Cae Ty'n y Graig** translated as *field of the house on the outcrop* (WR/418/1/13 and WR/418/1/14) This name may refer to the outcrop which can be seen protruding out of the centre of both sides of the central dividing field boundary.

5.1.2.2 Of interest was the reference to a **Cae Siamber** or *'Field of the chamber'* (WR/418/1/13) in a field to the southwest of *Carrog* farm. This name may imply the presence of a lost or destroyed megalithic tomb within the vicinity of the survey area. The location of the field is within the same location as the barrow cemetery referenced in this report (see **5.1.1.3**).

While it is possible that the name may be referring to the extant burial mounds, the use of the singular **siamber** instead of the plural **siamberau** (*chambers*) could be referring to a lost megalithic tomb. Reuse of megalithic funerary sites for later burial during prehistoric is attested in the Anglesey archaeological record at sites such as *Pant y Saer* near Benllech, where an early Bronze Age cist burial was found placed within the chamber of the megalithic tomb (Lynch, 1991, p. 133).

5.1.2.3 Other field names nearby, such as $Tre\ \hat{U}an\ (Ieuan)\ Bach\ ($ the little township of Ieuan) and $Tre\ \hat{U}an\ Mawr\ ($ the big/larger township of Ieuan, is of note, and may suggest the presence of a possible unrecorded settlement at this location. A section of the western field boundary appears to project out towards $Gors\$ farm, which may be the remnants of an earlier enclosed feature within the landscape (WR/418/1/13 and WR/418/1/14).

5.2. LIDAR analysis

5.2.1 LiDAR data was able to locate extant, known archaeology within the landscape (see Appendix 2, p. 18; Appendix 3, p. 19). These include the aforementioned settlement site (**a**) and barrow cemetery (**b**) to the north and southwest of *Carrog* farm appearing as small, raised mounds on the data (see **5.1.1.3**).



5.2.2 Further to the north-east and approximately 174m from the survey area is another feature, identifiable as a raised oval shaped earthwork overlooking a small valley (**a2**) which runs towards the south of the survey area. No traces of the eastern part of the earthwork are visible and may have been ploughed.

Previously identified anomalies such as the rectilinear and curvilinear enclosures appear on the data (**a3**), with evidence of a possible smaller enclosure and linear feature running from the curvilinear enclosure towards the northeast.

- **5.2.3** To the east of the barrow cemetery on an area of land approximately 30m OD can be seen a small mound (**b2**). It's close proximity to (**b**) may be of interest. A series of defined linear features can be seen in the northern and southern areas of the sampled study area. These linear features (**c1**, **c2**, **and c3**) are suggestive of possible field boundaries within the landscape, with one of the boundaries (**c1**) appearing to curve along a raised ridge of a hill towards the north. Another boundary (**c3**) appears to perfectly align with an extant boundary running south from *Carrog* farm and may once have been part of the same feature.
- **5.2.4** Further linear features can be found towards the southwest and western parts of the sampled study area. These include a possible rectilinear feature (d1) as well as a large, raised bank west of *Gors* farm (d2) the latter possibly being the remains of a raised trackway identified from earlier aerial photography (c.1945) of the area (APU Online).
- **5.2.5** The surrounding fields contain extensive evidence of previous agricultural activity within the landscape such as ridge and furrow ploughing, visible as regular, narrowly spaced linear anomalies within and around the sampled study area (**e1** to **e3**)

5.3. Satellite / Aerial photography analysis

- **5.3.1** Analysis of current and earlier aerial photography have highlighted features of potential archaeological origin as well as known archaeological sites within close proximity of the survey area (see Appendix 4, p. 20).
- **5.3.2** Aerial photography from 1945 show a series of cropmarks within the northern and southern sections of the sampled study area (i). Furthermore, the ditch around the settlement excavated at *Carroq* appears as a faint curvilinear cropmark to the southwest (ii).
- **5.3.3** Towards the northeast of the sampled study area, the earthworks that were identified on the LiDAR data (see **5.2.2**) appear as a sub circular or oval shaped enclosure. Another cropmark, sub circular in form, appears to enclosure part of the southwestern part of its circuit (iii).
- **5.3.4** Although the rectilinear enclosure identified on LiDAR does not appear as clear in the data (see 5.2.2. for more discussion), the curvilinear enclosure previously identified does appearas a large curvilinear cropmark within the field.



