Desk Top Study and Watching Brief Commissioned

By

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Field Work

by

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Registered in England

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Land Adjacent to Red Lion Farm, Llanllechid

Desk Top Study and Watching Brief

June 2011

EAS Client Report 2011/11

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Introduction

NGR

SH 6222 6880

Location and Topography (Figure 1)

The development site is situated at the northern end of Llanllechid, in a triangular plot to the north of St Llechid's Church and its graveyard. The site is bounded to the north by the old line of the road between Llanllechid and Tal-y-bont, to the west by Red Lion Farm and to the south by the Afon y Llan.

The plot (Figure 2) had the remains of a pond along its northern edge. This sat on an elevated platform, approximately 1.3m above the rest of the plot. Towards the western end of the plot was a small stone built structure which originally held a water wheel.

Archaeological Background

A new house is being built, partly over the pond and partly through the previously existing structure (Planning Application C10A/0547/21/). Archaeological conditions were imposed on the development requiring a desktop study, recording of the existing structure and watching brief on the construction of the new house.

Aims of the Study

The aims of the study were:

1. To make effective use of existing information in the establishment of the archaeological significance of the site to assess the impact of the development proposal on the surviving monument or remains.

2. To record the standing remains.

3. To record any archaeologically significant deposits disturbed by the development.

SUMMARY

The structure and its associated pond were constructed *circa* 1840. It was It consisted of a small building containing a water wheel on the lower floor and at least one grindstone on an upper floor. To the north was a mill pond fed from the Afon y Llan with an outlet in its south western corner. There was also an outfall leat, running from the water wheel back to the Afon y Llan. The building and mill pond are part of a small industrial complex with the building being used for the sharpening of tool for the local smithy.

Desktop Study

With the agreement of Ashley Batten, of the Gwynedd Archaeological Planning Service, the desk top study was restricted to the local and easily available archives.

Archives Consulted

The following archives and digital sources were consulted for this study

- University of Bangor Archives
- The Caernarvonshire Archives, Caernarfon
- The Historic Environment Record held by The Gwynedd Archaeological Trust
- The on line catalogue of the National Library of Wales (http://cat.llgc.org.uk/cgi-bin/gw/chameleon)
- http://www.archivesnetwork.wales.info/
- http://jura.rcahms.gov.uk/NMW/
- http://www.archwilio.org.uk/
- http://www.coflein.gov.uk/

Sources

Only a limited number of relevant records were located in the local archives listed above, these include:

- 1786 Penryhyn Estate Map (Bangor University Archive, Penrhyn 2203)
- Plan of the Parish of Llanllechid 1822 (Bangor University Archive, Penrhyn Maps 212
- 1840 Tithe map for the Parish of Llanllechid (Caernarfonshire Archives)
- Penrhyn Estate Map of circa 1840 (Bangor University Archive, Penrhyn 2213)
- 1889 First Edition Ordnance Survey map, Caernarvonshire XII NW, Scale 1:10560
- 1900 Ordnance Survey Map, Caernarvonshire XII.2, Scale 1:2500
- 1914 Ordnance Survey Map, Caernarvonshire XII.2, Scale 1:2500

Results

The earliest direct evidence for the plot discovered is the 1786 Penrhyn Estate Map (Bangor University Archives, Penrhyn 2203) (Figure 3). This shows the development area as Plot 23H where only the main house is shown at the northern end of the plot. It is also clear that both the development area and the area now occupied by the Red Lion Farmhouse were a single unit.

Although at a small scale the 1822 plan of Llanllechid (Bangor University Archive, Penrhyn Maps 212) (Figure 4) also appears to show a single building on the site, although the resolution on this map is not good.

Two maps of *circa* 1840 give the first indication of the structures on the site. The Tithe Map, of 1840 (Gwynedd Archives) (Figure 5), shows two buildings within Plot 88. This plot is listed as "Talysarn" on the schedule where the tenant is William Jones and the owner George Hay Dawkins Pennant. It does, however suggest that the area is still a single plot. The Penrhyn Estate Map of an assumed similar date (Bangor University Archive, Penrhyn 2213) (Figure 6) is the first of the maps to show the mill pond and its associated structure unambiguously. Although the size of the building is not to scale, it clearly shows the relationship of the pond, building and the Red Lion Farmhouse. This map also shows that the plot has been divided into

two separate plots, dividing the Farmhouse from the industrial remains.

The earliest accurate map is the First Edition Ordnance Survey map of 1889. Although the 1:2500 map was not held by the local archives, the 1:10560 map (Figure 7) clearly shows the mill pond and associated mill building. This map also shows the smithy which is assumed to be associated with the structure within the development area. Later Ordnance Survey maps (1900 and 1914) (Figures 8 and 9) were at 1:2500 giving slightly more detail. Both these maps show a widening of the Afon y Llan and the 1914 map also shows a sluice which is probably the point at which the mill pond was filled.

Mrs Bevan (one of the current owners) was brought up in Red Lion Farmhouse and thus was able to give a description of the structure, prior to its deterioration, but after its abandonment. There was a single pitched roof covering the building which was covered in slate. These slates were deliberately removed for re-use elsewhere. Inside, on the lower floor there was a water wheel "about the size of a cart wheel" whilst the upper floor only extended approximately half way across the building. There was a ladder linking the lower to the upper floor, whilst the door to the upper level had already been blocked. The upper floor contained a grinding wheel and its associated wooden frame. The structure was associated with the smithy, approximately 40 m to the north west and was used for sharpening the tools.

Watching Brief

Methodology

The structure in the grounds of Red Lion Farmhouse, Llanllechid was initially inspected on 26th April 2011 to record the standing structure prior to the construction of the house. The watching brief of the construction followed, taking place between 28th and 30th June 2011.

The site had been surveyed by NRG Engineering Services Ltd as part of the site investigations during the planning phase for the house (Figure 10). This plan was then used as the basis for further recording.

The plan was modified by direct measurement with features being added to the drawing when they were revealed. Photographs of the site were taken with a Nikon D80 digital SLR at a resolution of 10.8MP. Where possible the photographs included a metric scale.

Results

Initial Examination

Prior to the construction of the new house the structure was heavily infested with ivy and the interior had been used for dumping garden waste for many years such that the interior details were difficult to determine. It was however, possible to determine the general form and construction of the structure. The building was 6.79 x 4.69 m in size, partly cut into the bank which formed the dam defining the southern edge of the mill pond (Plate 1). It was standing to a height of approximately 3 m on the southern side (Plate 2) which was above the level of the upper floor, but not to the full gable height. To the west the structure was partly buried (Plate 3), however at least part of this was the result of dumping the spoil from a cleaning of the pond in this area (Bevan *pers. comm.*).

In general the building was constructed of random stone work with lime mortar pointing. There was some indication of the use of larger stones for quoins, however this was not stressed. There was one glacially smoothed boulder in the SE

corner of the structure. This was clearly in position prior to the construction of the building and was incorporated rather than moving it. There were openings in the north, east and south elevations (Figure 11). These generally have split stone lintels, although the lintel over the doorway in the eastern elevation had at least one sawn face.

The northern elevation (Plate 4) had one partly blocked doorway in its eastern end, which originally gave access to the upper floor. The eastern elevation (Plate 5) also has a single doorway (Plate 6), however, this gave access to the lower floor. The southern elevation (Plate 2) had a doorway in the western end giving access to the lower floor (Plate 7) and three window opening. One of the window openings was on the lower floor and overlooked the line of the outfall leat (Plate 8) whilst the upper windows were both in the eastern half of the building. They were set at slightly different levels (Plate 9) with the window over the outfall leat being at a slightly lower level.

The mill pond was 31.45 m long and up to 5.7 m wide running parallel to the property boundary and roughly at right angles to the line of the Afon y Llan (Plate 10. Although the pond was only damp at the time of the survey it has held water in recent times (Plate 11). At the time of the initial survey the level of the of the pond was above that of the bottom of the mill pond, however the 1914 Ordnance Survey Map (Figure 9) marks a sluice which presumably raised the level of the stream so that it filled the pond. The pond is bounded by the boundary wall to the property on the north and to the south by a bank/dam. This dam had a dry stone wall face to the north (Plate 12) and an earthen bank to the south and was approximately 1.5 m high above the level of the lower ground level. There was a leat opening in the south west corner of the pond which led to the building (Plate 13).

Watching Brief

The watching brief took place one complete (30th June) and two half days (28th and 29th June) and recorded the destruction of approximately half of the existing structure together with the removal of the deposits within the building and the cleaning of the pond.

The cleaning of the mill pond removed only deposits which had accumulated in recent years (A Bevan *pers. comm.*). It did, however, reveal more details of the construction of the mill pond. The pond was lined with a layer of blue/grey clay which also contained some slate waste fragments. This layer extended below the dam and was therefore laid down in an early phase of the construction of the mill pond. The dry stone wall between the north side of the pond and the road extended further down into the pond than was originally recognised (Plate 14), although it was much more crudely constructed than its upper portions which were previously visible. It is likely that the lower portion of this wall was originally, at least partly, covered by an earth bank. The dam consisted of a dry stone wall backed by an earth and clay bank (Figure 12, Plates 15, 16). In the south west corner, however, the wall had been replaced with a mortared stone wall around the outfall. This extended for approximately 2 m along the southern wall of the dam (Plate 17). This "patch" is assumed to be part of the modifications carried out after the mill had been decommissioned.

The leat between the pond and the building was slate lined (Plate 18). Once again this had been slightly modified after the mill had been decommissioned to incorporate a cast iron pipe which extended into the main body of the

building (Plate 19). This appears to have been inserted into the structure to allow drainage of the pond, once the head stock for the water wheel and the wheel had been removed.

