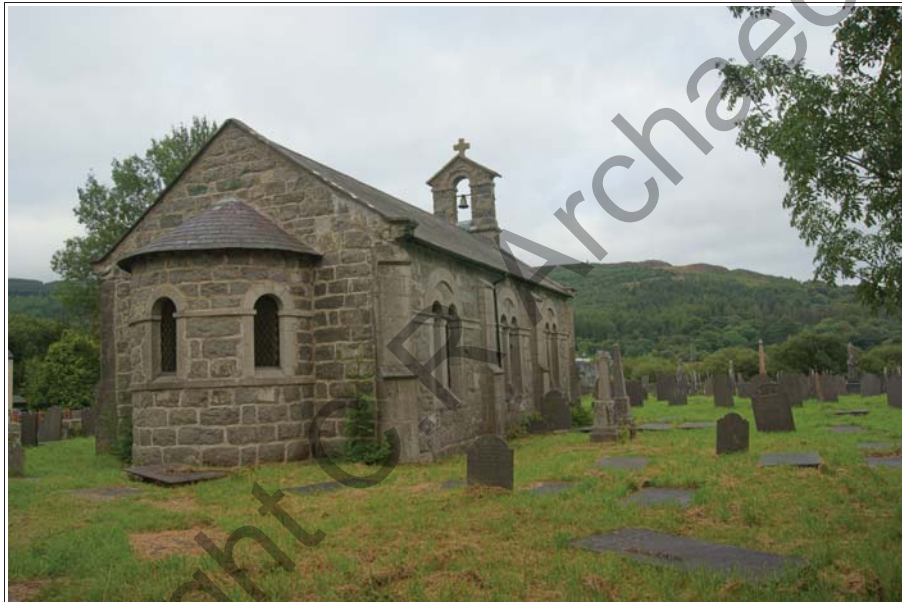


**Results of Archaeological Watching Brief at
Betws Garmon Church, Waunfawr**

NGR SH 53833 57368



Report Number CR110-2015



C.R Archaeology

Compiled by M. Jones & C. Rees
on Behalf of The Church in Wales

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1.0 Introduction

C.R Archaeology were instructed by the Church in Wales to conduct an archaeological watching brief on drainage works at Betws Garmon Church.

The Church of St. Garmon, Betws Garmon is a Grade II Listed Building (Cadw ID: 3754, NPRN 43736, PRN 6907) set in a rural location. Betws Garmon is a medium sized parish extending along the valley of the Afon Gwyrfai. The A4085 runs along this valley and the church sits on the northern side of the road, a short distance from the larger settlement of Waunfawr (figure 1). The site is under the ownership of the Church in Wales and as such is subject to Ecclesiastical Exemption. The church continues to be open for worship.

The works carried out at the church consisted of three hand dug drains approximately four meters in length reaching a maximum depth of 0.50m below the wall foundation. The first trench was located along the southern wall, the second on the northern wall. The third drain was located on the northern side of the apse on the eastern wall.

A possible single grave was encountered in the section wall of trench 3. Due to the grave orientation only the feet were uncovered and due to the mixed nature of the soil no actual cut could be identified for recording purposes. The grave lay outside the development area and was therefore not excavated. Terram was used to prevent remains from this grave from falling into the drainage trench. A single stone corbel believed to be part of the previous church was recovered from drainage trench 1.

2.0 Project Aims & Objectives

The aim of this programme of works was to monitor the works in the churchyard and to record any archaeological remains uncovered during these works.

The objective of the archaeological programme was to establish and make available information about the archaeological resource existing on the site.

3.0 Scheme of Works - Methodology

3.1 Desk Based Research

A history of the site was compiled utilising material sourced from Bangor University and Gwynedd Archives, Caernarfon. A map progression of the area was undertaken.

The RCAHMW database and the commission's survey of the area were also consulted. The information collected is discussed within the main report text.

The works were carried out accordance with the CIfA Standards and Guidance (2014).

This material forms the historical background of the full archaeological report. This report includes the results of the watching brief.

3.2 Methodology for Archaeological Watching Brief

All ground works at the site were monitored by an archaeologist from C.R Archaeology. The drainage trenches were hand excavated. No archaeological features were identified within the development area. A possible single grave cut appeared in the trench section but it was impossible to define due to the mixed nature of the surrounding graveyard soil. The grave was not excavated and was protected during works.