While it is possible that these may be archaeological in nature, only geophysical survey and subsequent excavation could validate any newly discovered archaeological features within the landscape. The resolution of these images is quite low and may be misrepresentative to any possible archaeology in this area.

5.4 Geophysical Survey

5.4.1 Geophysical survey was conducted over two days, with a day's pause between, on both the 14th and 16th of January. Weather conditions for the survey were favourable, with only slight drizzle by the end of the second day. Ground conditions varied in both areas - thenorthern section was quite firm and easy to walk on; whereas the southern section, as it hadbeen recently ploughed, proved difficult to walk over at times. A total of 14 full grids (30m by 30m) were surveyed running alongside the proposed hedge line to the east of the field - consisting of 8 grids on the northern side and 6 grids onthe southern side. Areas of high magnetic readings are due to the presence of a fenced stone wall boundary which divides both survey areas.

5.4.2 The geophysical results identified at least five visible anomalies within the survey area which are indicative of possible archaeology. The most notable of which is two highly magnetised linear anomalies (1) within the southern half of the survey area, which are traceable to the northern half of the survey area (2). Its length is traceable to at least approximately 58 metres and appears to run in a north easterly to south westerly direction. The parallel nature of the linears appear to be ditches of a possible trackway which may have continued further down the field. That these linear appear to run underneath the present field boundary which divides both survey areas is of note.

Traces of a curving linear anomaly can be seen to extend eastwards from the southern half of the twin linears curving inwards towards the south, with another thin linear anomaly running underneath. This may be interpreted as a possible enclosure of some kind.

Smaller linear anomalies were also visible running in both survey areas. These include a 't-shaped' linear anomaly group towards the eastern part of the northern survey area (3) as well as a long linear feature which appears to run in a north-north-easterly to south-south-westerly direction (4). This linear appears to run underneath the present field boundary, which dates back to at least the 19th century, suggesting an earlier date.

Finally, a series of round curvilinear anomalies of varying sizes were observed within the survey area. These (5) ranged in size from approximately 8.6m to 18m in diameter and may be structural in nature.

5.4.3 Interestingly, the results on the western side of the northern survey area did not produce any significant anomalies (**6**) suggestive of undisturbed archaeology. This may be deliberate, or possibly the result of more historically recent agricultural practices destroying any previously unrecorded remains. The presence of a drainage ditch nearby may be of note.



6.0 Discussion

- **6.0.1** The surveys carried out in this area have identified a number of anomalies which are likely to be archaeological in origin. Many of these anomalies may be contemporary in date with the extant archaeology nearby and will undoubtedly add further information to the historical and archaeological development of this landscape over time.
- **6.0.2** At least one part of the survey results (4) appears to align precisely with a small linear anomaly identified following geophysical survey of the late Bronze Age to early Iron Age defended settlement (Smith, 2010, pp. 28-9), with later excavation suggesting it may have functioned as an earlier field boundary ditch (Smith, 2011, p. 4).
- **6.0.3** The possible trackway identified within the survey area certainly predates the extant field boundaries, although whether the trackway is in fact prehistoric remains speculative. The nearby track immediately east of the survey areas does date back to at least the early 19th century, and it is possible that this trackway may have been an 'off shoot' leading to anearlier field.

However, trackways have been recorded nearby prehistoric monuments within the landscape. At the Llanfechell triangle a linear trackway was observed to run eastwards, possibly following the line of the present field boundary, towards the road (Woods, 2021, p. 140).

