Results of Archaeological Watching Brief at

Fferm Hendre, Tregaian, Ynys Môn

NGR SH 46212 79456

Project Number CR242-2023

CR ARCHAEOLOGY

Compiled by C. Rees and M. Jones

On Behalf of Mr E. Jones

Summary

CR Archaeology were instructed by the client to conduct an archaeological watching brief at Fferm Hendre, Tregaian, Ynys Môn ahead of the construction of a slurry pit at the site.

The proposed development footprint was stripped down to the level of the underlying natural under closely controlled observation. No archaeological features or artefactual material pre-dating 1800 were uncovered during the works.

Works were undertaken in September 2023.

Crynodeb

Cafodd CR Archaeology gyfarwyddyd gan y cleient i gynnal brîff gwylio archeolegol yn Fferm Hendre, Tregaian, Ynys Môn cyn adeiladu pwll slyri ar y safle.

Tynnwyd ôl troed y datblygiad arfaethedig i lawr i'r lefel naturiol sylfaenol o dan wyliadwraeth a reolir yn agos. Ni ddatgelwyd unrhyw nodweddion archeolegol na deunydd artiffisial a oedd yn dyddio cyn 1800 yn ystod y gwaith.

Cwblhawyd y gwaith ym mis Hydref 2023.

Results of Archaeological Watching Brief at

Fferm Hendre, Tregaian, Ynys Môn

Planning Application Number:	FPL/2023/175
National Grid Reference:	SH 46212 79456
Client:	Mr. E. Jones
Report Author:	Catherine Rees and Matthew Jones
Report Number:	CR242-2023
Date:	29/10/2023

Contents

1.0 Introduction

CR Archaeology were instructed by Mr E. Jones to conduct a programme of archaeological works at Fferm Hendre, Tregaian, Ynys Môn (figure 1, Planning Reference: FPL/2023/175). The work undertaken at the site was the construction of a slurry pit. A Specification for Archaeological Works was approved by Gwynedd Archaeological Planning Services and is included as Appendix A. The development plans are also included within Appendix A.

The proposed development site is situated in a rural location to the east of Tregaian (Figure 1).

Fferm Hendre (PRN 97790) is a post medieval farmstead located approximately 750m to the east of Plas Tregan. Approximately 500m the north of the farmstead a possible stretch of Roman Road is recorded, and a prehistoric standing stone (PRN 2194) once stood approximately 1.5km to the north-east of the site.

The proposed development footprint was stripped down to the level of the underlying natural under closely controlled observation. No archaeological features were uncovered during the works. A small quantity of nineteenth century Buckley style pottery was noted during the works.

2.0 Project Aims & Objectives

The aim of this programme of works was to undertake an archaeological watching brief on the area affected by the proposed site works to assess the survival, character and date of any archaeological remains and to excavate, record and analyse all archaeological remains uncovered within the formation width and depth of the foundation design or within any service trenches.

The project aimed to fulfil the criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance documents (2014 with 2020 updates - https://www.archaeologists.net/sites/default/files/CIfASGWatchingbrief.pdf).

The objectives of this programme of works were:

- To identify and excavate/record all archaeological remains uncovered within the proposed development area.

3.0 Scheme of Works – Methodology

An archaeological watching brief was undertaken at the site. The following section details the methodology for the research, site work, post excavation and archiving associated with the project.

3.1 Desk Based Research

A history of the site was compiled utilising material sourced from the Gwynedd Historic Environment Record (HER). A map progression of the area will be undertaken.

In order to identify the character of archaeological remains in the vicinity of the site, a search of the GAT HER was conducted examining an area within a 500m radius of the proposed works (the grid reference for the search is taken as the centre point of the development area). This was expanded to 1000m to examine general trends. This data was not be discussed in detail. The information collected has been discussed within the main report text.

The works were carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA 1994 (Revised 2009 & 2014).

This material forms the historical background for the archaeological report.

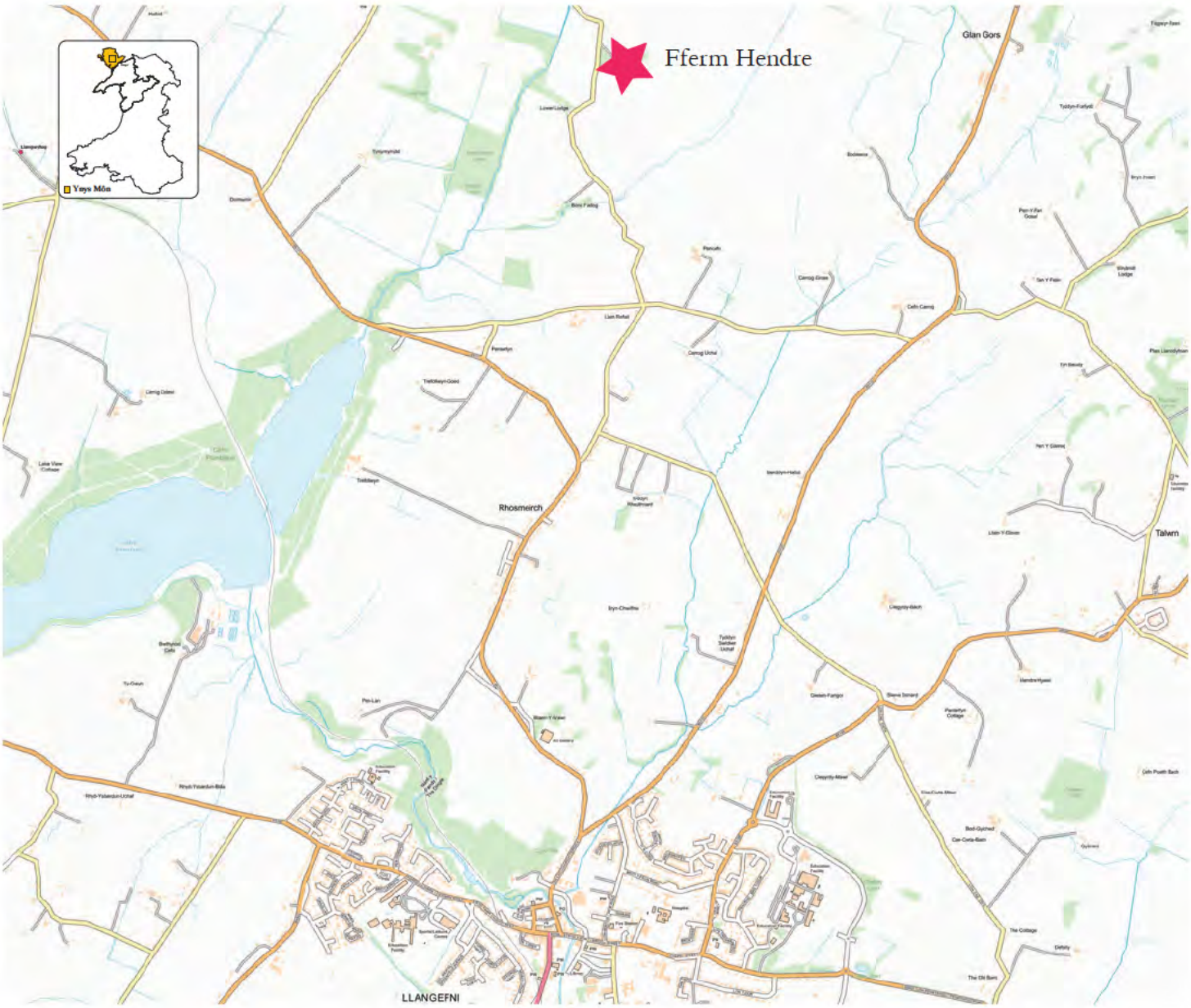

Figure 1. Site Location Map
(Source: OS Open Data Mapping Contains Ordnance Survey data
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3.2 Archaeological Watching Brief

The site works are to be conducted under Watching Brief conditions. The development footprint was excavated to the level of the underlying natural. All machine excavation was supervised by an archaeologist from CR Archaeology.

Plant used was a tracked excavator fitted with a toothless bucket. The stripping was undertaken in spits as directed by the archaeologist until the level of the underlying natural was reached. No archaeological remains/potential archaeological remains were identified during the works.

The works were carried out in accordance with the CIfA Standard and Guidance documents (2014 and will include 2020 updates - www.archaeologists.net/news/important-updates-4-x-standard-and-guidance-documents-1591692770).

3.2.1 Recording

The record forms at CR Archaeology are based on the English Heritage system and full written, graphic and photographic records will be made in accordance with the English Heritage *Field Recording Manual*. The written record comprises completed *pro-forma* record sheets.

A high-resolution 20 mega-pixel Sony Alpha digital camera was used to create a photographic record of the site. General photographs were taken due to the negative result of the works.

All photographic records were indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

3.2.2 Additional Mitigation/Contingency Measures

No additional mitigation/contingency measures were required.

3.2.3 Recovery, Processing and Curation of Artefactual Material

No artefactual material was retained from the site. A small quantity of Buckley pottery was discarded on site.

3.2.3.1 Material Selection Strategy

The material selected for retention was determined in accordance with the National Panel for Archaeological Archives in Wales Archaeological Archives: Selection, Retention and Disposal Guidelines for Wales (http://www.welshmuseumsfederation.org/uploads/online%20resources/National%20Archaeology%20standards%20wales%202017/natstandardsfinal2019.pdf).

3.2.3.2 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected, including records and other specialist materials. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report (P2)* as appropriate for analysis will be processed by suitable specialists and the resultant

Research Archive (*P3)* will be checked and ordered according to *MoRPHE* criteria. It is hoped that any archive/artefactual material created/discovered during this archaeological project will be deposited at the county museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition. In the event that no artefactual material is recovered or that the material is retained by the landowner the paper/digital archive will be deposited at the RCAHMW.

A copy of the digital archive will be deposited with the GAT HER and with the RCAHMW. RCAHMW will be notified in advance of the deposition of any archive created by this archaeological project and archive material will be deposited in accordance with the organisation's terms and conditions for archive deposition.

3.2.3.3 Data Management Policy
A site-specific Data Management Plan has been created based upon the Historic England Archaeological Digital Archiving Protocol (ADAPt) Digital Preservation Policy (www.historicengland.org.uk/content/docs/research/adapt-digital-preservation-policy/). The format is based upon the Historic England pro forma document (www.historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt -toolkit/). The document is included as Appendix B.

3.3 Timetable for Proposed Works
Site works commenced on the 25th September 2023. CR Archaeology staff will attend site as required on a day rate. Further time has been allotted for archive research, report compilation and site archiving.

3.4 Staffing
The project was managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork was conducted by Matthew Jones.

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.5 Monitoring
The project was subject to monitoring by Gwynedd Archaeological Planning Services who were kept informed of site progress and the results of the works.

3.6 Health and Safety
A risk assessment was conducted prior to the commencement of works and site staff were familiarised with its contents. A first aid kit was located in the site vehicle.

All staff were issued with appropriate Personal Protective Equipment (PPE) for the site work. This consisted of:

- Hi-visibility vests (EN471)
- Mobile Telephone
- Steel toe capped boots
- Hard Hat

3.7 The Report
This report clearly, and accurately incorporates information gained from the programme of archaeological works. It presents the documentary evidence gathered in such a way as to create a clear and coherent record. The report contains a site plan showing the locations of any photographs taken.

