

# Twyni Byw - Sands of Life (SoLIFE): Conservation Works at Hendai Farm, Newborough

Briff Gwyllo Archaeolegol/  
Archaeological Watching Brief



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust

# Twyni Byw - Sands of Life (SoLIFE): Conservation Works at Hendai Farm, Newborough

## Briff Gwyllo Archaeolegol/ Archaeological Watching Brief

Yr Amgylchedd Hanesyddol yn Cofnodi Prif Gyfeirnod /  
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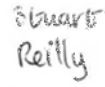
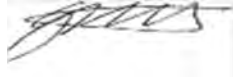

Gweld y safle o fewn lleoliad twyni coedwig a thywod/  
View of site within setting of forest and sand dunes; view from NNE (archive reference: G2699\_010).

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Ymddiriedolaeth Archaeolegol Gwynedd  
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Bangor, Gwynedd, LL57 2RT

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Cadeirydd / Chair David Elis-Williams MA(Oxon), MSc, CPFA  
Prif Archaeolegydd/Chief Archaeologist - Andrew Davidson, BA., MCIfA

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	Role	Printed Name	Signature	Date
Originated by	Document Author	Stuart Reilly		19/11/2021
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## **CRYNHODEB ANHECHNEGOL**

*Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan Adnoddau Naturiol Cymru i ymgymryd â briff gwyllo archeolegol yn ystod gwaith cadwraeth ar gyfer prosiect cadwraeth 'Sands of LIFE' yng Nghoedwig Newborough, Ynys Môn. Roedd y gwaith yn gyfagos i fferm ganoloesol henebion Hendai ond ni nodwyd unrhyw olion archeolegol yn ystod y gwaith daear.*

## **NON-TECHNICAL SUMMARY**

*Gwynedd Archaeological Trust was commissioned by Natural Resources Wales to undertake an archaeological watching brief during conservation works for the 'Sands of LIFE' conservation project at Newborough Forest, Ynys Môn. The work was adjacent to scheduled monument Hendai medieval farmstead but no archaeological remains were identified during the groundworks.*

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by Natural Resources Wales (NRW) to undertake an archaeological watching brief during works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Newborough Forest, Ynys Môn (NGR SH40426384; postcode LL61 6SG; cf. [Figure 01](#)). The Sands of LIFE project is being led by NRW and supported by the EU LIFE fund and the Welsh Government, with the aim to restore threatened sand dune sites across Wales. As detailed in NRW document Twyni Byw - Sands of LIFE (SoLIFE) Specification (dated 08/06/2021), Hendai is an open glade within the dense conifer plantation of Newborough Forest; before the forest was planted in the mid-20<sup>th</sup> century the area was open sand dune, and Hendai glade is an example of surviving relict dune grassland with significant wildlife value, including a population of Great Crested Newts as well as other notable plants and invertebrates. The NRW document stated that whilst Hendai was fenced off, the fence line was in disrepair and therefore, the area could not be grazed reliably by a range of stock, this would result in the encroachment of invasive scrub and coarse vegetation. The aim was to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime.

The archaeological watching brief was undertaken on 19<sup>th</sup> October 2021 and monitored the ground preparation works for the new livestock pen.

Part of the Hendai Medieval Farmstead Scheduled Monument (ref. An108; NGR SH40496374) is present in the southeast corner of the glade (cf. [Figure 02](#)). Cadw confirmed that full Scheduled Monument consent was not required to carry out the fencing works. The above-ground runs were taped off by the SoLIFE Project Officer and the contractor's vehicles and machinery were not allowed to enter. Cadw applied the following conditions:

1. Cadw shall be given at least two weeks' advance notice, in writing (written notice via email is acceptable), of the date of the commencement of the work or of any subsequent adjustment to this date;
2. That representatives from Cadw shall be afforded access to the site to monitor the progress of the works and carry out site inspections as necessary;
3. The works shall be undertaken as described in the specification documents (*SoLIFE Specification; Hendai fencing .pdf* and *SoLIFE Specification; Hendai Scrub*

*Management.pdf*) and that any deviation from these shall be agreed with Cadw prior to the work being undertaken;

4. NRW/CNC will ensure that all on-site contractors and staff are made fully aware that the area of work includes a Scheduled Ancient Monument that is protected from damage under the Ancient Monuments and Archaeological Areas Act, 1979. NRW/CNC shall be responsible for ensuring that the contractor(s) does not undertake any work affecting the Scheduled Area other than those works covered by this consent and that the contractor(s) adheres to all conditions specified within this consent;
5. That existing fence posts are drawn out and new ones knocked in to the same holes (no excavation);
6. That upon completion of the works the monument is left in a stable and tidy condition;
7. Cadw shall be informed in writing (written notice via email is acceptable) immediately upon the completion of the works.

## 1.1 Standards and Guidance

The archaeological watching brief was monitored by Andrew Davidson, Chief Archaeologist, Gwynedd Archaeological Trust and undertaken in accordance with an approved written scheme of investigation ([Appendix I](#)). In line with the regional Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER Event Primary Reference Number for this project was 46131.

All work was planned, managed and undertaken by GAT in accordance with the following standards and guidance:

The watching brief was completed in accordance with the following standards and guidance:

1. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018)
2. *Guidelines for digital archives* (Royal Commission on Ancient and Historical Monuments of Wales, 2015).
3. *Management of Archaeological Projects* (English Heritage, 1991);
4. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
5. *Standard and Guidance for Archaeological Watching Brief* (Chartered Institute for Archaeologists, 2020); and
6. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020).

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

## 1.2 Fieldwork Aims and Objectives

The key aims and objectives of the archaeological mitigation were:

- to establish the date and nature of any archaeological remains identified and assess their implications for understanding the area, in conjunction with the known archaeological record; and
- to place the results in context, reference shall be made if necessary to *A Research Framework for the Archaeology of Wales*.



### 1.3 Acknowledgements

GAT would like to thank the following for their contribution and support:

- *Client (NRW)* Leigh Denyer;
- *Chief Archaeologist, Gwynedd Archaeological Trust* Andrew Davidson; and
- *GAT team* for the fieldwork and production of this report, John Roberts, Stuart Reilly and Carolina Ferreira.

## **2 BACKGROUND**

### **2.1 Introduction**

As highlighted by the regional Historic Environment Record, Hendai medieval farmstead is a Scheduled Monument (ref. An108; NGR SH40486371), located at the southeastern end of the open glade. The farmstead was excavated in 1973, which revealed a two roomed house, consisting of a living area and an animal storage area, constructed of un-fashioned stones with clay packing set on a layer of red clay directly over sand dune. The farmstead Snowdon slate roof. The larger room contained a central open hearth consisting of seven large stones set in thick bedding clay; surrounding this was a hard packed layer of clay and pebble flooring and there was also evidence of a sleeping platform near the hearth. The smaller room reached by a centrally placed doorway in the south wall contained a feeding walk of clay and pebbles down its centre surrounded by pure sand; cow ribs and vertebrae were found in the sand flooring. Artefacts included material coated with rust and metal oxide and large pieces of pitted clay, apparently subjected to tremendous heat were found within the house. This suggested a forge was present in the farmstead that may have been used to shoe cattle or horses before they were driven across the Menai Straits to Caernarfon. The farmstead comprises a Rectangular building aligned NE - SW that measures 17 x 5 m in size and separated into two cells: one 10m x 5m in size and the other 7m x 5m; two doorways are both on the south side. The two spoilheaps from the excavation are still present.

Located c.155m to the south of the farmstead is possibly a related to (or of similar date to) farmstead, with attached byre. (PRN 1904; NGR SH40426357), comprising a rectangular building 4.5m x 5m in size and standing only to 0.5 m above present ground level; a pile of sand to the north of the building may represent further structures on the site. Located c420m to the northeast is a post-medieval cottage with remains of walls and garden (PRN 1905; NGR SH40826395); the building has remnant walls, mainly drystone except for part of one gable which is mortared and part of a garden/curtilage wall visible in the sand.

### **2.2 Historic Mapping**

A brief examination of the First to Third edition Anglesey County Series 1-inch to 25-mile map Sheet XXII.13 (published 1889; cf. [Figure 03](#)) shows the targeted area as part of a larger sand dune landscape prior to the 20<sup>th</sup> century forest plantation, with no evidence for Hendai farmstead visible and no other features apparent.

## 3 METHODOLOGY

### 3.1 Introduction

An archaeological watching brief is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2020).

The archaeological watching brief was required during conservation works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Hendai glade in Newborough Forest, Ynys Môn (NGR SH40426384). The aim of the project was to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime. Part of the Hendai Medieval Farmstead Scheduled Monument (ref. An108; NGR SH40496374) was present in the southeast corner of the glade (cf. Figure [02](#)), but Cadw confirmed that full Scheduled Monument consent was not required to carry out the fencing works. The watching brief abided by any instructions from the SoLIFE Project Officer as to any protocols within the scheduled area.

The project included the following groundwork activities:

1. Ground preparation: To carry out necessary ground preparation works to create a clear, level area for the livestock pen (0.15 ha).
2. Supply and erect livestock pen: Supply all materials and erect a timber livestock handling pen and erect as specified.
3. Removal of existing fencing and gates: Remove all existing fencing material including old gates from the current fence line (0.7km), and dispose of as specified, in line with relevant regulations; recycling materials wherever possible.
4. Supply and erect stock fencing: Supply all new fencing materials to FSC specified standard and erect 0.75km of livestock-proof fencing as specified.
5. Supply and erect new field gates: Supply all materials and fittings of new gates and erect as specified.

The archaeological watching brief was undertaken on the 19<sup>th</sup> October 2021.

## **3.2 Working Project Archive**

### *3.2.1 Photographic Record*

Photographic images were taken using a digital SLR (Nikon D5100) camera set to maximum resolution (4928 x 3264) in RAW format and archived in TIFF format using Adobe Photoshop. A total of 12 photographic images were taken (archive reference numbers G2699\_001 to G2699\_012; cf. [Appendix II](#) for the photographic metadata).

### *3.2.2 Written Record*

The written record was maintained on GAT pro-formas and comprised the following:

- 1 day record sheet
- 2 photographic record sheets (images G2699\_001 to G2699\_012).

### 3.3 Data Management Plan

Archiving was completed based on following task list;

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

This data was used as the basis for the physical and digital dataset archives. Information from these was used to compile the project report. The physical archive was stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset has been stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink.

External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report.

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

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

- File Information form (Excel) – Adobe PDF report final; and
- File Information form (Excel) - Photographic metadata (detail).

### 3.4 Selection Strategy

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

## 4 RESULTS

The GAT archaeologist liaised with the SoLIFE Project Officer on arrival at site. The SoLIFE Project Officer outlined the work to be undertaken as part of the clearance works and how the area of the livestock pen had been cleared of scrub and small trees (Plates 01 & 02) as per the works programme prior to the GAT archaeologist's attendance. The area was inspected by the GAT archaeologist but there were no visible upstanding archaeological remains.

The clearance works was undertaken by a tracked excavator. There were three small tree stumps that were removed by a toothed bucket but the ground reduction was done using a toothless bucket (Plate 03). The tracked excavator removed grass and topsoil to an average depth of 0.10m across the footprint of the livestock pen. This exposed the surface of the underlying natural sand. No archaeological features were evident within the boundary of the works area. The livestock pen was divided into the main paddock which measured 11.0m southwest-northeast and 6.5m northwest-southeast and the small paddock (which formed the entrance into the livestock pen) that measured 5.0m northeast-southwest and 3.0m northwest-southeast (Plates 04 & 05).

The adjacent Hendai medieval farmstead had also been cleared of vegetation on the behalf of Cadw. The surviving walls of the farmstead and excavation spoil heaps were more evident as a result of the clearance (Plates 06 & 07).



## **5 CONCLUSION**

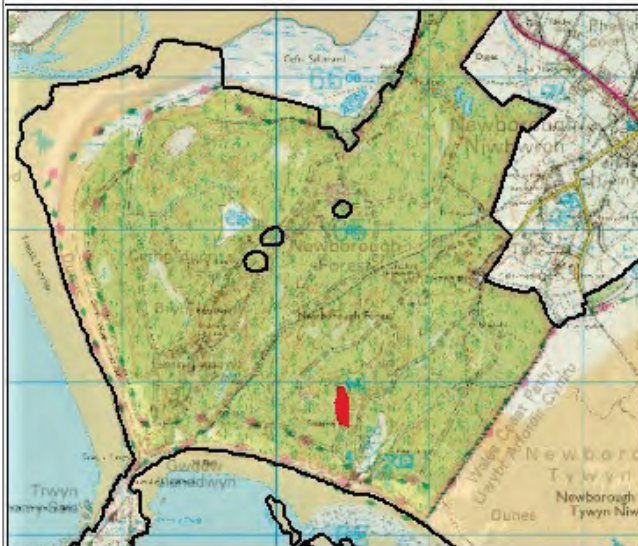
Gwynedd Archaeological Trust (GAT) was commissioned by Natural Resources Wales (NRW) to undertake an archaeological watching brief during works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Newborough Forest, Ynys Môn. GAT monitored ground preparation works for a new livestock pen due to its proximity to the scheduled monument Hendai medieval farmstead. No archaeological remains were identified during these groundworks and the scheduled monument, including the scheduled area, was not physically impacted by these groundworks.

