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**Results of Archaeological Works at
Wenallt and Derwenfa,
Ffordd Pennant, Eglwysbach**



NGR SH 80630 69313

Report Number CR161-2018



C.R Archaeology
Prepared by C. Rees
On Behalf of H. Henry & D. Allen

EVENT: 45359

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**Results of Archaeological Works at
Wenallt and Derwenfa, Ffordd Pennant, Eglwysbach**

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National Grid Reference:	SH 80630 69313
Client:	H. Henry & D. Allen
Report Authors:	Catherine Rees
Report Number:	CR161-2018
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Contents

1.0	Introduction
2.0	Project Aims
3.0	Scheme of Works – Methodology
3.1	Desk Based Research
3.2	Archaeological Watching Brief
3.2.1	Recording
3.2.2	Additional Mitigation/Contingency Measures
3.2.3	Recovery, Processing & Curation of Artefactual Material
3.2.4	Archive Compilation
3.3	Timetable for Proposed Works
3.4	Staff
3.5	Monitoring
3.6	Health and Safety
3.7	The Report
3.7.1	Copyright
4.0	Topographic and Geological Background
4.1	Topography
4.2	Geology
5.0	Historical Background
5.1	Prehistoric
5.2	Iron Age/Romano British
5.3	Early Medieval/Medieval
5.4	Post Medieval
5.5	Modern
5.6	Cartographic Evidence
6.0	Results of Archaeological Works
6.1	Pre-commencement Photographic Survey
6.2	The Partial Removal of the Bank and Wall
6.2.1	The North-Western Wall Section
6.2.2	The South-Eastern Wall Section
6.2.3	Discussion
7.0	Conclusion
8.0	Bibliography

Illustrations

Figure 1. Site Location Map

Figure 2. 1841 Tithe Map Extract Showing Development Site

Figure 3. First Edition Ordnance Survey Map Showing Development Site

Figure 4. 1899 Edition Ordnance Survey Map Showing Development Site

Figure 5. 1915 Edition Ordnance Survey Map Showing Development Site

Figure 6. 1953 Edition Ordnance Survey Map Showing Development Site

Figure 7. Area of Site Stripped During Current Works

Appendices

Appendix A. Specification for Archaeological Works

Appendix B. Proposed Works

Appendix C. Location and Direction of Photographic Plates

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1.0 Introduction

1.0.1 C.R Archaeology were instructed by Ms H. Henry & Mr D. Allen to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: 0/44593).

1.0.2 A specification (included as Appendix A) was written following an email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning Services (beginning 11th January 2018) as a methodology for an Archaeological Watching Brief. It refers directly to correspondence Ref: 1124je02/D3168 which outlines the required works.

1.0.3 The proposed development site is situated in a rural setting just off Pennant Road, Eglwysbach (Figure 1). Planning permission has been granted for works to the existing access and vehicular parking to the south of the pair of properties known as Derwenfa and Wenallt (Appendix B).

1.0.4 The development plot is located within the curtilage of Pentrefelin and Bwthyn-y-felin, a Grade II Listed water-driven flour mill and miller's accommodation (Cadw ID 17570). A mill is thought to have stood at the site since at least 1680 (RCAHMW ref. 24666, PRNs 945 and 949), and therefore the complex as a whole – including the millpond, sluice and neighbouring buildings – may have earlier origins. It is located within the Conwy Valley Special Landscape Area.

1.0.5 The proposed new access and parking breached a substantial earthwork which corresponds to the footprint of the millpond dam on historic Ordnance Survey mapping. However, the account and photographs included in the Heritage Impact Assessment show that this was largely a recent reconstruction, with the surviving original segment of the dam seemingly remaining unaffected by the proposals.

1.0.6 As the exact extent of recent reconstruction was unclear, and it was deemed possible that part of the original structure could be retained behind a late 19th century wall. It was therefore recommended that provision be made for the recording of the current wall and any evidence of earlier phasing or structures that may be revealed during site works. No such evidence was uncovered during the works.

1.0.7 With the exception of the modern material behind the 1990's rebuilt wall, no dating evidence was recovered during the watching brief.

1.0.8 The construction of the mill pond was found to cut into the underlying bedrock and some of this material was utilised in the bank construction.

2.0 Project Aims

2.0.1 This scheme of works aimed to create a basic photographic record of the site prior to the commencement of works and to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains.

2.0.2 It aims to fulfil the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the Cifa Standard and Guidance document (2014).

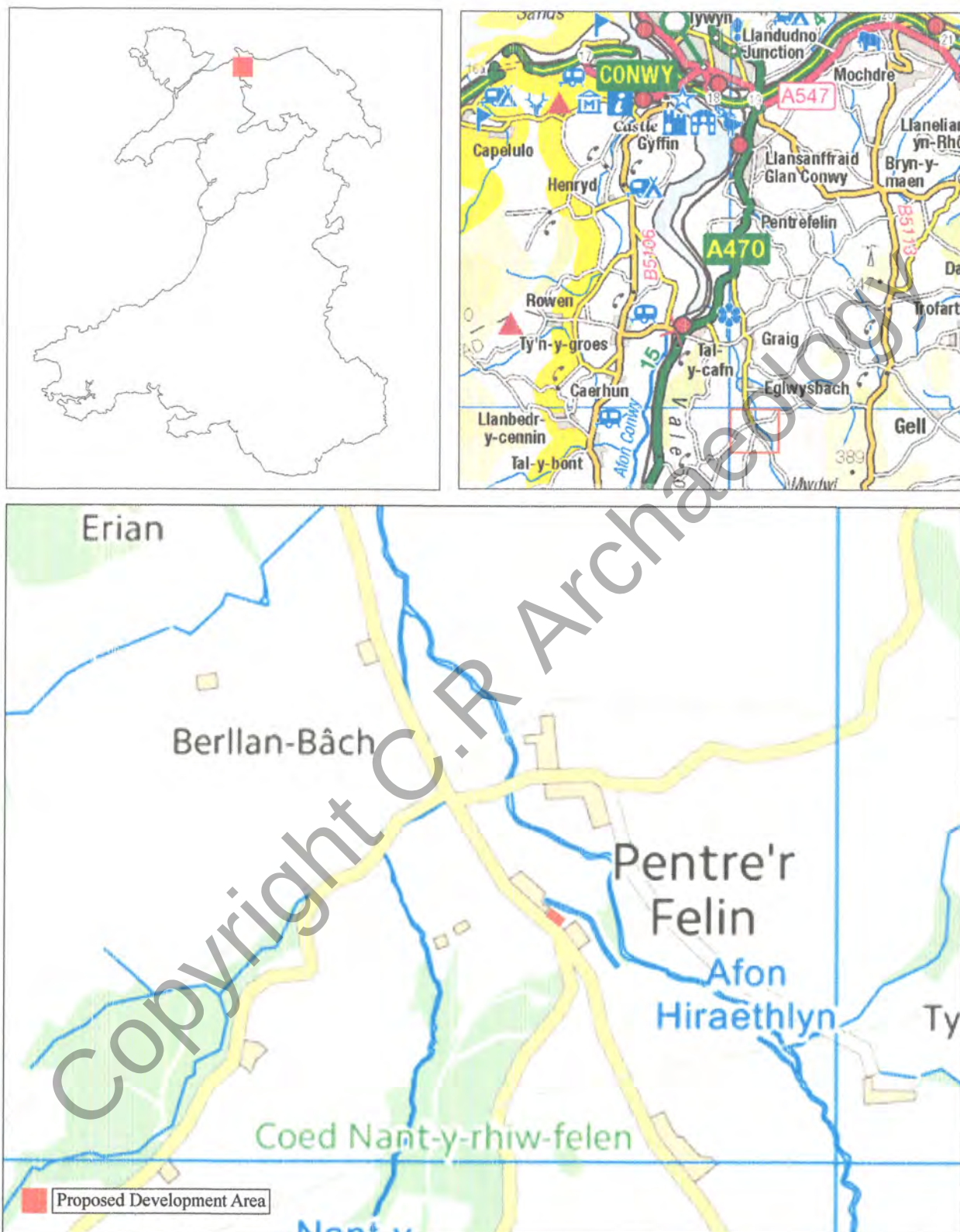


Figure 1. Site Location Map - Source: OS Open Data
(Contains Ordnance Survey data © Crown copyright and database right 2018)

3.0 Scheme of Works – Methodology

3.0.1 The methodologies employed conformed to The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

3.1 Desk Based Research

3.1.1 A brief history of the site and surrounding area was compiled using the Gwynedd Historic Environment Record Office. A map progression was undertaken beginning at the tithe records. The Gwynedd Historic Environment Record was consulted and a search radius of 1000m examined.

3.1.2 This material forms the historical background this archaeological report. The report also includes the results of the Archaeological Watching Brief.

3.1.3 These works were carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

3.2 Archaeological Watching Brief

3.2.1 Prior to the commencement of works a photographic record of the area was made detailing the current land use/appearance and any standing structures which were affected by the works. Photographs were taken with and without scales as appropriate.

3.2.2 The watching brief monitored all groundworks undertaken on the site. This included all topsoil and subsoil stripping and the excavation of any service trenches.

3.2.3 A C.R Archaeology staff member was present during the machine excavation of all groundworks. This work was undertaken using a mechanical excavator fitted with a toothless ditching bucket.

3.2.4 C. R Archaeology notified GAPS as the date of the commencement of works.

3.2.5 No archaeological remains were uncovered during the watching brief.

3.2.6 Fieldwork was conducted and managed by Matthew Jones (MA) of C.R Archaeology.

3.2.1 Recording

3.2.1.1 The record forms at C.R Archaeology are based on the English Heritage system and full written, graphic and photographic records were made in accordance with the English Heritage *Field Recording Manual*.

3.2.1.2 A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site. This is comprised of photographs of general photographs due to the negative result of the works.

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

3.2.2 Additional Mitigation/Contingency Measures

3.2.2.1 No additional mitigation/contingency measures were required.

3.2.3 Recovery, Processing and Curation of Artefactual Material

3.2.3.1 No artefactual material was recovered during the archaeological works.

3.2.4 Archive Compilation

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

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

3.2.4.3 All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report (P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive (P3)* will be checked and ordered according to MoRPHE criteria.

3.2.4.4 The archive will be deposited at the RCAHMW. Archive material will be deposited in accordance with the terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

3.3.1 Groundworks commenced on the 6th February 2018 with an additional site day on the 5th March. Additional time was allotted as necessary for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services were informed of the exact site days to allow monitoring of works.