The building is constructed of sub-angular and angular stone blocks which are largely constructed of dry stone walling with some lime mortar pointing (Plate 20). The floor appeared to be of beaten earth with slate slab supports for the water wheel and slate door sills. There is also a wheel pit, 0.97 m wide which crosses the middle of the floor (Figure 13).

The building was largely filled with garden waste which had accumulated over many years; below this was a layer of loose stones derived from the structure of the building.

The removal of the fill within the building revealed details of the rear wall of the building (Figure 14, Plate 21). This had a partly blocked doorway towards its eastern end which would have given access to the upper floor of the building (Plate 22). This was 0.8 m wide and probably at least 1.5 m high. The level of the sill to this door was lower than the top of the dam meaning that it was necessary to step down into the building. The leat from the mill pond entered the building though a rectangular opening, 0.7 m wide and 0.35 m high (Plate 23). The position of this opening marks the height at which the head stock was positioned and also suggests that the building contained either an overshot or pitchback wheel. The opening contained the iron pipe which was used to drain the pond after the decommissioning of the water wheel.

There is a third opening in the western half of the rear wall. This is 0.96 m wide and 0.5 m high and set in the upper part of the building (Plate 24). It is also set below the level of the top of the dam for the mill pond. Information from Mrs Bevan suggests that this half of the building did not have an upper floor and it is therefore difficult to suggest a function for this opening. Its form is similar to the head stock, however no signs of a wheel was recorded in this half of the building and its position is beyond the extent of the mill pond. It is possible that it was simply a window lighting this part of the building.

The removal of the gardening debris also revealed two stub walls on the western edge of the wheel pit (Plate 25. These were constructed of dry stone walling and appear to be later than the main structure of the building. It is possible that these were built to support the western end of the upper floor.

The wheel pit was 0.97 m wide and was lined with stone walls constructed of large stone blocks (Plate 26. It had been deliberately filled with large rounded stones, presumably to make the base of the building safe whilst still giving drainage. It was difficult to assess the depth of the wheel pit because it filled with water on excavation; however, it was at least 1 m deeper than the slate block on which the water wheel was mounted.

The water wheel was mounted on two slate slabs, either side of the wheel pit. The eastern slab was 1.84 m long and 0.83 m wide with a slot 0.78 m long and 0.14 m wide cut into its surface (Plate 27). There are three iron fittings attached, two studs and an iron plate held by a bolt (Plate 28). The western mounting was broken with the surviving section being a slate slab 0.6 x 0.52 m in size (Plate 29) with an iron stud in its upper surface (Plate 30).

The tail race was through a slate lined leat (Plate 31) that was buried below the

surface of the garden and curved toward the west before issuing back into the Afon y Llan. The route of this leat was partly defined by the need to get a fall on the leat as the levels between the base of the wheel pit and the level of the stream was marginal.

The building appears to have been stripped of its works on abandonment, only limited fragments were recovered with none of the waterwheel or much of the works being present. Only one metal fitting was recovered. This was a cast iron fitting attached to a broken fragment of a slate block (Plate 32). The function of this fitting is not certain; however it may be a toe pot, supporting a vertical shaft transferring the power from the waterwheel to the upper floor.

The frame and part of the grind wheel from the upper floor was found. This was a wooden frame (Plates 33 and 34) held together with iron rods and with the bearings for the grind stone in position (Plate 37). The grind stone was approximately 0.52 m in diameter with a hole in the centre approximately 0.07 m square. The likelihood is that this was belt driven as a flywheel with a series of concentric wheels which would have acted as a gear wheel for driving the grindstone was found (Figure 15, Plates 37 and 38)

Discussion

The structure in the garden of Red Lion Farmhouse would appear to be a water-powered grinding shop associated with the smithy, approximately 40 m to the north west (beyond Red Lion Farm house). It was probably constructed about 1840 at which point the plot land associated with The Red Lion Farmhouse was divided.

The water was probably diverted from the Afon y Llan into a small mill pond by means of a sluice across the stream. From here the water was allowed through a short leat into the building. It is somewhat unusual that the waterwheel was held within the building rather than being attached to one gable end. It is also clear that the fall available for this water wheel was somewhat marginal as there is only about a 2.0 m fall between the top of the dam and the floor of the structure. The total fall between the top of the dam and the stream adjacent to the outfall of the tail race is only about 4 m. Whilst the size of the water wheel is not entirely certain the maximum size of wheel which would fit into the space available is 1.2 m in radius and 0.95 m wide. A water wheel of this size would fill the available space and allow no room for a pit wheel or any other mechanism. It therefore likely that the wheel was somewhat smaller, possibly being less than 0.7 m wide which is the width of the head stock. A possible reconstruction of the relationship between the major features of the building is shown in Figure 16.

The mechanism for joining the water wheel to the grind stone is unknown, although the possible toe pot suggests that there was a vertical shaft, which would typically be driven via a pit wheel and wallower. No evidence for the transfer of power between this possible vertical shaft and the grindstones was recovered.

The grindstone itself would appear to have been belt driven with the possibility of adjusting the speed using the stone flywheel which was recovered from the fill within the building.

After abandonment the mechanism was deliberately removed and the wheel pit filled with stones to make it safe. The roof was also removed. The lack of timbers within the building would also

suggest that the upper floor was also deliberately removed.

Copyright

Acknowledgements

The desktop study and watching brief was commissioned by A. Bevan. The project was monitored by the Gwynedd Archaeological Planning Service and Jenny Emmet carried out a monitoring visit.

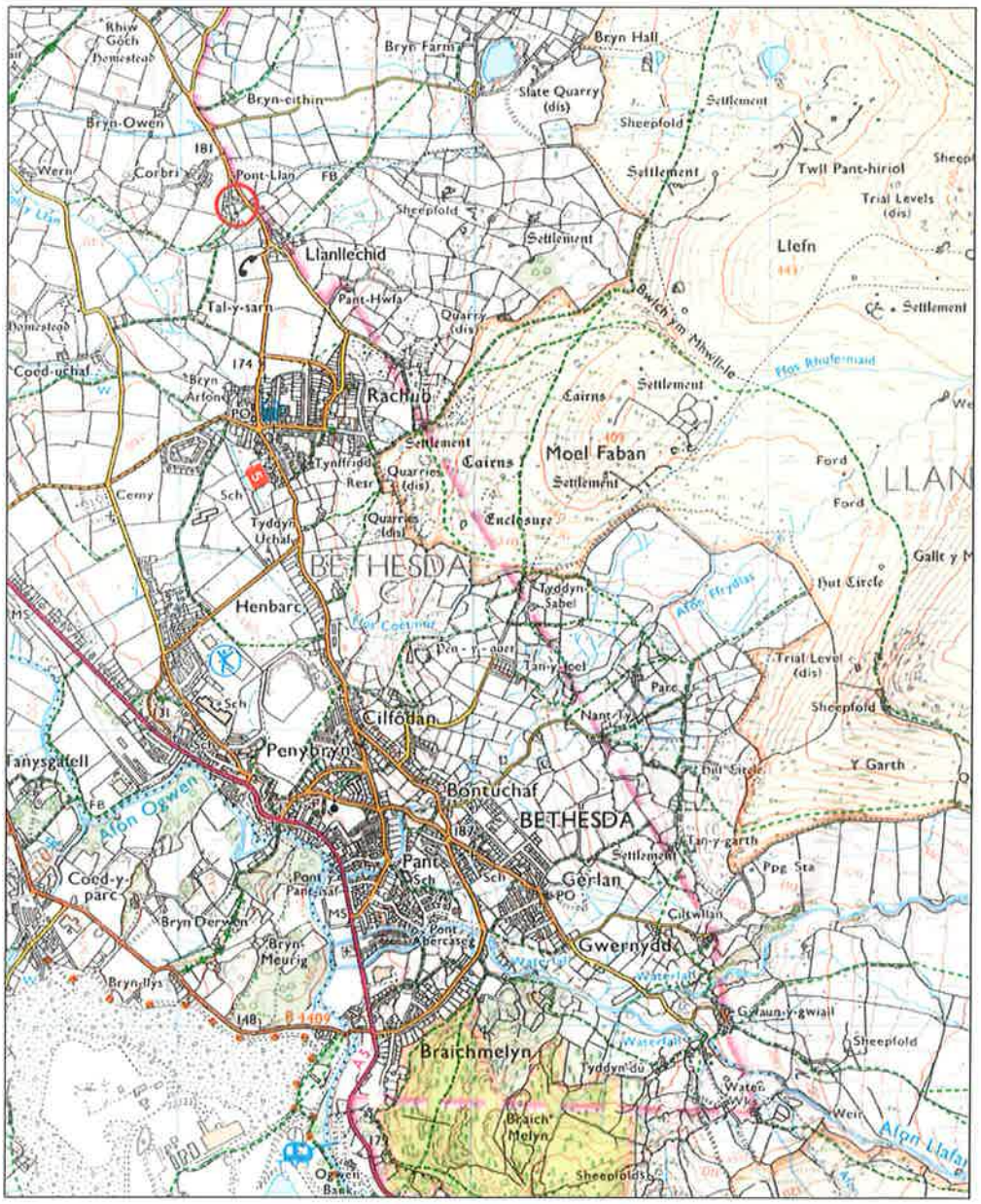


Figure 1: Location

Figure 2: The Development Plot
Scale 1:350
Based on Survey by NRG Engineering Services Ltd