The final report includes:

- A bilingual summary
- A copy of the agreed Written Scheme of Investigation

- A location plan
- A plan showing the locations of the excavated areas
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted
- An archive compact disc/USB stick

A copy of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the reports will be submitted to GAT as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final reports and will be lodged with the Gwynedd Historic Environment Record within six months of completion of post excavation works. The 2018 Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

3.7.1 Copyright

CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project.

4.0 Geological Context

4.1 Topography

The proposed development site is situated in a rural location to the east of Tregaian.

4.2 Geology

The bedrock geology at the site varies with bands of three bedrock types:

1. "*Gwna Group - Schist. Metamorphic bedrock formed between 635 and 508 million years ago during the Ediacaran and Cambrian periods.*
2. *Gwna Group - Quartzite. Metamorphic bedrock formed between 635 and 508 million years ago during the Ediacaran and Cambrian periods.*
3. *Central Anglesey Shear Zone and Berw Shear Zone - Schist, glaucophane. Metamorphic bedrock formed between 635 and 508 million years ago during the Ediacaran and Cambrian periods*". (https://geologyviewer.bgs.ac.uk/).

The superficial deposits are recorded as "*Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period*" (https://geologyviewer.bgs.ac.uk/).

5.0 Historical Background

A search of the Gwynedd Archaeological Trust Historic Environment Record was commissioned on 5th October 2023. Search radii of 500m and 1000m from the centre of the development site were examined.

Within a 500m radius of the development site were 4 sites, all of post medieval date. Record PRN 97790 was the Fferm Hendre farmstead.

The site is located approximately 750m to the east of Plas Tregan and with the 500m search radius are the Grade II Listed gate piers associated with the estate (PRN 66427). Two bridges (PRN 66423 & PRN 55990) were also located within the search area. Bridge PRN 66423 is a Grade II Listed structure.

When the search area was extended to 1000m it incorporated a further 24 results, predominantly of post medieval date. There was a single site of medieval date (PRN 36152 – the possible site of Melin Bonc Fadog), and a single record of possible Roman date (PRN 17838 – an ancient paved road Lon y Bwbach

which was recorded leading from Llanddyfnan Church to Plas Llanddyfnan). The Roman origin of the road remains unproven.

5.1 Cartographic Sources
The 1840's Tithe Map of the area has the Hendre plot named but there are no buildings. The development area is shown as a single large open area (https://places.library.wales). The first edition Ordnance Survey map of the area dated 1888 shows the subdivision of the land and the construction of the farmstead (https://maps.nls.uk/view/101604121). The current field system is in place by this date.

Due to the negative results of the watching brief the historical/cartographic background has not been discussed further.

6.0 Results of Archaeological Works (Figure 2, Plates 1-4)
The development site was situated to the south-east of the farm range and sloped on an east-west axis.

The stripped area measured approximately 40m by 35m. The underlying natural was reached at a depth of between 0.20m (at the eastern edge of the site at the top of slope) and 0.50m (at the western edge of the site at the bottom of the slope).

There were four contexts identified during the works:

- Context (01) was a turf layer. It was between 0.11m and 0.32m in depth.
- Underlying the turf layer was context (02) - the sub soil. This deposit was a mid-brown clay silt with rare small irregular stones. A small quantity of late 19th century pottery was recorded from this deposit. The deposit was between 0.1 and 0.3m in depth.
- The underlying natural was a compact light-brown clay silt - context (03). Within this deposit were banded outcrops of schist stone – context (04). Although the schist was encountered throughout the site development area, it was more prominent at the top of the slope.

No archaeological features were identified within the development area. A small quantity of 19th-early 20th century Buckley pottery was noted from the subsoil. The vessel forms were large pots or bowls which were ubiquitous on nineteenth century farms. This material was not retained.

The location and direction of photographic plates are shown on Appendix C.

7.0 Conclusion
No archaeological features were encountered during the watching brief. A small quantity of 19th-early 20th century Buckley pottery was noted from the subsoil.

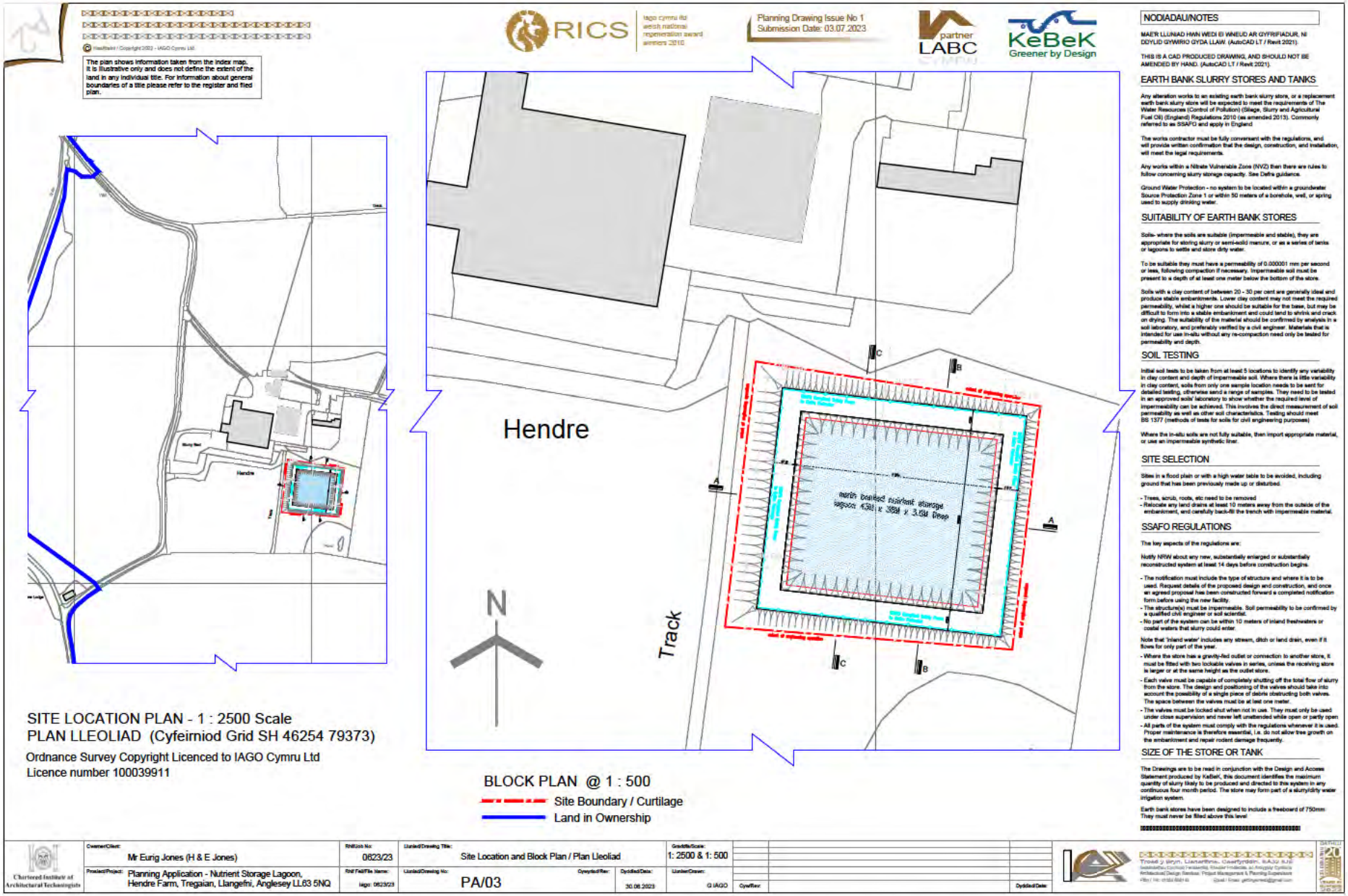

Figure 2. Location of Development Area (Marked in Red) - Scaled from A2 Original

Plate 1. Site During Stripping Works

Plate 2. Site Following Stripping Works

Plate 3. Site Following Stripping Works

Plate 4. Sample Section of Stripped Area

8.0 Bibliography

AAF. 2007. ***Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation***

English Heritage. 2006. ***Management of Research Projects in the Historic Environment (MORPHE)***

The Chartered Institute for Archaeologists. 1985 (Revised 2010 and 2014). ***Code of Conduct***

The Chartered Institute for Archaeologists. 1990 (Revised 2008 and 2014). ***Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology***

The Institute for Archaeologists. 2001. ***Standard and guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials***

The Chartered Institute for Archaeologists. 1994 (Revised 2011 and 2014). ***Standard and Guidance for Archaeological Desk-Based Assessment***

The Chartered Institute for Archaeologists. 2008 (Revised 2014). ***Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives***

The Chartered Institute for Archaeologists. 2014 (Updated 2020). ***Standard and Guidance for an Archaeological Watching Brief***

Walker, K.1990. ***Guidelines for the preparation of excavation archives for long-term storage.*** United Kingdom Institute for Conservation (UKIC) Archaeology Section

Websites – all sites were visited 29/10/2023

https://geologyviewer.bgs.ac.uk
https://maps.nls.uk/view/101604121
https://places.library.wales/browse/53.322/-4.226/13?page=1&alt=&alt=&leaflet-base-layers_70=on

Appendix A.
Specification for Archaeological Works

Written Scheme of Investigation -

Archaeological Watching Brief at

Fferm Hendre, Tregaian, Ynys Môn

NGR SH 46212 79456

Project Number CR242-2023

CR ARCHAEOLOGY
Compiled by C. Rees and M. Jones
On Behalf of Mr E. Jones

Written Scheme of Investigation (Archaeological Watching Brief) at

Fferm Hendre, Tregaian, Ynys Môn

Planning Application Number:	FPL/2023/175
National Grid Reference:	SH 46212 79456
Client:	Mr. E. Jones
Report Author:	Catherine Rees and Matthew Jones
Report Number:	CR242-2023
Date:	07/09/2023

Contents

1.0 Introduction

CR Archaeology have been instructed by Mr E. Jones to conduct a programme of archaeological works at Fferm Hendre, Tregaian, Ynys Môn (figure 1, Planning Reference: FPL/2023/175). The proposed work at the site is the construction of a slurry pit. The development plans are included as Appendix A.

The proposed development site is situated in a rural location to the east of Tregaian (Figure 1).

Fferm Hendre (PRN 97790) is a post medieval farmstead located approximately 750m to the east of Plas Tregan. Approximately 500m the north of the farmstead a possible stretch of Roman Road is recorded, and a prehistoric standing stone (PRN 2194) once stood approximately 1.5km to the north-east of the site.

This Written Scheme of Investigation details a programme for an Archaeological Watching Brief on the footprint of the proposed development. The development footprint will be stripped under closely controlled observation and surfaces in plan and section cleaned to identify features. Any archaeological features which will be destroyed by the foundations will be fully investigated to the formation width and depth of the foundation design.

2.0 Project Aims & Objectives

The aim of this programme of works is to undertake an Archaeological Watching Brief on the area affected by the proposed site works.