3.4 Staffing

3.4.1 The project was managed by Catherine Rees (MCIfA, MA). Site works were carried out by Matthew Jones (MA, BA). All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.5 Monitoring

3.5.1 The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork.

3.6 Health and Safety

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

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

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

3.6.3 All staff have passed at least a CITB health and safety test at least operative level.

3.6.4 C.R Archaeology staff also comply with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

3.7 The Report

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

3.7.2 As a minimum the report also includes:

- A copy of the design brief and agreed specification
- A location plan
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted
- An archive compact disc

3.7.3 A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of the project.

3.7.1 Copyright

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

4.0 Topological & Geological Background

4.1 Topography

4.1.1 The proposed development site is situated in a rural setting just off Pennant Road, Eglwysbach. The area for development is currently under grass and is partially set within the area once occupied by the mill pond and associated bank.

4.2 Geology

4.2.1 The bedrock is recorded as "*Denbigh Grits Formation - Mudstone, Siltstone And Sandstone, Sedimentary Bedrock formed approximately 423 to 428 million years ago in the Silurian Period. Local environment previously dominated by deep seas. These rocks were formed in deep seas from infrequent slurries of shallow water sediments which were then redeposited as graded beds*". The superficial geology is recorded as "*Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters*". The superficial deposits are not recorded (www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

5.0 Historical Background

5.0.1 A complete and coherent history of the site was not required for this project and research was limited to a search of the Gwynedd Historic Environment Record (HER) and a map progression beginning at the Tithe Map.

5.0.2 In order to identify the character of archaeological remains in the vicinity of the site, a search of the Gwynedd HER was conducted examining an area within a 500m and a 1000m radius of the proposed works (the grid reference for the search was taken as the centre point of the development area). This returned 3 records within a 500m search radius, which rose to 12 when the radius was extended to 1000m.

5.0.3 The Historic Environment Record holds relatively few records for the immediate vicinity of the proposed development site, but this is likely to reflect the lack of development and study in the area rather than presenting a representative picture of the archaeology.

5.1 Prehistoric

5.1.1 There are no records of Prehistoric date within the 500m search radius.

5.1.2 When the search area was extended to 1000m a single entry was recorded. PRN 2889 is the find spot of a Bronze Age celt. The HER entry is as follows "a rare specimen of a trunnion bronze celt is presumed to have been found in the parish of Llansantffraid Glan Conway. In the possession of Mr. Jones-Mortimer of St. Asaph. The celt is 7 1/2ins long and 1 1/2" across the cutting edge and about 1/2in across the butt end. Thorn like projections 'lugs' or trunnion prevent the tool from slipping into the haft when in use.

5.1.3 Mr. J. Mortimer says that the celt was in the house Bryn-Eisteddfod, which he inherited. He knows nothing of its previous history and believes it is still in his possession (it is apparently in the Rapallo House Museum, Llandudno)".

5.2 Iron Age/Romano British

5.2.1 There are no records of Iron Age/Romano British date within either a 500m or 1000m search radius of the site.

5.3 Early Medieval/Medieval

5.3.1 There are no records of Early Medieval/Medieval date within either a 500m or 1000m search radius of the site.

5.4 Post Medieval

5.4.1 The majority of the HER records (10 of the 12 entries) document Post Medieval sites, predominantly of agricultural origin in the village of Eglwys Bach. Of these entries 2 are located within the 500m search radius and 8 within the wider 1000m search radius.

5.4.2 The development site is within the curtilage of Pentrefelin and Bwthyn-y-felin, a Grade II Listed water-driven flour mill and miller's accommodation (Cadw ID 17570, PRN 949).

5.4.3 The following information is taken from the Cadw Listed Building description (www.cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=17570).

5.4.4 "History: Late C18 water-driven flour mill with miller's accommodation included. Internal graffiti dates range from 1795 to 1848; the mill was in use until c1948.

5.4.5 Exterior: Rectangular rubble building set into a slope, with 3-storey main elevation, and 2-storey rear; red brick segmental heads to openings. Renewed, hipped slate roof with single squat chimney L of centre. 4-bay front with 2-bay mill section to R (now known as Pentrefelin) and miller's accommodation to L (Bwthyn-y-felin). The former has a wide entrance at R, with pegged wooden frame and modern boarded door. The domestic section has an entrance at L with modern door as before. Slightly-recessed modern sash-type windows (tilting upper sections) of 12- and 9 panes. Further modern windows to side and rear elevations of 6 to 12 panes. Single-storey gabled porch to L at rear, with former loading bay above, now a fixed sash window. To the R, a single-storey former bake-house projection at the corner with partly hipped roof; modern doors.

5.4.6 Interior: Large internal overshot waterwheel of approximately 6m diameter (partly disintegrated, June 1996), with secondary wheel operating the vertical driveshaft; the cast iron wheel has lost its paddles. Iron toothed crown wheel to first floor with associated layshafts and secondary drives. 3 large pairs of stones (two with modern boxing), mostly renewed timber hoppers; pulleys and wheels for mill pond sluice gate and sack hoist. 2 large panelled grain cupboards with raised and fielded panels to sides and hinged front. That to the R is the earlier and bears incised graffiti dates of 1795 and 1799; wooden hoppers above, that to R cupboard renewed. Also pulley-driven, a later C19 grinding machine with hopper as before, and consisting of a Christy and Norris 'Disintegrator', and a 'Eureka smut and separating machine' by Howes Babcock and co., New York (1865 model). 2 king post trusses to roof.

5.4.7 The RCAHMS (NPRN 24666) notes that the mill has much earlier origins and states that there has been a mill on this site since at least 1680.

5.4.8 A second watermill, Felin Isaf (PRN 945) is also recorded within 500m of the development.

5.4.9 When the search area was extended to 1000m it incorporates 8 further sites in Eglwys Bach, 4 of which are Listed Buildings and one a Registered Park and Garden.

5.4.10 The Listed Buildings are as follows:

5.4.11 PRN 66326 Barn SE of Plas-yn-Llan (Grade II Listed) - Early C17 barn, originally with timber-framed storey above a rubble ground floor and with tall rubble gable ends.

5.4.12 PRN 66339 Stable Range at Plas-yn-Llan including adjoining Carthouse complex (Grade II Listed) - Late C17 stable range and tack room, built probably for Sir John Wynn, Baronet, subsequently the founder of the Williams-Wynn dynasty of Wynnstay.

5.4.13 PRN 29965 Plas-yn-Llan House, Eglwysbach (Grade II* Listed) Plas yn Llan was built by the Wynn family in the mid to third quarter of the 16th century. The house was extended and altered in the early 17th century, but no substantial alterations have taken place since. The gardens that once surrounded the house are also considered to be of the 17th century (PRN 17285).

5.4.14 PRN 29966 Ysgol Eglwysbach National School, Eglwysbach (Grade II Listed) School built in 1835, endowed by Rev. Howell Holland Edwards (1762 - 1846).

5.4.15 The Registered Park and Garden is PRN 17285 Plas-yn-Llan Gardens, Eglwysbach (Grade II) The gardens that once surrounded Plas yn Llan house and stable block are considered to be of late 17th century date. The gardens have been listed primarily for the survival of the structure of a rock-cut walled and terraced garden. The gardens fall into two main areas; the level ground in front of the house, and the steeply sloping ground to the back of it. In front, to the E of the house, is a rectangular stone walled enclosure extending from the N end of the house to the drive at the S. The interior is

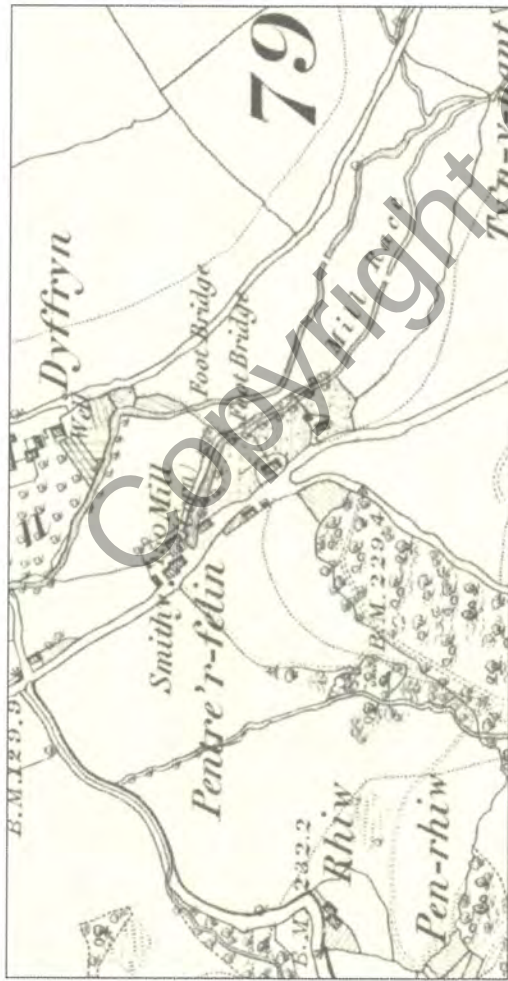


Figure 3. First Edition Ordnance Survey Map Showing Development Site
(Surveyed 1875 Published 1880. Source: www.maps.nls.uk)

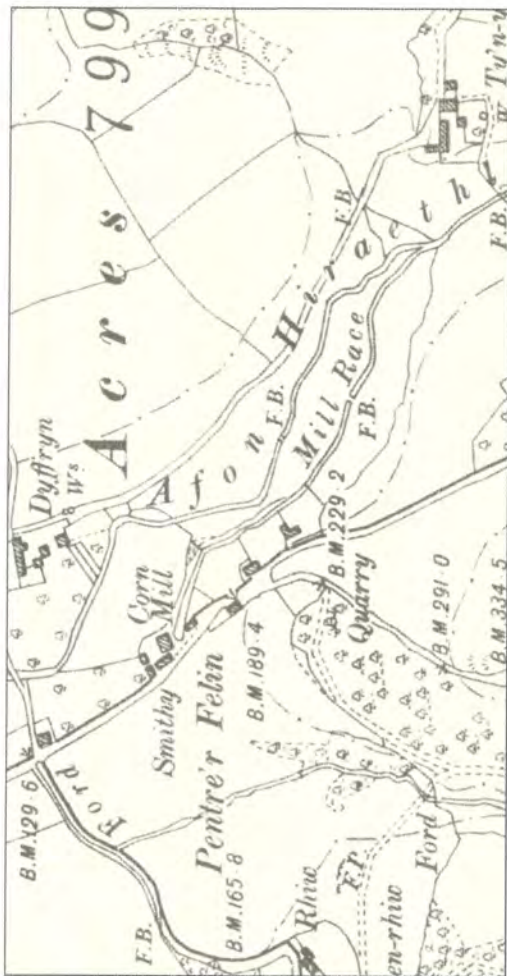


Figure 4. 1899 Edition Ordnance Survey Map Showing Development Site
(Revised 1899 Published 1900. Source: www.maps.nls.uk)