Figure 3: Extract from 1786 Penrhyn Estate Map
(Bangor University Archive, Penrhyn 2203)
(Not to Scale)

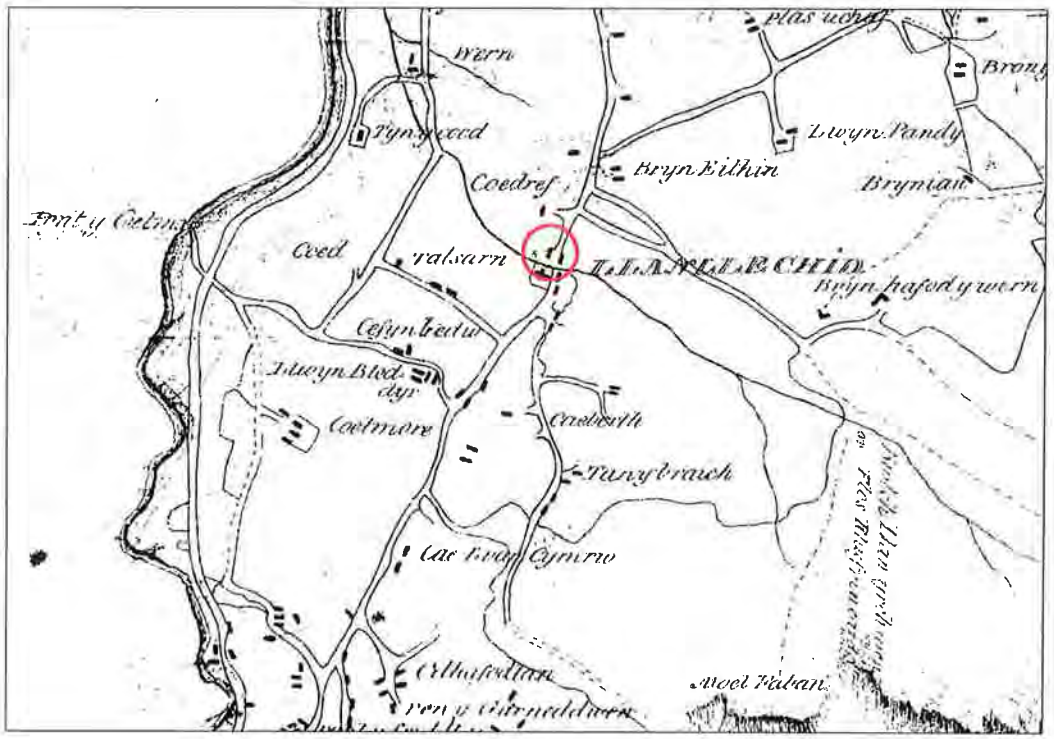


Figure 4: Extract of Plan of the Parish of Llanllechid 1822
(Bangor University Archive, Penrhyn Maps 212)
(Not to Scale)

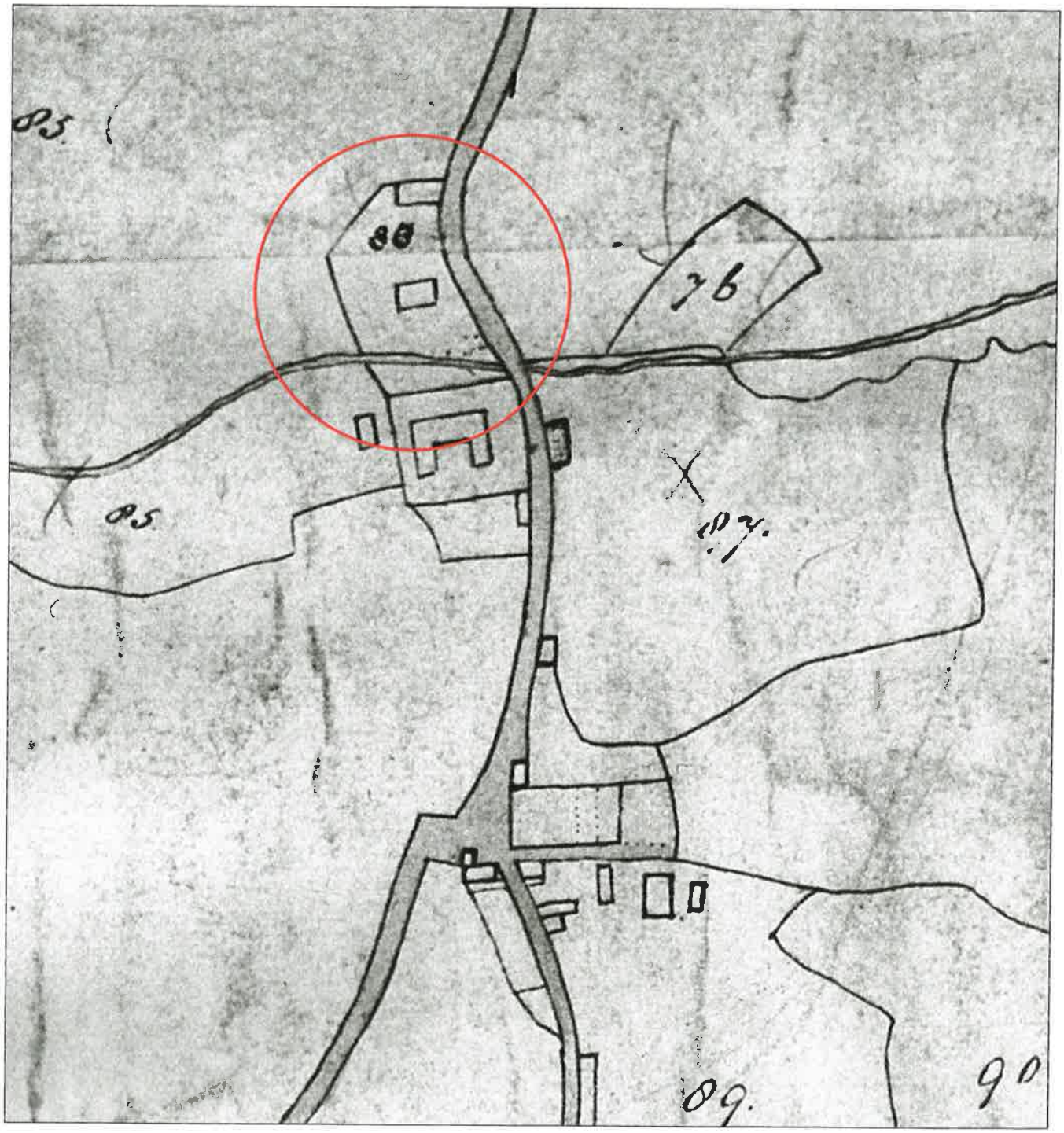


Figure 5: Extract of the 1840 Tithe Map
(Caernarfonshire Archive)
(Not to Scale)

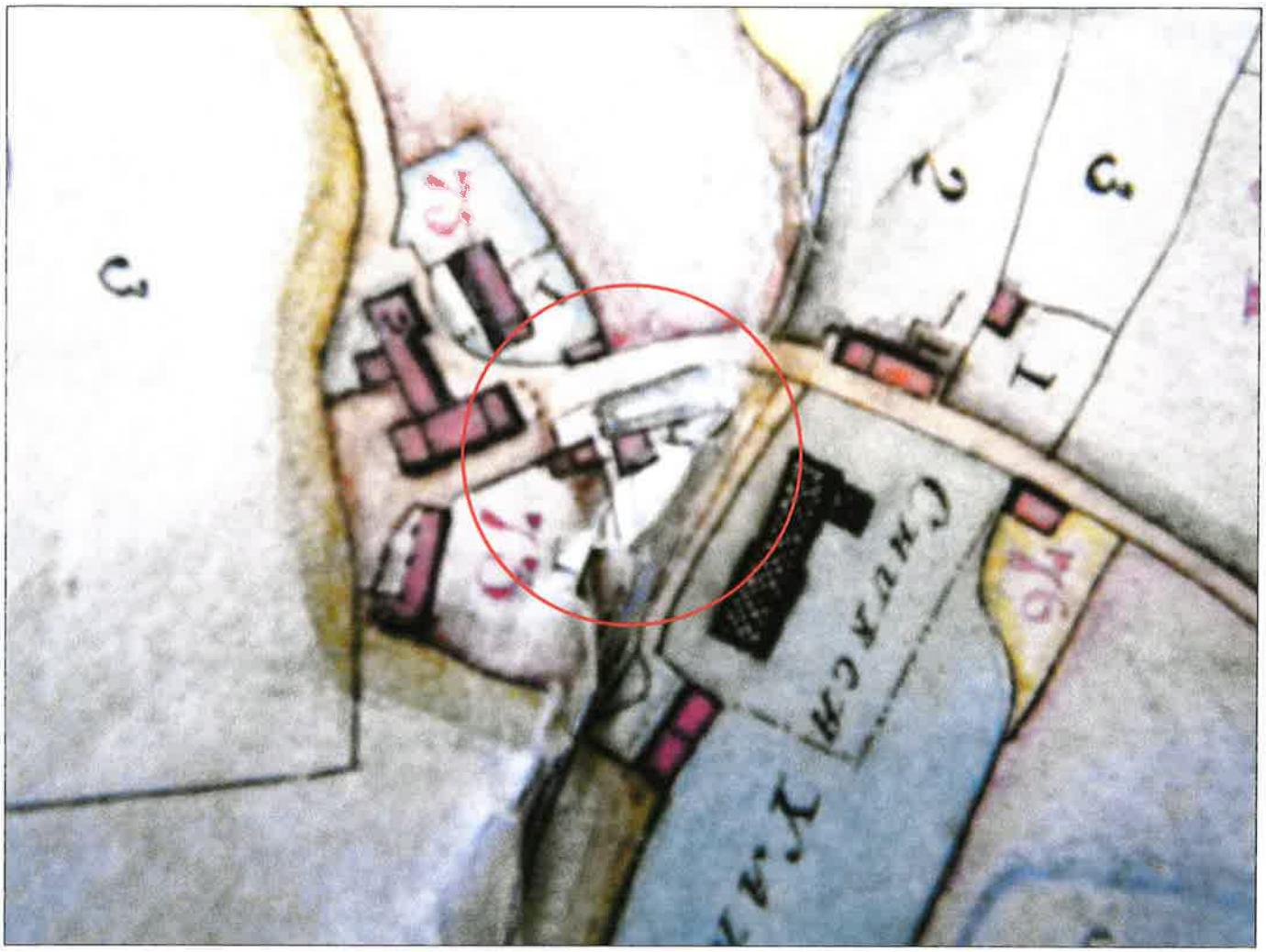


Figure 6: Extract from Penrhyn Estate map, after c.1840
(Bangor University Archive Penrhyn 2213)
(Not to Scale)