## 7 SOURCES CONSULTED





1. Chartered Institute for Archaeologists, 2020, Standard and Guidance for Archaeological Watching Brief;
2. Chartered Institute for Archaeologists, 2020, Standard and guidance for the collection, documentation, conservation and research of archaeological materials;
3. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*;
4. English Heritage, 1991, Management of Archaeological Projects (MAP2);
5. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation;
6. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE);
7. Natural Resources Wales, 2021. *Twyni Byw - Sands of LIFE (SoLIFE) Specification*;
8. Royal Commission on Ancient and Historical Monuments of Wales, 2015, Guidelines for digital archives;
9. The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1).

## **FIGURE 01**

**Reproduction of Plan 1: Site Location, from Natural Resources Wales,  
2021. Twyni Byw - Sands of LIFE (SoLIFE) Specification**



## Legend

-  SAC / Project Boundary
-  Newborough Forest
-  New Fence Line (0.75 km)
-  Current/Old Fence Line (0.7 km)

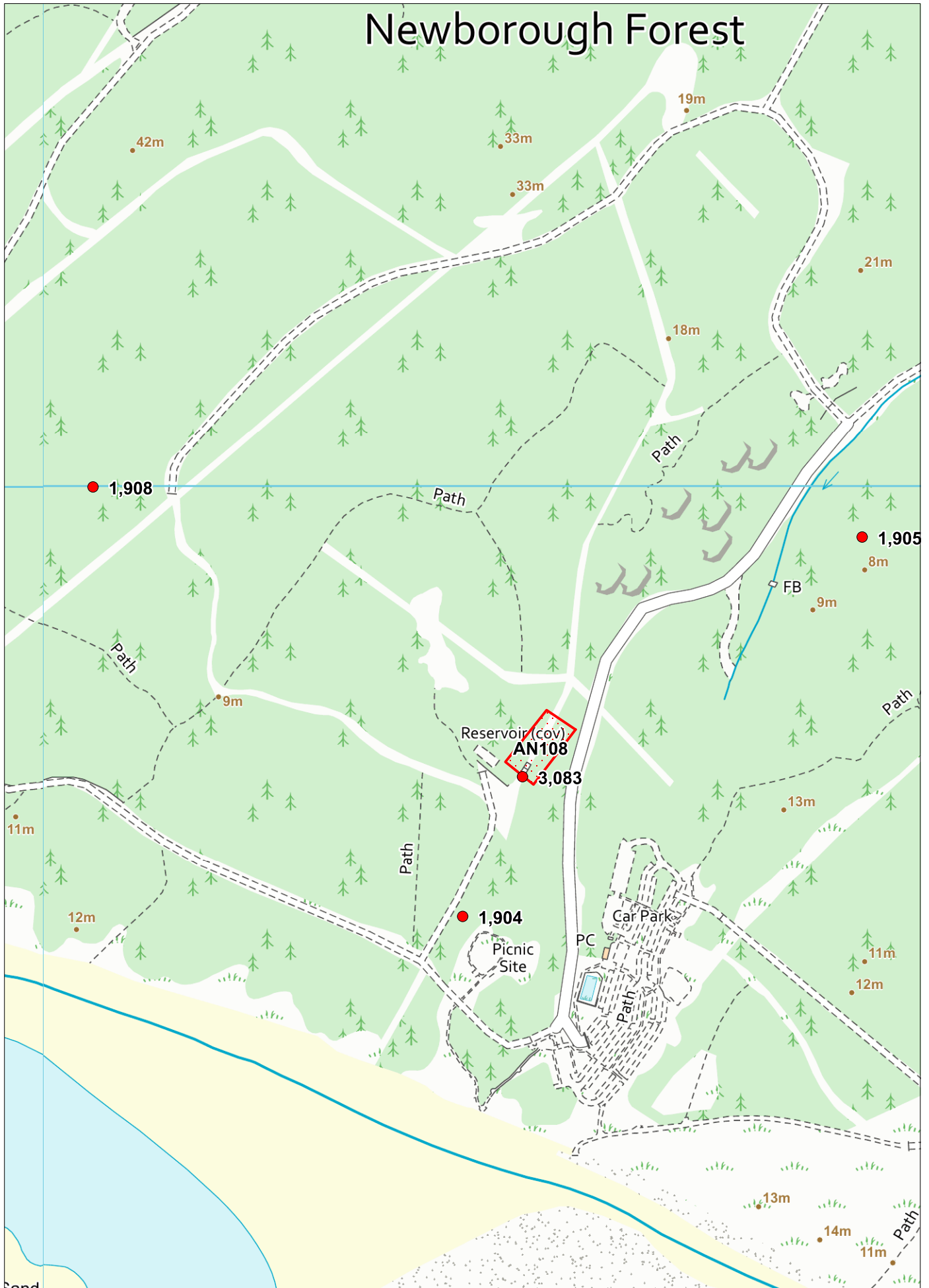
## Notes



## **FIGURE 02**

**Location Plan, based on Ordnance Survey Sheets SH46SW. Scale 1:5000@A4. The Scheduled Monument area is highlighted in red.**

# Newborough Forest



### **FIGURE 03**

**Reproduction of First Edition Anglesey County Series 1-Inch to 25-Mile Map Sheet XXII.13, published 1889. The conservation intervention area is highlighted in red. The Scheduled Monument area is highlighted in red.**



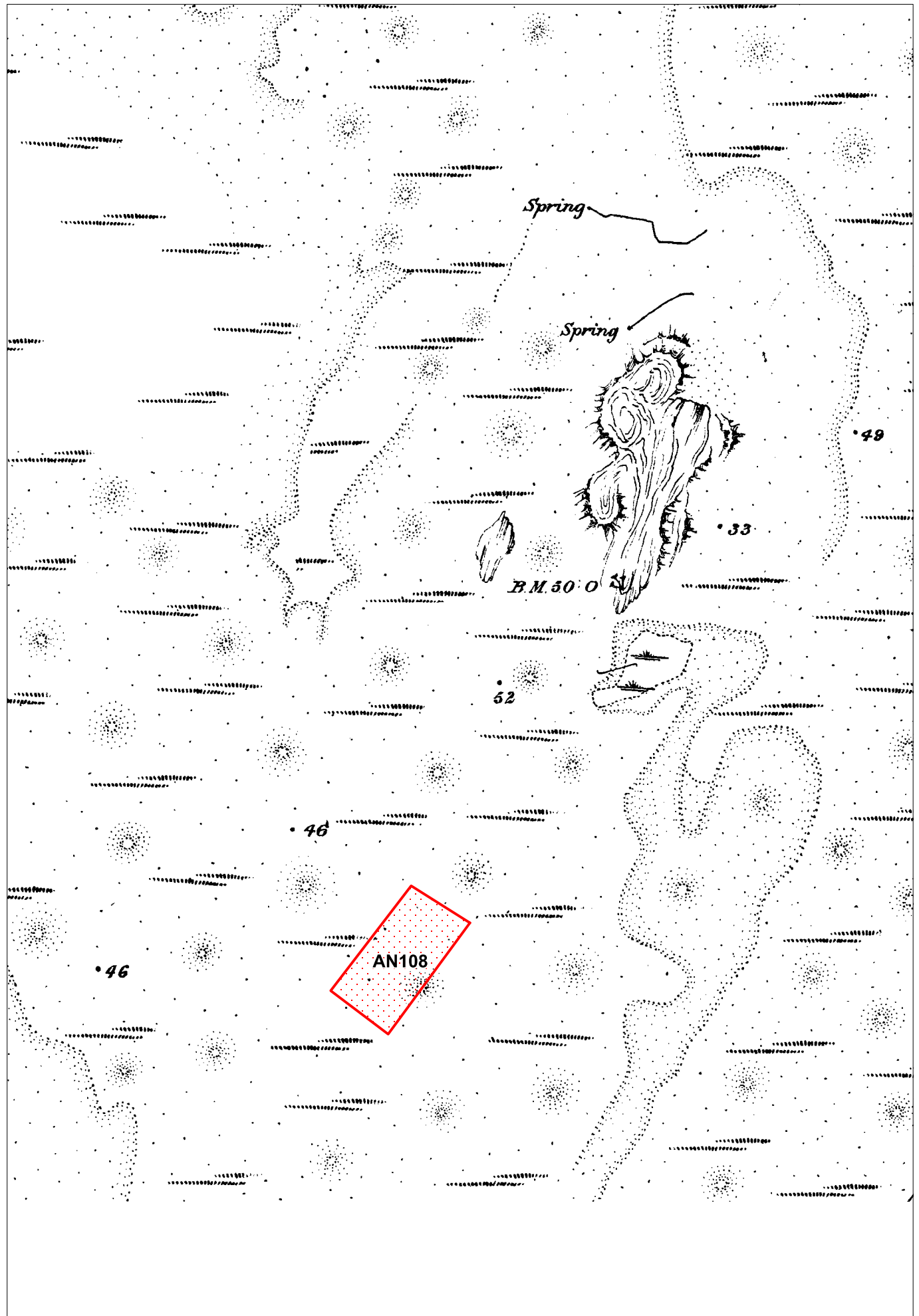






Plate 01: Pre-start view of clearance area; scale not used; view from NE  
(archive reference: G2699\_001).



Plate 02: Pre-start view of clearance area; scale not used; view from E  
(archive reference: G2699\_002).





Plate 03: View of soil strip of clearance area; scale not used; view from W (archive reference: G2699\_004).



Plate 04: View of soil strip completed of small paddock; scale 1x1m; view from SSW (archive reference: G2699\_005).





Plate 05: View of soil strip completed of main paddock; scale 1x1m; view from NE (archive reference: G2699\_007).



Plate 06: View of Hendai farmstead and glade in background; scale 1x1m; view from ESE (archive reference: G2699\_008).





**Plate 07: View of cleared interior of Hendai farmhouse; scale 1x1 m; view from S (archive reference: G2699\_012).**

## **APPENDIX I**

### **Reproduction of Gwynedd Archaeological Trust Written Scheme of Investigation**

**TWYNI BYW - SANDS OF LIFE (SOLIFE):  
CONSERVATION WORKS AT HENDAI FARMSTEAD,  
NEWBOROUGH (G2699)**

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

**Prepared for**

*Natural Resources Wales*

**September 2021**



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust

# **TWYNI BYW - SANDS OF LIFE (SOLIFE):**

## **CONSERVATION WORKS AT HENDAI FARMSTEAD, NEWBOROUGH (G2699)**

Prepared for *Natural Resources Wales*, September 2021

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# 1 INTRODUCTION

Gwynedd Archaeological Trust has been commissioned by Natural Resources Wales (NRW) to undertake an archaeological watching brief during works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Newborough Forest, Ynys Môn (NGR SH40426384; postcode LL61 6SG; cf. [Figure 01](#)). The Sands of LIFE project is being led by NRW and supported by the EU LIFE fund and the Welsh Government, with the aim to restore threatened sand dune sites across Wales. As detailed in NRW document Twyni Byw - Sands of LIFE (SoLIFE) Specification (dated 08/06/2021; cf. [Appendix I](#)), Hendai is an open glade within the dense conifer plantation of Newborough Forest; before the forest was planted in the mid-20th Century the whole area was open sand dune, and Hendai glade is an example of surviving relict dune grassland with significant wildlife value, including a population of Great Crested Newts as well as other notable plants and invertebrates. The NRW document states that whilst Hendai is a fenced, the fence line is in disrepair and therefore, the area cannot be grazed reliably by a range of stock, resulting in the encroachment of invasive scrub and coarse vegetation. The aim will be to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime.

The project will include the following groundwork activities:

1. Ground preparation: to carry out necessary ground preparation works to create a clear, level area for the livestock pen (0.15 ha).
2. Supply and erect livestock pen: supply all materials and erect a timber livestock handling pen and erect as specified.
3. Removal of existing fencing and gates: remove all existing fencing material including old gates from the current fence line (0.7km), and dispose of as specified, in line with relevant regulations; recycling materials wherever possible.
4. Supply and erect stock fencing: supply all new fencing materials to FSC specified standard and erect 0.75km of livestock-proof fencing as specified.
5. Supply and erect new field gates: supply all materials and fittings of new gates and erect as specified.

The groundworks are scheduled between Monday 4th October 2021 and Friday 29th October 2021. The schedule is in line with Protected Species Licence and SSSI Assent

compliance. The archaeological watching brief will be undertaken during the initial ground preparation and is currently scheduled on the 19th and 20th October 2021.

Part of the Hendai Medieval Farmstead Scheduled Monument (ref. An108; NGR SH40496374) is present in the southeast corner of the glade (cf. [Figure 02](#)). Cadw have confirmed that full Scheduled Monument consent is not required to carry out the fencing works. The contractor must work in line with any consent conditions which will be notified by the Project Officer. The above-ground runs will be taped off by the SoLIFE Project Officer and the contractor must not allow any vehicles or machinery to enter this area. Cadw have applied the following conditions:

1. Cadw shall be given at least two weeks' advance notice, in writing (written notice via email is acceptable), of the date of the commencement of the work or of any subsequent adjustment to this date;
2. That representatives from Cadw shall be afforded access to the site to monitor the progress of the works and carry out site inspections as necessary;
3. The works shall be undertaken as described in the specification documents (*SoLIFE Specification; Hendai fencing .pdf* and *SoLIFE Specification; Hendai Scrub Management.pdf*) and that any deviation from these shall be agreed with Cadw prior to the work being undertaken;
4. NRW/CNC will ensure that all on-site contractors and staff are made fully aware that the area of work includes a Scheduled Ancient Monument that is protected from damage under the Ancient Monuments and Archaeological Areas Act, 1979. NRW/CNC shall be responsible for ensuring that the contractor(s) does not undertake any work affecting the Scheduled Area other than those works covered by this consent and that the contractor(s) adheres to all conditions specified within this consent;
5. That existing fence posts are drawn out and new ones knocked in to the same holes (no excavation);
6. That upon completion of the works the monument is left in a stable and tidy condition;
7. Cadw shall be informed in writing (written notice via email is acceptable) immediately upon the completion of the works.