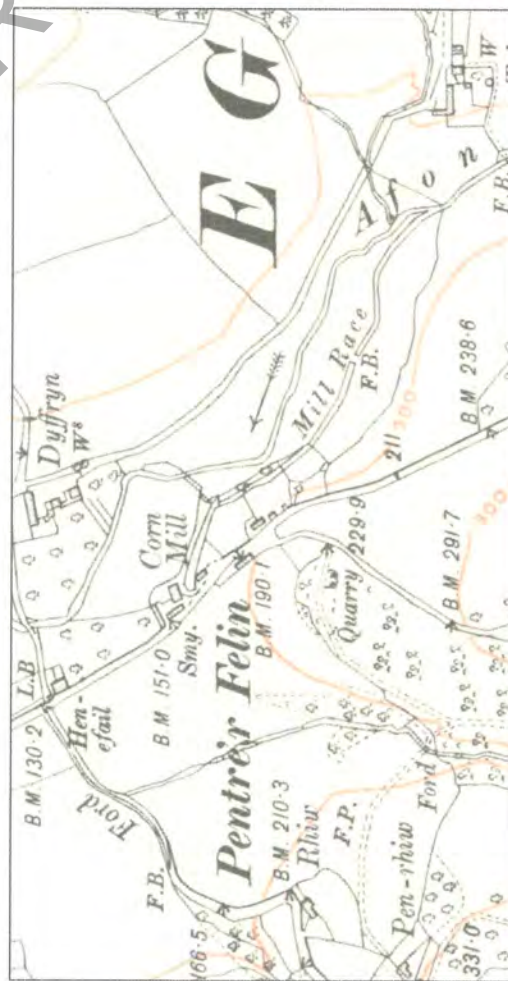


Figure 5. 1915 Edition Ordnance Survey Map Showing Development Site
(Revised 1911 Published 1915. Source: www.maps.nls.uk)

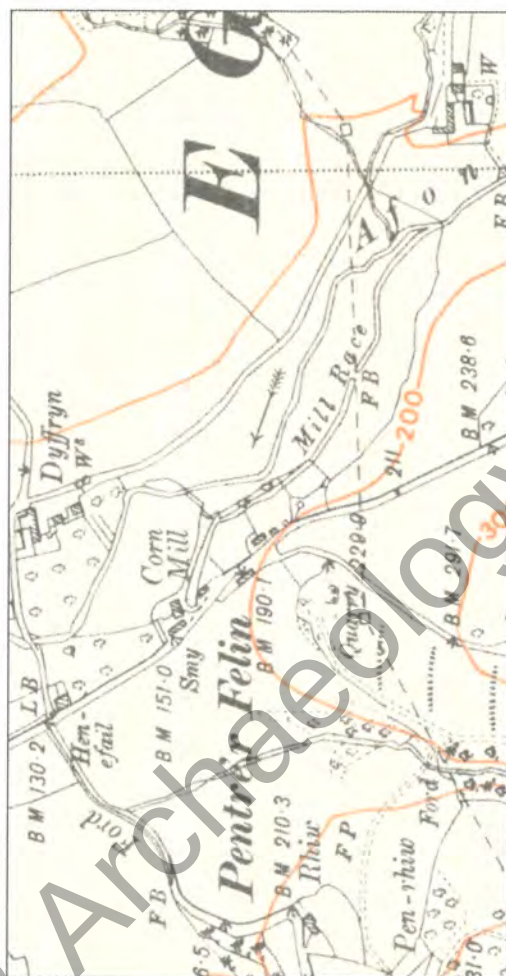


Figure 6. 1953 Edition Ordnance Survey Map Showing Development Site
(Revised 1948 Published 1953. Source: www.maps.nls.uk)

grassed over and mainly grazed. The garden behind the house is walled and terraced and has long fallen into disuse. It is also largely grassed over and grazed.

5.4.16 The remaining sites are PRN 34597 Woollen Mill, Eglwysbach, PRN 29976 Cefn Coed Ucha, Eglwysbach and PRN 56443 Footbridge, SE of Llwyn-du.

5.5 Modern

5.5.1 There are no records of Modern date within a 500m search radius of the site.

5.5.2 There is a single record of Modern date within the 1000m search radius. PRN 33321 is a corrugated iron agricultural building located to the south of Eglwysbach.

5.6 Cartographic Evidence

5.6.1 A full map progression was not required for this project and no documents prior to the Tithe of the early 1840's were consulted.

5.6.2 The 1840's Tithe (figure 2) shows the mill, associated buildings and mill pond. It is named Felin Newydd (new mill) and is presumably either a relatively recent rebuild on the site at that time or has been built more recently than other mills in the village. It is recorded as being occupied by Hugh Jones and others.

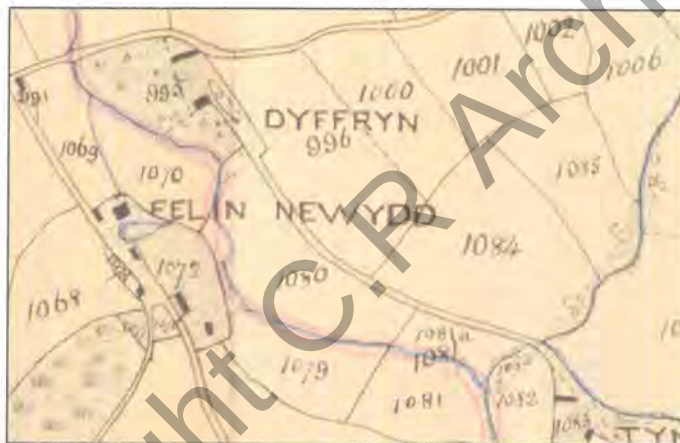


Figure 2. 1841 Tithe Map Extract Showing Development Site

5.6.3 By the time of the 1875 survey for the First Edition Ordnance Survey map (figure 3) of the area the mill has been renamed Pentre Felin and a separate mill race has been established. The mill pond appears to have been significantly altered to accommodate the new race, although this may not be the case due to the schematic nature of the Tithe Map. There are no further changes shown on the Ordnance Survey maps of 1899 (figure 4), 1915 (figure 5) or 1953 (figure 6).

5.6.4 Following a period of neglect the site was redeveloped by the current owners in the 1990's who reports reinstating the wall of the mill pond – see plates 1-4 for pictures of the mill and area at this time.

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6.0 Results of Archaeological Results

6.0.1 For ease of discussion/interpretation the following section has been subdivided by construction phase and area.

6.0.2 The area cleared is shown on figure 7 and location and direction of the photographic plates are shown in Appendix C.

6.1 Pre-commencement Photographic Survey (Plates 5 – 12)

6.1.1 A photographic survey was carried out before the commencement of machine excavation at the site.

6.1.2 The interior face of the bank area to be removed was faced with large – medium rounded stone.

6.1.3 The exterior face had a lower course constructed of very large rounded stones with smaller rounded stones used in the upper courses. The interior facing stones were removed by hand for reuse.

6.1.4 An area measuring approximately 9m in length by 4m in the north west, and 5m to south-east was removed by mechanical excavator to create a parking area.

6.2 The Partial Removal of the Bank and Wall (Plates 13 – 20)

6.2.1 The North-Western Wall Section

6.2.1.1 The north-western section was heavily disturbed and had extensive root damage from two large trees. This disturbance made it difficult to record the interior face. The section was approximately 4m wide and is 1.25m in height at its central point

6.2.1.2 The exterior was faced with large squarish stone which acted as a revetment. The stone facing had a maximum height of 1.5m. The stone facing was topped with turf (01) which was approximately 0.10 – 0.20m in depth. The bank crest has a rounded profile. Below the turf was context (02), a mid-brown silt clay subsoil with occasional flat small stones/shale. This deposit was around 0.36m in depth.

6.2.1.3 This overlay context (03), a light brown silt clay with frequent small and medium stone/shale. This deposit was the underlying natural at the site. It was excavated to a depth of approximately 0.45m in order to lower the level of the bank to that of the surrounding area.

6.2.2 The South-Eastern Wall Section

6.2.2.1 The south-eastern section was turf covered and was approximately 5m wide and a maximum of 1.50m in depth.

6.2.2.2 There was a single large rounded stone defining the exterior edge of the bank within the development area. The interior walling was modern facing added by the land owner when the associated buildings were converted to dwellings in 1994.

6.2.2.3 There was mixed deposit of modern rubbish between the bank and this recent walling which corresponded with the account that the site had been used for dumping before conversion. The whole bank was covered with a thick layer of turf (01) with a depth between 0.40m in the central section to 0.90m on the exterior edge. 1.10m of the natural shale bedrock was removed to level the development area.