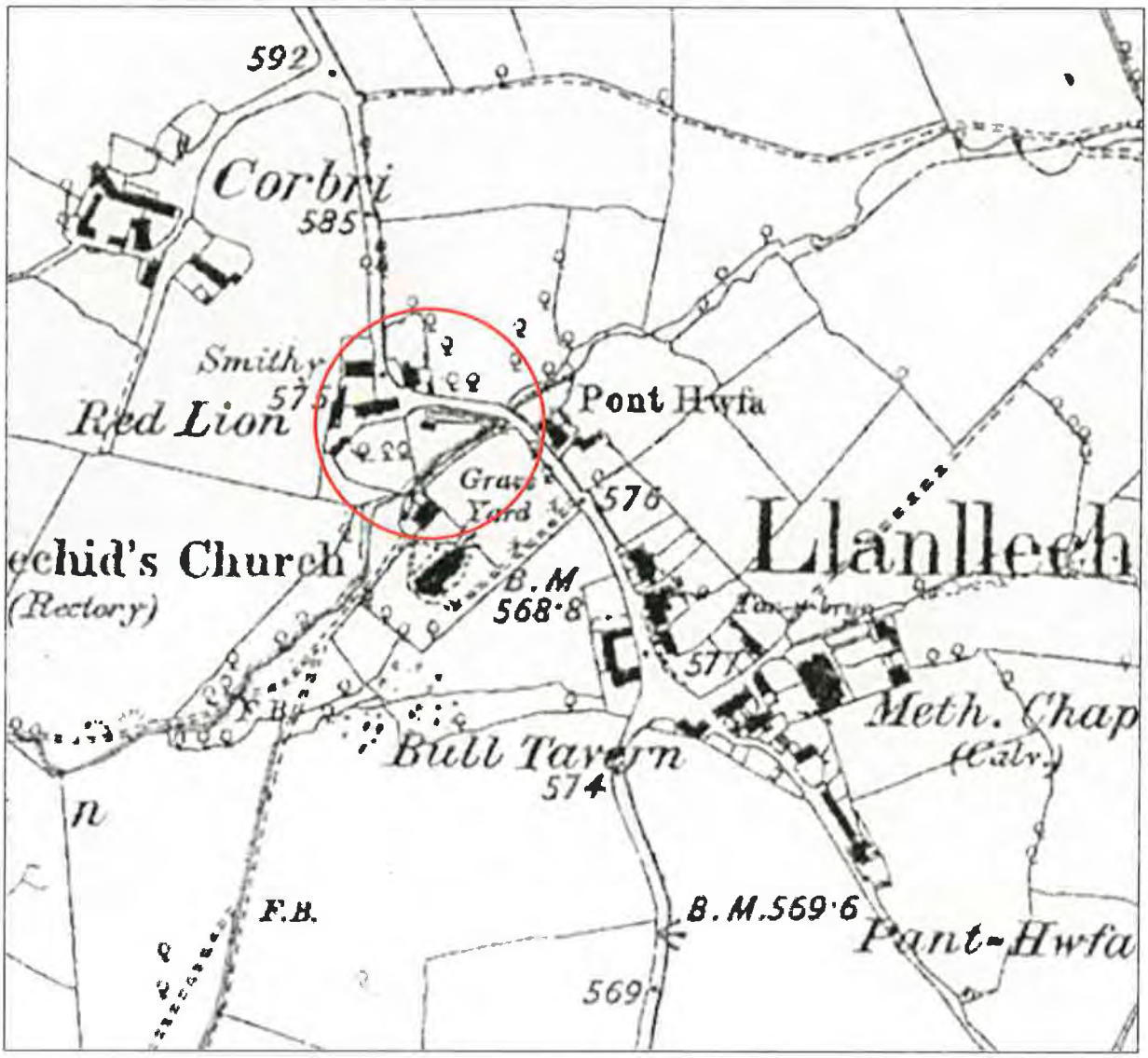


Figure 7: Extract from the 1889 First Edition Ordnanace Survey Map,
Caernarvonshire XII NW
Not To Scale

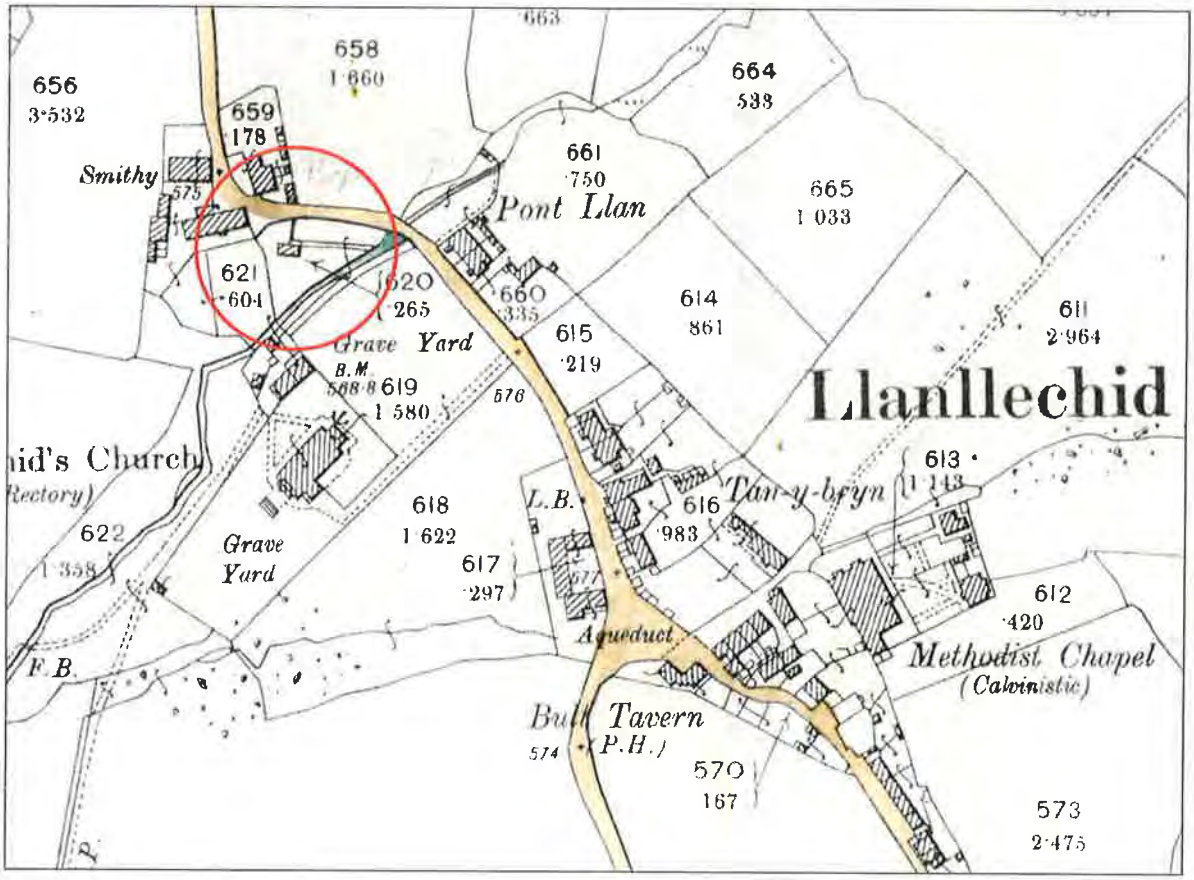


Figure 8: Extract from the 1900 Ordnanace Survey Map,
Caernarvonshire XII.2
Not To Scale