## 1.1 Standards and Guidance

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

1. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018)
2. *Guidelines for digital archives* (Royal Commission on Ancient and Historical Monuments of Wales, 2015).
3. *Management of Archaeological Projects* (English Heritage, 1991);
4. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
5. *Standard and Guidance for Archaeological Watching Brief* (Chartered Institute for Archaeologists, 2020); and
6. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020).

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

## **1.2 Monitoring Arrangements**

The watching brief will be monitored by the Chief Archaeologist at the Gwynedd Archaeological Trust; the content of this document and all subsequent reporting by GAT must be approved by the Chief Archaeologist (GAT) prior to final issue. The Chief Archaeologist (GAT) will need to be kept informed of the project timetable and of the subsequent progress and findings. Contact details are:

Andrew Davidson

Chief Archaeologist

Gwynedd Archaeological Trust

Mobile: 07827857545

email: [andrew.davidson@heneb.co.uk](mailto:andrew.davidson@heneb.co.uk)

### 1.3 Fieldwork Aims and Objectives

The key aims and objectives of the archaeological mitigation are to:

- The objective would be to establish the date and nature of any archaeological remains identified and assess their implications for understanding the area, in conjunction with the known archaeological record; and
- To place the results in context, reference shall be made if necessary to *A Research Framework for the Archaeology of Wales*.

## 1.4 Historic Environment Record

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

The GAT HER Enquiry Number for this project is GATHER 1499 and the Event PRN is 46131. The GAT HER will also be responsible for supplying Primary Reference Numbers (PRN) for any new assets identified and recorded.

Prior to submission of data to the HER on completion of the project, a bilingual event summary document will be prepared in *Microsoft Word* based on the format defined in section 4.2 of *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1).

## **2 BACKGROUND**

### **2.1 Introduction**

As highlighted by the regional Historic Environment Record, Hendai medieval farmstead is a Scheduled Monument (ref. An108; NGR SH40486371), located at the southeastern end of the open glade. The farmstead was excavated in 1973, which revealed a two roomed house, consisting of a living area and an animal storage area, constructed of un-fashioned stones with clay packing set on a layer of red clay directly over sand dune. The farmstead Snowdon slate roof. The larger room contained a central open hearth consisting of seven large stones set in thick bedding clay; surrounding this was a hard packed layer of clay and pebble flooring and there was also evidence of a sleeping platform near the hearth. The smaller room reached by a centrally placed doorway in the south wall contained a feeding walk of clay and pebbles down its centre surrounded by pure sand; cow ribs and vertebrae were found in the sand flooring. Artefacts included material coated with rust and metal oxide and large pieces of pitted clay, apparently subjected to tremendous heat were found within the house. This suggested a forge was present in the farmstead that may have been used to shoe cattle or horses before they were driven across the Menai Straits to Caernarfon. The farmstead comprises a Rectangular building aligned NE - SW that measures 17 x 5 m in size and separated into two cells: one 10m x 5m in size and the other 7m x 5m; two doorways are both on the south side. The two spoilheaps from the excavation are still present.

Located c.155m to the south of the farmstead is possibly a related to (or of similar date to) farmstead, with attached byre. (PRN 1904; NGR SH40426357), comprising a rectangular building 4.5m x 5m in size and standing only to 0.5 m above present ground level; a pile of sand to the north of the building may represent further structures on the site. Located c420m to the northeast is a post-medieval cottage with remains of walls and garden (PRN 1905; NGR SH40826395); the building has remnant walls, mainly drystone except for part of one gable which is mortared and part of a garden/curtilage wall visible in the sand.

### **2.2 Historic Mapping**

A brief examination of the First to Third edition Anglesey County Series 1-inch to 25-mile map Sheet XXII.13 (published 1889; cf. [Figure 03](#)) shows the targeted area as part of a larger sand dune landscape prior to the twentieth century forest plantation, with no evidence for Hendai farmstead visible and no other features apparent.

## 3 METHODOLOGY

### 3.1 Introduction

An archaeological watching brief is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2020).

The archaeological watching brief is required during conservation works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Hendai glade in Newborough Forest, Ynys Môn (NGR SH40426384). The aim of the project is to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime. Part of the Hendai Medieval Farmstead Scheduled Monument (ref. An108; NGR SH40496374) is present in the southeast corner of the glade (cf. [Figure 02](#)). Cadw have confirmed that full Scheduled Monument consent is not required to carry out the fencing works. The watching brief will abide by any instructions from the SoLIFE Project Officer as to any protocols within the scheduled area.

The project will include the following groundwork activities:

1. Ground preparation: To carry out necessary ground preparation works to create a clear, level area for the livestock pen (0.15 ha).
2. Supply and erect livestock pen: Supply all materials and erect a timber livestock handling pen and erect as specified.
3. Removal of existing fencing and gates: Remove all existing fencing material including old gates from the current fence line (0.7km), and dispose of as specified, in line with relevant regulations; recycling materials wherever possible.
4. Supply and erect stock fencing: Supply all new fencing materials to FSC specified standard and erect 0.75km of livestock-proof fencing as specified.
5. Supply and erect new field gates: Supply all materials and fittings of new gates and erect as specified.

The groundworks are scheduled between Monday 4th October 2021 and Friday 29th October 2021. The schedule is in line with Protected Species Licence and SSSI Assent



compliance. The archaeological watching brief will be undertaken during the initial ground preparation and is currently scheduled on the 19th and 20th October 2021.

The following watching brief methodology will be applied:

- During the watching brief all attendances and any identified features will be recorded using GAT watching brief pro-formas ([Appendix II](#));
- Photographic images will be taken using a digital SLR (camera set to maximum resolution in RAW format; a photographic record will be maintained on site using GAT pro-formas ([Appendix III](#)) and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from G2699\_001. When practical, a photographic ID board will be used during the watching brief inspection to record site code, image orientation and any relevant context numbers.
- Any subsurface features will be recorded photographically, with detailed notations and a measured survey (completed using a *Trimble* R8 GPS unit);
- The archaeological structure will be manually cleaned and examined to help determine visible extent, function, date and relationship to any adjacent activity; and
- Any required plans or sections to be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace.

### **3.2 Ecofacts**

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for post-excavation assessment and analysis, ecofact samples will be taken of not less than 40 litres for bulk samples, or 100% if the feature is smaller.

The samples will be subsequently assessed and analysed by an appropriate palaeoenvironmental specialist for plant species and charcoal, with the results used to inform agrarian practices and wood fuel use, as well as radiocarbon dating strategies.

*Any ecofact assessment/analysis proposals will require additional resourcing and cost and will only be undertaken further to agreement with GAT and the client.*

### 3.3 Artefacts

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19<sup>th</sup> and 20<sup>th</sup> century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.

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

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Oriel Ynys Môn, Rhosmeirch, Llangefni, LL77 7TQ), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

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

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

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Oriel Ynys Môn in accordance with their guidelines.

### 3.4 Human Remains

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

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner. If significant quantities of human remains are encountered, a human osteologist should be contacted and appointed to advise the team during the fieldwork. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Historic England, 2004).

### 3.5 Data Management Plan

Archiving will be completed based on following task list;

1. Pro-formas: all cross referenced and scanned for digital archiving;
2. Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*;
3. Project register (*Microsoft Excel* format): cross-referenced with all pro-formas and completed in *Microsoft Excel*; and
4. Measured drawings (permatrace) (if relevant): all cross referenced and scanned for digital archiving.

This data will then be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report.

A draft report will be submitted within one month of fieldwork completion and a final report will be submitted to the regional Historic Environment Record within six months of project completion. The report will include the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusion
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – photographic metadata

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

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

### 3.6 Selection Strategy

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

The selection strategy will be confirmed in the watching brief report and will take into account:

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

The selection strategy pro-forma is included as [Appendix IV](#).



## 4 PERSONNEL

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

- All archaeological watching brief duties on site;
- Client/contractor liaison;
- GAT liaison, with regular updates;
- specialist liaison (if relevant);
- completing all on site pro-formas and the fieldwork archive itemised in [para. 2.5](#);
- sourcing Primary Reference Numbers (PRN) from the GAT HER for any new features identified;
- completing an event summary and creating or updating PRN data, dependent on results; and
- for submitting a draft final report (or interim report) for project manager review and approval, to then be submitted as per the arrangements defined in [para. 4](#).

## **5 HEALTH AND SAFETY**

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and sub-contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook which were prepared by Ellis Whittam. All work will be undertaken in accordance with the client and site contractors Health and Safety requirements.

There will be no livestock grazing in the vicinity of the work area. The site is open access to the public and is regularly used by walkers, cyclists and horse riders. The main contractor will ensure appropriate demarcation of work zones via safety signs and warning tape.

## **6 SOCIAL MEDIA**

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

*Any social media output will be further to the agreement of NRW.*

## **7 INSURANCE**

### **7.1 Public/Products Liability**

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

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2022

### **7.2 Employers Liability**

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

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

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2022

### **7.3 Professional Indemnity**

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

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER PL-PSC10002389775/00

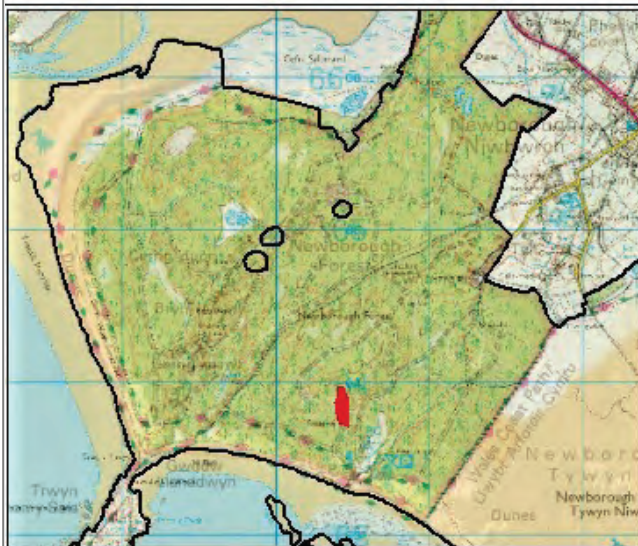
EXPIRY DATE 22/07/2022

## 8 SOURCES CONSULTED





1. Brunning, R and Watson, J 2010, *Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood* (3<sup>rd</sup> edition)
2. Chartered Institute for Archaeologists, 2020, *Standard and Guidance for Archaeological Watching Brief*
3. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
4. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
5. English Heritage, 1991, *Management of Archaeological Projects (MAP2)*
6. English Heritage, 2011, *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*
7. English Heritage, 2012, *Waterlogged Organic Artefacts, Guidelines on their Recovery, Analysis and Conservation*
8. Historic England, 2004, *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports*
9. Historic England, 2015, *Management of Research Projects in the Historic Environment (MoRPHE)*
10. Natural Resources Wales, 2021. *Twyni Byw - Sands of LIFE (SoLIFE) Specification*
11. Royal Commission on Ancient and Historical Monuments of Wales, 2015, *Guidelines for digital archives*
12. The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (Version 1.1)*
13. Watkinson, D and Neal, V, 2001, *First aid for finds* (3rd edition).

