

CYNLLUN RHYDDHAD LLIFOGYDD DWYRAN, YNYS MON /  
DWYRAN FLOOD RELIEF SCHEME, YNYS MON

Aseiad Archeolegol/  
Archaeological Assessment



Ymddiriedolaeth Archeolegol Gwynedd  
Gwynedd Archaeological Trust

# CYNLLUN RHYDDHAD LLIFOGYDD DWYRAN, YNYS MON / DWYRAN FLOOD RELIEF SCHEME, YNYS MON

## Asesiad Archeolegol/ Archaeological Assessment

Rhif y Prosiect / Project No. G2706

Rhif yr Adroddiad / Report No. 1620

Paratowyd ar gyfer / Prepared for: Binnies

Chwfror / February 2022

Ysgrifennwyd gan / Written by: Stuart Reilly, John Roberts and  
Robert Evans

Darlun gan / Illustration by: Bethan Jones




Delwedd y Clawr : Afon Braint o Pont Cadach (Cyfeirnod Archif: G2706\_033)  
/ Cover Image: Afon Braint from Pont Cadach (Archive Ref: G2706\_033)

Cyhoeddwyd gan Ymddiriedolaeth Achaolegol Gwynedd  
Ymddiriedolaeth Archaeolegol Gwynedd  
Craig Beuno, Ffordd y Garth,  
Bangor, Gwynedd, LL57 2RT

Published by Gwynedd Archaeological Trust  
Gwynedd Archaeological Trust  
Craig Beuno, Garth Road,  
Bangor, Gwynedd, LL57 2RT

Cadeiryddes/Chair - Yr Athro/Professor Nancy Edwards, B.A., PhD, F.S.A.  
Prif Archaeolegydd/Chief Archaeologist - Andrew Davidson, B.A., M.I.F.A.

Mae Ymddiriedolaeth Archaeolegol Gwynedd yn Gwmni Cyfyngedig (Ref Cof. 1180515) ac yn Elusen (Rhif Cof. 508849)  
Gwynedd Archaeological Trust is both a Limited Company (Reg No. 1180515) and a Charity (reg No. 508849)

Approvals Table				
Source	Role	Printed Name	Signature	Date
Originated by	Document Author	Stuart Reilly		15/02/2022
Reviewed by	Document Reviewer	John Roberts		15/02/2022
Approved by	Principal Archaeologist	John Roberts		15/02/2022

Revision History			
Rev No.	Summary of Changes	Ref Section	Purpose of Issue
1	Cover pages edit	Cover pages	GAPS approval
1	Edit/Correction to section 2.1.2	2.1.2	GAPS approval
1	Inclusion of NMRW data	3	GAPS approval
1	Removal of methodology data	2.4/2.5	GAPS approval
1	Name of listed building added	3.1.2	GAPS approval
1	Additional information about the medieval and post-medieval periods	3.1.3	GAPS approval
1	Inclusion of ecofact potential	3.1.5	GAPS approval
1	Further discussion of LIDAR data	3.1.7	GAPS approval
1	Edits to gazetteer, viz. recommendations section	3.3	GAPS approval
1	Conclusion extended to highlight areas of archaeological significance/amended recommendations	4	GAPS approval
2	Tithe map Llangeinwen date of map in text & Figure 04 aligned	3.1.3.5	GAPS approval
2	Text edited to concur with Plate 11	3.2.1	GAPS approval

## CONTENT

CRYNHODEB ANHECHNEGOL .....	3
NON-TECHNICAL SUMMARY .....	3
1 INTRODUCTION .....	4
1.1 Acknowledgements.....	5
2 METHODOLOGY .....	6
2.1 Introduction.....	6
2.1.1 Ger-y-Felin Approximate Works Extents.....	8
2.1.2 Tyn y Parc Approximate Works Extents.....	9
2.1.3 Rhyd y Valley NFM Approximate Works Extents .....	10
2.2 Assessment (Desktop Study) .....	11
2.3 Walkover Survey.....	12
3 RESULTS .....	13
3.1 Desk Based Assessment.....	13
3.1.1 Location & Geological Summary .....	13
3.1.2 Statutory & Non-Statutory Designations .....	14
3.1.3 Historical & Archaeological Background.....	20
3.1.3.1 Introduction.....	20
3.1.3.2 Prehistoric.....	21
3.1.3.3 Roman.....	23
3.1.3.4 Medieval.....	24
3.1.3.5 Post-Medieval .....	26
3.1.4 Artefact potential.....	31
3.1.5 Ecofact potential .....	31
3.1.6 Aerial Photographs .....	32
3.1.7 LiDAR.....	33
3.2 Walkover Survey.....	34
3.2.1 Afon Rhyd y Valley.....	35
3.2.2 Flood embankment and Tidal outflow.....	36
3.2.3 Ger-y-Felin.....	37
3.2.4 Tyn y Parc.....	38
3.2.5 Pont Cadach .....	39
3.3 Gazetteer of Features .....	40
3.3.1 Introduction.....	40
4 CONCLUSION & RECOMMENDATIONS .....	74
5 SOURCES CONSULTED .....	76
APPENDIX I.....	78
Gwynedd Archaeological Trust Written Scheme of Investigation.....	78
APPENDIX II.....	79
Gwynedd Archaeological Trust Photographic Archive .....	79
APPENDIX III .....	80
Gwynedd Archaeological Trust Selection Strategy.....	80

## FIGURES

Figure 01: Location Map detailing main flood protection areas (in blue). Scale: 1 to 15000@A4.

Figure 02: Estate Plan of Quirt belonging to the Revd Mr Edward Hughes, by John Corris 1792. The northern boundary lies to the south of the study area, which lay within Llangeinwen Common. This boundary was also the extent of the Geilleniog Monastic Grange in medieval times, indicating the northern extent of agricultural activity from medieval times until enclosure in 1815.

Figure 03: Enclosure Award for Newborough and Llangeinwen 1843 (copy from 1815 original map) (Anglesey Archives W/Maps/54), overlain with tithe map plot numbers in black. The area of the later Pare farm is outlined in green. Scale as shown on the map.

Figure 04: Detail from the Llangeinwen Tithe map of 1839 (National Archives) with the main flood protection areas shown in blue. Area of later development of Pare Farm outlined in green.

Figure 05: Detail from the Llanidan Tithe map of 1841 (National Archives) with the main flood protection area shown in blue. Not to Scale.

Figure 06: Map and Schedule from Plas Coch and Brynddu Estate Maps of 1875 (Anglesey Archives WR/418), showing how the former common land was divided into farms (in this case Pare) in the years following the 1815 enclosure of Llangeinwen common.

Figure 07: Location Map showing the Works Extents (blue) The lined area covers the area of the former Geilleniog Monastic Grange, and the dotted area the former area of Llangeinwen Common which was enclosed in 1815.

Figure 08: Reproduction of the 1st edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.?, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1889, incorporating the Rhyd y Valley works extents. Scale: 1:7500@A4.

Figure 09: Reproduction of the 1st edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.?, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1889, incorporating the Ger-y-Felin and Tyn y Pare works extents. Scale: 1:7500@A4.

Figure 10: Reproduction of the 2nd edition I-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1900, incorporating the Afon Rhyd y Valley works extents. Scale: 1:7500@A4.

Figure 11: Reproduction of the 2nd edition I-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1900, incorporating the Ger-y-Felin and Tyn y Pare works extents. Scale: 1:7500@A4.

Figure 12: Reproduction of the 3rd edition I-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1920, incorporating the Afon Rhyd y Valley works extents. Scale: 1:7500@A4.

Figure 13: Reproduction of the 3rd edition I-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1920, incorporating the Ger-y-Felin and Tyn y Pare works extents. Scale: 1:7500@A4.

Figure 14: Reproduction of the LiDAR 1m Digital Terrain Model data incorporating the Ger-y-Felin and Tyn y Pare works extents. Map sheets SH4465 and SH4565. Source: Welsh Government Open Licence Data. Scale: 1:7500@A4.

Figure 15: Reproduction of the LiDAR 1m Digital Terrain Model data incorporating the Afon Rhyd y Valley works extents. Map sheets SH4465 and SH4565. Source: Welsh Government Open Licence Data. Scale: 1:7500@A4.

Figure 16: Location Map detailing Assessment Area. Scale: 1:15000@A4.

Figure 17: Location Map detailing main flood protection areas (in blue) and Gazetteer Features. Scale 1 to 15000@A4.

## PLATES

Plate 1: Improved field of pasture and stone wall boundary beside Afon Rhyd y Valley, north of Coach House/Bryn Gwyn Hall; scale Not Used; view from W (archive reference: G2706\_004).

Plate 2: Stretch of Afon Rhyd y Valley next to Dwyran, off unnamed road; scale Not Used; view from NE (archive reference: G2706\_023).

Plate 3: Improved field of pasture along Afon Rhyd y Valley, with Coach House/Bryn Gwyn Hall in view; scale Not Used; view from E (archive reference: G2706\_003).

Plate 4: Field between Maen Hir (visible in background) and A4080; with cows; scale Not Used; view from S (archive reference: G2706\_008).

Plate 5: Improved field of pasture south of Treann Lodge, with Treann farm in background; scale Not Used; view from S (archive reference: G2706\_018).

Plate 6: Rough field of pasture off A4080, opposite entrance to Maes y Porth; scale Not Used; view from S (archive reference: G2706\_021).

Plate 7: Rough field of pasture east of A4080, with Afon Rhyd y Valley continuing behind Copthorne Cottage; scale Not Used; view from N (archive reference: G2706\_025).

Plate 8: Convergence of Afon Braint and Afon Rhyd y Valley; scale Not Used; view from NE (archive reference: G2706\_039).

Plate 9: Culvert for Afon Rhyd y Valley as it passes beneath A4080; scale Not Used; view from NE (archive reference: G2706\_005).

Plate 10: Culvert for Afon Rhyd y Valley at entrance to Maen Hir; scale Not Used; view from NE (archive reference: G2706\_006).

Plate 11: Location of archaeological assets in field between Maen Hir and Treann; scale Not Used; view from ESE (archive reference: G2706\_011).

Plate 12: Flood embankment looking toward A4080; scale Not Used; view from SE (archive reference: G2706\_036).

Plate 13: Flood embankment along public right of way; scale 1 x1 m; view from N (archive reference: G2706\_035).

Plate 14: Tidal outflow at Afon Rhyd y Valley; scale 1x1 m; view from SW (archive reference: G2706\_037).

Plate 15: Example of stone façade of flood embankment beside tidal outflow; scale 1x1m; view from SW (archive reference: G2706\_038).

Plate 16: Approximate location of Melin Wen off Afon Braint; scale Not Used; view from SE (archive reference: G2706\_028).

Plate 17: Tyn y Pare; scale Not Used; view from N (archive reference: G2706\_032).

Plate 18: Yard adjacent to Tyn y Pare; scale Not Used; view from ESE (archive reference: G2706\_031).



## CRYNHODEB ANHECHNEGOL

*Mae Ymddiriedolaeth Archeolegol Gwynedd wedi'i chomisiynu gan Binnies i gynnal asesiad archeolegol i lywio datblygiad cysyniad ac amlinelliad o ddyluniadau ar gyfer cynllun rheoli perygl llifogydd arfaethedig yn Ddwyran, Ynys Môn. Cynhaliwyd yr asesiad yn ystod mis Ionawr a mis Chwefror 2022 ac roedd yn cynnwys ymchwil desg ac arolwg cerdded dros dro..*

*Daeth yr ymchwil i'r casgliad bod y cynllun arfaethedig wedi'i leoli o fewn tirwedd wledig ac amaeth yn bennaf, gyda gweithgarwch archeolegol yn cynnwys gweithgarwch cynhanesyddol, Rhufeinig, canoloesol ac ôl-ganoloesol. Roedd hyn yn cynnwys anheddiad y cyfnod Rhufeinig a'r darganfyddiadau ar dir ffermdy Tre Anna, systemau caeau canoloesol a hen felin yd. Cwblhawyd yr arolwg dros dro ar hyd llwybr y cynllun ac roedd yn cynnwys cydgyfeiriant Afon Braint ac Afon Rhyd y Cwm a meysydd allweddol o weithgarwch archeolegol hysbys ac amheus. Ni nodwyd unrhyw weithgarwch archeolegol ychwanegol ac nid oedd y gweithgaredd hysbys yn weladwy. Yn seiliedig ar y canlyniadau hyn, argymhellwyd bod angen gwerthusiad archeolegol yn ardal Fferm Tre Anna ac Maen Hir a hefyd y dylai archeolegydd fod yn bresennol yn ystod unrhyw waith ymchwilio tir.*

## NON-TECHNICAL SUMMARY

*Gwynedd Archaeological Trust has been commissioned by Binnies to undertake an archaeological assessment to inform the development of concept and outline designs for a proposed flood risk management scheme at Dwyran, Ynys Môn. The assessment was undertaken during January and February 2022 and included desk-based research and a walkover survey.*

*The research concluded that the proposed scheme was located within a predominantly rural and agrarian landscape, with archaeological activity including prehistoric, Roman, medieval and post-medieval activity. This included the Roman period settlement and findspots within the grounds of Tre Anna farmstead, medieval field systems and a former corn mill.*

*The walkover survey was completed along the scheme route and included the convergence of Afon Braint and Afon Rhyd y Valley and key areas of known and suspected archaeological activity. No additional archaeological activity was identified and the known activity was not visible.*

*Based on these results, it was recommended that an archaeological evaluation was required in the Tre Anna Farm and Maen Hir area and also that an archaeologist should be present during any ground investigation works.*

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by *Binnies* to undertake an archaeological assessment to inform the development of concept and outline designs for a proposed flood risk management scheme near Dwyran, Ynys Môn (NGR SH44366558; post code LL61 6YY; cf. Figure 01). The scheme is located to the immediate south, east and west of the village of Dwyran, with five main work areas:

1. New flood wall or embankment at Ger-y-Felin;
2. New outfalls downstream of Pont Cadach;
3. New flood wall or embankment at Tyn y Parc;
4. Modify or replace tidal outfall on Afon Rhyd y Valley along with possible improvement works to the existing flood embankment to provide an access route to the tidal outfall; and
5. Potential Natural Flood Management measures on Afon Rhyd y Valley upstream of Dwyran.

(The scheme may also include the installation of Property Level Protection (PLP) at a small number of residential properties that are presently affected by Afon Rhyd y Valley.)

The assessment was undertaken during January and February 2022 and completed in accordance with the following guidance:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard and Guidance for historic environment desk-based assessment (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2020)
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2020); and
- Standard and Guidance for the archaeological investigation and recording of standing buildings or structures (Chartered Institute for Archaeologists, 2020).

The assessment was monitored by the Gwynedd archaeological Planning Service and undertaken in accordance with an approved Written Scheme of Investigation (cf. [Appendix I](#)). In line with the Gwynedd Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project and HER Enquiry Number GATHER1567 and Event Primary Reference Number 46198 were assigned.

## **1.1 Acknowledgements**

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

- *GAT project team*: John Roberts, Carol Ryan Young, Robert Evans and Stuart Reilly;
- *Client (Binnies)*: Jack Unwin, Donna Bigsby and Gareth Petit-Price; and
- *Gwynedd Archaeological Planning Service*: Jenny Emmett.

## 2 METHODOLOGY

### 2.1 Introduction

The flood risk management scheme area is detailed in Figure 01 and features five main working areas located around Dwyran:

1. New flood wall or embankment at Ger-y-Felin;
2. New outfalls downstream of Pont Cadach;
3. New flood wall or embankment at Tyn y Parc;
4. Modify or replace tidal outfall on Afon Rhyd y Valley Modify or replace tidal outfall on Afon Rhyd y Valley, along with possible improvement works to the existing flood embankment to provide an access route to the tidal outfall; and
5. Potential Natural Flood Management measures on Afon Rhyd y Valley upstream of Dwyran.



(Source: Binnies)

The key aims and objectives of the assessment were to undertake:

- a detailed breakdown of the known archaeology within the study area;
- an assessment of previous land use compiled from an analysis of historical maps, aerial photographs and other archive materials;
- a ranking of the potential for archaeology of each of the archaeological periods to be found within the site; and
- provide recommendations for the geotechnical site investigation works on site (requirements that would need to be in place during these or similar activities).

### 2.1.1 Ger-y-Felin Approximate Works Extents



(Source: Binnies)

As illustrated above the works are expected to include a new floodwall/embankment with tie-ins to high ground at the upstream and downstream ends, some local ground raising, raising works to an existing footpath and the installation of new flapped outfalls through an existing wall downstream of Pont Cadach. Depending on the condition of the existing wall, the works may also involve the construction of a new section of wall to accommodate the outfalls (Source: Binnies).

## 2.1.2 Tyn y Parc Approximate Works Extents



(Source: Binnies)

Works to Tyn y Parc are expected to involve the construction of either a new flood defence wall or embankment, with associated tie-in measures, around the perimeter of the property as illustrated above (Source: Binnies).

### 2.1.3 Rhyd y Valley NFM Approximate Works Extents



(Source: Binnies)

The potential works on Afon Rhyd y Valley have not yet been defined but any design will be restricted to the space available within the red-line boundary shown in the image above (and reproduced in Figure 01; Source: Binnies).



## 2.2 Assessment (Desktop Study)

A desk-based assessment is defined as “a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage...Significance is to be judged in a local, regional, national or international context as appropriate” (ClfA 2020, 4).

The desk-based assessment will involve a study of the following resources:

1. The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) was examined for information concerning the assessment area, as outlined in Figure 16. Examination of the core HER was undertaken, including the 6-inch and 25-inch County Series Ordnance Survey maps and any secondary information held within the HER. All identified features were mapped, described and added to a gazetteer of sites and the relative importance of any sites defined.
2. The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) was checked for sites additional to the HER;
3. Aerial photographs from the National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) were examined for potential features. This will include 1946 RAF vertical aerial photographs;
4. The online catalogue search of the National Library of Wales (Penglais Rd, Aberystwyth SY23 3BU) was examined; and
5. Light Detection and Ranging (LiDAR) data was examined from the Lle Geo-Portal at <http://lle.gov.wales/home> for information on potential surface features using digital terrain modelling and digital surface modelling.

## 2.3 Walkover Survey

The walkover survey was undertaken on Tuesday 25<sup>th</sup> January 2022. The locations visited as part of the walkover survey were agreed in advance with Binnies and GAPS.

Photographic images were taken using a digital SLR (Nikon D5100) camera set to maximum resolution (4928 × 3264) in RAW format and converted to TIFF format for archiving using Adobe Photoshop. A photographic record was maintained on site using GAT pro-formas and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. A total of 40 images were taken in relation to the photographic record (archive numbering system G2706\_001 to G2706\_040; cf. [Appendix II](#)).

A basic written record using GAT pro-formas were completed that summarised the findings of the walkover survey.

## **3 RESULTS**

### **3.1 Desk Based Assessment**

#### *3.1.1 Location & Geological Summary*

The study area consists of improved pastureland, scattered farmsteads, and ribbon development and settlement along local roads development and on moderately sloping ground from the east to the west towards the valley bottom and the Afon Braint, at a height of approximately 20m OD. The area includes Afon Rhyd y Valley, which is bisected by the A4080 road and Afon Braint.

The bedrock geology includes Central Anglesey Shear Zone and Berw Shear Zone (undifferentiated), comprising Schist, Hornblende and representing metamorphic bedrock formed c.508 to 635 million years ago in the Cambrian and Ediacaran Periods (Source: BGS).

The superficial geology includes Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period, and Alluvium comprising clay, silt, sand and gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period (Source: BGS).

### 3.1.2 Statutory & Non-Statutory Designations

There are 3No statutory archaeological assets and 109 non-statutory archaeological assets located within the search area (Figure 16).