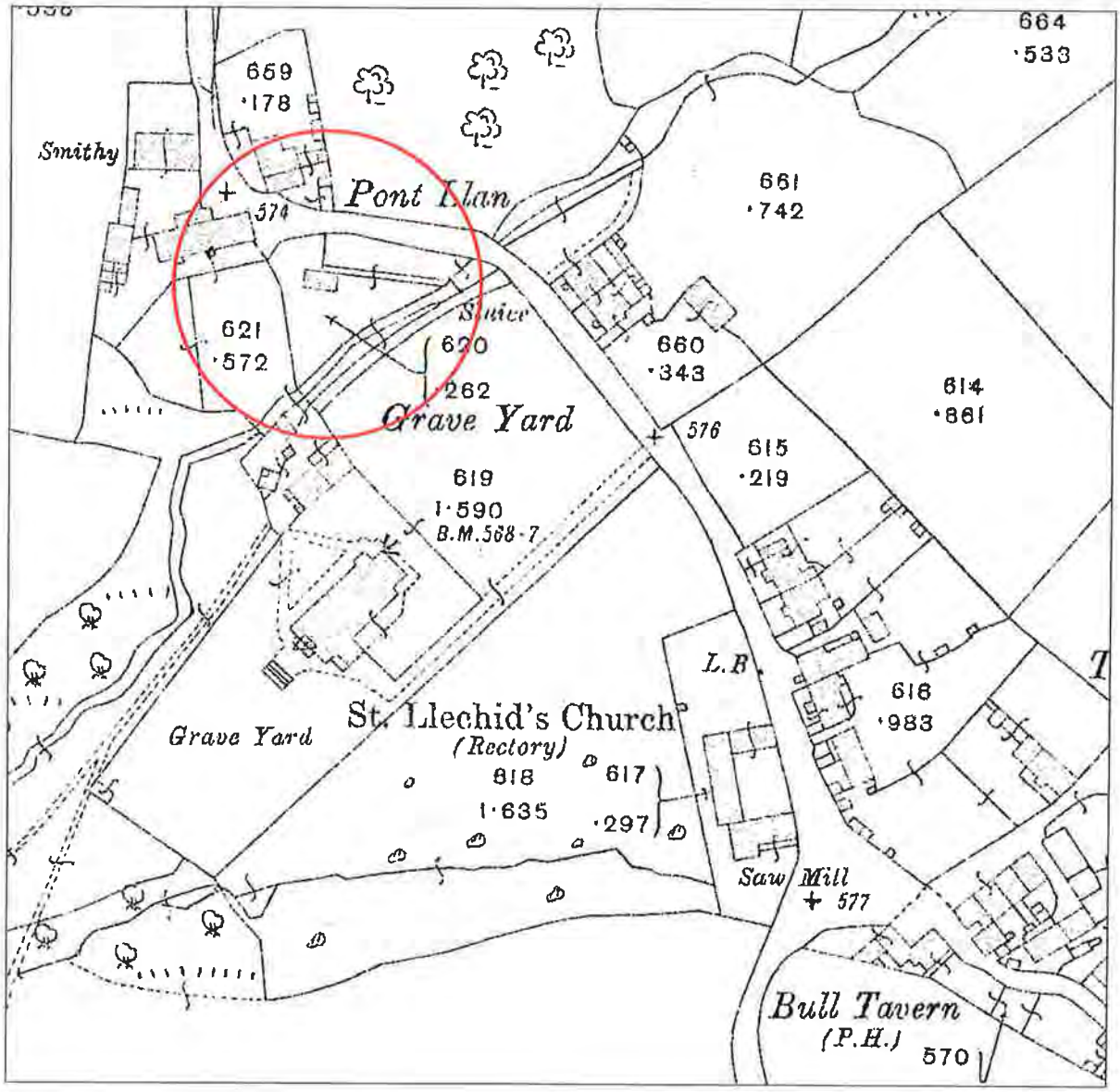
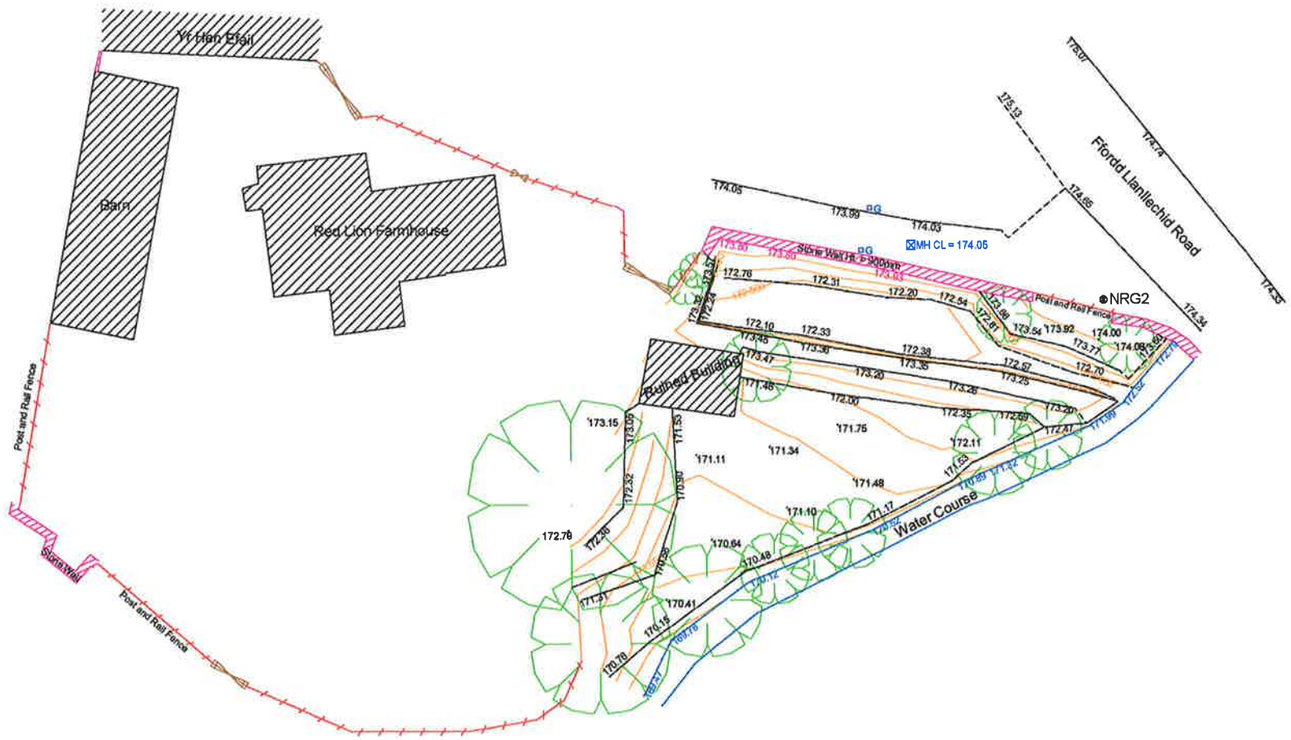


Figure 9: Extract from the 1914 Ordnanace Survey Map,
Caernarvonshire XII.2
Not To Scale



Point Features (Where Applicable)

Additional Notes For Fencing

P/W	Post and Wire
P/C	Post and Chain
P/R	Post and Rail
I/R	Iron Railing
PAL	Palisade
W/P	Wooden Panel
C/P	Concrete Panal
S/F	Safety Fence

Building And Floorplan Features

Floor Level
Damp Proof Course Level
Soffit Level
Eaves Level
Ridge Level
Threshold Level

Notes

Station ID	Easting	Northing	Level	Type
NRG2	262218.67	368767.58	174.27	PK Nail

NRG Engineering Services Ltd
Castle View
Station Road
Llanfairfechan
Conwy
LL33 0AN
Tel: 01248 681240
Fax: 01248 680914
email: nrg@nrgsurveys.co.uk
www.nrgsurveys.co.uk
www.CoGEO.co.uk

CLIENT: Mr. Alwyn Bevan

PROJECT: Red Lion Farmhouse, Llanllechid

TITLE: Topographic Survey

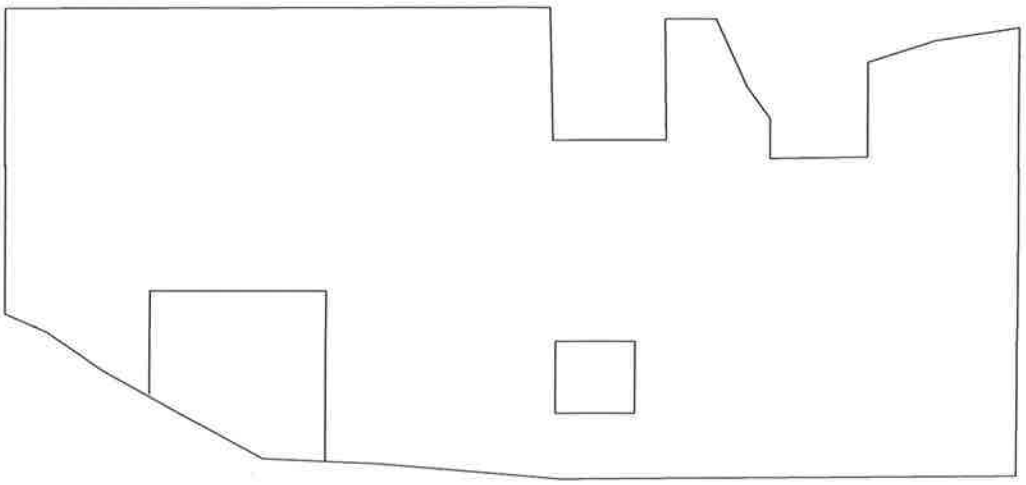
SCALE	DATUM	GRID
1:200 @ A1	Newlyn	OSGB36