## **FIGURE 01**

**Reproduction of Plan 1: Site Location, from Natural Resources Wales,  
2021. Twyni Byw - Sands of LIFE (SoLIFE) Specification**



## Legend

-  SAC / Project Boundary
-  Newborough Forest
-  New Fence Line (0.75 km)
-  Current/Old Fence Line (0.7 km)

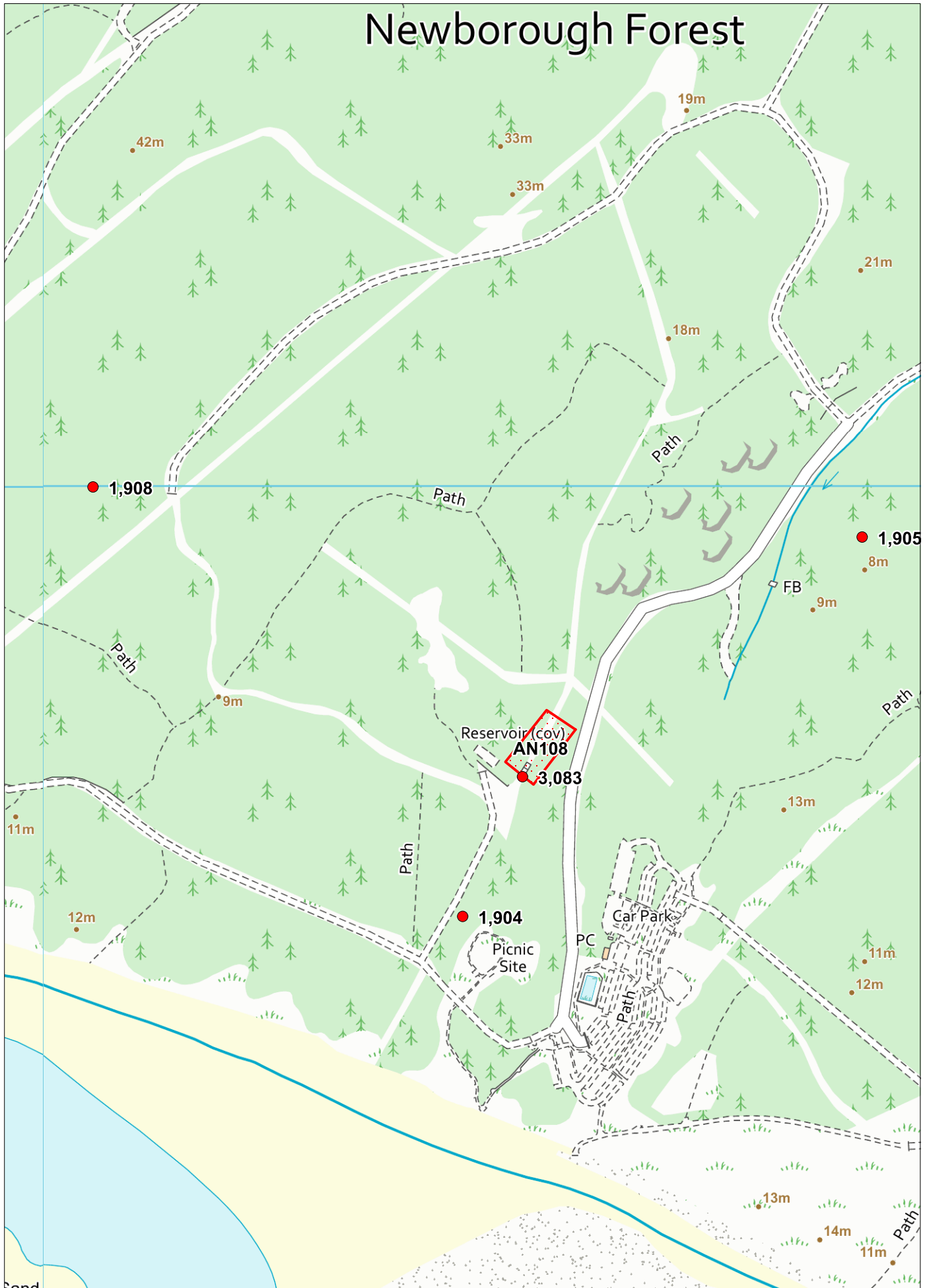
## Notes

## **FIGURE 02**

**Location Plan, based on Ordnance Survey Sheets SH46SW. Scale 1:5000@A4. The Scheduled Monument area is highlighted in red.**

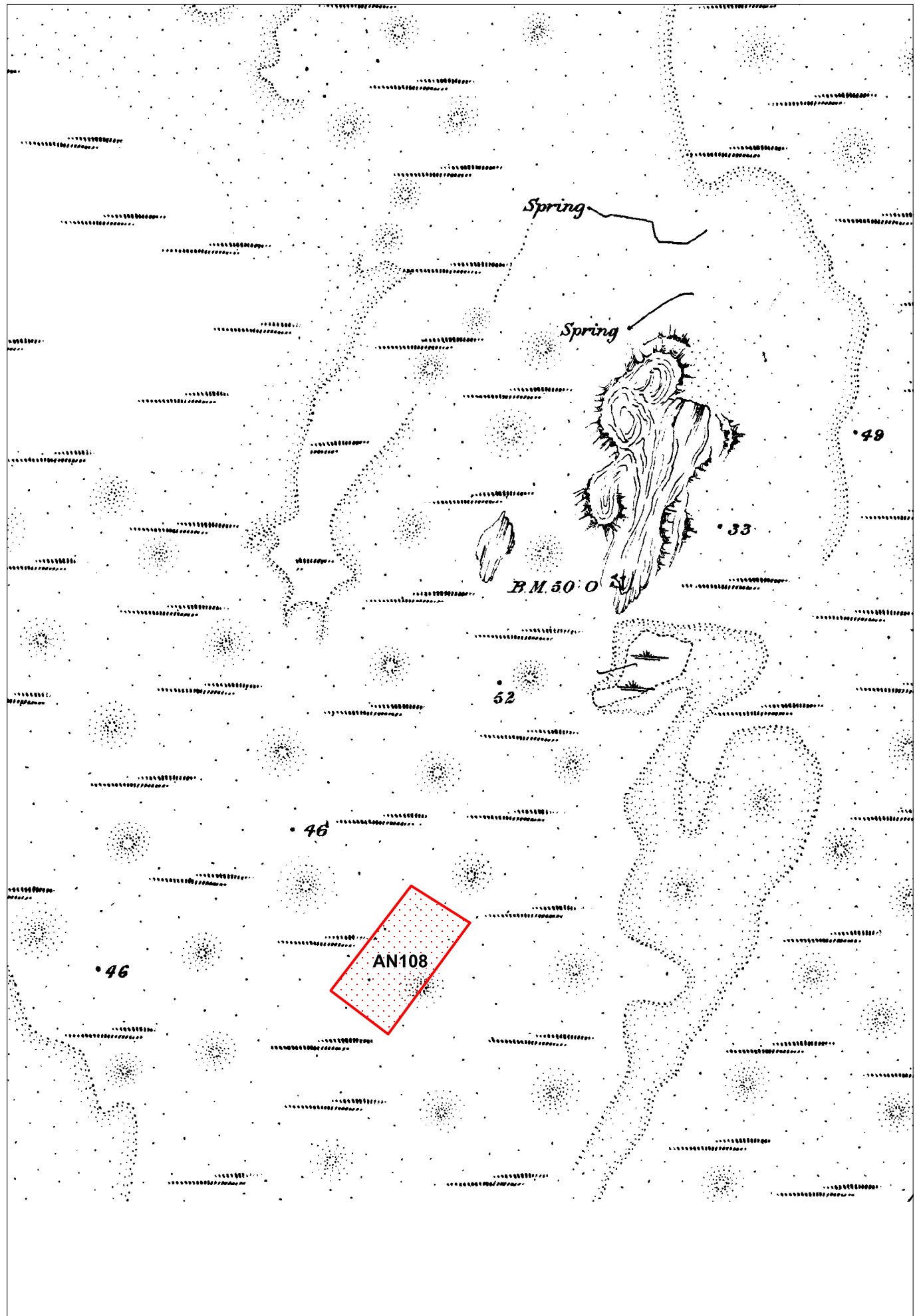


# Newborough Forest



### **FIGURE 03**

**Reproduction of First Edition Anglesey County Series 1-Inch to 25-Mile Map Sheet XXII.13, published 1889. The conservation intervention area is highlighted in red. The Scheduled Monument area is highlighted in red.**



## **APPENDIX I**

**Reproduction of Twyni Byw - Sands of LIFE (Solife) Specification,  
Natural Resources Wales, November 2020**

## Twyni Byw - Sands of LIFE Specification

**Contract Title:** Sands of LIFE Hendai Fencing

**Date:** 08/06/2021

**Sands of LIFE Code:** SoLIFE: LIFE17 NAT/UK/000023

**Sands of LIFE Contract Reference Number:** SoLIFE N2021/06

**Framework to be let under:** SoLIFE Conservation and All Wales Fencing Framework  
Lot 3b

### Introduction

Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) is a major conservation project, led by NRW and supported by the EU LIFE fund, which will restore threatened sand dune sites across Wales.

SoLIFE is now seeking to let a contract to carry out fencing and associated works to reinstate conservation grazing within Hendai glade in Newborough Forest.

### Project Actions

This contract will contribute to the delivery of the following SoLIFE action:

- C5.3 Repositioning of Stock Fencing

### Background

Hendai is an open glade within the dense conifer plantation of Newborough Forest. Before the forest was planted in the mid-20th Century the whole area was open sand dune, and Hendai glade is an example of surviving relict dune grassland. It has significant wildlife value, including a population of Great Crested Newts as well as other notable plants and invertebrates.

Long-term sustainable grazing can play a vital role in the conservation of sand dune habitats. Hendai is a fenced, however, the fence line is in disrepair and therefore, the area cannot be grazed reliably by a range of stock, resulting in the encroachment of invasive scrub and coarse vegetation.

The aim is to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime.

This will produce a varied sward structure and enhance species diversity that is typical of these dune grassland habitats; it will also promote biodiversity ranging from insect pollinators to rare plant species. Expanding the fence line under the conifer canopy will provide shade and shelter to the livestock and reduce adverse impacts on the stream and pond habitats on the western edge of the compartment.

## Summary of Requirements

The contractor is required to carry out the following:

1. **Ground preparation:** To carry out necessary ground preparation works to create a clear, level area for the livestock pen (0.15 ha).
2. **Supply and erect livestock pen:** Supply all materials and erect a timber livestock handling pen and erect as specified.
3. **Removal of existing fencing and gates:** Remove all existing fencing material including old gates from the current fence line (0.7km), and dispose of as specified, in line with relevant regulations; recycling materials wherever possible.
4. **Supply and erect stock fencing:** Supply all new fencing materials to FSC specified standard and erect 0.75km of livestock-proof fencing as specified.
5. **Supply and erect new field gates:** Supply all materials and fittings of new gates and erect as specified.

## Roles and Responsibilities

The contacts for this contract are as follows:

**Leigh Denyer** (primary point for all contact)  
Sands of LIFE Project and Monitoring Officer  
Email: leigh.denyer@cyfoethnaturiolcymru.gov.uk  
Mobile: 07789 654454

### **Graham Williams**

Senior Officer, Land Management Team (North West Wales)  
Email: graham.williams@cyfoethnaturiolcymru.gov.uk  
Mobile: 07884 111802

**Roles:** For the purposes of the CDM Regulations (where applicable), the SoLIFE Project is the Client and Principal Designer for this contract. The winning contractor shall be the Principal Contractor.

The SoLIFE Project Officer will represent the SoLIFE project and be responsible for the duties described below, however, in some instances this role will be delegated to the Senior Officer.

The contractor shall specify a site manager or supervisor for the contract prior to the start of works, who will also be the primary point of contact during the contract.

**Key documentation:** SoLIFE sets the scope and design of the works, including H&S aspects, via this specification document. Supplementary site and H&S information, such as a Site Hazard List is also provided. (See Appendices section). Any changes to the specification must be agreed with the Project Officer.

As part of the tender submission, the contractor shall provide a full method statement for the works, including H&S issues, personnel and machinery to be used; as well as a detailed risk assessment. Relevant certification and assessments shall also be supplied as described elsewhere in this specification.

**Inception meeting/site induction:** The SoLIFE Project Officer and the contractor will meet on site before commencement to discuss the details of the works, H&S matters, access routes, environmental sensitivities, no-go areas etc. The meeting must include the site manager/supervisor and, as far as possible, all team members. The contractor is responsible for fully communicating induction information to new workers or sub-contractors entering the work site.

**Ongoing oversight and communication:** The SoLIFE Project Officer will undertake regular site visits during the works to provide additional direction if required, and check standards are being met. The contractor must communicate with the SoLIFE Officer on a daily basis when on site, by text or phone, giving details of personnel and plant on site, start-finish times, progress made, etc. Photographs of the work site and progress should be provided where possible.

**Works management and supervision:** The contractor shall ensure the works are carried out in a safe and time-efficient manner in a logical sequence, whilst discharging all legally required safety requirements on site.

The contractor shall be responsible for the management and supervision for all of the contractor's personnel on site, including all sub-contractors. The site manager/supervisor or a lead responsible worker shall be on site at all times. Adequate worker supervision shall be provided, in particular, all chainsaw works shall be closely supervised, and the supervisor shall be appropriately qualified.

**Sub-contractors** shall only be used with the express permission of the Project Officer, and full names and qualifications shall be provided. The principle contractor shall take full responsibility of sub-contractors and pass on all information provided by SoLIFE.



## Location

The work will take place at Newborough Forest located near the village of Newborough, on Isle of Anglesey (Ynys Môn) in north-west Wales - please refer to **Plan 1-6** for further location information. SoLIFE can provide a geospatial shapefile for all works or centroid grid references, on request.