The statutory assets are:

<b>PRN</b>	<b>Statutory Designation</b>	<b>Name</b>	<b>Type</b>	<b>Location (NGR)</b>
3135	An022	Bryngwyn Standing Stones, Brynsiencyn – Scheduled Monument	Stone Circle	SH46246693
3140	An015	Castell Bryn Gwyn, Brynsiencyn – Scheduled Monument	Neolithic Enclosure	SH44816491
66964	84997	Cae'r Llechau - Nineteenth century Grade II Listed House	House	SH46526706

The non-statutory assets are:

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Period</b>	<b>NGR</b>
2632	Roman Coin, Findspot, Dwyran	Find Only	Roman	SH4465
3076	Burial Chamber, Site of, Cae'r Llechau	Document	Prehistoric	SH447647
3079	Cropmarks, N of Rhuddgaer	Cropmark	Unknown	SH445646
3143	Hut Group, Site of, Tre Anna, Dwyran	Earthwork	Prehistoric	SH455661
3154	Circular Cropmark, Llanidan	Cropmark	Roman	SH456656
5467	Enclosure, Bryn Gwyn NW of Dwyran	Document	Unknown	SH46006655
5575	Quernstones, Findspot, Rockery, Tre Anna	Find Only	Prehistoric	SH45496603
6638	Roman Coins, Findspot, Dwyran (Unlocated)	Find Only	Roman	SH4465
7232	Stepping Stones, Rhuddgaer	Other Structure	Unknown	SH44056468
24084	Circular Object, Findspot, Dwyran	Find Only	Modern	SH44806555
29391	Field System, S of Bryngwyn Bach	Buried Feature	Medieval	SH46246693
32805	Circular Feature, E of Tre Anna		Unknown	SH45646615
32806	Field System and Structures, Possible, NE of Maenhir		Roman	SH45636652
34198	Bryn Gwyn Hall, Dwyran	Building	Post-medieval	SH46016656
36138	Melin Wen, Dwyran	Document	Medieval	SH4442265625
36572	Standing Stone, Former Site of, Maen Hir	Document	Prehistoric	SH45516635
56093	Pond, N of Tre Anna		Post-medieval	SH4548666100
60323	Former Road, Rhosyr		Post-medieval	SH45006551
61539	Building, Possible, E of Tre Anna		Unknown	SH45646615
66964	Cae'r Llechau		Post-medieval	SH4481064910
70323	Farm building, Gelliniog-goch	Building - Roofed	Post-medieval	SH4530965099
70324	Farm building, Gelliniog-goch	Building - Roofed	Post-medieval	SH4532965103
70325	Farmstead, Gelliniog-bach		Post-medieval	SH4530465093
70327	Farm building, Bryntirion	Building - Roofed	Post-medieval	SH4518565140
70328	Farm building, Bryntirion	Building - Roofed	Post-medieval	SH4517465147
70329	Farm building, Bryntirion	Building - Roofed	Post-medieval	SH4517365156
70341	Farmstead, Bryntirion		Post-medieval	SH4516365141

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Period</b>	<b>NGR</b>
70499	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4480665489
70500	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4481765491
70501	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4481265499
70502	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4482265510
70503	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4483565515
70504	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4482765502
70506	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4483265502
70507	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4484065513
70508	Farm building, Taldrwst	Building - Roofed	Post-medieval	SH4482965518
70509	Farmstead, Taldrwst		Post-medieval	SH4482465505
70510	Farm building, Maen-hir	Building - Roofed	Post-medieval	SH4549866354
70511	Farm building, Maen-hir	Building - Roofed	Post-medieval	SH4551166352
70513	Farm building, Maen-hir	Building - Roofed	Post-medieval	SH4548166363
70515	Farm building, Maen-hir	Building - Roofed	Post-medieval	SH4549166372
70518	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4624066382
70519	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4623066370
70520	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4622066359
70521	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4622766355
70522	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4623366349
70523	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4624366341
70533	Farmstead, Tal-y-bont		Post-medieval	SH4539666639
70534	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4625166332
70535	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4627066357
70536	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4626766360
70537	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4626466363
70538	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4626166365
70539	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4625666369
70540	Farm building, Glas-ynys	Building - Roofed	Post-medieval	SH4624966376

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Period</b>	<b>NGR</b>
70541	Farmstead, Glas-ynys		Post-medieval	SH4624566358
70548	Farm building, Tal-y-bont	Building - Roofed	Post-medieval	SH4539466648
70549	Farm building, Tal-y-bont	Building - Roofed	Post-medieval	SH4540266656
70550	Farm building, Tal-y-bont	Building - Roofed	Post-medieval	SH4536966620
70557	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4549366072
70558	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4549766061
70559	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4551166059
70560	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4552266094
70561	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4552866081
70562	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4552766072
70563	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4552666067
70564	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4552566061
70565	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4550866089
70566	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4550766083
70567	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4549466089
70568	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4549566082
70569	Outbuilding, Tre Anna	Building - Roofed	Post-medieval	SH4551866084
70571	Outfarm, Tre Anna		Post-medieval	SH4551566091
70574	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481164919
70575	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481164912
70576	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481764901
70577	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4592565811
70578	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481264907
70579	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481264901
70580	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4591765791
70581	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4591565777
70582	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4591165767
70583	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4481364850

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Period</b>	<b>NGR</b>
70584	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4592365755
70585	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4592665759
70586	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4592365767
70588	Farm building, Gelliniog-wen	Building - Roofed	Post-medieval	SH4593865784
70589	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4479264869
70594	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4479564869
70597	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4479264865
70598	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4479064858
70694	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4478564840
70695	Farmstead Cae'r-llechau		Post-medieval	SH4480264873
70952	Farm building, Castell	Building - Roofed	Post-medieval	SH4655367115
70953	Farm building, Castell	Building - Roofed	Post-medieval	SH4654967090
70954	Farm building, Castell	Building - Roofed	Post-medieval	SH4655267074
70955	Farm building, Castell	Building - Roofed	Post-medieval	SH4655267080
70956	Farm building, Castell	Building - Roofed	Post-medieval	SH4656267090
70957	Farmstead, Castell		Post-medieval	SH4655467094
70974	Farm building, Bryngwnbach	Building - Roofed	Post-medieval	SH4630267051
70975	Farm building, Bryngwnbach	Building - Roofed	Post-medieval	SH4631567047
70976	Farmstead, Bryngwynbach		Post-medieval	SH4630967047
71172	Crop Marks, Nr, Castell Bryn Gwyn		Unknown	SH4678067010
90363	Dros-yr-Afon, Newborough		Unknown	SH4391264811
90743	Farm building, Maen-hir	Building - Roofed	Post-medieval	SH4548566392
91101	Farmstead, Maen-hir		Post-medieval	SH4549066373
91129	Farm building, Tal-y-bont	Building - Roofed	Post-medieval	SH4538966641
91132	Farm building, Cae'r-llechau	Building - Roofed	Post-medieval	SH4478764848
91406	Purse, Findspot, Rhosyr		Modern	SH4570965328
92332	Farmstead, Gelliniog-wen		Post-medieval	SH4594865770
1718	Circular Feature and Enclosure, Tre Anna	Enclosure	Unknown	SH46556582

Dwyran village has been designated RCAHMW NPRN 423047, and is described in the RCAHMW data as situated about 6 miles southeast of Llanfairpwll. It was previously home to two chapels -



Dwyran Methodists (NPRN 8788; NGR SH44846589) and Dwyran Independents (NPRN 8785; SH45016588), although a Post Office later occupied the space where the Independent Chapel once stood. There is also a church, St. Ceinwen's (NPRN 202; SH43986581), located half a mile west of the village centre.

### *3.1.3 Historical & Archaeological Background*

#### 3.1.3.1 Introduction

The archaeological assessment is a predominantly rural landscape with known archaeological activity concentrated within Dwyran and along the banks of or in close proximity to Afon Braint and Afon Rhyd y Valley. located within an area of known multi-period archaeology, including prehistoric ritual activity, Roman and medieval findposts, settlement and agrarian activity and post-medieval farmsteads. These include the site of a Roman settlement (Primary Reference Number (PRN) 3143; cf. Figure 16) located within the grounds of Tre Anna farmstead, which was investigated during the 19<sup>th</sup> century and also recovered Roman artefacts, whilst the site of a possible medieval mill, Melin Wen (PRN 36138; cf. Figure 16), is located along Afon Braint, within an area outlined for groundworks as part of the flood risk management scheme. The remaining archaeological assets within the study area are dominated the post-medieval farmsteads of Taldrwst and Tre Anna being located between Dwyran and the A4080 and within the Afon Rhyd y Valley, respectively.

### 3.1.3.2 Prehistoric

The known prehistoric activity within the study area is characterised by ritual sites. This includes the site of a prehistoric burial chamber at Cae'r Llechau, c.500m south of Dwyran (PRN 3076; NGR SH44706470; cf. Figure 16) at the southeastern end of the assessment area (Figure 16); a dolmen at the site was demolished in 1871 and no current evidence for the site is visible. Two Neolithic sites are located within the assessment area, comprising standing stones at Bryngwyn, c.1.57km northeast of Dwyran (SM An022/PRN 3135; NGR SH46246693; cf. Figure 16) and a Neolithic enclosure at Castell Bryn Gwyn, c.480m south of Dwyran (SM An015/PRN 3140; NGR SH44816491; cf. Figure 16), both at the northeastern end of the assessment area (Figure 16). There are two standing stones at Bryngwyn, located in a hedge-line between two large rectilinear fields. The larger of the two, at c.4m in height, is described as one of the tallest in Wales (Smith, 2013); the stones were visited in the early 18th century when they were described as part of a stone circle, but most of the surviving stones were removed or broken up early in the 19th century as part of field improvements, apart from the two stones that stand today (*ibid.*). Gwynedd Archaeological Trust undertook a geophysical survey of the site in 2006 by GAT as part of a pan-Wales survey of prehistoric funerary and ritual monuments for Cadw; the survey was designed to look for evidence of the former stone circle, the position of which was uncertain. Study of the antiquarian descriptions showed that the circle would have extended on the north side of the two standing stones and the geophysical survey identified a curvilinear feature there (Smith and Hopewell 2007). In 2008 a small evaluation excavation was carried out there to investigate this curvilinear feature three standing stone pits were found of which two contained stumps of broken-off standing stones; two stones lay in an arc in relation to the two extant standing stones that indicated a former stone circle of 8 stones and about 16m diameter, whilst another standing stone was discovered that lay inside the circle, unrelated to the projected circle (Smith 2008). In 2010 a further excavation was carried out by GAT for Cadw aiming to identify the full extent of the stone circle and to look for evidence of use and dating (Smith 2010). This concluded that the circle consisted of stones that were alternately slabs and columns laid out on a fairly precise circle of c.16m diameter with eight almost symmetrically placed and equidistant stones c.6m apart, emphasising the importance of this site as the only known example of a true orthostatic, free-standing stone circle on Anglesey (Smith 2013). The stone circle is located on naturally quite level ground southwest of Castell Bryn Gwyn, the southwest entrance of which faces in the direction of the stone circle. The henge was associated with Late Neolithic Grooved Ware pottery and is likely to pre-date the stone circle, which could be an elaboration to the ceremonial landscape around the henge; taken together, their proximity suggests the area was a ceremonial focus with the Afon Braint possibly playing a role (Smith 2013). The probable presence of a focal ceremonial area suggested by Smith, suggests there is a high

likelihood of other features in the area, such as minor circles or burials, or of linear features such as a cursus or of an avenue between Castell Bryn Gwyn and the stone circle or Afon Briant; however, surface artefact collection shows that there are few lithic finds here, suggesting they form part of a “special place” devoid of contemporary occupation or other activity (*ibid.*).

### 3.1.3.3 Roman

Evidence for Roman period settlement is located, towards the centre of the assessment area c.500m northeast of Dwyran (PRN 3143; NGR SH45506610; cf. Figure 16). The settlement area has been postulated to run along the bank of the Afon Rhyd-y-Valley upon which the farms of Maen Hir and the Tre Anna now stand. Part of the site was identified in 1862 by workmen cutting drains at Maen Hir, where fragments of pottery were recovered. An archaeological excavation in 1863 produced four fragments of Samian, three pieces of pottery (probably Upchurch ware), and numerous pieces of roof tiles, and flat stones laid horizontally to form a floor. There are currently no visible traces of settlement in the area, but there are over twenty quernstone fragments built into a rockery in the grounds of Tre Anna house, which include 11 rotary quern bases, four mortars and six saddle-quern fragments (PRN 5575; NGR SH45496603; cf. Figure 16). It is probable that they derive from the discovery and clearance of the settlement (Flook & Flook 2013). Aerial photography identified what appeared to be a circular feature and enclosure at Tre Anna located just to the south of the main house (*ibid*). GAT completed a geophysical survey of the site location in 2013 (Flook & Flook, 2013). A number of anomalies were detected, including a 10m wide circular feature (*ibid.*; PRN 32805; NGR SH45646615; cf. Figure 16), an apparent enclosure formed by narrow very straight linears that were interpreted as a building (*ibid.*; PRN 61539; NGR SH45646615; cf. Figure 16), and two anomalies suggestive of rectangular buildings were in the location of the activity found by Williams (*ibid.*; PRN 32806; NGR SH45636652; cf. Figure 16). The report also highlighted the presence of topographical changes within the area, suggesting platforms that may be the last visible vestiges of paddocks and enclosures relating to the former settlement site. Further evidence for Roman period activity included a 3<sup>rd</sup> century AD Roman coin findspot, c.500m southwest of Dwyran (PRN 2632; NGR SH44006500; cf. Figure 16) and a circular cropmark at Llanidan, c.300m east of Dwyran identified through aerial photography (PRN 3154; NGR SH45606560; cf. Figure 16).

#### 3.1.3.4 Medieval

The known and suspected medieval activity includes a field system located during a geophysical survey on the site of the Bryngwyn standing stones (PRN 3135), c.1.5km northeast of Dwyran (PRN 29391; NGR SH46246693; cf. Figure 16; Hopewell, D. & Smith, G, 2007); and the site of a mill, Melin Wen, located on the western outskirts of Dwyran (PRN 36138; NGR SH44426562; cf. Figure 16; Davidson, A, 2002). Melin Wen was a water powered corn mill based at the head of Afon Braint. The mill no longer exists, appears to have continued in use into the post-medieval period, as it is recorded on the 1<sup>st</sup> to 3<sup>rd</sup> edition 1-inch to 25-mile Ordnance Survey County Series maps of the area (Sheet XXII.6), published in 1889, 1900 and 1920 respectively (cf. Figures 08 to 13). The mill is visible as a rectangular shaped building to the immediate north of a school, with a sluice and mill race to the west.

The study area is located just to the north of the former monastic grange of Gelleiniog, which was a substantial estate of the Cistercian Abbey at Aberconwy and subsequently moved to Maenan after the foundation of Conwy by Edward I (Figure 02, 07). The monks of the Cistercian Aberconwy Abbey were granted Gelliniog and Rhuddgaer in the parish of Llangeinwen by Gruffydd ap Cynan ab Owain Gwynedd sometime between 1188 and 1199. This grant was repeated in Llywelyn ab Iorweth's charter of 1200 (Carr 1982, 271; Hays 1963). The northern boundary became fossilised over time and became the boundary of the demesne of Quirt, centred on the former Grange Chapel (Figure 07).

Granges were often the model farms of their day, and their nucleus comprised a refectory and Dorter, an oratory, a granary and other necessary farm buildings. There might also be a precinct wall and hospice, and the buildings would probably have been of a mixture of wood and stone, of which the chapel would have been of the latter (*ibid.*, 192). It is not known how much of this there was at Gelliniog, but the substantial two cell nature of the chapel that remains at Quirt suggests that this important Grange was well appointed (Evans *et al.* 2017).

The extent of the wider Gelliniog holdings included 'Rithkayre', 'Iquerly', 'Ymarle', 'Iperyn Eyere' and one unnamed holding, and were much more sub-divided than later became the case (Hays 1952). These were let out to leasehold tenants, and brought in revenue of £34 17s 16d. Immediately before or just after the dissolution three holdings, 'Kay Mawre', 'Kay Vedell', and 'Kay Ikeven', were amalgamated and a single tenant paid £2 13s 4d. A note was produced in 1806 associated with a sale of the property of Quirt, stated that the grant of land to the Aberconwy Abbey went up *from Maene by the river Braint, as far as Aber, Pwll Dwyran, from hence through the Middle of the water*

*of Pwll Dwyran, as far as Saringerd; from hence through a certain clawdd made of stones, (meaning a fence, and now a common way, ditched on each side) to a certain pond near Trev Arthen, from thence through the middle of that pond, as far as Clawdd yr Adwy, from thence through that Clawdd as far as the sea shore; from thence straight to the channel of the Maene, and so through the middle of the Maene as far as Aber Braint* (Gwynedd Archives, X/Poole/3224).

In 1535 the profits of the abbot's court at Gelliniog were valued at £1 (*ibid.* 71). At the Dissolution of the Monasteries the land at Quirt was granted in the first instance to William Chaplin and John Selwood, who sold them to James Rogers, from whom Rhys ap Llewelyn bought the property for £45 (*Arch Camb.* 1846, 315). The Grange lands were subsequently formed into the Quirt and Ruddgaer Estates.

The lands to the north of the Gelleiniog Grange, which include the Ger- y- Felin and Tyn y Parc works extents lay in an area described in 1792 as *Llangeinwen Common* (Figure 02). This would have been common land, used by the grange and others to graze sheep at certain times of year. The common land would also have served as a buffer between the monastic grange and the secular world further to the north, a concept popular with the Cistercian monks. This area remained common land until it was enclosed by parliamentary enclosure in 1815 (Figure 03).

The medieval church of Llangeinwen, located to the north-west of the proposed works at NGR SH43977658, about 300m from the Ty'n y Parc area, is believed to be 12<sup>th</sup> century in origin, and it is listed in the *Norwich Taxatio* of 1254 (Davidson 200, 171). It also has early medieval memorial stones built into its walls, suggesting that the origin of the site probably goes back to early medieval times. It was probably also the focus for medieval settlement.

The Afon Rhyd Valley work extent lay across the parish boundary between Llangeinwen and Llanidan (Figures 04-05), and this area under secular control in medieval times. The date of this parish boundary is likely to be medieval in origin.

### 3.1.3.5 Post-Medieval

The assessment area was located within the historic parishes of Llangeinwen and Llanidan; the former covering the western part of the assessment area and the latter covering the eastern part. Landownership included local large-scale landowners, including Thomas Assheton Smith Esq. of Vaynol, Humphrey Owen Esq., Thomas Peers Williams Esq. of Criag y Don, The Right Honourable Lord Boston of Plas Llanidan and The Right Honourable Lord Dinorben of Kinmel Hall. The fact that the study area, particularly to the west, is parcelled up between the various major and minor landowners of the area is due to the fact that Llangeinwen Common, which for centuries had been common grazing land, was parcelled up under the *Llanbedr Newborough and Llangeinwen Enclosure Act* of 1815 (Evans Jones 1926, 59-65; Figure 03, 07). Drains, ditches, watercourses, banks and sluices, tunnels and bridges were repaired and new ones cut as part of the enclosure, but the rights of common over the land was abolished. Figure 03 shows the allotted portions, with the field names and subdivisions shown on the tithe map of Llangeinwen of 1839 (Figure 04) overlain.

The landowners and field names of the area parcelled out under the Enclosure Act of 1815 and subsequently used on the parish tithe map of 1839 are shown in the table below, which is taken from the tithe apportionment. This cross references with the information shown on Figures 03 and 04, however it is suggested that all the field names post-date the enclosure of 1815, as the area would not have been subdivided before that. However there are some points of interest shown, such as how certain lands were allocated to the poor of the parish (No. 92), and both large and smaller landowners were included in the apportionment of the common, including the owners of the nearby Rhuddgaer and Quirt. A number of the place names refer to the main part of the estate to which they have by now been linked. It is also clear that the enclosed fields were suitable to a great extent for arable agriculture, suggesting that field improvement was carried out. The name 'Tanfyn went' for field 99 is probably a corruption of *Tan y Fynwent*, as it does lie below the churchyard at Llangeinwen. In Field 180 the 'Ysgaw' refers to an 'Elder' so there were possibly elder trees growing here, which is likely in wet unimproved areas which they favour, so this may refer back to pre-enclosure times. The field spellings are written in their original form on the apportionment:



Landowners	Occupiers	No. on Plan	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure A R P
Lord Boston		81	Mill	-	
Lord Boston	John Williams	82	Llyn y Felin (Mill Pond)	-	4 3 3
The Parish Lands	-	92	Poor Houses and gardens	-	- 1 19
The Right Honourable George Irby Lord Boston	William Owen	93	Cae Lidiart	Arable	3 - 27
The Right Honourable George Irby Lord Boston	William Owen	94	Cae Chymiog (Tyn y Parc)	Pasture	8 - 36
The Right Honourable George Irby Lord Boston	William Owen	95	Pwll y Forwyn	Pasture	1 1 16
Honourable George Irby Lord Boston	Thomas Hughes	96	Tros y Rhos Houses and Field	pasture	3 1 30
Honourable George Irby Lord Boston	Thomas Hughes	97	Cae maes Samuel	Arable and pasture	2 3 16
The parish Lands	Richard Williams	98	Allotment	-	- 2 3
John Owen Esquire	Griffith Owen	99	Tanfyn Went	-	- 2 10
Thomas Peers Williams Esquire	John Griffiths	100	Marsh	-	9 3 5
Thomas Peers Williams Esquire	William Edwards	101	Marsh	-	88 2 -

<b>Landowners</b>	<b>Occupiers</b>	<b>No. on Plan</b>	<b>Name and Description of Lands and Premises</b>	<b>State of Cultivation</b>	<b>Quantities in Statute Measure A R P</b>
William Bulkley Hughes Esq.	Robert Roberts	102	Plas Coch	-	20 3 38
James Greenfield Esquire	Owen Hughes	103	Parc Rhyddgaer	-	39 8 -
Thomas Assheton Smith Esq.	Richard Jones	104	Cae Salisbury	-	16 - 5
The Right Honourable George Irby Lord Boston	William Owen	106	Wern Gan	Pasture	16 2 10
The Right Honourable George Irby Lord Boston	William Owen	107	Gloac Fawr	Arable and Pasture	12 1 16
The Right Honourable George Irby Lord Boston	William Owen	108	Quillet	Arable	1 - -
Mr William Owen	William Owen	173 and 175	Talebuost	-	16 2 1 (with other areas)
Hugh Owen	John Williams	176	Lime Grove	-	8 2 26
NOT RECORDED		177			
NOT RECORDED		178			
Mr Edward Edwards	John Owen	179	Cwyr (Quirt?)	-	6 1 38 (with other areas)
Mr John Edwards	Ellen Jones	180	Llwyn Ysgaw	-	1 1 8 (with other areas)
Mr John Roberts	Owen Hughes	181	Marsh	-	- 1 18

Landowners	Occupiers	No. on Plan	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure A R P
Hugh Owen	Hugh Owen	182 and 183	Luin Penlan	-	1 - 10

Focussing on the western end of the assessment area, formerly part of Llangeinwen Common, where new flood walls or embankments are proposed at Ger-y-Felin and Tyn y Parc, in the 1840 Llangeinwen Parish tithe map, Ger-y-Felin is listed as apportionment number 82 “Llyn-y-Felin”, which is the mill pond itself whilst Tyn y Parc is listed as apportionment number 94. Both are shown as large plots, with Llyn-y-Felin evident as an irregular shaped plot bounded by Afon Braint to the north and Lôn Capel road to the south. Ty’n y Parc is visible as a rectangular shaped plot with a property at the northern corner closest to the road. That the enclosed area could be parcelled out into farms can be seen clearly in the regular pattern of fields shown as Parc in 1875, part of the Plas Coch Estate (Figure 06), where regular sub rectangular fields are noted, located in the south-west corner of Llangeinwen Common. This 1875 map corresponds in area to plot 102 on the enclosure and tithe maps, where it is shown that it was awarded to Plas Coch under the Enclosure Act.

The area to the east around the Afon Rhyd y Valley straddled the parish boundary between Llangeinwen and Llanidan, as the river formed the boundary. The field pattern there is thought to be post-medieval in date, but probably early than the 1815 enclosure seen to the west (Figures 04 and 05). To the north of the river in Llangeinwen Parish lay the farmsteads of Treanna (Plot 60) and Maen Hir (Plot 59). These are discussed elsewhere in this report, but may be relatively early in date. South of the river, in Llanidan parish, there was a fairly regular pattern of enclosed paddocks and the apportionment from the tithe map of 1841 for the study area is given in the table below:

Landowners	Occupiers	No. on Plan	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure A R P
Thomas Assheton Smith ESquire	Rhos Fawr	53	Rhos Fawr	Pasture	6 2 -
Humphrey Owen Esquire	On Hand	54	Cae Pwll Budr	Arable and Meadow	7 3 4

Landowners	Occupiers	No. on Plan	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure A R P
Thomas Assheton Smith ESquire	Hugh Owen	57	Cae W**k	Pasture	2 3 34
Humphrey Owen Esquire	On Hand	58	Cae W**k	Pasture	5 1 38
Humphrey Owen Esquire	On Hand	59	Wain	Pasture	3 2 26
Humphrey Owen Esquire	On Hand	65	Coilia tan ty	Pasture and meadow	17 1 20

Thomas Assheton Smith of Vaynol Hall near Bangor is also dominant in the area but Humphrey Owen is a yeoman farmer who lives on his property, Bryn Gwyn Mawr, located in Plot 61 to the south east of the study area (Figure 05). Field 54 can be translated as 'dirty pool field', suggesting that it was not good for watering people or animals!