SURVEYED BY	DRAWN BY	DATE
DB JJ	JJ DB	25 / 08 / 2010

DRAWING REFERENCE: 926 / TP / 01:01 — 01

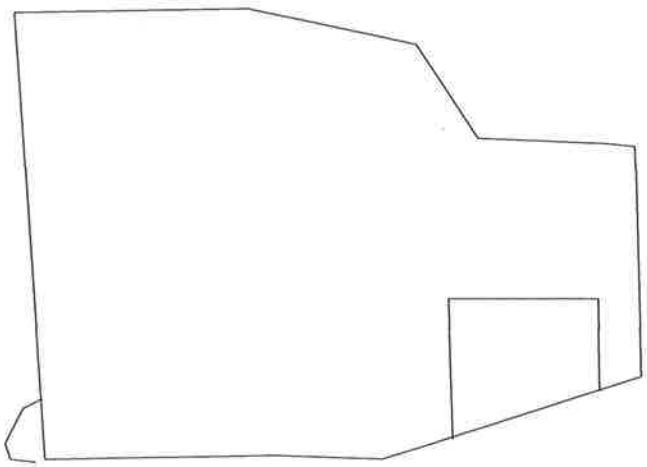
Figure 10: Survey by NRG Engineering Services Ltd
Not to Scale

W E



Southern Elevation

S N



Northern Elevation

0 5 m

Figure 11: Sketch Elevations
Approximate Scale 1:50

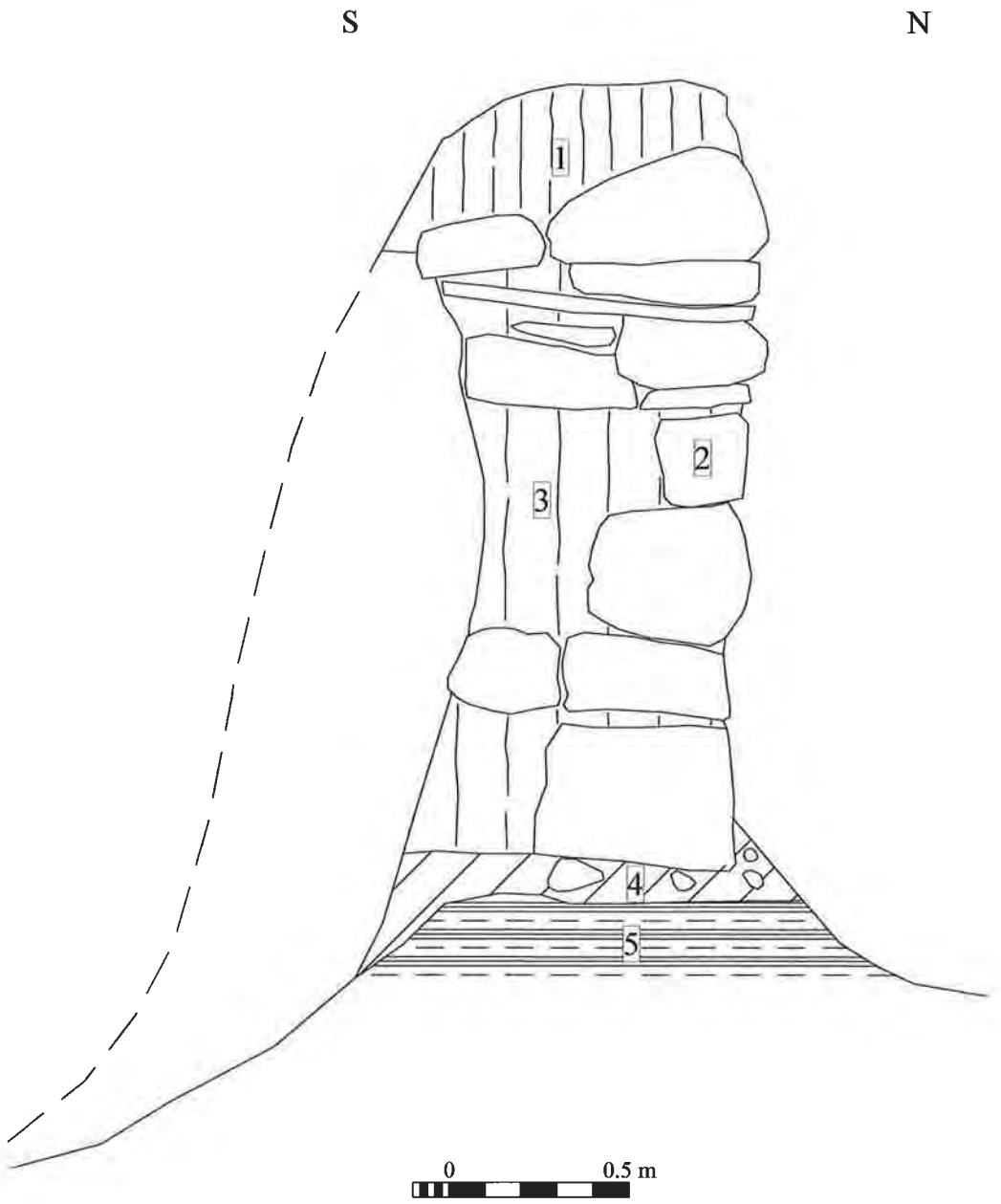


Figure 12: Section Through the Dam
Scale 1:10

Figure 13: Plan of the Structure
Scale 1:50

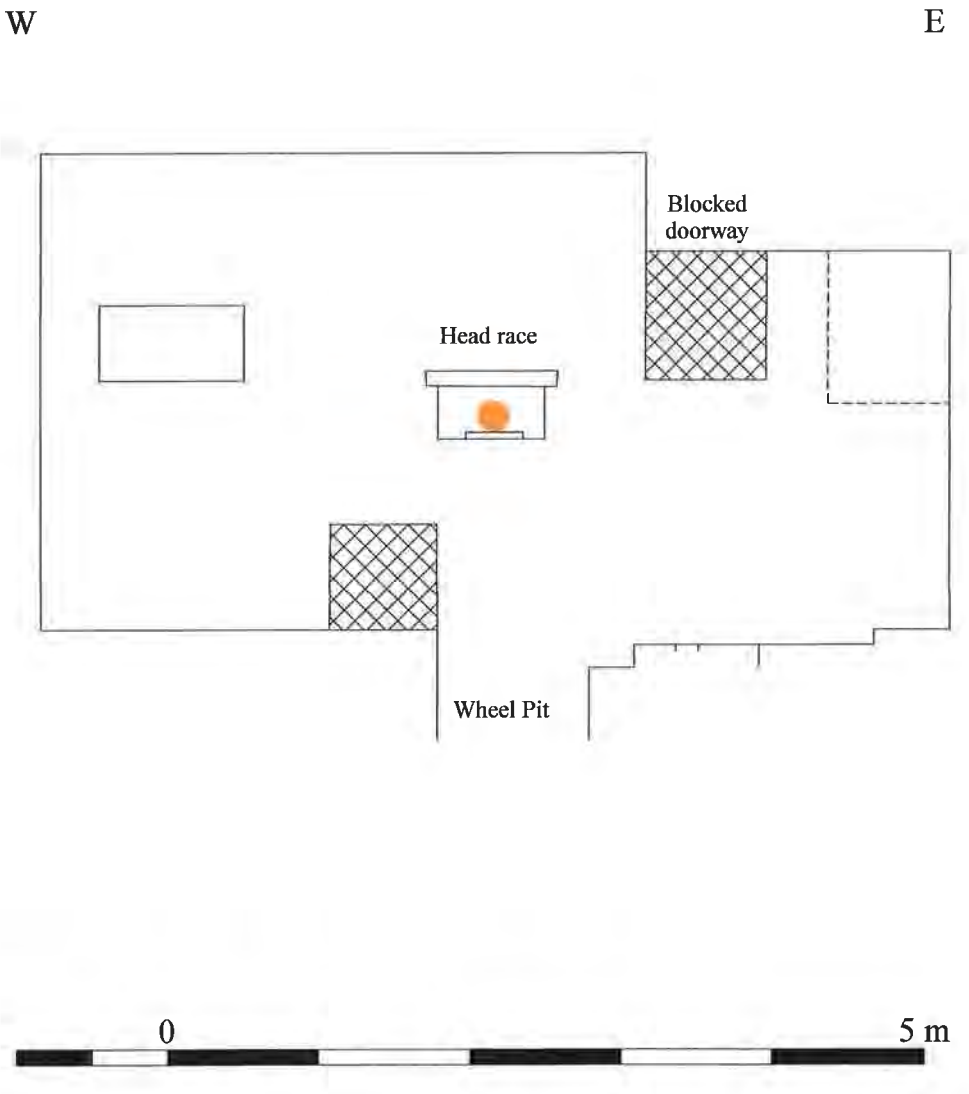


Figure 14: Sketch Evelation of the Rear Wall of the Building
Approximate Scale 1:50