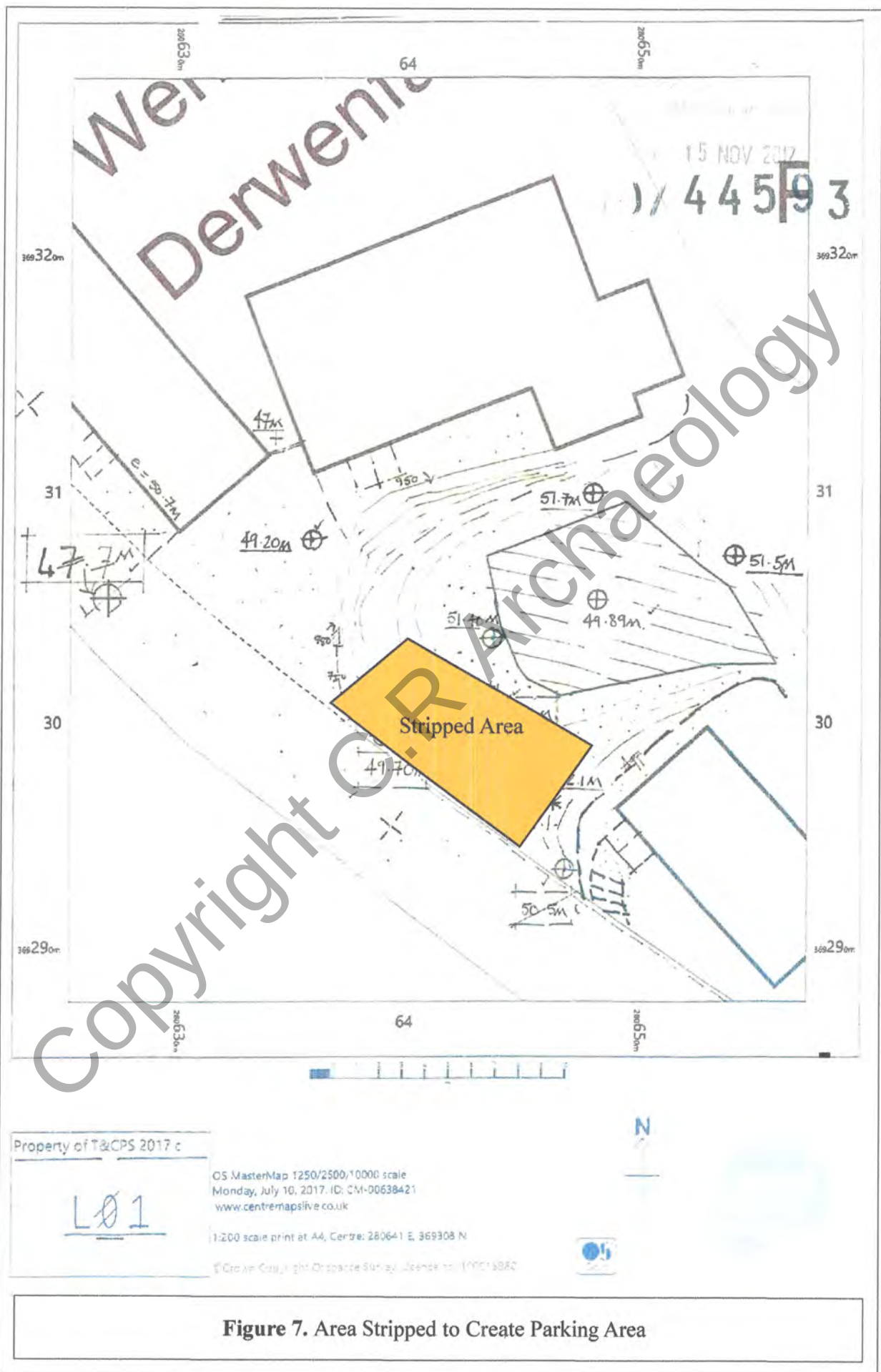




Plate 1. Existing Retaining Wall of Mill Pond
- "New" Wall in Foreground (Supplied by Client)



Plate 2. Area Inside Mill Pond Prior to Redevelopment
Of the Site in the 1990's (Supplied by Client)



Plate 3. Ancillary Building Prior to Redevelopment
Of the Site in the 1990's (Supplied by Client)



Plate 4. Ancillary Building Following Redevelopment
Of the Site in the 1990's (Supplied by Client)

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Plates 5 - 8. Mill Pond Retaining Wall Prior to Commencement of Work - Exterior Face



Plates 9 - 12. Mill Pond Retaining Wall Prior to Commencement of Work - Interior Face



Plate 13. Removal of Modern Replacement Wall in Mill Pond Interior

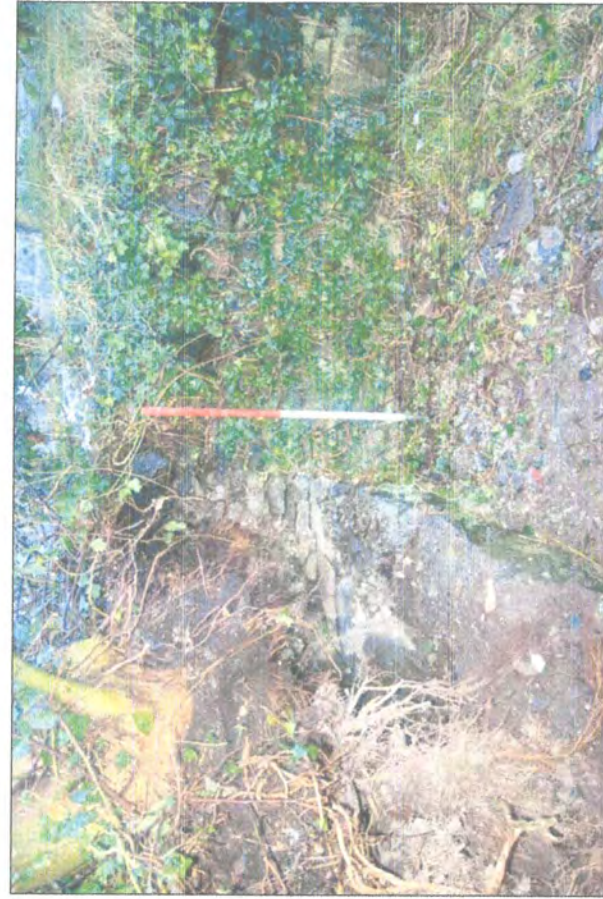


Plate 14. Removal of Modern Replacement Wall in Mill Pond Interior - Nineteenth Century Wall in Background



Plate 15. Removal of Modern Replacement Wall in Mill Pond Interior



Plate 16. Stripped Area Following Removal of Bank & Wall



Plates 17 - 20. Selected Sections Through Bank and Wall

6.2.3 Discussion

6.2.3.1 The construction of the mill pool required the excavation into the surrounding bed rock which was then faced and built up in the lower areas. Where the base of the pool was exposed it appeared to go straight onto the bed rock perhaps making it easier to water proof. The surrounding height of the bed rock can be seen from the height of the drying house and the exposed bedrock sections seen opposite in the road section.

7.0 Conclusion

7.0.1 With the exception of the modern material behind the 1990's rebuilt wall, no dating evidence was recovered during the watching brief.

7.0.2 The construction of the mill pond was found to cut into the underlying bedrock and some of this material was utilised in the bank construction.

7.0.3 An examination of the cartographic evidence shows that although the mill pond may possibly have an earlier origin the mill pond form as evident on site was created between 1841 and 1875. It was in part recreated/rebuilt during the 1990's conversions of the site.

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www.mapapps.bgs.ac.uk/geologyofbritain/home.html?location=eglwysbach&gobBtn=go

Appendix A.

Specification for Archaeological Works

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**Specification for Archaeological Works at
Wenallt and Derwenfa,
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Contents

1.0 Introduction

2.0 Project Aims

3.0 Brief Historical Background

3.1 Topography

3.2 Geology

4.0 Scheme of Works – Methodology

4.1 Desk Based Research

4.2 Archaeological Watching Brief

4.2.1 Recording

4.2.2 Additional Mitigation/Contingency Measures

4.2.3 Recovery, Processing & Curation of Artefactual Material

4.2.4 Archive Compilation

4.3 Timetable for Proposed Works

4.4 Staff

4.5 Monitoring

4.6 Health and Safety

4.7 The Report

4.7.1 Copyright

5.0 Bibliography

Illustrations

Figure 1. Site Location Map

Appendices

Appendix A. Proposed Works

1.0 Introduction

C.R Archaeology have been instructed by Ms H. Henry & Mr D. Allen to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: 0/44593).

This specification has been written following an email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning Services (beginning 11th January 2018) as a methodology for an Archaeological Watching Brief. It refers directly to correspondence Ref: 1124je02/D3168 which outlines the required works.

The proposed development site is situated in a rural setting just off Pennant Road, Eglwysbach (Figure 1). Planning permission has been granted for works to the existing access and vehicular parking to the south of the pair of properties known as Derwenfa and Wenallt (Appendix A).

The development plot is located within the curtilage of Pentrefelin and Bwthyn-y-felin, a Grade II Listed water-driven flour mill and miller's accommodation (Cadw ID 17570). A mill is thought to have stood at the site since at least 1680 (RCAHMW ref. 24666, PRNs 945 and 949), and therefore the complex as a whole – including the millpond, sluice and neighbouring buildings - may have earlier origins. It is located within the Conwy Valley Special Landscape Area.

The proposed new access and parking breaches a substantial earthwork corresponding to the footprint of the millpond dam on historic Ordnance Survey mapping. The account and photographs included in the Heritage Impact Assessment show however that this is largely a recent reconstruction, with the surviving original segment of the dam seemingly remaining unaffected by the proposals.

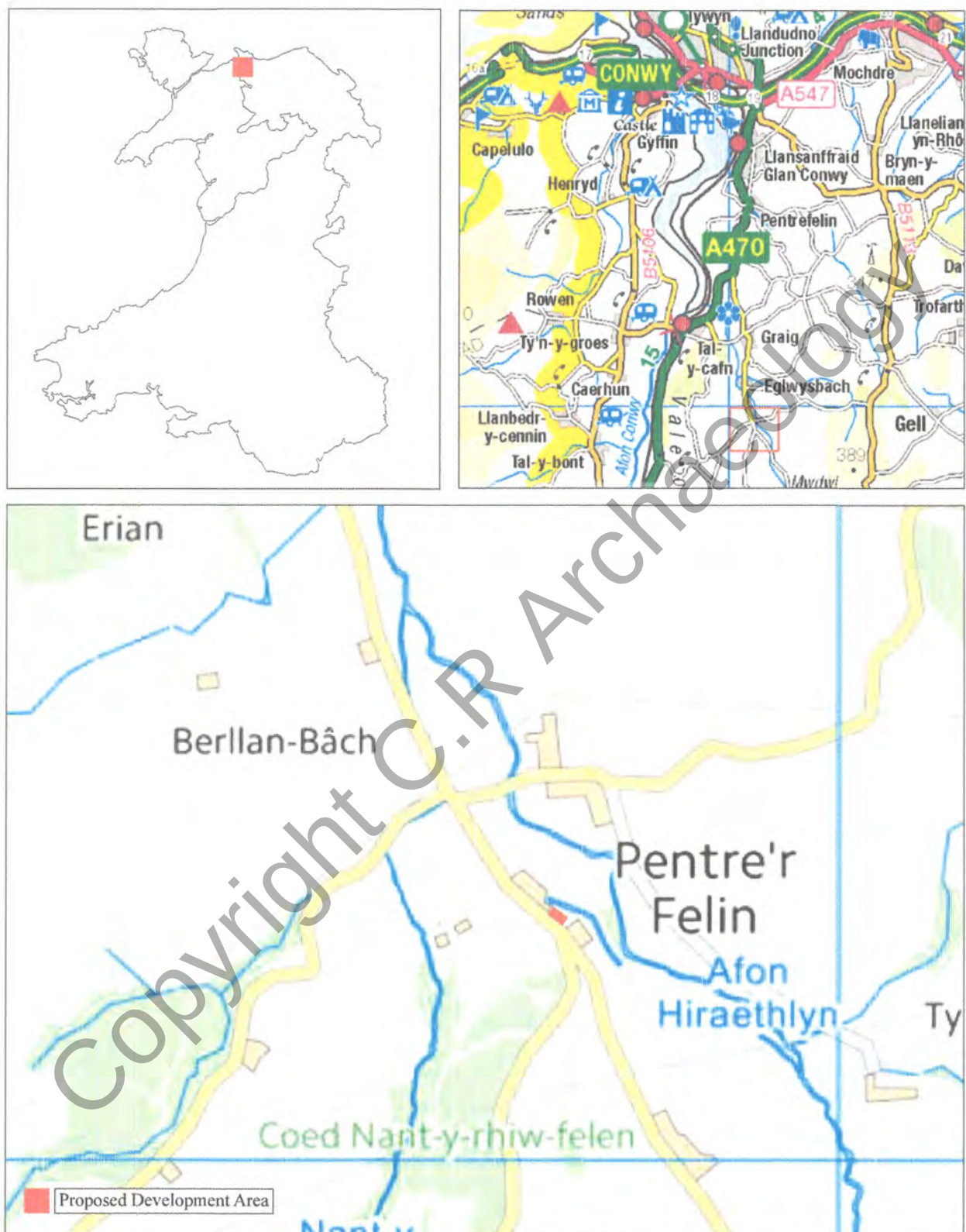
The majority of the section of bank to be removed is of recent date, and is understood to have used materials imported to site. As such, it is of negligible intrinsic archaeological interest. The north-western end however (annotated on the former planning drawing of September 1993 as 'not original but added pre-1994') does appear to be of some age, appearing on the 2nd edition Ordnance Survey map of 1900. As the exact extent of recent reconstruction is unclear, it is possible that original structure is retained behind this late 19th century wall, which would be removed by the proposed works. It was therefore recommended that provision was made for the recording of the current wall and any evidence of earlier phasing or original structure that may be revealed during site works.