The 1<sup>st</sup> to 3<sup>rd</sup> edition 1-inch to 25-mile Ordnance Survey County Series maps of the assessment area (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 and XXII.16; cf. Figures 08 to 13), published in 1889, 1900 and 1920 respectively, illustrate a generally agricultural landscape comprising irregular shaped fields and scattered farmsteads, as well as settlement along the main road networks. There is little change between the three editions, suggesting Dwyran and the surrounding area saw limited development in this time, with current settlement patterns appearing later in the twentieth century, and mostly around Lon Faen. Ger-y-Felin appears as an open plot on the historic Ordnance Survey mapping, similar to the earlier tithe map, as does Ty'n y Parc, with both areas subsequently developed in the later twentieth century. The Melin Wen corn mill visible on the historic Ordnance Survey mapping is longer present.

The post medieval landscape in the study area consists of two areas, to the west the parcelled out fields that were formerly unenclosed common land, enclosed in 1815, and to the east earlier paddocked enclosures on the slopes above the Afon Rhyd Valley. These latter form field systems associated with substantial farmsteads that were probably present in the 17<sup>th</sup> and 18<sup>th</sup> centuries. There has been significant development to the west particularly in the 20<sup>th</sup> century, especially with the development and expansion of Dwyran itself.

### *3.1.4 Artefact potential*

There are several examples of findspots across the assessment area, including: Roman period quernstones at Tre Anna farm (PRN 5575; NGR SH45496603), a 3<sup>rd</sup> century AD Roman coin findspot, c.500m southwest of Dwyran (PRN 2632; NGR SH44006500) and thirteen bronze coins surviving range in date from Gordian III (238-244AD) to Constantine The Great (306-337AD) (PRN 6638; NGR SH4465; cf. Figure 06). Gwynedd Archaeological Trust completed a metal detecting survey in 2013 (Flook & Flook 2013) at Tre Anna Farm recovered ferrous objects relating to agricultural practice, broken bits of machinery, and objects associated with horse traction: horseshoes, harness fittings, as well as domestic objects presumably incorporated into the topsoil during manuring. Although no finds related to the Roman period were recovered - which was a focus of the survey - of particular interest was part of a 18<sup>th</sup> century fine quality cast bronze buckle (Find 277) possibly for a shoe or hat, along with a copper alloy coin (Find 559) of similar date. These findspots suggest the potential for artefacts to be encountered across the area, with a likely preponderance of post-medieval artefacts, but greater potential for earlier artefacts around Tre Anna.

### *3.1.5 Ecofact potential*

The scheme is located within a within the floodplain and there is potential for waterlogged and/or palaeoenvironmental remains, particularly at the convergence of the Afon Rhyd y Valley with the Afon Braint which includes marshland and rough pasture. Elsewhere, the majority of the scheme is located within well improved agricultural land, which may limit potential. Any geotechnical ground investigation works associated with the proposed scheme could be valuable for providing additional information and improve our understanding. Within the area of the former Melin Wen corn mill, evidence for the original watercourse and past land management may be encountered.

### 3.1.6 *Aerial Photographs*

Aerial photographs were sourced the Central Registry of Aerial Photography, Welsh Government, Cardiff and the following were examined:

- RAF sortie HLA578 2\_17 dated 1942;
- RAF sortie 540\_491 4277 dated 1951;
- RAF sortie 1931 F22 0015 dated 1956;
- Ordnance Survey image 6626 OS66\_104 384 dated 1966
- Ordnance Survey image 7053 OS 70\_251 080 dated 1970`
- University of Cambridge image 8233 CUCAP RC8\_EU 145 dated 1982; and
- ADAS image 9205 ADAS 554 224 dated 1992.

For the assessment, particular attention was paid to the areas of Ger-y-Felin and Tyn y Parc at the western end of the scheme due to the proposed works at these locations and to Tre Anna near the centre due to the archaeology previously identified. No additional features were identified in the respective areas. What did become apparent from these images was that the settlement expansion around Lon Faen developed between 1970 and 1982.

### 3.1.7 LiDAR

Light Detection and Ranging (LiDAR) data was examined from the Lle Geo-Portal at <http://lle.gov.wales/home> for information on potential surface features using digital terrain modelling (DTM) and digital surface modelling (DSM). The 1m DTM composite dataset for SH4465 and SH4565 were examined (cf. Figures 14 and 15).

At the western end of the scheme, incorporating the Tyn y Parc, Ger-y-Felin and Pont Cadach work extents, no additional features were identified in the respective areas, although plough markings were visible at the central and southern end of Tyn y Parc.

At the eastern end of the scheme, incorporating the Afon Rhyd y Valley work extents, there are visible anomalies. At Tre Anna, particularly to the northeast of the farm, there are irregular shaped anomalies visible that don't correlate with current or historic mapping. At least one anomaly appears to correlate with a geophysical anomaly identified by GAT in 2013, which was identified as a possible Roman period enclosure/building formed by narrow very straight linears (*Flook & Flook 2013*; PRN 61539; NGR SH45646615; cf. Figure 16); the 10m wide circular feature identified at the same location during the survey (PRN 32805; NGR SH45646615; cf. Figure 16) is not clearly visible on the LiDAR, but topographical changes within the area are also visible, which may suggest other activity. The area incorporating Tre Anna Farm and Maen Bach Farm and an area to the north leading the Bryngwyn Hall, also include LiDAR anomalies that appear to correlate with the results of the 2013 survey. The 2013 survey identified anomalies suggestive of rectangular buildings that may be associated with topographic changes previously interpreted as platforms associated with paddocks and enclosures (PRN 32806; NGR SH45636652; cf. Figure 16). In the LiDAR data, the most visible anomaly that corresponds to this is an irregular shaped feature in the large trapezoidal field to the immediate northeast of Maen Hir Farm.

In the field to the immediate east of the large trapezoidal field, the LiDAR clearly shows radiating boundaries emanating from Bryngwyn Hall (cf. Figure 15). These do not correlate with historic mapping and suggest earlier field systems and activity.

## 3.2 Walkover Survey

The walkover survey was undertaken on Tuesday 25<sup>th</sup> January 2022 in dry overcast conditions. The walkover was conducted within the survey area, extending from where the Afon Rhyd y Valley was bisected by the A4080, in the proximity of PRNs 3135 and 3140 northeast of Dwyran, to the tidal outfall adjacent to the convergence of the Afon Braint and Afon Rhyd y Valley at the southwest. The locations visited as part of the walkover survey were agreed in advance with Binnies and GAPS. The survey visited the following locations:

1. The route of Afon Rhyd y Valley as this has been flagged as an area of Potential Natural Flood Management measures and due to the location of PRNs 61539 & 32805 within this part of the scheme (cf. Figure 16);
2. The flood embankment and tidal outfall at Afon Rhyd y Valley, south of Dwyran and the A4080. The tidal outfall may be modified or replaced as part of the proposed food relief scheme, along with possible improvement works to the existing flood embankment to provide an access route to the tidal outfall;
3. Ger-y-Felin located at the southwestern edge of Dwyran, as PRN 36138 (cf. Figure 16), the site of a possible medieval mill, Melin Wen is in the vicinity of a proposed new flood wall or embankment as part of the flood risk management scheme;
4. Tyn y Parc located off the A4080 to the immediate west of Dwyran as a proposed new flood wall or embankment may be constructed here as part of the flood risk management scheme; and
5. Pont Cadach a modern road bridge that carries the A4080 over the Afon Braint, as new outfalls downstream of the bridge may be constructed here as part of the flood risk management scheme.



### *3.2.1 Afon Rhyd y Valley*

The Afon Rhyd y Valley resembled a drainage channel or small stream (Plates 01 & 02) that converged with the Afon Braint. The majority of the route covered by the survey, from Bryngwyn to the northeastern edge of Dwyran, the watercourse flowed through improved fields of pasture (Plates 03 to 05) with a mixture of livestock present in the fields, which included cows, horses and sheep. The ground changed from the entrance to Maes y Porth off the A4080 to the east/northeast of the mouth of the river, with the ground became increasingly marshy and marginal to form rough pasture (Plates 06 & 07). At the convergence of the Afon Rhyd y Valley with the Afon Braint and to the south/southwest of Ty Felin and the flood embankment the area was characterised by salt marshes (Plate 08).

Within the survey area the Afon Rhyd y Valley was crossed at several intervals by the A4080 and Dwyran Bypass. The river was culverted beneath the road (Plate 09) and at entrances to private properties, such as Maen Hir (Plate 10), with these works appearing to be contemporary with the Dwyran Bypass.

The archaeological assets PRN 32805 and PRN 61539 were in a well grazed field of improved pasture. Possible grass marks, including a curved arc were visible adjacent to the western field boundary as the ground gradually rose to a ridge (Plate 11). The possible grass marks were located to the west of the stream, within the field between Tre Anna Farm and the A4080. The assets were identified during a geophysical survey completed by GAT in 2013 (GAT Report 1127) and survive as sub-surface remains. No unknown upstanding archaeological remains were identified during the walkover survey along the Afon Rhyd y Valley.

### *3.2.2 Flood embankment and Tidal outflow*

The flood embankment extends from the A4080 in a staggered manner (Plate 12) along a roughly north – south orientation, broadly parallel with the Afon Braint. The embankment appeared to be in good repair and well maintained, with an approximate maximum height of 2.50m (Plate 13). Set within the southern limits of the embankment there was a tidal outflow for the Afon Rhyd y Valley. It was of modern construction with a concrete face, metal and timber plank shutters, set within a stone wall, with the stones bonded by concrete (Plate 14). The flood embankment extends a short distance to the southeast of the tidal outflow and this section has an exposed stone face (Plate 15).

### 3.2.3 *Ger-y-Felin*

Ger-y-Felin is a small estate of council houses adjacent to the Afon Braint at the southwestern edge of Dwyran. The location of PRN 36138/Melin Wen was investigated along the eastern bank of Afon Braint. The river appeared to have been channelled or straightened at this point. At the location of the archaeological asset there are various 20<sup>th</sup> century outbuildings and late 20<sup>th</sup> century bungalows (Plate 16). There were no visible upstanding remains of the mill at this location.

### 3.2.4 *Tyn y Parc*

The core of the house appears to be of late 19<sup>th</sup> or early 20<sup>th</sup> century with modern (i.e. late 20<sup>th</sup> century) extensions toward the A4080 and a conservatory at the rear of the property (Plate 17). Adjacent to the property (between the house and Pont Cadach) was a large yard (Plate 18) that was partially overgrown, with a level, gravelled surface accessed off the A4080 via two aluminium gates. There were no evident upstanding archaeological remains at this location.

### 3.2.5 *Pont Cadach*

Pont Cadach was a modern, late 20<sup>th</sup> century road bridge (Plate 19) that crossed the Afon Braint. The downstream stretch of the Afon Braint adjacent to the bridge appeared to have been part channelled with concrete block sides and outflows from surface water pipes. The sides of the river were covered by thick brambles and bushes (Plate 20). There were no evident upstanding archaeological remains at the sides of or within the river.

### **3.3 Gazetteer of Features**

#### *3.3.1 Introduction*

The gazetteer of features has been prepared using information sourced from the regional Historic Environment Record and the walkover survey. This gazetteer includes known archaeological features previously identified, with existing descriptions reproduced and updated, where possible, further to the walkover survey. The gazetteer has amalgamated the 112 statutory and non-statutory designates assets into a smaller number of features, due to many features being extant as farm buildings within larger farmsteads. For the location of individual features, cf. Figure 17.

<b>Feature Number</b>	<b>01</b>
<b>Site name</b>	Bryngwn-bach
<b>PRN number</b>	70976 (70974 & 7097)
<b>Grid reference</b>	SH4630967047
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead with associated farm buildings. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>02</b>
<b>Site name</b>	Castell
<b>PRN number</b>	70957 (70952, 70953, 70954, 70955 & 70956)
<b>Grid reference</b>	SH4655467094
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead with associated farm buildings. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A



<b>Feature Number</b>	<b>03</b>
<b>Site name</b>	Crop Marks, Near, Castell Bryn Gwyn
<b>PRN number</b>	71172
<b>Grid reference</b>	SH4678067010
<b>Period</b>	Unknown
<b>Site type</b>	Cropmark
<b>Assessment category</b>	E
<b>Description</b>	Two possible crop marks identified from aerial photographs. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>04</b>
<b>Site name</b>	Castell Bryn Gwyn, Brynsiencyn
<b>PRN number</b>	3140
<b>Grid reference</b>	SH4652867061
<b>Period</b>	Neolithic
<b>Site type</b>	Enclosure
<b>Assessment category</b>	A
<b>Description</b>	Castell Bryn-Gwyn consists of a circular clay and gravel bank enclosing a level area about 17m in diameter. It would have originally had a ditch encircling the 2m high bank, although this has now silted up. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>05</b>
<b>Site name</b>	Bryngwyn Standing Stones, Brynsiencyn
<b>PRN number</b>	3135
<b>Grid reference</b>	SH46246693
<b>Period</b>	Neolithic
<b>Site type</b>	Stone Circle
<b>Assessment category</b>	A
<b>Description</b>	<p>Two immense standing stones set about 4.6m apart. These are: a pointed slab 4.2m high, 3.2m wide and 0.6m thick; a more massive block 3.2m high, 2.9m wide and 1.5m thick, with a flat inclined top. An evaluation excavation was carried out of an area north of the two standing stones at Bryn Gwyn, based on evidence from geophysical survey of the existence of a possible curvilinear feature there (Smith and Hopewell 2007). No such feature was present but three standing stone pits were found of which two contained stumps of broken-off standing stones. Two stones lay in an arc in relation to the two extant standing stones that indicated a former stone circle of 8 stones and about 16m diameter. One standing stone was not part of this arc, but lay on a different alignment, possibly orientated on the nearby Castell Bryn Gwyn henge. (Smith 2009). Excavations in 2010 at the two standing stones at Bryn Gwyn, Brynsiencyn, Anglesey confirmed the former presence of a stone circle c. 16m diameter consisting of 8 stones. Fragments of some former standing stones remained while others had been removed entirely. Traces were also found of later use of the circle for cremation activity (Smith 2011). This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.</p>
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>06</b>
<b>Site name</b>	Field System, south of Bryngwyn Bach
<b>PRN number</b>	29391
<b>Grid reference</b>	SH46246693
<b>Period</b>	Medieval
<b>Site type</b>	Strip field system
<b>Assessment category</b>	C
<b>Description</b>	Medieval strip fields identified during a geophysical survey on the site of Bryngwyn standing stones [PRN 3135] that revealed a field system of probable medieval date (Smith G & Hopewell D,. 2007). This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>07</b>
<b>Site name</b>	Tal-y-Bont
<b>PRN number</b>	70533 (70548, 70549, 70550 & 91129)
<b>Grid reference</b>	SH4539666639
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead, This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>08</b>
<b>Site name</b>	Possible field system and structures, northeast of Maenhir
<b>PRN number</b>	32806
<b>Grid reference</b>	SH45636652
<b>Period</b>	Roman
<b>Site type</b>	Settlement
<b>Assessment category</b>	B
<b>Description</b>	A network of small fields or platforms have been identified that which may indicate a prehistoric cultivation pattern (Flook R & Flook M, 2013). The 2013 GAT report stated that these features were similar to those seen on the ground at Tre Anna Farm and may support the contention that the bank between Maenhir and Tre Anna was the site of an extensive settlement. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	Unknown
<b>Recommendation</b>	Archaeological activity may be more extensive than what is currently known from available evidence. Due to the potential for historic settlement activity to extend between Maenhir and Tre Anna and possibly further afield, it is recommended that archaeological evaluation is undertaken as a next stage, including geophysical survey and trial trenching.

<b>Feature Number</b>	<b>09</b>
<b>Site name</b>	Bryn Gwyn Hall, Dwyran
<b>PRN number</b>	34198
<b>Grid reference</b>	SH46016656
<b>Period</b>	Post-medieval
<b>Site type</b>	House
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval house. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>10</b>
<b>Site name</b>	Enclosure, Bryn Gwyn Northwest of Dwyran
<b>PRN number</b>	5467
<b>Grid reference</b>	SH46006655
<b>Period</b>	Unknown
<b>Site type</b>	Enclosure
<b>Assessment category</b>	E
<b>Description</b>	Enclosure identified in Thompson D, 1994. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A



<b>Feature Number</b>	<b>11</b>
<b>Site name</b>	Glas-ynys
<b>PRN number</b>	70541 (70518, 70519, 70520, 70521, 70522, 70523, 70534, 70535, 70536, 70537, 70538, 70539 & 70540)
<b>Grid reference</b>	SH4624566358
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>12</b>
<b>Site name</b>	Maen-Hir
<b>PRN number</b>	91101 (70510, 70511, 70513, 70515 & 90743)
<b>Grid reference</b>	SH4549066373
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>13</b>
<b>Site name</b>	Former Site of Standing Stone, Maen Hir
<b>PRN number</b>	36572
<b>Grid reference</b>	SH45516635
<b>Period</b>	Prehistoric
<b>Site type</b>	Standing stone
<b>Assessment category</b>	D
<b>Description</b>	Former site of a standing stone at the farmhouse, Maen Hir. As stated in Gwynedd Archaeological Trust Report 1174, the stone may have been re-used in one of the farm buildings (Smith, G 2013). This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>14</b>
<b>Site name</b>	Circular Feature, east of Tre Anna
<b>PRN number</b>	32805
<b>Grid reference</b>	SH45646615
<b>Period</b>	Unknown
<b>Site type</b>	Unassigned
<b>Assessment category</b>	E
<b>Description</b>	A circular feature was identified by during a geophysical survey on the east bank of the Afon Rhyd y Valley (Flook, R & Flook, M, 2013). The anomaly measured c.10m in diameter overall and produced a clearly defined positive response around one side, possibly indicating a ditch, and what appeared to be a central anomaly, possibly a pit or hearth. The report suggested it could be a barrow or possibly some sort of industrial feature. The location of this feature was visited as part of the walkover survey but no visible evidence was recorded.
<b>Impact</b>	Unknown
<b>Recommendation</b>	Archaeological activity may be more extensive than what is currently known from available evidence. Due to the potential for historic settlement activity to extend between Maenhir and Tre Anna and possibly further afield, it is recommended that archaeological evaluation is undertaken as a next stage, including geophysical survey and trial trenching.
<b>Photo archive reference</b>	G2706_010, G2706_011

<b>Feature Number</b>	<b>15</b>
<b>Site name</b>	Possible building east of Tre Anna
<b>PRN number</b>	61539
<b>Grid reference</b>	SH45646615
<b>Period</b>	Unknown
<b>Site type</b>	Unassigned
<b>Assessment category</b>	E
<b>Description</b>	An extremely faint rectangular feature was identified during a geophysical survey by Gwynedd Archaeological Trust on the west side of Afon Rhyd y Valley (Flook, R & Flook, M, 2013). The feature measured measuring 14.5m by 13m and was oriented northwest to southeast, roughly parallel to the river. The feature appeared to be some sort of enclosure formed by narrow very straight linears about 1.6m wide. The geophysical survey results was interpreted as a negative anomaly consistent with buried masonry and suggested walls, possibly of some sort of substantial building ( <i>ibid.</i> ). This location was visited as part of the current assessment; no physical remains were visible at surface level.
<b>Impact</b>	Unknown
<b>Recommendation</b>	Archaeological activity may be more extensive than what is currently known from available evidence. Due to the potential for historic settlement activity to extend between Maenhir and Tre Anna and possibly further afield, it is recommended that archaeological evaluation is undertaken as a next stage, including geophysical survey and trial trenching.
<b>Photo archive reference</b>	G2706_010, G2706_011

<b>Feature Number</b>	<b>16</b>
<b>Site name</b>	Tre Anna
<b>PRN number</b>	70571 (70557, 70558, 70559, 70560, 70561, 70562, 70563, 70564, 70565, 70566, 70567, 70568 & 70569)
<b>Grid reference</b>	SH4551566091
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>17</b>
<b>Site name</b>	Pond, N of Tre Anna
<b>PRN number</b>	56093
<b>Grid reference</b>	SH4548666100
<b>Period</b>	Post-medieval
<b>Site type</b>	Pond
<b>Assessment category</b>	C
<b>Description</b>	Site identified using historic Ordnance Survey mapping; source: McGuiness, N, 2014, Glastir Private Woodland Management Polygonisation. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>18</b>
<b>Site name</b>	Hut Group, Site of, Tre Anna, Dwyran
<b>PRN number</b>	3143
<b>Grid reference</b>	
<b>Period</b>	Roman
<b>Site type</b>	Settlement
<b>Assessment category</b>	B
<b>Description</b>	Identified in the regional Historic Environment Record as the site of an extensive Romano British village that occupies the whole of the bank (of the Afon Rhyd-y-Valley) upon which the farms of Maen Hir and the Tre Anna stand. In 1862, workmen cutting drains at Maen hir, came upon a layer of wood ashes mixed with fragments of pottery. Further digging produced four fragments of Samian, three pieces of pottery (probably Upchurch ware), and numerous pieces of roof tiles etc. There were also numerous loose stones, some of considerable size, lying around but no trace of walls, at a depth of 0.60m, below the layer of tiles and charred wood, there were flat stones laid horizontally to form a floor. The location of this feature appears unlikely to be affected by the scheme proposals but avoidance is recommended.
<b>Impact</b>	Unknown
<b>Recommendation</b>	Archaeological activity may be more extensive than what is currently known from available evidence. Due to the potential for historic settlement activity to extend between Maenhir and Tre Anna and possibly further afield, it is recommended that archaeological evaluation is undertaken as a next stage, including geophysical survey and trial trenching.