The aims of the programme of archaeological works are to assess the survival, character and date of any archaeological remains and to excavate, record and analyse all archaeological remains uncovered within the formation width and depth of the foundation design or within any service trenches.

This project aims to fulfil the criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance documents (2014 with 2020 updates - https://www.archaeologists.net/sites/default/files/CIfASGWatchingbrief.pdf).

The objectives of this programme of works are:

- To identify and excavate/record all archaeological remains uncovered within the proposed development area

3.0 Brief Historical Background

The following historical background is a very brief overview of archaeological sites in the vicinity of the proposed development site. Background research will be conducted as an element of the forthcoming works.

Fferm Hendre (PRN 97790) is a post medieval farmstead located approximately 750m to the east of Plas Tregan. Approximately 500m the north of the farmstead a possible stretch of Roman Road is recorded, and a prehistoric standing stone (PRN 2194) once stood approximately 1.5km to the north-east of the site.

4.0 Geological Context

4.1 Topography

The proposed development site is situated in a rural location to the east of Tregaian.

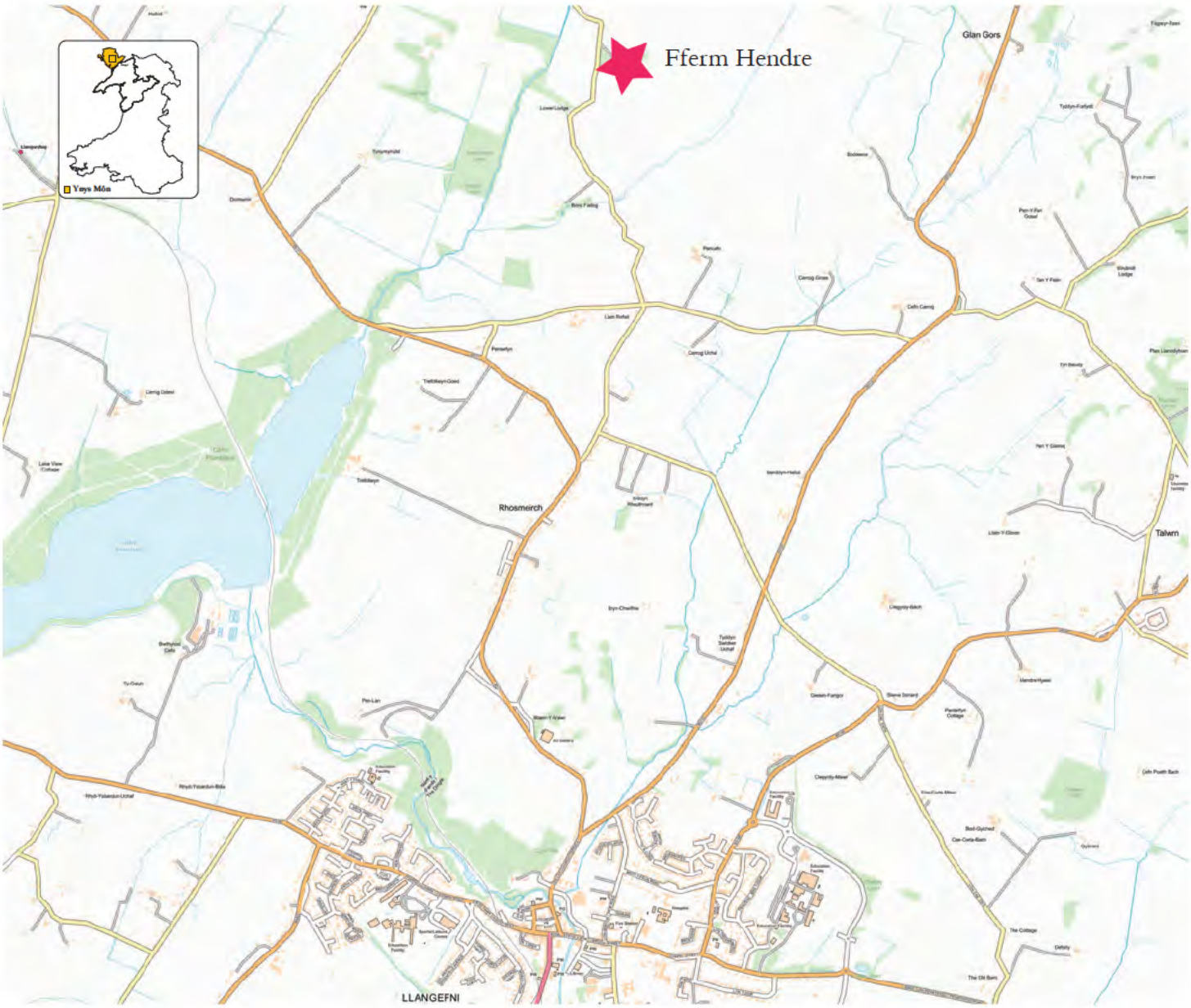

Figure 1. Site Location Map
(Source: OS Open Data Mapping Contains Ordnance Survey data
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4.2 Geology

The bedrock geology at the site varies with bands of three bedrock types:

1. "*Gwna Group - Schist. Metamorphic bedrock formed between 635 and 508 million years ago during the Ediacaran and Cambrian periods.*
2. *Gwna Group - Quartzite. Metamorphic bedrock formed between 635 and 508 million years ago during the Ediacaran and Cambrian periods.*
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The superficial deposits are recorded as "*Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period*" (https://geologyviewer.bgs.ac.uk/).

5.0 Scheme of Works – Methodology

The work to be undertaken at the site is an Archaeological Watching Brief and the following section details the methodology for the research, site work, post excavation and archiving associated with the project.

5.1 Desk Based Research

A history of the site will be compiled utilising material sourced from the Gwynedd Historic Environment Record (HER). Where relevant, this information will be supplemented with material sourced from local archives and specialist interest websites & journals. A map progression of the area will be undertaken.

In order to identify the character of archaeological remains in the vicinity of the site, a search of the GAT HER will be conducted examining an area within a 500m radius of the proposed works (the grid reference for the search is taken as the centre point of the development area). This will be expanded to 1000m to examine general trends, but this data will not be discussed in detail. The information collected will be discussed within the main report text.

The works will be carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA 1994 (Revised 2009 & 2014).

This material will form the historical background for the full archaeological reports and will be utilised to aid the interpretation of the results of the archaeological Watching Brief.

5.2 Archaeological Watching Brief

The site works are to be conducted under Watching Brief conditions. The development footprint is to be excavated down to the required development depth. All machine excavation will be supervised by an archaeologist from CR Archaeology.

Plant will be tracked excavators fitted with toothless buckets where possible, and the stripping will be undertaken in spits as directed by the archaeologist until archaeology/required development depth is reached. All archaeological remains/potential archaeological remains identified during works will be marked using spray paint and, unless immediately evaluated and found to be natural features, their locations will be surveyed before being excavated by CR Archaeology staff.

All archaeological features, structures or remains will be cleaned and excavated by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, date, significance and quality. Excavation will generally involve the removal 100% of discreet features such as pits/posthole fills within the development footprint.

If features yield suitable material for dating/environmental processing, then samples will be taken for processing off site. The size of these samples will depend on the size of the feature but for smaller features a sample of up to 100% will be taken. Where possible (provided the feature contains this volume of material) the minimum sample size taken will be 40 litres.

Unless a significant archaeological discovery is made, excavation of features will be limited to the area which will be destroyed by the works. They will be fully investigated to the formation width and depth of the foundation design. However, contingency must be allowed in the event of a significant discovery.

In the event of a significant discovery Gwynedd Archaeological Planning Services will be informed of the discovery and an appropriate mitigation strategy agreed before works will progress. Fieldwork is to be conducted and managed by Catherine Rees (MCIfA) & Matthew Jones (MA) of CR Archaeology.

The excavation works will be carried out in accordance with the CIfA Standard and Guidance documents (2014 and will include 2020 updates - www.archaeologists.net/news/important-updates-4-x-standard-and-guidance-documents-1591692770).

5.2.1 Recording

The record forms at CR Archaeology are based on the English Heritage system and full written, graphic and photographic records will be made in accordance with the English Heritage *Field Recording Manual*. Sample forms can be provided on request. The written record shall comprise completed *pro-forma* record sheets.

Plans, sections and elevations will be produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections will be prepared as appropriate showing the sequence and depths of deposits. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'Harris matrix' diagram will be constructed for the excavated area.

A high-resolution 20 mega-pixel Sony Alpha digital camera will be used to create a photographic record of the site. This will be comprised of photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale, north arrow and a record board detailing the site name, number and context number. General photographs will also be taken in the event of a negative result.

All photographic records will be indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

5.2.2 Additional Mitigation/Contingency Measures

In the event of a significant archaeological discovery being made during the excavation, CR Archaeology will immediately inform both the client and the development control archaeologist. Consultation will take place between CR Archaeology, Gwynedd Archaeological Planning Services and the client with regards to the most suitable course of action.

In the event that human remains are encountered site work will cease with immediate effect. The coroner, client and monitoring body will be informed immediately. The company will abide by the requirements of Section 25 of the Burial Act 1857. Any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought.

All human remains are to be preserved *in situ*, covered and protected. They will only be removed in exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds

(Amendment) Act 1981 or other local Act, with adequate security provided in such cases. Should this be undertaken a separate specification for works will be prepared detailing the excavation and post-excavation strategies.

Any artefacts recovered that fall within the scope of the Treasure Act 1996 will be reported to the landowner, Gwynedd Archaeological Planning Services and to HM Coroner.

5.2.3 Recovery, Processing and Curation of Artefactual Material
All recovered artefactual material will be retained, cleaned, labelled and stored according to *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2008 revised 2014) and First Aid for Finds (Watkinson & Neal* 2001). The aim will be to create a stable, ordered, well-documented, accessible material archive forming a resource for current and future research (CIfA 2008, revised 2014).

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds. Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material will be produced by Matthew Jones, prehistoric pottery will be examined by Frances Lynch and lithics by Dr Ian Brooks. A list of further specialists will submitted to Gwynedd Archaeological Trust if necessary and the relevant expertise will be sought. Any specialist conservation necessary will be undertaken by Cardiff Conservation Services, Cardiff University. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis, it is proposed that archaeological material recovered will be deposited in the local museum although the owner reserves the right to retain the artefactual material. Should no artefactual material be recovered the paper/digital archive will be deposited with the RCAHMW.

Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition. The works will be carried out in accordance with The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008 & 2014).

5.2.3.1 Material Selection Strategy
The material selected for retention will be determined in accordance with the National Panel for Archaeological Archives in Wales Archaeological Archives: Selection, Retention and Disposal Guidelines for Wales (http://www.welshmuseumsfederation.org/uploads/online%20resources/National%20Archaeology%20standards%20wales%202017/natstandardsfinal2019.pdf).

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archive/artefactual material created/discovered during this archaeological project will be deposited at the county museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition. In the event that no artefactual material is recovered or that the material is retained by the landowner the paper/digital archive will be deposited at the RCAHMW.