This document details the methodology for a pre-commencement photographic survey and an archaeological watching brief which is to be conducted on all groundworks associated with the proposed project.

2.0 Project Aims

This scheme of works aims to create a basic photographic record of the site prior to the commencement of works and to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aims to fulfil the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance document (2014).



3.0 Historical Background

The following section is, through necessity, brief and is intended to merely place the site in context. A more detailed history of the site will form an element in the proposed works and will concentrate more specifically on the site itself.

The following information is taken from the Cadw Listed Building description (www.cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=17570).

"History: Late C18 water-driven flour mill with miller's accommodation included. Internal graffiti dates range from 1795 to 1848; the mill was in use until c1948.

Exterior: Rectangular rubble building set into a slope, with 3-storey main elevation, and 2-storey rear; red brick segmental heads to openings. Renewed, hipped slate roof with single squat chimney L of centre. 4-bay front with 2-bay mill section to R (now known as Pentrefelin) and miller's accommodation to L (Bwthyn-y-felin). The former has a wide entrance at R, with pegged wooden frame and modern boarded door. The domestic section has an entrance at L with modern door as before. Slightly-recessed modern sash-type windows (tilting upper sections) of 12- and 9 panes. Further modern windows to side and rear elevations of 6 to 12 panes. Single-storey gabled porch to L at rear, with former loading bay above, now a fixed sash window. To the R, a single-storey former bake-house projection at the corner with partly hipped roof; modern doors.

Interior: Large internal overshot waterwheel of approximately 6m diameter (partly disintegrated, June 1996), with secondary wheel operating the vertical driveshaft; the cast iron wheel has lost its paddles. Iron toothed crown wheel to first floor with associated layshafts and secondary drives. 3 large pairs of stones (two with modern boxing), mostly renewed timber hoppers; pulleys and wheels for mill pond sluiceway and sack hoist. 2 large panelled grain cupboards with raised and fielded panels to sides and hinged front. That to the R is the earlier and bears incised graffiti dates of 1795 and 1799; wooden hoppers above, that to R cupboard renewed. Also pulley-driven, a later C19 grinding machine with hopper as before, and consisting of a Christy and Norris 'Disintegrator', and a 'Eureka smut and separating machine' by Howes Babcock and co., New York (1865 model). 2 king post trusses to roof".

3.1 Topography

The proposed development site. The proposed development site is situated in a rural setting just off Pennant Road, Eglwysbach. The area for development is currently under grass and is partially set within the area once occupied by the mill pond and associated bank.

3.2 Geology

The bedrock is recorded as "Denbigh Grits Formation - Mudstone, Siltstone And Sandstone. Sedimentary Bedrock formed approximately 423 to 428 million years ago in the Silurian Period. Local environment previously dominated by deep seas. These rocks were formed in deep seas from infrequent slurries of shallow water sediments which were then redeposited as graded beds". The superficial geology is recorded as "Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters". The superficial deposits are not recorded (www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

4.0 Scheme of Works – Methodology

The methodologies employed will conform to The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

4.1 Desk Based Research

A brief history of the site and surrounding area will be compiled using the Gwynedd Historic Environment Record Office. A map progression will be undertaken beginning at the tithe records. Should groundworks at the site yield a significant discovery then full archival research including a cartographic study will be undertaken.

The Gwynedd Historic Environment Record will be consulted and a search radius of 1000m will be examined.

These works will be carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

This material will form the historical background for a full archaeological report. The report will include the results of the Archaeological Watching Brief.

4.2 Archaeological Watching Brief

Prior to the commencement of works a photographic record of the area will be made detailing the current land use/appearance and any standing structures which will be affected by the works. Photographs will be taken with and without scales as appropriate.

The watching brief will monitor all groundworks undertaken on the site. This will include all topsoil and subsoil stripping and the excavation of any service trenches.

A C.R Archaeology staff member will be present during the machine excavation of all groundworks. This work will be undertaken using a mechanical excavator fitted with a toothless ditching bucket. If archaeological remains are encountered then machine excavation will cease at this level until it is clear in plan that the full extent of any features have been uncovered within the development area. If the features extend beyond the limits of the development and it is felt to be beneficial to extend the width of the strip where possible an additional area of up to 1m on either side of the feature will be exposed. If this does not prove sufficient it may then be necessary to follow the procedures for Additional Mitigation/Contingency Measures.

C.R Archaeology will notify GAPS as the date of the commencement of works and if any significant archaeological features are uncovered. A site visit will be arranged to allow for the inspection of works.

All archaeological remains/potential archaeological remains identified during the stripping of the site will be marked using spray paint and cordoned off to allow excavation by C.R Archaeology staff. Any archaeological features, structures or remains will be trowel cleaned by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, date, significance and quality. If features yield suitable material for dating/environmental processing then samples will be taken for processing off site. The size of these samples will depend on the size of the feature but for smaller features a sample of up to 95% will be taken. For larger features a sample of up to 40 litres will be taken. In the event of a significant discovery GAPS will be informed of the discovery and a mitigation strategy agreed before works will progress.

Fieldwork is to be conducted and managed by Matthew Jones (MA)/Catherine Rees (MCIfA, MA) of C.R Archaeology. Additional staff can be brought in as required and all staff members will have experience equivalent to MCIfA level and cv's can be provided on request.

4.2.1 Recording

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

Plans, sections and elevations will be produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections will be prepared as appropriate showing the sequence and depths of deposits. A temporary benchmark (TBM) will be established on the site and plans, elevations and sections will contain grid and level information which where possible will be calculated relative to OS data. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'harris matrix' diagram will be created.

A high-resolution 14.2mp Sony Alpha digital camera will be used to create a photographic record of the site. This will be comprised of photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale and north arrow. General photographs will also be taken in the event of a negative result.

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

4.2.2 Additional Mitigation/Contingency Measures

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

In the unlikely event that human remains are encountered site work will cease with immediate effect. The coroner, client and monitoring body will be informed immediately. The company will abide by the requirements of Section 25 of the Burial Act 1857. Any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought. All human remains are to be preserved *in situ*, covered and protected. They will only be removed in exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act, with adequate security provided in such cases.

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

4.2.3 Recovery, Processing and Curation of Artefactual Material

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

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds.

Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material will be produced by Matthew Jones and further specialists will be appointed as required. A list of specialists will be prepared prior to the post-excavation phase of works.

Any specialist conservation necessary will be undertaken by Cardiff Conservation Services, Cardiff University. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis it is hoped all archaeological material recovered will be deposited in Llandudno Museum. However should the client has asked to reserve the right to retain ownership of any artefacts. Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition. In the event of a negative result a digital version of the archives will be deposited at the RCAHMW.

The works will be carried out in accordance with The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief*.

4.2.4 Archive Compilation

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

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

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report (P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive (P3)* will be checked and ordered according to MoRPHE criteria.

Any archive/artefactual material created/discovered during this archaeological project will be deposited in Llandudno Museum. In event of a negative result, or the owner retaining the finds the archive will be deposited at the RCAHMW. Archive material will be deposited in accordance with the terms and conditions for archive deposition.

4.3 Timetable for Proposed Works

It is envisaged that groundworks will commence in approximately 2 weeks time and will be carried out on a day rate basis and staff will attend site as necessary. Additional time will be allotted as necessary for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

4.4 Staffing

The project will be managed by Catherine Rees (MCIfA, MA). All staff will have a skill set equivalent to the CIfA MCIfA level. C.Vs for all staff employed on the project can be provided on request. All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

4.5 Monitoring

The project will be subject to monitoring by Gwynedd Archaeological Planning Services. The monitor will be given prior notice of the commencement of the fieldwork. A projected time-scale and copy of the risk assessment can be provided on request to the monitoring body prior to the commencement of works.

They will be notified in writing (via email) of the commencement dates for archaeological site work and will be updated with the results of all works conducted as watching brief elements. This will be initially as an telephone call & email with attached JPEG photographs and if/when required further interim reports will be compiled.

4.6 Health and Safety

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

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

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

Any further PPE required will be provided by C.R Archaeology

All staff will have passed at least a CITB health and safety test at least operative level.

C.R Archaeology staff will also comply with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

4.7 The Report

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

As a minimum the report will include:

- A copy of the design brief and agreed specification
- A location plan
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy

of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of the project.

In the event of a positive result of site works a short article will be submitted to the Archaeology in Wales Journal and the site archive including copies of all photographs in RAW and Tiff format will be deposited the local museum.