<b>Feature Number</b>	<b>19</b>
<b>Site name</b>	Gelliniog-wen
<b>PRN number</b>	92332 (70577, 70580, 70581, 70582, 70584, 70585, 70586 & 70588)
<b>Grid reference</b>	SH4594865770
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>20</b>
<b>Site name</b>	Circular Cropmark, Llanidan
<b>PRN number</b>	3154
<b>Grid reference</b>	SH456656
<b>Period</b>	Roman
<b>Site type</b>	Settlement
<b>Assessment category</b>	E
<b>Description</b>	Identified in the regional Historic Environment Record as a circular crop mark observed from the air about SH 456 656 (Historic Environment Record source reference: St. Joseph, 1966). Nothing visible on RAF aerial photography. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>21</b>
<b>Site name</b>	Former Road, Rhosyr
<b>PRN number</b>	60323
<b>Grid reference</b>	SH45006551
<b>Period</b>	Post-medieval
<b>Site type</b>	Road
<b>Assessment category</b>	C
<b>Description</b>	Identified in Hopewell, D, 2016 as a former road that is shown on the Evans' 1795 <i>Map of the Six Counties of North Wales</i> and now extant as an orphaned stretch of road. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>22</b>
<b>Site name</b>	Taldrwst
<b>PRN number</b>	70509 (70499, 70500, 70501, 70502, 70503, 70504, 70506, 70507 & 70508)
<b>Grid reference</b>	SH4482465505
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>23</b>
<b>Site name</b>	Melin Wen, Dwyran
<b>PRN number</b>	36138
<b>NPRN number</b>	407,925
<b>Grid reference</b>	SH4442265625
<b>Period</b>	Medieval
<b>Site type</b>	Mill
<b>Assessment category</b>	D
<b>Description</b>	<p>Possible medieval mill site, formerly located at the head of the tidal estuary of the Afon Braint. Shown on Ordnance Survey 1-inch to 25-mile County Series 1<sup>st</sup> Edition map. The RCAHMW data states that an undated but early twentieth century postcard (Anglesey County Archives Service, WSG/8/1) shows the mill dam and north-west side of the mill with an undershot waterwheel of composite construction, approximately 5.5m in diameter and 1.5m broad, with the cast iron shroud plates comprising seven sections held by plain wooden paddles. The RCAHMW data also states by the mid-1970s the building was used as a cowshed - it was built of stone construction with slate sills and wooden lintels and measured 12m by 6.15m, with a roof ridge at 5.7m; a filled wheel-pit, 1.6m wide, was attached the west gable, but the only internal survivor was a fragment of the sack hoist drive. The mill was converted to a dwelling in the 1990s but was demolished after floods; the site is now occupied by a large modern bungalow, and the course of the river has been straightened and moved some 40 metres to the northwest.</p>
<b>Impact</b>	Likely
<b>Recommendation</b>	Avoidance/Archaeological monitoring presence during any scheme related ground investigation works and/or any proposed groundworks in the vicinity.
<b>Photo archive reference</b>	G2706_028



<b>Feature Number</b>	<b>24</b>
<b>Site name</b>	Bryntirion
<b>PRN number</b>	70341 (70327, 70328 & 70329)
<b>Grid reference</b>	SH4516365141
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>25</b>
<b>Site name</b>	Gelliniog-bach
<b>PRN number</b>	70325 (70323 & 70324)
<b>Grid reference</b>	SH4530465093
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A



<b>Feature Number</b>	<b>26</b>
<b>Site name</b>	Cae'r-llechau
<b>PRN number</b>	70695 (70574, 70575, 70576, 70578, 70579, 70583, 70589, 70594, 70597, 70598, 70694 & 91132)
<b>Grid reference</b>	SH4480264873
<b>Period</b>	Post-medieval
<b>Site type</b>	Farmstead
<b>Assessment category</b>	C
<b>Description</b>	A post-medieval farmstead. This farmstead was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>27</b>
<b>Site name</b>	Burial Chamber, Site of, Cae'r Llechau
<b>PRN number</b>	3076
<b>Grid reference</b>	SH44706470
<b>Period</b>	Prehistoric
<b>Site type</b>	Chambered tomb
<b>Assessment category</b>	D
<b>Description</b>	Identified in the regional Historic Environment Record as a dolmen, demolished before 1871. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>28</b>
<b>Site name</b>	Cae'r Llechau
<b>PRN number</b>	66964
<b>Grid reference</b>	SH4481064910
<b>Period</b>	Post-medieval
<b>Site type</b>	House
<b>Assessment category</b>	B
<b>Description</b>	A Grade II listed house built around 1830 (ref.: 84997). This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>29</b>
<b>Site name</b>	Cropmarks, north of Rhuddgaer
<b>PRN number</b>	3079
<b>Grid reference</b>	SH445646
<b>Period</b>	Unknown
<b>Site type</b>	Feature
<b>Assessment category</b>	E
<b>Description</b>	Identified in the regional Historic Environment Record as soil marks visible via aerial photography, although there is nothing visible on the ground. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>30</b>
<b>Site name</b>	Stepping Stones, Rhuddgaer
<b>PRN number</b>	7232
<b>Grid reference</b>	SH44056468
<b>Period</b>	Unknown
<b>Site type</b>	Stepping stones
<b>Assessment category</b>	C
<b>Description</b>	Identified in the regional Historic Environment Record as a line of stones across the river with a ford (bed of small stones) on the downstream side. Suggested in Davidson & Jones (GAT Report 251, 1997) as a possible medieval crossing point. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>31</b>
<b>Site name</b>	Dros-yr-Afon, Newborough
<b>PRN number</b>	90363
<b>Grid reference</b>	SH4391264811
<b>Period</b>	Unknown
<b>Site type</b>	Dwelling
<b>Assessment category</b>	E
<b>Description</b>	Identified in the regional Historic Environment Record as a dwelling identified as Dros-yr-Afon on the 1-inch to 25-mile Ordnance Survey County Series First Edition map of 1889. This feature location was not visited as part of the walkover survey and currently is not affected by the scheme proposals.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

<b>Feature Number</b>	<b>32</b>
<b>Site name</b>	Pont Cadach
<b>NPRN number</b>	23723
<b>Grid reference</b>	SH44326553
<b>Period</b>	Unknown
<b>Site type</b>	Bridge
<b>Assessment category</b>	C
<b>Description</b>	Pont Cadach a modern road bridge that carries the A4080 over the Afon Braint. Described in the RCAHMW data as a four centred arch bridge that is widened on the east side by 5 feet by an elliptical arch, making the total width within the parapets to 14ft 3ins; the arch, with grit voussoirs, is set back slightly from the main wall face. New outfalls downstream of the bridge may be constructed here as part of the flood risk management scheme.
<b>Impact</b>	None
<b>Recommendation</b>	N/A

## 4 CONCLUSION & RECOMMENDATIONS

Gwynedd Archaeological Trust was commissioned by Binnies to undertake an archaeological assessment to inform the development of concept and outline designs for a proposed flood risk management scheme at Dwyran, Ynys Môn. The proposed scheme includes new flood walls/embankments at Ger-y-Felin and Tyn y Parc and outfalls downstream of Pont Cadach at the western end of the assessment area, followed by modification/replacement of a tidal outfall, natural flood management measures and possible property level protection along Afon Rhyd y Valley, in the central part of the assessment area.

The assessment was undertaken during January and February 2022 and included desk-based research and a walkover survey. The research concluded that the proposed scheme was located within a predominantly rural and agrarian landscape, with varied archaeology present including prehistoric, Roman period, medieval and post-medieval activity. The key areas within the scheme zone were the Roman activity at Tre Anna Farm (Features 8, 14, 15 and 18) that included evidence for settlement and artefacts, and the medieval activity near Ger-y-Felin comprising a former corn mill (Feature 23). GAT completed a geophysical survey at Tre Anna Farm in 2013 and several anomalies were detected that could be linked to the former settlement, including a circular feature and possible buildings. Topographical changes also suggested platforms that may be the last visible vestiges of paddocks and enclosures. The LiDAR data for the area consulted for the assessment also identified anomalies that appeared to correspond with the results of the geophysical survey.

A walkover survey was completed as part of the assessment and inspected the scheme route along Afon Rhyd y Valley, the geophysical survey area targeted in 2013, the former location of the corn mill near Ger-y-Felin, as well as Tyn y Parc and Pont Cadach. The Afon Rhyd y Valley was found to include modern waterway and drainage controls, whilst at the geophysical survey area, no additional archaeological activity was identified. At the corn mill location, no further archaeological evidence was identified, whilst the local area was characterised by modernised dwellings and developments – as was Tyn y Parc; Pont Cadach was a modern, late 20<sup>th</sup> century road bridge.

Based on the results of the archaeological assessment, it is apparent that there are areas of archaeological activity and potential within the proposed flood risk management scheme. Within the Afon Rhyd y Valley works extent, the area between Tre Anna and Maen Hir farms is of particular significance, with Roman period settlement activity identified through artefact recovery, topography and geophysical survey and evident as possible rectangular buildings and other features. The full extent of this activity has yet to be determined and requires further



investigation to inform the design options. It is therefore recommended that a staged programme of archaeological evaluation is undertaken, including a geophysical survey to expand on the results from 2013, followed by targeted trial trenching.

Within the Tyn y Parc and Ger-y-Felin works extent, the area of main significance is the site of the former Melin Wen corn mill (Feature 23). Whilst the structure has been demolished, there is still potential for associated activity, including past land management and evidence of the original watercourse, prior to it being straightened and moved some 40 metres to the northwest. Based on this, it is recommended that any forthcoming geotechnical ground investigation works in this area should be monitored by an archaeological watching brief. The results of this may inform further archaeological mitigation or investigation strategies.

## 5 SOURCES CONSULTED

1. Anon. 1846 'Antiquitates Parochiales' , *Archaeologia Cambrensis* Vol. III Supplement
2. Anglesey Archives W/Maps/54 *Enclosure Award for Newborough and Llangeinwen 1843*
3. Anglesey Archives WR/418 Map and Schedule from *Plas Coch and Bryn-ddu Estate Maps 1875*
4. Carr, A. 1982 *Medieval Anglesey*
5. Chartered Institute for Archaeologists, 2020, *Standard and guidance for historic environment desk-based assessment* (Chartered Institute for Archaeologists, 2020);
6. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
7. Chartered Institute for Archaeologists, 2020, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
8. Cooke, R, 2013, Bodrida Wind Turbine, Brynsiencyn, Isle of Anglesey: Archaeological Desk Based Assessment. Aeon Archaeology Report 0009
9. Cooke, R. & Evans, R, 2012 , Proposed Wind Turbine at Tre Ifan, Brynsiencyn, Anglesey: Archaeological Assessment. Gwynedd Archaeological Trust Report 1086
10. Davidson, A. & Jones, S 1997 Coastal Erosion Survey: Anglesey. Gwynedd Archaeological Trust Report 251.
11. Davidson, A. 2000 *Historic Churches of Gwynedd, Gazetteer of Churches* Unpublished GAT Report 391
12. Davidson, A, 2002 , The Medieval Mills of Anglesey: Archaeological Threat Related Assessment. Gwynedd Archaeological Trust Report 405.
13. English Heritage, 1991, *Management of Archaeological Projects (MAP2)*
14. Flook, R & Flook, M, 2013 , Findspots and Archaeological Remains Pilot Project: Roman SW Anglesey Landscape Survey. Gwynedd Archaeological Trust Report 1127
15. Gresham, C.A. 1939 'The Aberconwy Charter', *Archaeologia Cambrensis* XCIV, Part II, 123-162
16. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1 (The Welsh Archaeological Trusts, 2018);
17. *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
18. Hays, Rh. W. 1963 *The History of the Abbey of Aberconway 1186-1537* (Cardiff)
19. Historic England, 2015, *Management of Research Projects in the Historic Environment (MoRPHE)*

20. Hopewell, D., 2016 , Medieval and Post-Medieval Scheduling Enhancement: Medieval and Post-Medieval Roads. Southern Anglesey. Gwynedd Archaeological Trust Report 1315.
21. Jones, E.A. 1926 'The Enclosure Movement in Anglesey (1788-1866) continued', *Transactions of the Anglesey Antiquarian Society and Field Club* 1926, 31-89)
22. National Archives Tithe Maps of the Parish of Llangeinwen 1839 and Llanidan 1841
23. National Library of Wales Ms. Maps Vol. 92 Plan of Quirt from *Plans and Surveys of lands in the Counties of Carnarvon and Anglesey by John Corris* 1791-2 [Quirt Folio 38]
24. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.10
25. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.11
26. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.12
27. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.14
28. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.15
29. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.16
30. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.6
31. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.7
32. Ordnance Survey 1-inch to 25-mile County Series Map Sheet XXII.8
33. Rees C. & Jones M., 2013. Results of Archaeological Works at Land adjacent to Penbryn Surgery, Dwyran, Anglesey. C.R Archaeology Report Number CR32-2013
34. Royal Commission on Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives*
35. Smith G 2003, Prehistoric Funerary and Ritual Monument Survey: West Gwynedd and Anglesey. Gwynedd Archaeological Trust Report 478
36. Smith G, 2009, Bryn Gwyn Stones, Brynsiencyn, Anglesey. Evaluation Excavation 2008: Preliminary Report. Gwynedd Archaeological Trust Report 790
37. Smith G, 2011, Bryn Gwyn Stones, Brynsiencyn, Anglesey. Excavation 2010 Preliminary Report. Gwynedd Archaeological Trust Report 942
38. Smith G, 2013, The Bryn Gwyn Stone Circle, Brynsiencyn, Anglesey. Publication Report. Gwynedd Archaeological Trust Report 1174
39. Smith G. and Hopewell, D. 2007. Prehistoric Funerary and Ritual Monument Survey 2006-7: Assessment of monuments at risk in an agricultural landscape: Ceremonial monuments: Henges and Stone circles. Gwynedd Archaeological Trust Report 663.
40. Smith G., and Steele, N, 2005 , Pan-Wales Prehistoric Funerary and Ritual Sites Survey: Trial Data Synthesis. Gwynedd Archaeological Trust Report 579
41. X/Poole/3222 *Printed note about the Lordship of Colliniog alias Celleinioc [sic] describing the boundaries* 1806 (Gwynedd Archives)

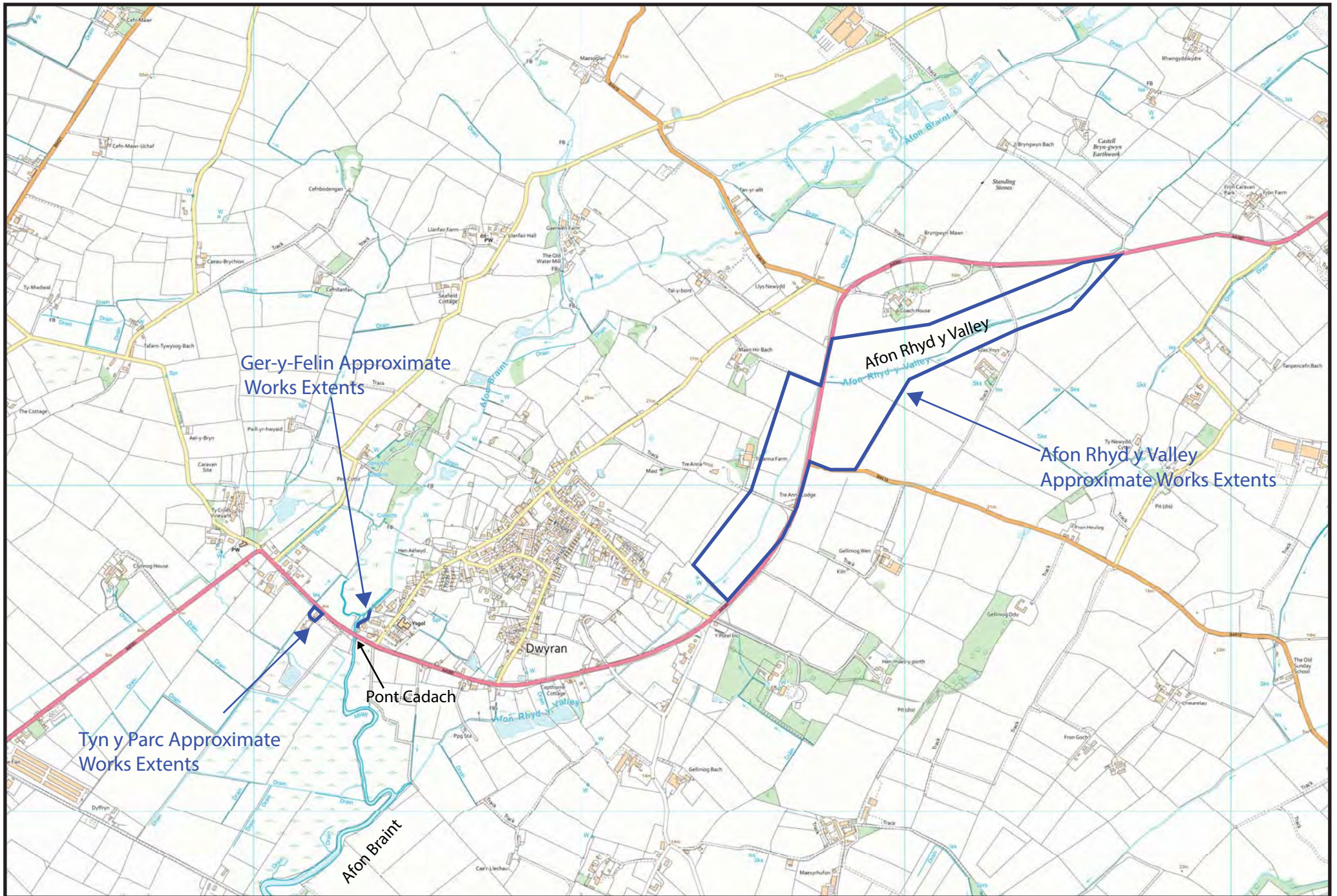


Figure 01: Location Map detailing main flood protection areas (in blue). Scale: 1 to 15000@A4.



Figure 02: Estate Plan of Quirt belonging to the Revd Mr Edward Hughes, by John Corris 1792. The northern boundary lies to the south of the study area, which lay within Llangeinwen Common. This boundary was also the extent of the Geilleniog Monastic Grange in medieval times, indicating the northern extent of agricultural activity from medieval times until enclosure in 1815.

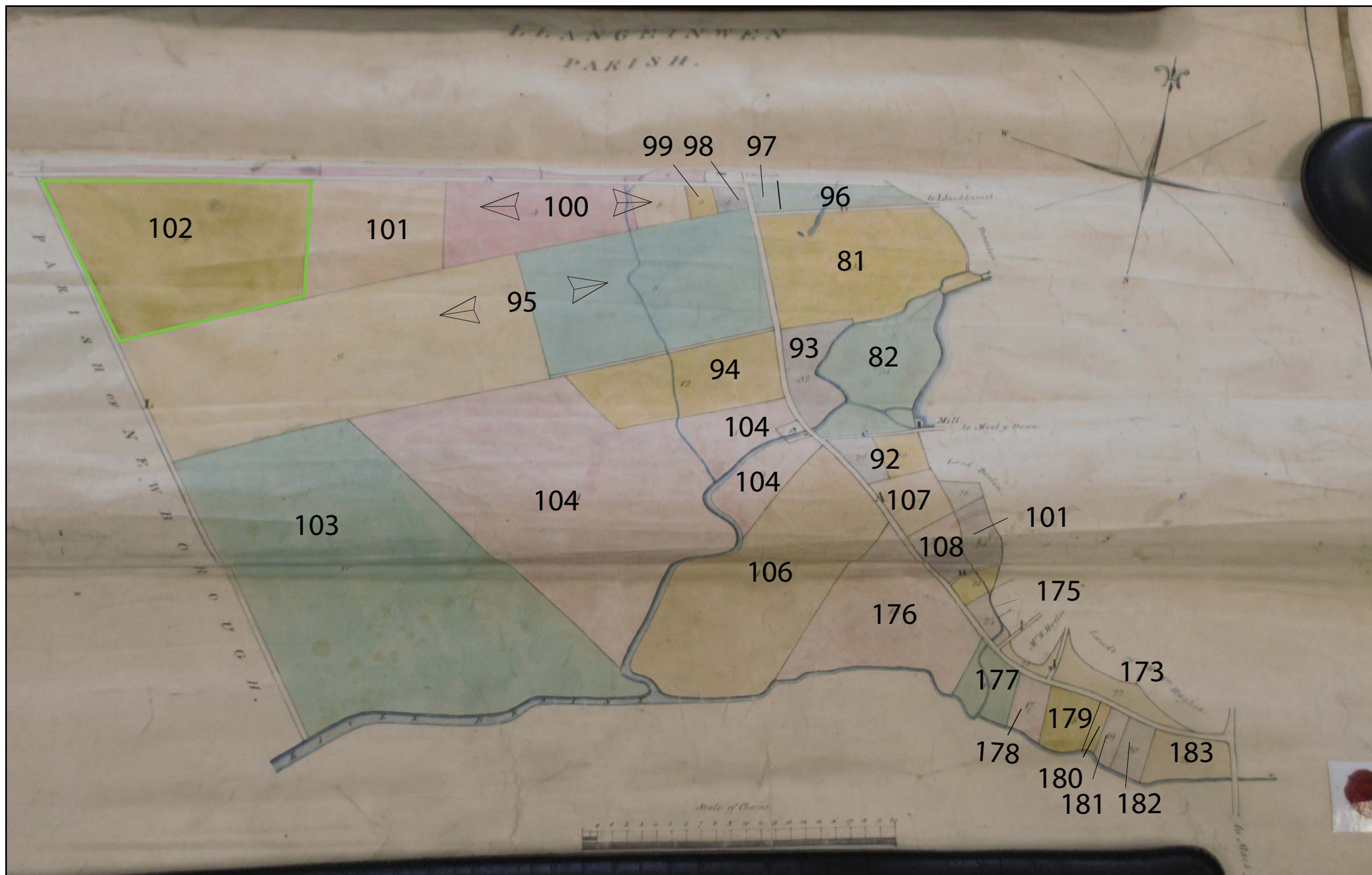


Figure 03: Enclosure Award for Newborough and Llanginwen 1843 (copy from 1815 original map) (Anglesey Archives W/Maps/54), overlain with tithe map plot numbers in black. The area of the later Parc farm is outlined in green. Scale as shown on the map.