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A site-specific Data Management Plan has been created based upon the Historic England Archaeological Digital Archiving Protocol (ADAPt) Digital Preservation Policy (www.historicengland.org.uk/content/docs/research/adapt-digital-preservation-policy/). The format is based upon the Historic England pro forma document (www.historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt -toolkit/). The preliminary document is included as Appendix B.

5.3 Timetable for Proposed Works
It is envisaged that the works will commence on the week beginning 25th September 2023. CR Archaeology staff will attend site as required on a day rate. Further time has been allotted for archive research, report compilation and site archiving.

5.4 Staffing
The project will be managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork will be conducted by Matthew Jones and/or Catherine Rees.

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

5.5 Monitoring
The project will be subject to monitoring by Gwynedd Archaeological Planning Services who will be kept informed of site progress and the results of the works. A site visit will be arranged as necessary.

5.6 Health and Safety
A risk assessment will be conducted prior to the commencement of works and site staff will be familiarised with its contents. A first aid kit will be located in the site vehicle.

All staff will be issued with appropriate Personal Protective Equipment (PPE) for the site work. Initially this is anticipated to consist of:

- Hi-visibility vests (EN471)
- Mobile Telephone
- Steel toe capped boots
- Hard Hat

Any further PPE required will be provided by CR Archaeology

5.7 The Report
The reports will clearly, and accurately incorporate information gained from the programme of archaeological works. It will present the documentary evidence gathered in such a way as to create a clear and coherent record. The report will contain a site plan showing the locations of any photographs taken.

The final report will include:

- A bilingual summary
- A copy of the agreed Written Scheme of Investigation
- A location plan
- A plan showing the locations of the excavated areas
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted
- An archive compact disc/USB stick

A copy of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the reports will be submitted to GAT as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final reports and will be lodged with the Gwynedd Historic Environment Record within six months of completion of post excavation works. The 2018 Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

A short article will be submitted to the Archaeology in Wales Journal and other publications as appropriate.

5.7.1 Copyright

CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project.

6.0 Bibliography

AAF. 2007. ***Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation***

English Heritage. 2006. ***Management of Research Projects in the Historic Environment (MORPHE)***

The Chartered Institute for Archaeologists. 1985 (Revised 2010 and 2014). ***Code of Conduct***

The Chartered Institute for Archaeologists. 1990 (Revised 2008 and 2014). ***Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology***

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Walker, K.1990. ***Guidelines for the preparation of excavation archives for long-term storage.*** United Kingdom Institute for Conservation (UKIC) Archaeology Section

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https://geologyviewer.bgs.ac.uk

Appendix A.
Proposed Development Plans

IAGO Cymru Ltd
Sustainable Solutions
Cynllunio Cynaliadwy.

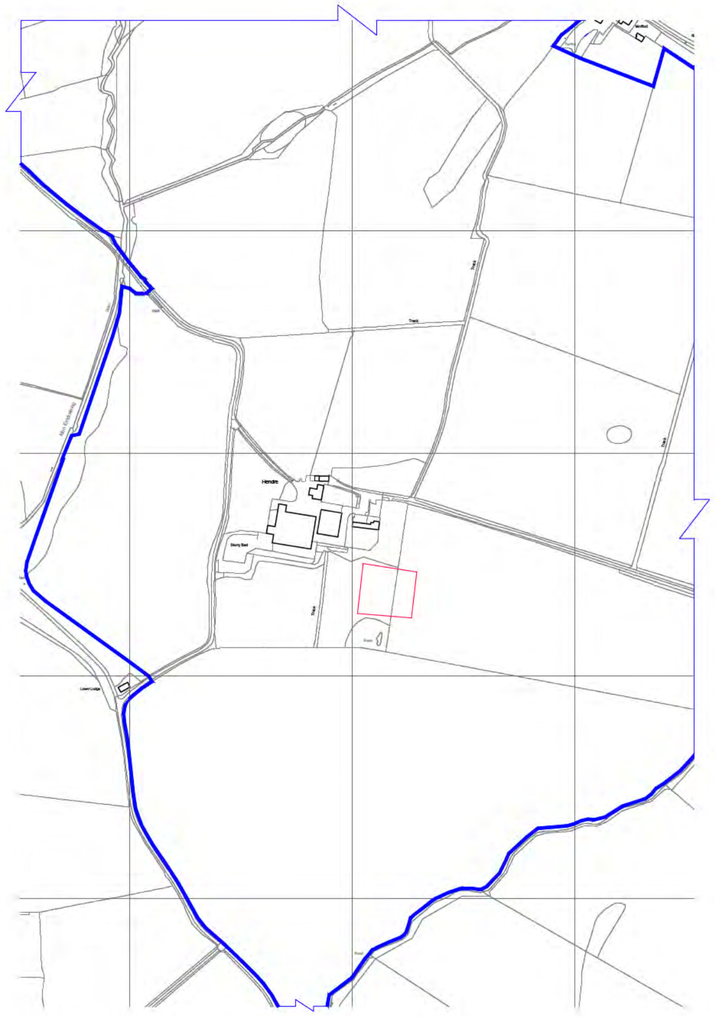
The plan shows information taken from the index map. It is illustrative only and does not define the extent of the land in any individual title. For information about general boundaries of a title please refer to the register and filed plan.

RICS iago cymru ltd welsh national regeneration award winners 2010

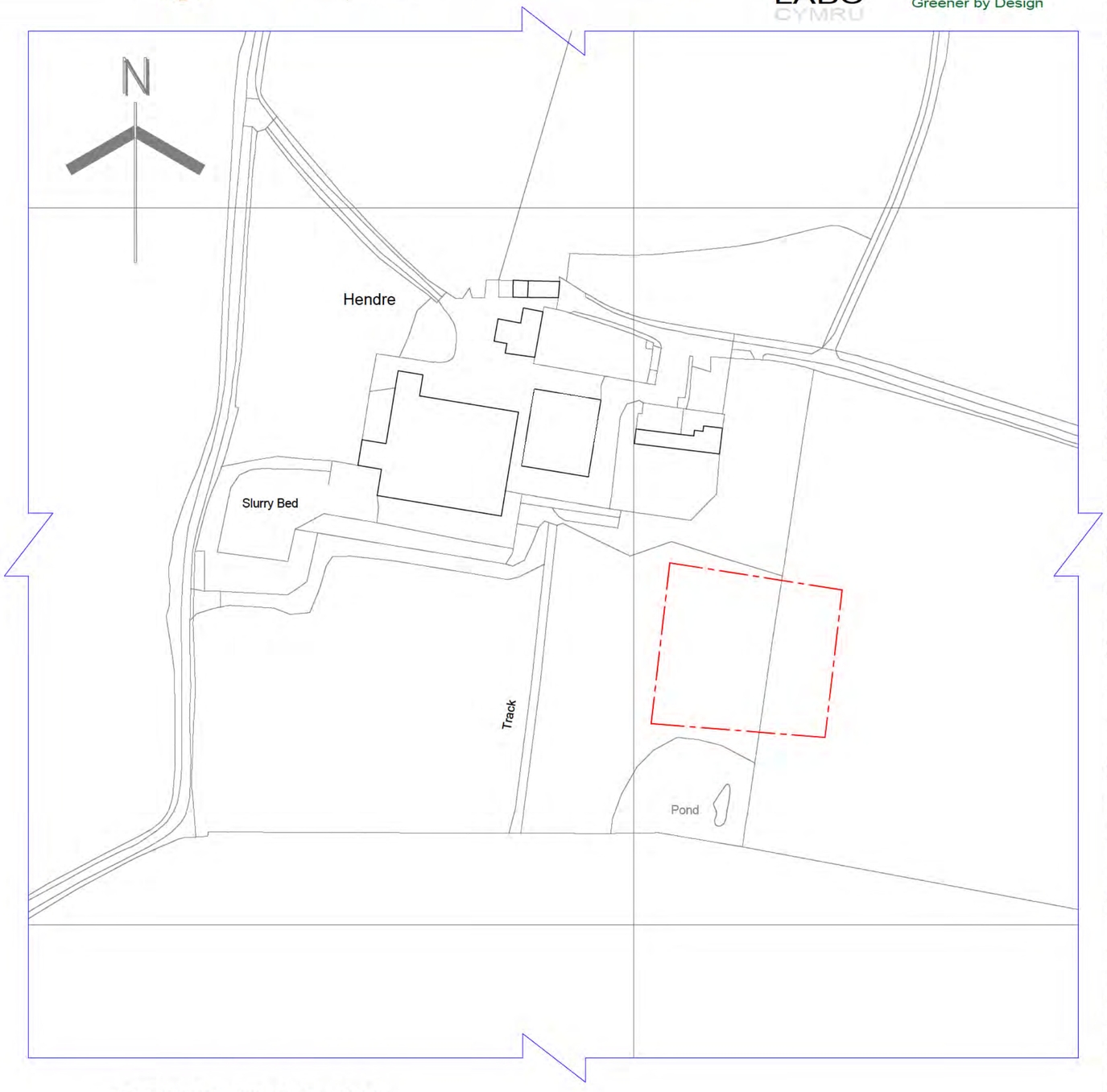
Planning Drawing Issue No 1
Submission Date: 03.07.2023

partner LABC CYMRU

KeBeK Greener by Design



EXISTING SITE LOCATION PLAN - 1 : 5000 Scale
PLAN LLEOLIAD (Cyfeirniod Grid SH 46254 79373)



BLOCK PLAN @ 1 : 1250

Site Boundary / Curtilage
Land in Ownership

NODIADAU/NOTES

MAE'R LLUNIAD HWN WEDI EI WNEUD AR GYFRIFIADUR, NI DDYLID GYWIRIO GYDA LLAW. (AutoCAD LT / Revit 2021).

THIS IS A CAD PRODUCED DRAWING, AND SHOULD NOT BE AMENDED BY HAND. (AutoCAD LT / Revit 2021).

EARTH BANK SLURRY STORES AND TANKS

Any alteration works to an existing earth bank slurry store, or a replacement earth bank slurry store will be expected to meet the requirements of The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013). Commonly referred to as SSAFO and apply in England

The works contractor must be fully conversant with the regulations, and will provide written confirmation that the design, construction, and installation, will meet the legal requirements.

Any works within a Nitrate Vulnerable Zone (NVZ) then there are rules to follow concerning slurry storage capacity. See Defra guidance.

Ground Water Protection - no system to be located within a groundwater Source Protection Zone 1 or within 50 meters of a borehole, well, or spring used to supply drinking water.

SUITABILITY OF EARTH BANK STORES

Soils- where the soils are suitable (impermeable and stable), they are appropriate for storing slurry or semi-solid manure, or as a series of tanks or lagoons to settle and store dirty water.

To be suitable they must have a permeability of 0.000001 mm per second or less, following compaction if necessary. Impermeable soil must be present to a depth of at least one meter below the bottom of the store.

Soils with a clay content of between 20 - 30 per cent are generally ideal and produce stable embankments. Lower clay content may not meet the required permeability, whilst a higher one should be suitable for the base, but may be difficult to form into a stable embankment and could tend to shrink and crack on drying. The suitability of the material should be confirmed by analysis in a soil laboratory, and preferably verified by a civil engineer. Materials that is intended for use in-situ without any re-compaction need only be tested for permeability and depth.