4.7.1 Copyright

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

5.0 Bibliography

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

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

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

Watkinson, D. & Neal, V. 2001. *First Aid for Finds*. London. United Kingdom Institute for Conservation of Historic & Artistic Works

Websites (All websites were consulted on 12/01/2018)

www.cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=17570

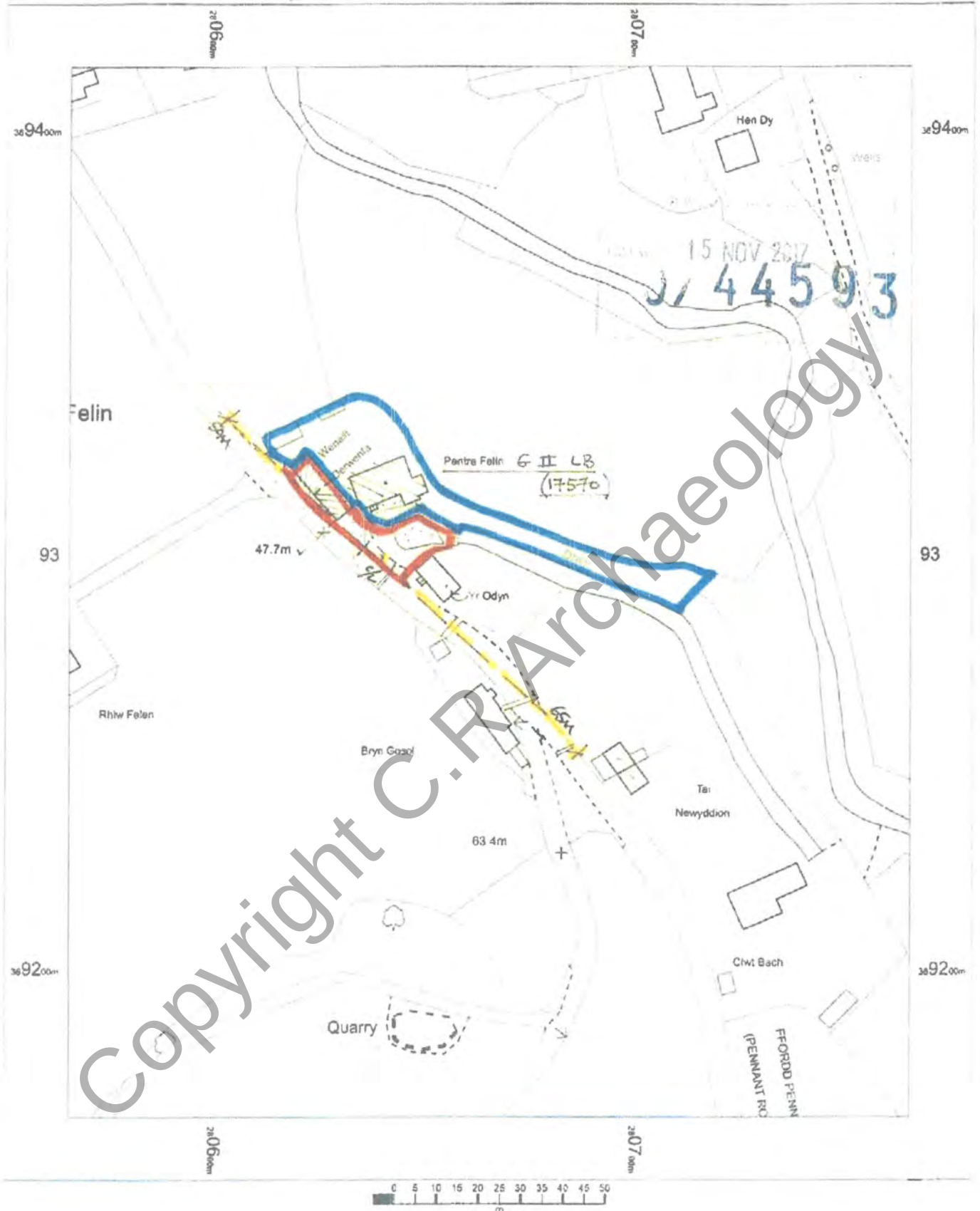
www.mapapps.bgs.ac.uk/geologyofbritain/home.html?location=eglwysbach&gobBtn=go

Appendix B.

Proposed Development Plans and Elevations

Copyright C.R Archaeology

Access & Parking Revisions.



C. Property of
T&CPS 2017- asserted.

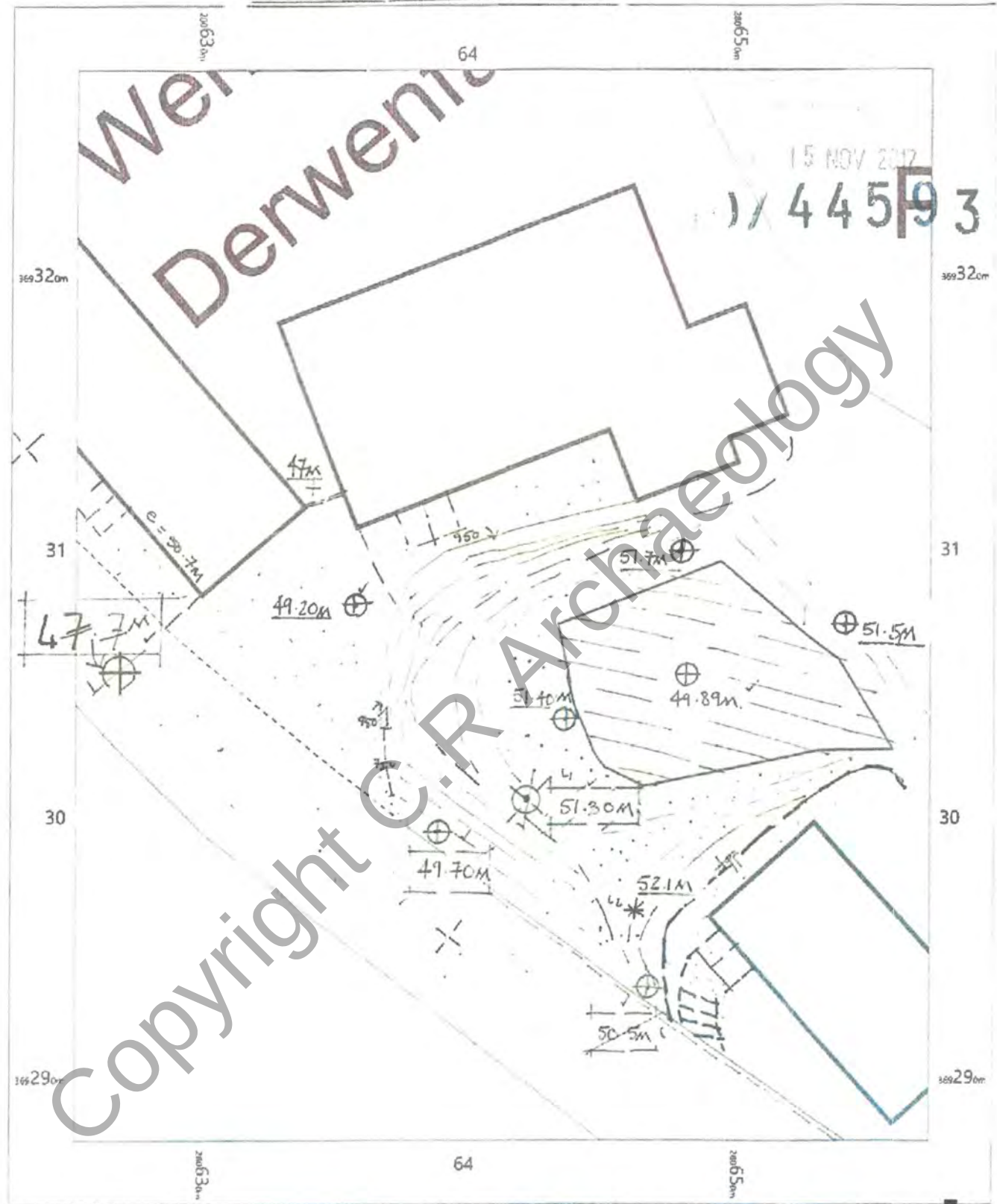
OS MasterMap 1250/2500/10000 scale
21 April 2017, ID CM-00817782
www.centremapslive.co.uk

1:1250 scale print at A4. Centre: 280667 E, 369291 N

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Levels As Existing - 1:200



Property of T&CPS 2017 c

L01

OS MasterMap 1250/2500/10000 scale
Monday, July 10, 2017 ID: CM-00638421
www.centremapslive.co.uk

1:200 scale print at A4, Centre: 260641 E, 369308 N

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Layout - 1:200



Property of T&CPS 2017 c

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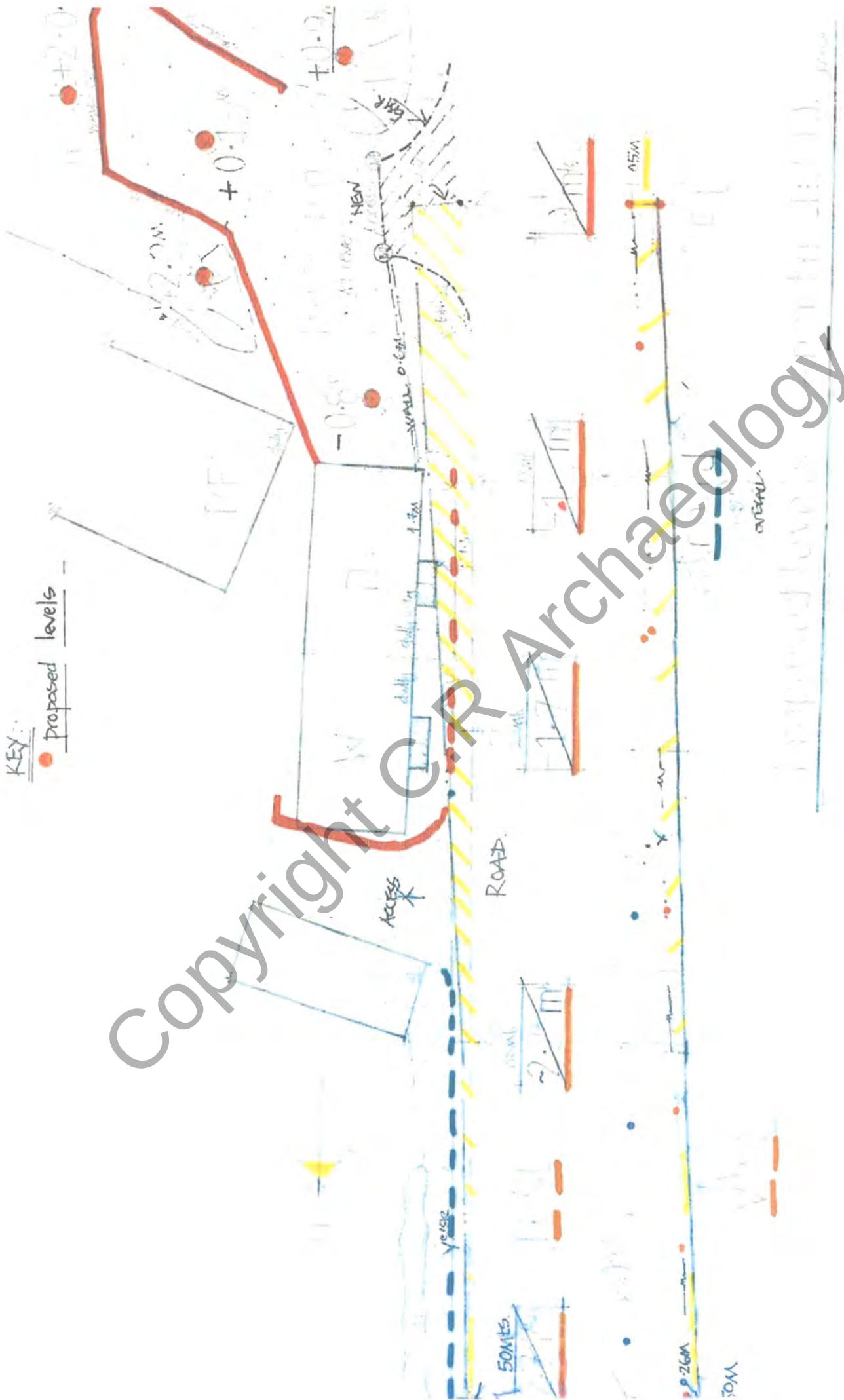
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www.centremapslive.co.uk