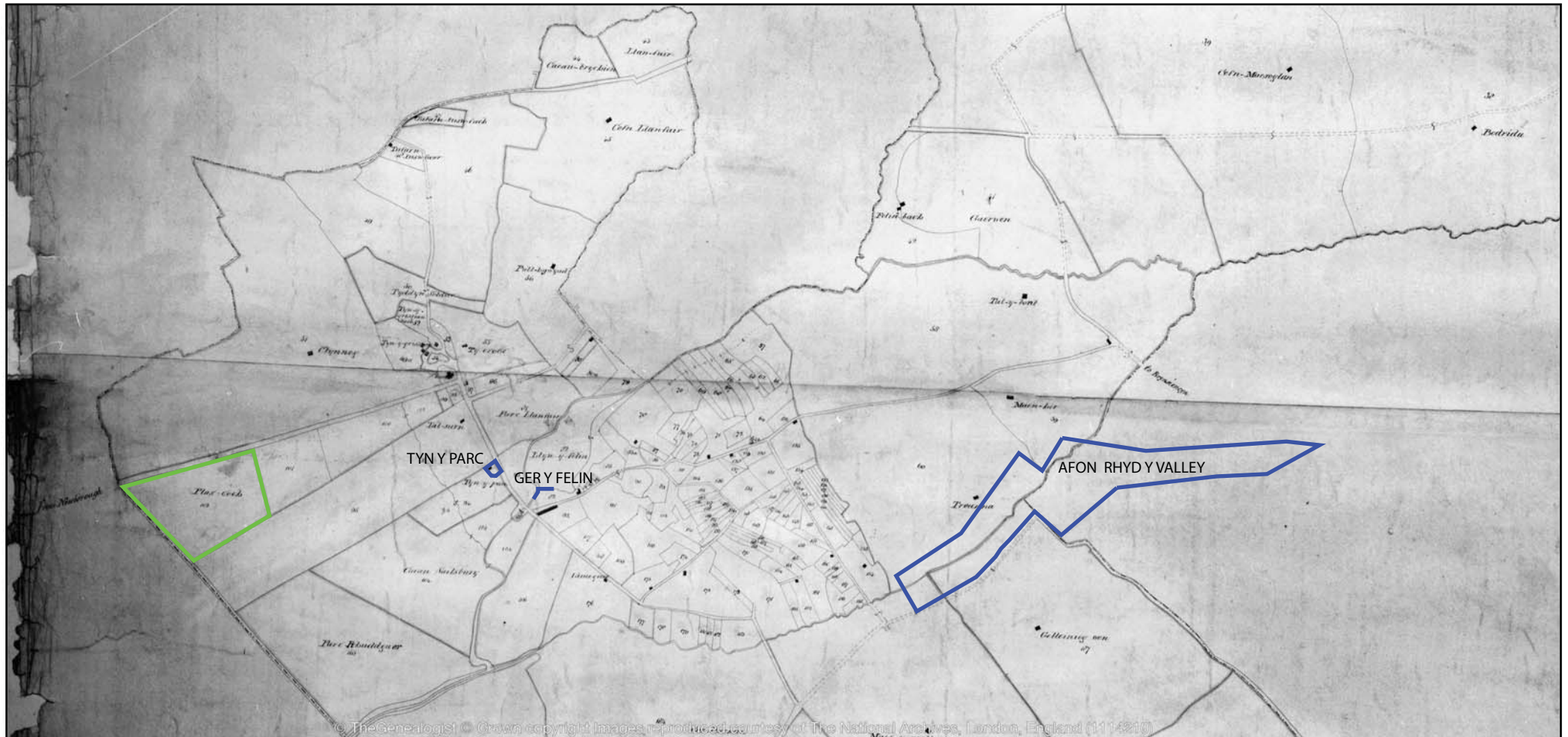


Figure 04: Detail from the Llangeinwen Tithe map of 1839 (National Archives) with the main flood protection areas shown in blue. Area of the later development of Parc farm outlined in green. Not to Scale

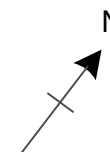
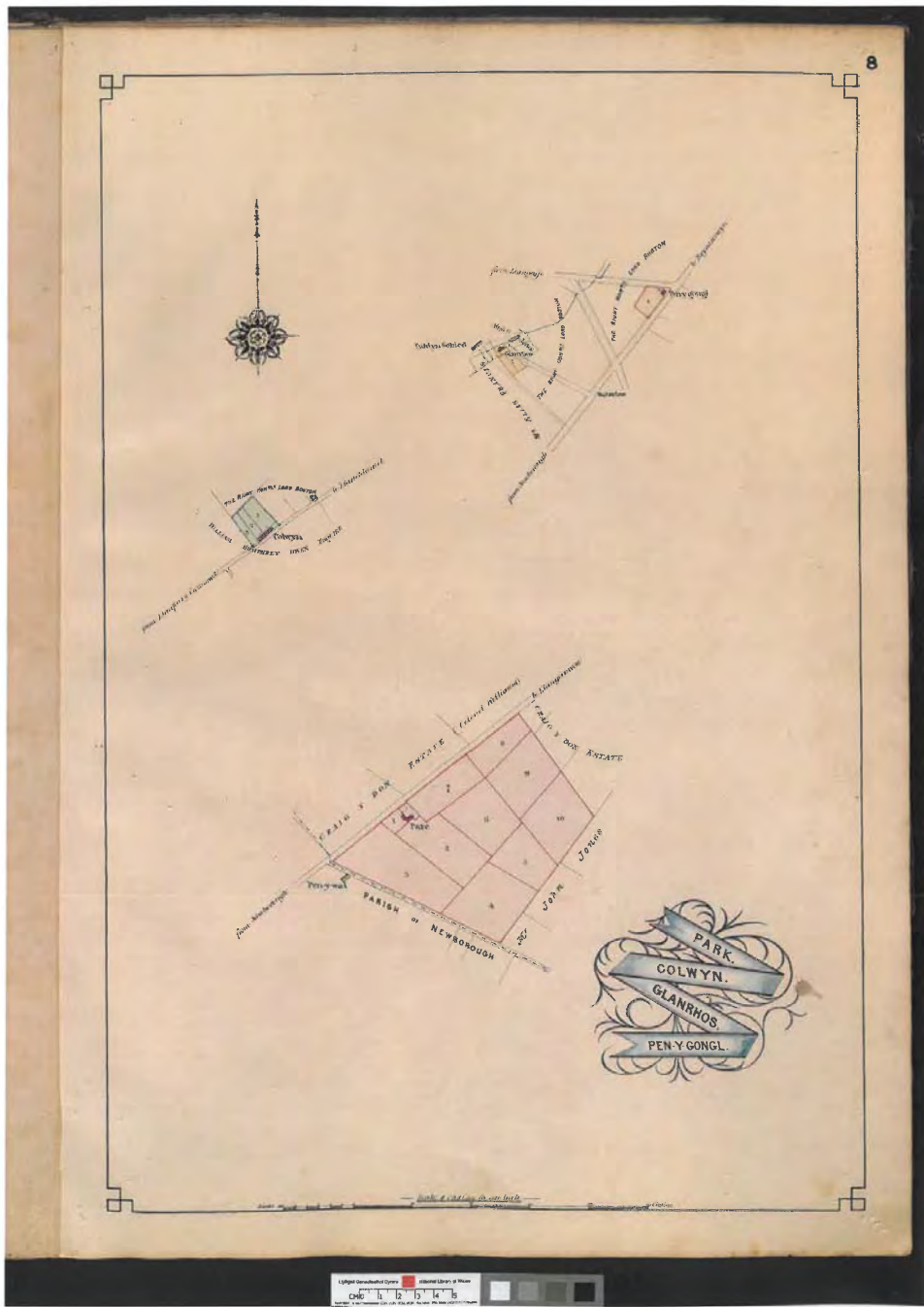


Figure 05: Detail from the Llanidan Tithe map of 1841 (National Archives) with the main flood protection area shown in blue. Not to Scale





8

Reference

NAM <sup>e</sup> or TENEMENT	Colour Plan	PARISH	1875 Plan	DESCRIPTION	Acres	Value
Yark	Pink	LLANGINWEN	1	Household	1 1/2	100
			2	Two Acre 1/2	2 1/2	100
			3	Three Acre	3	100
			4	Four Acre 1/2	4 1/2	100
			5	Five Acre	5	100
			6	Six Acre 1/2	6 1/2	100
			7	Seven Acre	7	100
			8	Eight Acre	8	100
			9	Nine Acre	9	100
			10	Ten Acre	10	100
Cubwyn	Blue	LLANDANIEL	1	1 Cottage and Garden	1 1/2	100
			2	2 Cottages and Garden	2 1/2	100
			3	3 Cottages and Garden	3 1/2	100
Glanrhos	Yellow	LLANIDAN	1	1 Cottage and Garden	1 1/2	100
Pen-y-gongl	Brown	do	1	1 Cottage and Garden	1 1/2	100
					102 1/2	100

Figure 06: Map and Schedule from *Plas Coch and Brynddu Estate Maps* of 1875 (Anglesey Archives WR/418), showing how the former common land was divided into farms (in this case Parc) in the years following the 1815 enclosure of Llangeinwen common.

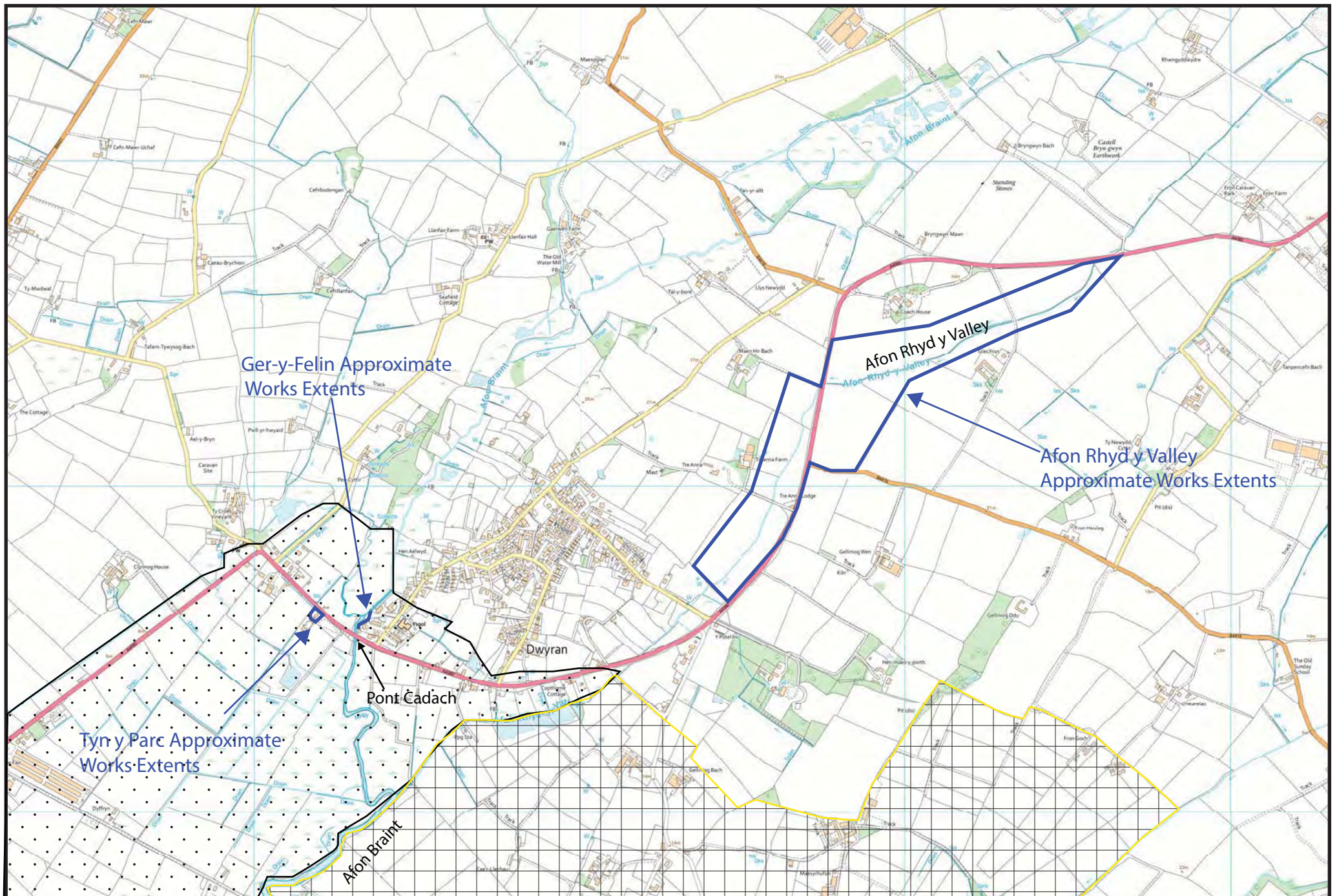


Figure 07: Location Map showing the Works Extents (blue) The lined area covers the area of the former Geilleniog Monastic Grange, and the dotted area the former area of Llangeinwen Common which was enclosed in 1815.

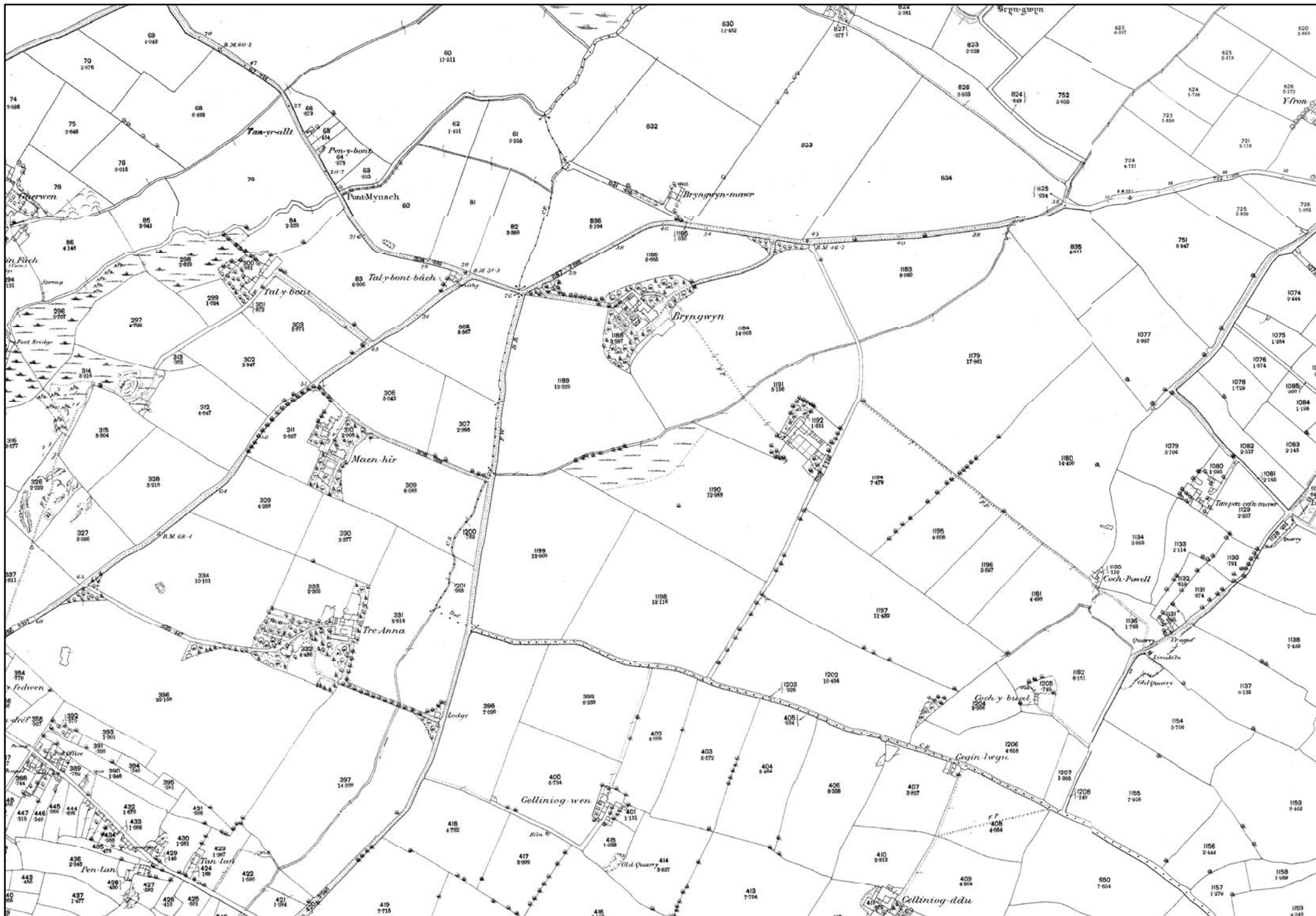


Figure 08: Reproduction of the 1st edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1889, incorporating the Rhyd y Valley works extents. Scale: 1:7500@A4.

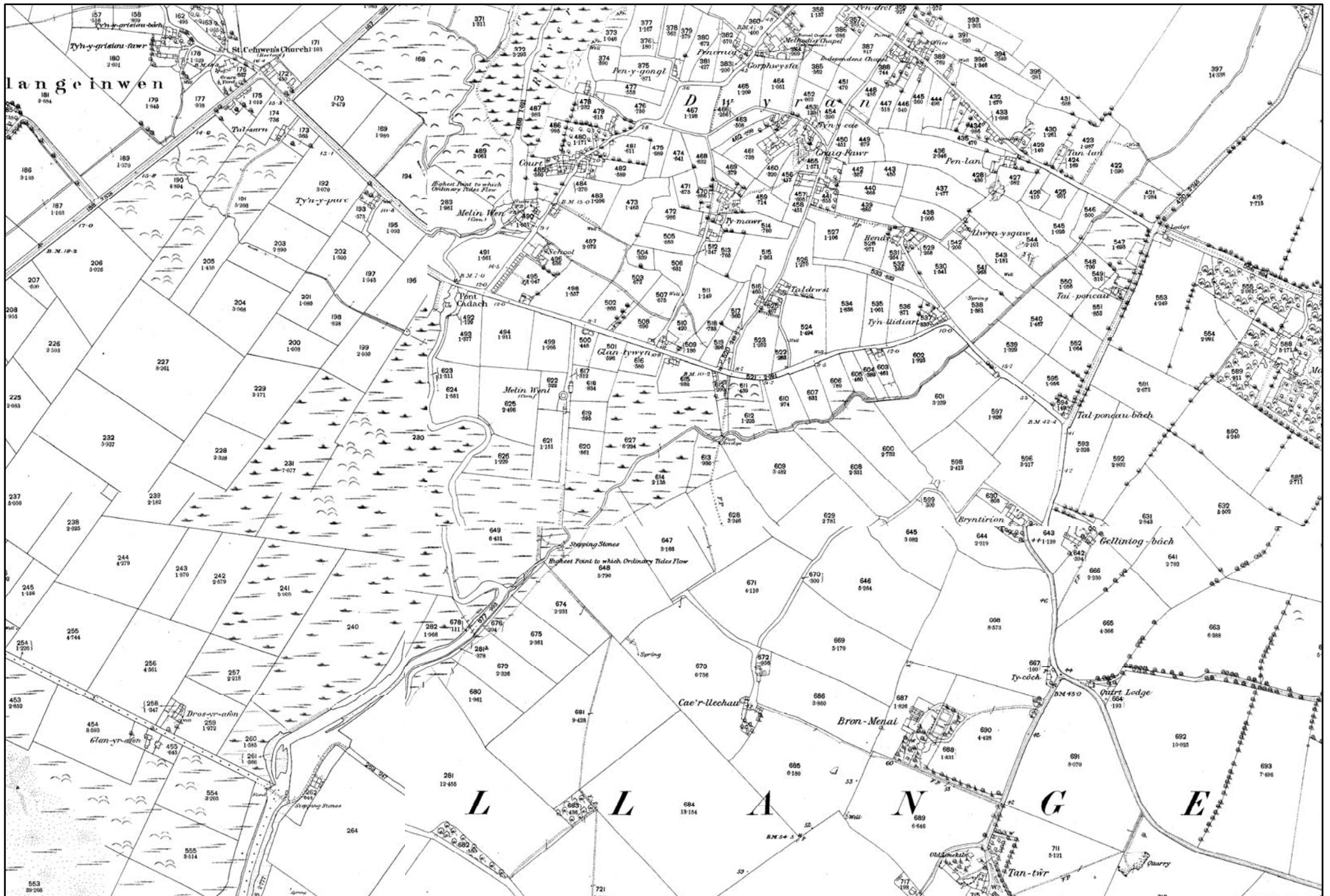


Figure 09: Reproduction of the 1st edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1889, incorporating the Ger-y-Felin and Tyn y Parc works extents. Scale: 1:7500@A4.

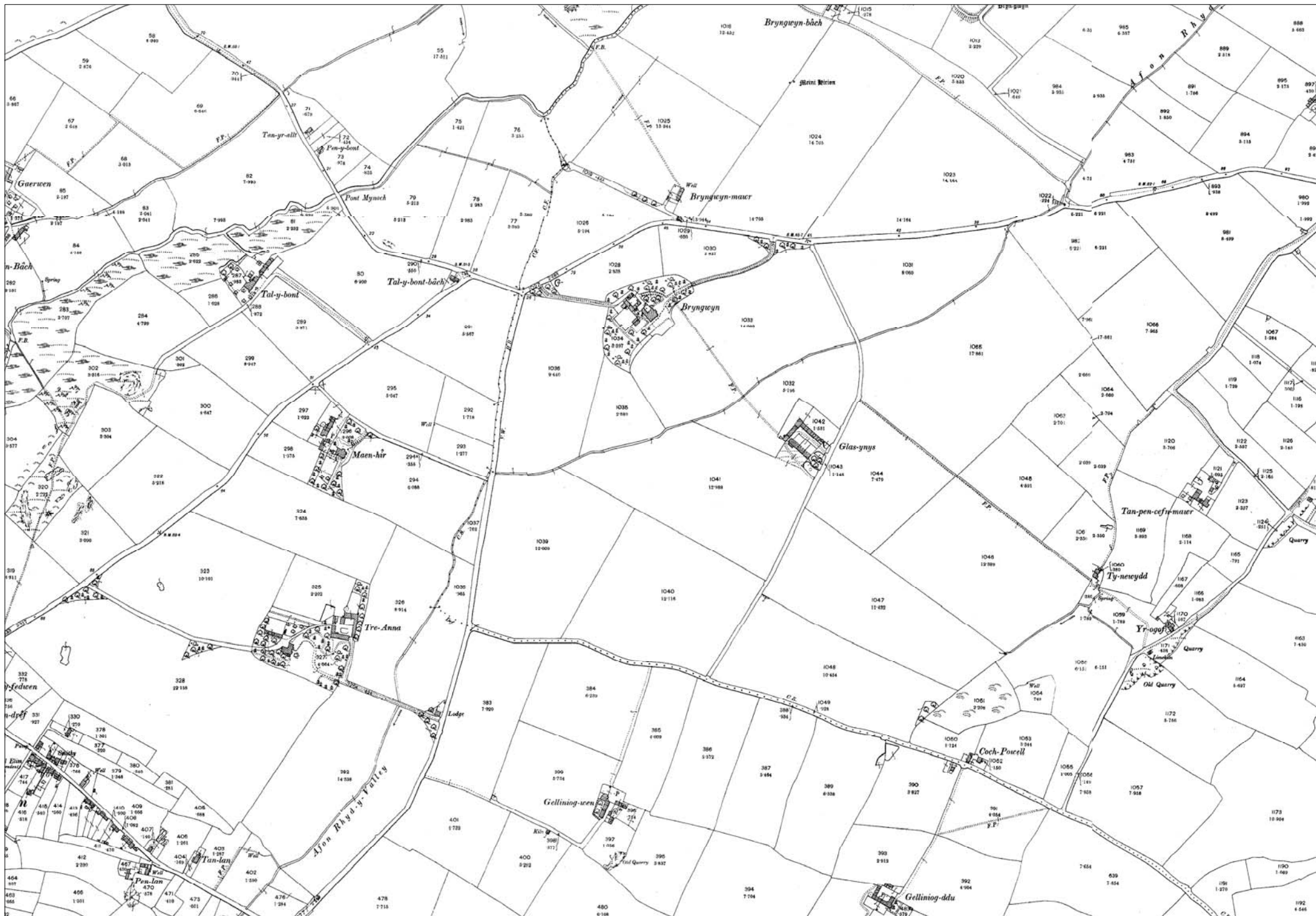


Figure 10: Reproduction of the 2nd edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1900, incorporating the Afon Rhyd y Valley works extents. Scale: 1:7500@A4.