### Plan 1: Site Location

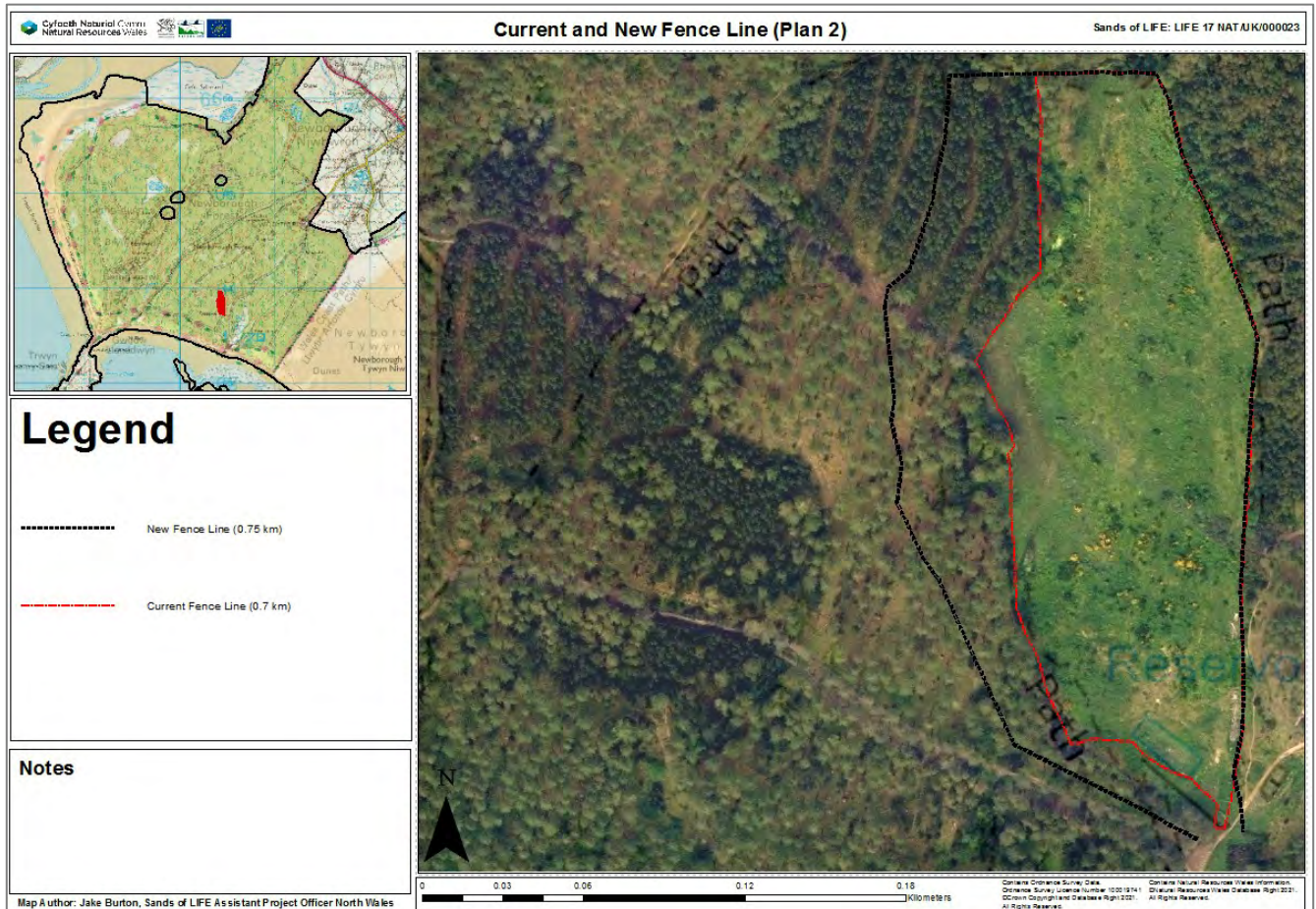
The location of Newborough Forest is shown on **Figure 1**, marked as a yellow polygon. Access is from the A4080.





### Plan 3: Current and New Fence Line

The black line represents the line of the new fence required under this contract (~0.75km). The red line represents the line of the existing fence (0.7km).



### Photos of old fence and work area.



## Period of Work

All works can begin from **Monday 4<sup>th</sup> October 2021** and must be completed before **Friday 29<sup>th</sup> October 2021**.

**The timetable of works are in line with Protected Species Licence and SSSI Assent compliance. The contractor shall confirm in their tender if this timetable is acceptable and provide a timetable of works.**

Contractors must avoid periods of cold weather and there will be no weekend working at Newborough.

The exact timing of work will be dependent on events out of our control such as adverse weather or the re-imposition of Coronavirus restrictions.

The contractor will discuss and agree changes to timing options with the SoLIFE Project Officer.



## Detailed Requirements

### 1. Ground Preparation work

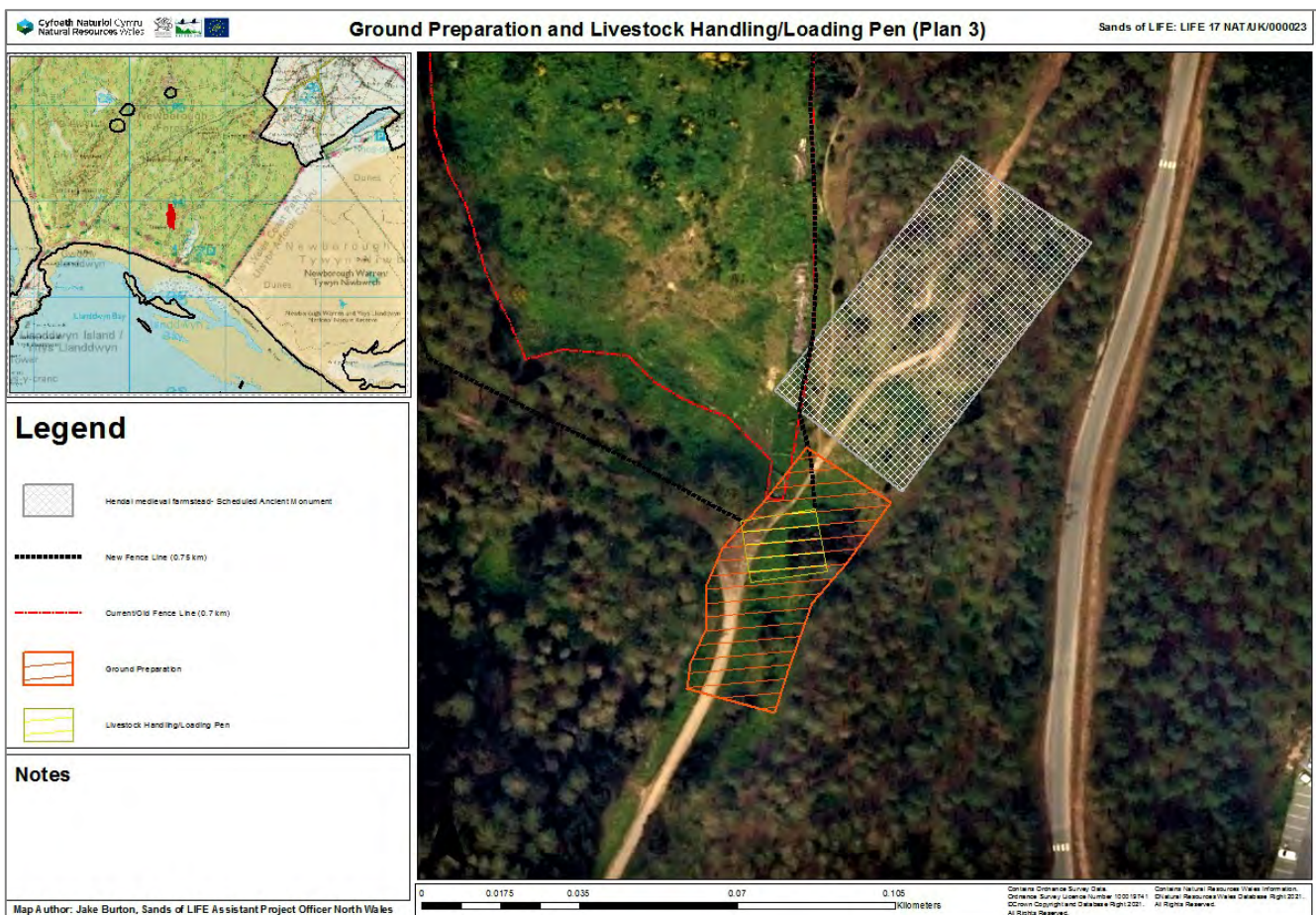
The aim is to create a flat, bare sandy surface, free of all obstructions to allow a **livestock handling and loading pen** to be fitted unimpeded and to allow land management staff better access to Hendai from the forest track.

Scrub will be removed as part of an earlier separate contract. The contractor is required to remove all remaining stumps and roots in this area. The contractor will then be required to level out of the surface across 0.15 ha seen in Plan 3. This will be completed through the use of an excavator and a dumper. All stumps and roots along with sand arisings will be used to cap existing nearby disposal areas as indicated by the SoLIFE project officer and NRW Senior Officer.

**Excavations must not extend into the adjacent Scheduled Ancient Monument area. See below for more information.**

### Plan 3: Ground Preparation and Livestock Handling/Loading Pen

The orange polygon represents the area in which requires ground preparation works, prior to the installation of the livestock handling/loading pen which is seen in the yellow polygon. **The exact location of this pen is indicative and will be determined after ground preparation works.**



## 2. Installation of Livestock Handling/Loading Pen

The contractor is then required to supply materials and install/erect a livestock handling and loading pen, as follows:

- 1 x stock pen = 11m x 6.5m (36ft x 21ft)
- 1 x stock funnel = 5.5m x 2.4m (18ft x 8ft)

*N.B. measurements take into account gates*

- 2 x 3m (10ft) 5 rail, galvanised gate (with welded mesh cladding)
- 2 x 2.4m (8ft) 5 rail, galvanised gate (with welded mesh cladding)

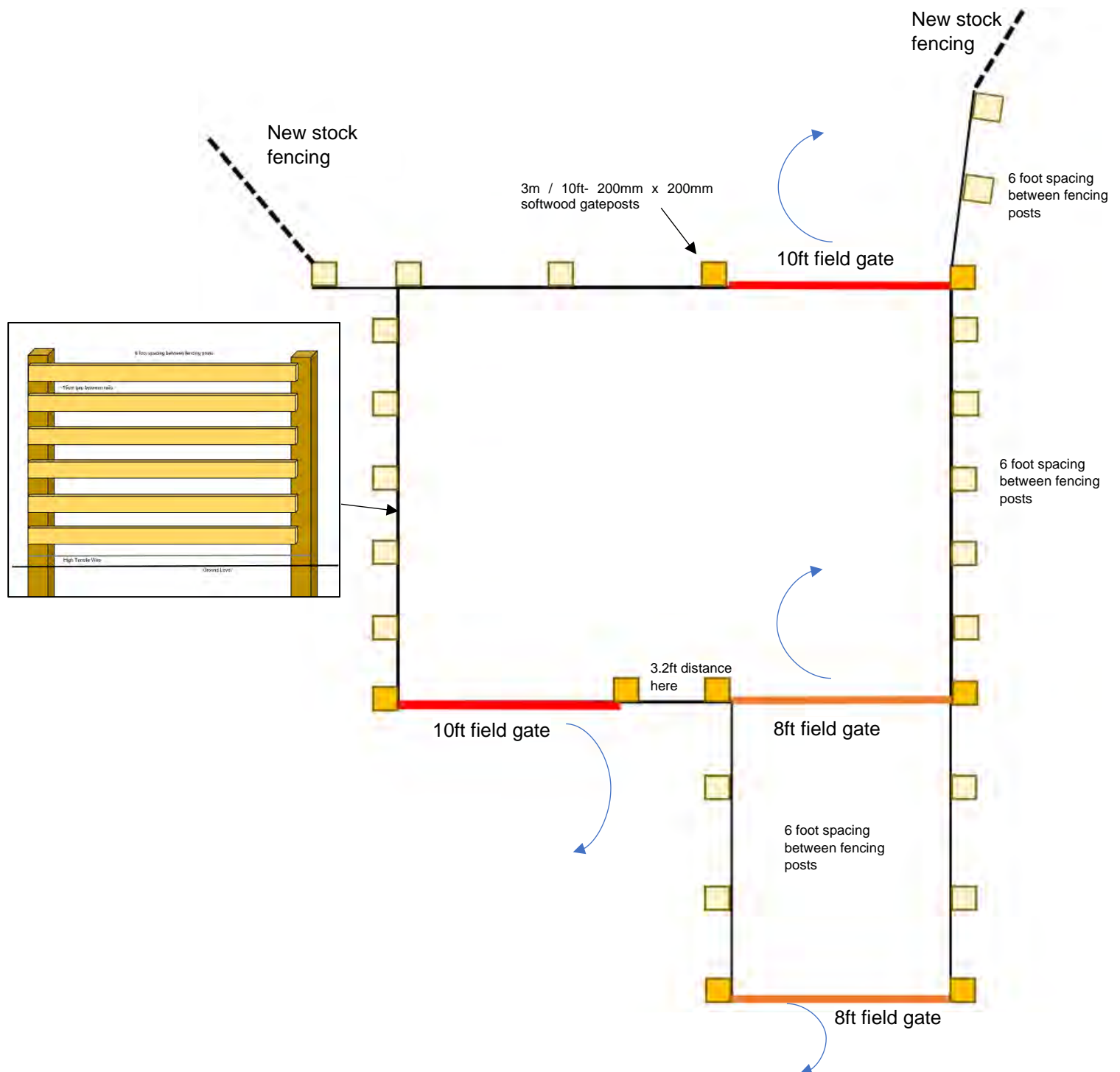
Bottom hook to be put upside down (this saves the gate being taken off its hinges). Gates should be of a design that does not permit lambs to escape through. Gates to be hung so the bottom bar is low enough to the ground when closed to not permit sheep or lambs to escape under it. All gates need to be fixed flat on the outer face of the square posts so they can be opened 180 degrees.