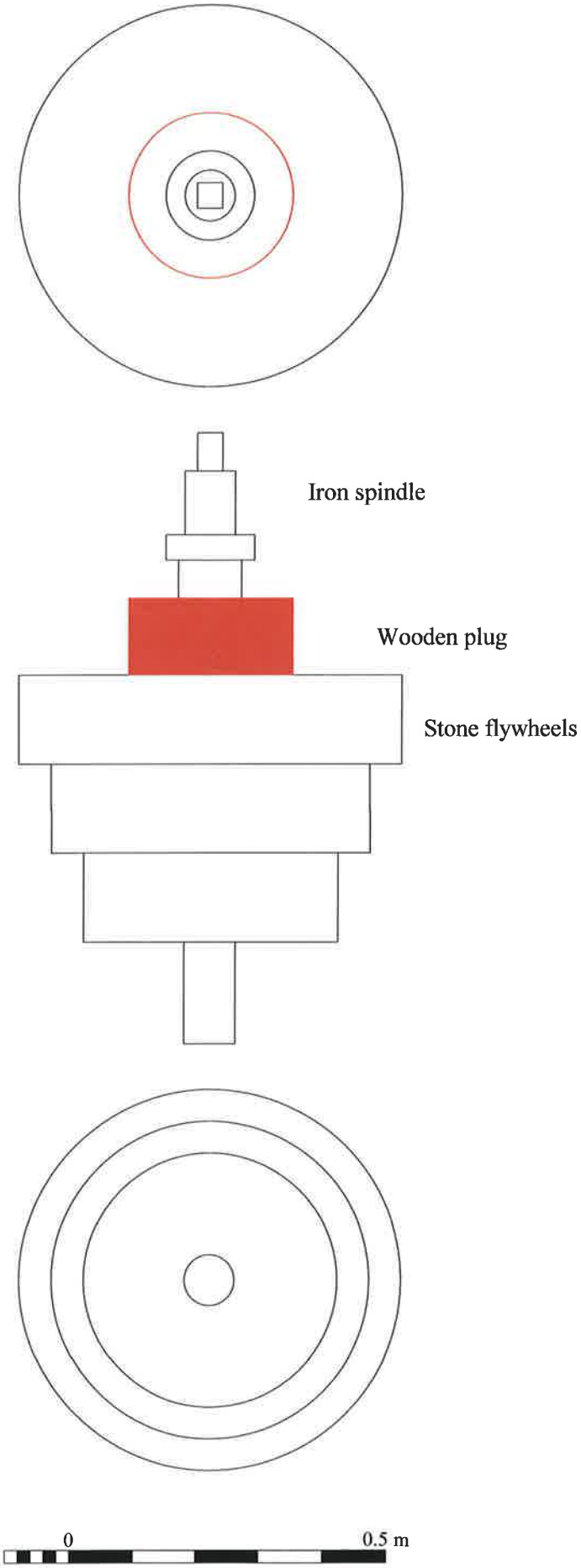


Figure 15: Flywheel
Scale 1:5

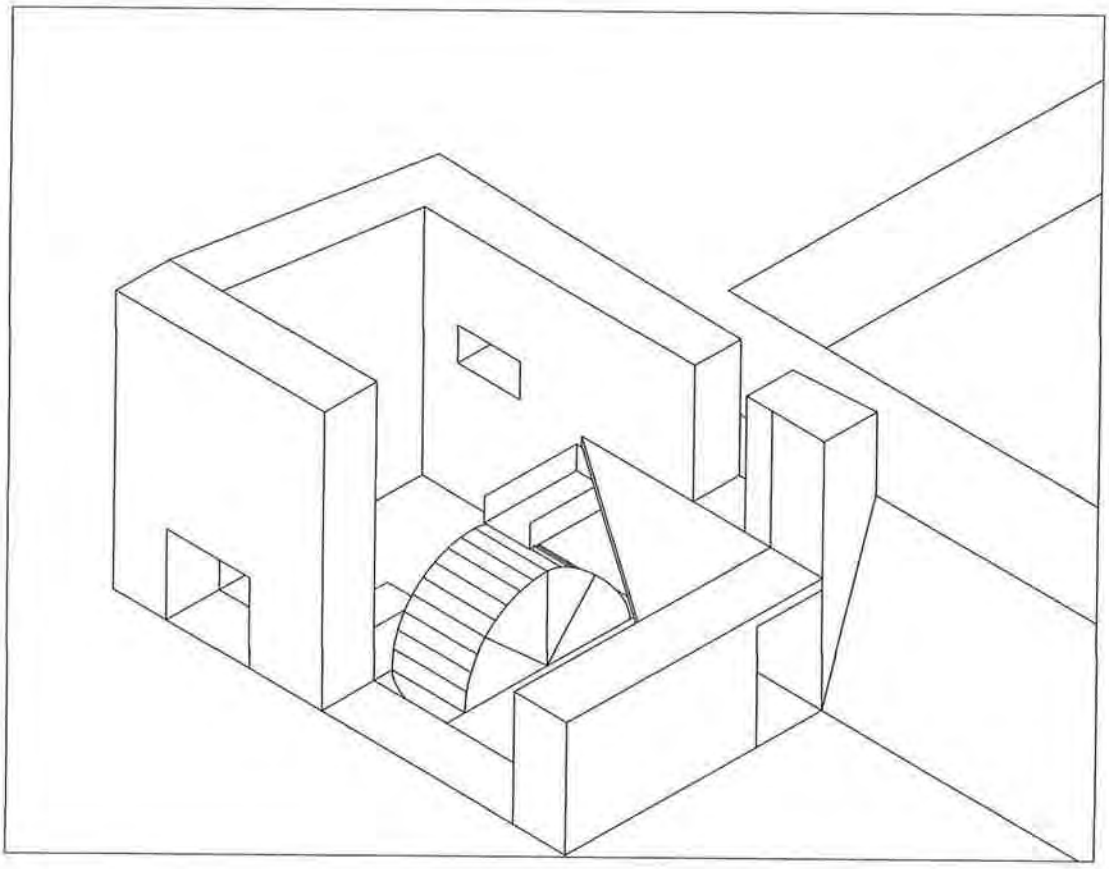


Figure 16: Possible Isometric Reconstruction
Approximate Scale 1:100

Plate 1: General appearance of the structure before construction

Plate 2: The southern elevation

Plate 3: The western elevation

Plate 4: The northern elevation

Plate 5: The eastern elevation

Plate 6: Detail of the doorway in the eastern elevation

Plate 7: Doorway in the southern elevation

Plate 8: The lower window in the southern elevation

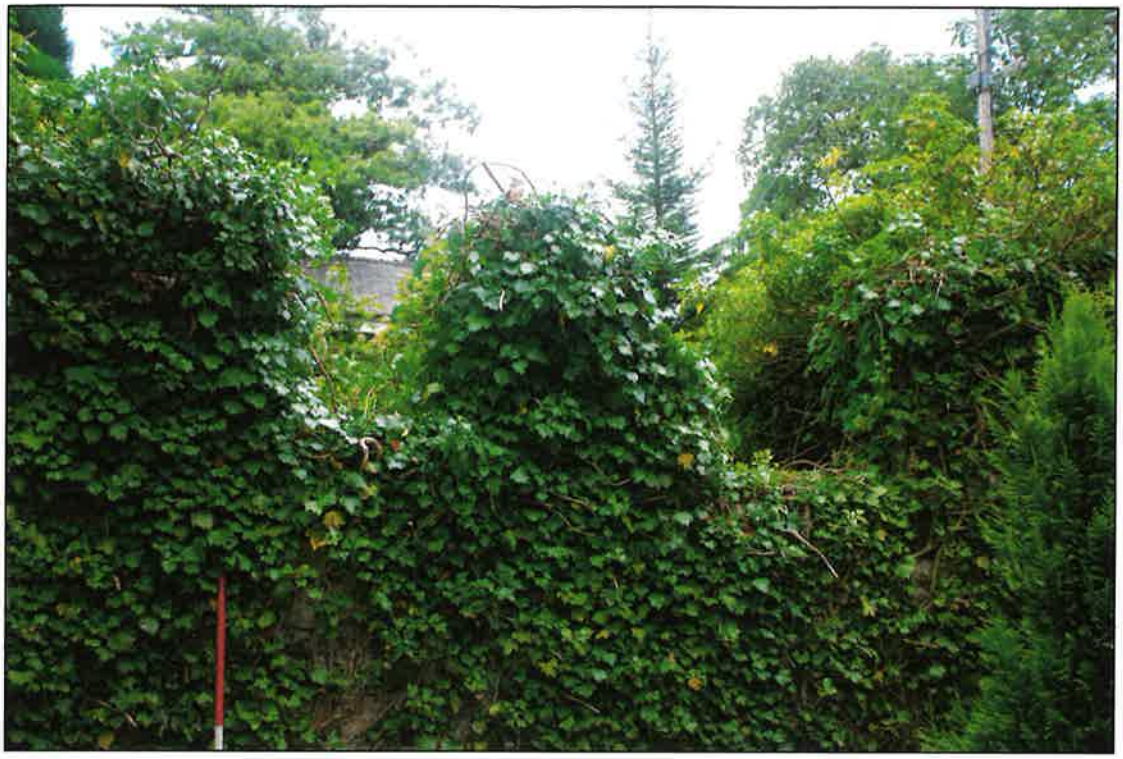


Plate 9: Window openings on the upper floor of the southern elevation

Plate 10: The mill pond

Plate 11: The mill pond containing water (Source A. Bevan)

Plate 12: The mill pond wall

Plate 13: Detail of the leat opening in the south west corner of the mill pond

Plate 14: Wall to the north of the mill pond

Plate 15: Section through the dam

Plate 16: Top of the dam, partly excavated showing the structure of the wall

Plate 17: The mortared patch in the south west corner of the mill pond

Plate 18: The leat between the mill pond and the building

Plate 19: The iron pipe within the building

Plate 20: Detail of wall construction

Plate 21: The rear wall of the building

Plate 22: The blocked doorway

Plate 23: The opening for the headstock

Plate 24: The opening in the western half of the rear wall

Plate 25: Stub walls dividing the building

Plate 26: The wheel pit

Plate 27: The slate slab for the eastern mounting of the water wheel

Plate 28: Detail of the iron fitting on the eastern mounting block

Plate 29: The western mounting block for the water wheel

Plate 30: Detail of the iron stud in the top of the western mounting block.

Plate 31: The join between the wheel pit and the tail race.