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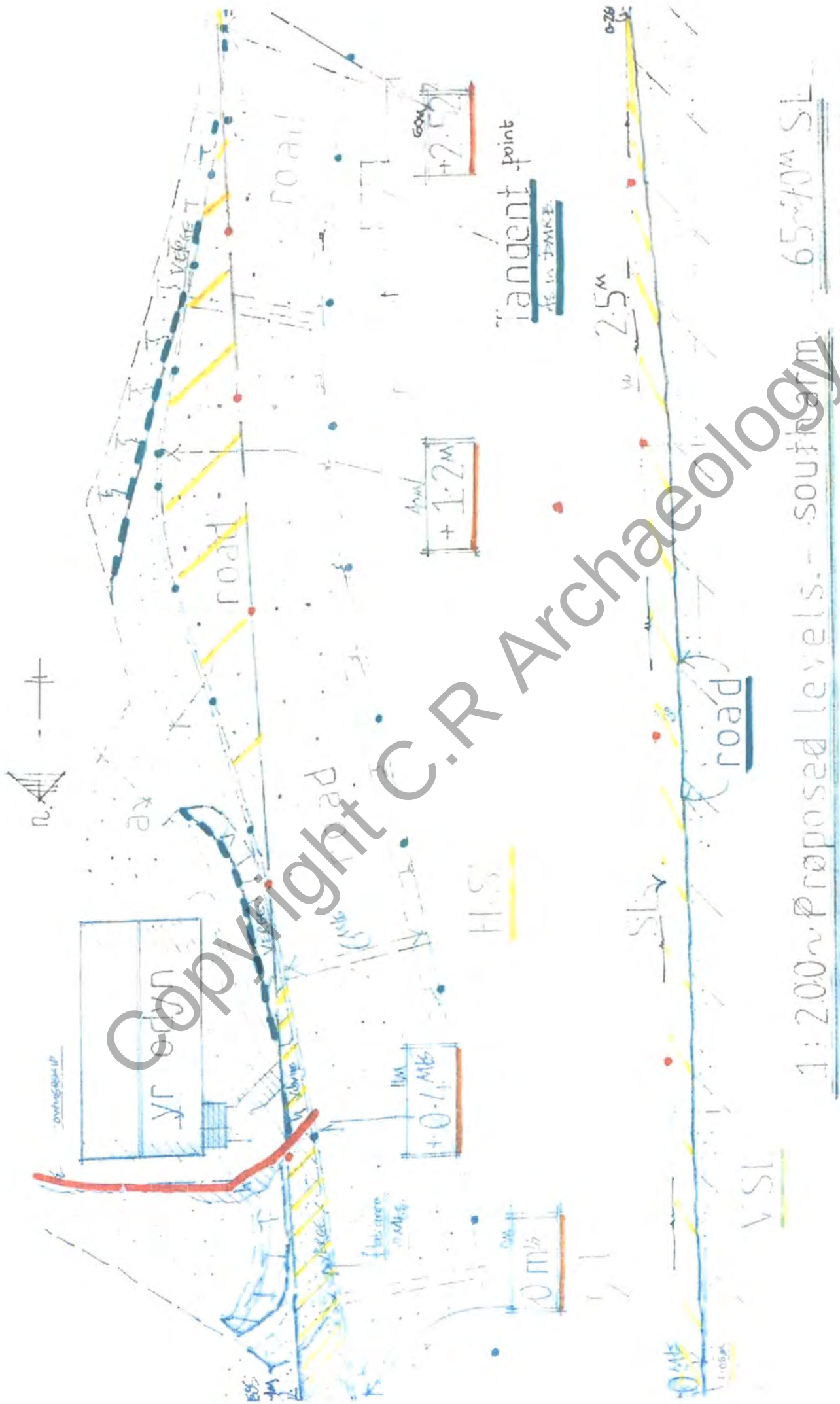
27m x 27m Digital Terrain Model Survey, 10m x 10m grid



proposed	levels
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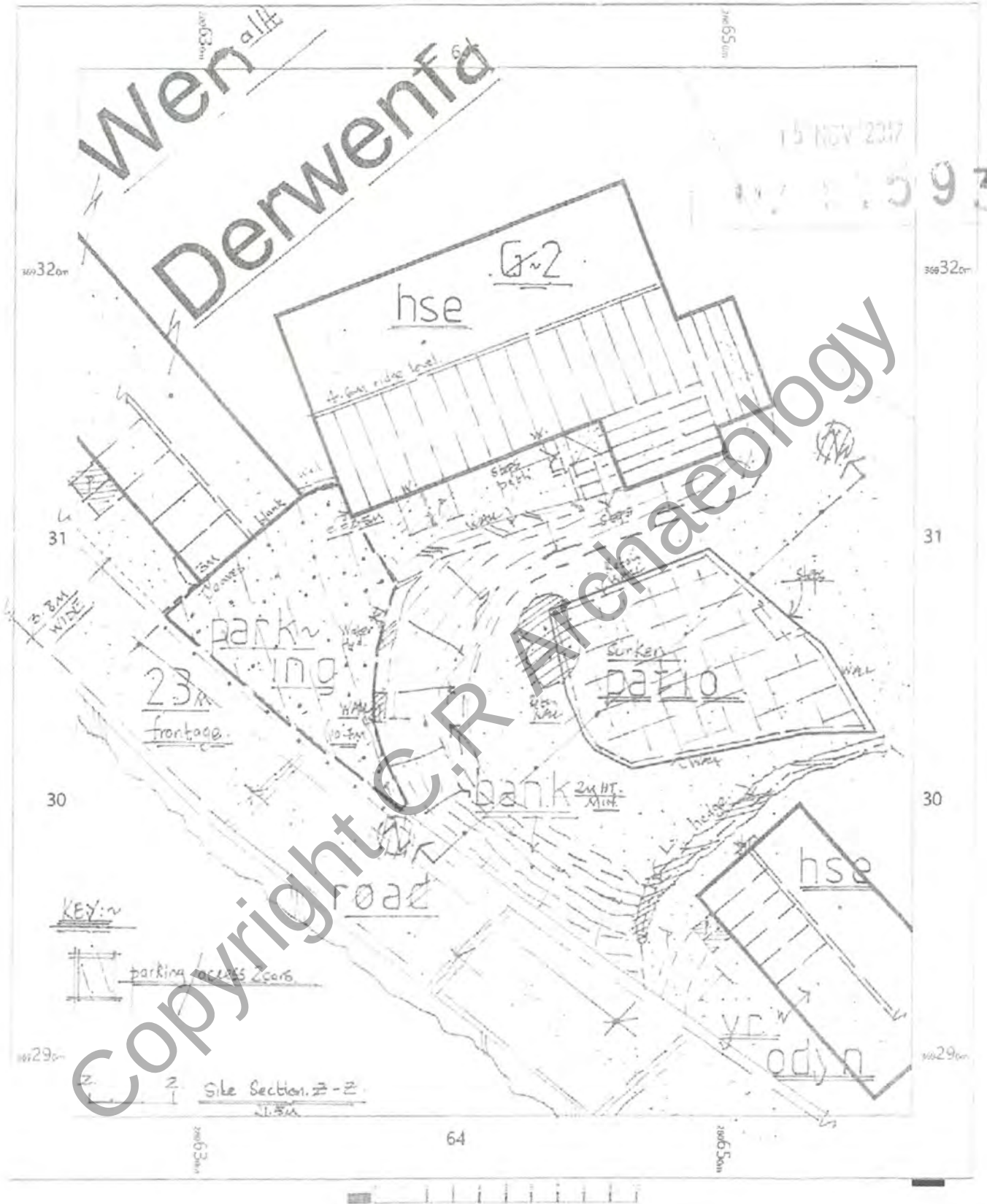


1:200 ~ Proposed levels. - southern.

657059 TS WD/59

15 NOV 2017

0:4593



STONE WALLS THAT I BUILT 1994

DIRECTION OF STONE WALL WHICH IS NOT ORIGINAL BUT ADDED PRE 1994

TRENCH FOR GAS PIPE

JCB EXCAVATIONS

Simon Tarmaster and Associates
ARCHITECTURAL AND PLANNING CONSULTANTS

3a Victoria Buildings
Station Road, Deganwy
Gwynedd LL31 9DS
Tel Llandudno 583038
Fax (0492) 583036

Site Layout.

The Mill, Eglwysbach.