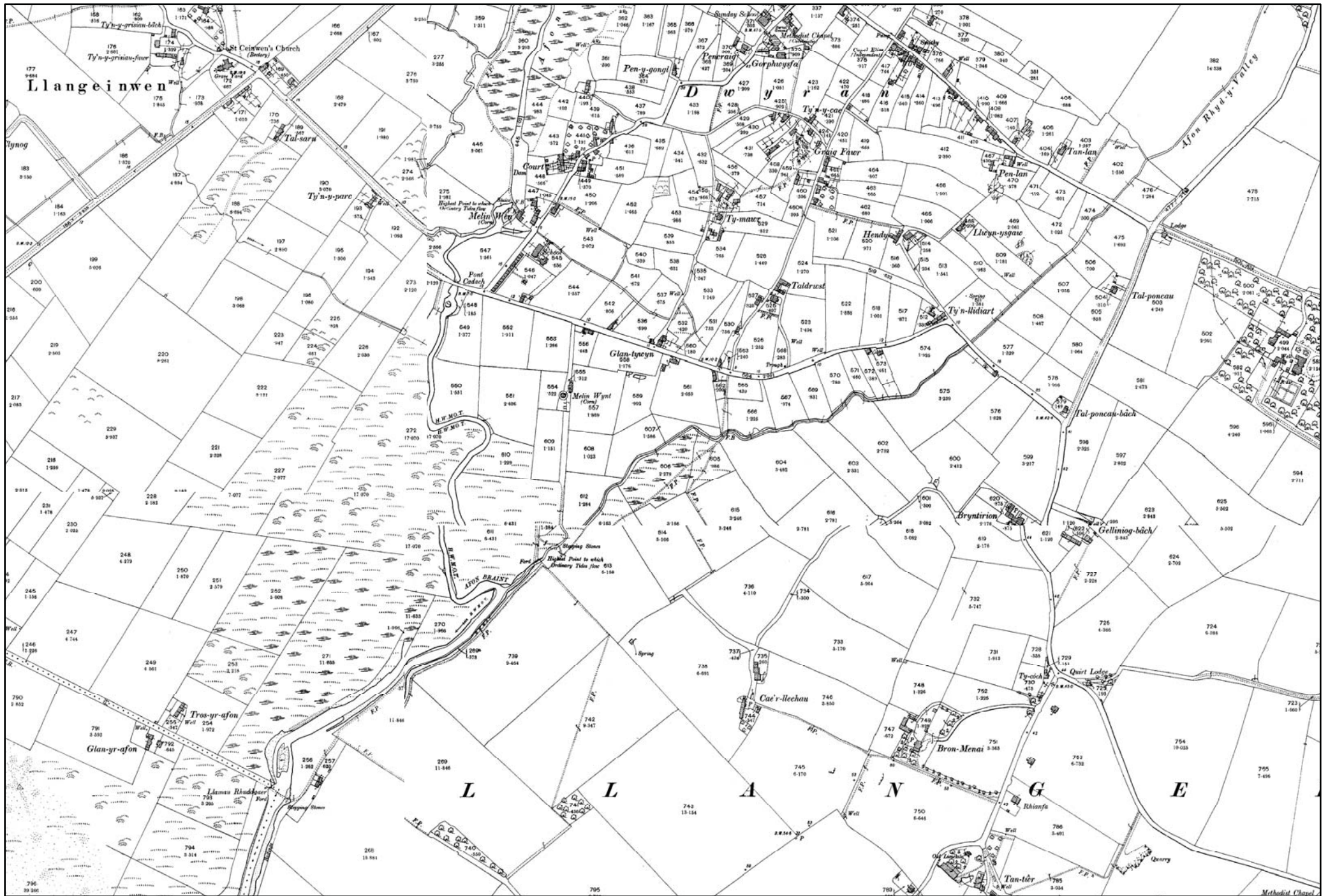


Figure 11: Reproduction of the 2nd edition 1-inch to 25-mile Ordnance Survey Wyn County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1900, incorporating the Ger-y-Felin and Tyn y Parc works extents. Scale: 1:7500@A4.

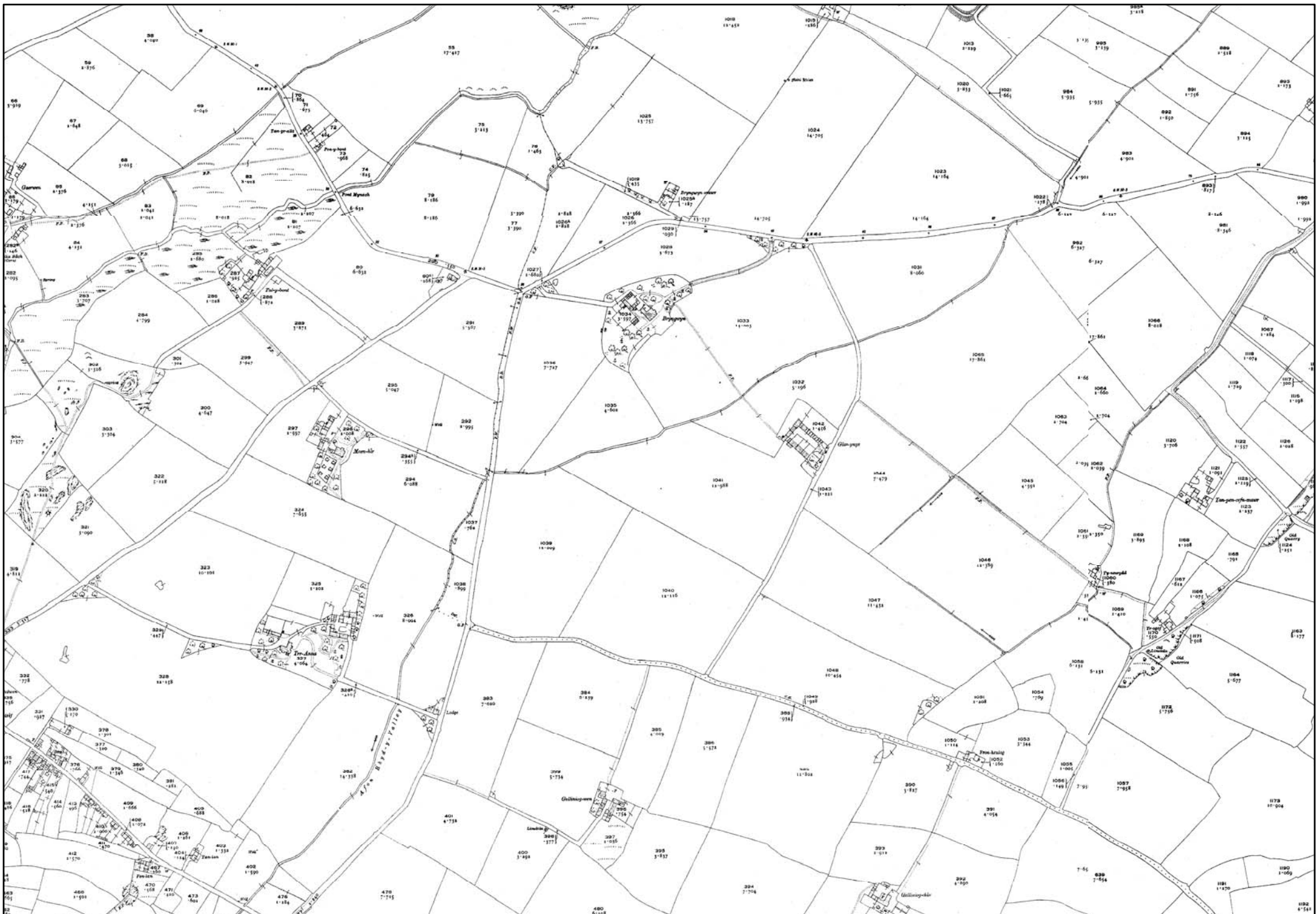


Figure 12: Reproduction of the 3rd edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1920, incorporating the Afon Rhyd y Valley works extents. Scale: 1:7500@A4.



Figure 13: Reproduction of the 3rd edition 1-inch to 25-mile Ordnance Survey County Series maps (Sheets XXII.6, XXII.7, XXII.8, XXII.10, XXII.11, XXII.12, XXII.14, XXII.15 & XXII.16), published in 1920, incorporating the Ger-y-Felin and Tyn y Parc works extents. Scale: 1:7500@A4.



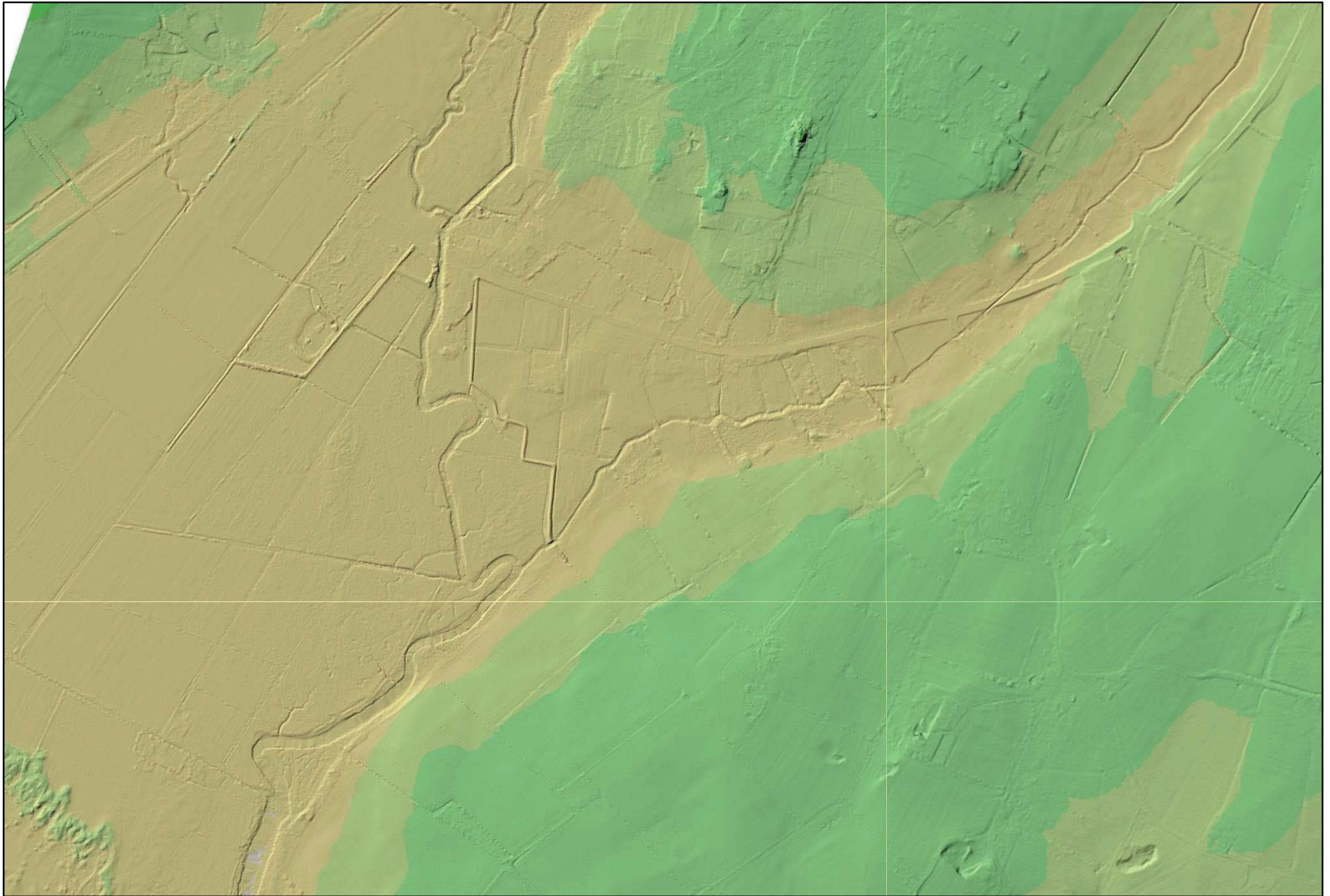


Figure 14: Reproduction of the LiDAR 1m Digital Terrain Model data incorporating the Ger-y-Felin and Tyn y Parc works extents. Map sheets SH4465 and SH4565. Source: Welsh Government Open Licence Data. Scale: 1:7500@A4.

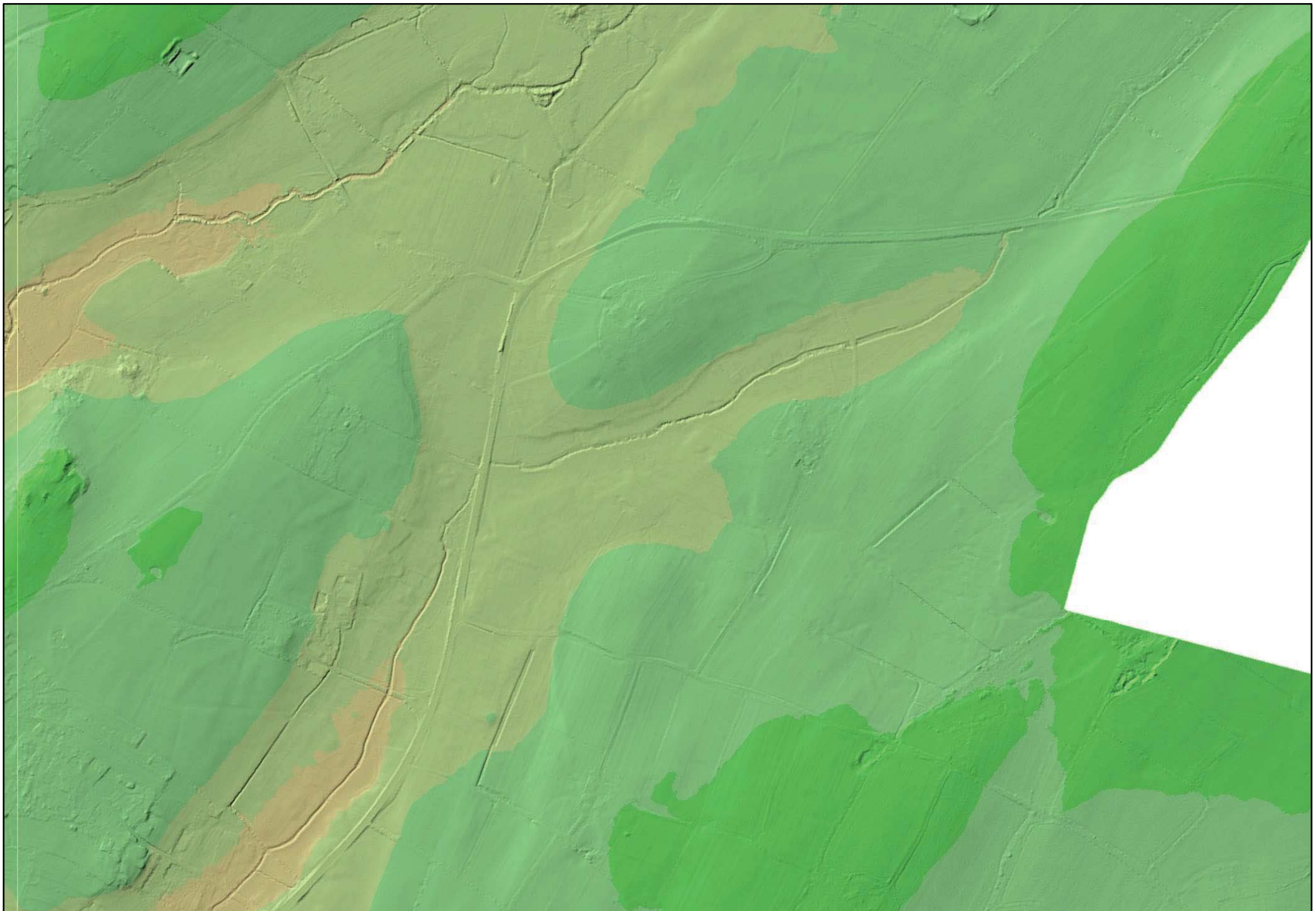
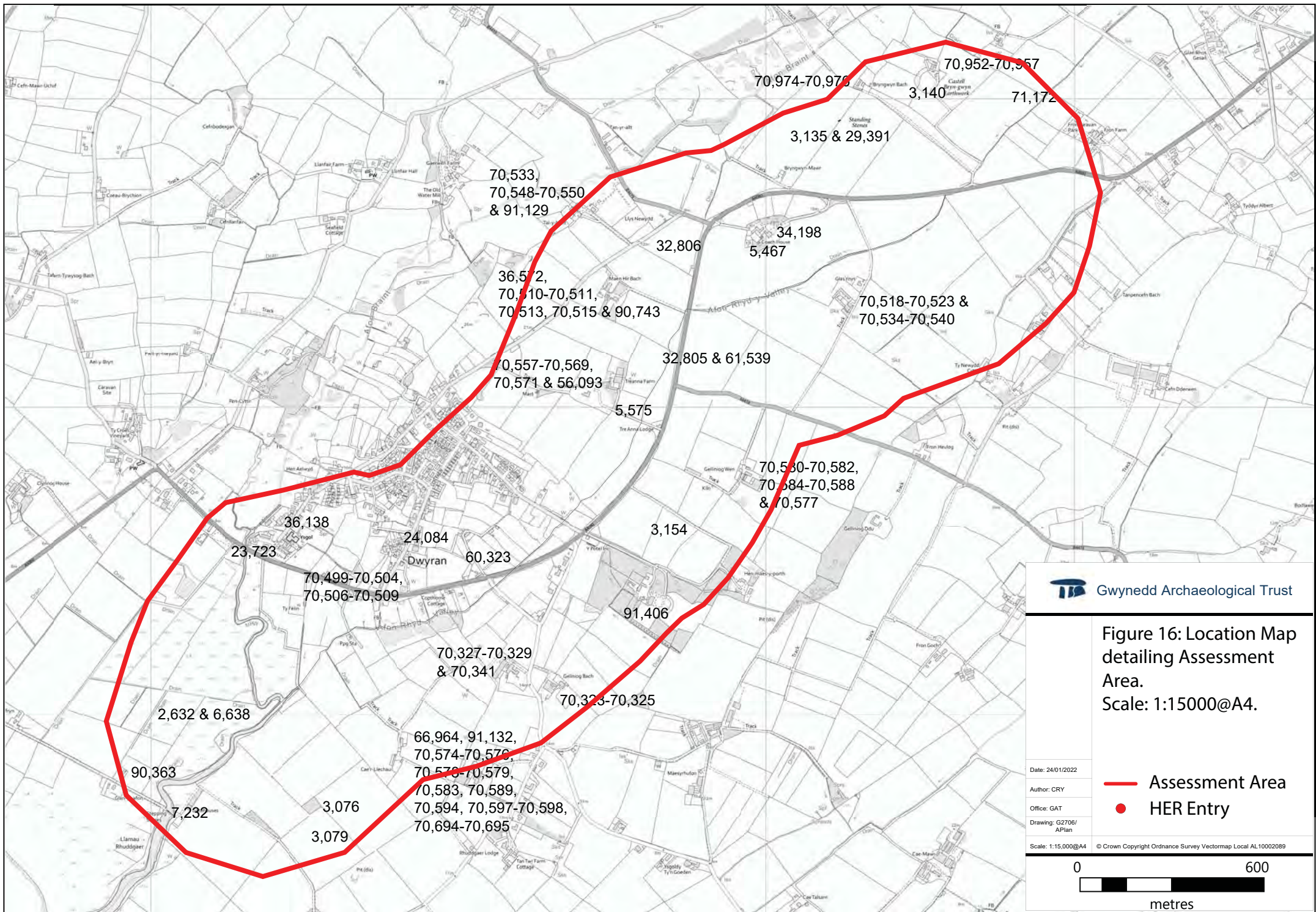


Figure 15: Reproduction of the LiDAR 1m Digital Terrain Model data incorporating the Afon Rhyd y Valley works extents. Map sheets SH4465 and SH4565.  
Source: Welsh Government Open Licence Data. Scale: 1:7500@A4.



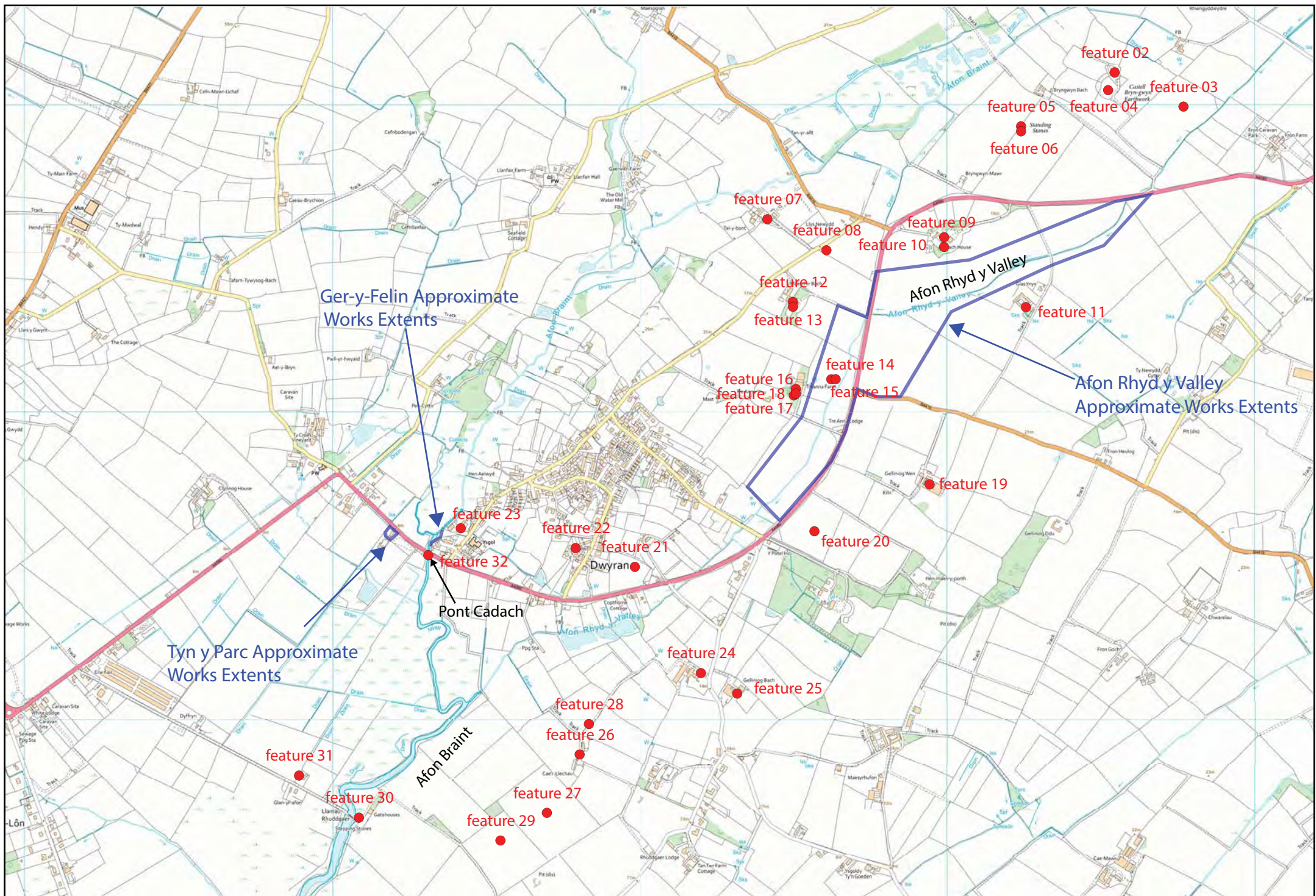


Figure 17: Location Map detailing main flood protection areas (in blue) and Gazetteer Features. Scale: 1 to 15000@A4. © Crown Copyright Ordnance Survey AL10002089



**Plate 01: Improved field of pasture and stone wall boundary beside Afon Rhyd y Valley, north of Coach House/Bryn Gwyn Hall (archive reference: G2607\_004).**



**Plate 02: Stretch of Afon Rhyd y Valley next to Dwyran, off unnamed road (archive reference: G2706\_023).**



Plate 03: Improved field of pasture along Afon Rhyd y Valley, with Coach House/Bryn Gwyn Hall in view (archive reference: G2706\_003).