Plate 32: Possible toe pot

Plate 33: The grinding frame

Plate 34: The frame for the grind stone

Plate 35: The bearing for the grind wheel

Plate 36: Fragment of the grindstone

Plate 37: Gear wheel for the drive belt

Plate 38: Gear wheel for the drive belt

Appendix 1: Summary of Contexts in the Dam

Context	Relationship	Description
1	Above 2 and 3	[Topsoil], Mid brown loam with turf
2	Below 1, Abuts 3, Above 4	[Stone face]. A dry stone wall constructed of sub-angular to sub-rounded stone blocks up to 0.28 m x 0.2 m in size.
3	Below 1 Abuts 2 Above 4	[Dam structure]. Yellow brown slightly clayey soil with a few sub-angular stones and many roots. The layer formed the bulk of the structure of the dam.
4	Below 2 and 3 Above 4	[Mill pond lining] Blue/grey clay with fragments of slate and the occasional stone fragment.
5	Below 4	[Natural]. Yellow clay.

Appendix 2: Photographic Index

File	Scale	Direction	Description
Red Lion_001	2 m	E	Western elevation before construction
Red Lion_002	2m	E	Western elevation before construction
Red Lion_003	2m	SE	Northern elevation before construction
Red Lion_004	2 m	S	Northern elevation before construction
Red Lion_005	2 m	S	Northern elevation before construction
Red Lion_006	2 m	S	Western end of mill pond with building in background
Red Lion_007	2 m	W	Mill pond
Red Lion_008	2 m	W	Mill pond
Red Lion_009	2 m	W	Mill pond
Red Lion_010	2 m	W	Eastern elevation before construction
Red Lion_011	2 m	W	Detail of doorway in eastern elevation
Red Lion_012	2 m	NW	Detail of doorway in eastern elevation
Red Lion_013	2 m	NW	SE corner of building showing glacial boulder over which the building was constructed
Red Lion_014	2 m	NNE	Southern elevation before construction
Red Lion_015	2 m	N	Doorway in southern elevation
Red Lion_016	2 m	N	Opening above the tail race in the southern elevation
Red Lion_017	2 m	N	Opening above the tail race in the southern elevation
Red Lion_018		N	Debris with the building, before construction
Red Lion_019		W	Debris with the building, before construction
Red Lion_020		W	Debris with the building, before construction
Red Lion_021	2 m	E	Western elevation before construction
Red Lion_022	2 m	E	Western elevation before construction
Red Lion_023	2 m	S	North elevation, before construction
Red Lion_024	2 m	SE	North elevation, before construction
Red Lion_025	2 m	S	Opening of leat in SW corner of mill pond
Red Lion_026	2 m	W	Mill pond
Red Lion_027	2 m	W	Mill pond
Red Lion_028	2 m	W	Mill pond
Red Lion_029	2 m	W	Mill pond
Red Lion_030	2 m	W	Eastern elevation, before construction
Red Lion_031	2 m	W	Door in eastern elevation before construction
Red Lion_032	2 m	NW	Door in eastern elevation before construction
Red Lion_033		N	Debris in the building
Red Lion_034	2 m	NNE	Southern elevation before construction
Red Lion_035	2 m	N	Door in southern elevation

File	Scale	Direction	Description
Red Lion_036	2 m	N	Door in southern elevation
Red Lion_037	2 m	N	Opening above the tail race
Red Lion_038	2 m	N	Opening above the tail race
Red Lion_039		SW	Debris in building
Red Lion_040		N	Debris in building
Red Lion_041		N	Glacial boulder in SE corner of building
Red Lion_042		S	Quoin in NW corner of building
Red Lion_043		SW	Debris in building
Red Lion_044		W	General view of site
Red Lion_045		W	General view of site
Red Lion_046		WNW	General view of site
Red Lion_047		N	Glacial boulder in SE corner of building
Red Lion_048		W	Glacial boulder in SE corner of building
Red Lion_049	2 m	N	Southern elevation before construction
Red Lion_050	2 m	N	Southern elevation before construction
Red Lion_051	0.5 m	N	Upper window openings in southern elevation
Red Lion_052	2 m	N	Wall on northern side of mill pond
Red Lion_053	2 m	N	Wall on northern side of mill pond
Red Lion_054	2 m	S	Dam wall after cleaning of the mill pond
Red Lion_055	2 m	SW	Dam wall after cleaning of the mill pond
Red Lion_057	2 m	SW	Inside of building
Red Lion_058	2 m	SW	Inside of building
Red Lion_059	2 m	SW	Inside of building
Red Lion_060	2 m	SE	Inside of building
Red Lion_061	2 m	N	Eastern support for the water wheel when first located
Red Lion_062	2 m	N	Eastern support for the water wheel when first located
Red Lion_063	0.2 m	down	Detail of slot in the eastern water wheel support
Red Lion_064	0.2 m	down	Detail of slot in the eastern water wheel support
Red Lion_065	2 m	S	Eastern water wheel support
Red Lion_066	2 m	S	Eastern water wheel support
Red Lion_067	2 m	S	Eastern water wheel support
Red Lion_068	2 m	W	Cast iron pipe
Red Lion_069	2 m	N	Blocked doorway
Red Lion_070	2 m	N	Blocked doorway
Red Lion_071	2 m	NW	Head stock
Red Lion_072	2 m	NW	Head stock
Red Lion_073	2 m	N	Opening in the western side of the rear wall
Red Lion_074	2 m	N	Opening in the western side of the rear wall
Red Lion_075	2 m	E	Eastern water wheel support
Red Lion_076	2 m	E	Eastern water wheel support
Red Lion_077	1 m	NW	Northern stub wall dividing the building
Red Lion_078	1 m	SW	Southern stub wall dividing the building

File	Scale	Direction	Description
Red Lion_079	1 m	SW	Southern stub wall dividing the building
Red Lion_080	1 m	E	Top of dam wall
Red Lion_081	1 m	E	Top of dam wall
Red Lion_082	2 m	S	Section through the eastern wall
Red Lion_083	2 m	S	Section through the eastern wall
Red Lion_084	2 m	SW	Opening in SW corner of the mill pond
Red Lion_085	2 m	S	Opening in W corner of the mill pond
Red Lion_086	2 m	W	Western end of the mill pond
Red Lion_087	2 m	S	Detail of dam wall
Red Lion_088		NE	Destruction of the building
Red Lion_089		NE	Destruction of the building
Red Lion_090		S	Destruction of the building
Red Lion_091	2 m	W	Eastern support for the mill wheel
Red Lion_092	2 m	down	Eastern support for the mill wheel
Red Lion_093	2 m	S	Eastern support for the mill wheel
Red Lion_094	2 m	N	Blocked doorway
Red Lion_095	2 m	N	Blocked doorway
Red Lion_096	2 m	W	Wheel pit
Red Lion_097	2 m	N	Wheel pit
Red Lion_098	2 m	N	Wheel pit
Red Lion_099	2 m	S	Wheel pit
Red Lion_100	2 m	S	Wheel pit
Red Lion_101	2 m	W	Stub walls dividing the building and wheel pit
Red Lion_102	2 m	W	Stub walls dividing the building and wheel pit
Red Lion_103	1 m		Grinding frame
Red Lion_104	1 m		Grinding frame
Red Lion_105	1 m		Grinding frame
Red Lion_106	0.15 m		Grinding wheel
Red Lion_107	0.15 m		Grinding frame
Red Lion_108	0.15 m		Bearing on the grinding frame
Red Lion_109	0.15 m		Grinding frame
Red Lion_110	0.15 m		Grinding frame
Red Lion_111	2 m	E	Western support for the water wheel
Red Lion_112	2 m	E	Detail of western support for the water wheel
Red Lion_113	1 m	W	Western support for the water wheel
Red Lion_114	1 m	W	Detail of western support for the water wheel
Red Lion_115	2 m	S	Western support for the water wheel
Red Lion_116	2 m	S	Western support for the water wheel
Red Lion_117	2 m	S	Western support for the water wheel
Red Lion_118	2 m	N	Opening in western end of rear wall
Red Lion_119	2 m	N	Opening in western end of rear wall
Red Lion_120	2 m	NW	Rear wall of building
Red Lion_121	2 m	SW	Wheel pit

File	Scale	Direction	Description
Red Lion_122	2 m	SW	Wheel pit
Red Lion_123	0.1 m		Flywheel
Red Lion_124	0.1 m		Flywheel
Red Lion_125	0.1 m		Flywheel
Red Lion_126	0.1 m		Possible toe pot
Red Lion_127	0.1 m		Possible toe pot
Red Lion_128	2 m	S	Line of tail race
Red Lion_129	2 m	S	Line of tail race
Red Lion_130	2 m	NNW	Join between the tail race and the wheel pit
Red Lion_131	2 m	WNW	Section through the dam
Red Lion_132	2 m	WNW	Section through the dam
Red Lion_133	2 m	WSW	Section through the dam
Red Lion_134	2 m	WSW	Section through the dam
Red Lion_135		E	Machine removing the dam
Red Lion_136		E	Machine removing the dam
Red Lion_137		NW	Machine removing the dam
Red Lion_138		NW	Machine removing the dam
Red Lion_139	1 m	NW	Leat between the mill pond and the building
Red Lion_140	1 m	NW	Leat between the mill pond and the building
Red Lion_141	1 m	NW	Leat between the mill pond and the building
Red Lion_142		N	Leat between the mill pond and the building
Red Lion_143	1 m	NE	Leat between the mill pond and the building
Red Lion_144		SW	Leat between the mill pond and the building
Red Lion_145		SW	Leat between the mill pond and the building
Red Lion_146	2 m	SW	Leat between the mill pond and the building
Red Lion_147	2 m	SW	Leat between the mill pond and the building
Red Lion_148		SW	Leat between the mill pond and the building