Fieldwork was conducted by Matthew Jones of C.R Archaeology.

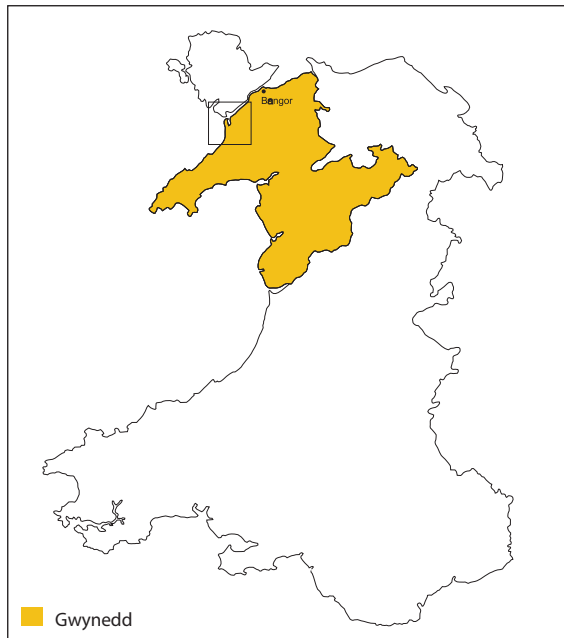


Figure 1. Site Location Map - Source: OS Open Data
(Contains Ordnance Survey data © Crown copyright and database right 2015)

3.2.1 Recording

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*. Sample forms can be provided on request. The written record comprises completed *pro-forma* record sheets.

A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site.

3.2.2 Additional Mitigation/Contingency Measures

No additional mitigation or contingency measures were required.

3.2.3 Recovery, Processing and Curation of Artefactual Material

Disarticulated human remains were not analysed and reburied on site. A single stone corbel was uncovered along with some pieces of 19th century pottery. This material is to be returned to the church.

The works were carried out in accordance with The Chartered Institute for Archaeologists: Standard and Guidance for Archaeological Watching Brief (Revised 2014).

3.2.4 Archive Compilation

All records created during the fieldwork have been 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.

3.3 Timetable for Proposed Works

Initial works at Betws Garmon Church commenced on September 15th 2015 and took 3 days.

3.4 Staffing

The project was managed by Matthew Jones (BA Archaeology), MA Archaeology). Site work was conducted by Matthew Jones. Stefanie Vincent (MSc), (oste archaeologist at Salisbury Museum) acted as consultant when required. 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.

3.5 Monitoring

The project was not subject to monitoring by Gwynedd Archaeological Planning Services. GAPS were however notified that the works were to be undertaken.

3.6 Health and Safety

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

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

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

All staff had passed at least a CITB health and safety test at least operative level and will carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363) or a Site Visitor card.

C.R Archaeology staff were also compliant 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

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

This report includes:

- A location plan
- Drawings detailing the locations of all excavated areas
- All identified features plotted on an appropriately scaled plan of the development site
- A plan illustrating the location and direction of any photographs or drawings
- A full bibliography of sources consulted
- An archive compact disc

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 fieldwork.

3.7.1 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.

4.0 Geographical and Geological Context

4.1 Topography

Betws Garmon is a medium sized rural parish extending along the valley of the Afon Gwyrfai. The A4085 runs along this valley and the church sits on the northern side of the road, a short distance from the larger settlement of Waunfawr.

4.2 Geology

The underlying bedrock is recorded as “*Bronllwyd Grit Formation - Sandstone. Sedimentary Bedrock formed approximately 488 to 528 million years ago in the Cambrian Period. Local environment previously dominated by shallow seas. These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel*”.

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*”(Source: www.mapapps.bgs.ac.uk/geologyofbritain/home.html).

5.0 Historical Background

Betws Garmon is a medium sized parish extending along the valley of the Afon Gwyrfai. The A4085 runs along this valley and the church sits on the northern side of the road, a short distance from the larger settlement of Waunfawr.

Due to the focused nature of the works undertaken, and the lack of recovery of any finds which are unrelated to the church itself, a wider examination of the archaeological resource in the surrounding area was not conducted. This section details the history of the church only.

The current church was built in 1841-2 and was designed by the architect George Alexander, but whilst it would seem most likely that the site has Medieval origins, the first document which refers to a church in the area is the Valor Ecclesiasticus. This was a survey of the church lands in Wales, England and Ireland and was carried out in 1535. The church later came under ownership of the Augustinian priory of Beddgelert (Source: Gwynedd HER Entry PRN 6907).