Plate 04: Field between Maen Hir (visible in background) and A4080; with cows (archive reference: G2706\_008).



**Plate 05: Improved field of pasture south of Treann Lodge, with Treann farm in background (archive reference: G2706\_018).**



**Plate 06: Rough field of pasture off A4080, opposite entrance to Maes y Porth (archive reference: G2706\_021).**



**Plate 07: Rough field of pasture east of A4080, with Afon Rhyd y Valley continuing behind Copthorne Cottage (archive reference: G2706\_025).**



**Plate 08: Convergence of Afon Braint and Afon Rhyd y Valley (archive reference: G2706\_039).**





Plate 09: Culvert for Afon Rhyd y Valley as it passes beneath A4080 (archive reference: G2706\_005).



Plate 10: Culvert for Afon Rhyd y Valley at entrance to Maen Hir (archive reference: G2706\_006).



Plate 11: Feature 14 - Location of archaeological assets in field between Maen Hir and Treann (archive reference: G2706\_011).



Plate 12: Flood embankment looking toward A4080 (archive reference: G2706\_036).



Plate 13: Flood embankment along public right of way; scale: 1x1m (archive reference: G2706\_035).



Plate 14: Tidal outflow at Afon Rhyd y Valley; scale: 1x1m (archive reference: G2706\_037).



**Plate 15: Example of stone façade of flood embankment beside tidal outflow ; scale: 1x1m (archive reference: G2706\_038).**



**Plate 16: Feature 23 - Approximate location of Melin Wen off Afon Braint (archive reference: G2706\_028).**



Plate 17: Tyn y Parc (archive reference: G2706\_032).



Plate 18: Yard adjacent to Tyn y Parc (archive reference: G2706\_031).



Plate 19: Pont Cadach over the Afon Braint (archive reference: G2706\_030).



Plate 20: Afon Braint from Pont Cadach (archive reference: G2706\_033)

## **APPENDIX I**

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

# DWYRAN FLOOD RELIEF SCHEME (G2706)

## WRITTEN SCHEME OF INVESTIGATION FOR DESK-BASED ASSESSMENT

*Prepared for*




*Binnies*

***January 2022***



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust



Approvals Table				
	Role	Printed Name	Signature	Date
Originated by	Document Author	Stuart Reilly		24/01/22
Reviewed by	Document Reviewer	John Roberts		24/01/22
Approved by	Principal Archaeologist	John Roberts		24/01/22

Revision History			
Rev No.	Summary of Changes	Ref Section	Purpose of Issue
01	Reference change from 'mitigation' to 'desk-based assessment' Annotation changed to match caption for Figure 02 HER search area widened	1.2  Figure 02  2.0  Figure 03	GAPS approval

All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name

Signature

Date

## DWURAN FLOOD RELIEF SCHEME (G2706)

### WRITTEN SCHEME OF INVESTIGATION FOR DESK-BASED ASSESSMENT

Prepared for *Binnies*, January 2022

1	INTRODUCTION .....	5
1.1	Aims and Objectives .....	6
1.2	Monitoring Arrangements .....	7
1.3	Historic Environment Record .....	8
2	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND .....	9
3	METHODOLOGY.....	17
3.1	Introduction.....	17
3.2	Assessment (Desktop Study).....	17
3.3	Walkover Survey .....	19
3.4	Gazetteer of Features.....	20
3.5	Data Management Plan.....	23
4	PERSONNEL.....	26
5	HEALTH AND SAFETY .....	27
6	SOCIAL MEDIA .....	28
7	INSURANCE.....	29
7.1	Public/Products Liability.....	29
7.2	Employers Liability.....	29
7.3	Professional Indemnity .....	29
8	SOURCES CONSULTED .....	30
	FIGURE 01.....	31
	Site location and key features. Source: <i>Binnies</i> .....	31
	FIGURE 02.....	32
	Route of existing flood embankment (highlighted in green) and location of tidal outfall on Afon Rhyd y Valley. Source: <i>Binnies</i> .....	32
	FIGURE 03.....	33
	Assessment Area. Scale: 1:15,000@A4. Source: <i>Gwynedd Archaeological Trust</i> .....	33
	APPENDIX I .....	34
	Reproduction of Binnies archaeological scope document.....	34
	APPENDIX II .....	35
	Gwynedd Archaeological Trust basic recording pro-forma .....	35
	APPENDIX III .....	36
	Gwynedd Archaeological Trust photographic metadata pro-forma .....	36

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been commissioned by *Binnies* to compile a Written Scheme of Investigation (WSI) to undertake an archaeological desk-based assessment in the vicinity of Dwyran, Ynys Môn to assist in the development of concept and outline designs for a proposed flood relief scheme (NGR SH 44363 65584; post code LL61 6YY; Figure 01). The proposed works focus on flood risk management measures which will be implemented on the watercourses Afon Braint and Afon Rhyd y Valley. The study area for this assessment is concentrated to the immediate south and east of the village of Dwyran, with five main work areas:

- 1) New flood wall or embankment at Ger-y-Felin;
- 2) New outfalls downstream of Pont Cadach;
- 3) New flood wall or embankment at Tyn y Parc;
- 4) Modify or replace tidal outfall on Afon Rhyd y Valley; and
- 5) Potential Natural Flood Management measures on Afon Rhyd y Valley upstream of Dwyran.

The current details of the planned flood relief measures are outlined in [Appendix I](#).

The works may also involve:

- i. The installation of Property Level Protection (PLP) at a small number of residential properties that are presently affected by Afon Rhyd y Valley; and
- ii. Improvement works to an existing flood embankment, located to the immediate east of Afon Braint and may provide an access route to the tidal outfall on Afon Rhyd y Valley (see [Figure 02](#)).

The desk-based assessment will be undertaken in January and February 2022 and will be completed in accordance with the following guidance:

- *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1* (The Welsh Archaeological Trusts, 2018);
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);

- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard and Guidance for historic environment desk-based assessment (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2020)
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2020); and
- Standard and Guidance for the archaeological investigation and recording of standing buildings or structures (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.

## **1.1 Aims and Objectives**

The key aims and objectives are to undertake:

- a detailed breakdown of the known archaeology within the study area;
- an assessment of previous land use compiled from an analysis of historical maps, aerial photographs and other archive materials;
- a ranking of the potential for archaeology of each of the archaeological periods to be found within the site; and
- provide recommendations for the geotechnical site investigation works on site (requirements that would need to be in place during these or similar activities).

This will be delivered in the form of a desk-based study with walkover and heritage asset gazetteer.

## **1.2 Monitoring Arrangements**

The archaeological desk-based assessment will be monitored by the Gwynedd archaeological Planning Service (GAPS); the content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue.

### 1.3 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER will be 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 **GATHER1567** and the Event PRN is **46198**. 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 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The village of Dwyran, Ynys Môn is set within an archaeologically sensitive area with evidence of sites that range in date from the Neolithic period (4000 – 2000 BC), through to the later post-medieval and industrial era (1750 – 1899 AD). It is predominantly a rural landscape, with known archaeological sites being concentrated within Dwyran and along the banks of or in close proximity of the Afon Braint and Afon Rhyd y Valley.

There are 113 archaeological assets located within the search area ([Figure 03](#)):

PRN	Name	Type	Location
2632	Roman Coin, Findspot, Dwyran	FINDSPOT	SH4465
3076	Burial Chamber, Site of, Cae'r Llechau	CHAMBERED TOMB	SH447647
3079	Cropmarks, N of Rhuddgaer	FEATURE	SH445646
3135	Bryngwyn Standing Stones, Brynsiencyn	STONE CIRCLE	SH46246693
3140	Castell Bryn Gwyn, Brynsiencyn	ENCLOSURE	SH4652867061
3143	Hut Group, Site of, Tre Anna, Dwyran	HUT CIRCLE SETTLEMENT	SH455661
3154	Circular Cropmark, Llanidan	SETTLEMENT	SH456656
5467	Enclosure, Bryn Gwyn NW of Dwyran	ENCLOSURE	SH46006655
5575	Quernstones, Findspot, Rockery, Tre Anna	FINDSPOT	SH45496603
6638	Roman Coins, Findspot, Dwyran (Unlocated)	FINDSPOT	SH4465
7232	Stepping Stones, Rhuddgaer	STEPPING STONES	SH44056468
24084	Circular Object,	FINDSPOT	SH44806555



<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
	Findspot, Dwyran		
29391	Field System, S of Bryngwyn Bach	STRIP FIELD SYSTEM	SH46246693
32805	Circular Feature, E of Tre Anna	ARCHAEOLOGICAL FEATURE	SH45646615
32806	Field System and Structures, Possible, NE of Maenhir	SETTLEMENT	SH45636652
34198	Bryn Gwyn Hall, Dwyran	HOUSE	SH46016656
36138	Melin Wen, Dwyran	MILL	SH4442265625
36572	Standing Stone, Former Site of, Maen Hir	STANDING STONE	SH45516635
56093	Pond, N of Tre Anna	POND	SH4548666100
60323	Former Road, Rhosyr	ROAD	SH45006551
61539	Building, Possible, E of Tre Anna	BUILDING	SH45646615
66964	Cae'r Llechau	HOUSE	SH4481064910
70323	Farm building, Gelliniog-goch	FARM BUILDING	SH4530965099
70324	Farm building, Gelliniog-goch	FARM BUILDING	SH4532965103
70325	Farmstead, Gelliniog-bach	FARMSTEAD	SH4530465093
70327	Farm building, Bryntirion	FARM BUILDING	SH4518565140
70328	Farm building, Bryntirion	FARM BUILDING	SH4517465147
70329	Farm building, Bryntirion	FARM BUILDING	SH4517365156
70341	Farmstead, Bryntirion	FARMSTEAD	SH4516365141

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
70499	Farm building, Taldrwst	FARM BUILDING	SH4480665489
70500	Farm building, Taldrwst	FARM BUILDING	SH4481765491
70501	Farm building, Taldrwst	FARM BUILDING	SH4481265499
70502	Farm building, Taldrwst	FARM BUILDING	SH4482265510
70503	Farm building, Taldrwst	FARM BUILDING	SH4483565515
70504	Farm building, Taldrwst	FARM BUILDING	SH4482765502
70506	Farm building, Taldrwst	FARM BUILDING	SH4483265502
70507	Farm building, Taldrwst	FARM BUILDING	SH4484065513
70508	Farm building, Taldrwst	FARM BUILDING	SH4482965518
70509	Farmstead, Taldrwst	FARMSTEAD	SH4482465505
70510	Farm building, Maen- hir	FARM BUILDING	SH4549866354
70511	Farm building, Maen- hir	FARM BUILDING	SH4551166352
70513	Farm building, Maen- hir	FARM BUILDING	SH4548166363
70515	Farm building, Maen- hir	FARM BUILDING	SH4549166372
70518	Farm building, Glas- ynys	FARM BUILDING	SH4624066382
70519	Farm building, Glas- ynys	FARM BUILDING	SH4623066370
70520	Farm building, Glas- ynys	FARM BUILDING	SH4622066359

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
70521	Farm building, Glas- ynys	FARM BUILDING	SH4622766355
70522	Farm building, Glas- ynys	FARM BUILDING	SH4623366349
70523	Farm building, Glas- ynys	FARM BUILDING	SH4624366341
70533	Farmstead, Tal-y- bont	FARMSTEAD	SH4539666639
70534	Farm building, Glas- ynys	FARM BUILDING	SH4625166332
70535	Farm building, Glas- ynys	FARM BUILDING	SH4627066357
70536	Farm building, Glas- ynys	FARM BUILDING	SH4626766360
70537	Farm building, Glas- ynys	FARM BUILDING	SH4626466363
70538	Farm building, Glas- ynys	FARM BUILDING	SH4626166365
70539	Farm building, Glas- ynys	FARM BUILDING	SH4625666369
70540	Farm building, Glas- ynys	FARM BUILDING	SH4624966376
70541	Farmstead, Glas- ynys	FARMSTEAD	SH4624566358
70548	Farm building, Tal-y- bont	FARM BUILDING	SH4539466648
70549	Farm building, Tal-y- bont	FARM BUILDING	SH4540266656
70550	Farm building, Tal-y- bont	FARM BUILDING	SH4536966620
70557	Outbuilding, Tre- Anna	FARM BUILDING	SH4549366072
70558	Outbuilding, Tre-	FARM BUILDING	SH4549766061

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
	Anna		
70559	Outbuilding, Tre-Anna	FARM BUILDING	SH4551166059
70560	Outbuilding, Tre-Anna	FARM BUILDING	SH4552266094
70561	Outbuilding, Tre-Anna	FARM BUILDING	SH4552866081
70562	Outbuilding, Tre-Anna	FARM BUILDING	SH4552766072
70563	Outbuilding, Tre-Anna	FARM BUILDING	SH4552666067
70564	Outbuilding, Tre-Anna	FARM BUILDING	SH4552566061
70565	Outbuilding, Tre-Anna	FARM BUILDING	SH4550866089
70566	Outbuilding, Tre-Anna	FARM BUILDING	SH4550766083
70567	Outbuilding, Tre-Anna	FARM BUILDING	SH4549466089
70568	Outbuilding, Tre-Anna	FARM BUILDING	SH4549566082
70569	Outbuilding, Tre-Anna	FARM BUILDING	SH4551866084
70571	Outfarm, Tre-Anna	FARMSTEAD	SH4551566091
70574	Farm building, Cae'r-llechau	FARM BUILDING	SH4481164919
70575	Farm building, Cae'r-llechau	FARM BUILDING	SH4481164912
70576	Farm building, Cae'r-llechau	FARM BUILDING	SH4481764901
70577	Farm building, Gelliniog-wen	FARM BUILDING	SH4592565811
70578	Farm building, Cae'r-	FARM BUILDING	SH4481264907

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
	llechau		
70579	Farm building, Cae'r-llechau	FARM BUILDING	SH4481264901
70580	Farm building, Gelliniog-wen	FARM BUILDING	SH4591765791
70581	Farm building, Gelliniog-wen	FARM BUILDING	SH4591565777
70582	Farm building, Gelliniog-wen	FARM BUILDING	SH4591165767
70583	Farm building, Cae'r-llechau	FARM BUILDING	SH4481364850
70584	Farm building, Gelliniog-wen	FARM BUILDING	SH4592365755
70585	Farm building, Gelliniog-wen	FARM BUILDING	SH4592665759
70586	Farm building, Gelliniog-wen	FARM BUILDING	SH4592365767
70588	Farm building, Gelliniog-wen	FARM BUILDING	SH4593865784
70589	Farm building, Cae'r-llechau	FARM BUILDING	SH4479264869
70594	Farm building, Cae'r-llechau	FARM BUILDING	SH4479564869
70597	Farm building, Cae'r-llechau	FARM BUILDING	SH4479264865
70598	Farm building, Cae'r-llechau	FARM BUILDING	SH4479064858
70694	Farm building, Cae'r-llechau	FARM BUILDING	SH4478564840
70695	Farmsted Cae'r-llechau	FARMSTEAD	SH4480264873
70952	Farm building, Castell	FARM BUILDING	SH4655367115

<b>PRN</b>	<b>Name</b>	<b>Type</b>	<b>Location</b>
70953	Farm building, Castell	FARM BUILDING	SH4654967090
70954	Farm building, Castell	FARM BUILDING	SH4655267074
70955	Farm building, Castell	FARM BUILDING	SH4655267080
70956	Farm building, Castell	FARM BUILDING	SH4656267090
70957	Farmstead, Castell	FARMSTEAD	SH4655467094
70974	Farm building, Bryngwn-bach	FARM BUILDING	SH4630267051
70975	Farm building, Bryngwn-bach	FARM BUILDING	SH4631567047
70976	Farmstead, Bryngwyn-bach	FARMSTEAD	SH4630967047
71172	Crop Marks, Nr, Castell Bryn Gwyn	CROPMARK	SH4678067010
90363	Dros-yr-Afon, Newborough	DWELLING	SH4391264811
90743	Farm building, Maen- hir	FARM BUILDING	SH4548566392
91101	Farmstead, Maen-hir	FARMSTEAD	SH4549066373
91129	Farm building, Tal-y- bont	FARM BUILDING	SH4538966641
91132	Farm building, Cae'r- llechau	FARM BUILDING	SH4478764848
91406	Purse, Findspot, Rhosyr	FINDSPOT	SH4570965328
92332	Farmstead, Gelliniog- wen	FARMSTEAD	SH4594865770

The known archaeological assets within the study area are dominated by structures associated with the post-medieval farmsteads of Taldrwst and Tre-Anna being located between Dwyran and the A4080 and within the Afon Rhyd y Valley, respectively. There is evidence for earlier occupation in the form of PRN 3143, the site of a prehistoric hut circle settlement within the grounds of the farmstead Tre-Ann that was identified and investigated in a limited manner during the 19<sup>th</sup> century. The artefacts recovered from the site were Roman in date (AD 42 – 410). In addition, the site of a possible medieval mill, Melin Wen (PRN 36138) along the Afon Braint, is in the vicinity of Ger-y-Felin (see [Appendix I](#)) an area outlined for groundworks as part of the flood relief scheme.

## **3 METHODOLOGY**

### **3.1 Introduction**

Gwynedd Archaeological Trust will undertake an archaeological desk-based assessment in the vicinity of Dwyran, Ynys Môn to assist in the development of concept and outline designs for a proposed flood relief scheme. This assessment will involve a desk-based study incorporating a walkover survey, a heritage asset gazetteer, and the following:

The key aims and objectives are to undertake:

- a detailed breakdown of the known archaeology within the study area;
- an assessment of previous land use compiled from an analysis of historical maps, aerial photographs and other archive materials;
- a ranking of the potential for archaeology of each of the archaeological periods to be found within the site; and
- provide recommendations for the geotechnical site investigation works on site (requirements that would need to be in place during these or similar activities).

### **3.2 Assessment (Desktop Study)**

A desk-based assessment is defined as “a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage....Significance is to be judged in a local, regional, national or international context as appropriate” (ClfA 2020, 4).

The desk-based assessment will involve a study of the following resources:

1. The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) will be examined for information concerning the assessment area, as outlined in Figure 02. Examination of the core HER will be undertaken, including the 6-inch and 25-inch County Series Ordnance Survey maps and any secondary information held within the HER. All identified features will be mapped, described and added to a gazetteer of sites and



the relative importance of any sites defined. All identified features will be mapped, described and added to a gazetteer of sites and the relative importance of any sites defined;

2. The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be checked for sites additional to the HER;
3. Aerial photographs from the National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be examined for potential features. This will include 1946 RAF vertical aerial photographs;
4. The online catalogue search of the National Library of Wales (Penglais Rd, Aberystwyth SY23 3BU);
5. Archive data, including primary and secondary sources, historic maps and estate maps will be examined at the regional archives, if open and accessible. Archive data will include historic mapping such as the local tithe map and schedule;
6. Light Detection and Ranging (LiDAR) data will be examined from the Lle Geo-Portal at <http://lle.gov.wales/home> for information on potential surface features using digital terrain modelling and digital surface modelling;

### 3.3 Walkover Survey

A walkover survey will be undertaken that will incorporate the assessment study area, as outlined red in Figure 02. The aim will be to visit and record known archaeological assets. The assets will be mapped and located in advance as part of the desk based assessment, using a combination of historic and GIS based data; this information will then be used to geo-locate features, which will then be located and described on GAT pro-formas. The sites will then be added to the overall gazetteer and their relative importance defined. Any newly identified assets will also be recorded. Only features that can be safely accessed will be directly recorded. A handheld GPS unit will also be used during the walkover survey. A photographic record will be maintained in RAW format using a digital SLR set to maximum resolution (Nikon D3000; resolution: 3,872 × 2,592 [10.2 effective megapixels]) and photographic metadata table will be completed and included in the report. Photographic images will be archived in TIFF format; the archive numbering system will start from G2706\_001. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from the next sequential number available.

Following the completion of the respective assessment/evaluation stages, archiving will be completed 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;

All data will be processed and a report will be produced which will detail and synthesise the results.

### 3.4 Gazetteer of Features

A gazetteer will be compiled for any existing and newly identified sites, based on information sourced from the desk based assessment and field survey; the gazetteer will be prepared in the following format and will include:

<b>Feature Number</b>	
<b>Site name</b>	
<b>PRN number</b>	
<b>Grid reference</b>	
<b>Period</b>	
<b>Site type</b>	
<b>Assessment category</b>	
<b>Description</b>	
<b>Impact</b>	
<b>Recommendation for further assessment/evaluation</b>	
<b>Recommendation for mitigatory measures</b>	

**The following categories will be used to define the assessment category of the archaeological asset:**

*Category A - Sites of National Importance.*

Scheduled Monuments, Listed Buildings of grade II\* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both. Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

*Category B - Sites of regional or county importance.*

Grade II listed buildings and sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region. Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

*Category C - Sites of district or local importance.*

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened. Category C sites nevertheless merit adequate recording in advance of damage or destruction.

*Category D - Minor and damaged sites.*

Sites that are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category. For Category D sites, rapid recording, either in advance of or during destruction, should be sufficient.

*Category E - Sites needing further investigation.*

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation.

**The impact of the proposed works on any asset will be identified using the following impact criteria, defined either as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:**

*None:*

There is no construction impact on this asset.