- 8 x 3m (10ft) pressure-treated square softwood gateposts (200mm x 200mm). Forest Stewardship Council (FSC)-certified. Gate posts must be braced in ground, to a depth of 1.5m. Postcrete is not permitted.
- 20 x 2.4m (8ft) pressure-treated square softwood posts (150mm x 150mm). FSC-certified. Posts must be braced in ground, to a depth of 90cm. Postcrete is not permitted. Contractor should allow one post for every 1.8m (or 6') of rail fence line (plus one for the end of the run, if necessary)
- Timber fencing rails. 3.6m x 100mm x 38mm. FSC-certified. Pressure-treated, sawn finish. Timber rails to create rail fencing (nailed). 6 rails with 150mm gap or at least of design to prevent livestock escaping (including lambs). Fencing rails to be on the inside and square posts to be on the outside, where possible.
- 100mm galvanised wire nails
- High tensile wire. 2.5mm dia. 1 strand of bottom HT wire (near ground level) on inside of stock pen and stock funnel.
- Staples: galvanised 40mm. Staples must not be driven home except to terminate line wire. Staples must be driven cross grain.



The corral design example

**Please note- The livestock handling and loading pen design is not to true scale but shows the contractor the design as a guide.**





### 3. Removal of Existing Fencing and Gates

The contractor is required to remove all existing fencing materials from the old fence line shown as the red line on Plan 3 above.

The old fence and gate posts and the wooden gates will be retained, for North West Land Management staff to reuse and recycle. These will be stacked on the adjacent NRW forest road for the Land Management Team to collect.

All other material will be removed and disposed at a registered recycling facility, in line with relevant regulations. The contractors must have a Waste Carrier Licence for the removal of material off site, which must be presented to the SoLIFE Project Officer with the tender.

*The contractor will show great attention to detail and remove all staples and collecting them all from Hendai to avoid harming wildlife, livestock and the public.*

### 4. Erect Stock Fencing

The contractor is required to supply and erect ~0.75km of stock fencing using Forest Stewardship Council (FSC) certified timber, with a 15-year guarantee, as follows:

- Stakes to be 7.5- 8cm diameter and 2.1m long.
- Strainers to be 20cm diameter and 2.5m long.
- Struts to be 7.5-10cm diameter and 2.3m long.

Stakes to be placed at 3m intervals or closer if ground conditions dictate and shall be driven into the ground to at least 0.8m. Strainers to be put at no more than 100m intervals but also at every turn and significant ground undulation.

All strainers must have at least 1 notched and nailed strut against the pull and must be installed into a depth of at least 1m. Some strainers will need an additional notched and nailed strut, because of terrain conditions, the contractor must include these extra struts in their tender costings and clarify reasons/costings.

- High tensile stock netting (Stock netting- must be sheep/lamb safe). Galvanised, 80cm. Eight-line wires, uprights, 22cm apart. Top and bottom gauge 2.5mm; intermediate gauge 2.5mm. Stock fencing to be on the inside of grazing compartment and stakes on the outside ([example guide](#)).
- High tensile wire, 2.5mm diameter (in place of barbed wire):
  - 2 strands of HT wire, above stock netting, inside of fence line. First line to be ~12.5cm above stock netting then leave another ~12.5cm gap for second strand. This will reduce downward pressure from cattle and ponies.

- 1 strand of HT wire on the outside of fence line, running parallel to the inside top HT wire. This gives additional stock control for cattle and ponies, if fence is completed to high standard.
- 1 strand of bottom HT wire (below stock netting, near ground level, inside of fence line), to account for hollows and dips. This will ensure that it is fully stock proof for lambs/sheep.
- Staples: galvanised 40mm. Staples must not be driven home except to terminate line wires or netting. Staples must be driven cross grain.

## In General

Stock fencing to be on the inside of the grazing compartment, and stakes on the outside.

Netting and wire should be properly strained and stapled. Fencing should not be attached to gate posts, trees, shrubs or other structures. Gaps between the end straining posts and other structures should be stock proofed with fence rails if necessary.

On the eastern and northern boundary, the fence shall be erected approximately on the existing line. However, minor modifications to the line can be made to any avoid mature trees, wet areas, or particularly uneven ground. However, all modifications to the line should be made outwards, rather than inward,

If the SoLIFE or Senior officer require any other minor amendments to the line, these shall be marked by canes or posts and discussed on site **at the start of the contract**. On the new boundary line, the new fence line will be marked before contract is due to begin. As above, minor modifications can be made to the marked line if required.

## 5. Install Field gates

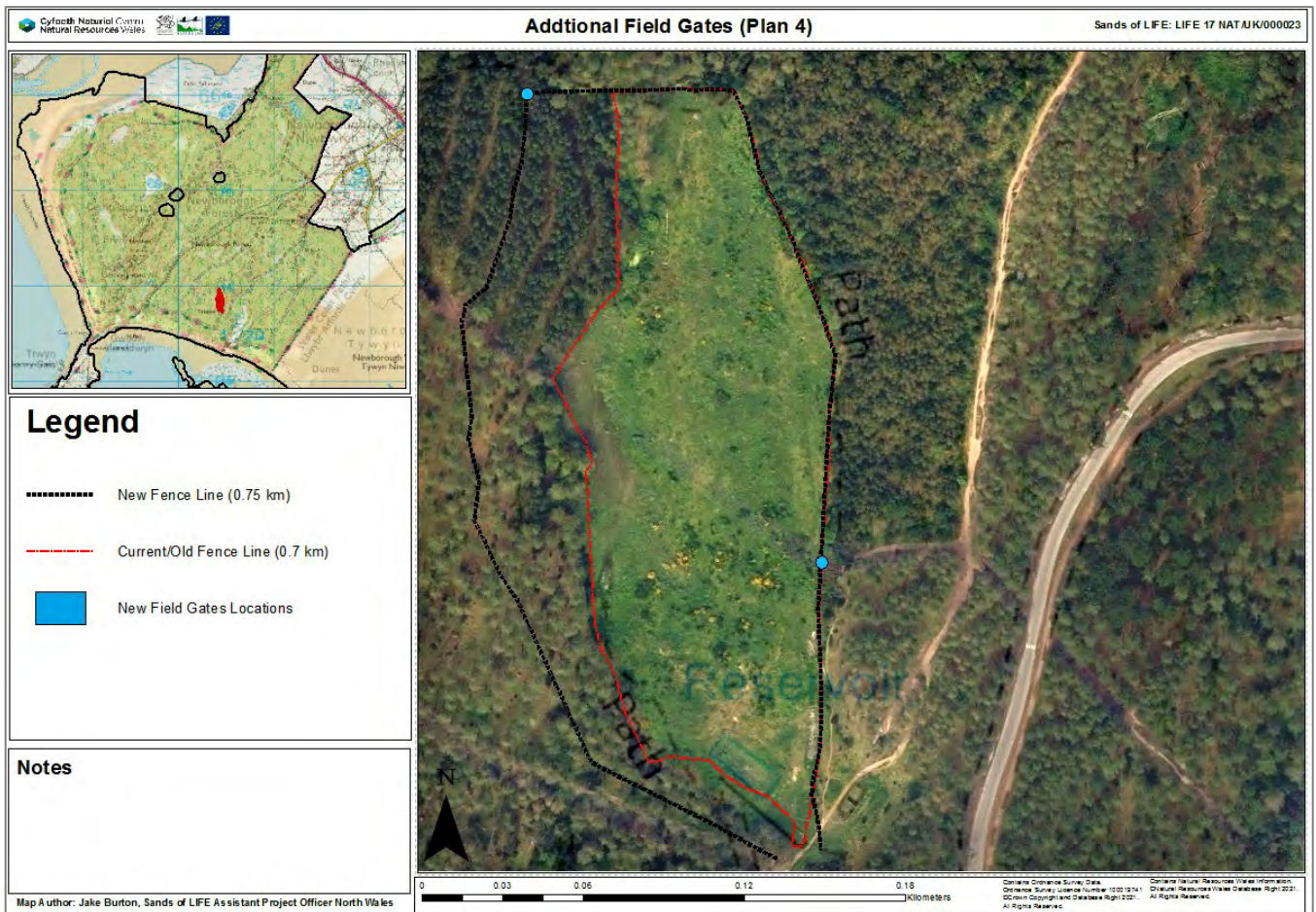
The contractor is required to supply and install / erect 2 metal field gates, as follows:

- 2 x 4.2m (14'), 5-rail galvanised farm gates, with welded mesh cladding and associated gate hanging kit ([example gate](#)).
- 4 x 3m (10') pressure-treated square (200mm x 200mm) softwood gateposts. FSC-certified. Gate posts must be braced in ground to a depth of 1.5m. Postcrete is not permitted.



#### Plan 4: Field Gate Locations

Two field gates are to be installed at locations shown by the blue dots below.



**Gates should be of a design/fitted that it does not permit lambs to escape through.**

Bottom hook to be put upside down (this saves the gate being taken off its hinges). Gates to be hung such that the bottom bar is low enough when closed to not permit sheep/lambs to escape under it. All gates need to be fixed flat on the outer face of the square posts so they can be opened 180 degrees back on to the fence line.

## Fencing Standards

NRW is committed to the Forest Industry Safety Accord (FISA) 104 on Fencing Guidance - available via: <https://ukfisa.com/Safety/Safety-Alerts/fisa-104> – this will also be sent via an email PDF attachment). **All fencing work must comply with FISA 104 (Fencing) guidance.** Where treated woodwork is cut, exposed wood must be treated with wood preservative within 30 minutes of cutting.

**Timber Policy Compliance:** All timber used will be certified under Forest Stewardship Council, PEFC or equivalent as coming from a sustainably managed source and in compliance with the NRW Timber Policy.

The contractor must hold an FSC Certificate to comply with NRW chain of custody, and a copy must be presented to the SoLIFE Project Officer before the contract is let and prior to the purchase of timber.

## Contractors Tender & Quote

It is strongly recommended that the contractor carries out **a detailed site visit prior to quoting** to decide on the most suitable methods and required machinery for this work.

This would take around ~2 hours.

The contractor is required to submit as part of their tender, a **written, detailed method statement** describing how they will carry out the work in line with this specification and in a safe and effective manner. The contractor will supply all machinery and equipment, which should be suitable for the purpose as agreed with the SoLIFE Officer.

## Access

The site is owned and managed by Natural Resources Wales. Permission from the Senior Officer for the contractor to access and carry out the work has been secured by the SoLIFE Project Officer.

A standard NRW forestry key will be required alongside a blue lock key; these will be made available to the contractor by Leigh Denyer prior to work beginning.

Access to the work site is as follows: The contractor will enter and exit the site through the main forest entrance (Llyn Parc Mawr) **at all times** and follow the NRW forest roads to Hendai. The contractor will not use the main public site entrance (kiosk) and will not use any of the public car parks.





## Environmental Compliance

This site is a designated Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). SSSI Assent for the works (including the relevant Habitat Regulations Assessment) will be obtained prior to the contract being let.

## European Protected Species

As the work area is within 250m of a Great Crested Newt (GCN) breeding pond, so there is a moderate chance that this European Protected Species is present in the intervention area(s). The species will be most likely to be found in such as old brash or log piles however during August and September, they will still utilise the pond as they preferred habitat.

The SoLIFE project have obtained an EPS license and alongside the NRW Senior Officer may undertake terrestrial hand searches of fallen timber logs and brash and small mammal burrows before works begin. The conditions of our **Assent (Annex A)** outlines conditions necessary during these works.

The Senior Officer will give the contractors a '*toolbox talk*' regarding GCN and mitigation at the inception meeting. The contractor will also be briefed on other features of ecological and significance within the site and will be expected to avoid all practices which damage or have the potential to damage those features.

The contractor must plan the timing of works so the NRW ecologist can be present to avoid downtime and work delays. At least 4-weeks' notice will be needed.

### Great Crested Newt identification and further information

Work shall be undertaken in compliance with relevant permit conditions and advice provided. Any queries regarding permits, consents/assents and other environmental factors should be directed to the SoLIFE Project Officer.