SOIL TESTING

Initial soil tests to be taken from at least 5 locations to identify any variability in clay content and depth of impermeable soil. Where there is little variability in clay content, soils from only one sample location needs to be sent for detailed testing, otherwise send a range of samples. They need to be tested in an approved soils' laboratory to show whether the required level of impermeability can be achieved. This involves the direct measurement of soil permeability as well as other soil characteristics. Testing should meet BS 1377 (methods of tests for soils for civil engineering purposes)

Where the in-situ soils are not fully suitable, then import appropriate material, or use an impermeable synthetic liner.

SITE SELECTION

Sites in a flood plain or with a high water table to be avoided, including ground that has been previously made up or disturbed.

- Trees, scrub, roots, etc need to be removed
- Relocate any land drains at least 10 meters away from the outside of the embankment, and carefully back-fill the trench with impermeable material.

SSAFO REGULATIONS

The key aspects of the regulations are:

Notify NRW about any new, substantially enlarged or substantially reconstructed system at least 14 days before construction begins.

- The notification must include the type of structure and where it is to be used. Request details of the proposed design and construction, and once an agreed proposal has been constructed forward a completed notification form before using the new facility.
- The structure(s) must be impermeable. Soil permeability to be confirmed by a qualified civil engineer or soil scientist.
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Note that 'inland water' includes any stream, ditch or land drain, even if it flows for only part of the year.

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- Each valve must be capable of completely shutting off the total flow of slurry from the store. The design and positioning of the valves should take into account the possibility of a single piece of debris obstructing both valves. The space between the valves must be at lest one meter.
- The valves must be locked shut when not in use. They must only be used under close supervision and never left unattended while open or partly open
- All parts of the system must comply with the regulations whenever it is used. Proper maintenance is therefore essential, i.e. do not allow tree growth on the embankment and repair rodent damage frequently.

SIZE OF THE STORE OR TANK

The Drawings are to be read in conjunction with the Design and Access Statement produced by KeBeK, this document identifies the maximum quantity of slurry likely to be produced and directed to this system in any continuous four month period. The store may form part of a slurry/dirty water irrigation system.

Earth bank stores have been designed to include a freeboard of 750mm They must never be filled above this level

During reproduction Drawing may Shrink or Expand

Chartered Institute of Architectural Technologists

Cwsmer/Client: Mr Eurig Jones (H & E Jones)	Rhif/Job No: 0623/23	Lluniad/Drawing Title: Existing Site Location and Block Plan / Plan Lleoliad		Graddfa/Scale: 1: 5000 & 1: 1250	
Prosiect/Project: Planning Application - Nutrient Storage Lagoon, Hendre Farm, Tregaian, Llangefni, Anglesey LL63 5NQ	Rhif Feil/File Name: iago: 0623/23	Lluniad/Drawing No: PA/05	Cywyriad/Rev:	Dyddiad/Date: 30.06.2023	Lluniwr/Drawn: G IAGO
			Cyw/Rev:		Dyddiad/Date:

IAGO Cymru Cyf.
Troed y Bryn, Llanarthne, Caerfyrddin, SA32 8JE
Gwasanaethau Cynllunio Pensaernïol, Rheolwr Prosiectau, ac Arolygwyr Cynllunio
Architectural Design Services, Project Management & Planning Supervisors
Ffôn / Tel: 01558 668143 Ebost / Email: gethinjames3@gmail.com

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Cynllunio Cynaliadwy.

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RICS iago cymru ltd welsh national regeneration award winners 2010

Planning Drawing Issue No 1
Submission Date: 03.07.2023

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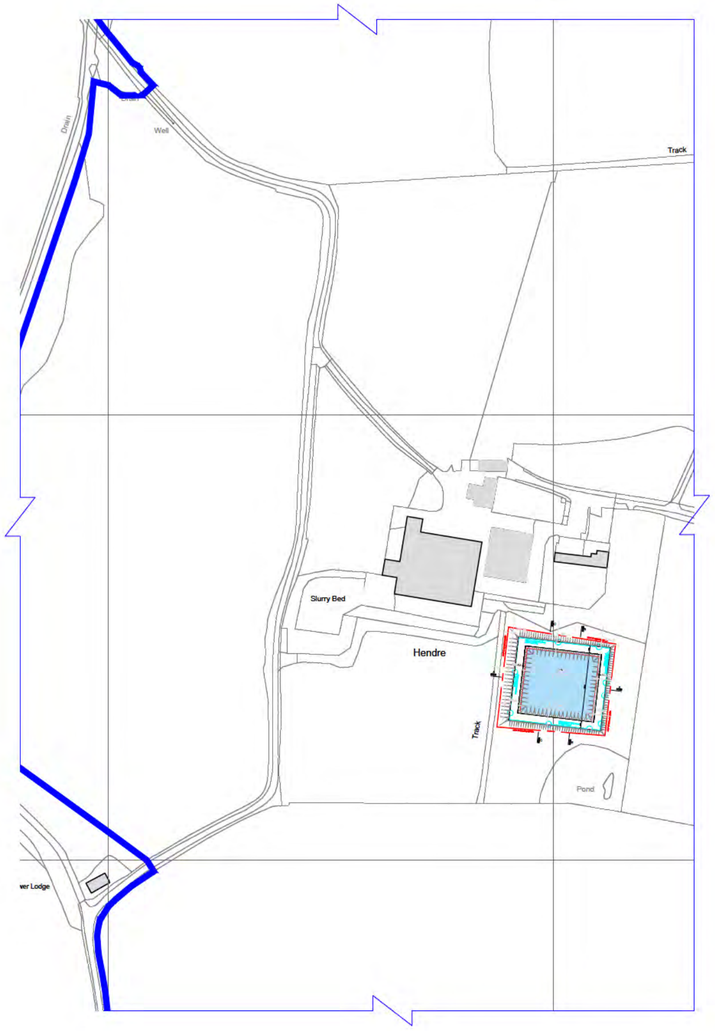

SITE LOCATION PLAN - 1 : 2500 Scale
PLAN LLEOLIAD (Cyfeirniod Grid SH 46254 79373)

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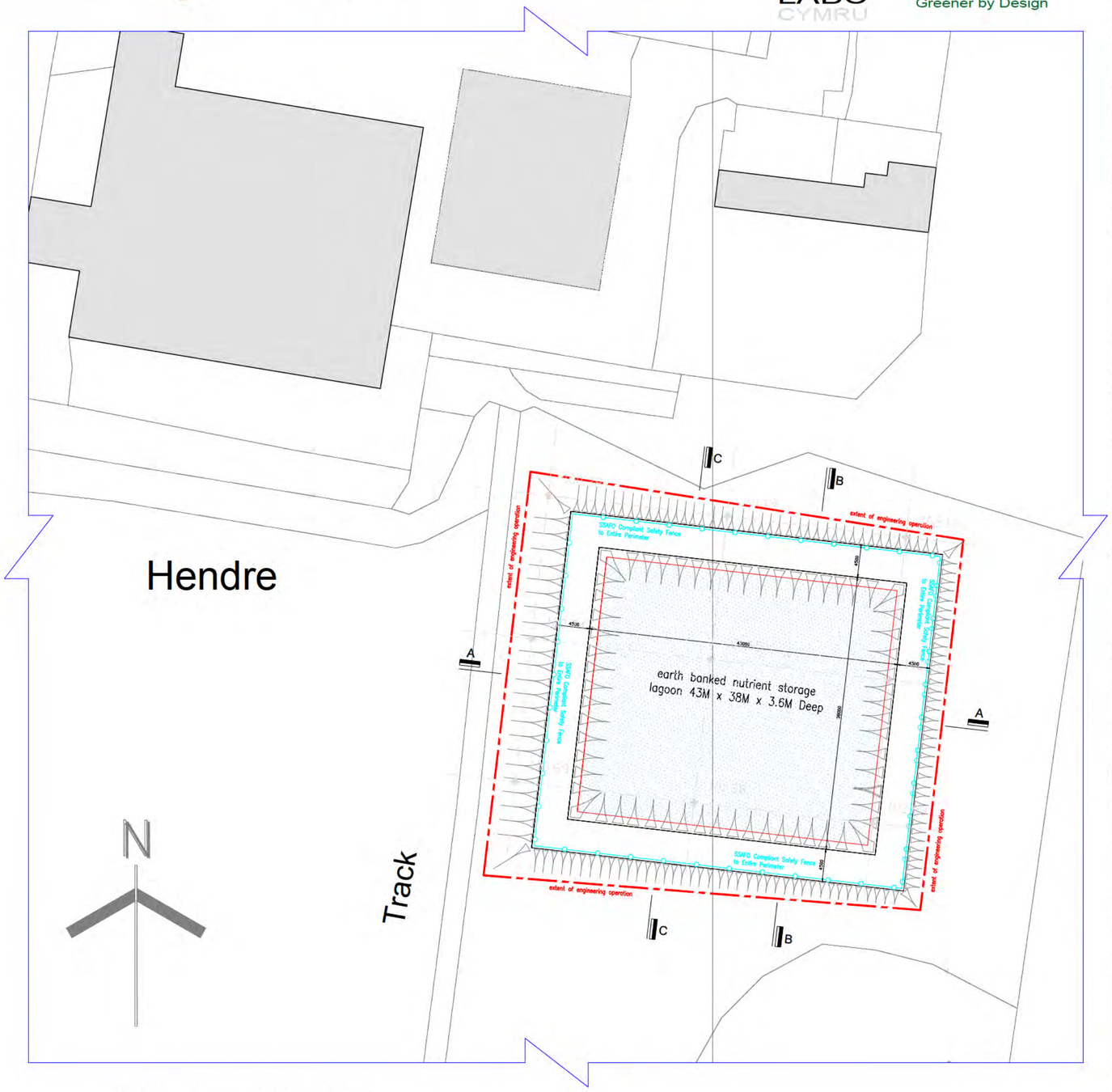

BLOCK PLAN @ 1 : 500

Site Boundary / Curtilage
Land in Ownership

NODIADAU/NOTES

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During reproduction Drawing may Shrink or Expand

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Cwsmer/Client: Mr Eurig Jones (H & E Jones)		Rhif/Job No: 0623/23	Lluniad/Drawing Title: Site Location and Block Plan / Plan Lleoliad	Graddfa/Scale: 1: 2500 & 1: 500	
Prosiect/Project: Planning Application - Nutrient Storage Lagoon, Hendre Farm, Tregaian, Llangefni, Anglesey LL63 5NQ	Rhif Feil/File Name: iago: 0623/23	Lluniad/Drawing No: PA/03	Cywyriad/Rev:	Dyddiad/Date: 30.06.2023	Lluniwr/Drawn: G IAGO

Cyw/Rev: Dyddiad/Date:

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Gwasanaethau Cynllunio Pensaernïol, Rheolwr Prosiectau, ac Arolygwyr Cynllunio
Architectural Design Services, Project Management & Planning Supervisors
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DATHLU 20 CELEBRATING YEARS IN BUSINESS 2022