*Slight:*

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the asset, e.g. part of a trackway or field bank.

*Unlikely:*

This category indicates sites that fall within the band of interest but are unlikely to be directly affected. This includes sites such as standing and occupied buildings at the margins of the band of interest.

*Likely:*

Sites towards the edges of the study area, which may not be directly affected, but are likely to be damaged in some way by the construction activity.

*Significant:*

The partial removal of an asset affecting its overall integrity. Assets falling into this category may be linear features such as roads or tramways where the removal of part of the feature could make overall interpretation problematic.

*Considerable:*

The total removal of an asset or its partial removal which would effectively destroy the remainder of the site.

*Unknown:*

This is used when the location of the asset is unknown, but thought to be in the vicinity of the proposed works.

### 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*;

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. Front cover;
2. Inner cover;
3. Figures and Plates List;
4. Non-technical summary (Welsh/English);
5. Introduction;
6. Methodology;
  - i. Desk-based assessment;
  - ii. Field survey;
7. Results;
  - a. Desk based assessment;
    - i. Location and geological summary;
    - ii. Statutory and non-statutory designations;
    - iii. Environmental remains and soil morphology;
    - iv. Historical and archaeological background;
    - v. Cartographic evidence;
    - vi. Artefact potential;
    - vii. Aerial photographs and LiDAR;
  - b. Field survey;
  - c. Gazetteer of features;
8. Conclusions and recommendations;
  - a. Conclusion;
  - b. Table of sites and recommendations;

9. Acknowledgements;
  10. Bibliography;
    - a. Primary sources;
    - b. Secondary sources;
  11. Figures; inc.:
    - location plan;
    - historic mapping;
    - location plan with identified features.
  12. Plates; inc.
    - Illustrative examples from the field survey
  13. Appendix I (approved written scheme of investigation);
  14. Appendix II (Sites listed on GAT Historic Environment Record);
  15. Appendix III (Definition of mitigation terms);
  16. Appendix IV (Photographic metadata - field survey);
- Back cover.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included.

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).



## **4 PERSONNEL**

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section and undertaken by a team of project archaeologists. The project archaeologists will be responsible for the desk based assessment and field survey, as well as Gwynedd Archaeological Planning Service liaison and client liaison. The project archaeologists will be responsible for completing the field survey pro-formas and the archive itemised above. The project archaeologists will also be responsible for submitting a draft final report to the project manager for review and approval. The reports will then be submitted as per the arrangements defined in the data management plan.

## **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 prior to the start of the field survey. All GAT staff attending will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat.

The GAT Project Archaeologist will liaise with Binnies to gain permission to access private land and farms in advance of the site visit of the archaeological assets outlined in section 2.0 of the WSI.

## **6 SOCIAL MEDIA**

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

## **7 INSURANCE**

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

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

INSURER 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 24765101 CHC / 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. Chartered Institute for Archaeologists, 2014, *Standard and guidance for historic environment desk-based assessment* (Chartered Institute for Archaeologists, 2020);
2. Chartered Institute for Archaeologists, 2014, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
3. Chartered Institute for Archaeologists, 2014, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
4. Chartered Institute for Archaeologists, 2014, *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*
5. English Heritage, 1991, *Management of Archaeological Projects (MAP2)*
6. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1* (The Welsh Archaeological Trusts, 2018);
7. *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
8. Historic England, 2015, *Management of Research Projects in the Historic Environment (MoRPHE)*
9. Royal Commission on Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives*

## **FIGURE 01**

**Site location and key features. Source: *Binnies***



Figure 01: Site location and key features

## FIGURE 02

Route of existing flood embankment (highlighted in green) and location of tidal outfall on Afon Rhyd y Valley. Source: *Binnies*



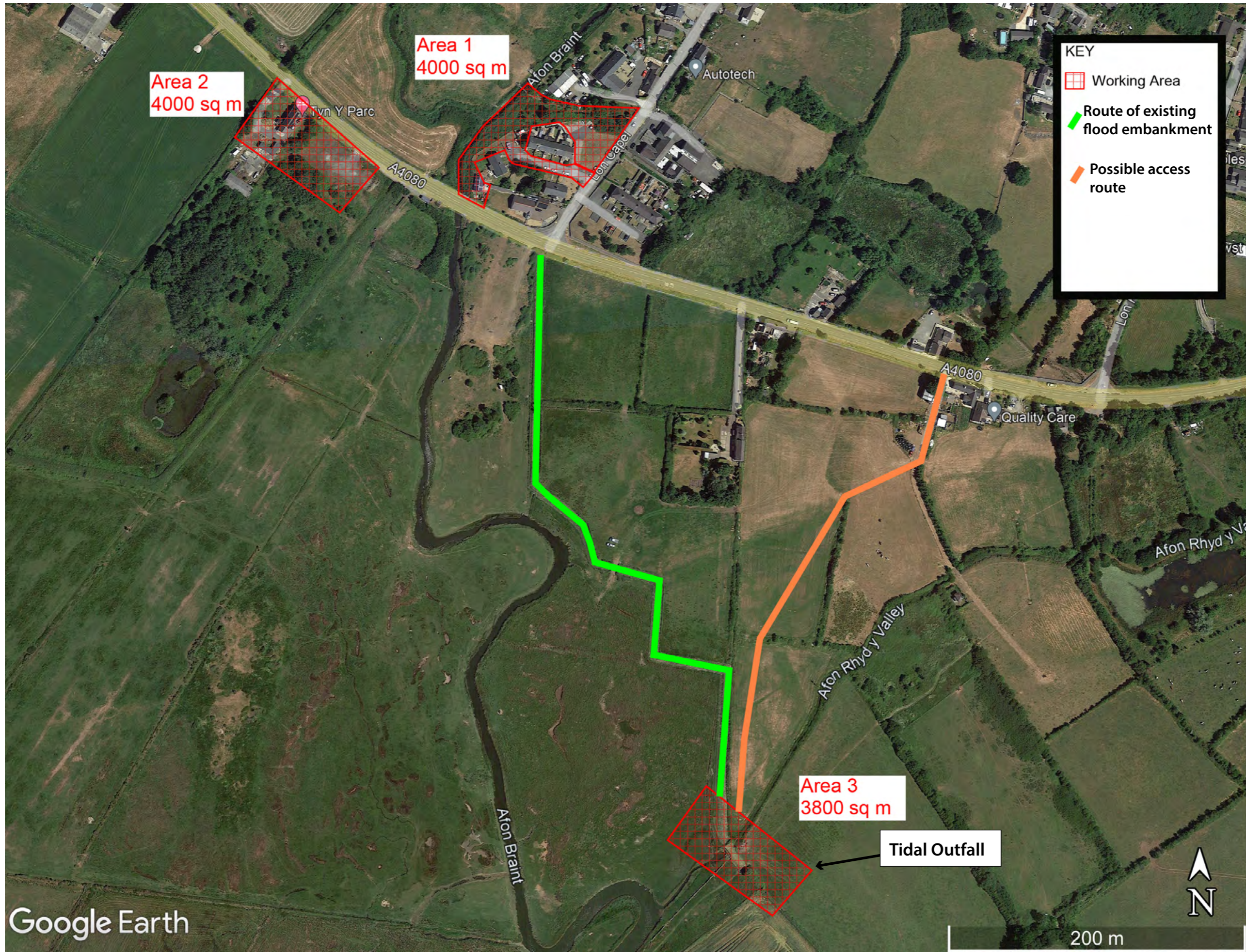


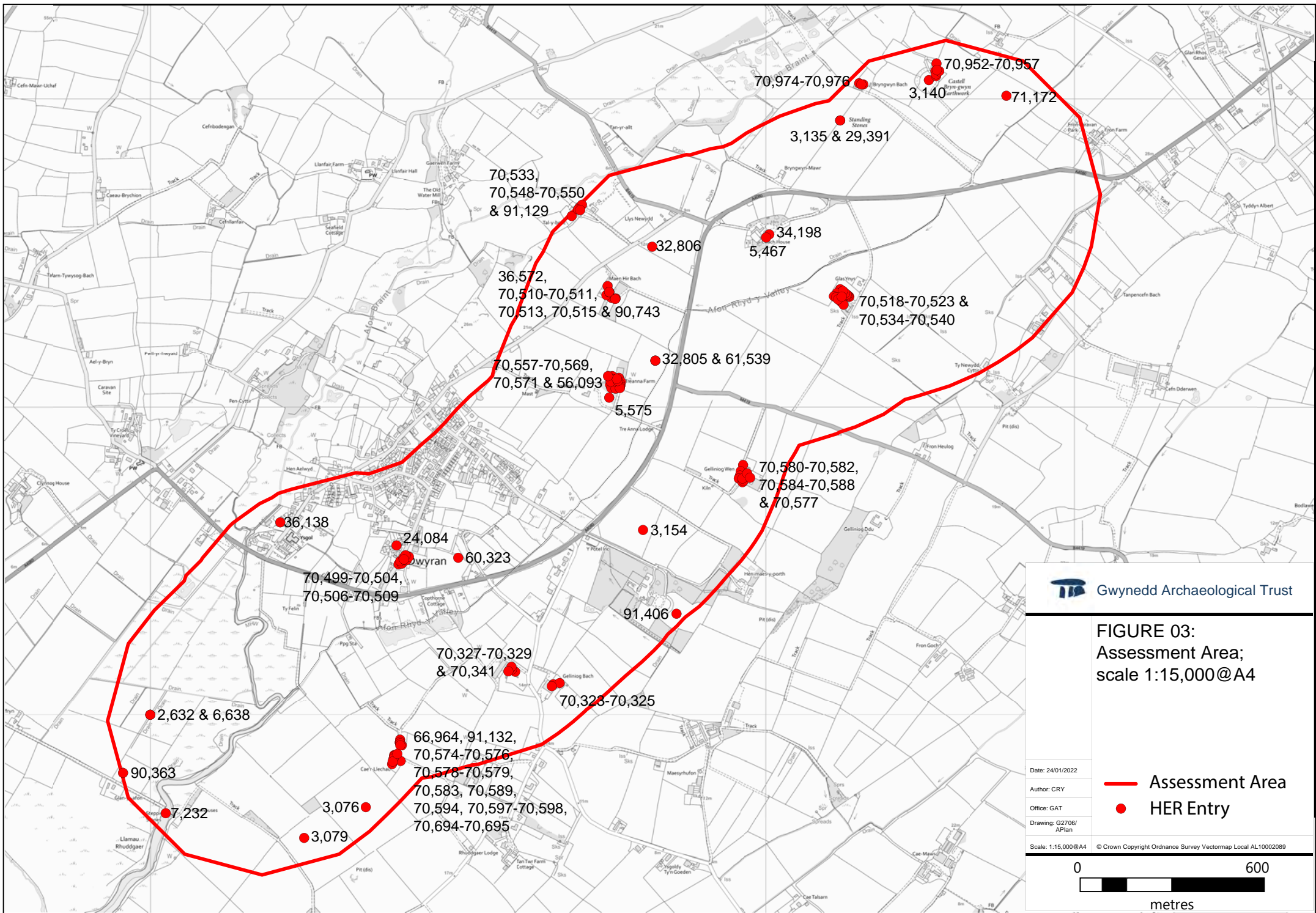
Figure 02: Route of existing flood embankment (highlighted in green) and location of tidal outflow on Afon Rhyd y Vally. Source: Binnies

**FIGURE 03**

**Assessment Area. Scale: 1:15,000@A4. Source: *Gwynedd Archaeological Trust***



## **APPENDIX I**

**Reproduction of Binnies archaeological scope document.**

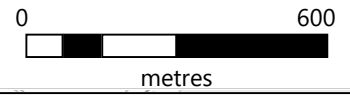


**FIGURE 03:**  
**Assessment Area;**  
 scale 1:15,000@A4

Date: 24/01/2022  
 Author: CRY  
 Office: GAT  
 Drawing: G2706/  
 APlan

 Assessment Area  
 HER Entry

Scale: 1:15,000@A4 © Crown Copyright Ordnance Survey Vectormap Local AL10002089



## Section 3 – Scope

Binnies have been appointed by Natural Resources Wales (NRW) to develop the concept and outline designs for a flood relief scheme at Dwyran, Anglesey.

To support the planning of geotechnical site investigation works and ongoing design development, we require archaeological support services.

The study area for this project can be seen in Figure 1 below and features 5 no. main working areas located around Dwyran. The proposed works focus on flood risk management measures which will be implemented on the watercourses Afon Braint and Afon Rhyd y Valley.

*Figure 1 - Site Location and key features*



The expected scope of design works focusses on the following:

- 1) New flood wall or embankment at Ger-y-Felin (see Figure 2)
- 2) New outfalls downstream of Pont Cadach (see Figure 2)
- 3) New flood wall or embankment at Tyn y Parc (see Figure 3)
- 4) Modify or replace tidal outfall on Afon Rhyd y Valley
- 5) Potential Natural Flood Management measures on Afon Rhyd y Valley upstream of Dwyran (see Figure 4).

The works may also involve the installation of Property Level Protection (PLP) at a small number of residential properties that are presently affected by Afon Rhyd y Valley.

Figure 2 - Ger-y-Felin Approximate Works Extents



As illustrated in Figure 2, the works are expected to include a new floodwall/embankment with tie-ins to high ground at the upstream and downstream ends, some local ground raising, raising works to an existing footpath and the installation of new flapped outfalls through an existing wall downstream of Pont Cadach.

Depending on the condition of the existing wall, the works may also involve the construction of a new section of wall to accommodate the outfalls.

Figure 3- Tyn y Parc Approximate Works Extents



Works to Tyn y Parc are expected to involve the construction of either a new flood defence wall or embankment, with associated tie-in measures, around the perimeter of the property as illustrated in Figure 3.

Works to the Tidal outfall, location shown in Figure 1, will involve measures to increase flow through the outfall. This will be achieved either by replacing the existing outfall pipe with a new larger diameter pipe and replacing/modifying the existing headwall to suit, or constructing a smaller secondary outfall alongside the existing.

Figure 4 - Rhyd y Valley NFM Approximate Works Extents



The potential NFM works on Afon Rhyd y Valley have not yet been defined but any design will be restricted to the space available within the red-line boundary shown in Figure 4.

The core support services required under this brief are as follows:

- i. Archaeological Desk-based Assessment (DBA) of the project study area; and an
- ii. Archaeological Mitigation Strategy for Site Investigation (SI) works
- iii. Archaeological Supervision throughout the Site Investigation (SI) works.

Activities required by the *Consultant* to provide the above (such as site visits) should be itemised in the Activity Schedule in Section 4 of this document.

Where necessary, the *Consultant* shall consult/liaise with Gwynedd Archaeological Planning Services (GAPS) to support the provision of the DBA.

With respect to Binnies design programme, the following key dates currently apply:

- Conceptual Design Development – 11<sup>th</sup> January to 15<sup>th</sup> March 2022
- Finalise Geotechnical SI specification – 16<sup>th</sup> February 2022
- Procure and mobilise SI – 17<sup>th</sup> February to 19<sup>th</sup> April 2022
- Undertake Geotechnical SI – 20<sup>th</sup> to 26<sup>th</sup> April 2022



Figure 5 – Combined total study area for the works



## **APPENDIX II**

### **Gwynedd Archaeological Trust basic recording pro-forma**

YMDDIRIEDOLAETH ARCHAEOLEGOL GWYNEDD ARCHAEOLOGICAL TRUST

<b>BASIC RECORDING FORM</b>	<i>Project name</i>	<i>Project number</i>
<i>Feature name</i>		<i>Feature Number</i>
<i>NGR</i>		
<i>Description</i>		
<i>Recommendations for further assessment</i>		
<i>Photographic record numbers</i>		
<i>Digital</i>		
		<i>Visit date</i>
		<i>Visit by</i>

## **APPENDIX III**

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



## **APPENDIX II**

### **Gwynedd Archaeological Trust Photographic Archive**

## APPENDIX II

PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	PRN NUMBER (S)	FEATURE NUMBER	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	Plates
G2706_001	Assessment	Afon Rhyd y Valley where it emerges from beneath A4080 opposite Bryngwyn			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_002	Assessment	Improved field of pasture along Afon Rhyd y Valley, east of Coach House/Bryn Gwyn Hall			W	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_003	Assessment	Improved field of pasture along Afon Rhyd y Valley, with Coach House/Bryn Gwyn Hall in view			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	03
G2706_004	Assessment	Improved field of pasture and stone wall boundary beside Afon Rhyd y Valley, north of Coach House/Bryn Gwyn Hall			W	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	01
G2706_005	Assessment	Culvert for Afon Rhyd y Valley as it passes beneath A4080			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	09
G2706_006	Assessment	Culvert for Afon Rhyd y Valley at entrance to Maen Hir			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	10
G2706_007	Assessment	Culvert walling and sluice gate at entrance to Maen Hir			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	PRN NUMBER (S)	FEATURE NUMBER	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	Plates
G2706_008	Assessment	Field between Maen Hir (visible in background) and A4080; with cows			S	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	04
G2706_009	Assessment	Improved field of pasture between Maen Hir and Treann with horses			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_010	Assessment	Location of archaeological assets in field between Maen Hir and Treann	PRNs 32805 & 61539	14 & 15	E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_011	Assessment	Location of archaeological assets in field between Maen Hir and Treann	PRNs 32805 & 61539	14 & 15	ESE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	11
G2706_012	Assessment	Afon Rhyd y Valley beside Treann			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_013	Assessment	Treann Lodge and stretch of A4080			NNE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_014	Assessment	Afon Rhyd y Valley with Mane Hir in distance			S	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_015	Assessment	Corner of improved field of pasture between Treann Lodge & House			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_016	Assessment	Improved field of pasture south of Treann Lodge			SE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	



PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	PRN NUMBER (S)	FEATURE NUMBER	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	Plates
G2706_017	Assessment	Improved field of pasture south of Treann Lodge			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_018	Assessment	Improved field of pasture south of Treann Lodge, with Treann farm in background			S	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	05
G2706_019	Assessment	Improved field of pasture south of Treann Lodge with crossing over river			ESE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_020	Assessment	Improved field of pasture south of Treann Lodge, with Dwyran in distance			ENE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_021	Assessment	Rough field of pasture off A4080, opposite entrance to Maes y Porth			S	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	06
G2706_022	Assessment	Rough field of pasture off A4080 south of unnamed road to Dwyran			E	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_023	Assessment	Stretch of Afon Rhyd y Valley next to Dwyran, off unnamed road			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	02
G2706_024	Assessment	Stretch of Afon Rhyd y Valley at culvert off A4080			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_025	Assessment	Rough field of pasture east of A4080, with Afon Rhyd y Valley continuing behind Cophthorne Cottage			N	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	07

PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	PRN NUMBER (S)	FEATURE NUMBER	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	Plates
G2706_026	Assessment	Culvert/small bridge for unnamed road crossing Afon Rhyd y Valley			N	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_027	Assessment	Back garden of cottage along the bank of Afon Rhyd y Valley			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_028	Assessment	Approximate location of Melin Wen off Afon Braint	PRN 36138	23	SE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	16
G2706_029	Assessment	Stretch of Afon Braint next to Lon Chapel, toward A4080			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	
G2706_030	Assessment	Pont Cadach over the Afon Braint			W	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	19
G2706_031	Assessment	Yard adjacent to Tyn y Parc			ESE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	18
G2706_032	Assessment	Tyn y Parc			N	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	17
G2706_033	Assessment	Afon Braint from Pont Cadach			NNE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	20
G2706_034	Assessment	Flood embankment as viewed from the A4080			N	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	PROJECT PHASE	DESCRIPTION	PRN NUMBER (S)	FEATURE NUMBER	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	Plates
G2706_035	Assessment	Flood embankment along public right of way			N	1x1m	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	13
G2706_036	Assessment	Flood embankment looking toward A4080			SE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	12
G2706_037	Assessment	Tidal outflow at Afon Rhyd y Valley			SW	1x1m	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	14
G2706_038	Assessment	Example of stone façade of flood embankment beside tidal outflow			SW	1x1m	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	15
G2706_039	Assessment	Convergence of Afon Braint and Afon Rhyd y Valley			NE	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	08
G2706_040	Assessment	Flood embankment and Afon Rhyd y Valley			S	Not Used	Stuart Reilly	25/01/2022	Gwynedd Archaeological Trust	

## **APPENDIX III**

### **Gwynedd Archaeological Trust Selection Strategy**

# G2706\_Dwyran\_Flood\_Relief\_Scheme

## 14/02/2022 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>	Gwynedd Archaeological Trust Historic Environment Record	18/01/2022
<b>Project Lead / Project Assurance</b>	RCAHMW	On completion of Project Archive
<b>Landowner / Developer</b>	Gwynedd Archaeological Planning Service	20/01/2022

### Resources

#### Resources required

Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.

No unusual resources required outside of GAT normal operating equipment and personnel.

### Context

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

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

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

The full aims and objectives of this project are detailed in the project specific Written Scheme of Investigation:

Gwynedd Archaeological Trust was commissioned by *Binnies* to undertake an archaeological

desk-based assessment in the vicinity of Dwyran, Ynys Môn to assist in the development of concept and outline designs for a proposed flood relief scheme (NGR SH 44363 65584; post code LL61 6YY; WSI Figure 01). The proposed works focused on flood risk management measures that will be implemented on the watercourses Afon Braint and Afon Rhyd y Valley. The study area for this assessment was concentrated to the immediate south, west and east of the village of Dwyran, with five main work areas:

1. New flood wall or embankment at Ger-y-Felin;
2. New outfalls downstream of Pont Cadach;
3. New flood wall or embankment at Tyn y Parc;
4. Modify or replace tidal outfall on Afon Rhyd y Valley; and
5. Potential Natural Flood Management measures on Afon Rhyd y Valley upstream of Dwyran.

The works may also involve the installation of Property Level Protection (PLP) at a small number of residential properties that are presently affected by Afon Rhyd y Valley. The current details of the planned flood relief measures were outlined in the WSI Appendix I. The desk-based assessment was undertaken in January and February 2022

Source: Gwynedd Archaeological Trust. 2022. *G2706\_Dwyran\_Flood\_Relief\_Scheme Written Scheme of Investigation for Archaeological Mitigation. Project G2706.*

## 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)  
 Stuart Reilly (GAT Senior 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.

Archiving has been completed based on following task list;

- Pro-formas: all cross referenced and scanned for digital archiving;
  - Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*;
- This data has been used as the basis for the physical and digital dataset archives. Information from these has been used to compile the project report. The physical archive has been stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset has been stored on a dedicated 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 has been 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;  
Carol Ryan Young – Project Archaeologist, Gwynedd Archaeological Trust;  
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;  
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*.

## Selection

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

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

A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and

A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and will include:

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

## De-Selected Documents

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

It is envisaged that the material de-selected from inclusion in the preserved archive will be duplicates or reproductions 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



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)