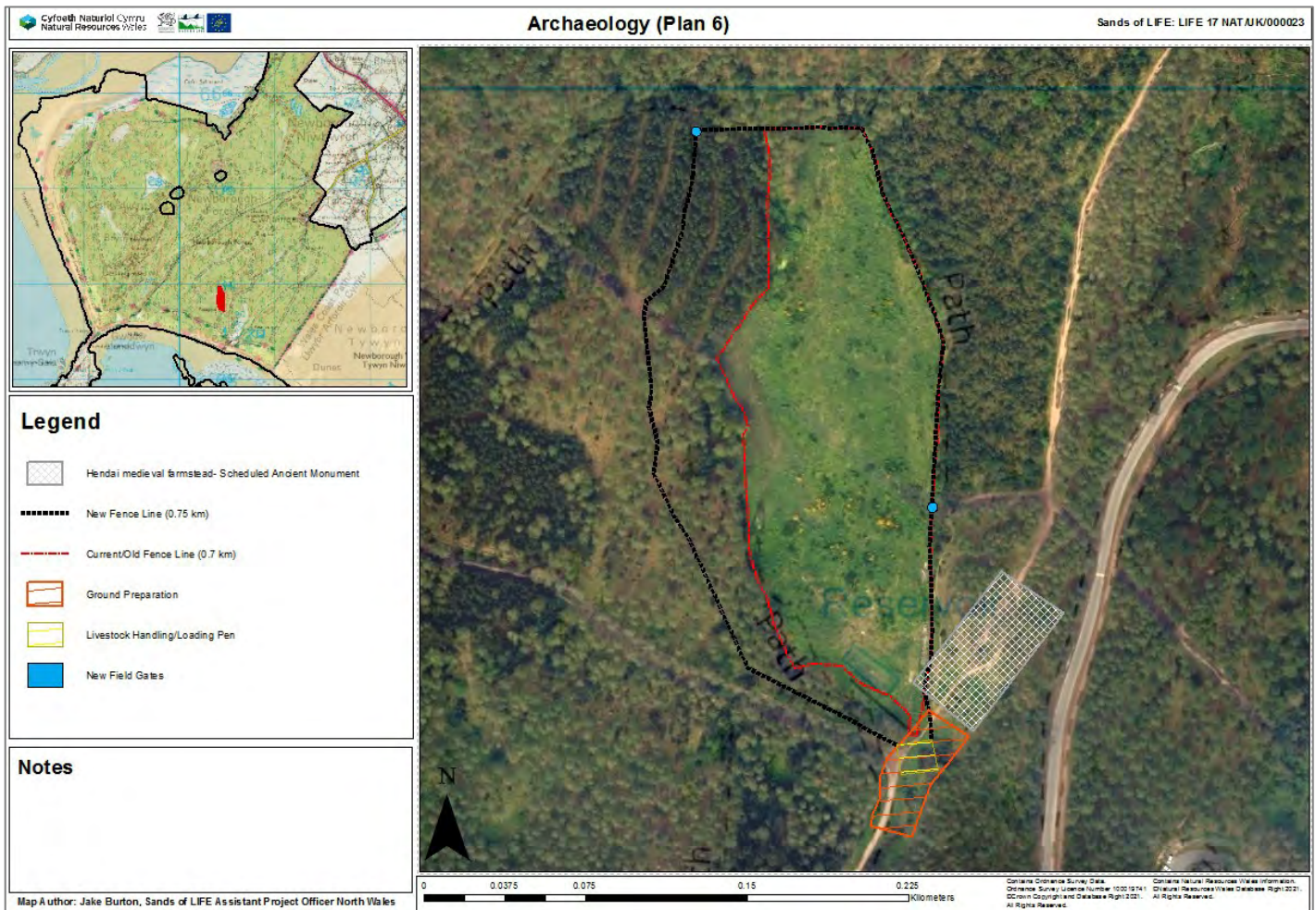
## Archaeology

A Scheduled Ancient Monument is present in the south-east corner of the intervention area (white hatched area) – the ruins of the Medieval farmstead. SAM consent may be required to carry out the fencing as it is ground penetrating works. The contractor must work in line with any consent conditions which will be notified by the Project Officer.

The above-ground runs will be taped off by the SoLIFE Project Officer and the contractor must not allow any vehicles or machinery enter this area.

**The SoLIFE Project Officer will point out the extent of the SAM during the inception meeting and will be on site daily during the works around this area.**





## Standards, Qualifications, Skills and Experience

All work shall be delivered to a high, professional standard. The contractor shall demonstrate relevant qualifications and professional expertise, and experience of similar work. Contractors must ensure that all personnel operating machinery are competent, qualified and insured to do so.

Copies of all relevant certificates shall be presented to the SoLIFE Officer prior to works starting.

Any damage to gates, fences, tracks or any other structures or fittings, must be made good to the satisfaction of the Key Site Officer.

The Pollution Prevention Method Statement as shown in Annex C shall be followed.

## Health and safety

All known site hazards are described on the Site-Specific Hazard List (attached). The contractor is required to prepare a full risk assessment, identifying potential hazards associated with the site, task, personnel and equipment involved. This risk assessment shall include a safe system of work and shall be supplied with the tender.

The contractor must work in line with all relevant H&S legislation including LOLER, PUWER and Construction Design and Management Regulations 2015.

**PPE and First Aid:** The contractor must meet all Health and Safety requirements with regards to Personal Protective Equipment (PPE) and First Aid provision. The appropriate PPE for the operations being carried out must be worn at all times by the operating staff. The contractor must carry an appropriate First Aid kit (BS8599) while working on site at all times and have suitably qualified personnel available.

**Fuel and chemicals/COSHH:** All contractors should be aware of site procedures and store fuel and chemicals safely and securely to prevent any spillage to land or to controlled waters. A pollution control kit must be available on site at all times. A COSHH assessment shall be provided to the SoLIFE Project Officer as part of the tender submission.

All spill/emergency incidents should be reported to NRW staff immediately.

The Pollution Prevention Method Statement should be adhered to and is shown in Appendix C.

**Welfare Provision:** NRW is committed to the Forest Industry Safety Accord (FISA) guidance on welfare, Safety Guide 806 (available via: <https://ukfisa.com/Safety/Safety-Guides/fisa-806>)

All contracts must follow NRW Welfare guidance policy. Adequate welfare facilities must be sufficient depending on the number of staff and number of days on site.

**An assessment must be carried out by the contractor to be based on the FISA guidance on the type of welfare facilities required per job and provided with the tender.** This will be followed up with consultation with the SoLIFE Project Officer.

The legal duty is to do **all** that is reasonably practicable. If levels of provision required cannot be provided in some respect, then an alternative must be provided and the reasons why the alternative has been chosen **MUST** be justified and recorded in the outline risk assessment.

**Covid-19:** All Government advice regarding Covid-19 must be followed. The contractor's method statement and risk assessment must demonstrate that the works can proceed in line with the current legislation, and that social distancing can be maintained.

**Underground Services:** There are no underground services.

**Livestock:** There will be no livestock grazing in the vicinity of the work area as the contractor will contact SoLIFE two weeks ahead of work starting to allow ponies to be moved.

**Public:** The site is open access to the public and is regularly used by walkers, cyclists and horse riders. Adequate care should be taken to prevent any hazard to passing users and it is vital that members of the public do not enter the work zone. The contractor must still ensure appropriate demarcation of work zones.

The contractor will provide and be responsible for erecting and removing the safety signs and warning tape put up on the approaches to the work area. It is the duty of the contractor to check the presence and condition of these signs/tape on a daily basis.

**Contractors must stop working immediately if visitors are within the risk zone.**

**Lone Working:** No lone working is permitted when delivering practical works.

**Unexploded ordnance (UXO):** Newborough Warren and Forest has been subject to a preliminary UXO Risk Assessment (attached). The site has been assessed as being of **LOW RISK** for general access, non-intrusive processes and ground penetrating processes.

**However, it is impossible to eliminate all UXO risks, and there is a possibility that UXOs may be present on the site, either buried or partially exposed on the surface which could present a hazard.**

It is the contractor's responsibility to assess and manage the UXO risk and this should be included in the Risk Assessment and Safe System of Work, which the contractor is required to provide. It is also the contractor's responsibility to communicate relevant information to their personnel.

The contractor is required to refer to, and take account of, information provided in this specification and the following to be supplied: Detailed UXO Risk Assessment, Site Specific Hazard List, and Emergency Response Plan. In addition, SoLIFE's recommended practice for managing UXO risk on this site is also shown below in Annex A for information only.

The contractors are also advised to refer to, and work in line with the CIRIA guidance Unexploded ordnance (UXO) risk management guide for land-based projects (R. Bowman et al, 2019, CIRIA C785) and Unexploded Ordnance, A Guide for the Construction Industry (K. Stone et al, 2009 CIRIA C681).

The pre-commencement meeting shall take place on the first day of work to ensure that all information has been understood and risk assessments are being followed.



**The contractor must contact the SoLIFE Project Officer if they have any concerns or queries about UXO risks before work starts.**

## **Biosecurity**

Disease and invasive alien species can be spread by animals, people, vehicles and equipment. By using biosecurity measures, the risk of spreading alien species and/or disease can be reduced. The contractor shall be aware of and work in accordance with standard good practice.

**The contractor shall include proposed biosecurity management measures (method statement) with the tender.**

All vehicles, machinery and equipment should be thoroughly cleaned to remove any soil, plant material or other debris before being brought onto the site.

Further information on biosecurity can be found in Biosecurity Awareness and Invasive Species Session Notes, North Wales Wildlife Trust (DINNS Project) on behalf of NRW (2018) (to be supplied via email).

## **Quoting and Pricing**

The bidder is asked to provide a binding quote for the specified work, as shown below: All rates must be consistent with the SoLIFE framework rates.

- Labour – number of person days. Please note number and grade of personnel.  
Please break down by:
  - Ground Preparation
  - Erection of the livestock handling/loading pen
  - Removal of existing fencing and gates
  - Erection of stock fencing and gates
- Cost of material – itemise post and netting fencing, pen timber fencing and gates separately
- Cost of plant/equipment hire (if required)
- Waste disposal costs
- Cost of welfare unit
- Other costs
- Total

Please also confirm your daily rate. Please note, we require a binding quotation, **not** a flexible price.

Before tendering, contractors should visit the site and satisfy themselves as to the full extent and character of the work and conditions affecting the contract and quote for the whole of the works necessary to complete it to the intention of the specification.

Contact should be made with the SoLIFE Officer before a site visit. Any queries prior to submitting a quotation for the work should be addressed to the SoLIFE Project Officer.

Any measurements in this specification are approximate. Contractors must take their own site measurements and report any discrepancy, as no claims for extra payments will be entertained for short measurements after the contract has been placed.

**The contactor must include the following reference on all paperwork relating to the contract including quotations:**

**Sands of LIFE: LIFE 17 NAT/UK/000023**

The contract shall be let in line with the terms and conditions of the SoLIFE Framework.

### **Ordering and invoicing arrangements**

If NRW/SoLIFE wishes to make an order/contract with the supplier, they will be notified in writing and sent an official order number. The supplier must not start work before receipt of the order number.

Invoices can only be paid on full completion of works. SoLIFE will require evidence of completion of works in the form of an email from the contractor confirming completion with an attached electronic photograph of the completed works.

#### ***PLEASE SEND ALL INVOICES TO:***

*Diane Farmery, SoLIFE Finance and Administration Officer (not to the NRW central payment team):*

Email: [diane.farmery@cyfoethnaturiolcymru.gov.uk](mailto:diane.farmery@cyfoethnaturiolcymru.gov.uk)

Invoices can only be paid if they contain the SoLIFE reference (shown below) and the order number:

***Work carried out on behalf of the Sands of LIFE (SoLIFE) project:  
LIFE 17 NAT/UK/000023***

## Key Performance Indicators

The key performance indicators for the contract are as follows:

- 1) Deliver work on time as per the timetable described in this specification.
- 2) Produce and supply all requirements/outcomes as described in this specification.
- 3) Deliver all work to the quality standards described in this specification.
- 4) Health and safety – full compliance with relevant legislation, and standards laid out in this specification.
- 5) Environmental - full compliance with relevant legislation, and standards laid out in this specification.

## Supporting Information

**Annex A:** Conditions of Assent ref no: A000645/1

**Annex B :** Sands of LIFE UXO safe system of work for low risk sites

**Annex C:** Pollution Prevention Method Statement for Machinery and Plant

## PDF Email Attachments

- SoLIFE Site Specific Hazard List
- Emergency Response Plan
  
- FISA 806 Welfare Guide
- FISA Safety Bulletin - Welfare and Covid 19
- Welfare Standards for those working on the WGWE
- Contract Specific Welfare Assessment
  
- FISA 104 Fencing Guidance
  
- RPS- Preliminary UXO Risk Assessment
- Biosecurity Awareness and Invasive Species Session Notes

**The shall acknowledge, via email, receipt of the above attachments sent by SoLIFE Project Officer.**

## Annex A: Conditions of SSSI Assent no: A000645/1

Assent ref no: A000645/1 ASSENT UNDER SECTION 28H OF THE WILDLIFE AND COUNTRYSIDE ACT 1981

Site(s) of Special Scientific Interest: **Newborough Warren - Ynys Llanddwyn**

Having considered the likely impact of the operation(s) described in your notice dated 29/07/2020 on the special features of the site(s) listed above; insofar as it is required in the exercise of your functions as a Section 28G Authority: Natural Resources Wales hereby assents that,

Natural Resources Wales, Maes Y Ffynnon, Penrhosgarnedd, Bangor, Gwynedd LL75 2DW

May carry out the operation(s) specified below in the manner prescribed: Scrub and invasive plant management, pond excavation and widening, pond creation, mowing of rank vegetation. This assent is subject to the following conditions:

Brash and logs over 10cm in diameter to be used to construct refugia/hibernacula for GCN. These must be well constructed, minimum of 1 meter high and minimum of 1 x 2m. Covered in turf with open sides to allow access. Some of these must be adjacent to ponds (at Pwll Pant Mawr and Ffrydiau). Some need to be on the islands in Pwll Pant Mawr.	To enhance and retain habitat for great crested newts.
Retain and replace water mint roots where possible in Pwll Pant Mawr.	To retain spawning habitat for GCNs.
Shore dock to be flagged or taped off during works. Contractors to be briefed on EPS issues.	To protect European Protected Species.
Bunds at Pwll Pant Mawr to be retained to divide up pond to at least 3 separate ponds.	To improve habitat for GCNs.
Risings (mowing and chipping) disposal area to be agreed with the contractor.	To protect vegetation and ponds.