It is possible that this is not a track but rather a double ditched field boundary, similar to that observed running south-east of the *Penbodeistedd* standing stone (Smith, 2011). However, its width of approximately 10-12 metres is much too large for a field boundary and, given that the anomaly appears to open wider at its northern end, is more indicative of a double ditched trackway system.

6.0.4 The circular anomalies identified may be the remains of roundhouses evident of late prehistoric settlement activity within this upland area, likely of the Late Bronze Age or Iron Age. Magnetometry surveys carried out at Bryn Celli Ddu revealed comparable circular and curvilinear anomalies as identified at this site (Woods 2021) and is likely to be an Iron Age settlement as roundhouses were excavated in the neighbouring fields (Edmunds & Thomas, 1990).

Subsequent excavation at sites near Holyhead (Kenney, 2020, p. 337), *Burwen* near Amlwch (Wessex Archaeology, 2015, p. 7) *Ffynnonwen* in Ceredigion (Murphy, et al., 2006) have helped 'ground truth' the science, providing physical evidence for the anomalies detected.

It is also possible that several of these roundhouses may be Roman or early medieval in date due to the longevity of the roundhouse tradition in Northwest Wales, as evidenced with the early medieval settlement site at *Glyn* near Llanbedrgoch (Waddington, 2013, pp. 152-3). The discovery of a piece of Roman pottery within the surface plough soil of the southern survey area is of interest.

6.0.5 The identification of an oval enclosure immediately northeast of the survey area is



most intriguing. The feature does appear as a cropmark in later satellite imagery (Google) and may be suggestive of another previously unrecorded defended settlement of prehistoric date, similar to the excavated example on the southwestern corner of the survey area (Smith, 2011). Both sites occupy an area of high ground in the landscape overlooking a shallow stream which cuts across the south-eastern sides of the site and are visible as cropmarks on earlier aerial photography as well as satellite imagery of the study area. The use of cropmarks in identifying unrecorded archaeological sites on Anglesey is well attested given the success of research conducted by Gwynedd Archaeological Trust across Anglesey and western Gwynedd in 2006-7 (Hopewell, et al., 2007).

Further investigation would be required to determine its date and function, but it is likely to be prehistoric in date given its wider context.

7.0 Recommendations

7.1 Following this study, it is recommended that the clearest circular anomalies seen in themagnetometry data be excavated in an attempt to ascertain their date alongside excavations of the ditch system to establish any links between these archaeological features.

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WEBSITES:

Geology of Britain viewer - https://mapapps.bgs.ac.uk/geologyofbritain/home.html

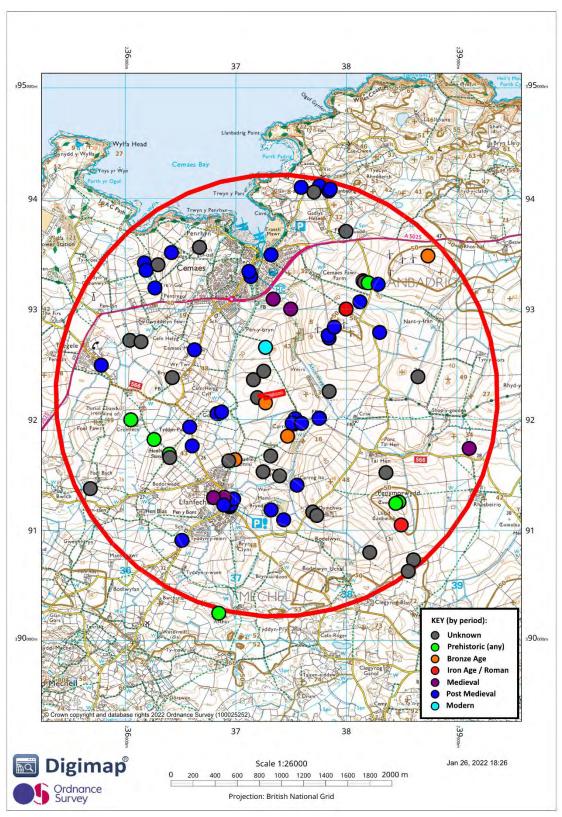
Mechell Historical Society / Cymdeithas Hanes Mechell-