Client: Mr. D. Allen

Drawn by : Jan Benjamin

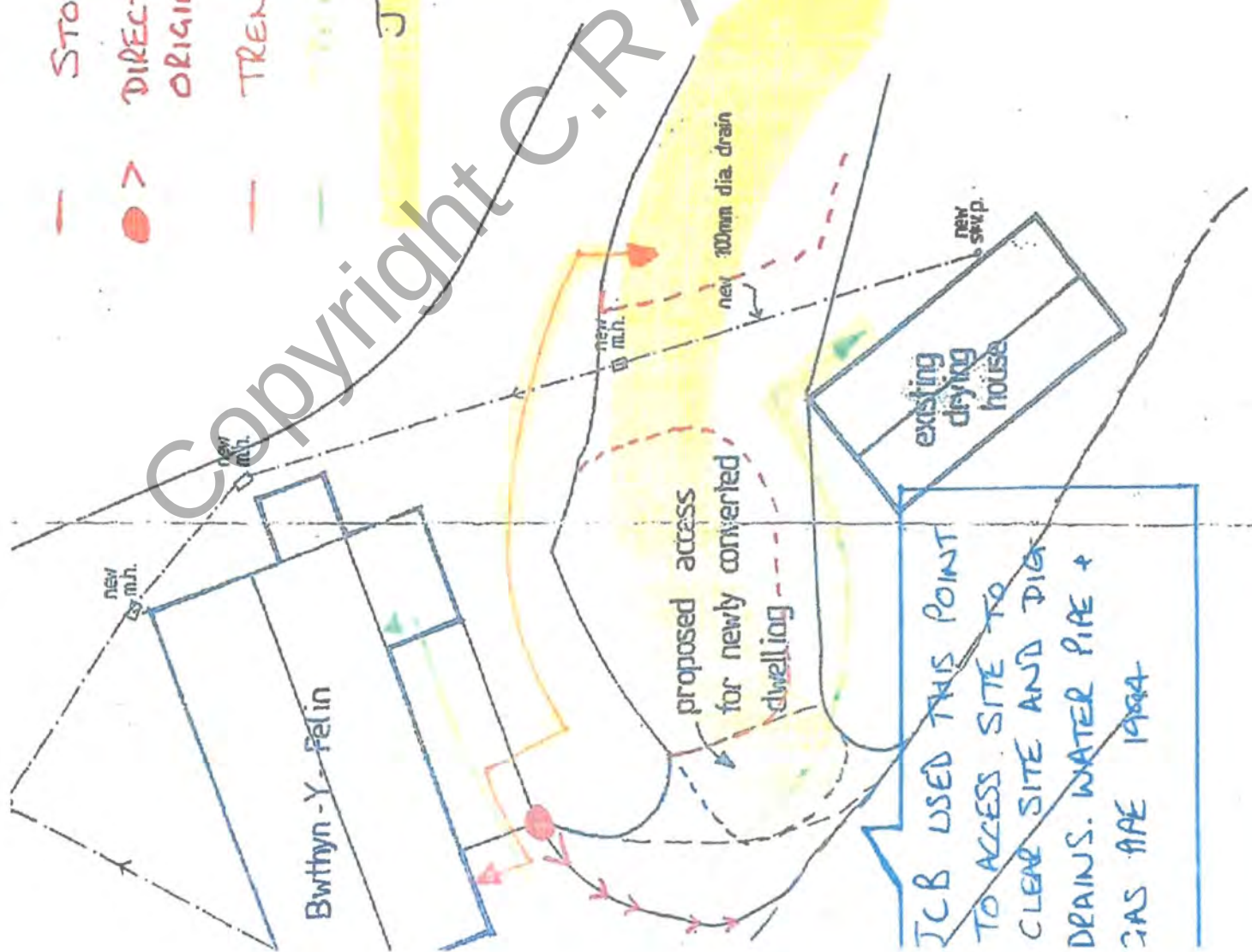
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Revision :

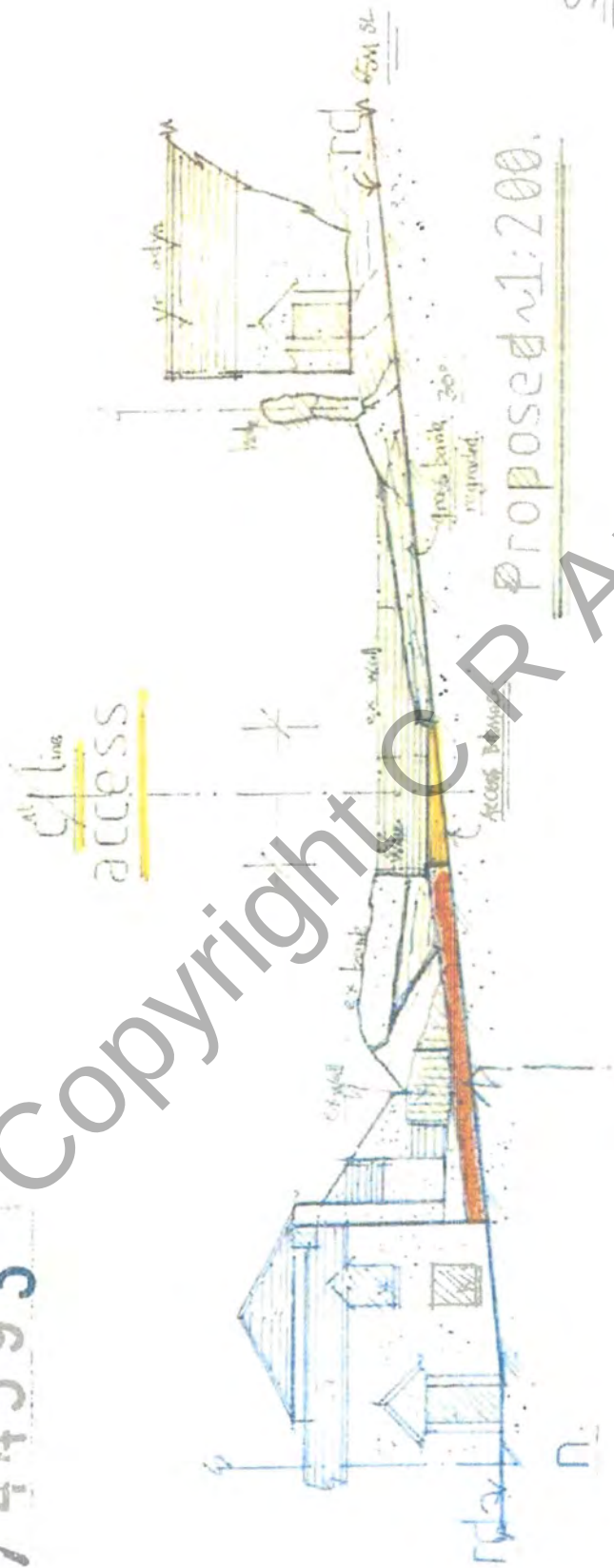
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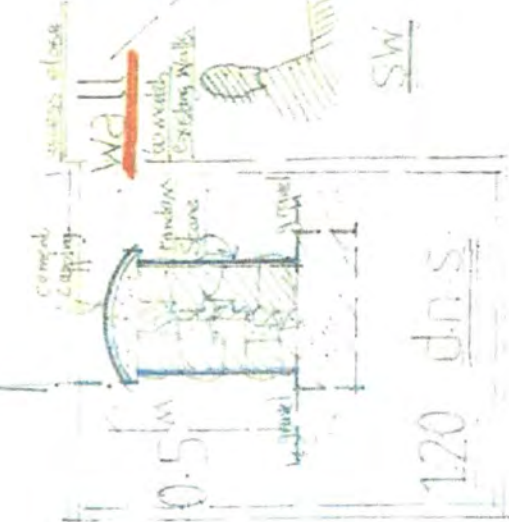


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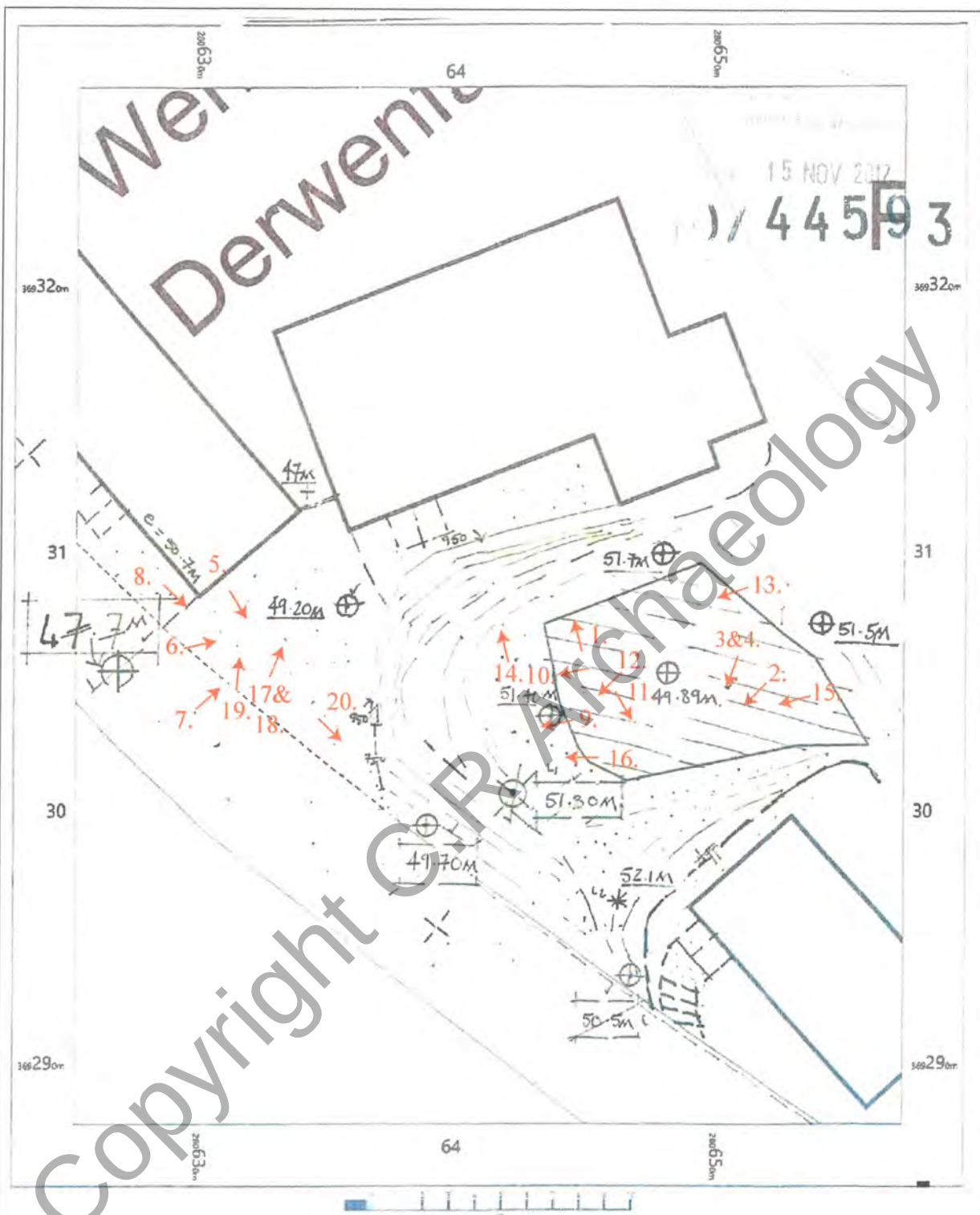


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OS MasterMap 1250/2500/10000 scale
Monday, July 10, 2017. ID: CM-00638421
www.centremapslive.co.uk

1:200 scale print at A4, Centre: 280641 E, 369308 N

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Appendix C. Location and Direction of Photographic Plates