## Annex B: Sands of LIFE UXO safe system of work for low risk sites

The following is provided to the contractor for information only. The contractor is required to prepare their own risk assessment and safe system of work.

### Unexploded Ordnance Safe System of Work for SoLIFE staff – Low UXO risk sites

- a) Refer to the following site information which will be provided:
  - UXO Activity Appraisal for the activity you will be carrying out
  - UXO Preliminary Risk Assessment or Detailed Risk Assessment
  - Standard H&S risk assessment for the site, which includes UXO RA summary
  - Emergency response plan for the site
  - 'Dealing with UXO incidents' sheet (see below)
- b) Make yourself and your team/colleagues fully aware of the UXO risks and any precautionary measures required. Take account of the above information when carrying out any additional risk assessments and work planning.
- c) When carrying out practical work, follow the work specification provided and avoid any additional or unnecessary excavation or ground penetrating actions on site which are not in the specification. This includes, for example: avoiding
  - Creation of deep tyre ruts
  - Digging or boring
  - Driving in posts etc
  - Pulling up stumps or tree roots
  - Fires
- d) Do a visual search for visible UXO or other metal or dangerous obstructions on the work site before starting work. It is recommended that you use a metal detector to support your visual check if you are doing shallow excavations, however, this is not compulsory. Mark any obstructions and avoid during work.  
  
Do **not** attempt to excavate any object identified below ground. Choose a different nearby location for signs, posts etc.
- e) Ensure a banksman oversees any excavation and keeps watch for any unidentified suspicious objects. When fencing treat any underground obstruction with caution (move the post location if necessary).
- f) If you find an item of UXO (or suspected UXO) follow the instructions in below.
- g) Contact your team leader if you have any concerns about UXO risks before work starts.

## If a UXO is identified or unearthed as part of Sands of LIFE practical work

If you discover an **unidentified suspicious object** on the work site, then:

- Stop work.
- Do not move, handle or disturb the object.
- Warn others and tell them to move away.
- Inform the site supervisor, and UXO specialist on site (if present).
- Move to a safe area/assembly area at least 100m away, ideally out of line of sight, behind sand dunes or trees. Follow a safe route and do not walk past the object unless absolutely necessary.
- Assume that the object is UXO until advised otherwise. Even if the site is deemed low risk or has a clearance certificate, UXOs may still be present.
- Be aware that the UXO could detonate even if it is old and damaged (as they can become more unstable with age and degradation). Always assume the object is dangerous.

Site supervisors or SoLIFE Project Officer (if no UXO specialist on site), in addition should:

- Ensure team and members of public are moved to safe place/assembly area, as described above.
- Without moving it, try to identify if the object is a UXO. Photograph the object if possible.
- If it appears to be a UXO, or you are uncertain then place a marker near the object in a position that can be seen from a safe distance. Use a piece of equipment, or clothing (do not drive in a stake or pole) and note the location either on GPS equipment, map or using a detailed grid reference.
- If the object is in the bucket of an excavator etc do not tip it out. Lower the bucket to the ground unless the object is in danger of falling out. Switch off the engine
- Retreat to the safe area.
- Call the UXO specialist [insert name and details here]. Be aware that they might not be able to come out immediately.
- Report the incident to the Site Manager, and Sands of LIFE Project Officer by the quickest means possible – see Emergency Plan.
- Report the incident to the Police on 101 or 999 but inform them that a UXO specialist has been called. Call the coastguard rather than the police, if the UXO is on the beach.
- Erect a cordon around the UXO to prevent any unauthorised access. This cordon should be manned to prevent unauthorised access to the location.
- Wait for further instructions from Police/Coastguard or UXO specialist.
- If possible, meet the Police/Coastguard/UXO specialist at the car park/access point and show them the location of the object.
- Should the Police/Coastguard/UXO specialist decide that the object is a UXO that could be a potential threat to the public and/or they believe it requires handling by the military, they will take control of the situation.



## Annex C: Pollution Prevention Method Statement for Machinery and Plant

The contractor will be required to follow the following Pollution Prevention Method Statement.

### Prior to Start of Works

- All equipment, materials, machinery and PPE used will be in a clean condition prior to their arrival on site, and upon removal from site, to minimise risk of introducing pollution and non-native species into the environment.
- Access routes will be walked beforehand with the Key Site Officer to ensure the most suitable route is used.  
**Note:** Access will be via the dunes from the access gate at SS 412 996. No access will be made via the beach.
- A designated re-fuelling area will be chosen on an area of hardstanding.

### During Works

- Use of low ground pressure machinery to reduce ground damage.
- Trained and certified operators will use the machines in a safe and efficient manner reducing emissions and to minimise accidents.
- All operators must check the machines daily. They must also visually check the machines at regular intervals during the working day, in particular looking out for oil leaks.
- Correct and secure storage facilities (including bunding) will be present on/by every machine to contain and prevent the release of fuel, oils and chemicals into the sensitive environment, associated with the plant, refuelling and construction equipment.
- Each vehicle should carry a pollution spill kit at all times and operators must be familiar with its use. This includes welfare units.
- Care should be taken when refuelling to avoid spillage of fuel or oil into drains and water courses.
- Use of plant nappies when plant is not in use.
- When not in use, plant should be stored off the dunes/ on hard standing, where possible.
- Oil drums, grease containers and chemical containers must not be left on site whether full or empty.
- All incidents must be reported to the SoLIFE Project Officer in the first instance, as soon as practicable.

### Completion of Works

- All equipment, temporary structures, access tracks, waste and/or debris associated with the works will be removed on completion of the works.



## **APPENDIX II**

### **Gwynedd Archaeological Trust Watching Brief pro-forma**

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WATCHING BRIEF DAY RECORD		Date
Project name	Project number	Compiler
Location		
Description		
Times of travelling and on-site		
Drawn record details		
Photographic record details		

## **APPENDIX III**

### **Gwynedd Archaeological Trust Photographic metadata pro-forma**



**Digital Photographic Record      Project code and name:**

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

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

Regularly upload photographs to computer.

[illegible]

## **APPENDIX IV**

### **Gwynedd Archaeological Trust Selection Strategy pro-forma**

# G2699\_Morlais

## 31/08/2021 v1.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Organisation</b>	Gwynedd Archaeological Trust

Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	13/09/2021
	RCAHMW	On completion of Project Archive
	Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ	If applicable, post-fieldwork based on artefact recovery
<b>Project Lead / Project Assurance</b>	Gwynedd Archaeological Trust Chief Archaeologist	18/08/2021
<b>Landowner / Developer</b>	NRW	18/08/2021

##### Resources

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

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

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

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

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust has been commissioned by Natural Resources Wales (NRW) to undertake an archaeological watching brief during conservation works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Newborough Forest, Ynys Môn. The Sands of LIFE project is being led by NRW and supported by the EU LIFE fund and the Welsh Government, with the aim to restore threatened sand dune sites across Wales. As detailed in NRW document Twyni Byw - Sands of LIFE (SoLIFE) Specification (dated 08/06/2021), Hendai is an open glade within the dense conifer plantation of Newborough Forest; before the forest was planted in the mid-20th Century the whole area was open sand dune, and Hendai glade is an example of surviving relict dune grassland with significant wildlife value, including a population of Great Crested Newts as well as other notable plants and invertebrates. The NRW document states that whilst Hendai is a fenced, the fence line is in disrepair and therefore, the area cannot be grazed reliably by a range of stock, resulting in the encroachment of invasive scrub and coarse vegetation. The aim will be to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime. The groundworks are scheduled between Monday 4th October 2021 and Friday 29th October 2021. The schedule is in line with Protected Species Licence and SSSI Assent compliance. The archaeological watching brief will be undertaken during the initial ground preparation and is currently scheduled on the 4th and 5th October 2021.

Gwynedd Archaeological Trust. 2021. *SoLIFE Newborough Written Scheme of Investigation*. Project G2699.



# 1 – Digital Data

## Stakeholders

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

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

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

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

The selection strategy in your DMP should:

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

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

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

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

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

selected digital data will be confirmed in an updated digital management plan appended to the final report

## De-Selected Digital Data

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

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

## Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

## 2 – Documents

### Stakeholders

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

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

### Selection

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

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

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

### De-Selected Documents

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

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

### Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

## 3 – Materials

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

<b>Material type</b>	Bulk Finds	<b>Section 3.</b>	
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### Stakeholders

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

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

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19<sup>th</sup> and 20<sup>th</sup> century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained.

Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

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

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

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ), where they can receive specialist treatment and study.

GAT will contact the landowner via client for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Oriel in accordance with their guidelines.

### Selection

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

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

The [Materials Selection Template](#) may be useful in structuring this section.

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

## Uncollected Material

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

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

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

## De-Selected Material

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

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

## Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

## Materials Selection Template

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

Find Type	Selection Strategy	Stakeholders	Review Points



## **APPENDIX II**

### **Gwynedd Archaeological Trust Photographic metadata**

## APPENDIX II

PHOTO RECORD NUMBER*	PROJECT NAME	PROJECT PHASE	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	Plates
G2699_001	G2699_SoLIFE_Newborough	Watching Brief	Pre-start view of clearance area		NE	Not used	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	01
G2699_002	G2699_SoLIFE_Newborough	Watching Brief	Pre-start view of clearance area		E	Not used	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	02
G2699_003	G2699_SoLIFE_Newborough	Watching Brief	Soil strip of clearance area		SSW	Not used	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	
G2699_004	G2699_SoLIFE_Newborough	Watching Brief	Soil strip of clearance area		W	Not used	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	03
G2699_005	G2699_SoLIFE_Newborough	Watching Brief	Soil strip completed of small paddock		SSW	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	04
G2699_006	G2699_SoLIFE_Newborough	Watching Brief	Soil strip completed of main paddock		WNW	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	
G2699_007	G2699_SoLIFE_Newborough	Watching Brief	Soil strip completed of main paddock		NE	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	05
G2699_008	G2699_SoLIFE_Newborough	Watching Brief	Hendai farmstead and glade in background		ESE	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	06
G2699_009	G2699_SoLIFE_Newborough	Watching Brief	Hendai		NNE	1x1m	Stuart	19/10/2021	Gwynedd	

PHOTO RECORD NUMBER*	PROJECT NAME	PROJECT PHASE	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	Plates
			farmstead with clearance area in background				Reilly		Archaeological Trust	
G2699_010	G2699_SoLIFE_Newborough	Watching Brief	Site within setting of forest and sand dunes		NNE	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	
G2699_011	G2699_SoLIFE_Newborough	Watching Brief	Cleared interior of Hendai farmstead		N	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	
G2699_012	G2699_SoLIFE_Newborough	Watching Brief	Cleared interior of Hendai farmstead		S	1x1m	Stuart Reilly	19/10/2021	Gwynedd Archaeological Trust	07

## **APPENDIX III**

### **REPRODUCTION OF GAT SELECTION STRATEGY**

# G2699\_SoLIFE\_Newborough

## 10/11/2021 v2.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts @heneb.co.uk</a>
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts @heneb.co.uk</a>
<b>Organisation</b>	Gwynedd Archaeological Trust

Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	13/09/2021
	RCAHMW	On completion of Project Archive
<b>Project Lead / Project Assurance</b>	Gwynedd Archaeological Trust Chief Archaeologist	18/08/2021
<b>Landowner / Developer</b>	NRW	18/08/2021

##### Resources

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

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

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

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

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

Gwynedd Archaeological Trust was commissioned by Natural Resources Wales (NRW) to undertake an archaeological watching brief during conservation works for the Sands of LIFE (SoLIFE) (LIFE17 NAT/UK/000023) conservation project at Newborough Forest, Ynys Môn. The Sands of LIFE project is being led by NRW and supported by the EU LIFE fund and the Welsh Government, with the aim to restore threatened sand dune sites across Wales. As detailed in NRW document Twyni Byw - Sands of LIFE (SoLIFE) Specification (dated 08/06/2021), Hendai is an open glade within the dense conifer plantation of Newborough Forest; before the forest was planted in the mid-20th Century the whole area was open sand dune, and Hendai glade is an example of surviving relict dune grassland with significant wildlife value, including a population of Great Crested Newts as well as other notable plants and invertebrates. The NRW document stated that the Hendai fence line is in disrepair and therefore the area cannot be grazed reliably by a range of stock, resulting in the encroachment of invasive scrub and coarse vegetation. The aim was to restore Hendai glade through the erection of new stock fencing, increasing the grazing compartment size and to introduce a sustainable livestock grazing regime. The archaeological watching brief was undertaken during the initial ground preparation on the 19th October 2021.

Gwynedd Archaeological Trust. 2021. *Twyni Byw - Sands of Life (SoLIFE):Conservation Works at Hendai Farm, Newborough Archaeological Watching Brief*. Project G2699. Gwynedd Archaeological Trust Report 1609



# 1 – Digital Data

## Stakeholders

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

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

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

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

The selection strategy in your DMP should:

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

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

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

The physical archive is stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset is stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below.

## De-Selected Digital Data

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

There is no de-selected digital data

## 2 – Documents

### Stakeholders

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

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

### Selection

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

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

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

### De-Selected Documents

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

There are no de-selected documents



Gwynedd Archaeological Trust  
Ymddiriedolaeth Archaeolegol Gwynedd

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT  
Ffon: 01248 352535. Ffacs: 01248 370925. email: [gat@heneb.co.uk](mailto:gat@heneb.co.uk)