IAGO Cymru Ltd
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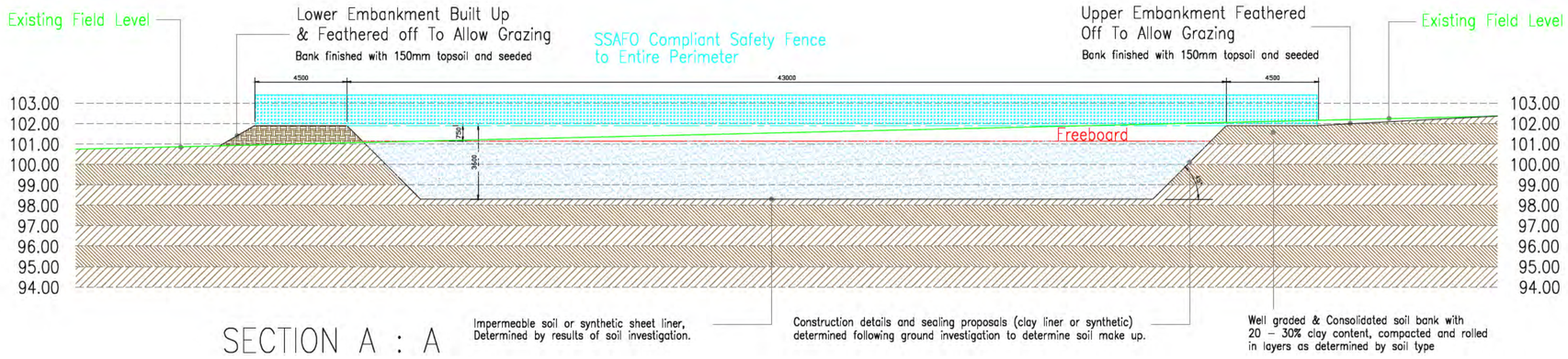
RICS iago cymru ltd welsh national regeneration award winners 2010

Planning Drawing Issue No 1
Submission Date: 03.07.2023

partner LABC CYMRU

KeBeK Greener by Design



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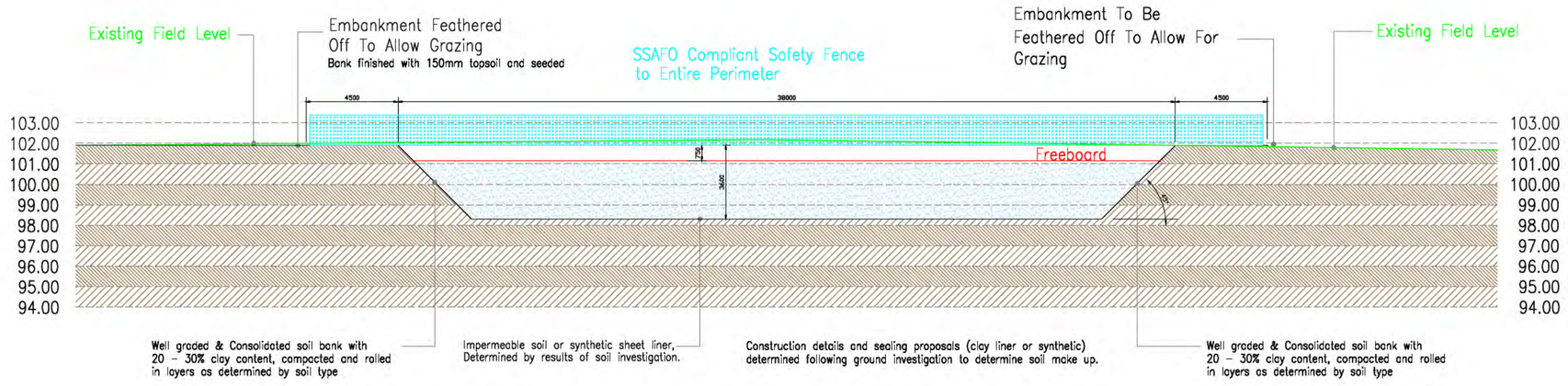
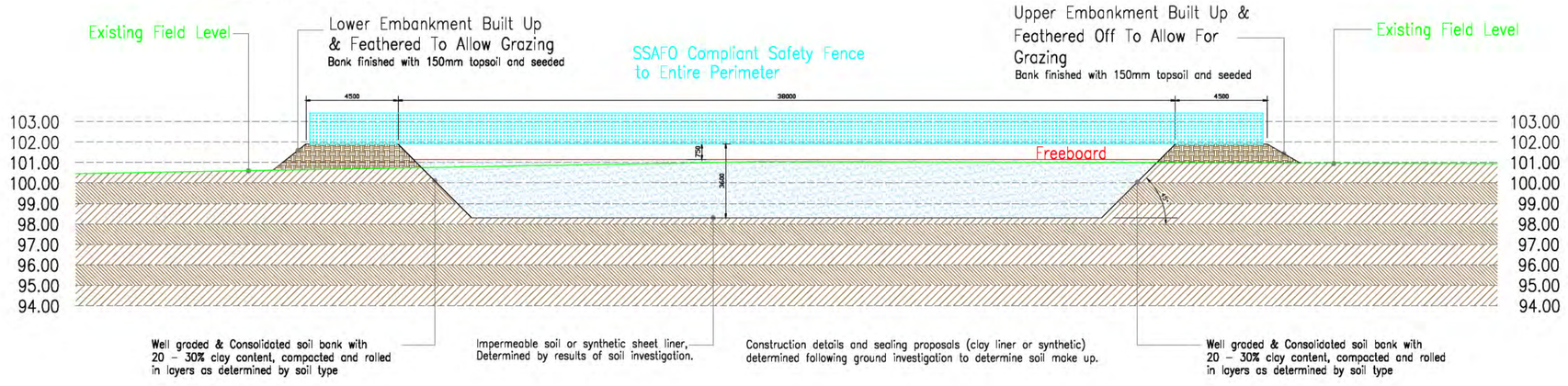


SECTION B : B



SECTION C : C

NODIADAU/NOTES

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SILAGE AND SLURRY STORAGE REQUIREMENTS

The Water Resources (Control of Pollution) Silage, Slurry and Agricultural Fuel Oil (Wales) Regulations 2010 (SSAFO)

These above regulations set out the requirements for the design (capacity) construction and maintenance of storage facilities for silage, and slurry.

They apply to all installations completed since September 1991.

They require you to nofity NRW, in writing at least 14 days before using a system that is new, substantially enlarged or substantially re-constructed. NRW have forms available to enable you to provide the necessary information.

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Contd .....

Chartered Institute of Architectural Technologists	Cwsmer/Client: Mr Eurig Jones (H & E Jones)	Rhif/Job No: 0623/23	Lluniad/Drawing Title: Site Sections A : A, B : B, & C : C.		Graddfa/Scale: 1 : 200		
	Prosiect/Project: Planning Application - Nutrient Storage Lagoon, Hendre Farm, Tregaian, Llangefni, Anglesey LL63 5NQ	Rhif Feil/File Name: iago: 0623/23	Lluniad/Drawing No: PA/02	Cywyriad/Rev:	Dyddiad/Date: 30.06.2023	Lluniwr/Drawn: G IAGO	Cyw/Rev: / Dyddiad/Date:

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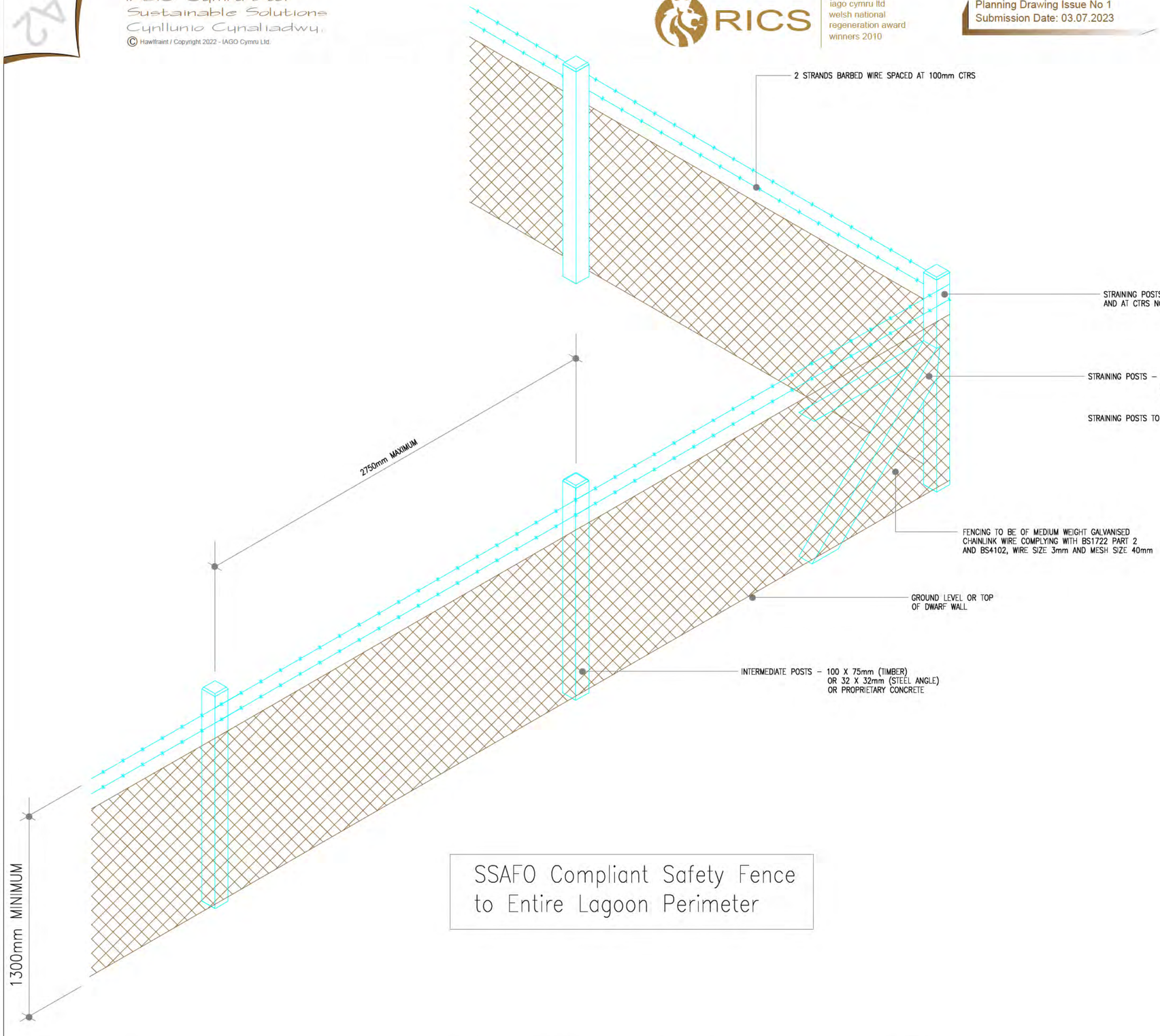

SSAFO Compliant Safety Fence to Entire Lagoon Perimeter

- The valves must be locked shut when not in use. They must only be used under close supervision and never left unattended while open or partly open
- All parts of the system must comply with the regulations whenever it is used. Proper maintenance is therefore essential, i.e. do not allow tree growth on the embankment and repair rodent damage frequently.