http://www.cymdeithashanesmechell.co.uk/

APU Online: http://aerialphotos.wales.gov.uk/map/

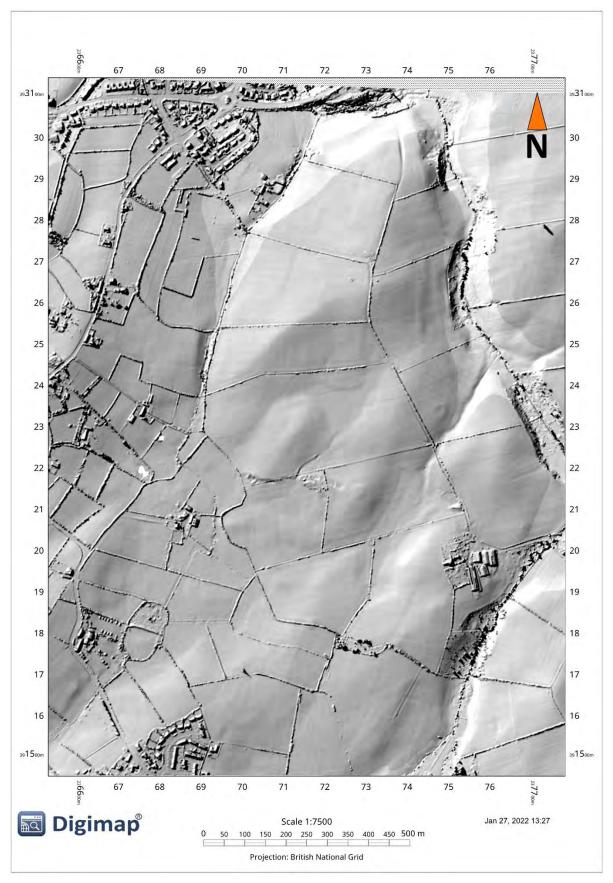


APPENDIX



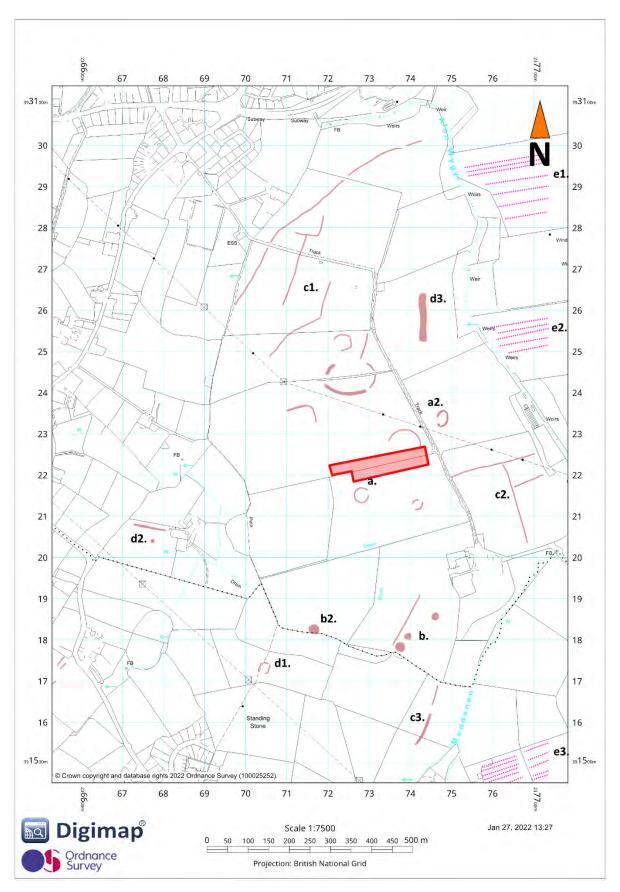
Appendix 1: Map showing HER records within 2km of survey area.