The church is one of several noted from the 8th century onwards as dedicated to St. Garmon, also known as Germanus. Germanus was a 5th century Bishop of Auxerre and he is recorded as a defender of the Christian faith against the Pelagian Heresy. (The Pelagian Heresy taught that there was no original sin and that good could be chosen over evil without any divine aid). He is reputed to have lead forces against the Picts and Saxons near Mold (Unknown 1964: 1).

As mentioned above the foundation date of the original church is unknown but the aforementioned pamphlet notes that “*whether the first Church of St. Garmon was situated in the present site is doubtful – it might well have been on higher ground to the north-west of the church, but apparently at first, the foundation was not a 'parish church' but a Chapelry, that is a church with a Font and churchyard – the small church being used perhaps as a Bedehouse, a house of prayer (though in Bettws Garmon, the word Bettws or Betws, in fact means a cluster of beech trees), where pilgrims crossing via Beddgelert to Clynnogfawr and Bardsey Isle near the promontory of Lleyn, rested to pray and meditate upon their journey*” (ibid).

There is also no date for the construction of the immediate predecessor of the current church on this site. The 1964 pamphlet records that it examined available documents which clearly show that this building was of c.16-17th Century in date. This is however not what is stated in other sources (see below) and it may well be that the previous church was a multi-phase structure.

It was believed that the previous church building was positioned between the present building and the nearby Betws Inn. This is supported by the tithe map (figure 2) and the orientation of the pre-1840's graves which all suggest that the first church was located to the east of the current church. The tithe map shows a rectangular building aligned on an east-west axis.

The earliest grave noted on a complimentary alignment dates from 1750, the latest example found dates from the early 1800's. The current church has retained some of the fittings from the earlier church which includes a 17th Century communion table, an 18th century memorial and the font which has an 1614 inscription (RCAHMW 1960: 33).

The Glebe Terriers (church surveys) of the early 1800's describe the earlier church as being 36 feet by 19 feet in 1801. By 1817 this has changed to 48 feet by 15.5 feet but it is unclear as to why there is such a change in the churches dimensions. It would however point to the addition of an extension or partial rebuild of the structure (Davidson & Ward 1998).

There is little mention of the church until 19th century travellers accounts which give an impression of the state of the early church. Edmund Hyde Hall's description of Caernarfonshire 1809-1811 described the church as "*a very poor building and the living itself a perpetual curacy in the gift of the Bishop the rates remain nearly stationary*" (Hyde Hall 1952: 206). This is echoed in Lewis's Topographical Dictionary of Wales which describes the church as a "*small edifice in a dilapidated condition*" (Lewis 1833: 160).

Records held a Gwynedd archive show that by the 1840's the church was still in a run down state. A letter from A. Williams to Lord Newborough dated March 3rd 1840 states that "*It has been decided to build a new church at Betws Garmon in view of the dilapidated condition and dampness and cold of the old church and landed proprietors of the area are appealed to give financial aid*" (Gwynedd Archive XD2/19083).

A second letter dated 1840 March 10th from Williams to Lord Newborough goes on to explain they are only asking for money because the parishioners have spent all their money on the upkeep of the old church. Williams goes on to explain "*It is upwards of 800 years old, the timbers are rotten and the walls tottering; it is so damp that in winter it is difficult to sit the service out*" (Gwynedd Archive XD2/19094). This would provide a 11th Century date for the earlier church.

The current church (PRN 6907) was built in 1841-2 by the architect George Alexander in the revived romanesque style. The following text is taken from the Cadw Listed Building entry (ID 3754).

History: Built in 1841-2 by George Alexander near the site of the old church, the west end of which appears to have been where the present chancel is.

Interior: Simple interior has collar and tie beam roof structure with boarding to the rafters; half-height screen forms small internal lobby at west end; slate floor. Plain C19 fittings include rail to raised sanctuary, pulpit, reading desk and benches. C17 communion table with C20 top; font with carved lettering and date "CAPEL. SANT. GARMON. BETWS. 1614" also from old church has a small 4-leaved flower carved between "CAPEL" and the date. C18 wall tablets and a brass on north wall to John Rowlands (d.1703).