SIZE OF THE STORE OR TANK

The Drawings are to be read in conjunction with the Design and Access Statement produced by KeBeK, this document identifies the maximum quantity of slurry likely to be produced and directed to this system in any continuous four month period. The store may form part of a slurry/dirty water irrigation system.

Earth bank stores have been designed to include a freeboard of 750mm They must never be filled above this level

SILAGE CLAMPS

The clamp base, effluent tank and drains must all be impermeable and resistant to attack from silage effluent. The base of the clamp must be designed and constructed in accordance with BS8007 or BS5502 Part 21.

Where walls are used, the base must extend beyound walls. All silage clamps must include a perimeter drainage channel connecting to an effluent tank.

All effluent must be collected and contained. The silage effluent tank must be 20 litres/cubic metre of silo capacity - up to 1500 cubic metres, plus an additional 6.7 litres/cubic metre of silo capacity thereafter.

No part of this installation should be within 10 meters of a watercourse or land drains.

Clamps and drains must be capable of lasting for 20 years (with routine maintenance.

Below-ground effluent tanks must be capable of lasting 20 years without Maintenance, A certificate to confirm suitable design and construction of tank and clamp must be sent to NRW 14 days before use.

If the clamp has walls, they must be designed to BS5502 Part 22 and be resistant to attack from silage effluent.

SLURRY STORAGE FACILITIES REQUIREMENTS

Slurry stores, tanks, pipes, and hannels must be impermeable. Where walls of the slurry store are not impermeable (eg weeping wall stores), the base must extend beyond the walls and have perimeter drains that connect to a slurry tank.

The base and walls of the slurry storage tank, any effluent tank, channels and reception pit, and the walls of any pipes, must be protected against corrosion, as described in BS 5502, Part 50 (1993).

Slurry storage tank and reception pit must be designed to BS 5502, Part 50 (1993).

The reception pit and associated channels must normally hold at least two days slurry production, including likely rainwater.

A slurry storage tank must normally hold at least four months production, including allowance for likely rain water. In designated Nitrate Vulnerable Zones (NVZ), it will need to hold five or six months production dependant on the type of slurry produced.

The slurry storage tank has been designed to have a minimum freeboard of 300mm but earth banked stores will have a minimum 750mm freeboard to be maintained at all times.

All parts of the slurry storage system has been designed to last for 20 years with routine maintenance.

Any fixed drainage pipe from the slurry store must have 2 valves in series These must be locked shut when not in use and for stores built since 2010 there must be at least 1 metre spacing between valves.

NODIADAU/NOTES

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These above regulations set out the requirements for the design (capacity) construction and maintenance of storage facilities for silage, and slurry.

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They require you to nofity NRW, in writing at least 14 days before using a system that is new, substantially enlarged or substantially re-constructed. NRW have forms available to enable you to provide the necessary information.

EARTH BANK SLURRY STORES AND TANKS

Any alteration works to an existing earth bank slurry store, or a replacement earth bank slurry store will be expected to meet the requirements of The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013). Commonly referred to as SSAFO and apply in England

The works contractor must be fully conversant with the regulations, and will provide written confirmation that the design, construction, and installation, will meet the legal requirements.

Any works within a Nitrate Vulnerable Zone (NVZ) then there are rules to follow concerning slurry storage capacity. See Defra guidance.

Ground Water Protection - no system to be located within a groundwater Source Protection Zone 1 or within 50 meters of a borehole, well, or spring used to supply drinking water.

SUITABILITY OF EARTH BANK STORES

Soils- where the soils are suitable (impermeable and stable), they are appropriate for storing slurry or semi-solid manure, or as a series of tanks or lagoons to settle and store dirty water.

To be suitable they must have a permeability of 0.000001 mm per second or less, following compaction if necessary. Impermeable soil must be present to a depth of at least one meter below the bottom of the store.

Soils with a clay content of between 20 - 30 per cent are generally ideal and produce stable embankments. Lower clay content may not meet the required permeability, whilst a higher one should be suitable for the base, but may be difficult to form into a stable embankment and could tend to shrink and crack on drying. The suitability of the material should be confirmed by analysis in a soil laboratory, and preferably verified by a civil engineer. Materials that is intended for use in-situ without any re-compaction need only be tested for permeability and depth.

SOIL TESTING

Initial soil tests to be taken from at least 5 locations to identify any variability in clay content and depth of impermeable soil. Where there is little variability in clay content, soils from only one sample location needs to be sent for detailed testing, otherwise send a range of samples. They need to be tested in an approved soils' laboratory to show whether the required level of impermeability can be achieved. This involves the direct measurement of soil permeability as well as other soil characteristics. Testing should meet BS 1377 (methods of tests for soils for civil engineering purposes)

Where the in-situ soils are not fully suitable, then import appropriate material, or use an impermeable synthetic liner.

SITE SELECTION

Sites in a flood plain or with a high water table to be avoided, including ground that has been previously made up or disturbed.

- Trees, scrub, roots, etc need to be removed
- Relocate any land drains at least 10 meters away from the outside of the embankment, and carefully back-fill the trench with impermeable material.

SSAFO REGULATIONS

The key aspects of the regulations are:

Notify NRW about any new, substantially enlarged or substantially reconstructed system at least 14 days before construction begins.

- The notification must include the type of structure and where it is to be used. Request details of the proposed design and construction, and once an agreed proposal has been constructed forward a completed notification form before using the new facility.
- The structure(s) must be impermeable. Soil permeability to be confirmed by a qualified civil engineer or soil scientist.
- No part of the system can be within 10 meters of inland freshwaters or costal waters that slurry could enter.

  Note that 'inland water' includes any stream, ditch or land drain, even if it flows for only part of the year.
  - Where the store has a gravity-fed outlet or connection to another store, it must be fitted with two lockable valves in series, unless the receiving store is larger or at the same height as the outlet store.
  - Each valve must be capable of completely shutting off the total flow of slurry from the store. The design and positioning of the valves should take into account the possibility of a single piece of debris obstructing both valves. The space between the valves must be at lest one meter.

Contd .....

Chartered Institute of Architectural Technologists

Cwsmer/Client: Mr Eurig Jones (H & E Jones)	Rhif/Job No: 0623/23	Lluniad/Drawing Title: Lagoon Safety Perimeter Fence Detail		Graddfa/Scale: 1 : 20	
Prosiect/Project: Planning Application - Nutrient Storage Lagoon, Hendre Farm, Tregaian, Llangefni, Anglesey LL63 5NQ	Rhif Feil/File Name: iago: 0623/23	Lluniad/Drawing No: PA/04	Cywyriad/Rev:	Dyddiad/Date: 30.06.2023	Lluniwr/Drawn: G IAGO
			Cyw/Rev:		Dyddiad/Date:

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Troed y Bryn, Llanarthne, Caerfyrddin. SA32 8JE
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Architectural Design Services, Project Management & Planning Supervisors
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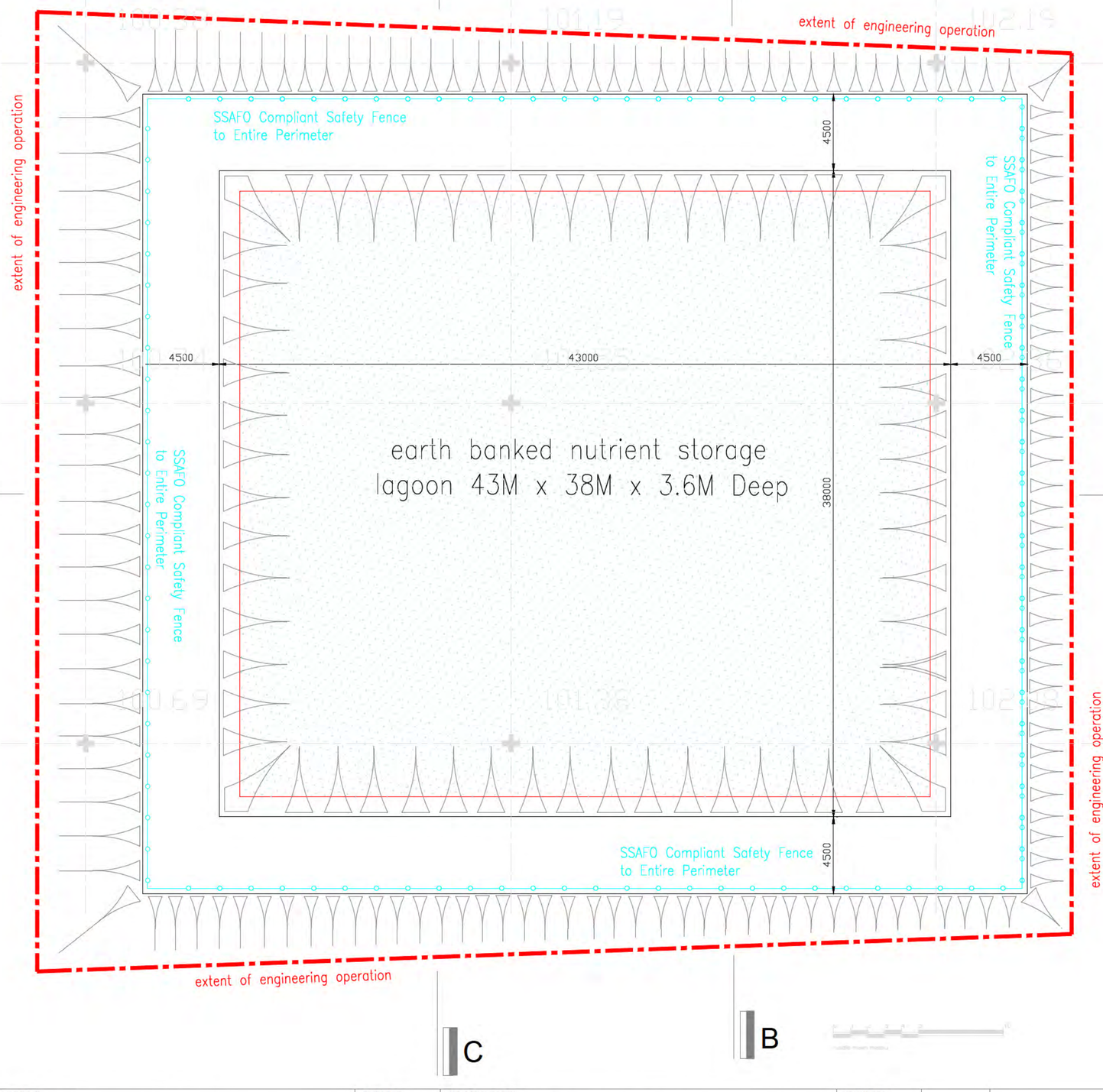
DATHLU 20 YEARS IN BUSINESS 2022

IAGO Cymru Ltd
Sustainable Solutions
Cynllunio Cynaliadwy.

iago cymru ltd
welsh national
regeneration award
winners 2010

Planning Drawing Issue No 1
Submission Date: 03.07.2023



partner LABC CYMRU

KeBeK Greener by Design

NODIADAU/NOTES

MAE'R LLUNIAD HWN WEDI EI WNEUD AR GYFRIFIADUR, NI DDYLID GYWIRIO GYDA LLAW. (AutoCAD LT / Revit 2021).