Appendix 2: Image of LiDAR data of surrounding survey area.





Appendix 3: Interpretation of LiDAR data of surrounding survey area. Survey area highlighted as red polygonal shape (centre right). Features annotated.





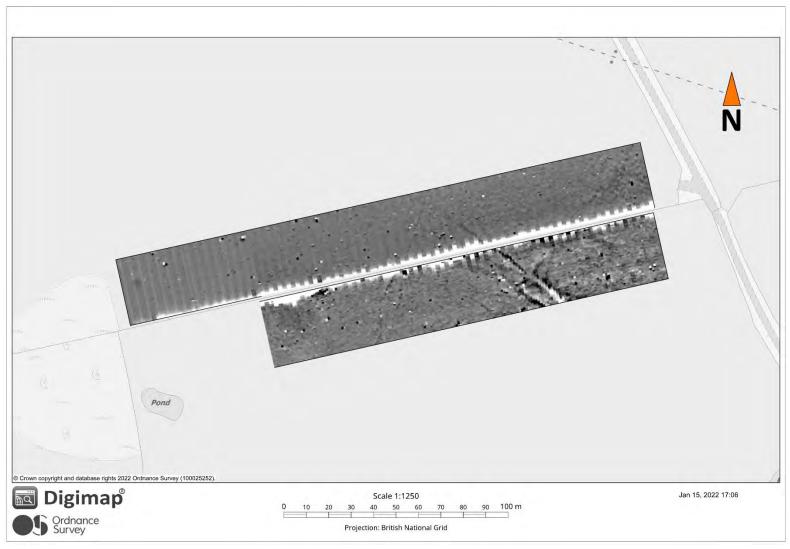
Appendix 4: Aerial photograph of study area c. 1945 (top), with interpretation (below - Welsh Government APU Online Service).





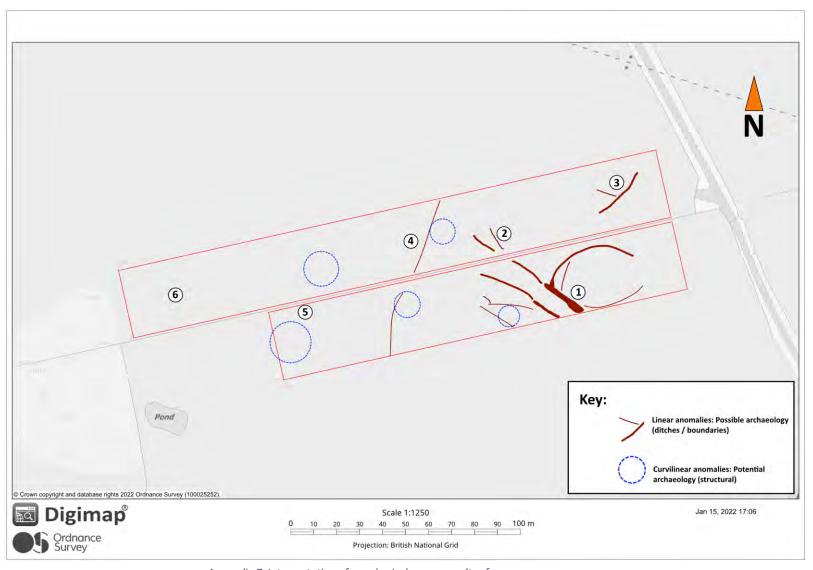
Appendix 5: Grid layout of survey areas.





Appendix 6: Geophysical results of survey areas.





Appendix 7: Interpretation of geophysical survey results of survey areas.