Exterior: Parish church. Romanesque style. Regularly coursed and dressed rubblestone blocks with ashlar dressings; slate roofs with coped verges and kneelers to nave, conical to semi-circular sanctuary. Nave in 3 bays with 2 stepped buttresses to north and south walls and diagonal buttresses to corners. 2-light round-arched cast-iron latticed windows with plain chamfered shafts and capitals in round-headed openings linked by continuous impost banding. West end has central round-headed doorway with date "1842" to top and recessed boarded door; narrow round-headed windows to either side linked by continuous impost band. String course above with slightly projecting break to centre of the wall, housing a 2-light window like those to north and south walls, continues up to form gabled bellcote with round-headed opening; this has extrados, imposts and a bell. Semi-circular apsidal sanctuary has 3 small round-headed windows linked by continuous cill and impost bands; red stained glass to outer quarries.

Reason for Listing: Included as an unaltered mid-C19 church, an unusual essay in Romanesque style forming a prominent local landmark”.

5.1 Cartographic Evidence

No estate maps could be sourced which show the church prior to the compilation of the 1840's Tithe map.

Tithe Map c.1840 (figure 2)

The Tithe map (figure 2) shows the earlier church was located on the eastern area of the plot. It was built on a north-south axis, close to old rectory building which later became a public house.



Figure 2. 1840 Tithe Map Showing Betws Garmon Church

Ordnance Survey Maps 1888 – 1949 (figures 3 - 6)

The “new” or current church is shown on the First Edition Ordnance Survey Map of Betws Garmon. There are no changes to the church building shown on the Ordnance Survey Map sequence. There are however two additional areas incorporated into the graveyard grounds. The first is a rectangular plot to the west which is shown on the 1901 map and the second a much larger plot to the north which appears to have become incorporated by the production of the 1919 map edition.



Figure 3. 1888 First Edition Ordnance Survey Map
Showing St. Garmon's Church

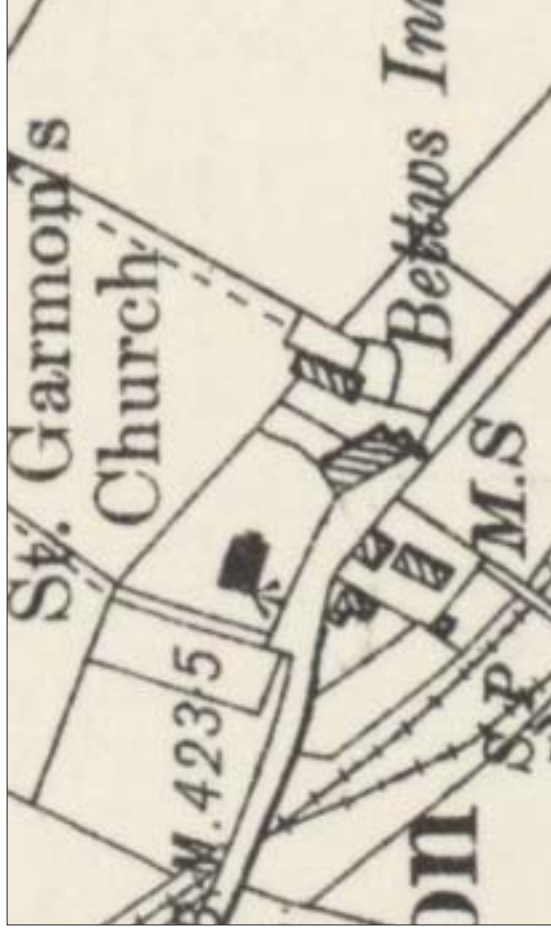


Figure 4. 1901 Edition Ordnance Survey Map
Showing St. Garmon's Church (Revised 1899)