THIS IS A CAD PRODUCED DRAWING, AND SHOULD NOT BE AMENDED BY HAND. (AutoCAD LT / Revit 2021).
During reproduction Drawing may Shrink or Expand

- The valves must be locked shut when not in use. They must only be used under close supervision and never left unattended while open or partly open
- All parts of the system must comply with the regulations whenever it is used. Proper maintenance is therefore essential, i.e. do not allow tree growth on the embankment and repair rodent damage frequently.

SIZE OF THE STORE OR TANK

The Drawings are to be read in conjunction with the Design and Access Statement produced by KeBeK, this document identifies the maximum quantity of slurry likely to be produced and directed to this system in any continuous four month period. The store may form part of a slurry/dirty water irrigation system.

Earth bank stores have been designed to include a freeboard of 750mm They must never be filled above this level

SILAGE CLAMPS

The clamp base, effluent tank and drains must all be impermeable and resistant to attack from silage effluent. The base of the clamp must be designed and constructed in accordance with BS8007 or BS5502 Part 21.

Where walls are used, the base must extend beyound walls. All silage clamps must include a perimeter drainage channel connecting to an effluent tank.

All effluent must be collected and contained. The silage effluent tank must be 20 litres/cubic metre of silo capacity - up to 1500 cubic metres, plus an additional 6.7 litres/cubic metre of silo capacity thereafter.

No part of this installation should be within 10 meters of a watercourse or land drains.

Clamps and drains must be capable of lasting for 20 years (with routine maintenance.

Below-ground effluent tanks must be capable of lasting 20 years without Maintenance, A certificate to confirm suitable design and construction of tank and clamp must be sent to NRW 14 days before use.

If the clamp has walls, they must be designed to BS5502 Part 22 and be resistant to attack from silage effluent.

SLURRY STORAGE FACILITIES REQUIREMENTS

Slurry stores, tanks, pipes, and hannels must be impermeable. Where walls of the slurry store are not impermeable (eg weeping wall stores), the base must extend beyond the walls and have perimeter drains that connect to a slurry tank.

The base and walls of the slurry storage tank, any effluent tank, channels and reception pit, and the walls of any pipes, must be protected against corrosion, as described in BS 5502, Part 50 (1993).

Slurry storage tank and reception pit must be designed to BS 5502, Part 50 (1993).

The reception pit and associated channels must normally hold at least two days slurry production, including likely rainwater.

A slurry storage tank must normally hold at least four months production, including allowance for likely rain water. In designated Nitrate Vulnerable Zones (NVZ), it will need to hold five or six months production dependant on the type of slurry produced.

The slurry storage tank has been designed to have a minimum freeboard of 300mm but earth banked stores will have a minimum 750mm freeboard to be maintained at all times.

All parts of the slurry storage system has been designed to last for 20 years with routine maintenance.

Any fixed drainage pipe from the slurry store must have 2 valves in series These must be locked shut when not in use and for stores built since 2010 there must be at least 1 metre spacing between valves.

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Chartered Institute of Architectural Technologists

Cwsmer/Client: Mr Eurig Jones (H & E Jones)		Rhif/Job No: 0623/23	Lluniad/Drawing Title: Plan of Earth Banked Lagoon		Graddfa/Scale: 1 : 200
Prosiect/Project: Planning Application - Nutrient Storage Lagoon, Hendre Farm, Tregaian, Llangefni, Anglesey LL63 5NQ		Rhif Ffeil/File Name: iago: 0623/23	Lluniad/Drawing No: PA/01	Cywyriad/Rev:	Dyddiad/Date: 30.06.2023
					Lluniwr/Drawn: G IAGO
				Cyw/Rev:	Dyddiad/Date:

IAGO Cymru (Cyf).
Troed y Bryn, Llanarthne, Caerfyrddin. SA32 8JE
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Architectural Design Services, Project Management & Planning Supervisors
Ffôn / Tel: 01558 668143 Ebost / Email: gethinjames3@gmail.com

DATHLU 20 YEARS IN BUSINESS 2022

Appendix B.
Data Management Plan

Data Management Plan

Project Outline

Project Manager	Catherine Rees
Project Number	CR235-2023
Project Name	Fferm_Hendre
Author(s)	C. Rees
Origination Date:	06-09-2023
Reviser(s)	n/a
Date of last revision	n/a
Project stages covered	Archaeological Watching Brief
Version	1.0
Status	Final
Summary of Changes	n/a
File Name/Location	H: CR Archaeology 2023-2024 Projects: CR242-2023_ Fferm_Hendre
Related Policies	CR242-2023_ CR242-2023_ Fferm_Hendre_Selection_Strategy

Data Collection/Creation

Data to be Collected/Created	The CR Archaeology standard pro forma recording system used on site. Images will be created according to standards set out in ADAPt Guidance. All file formats created will meet the standards set out in ADAPt. The documentary archive consists of: Text: Various Word/PDF Documents; including Project Design, Assessment Reports, Site Archive Completion Report. Databases: Access/Excel databases Images: Digital images - site photography (JPEG & TIFF)
How Data will be Collected/Created	The data will be created according to the CR Archaeology Recording Manual, and ADAPt
Relations	If the data collection was derived in whole or in part from published or unpublished sources, whether printed or machine-readable, please give references to the original

	material. Please give details of where the sources are held and how they are identified there (e.g. by accession number). If the collection is derived from other sources please indicate whether the data represent a complete or partial transcription/copy and the methodology used for its computerisation. Clearly state whether the data represents a clear enhancement of this previous dataset

Documentation and Metadata

Metadata	Metadata will be created to the standard set out in ADAPt
Documentation	Describe the types of documentation that will accompany the data to help secondary users to understand and reuse it.

Ethical and Legal Compliance

Data Security Issues	Document if there are any issues such as: Does the data need to be embargoed to protect the site(s)? Is some of the data protected under data protection legislation? Does the dataset contain commercially sensitive data? Detail how any issues are to be dealt with.
Intellectual Property Rights	The data and reports created by any external specialists will be CR Archaeology Copyright; this will be managed through their contracts.

Data Storage

Storage and Backup	Data will be stored on the CR Archaeology Network and during excavation will be managed in line with Project Procedures for backing up data and transfer to network.
Access and Security	Data will be made available to the project team through the CR Archaeology network. There are no security issues.

Selection and Preservation

Preservation Plan	In the event of archaeological material being recovered on site the physical archive, the documentary archive and the digital archive will be deposited with the artefactual material at the local museum. Should artefactual material of value be encountered the landowner reserves the right to retention. The documentary archive will contain any hard copy data reports the repository wish to receive. A copy of the digital archive will be sent to the RCAHMW.

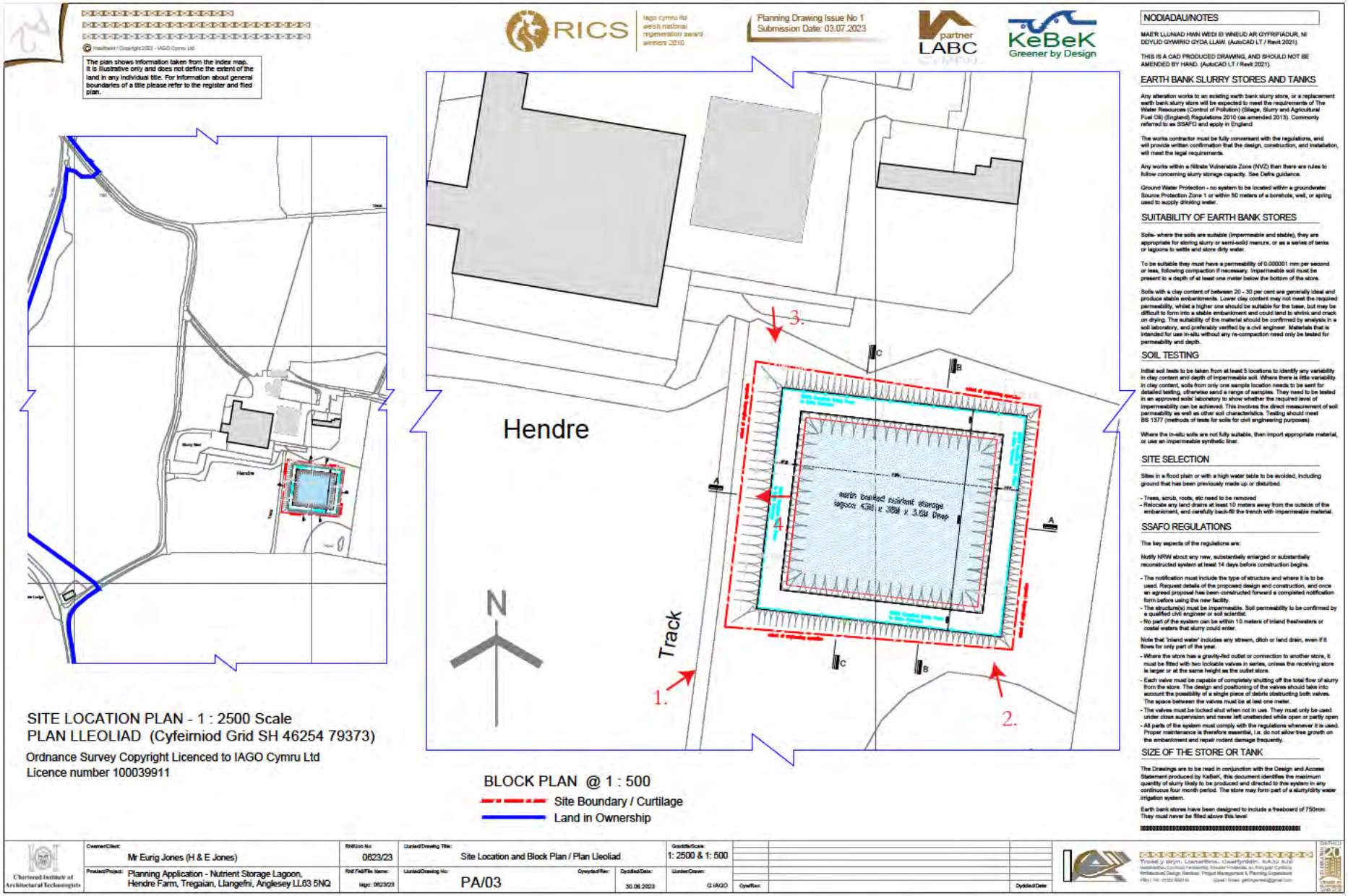
	In the event of a negative result or no artefactual material being recovered the documentary and digital archives will be deposited with the RCAHMW. Copies of the project report and photographs will be deposited with the appropriate HER (GAT).

Data Sharing

Data Sharing Plan	The data generated from this project will be made publicly available through the digital repositories. Awareness of the work will be raised through publication, and documentation with the HER.
Data Sharing Restrictions	There are no restrictions on the use of this data after project completion.

Responsibilities and Resources

Responsibilities	The Project Manager and Archaeological Archives Curator are responsible for ensuring the data management plan is followed.
Resources	Resources required to deliver this plan are covered by standard CR Archaeology resources and the project design. The costs of deposition of the archive are covered by the client.



Appendix C. Location and Direction of Photographic Plates