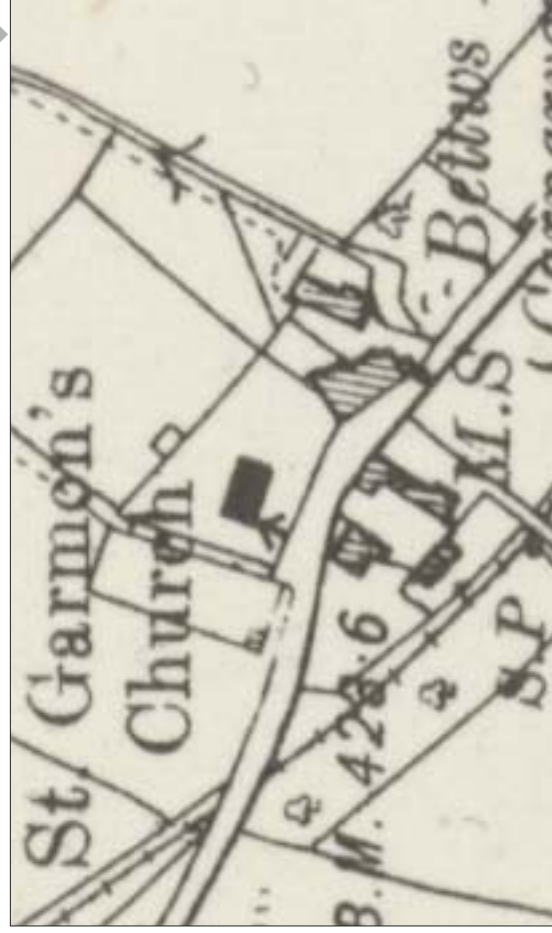


Figure 5. 1919 Edition Ordnance Survey Map
Showing St. Garmon's Church (Revised 1913)

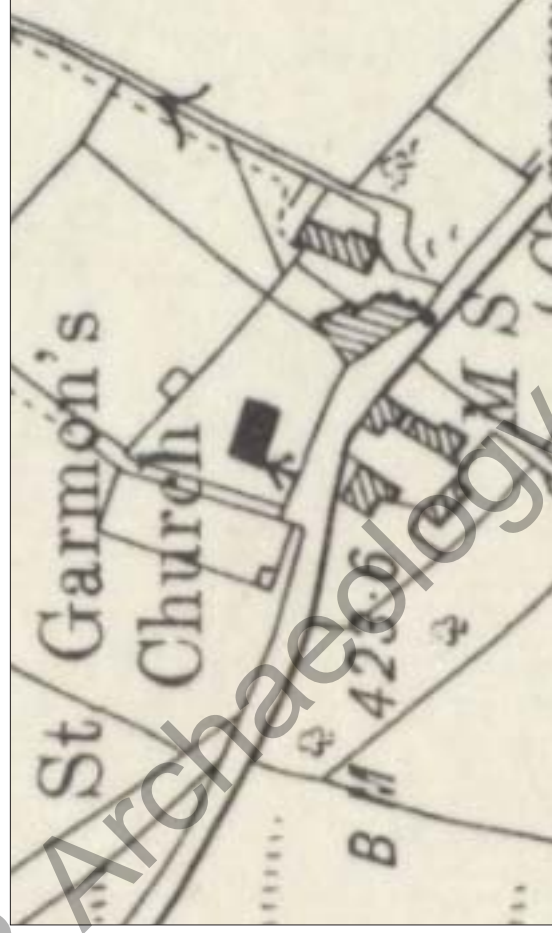


Figure 6. 1953 Edition Ordnance Survey Map
Showing St. Garmon's Church (Revised 1949)

6.0 Results of Archaeological Works

The works carried out at the church consisted of the hand excavation of three drainage trenches. Each was approximately four meters in length and was excavated to a maximum depth of 0.85m. The first (drain 1) was excavated along the southern church wall, the second (drain 2) excavated on the opposite northern wall. The third drain (drain 3) was excavated on the northern side of the apse on the eastern wall. The positions of these drains are marked on the plan included as figure 7.

Drain 1 (Plates 3 - 5)

Drain 1 was orientated on a north-south axis and ran from the southern wall for a distance of c.1.90m. At this point the drain direction was slightly altered in order to avoid existing gravestones and continued for a further 2.10m. It had a maxim depth of 0.85m from the ground level.

Three contexts were identified within this trench. The topsoil (101) had an average depth of 0.22m, and was a brown clay silt with frequent small angular stones. Context (102) had a depth of 0.23m and was a yellow-brown clay-silt mixed subsoil. It contained regular rounded and angular large to small stones inclusions together with broken slate roof tiles. Context (103) was the underlying mixed graveyard soil. It was excavated to a depth of 0.40m but continued below this level. The deposit was a mid-brown soil-clay. It contained frequent slate and a regular distribution of rounded stone. A carved stone corbel believed to be of Medieval date was recovered from this deposit along with late 18th century coarse ware pottery.

Stone Corbel (Figure 8)

The aforementioned stone corbel is trapezoid in section, measuring 0.15m in width, a height of 0.13m and a depth of 0.08m. These sides have been dressed but not finished further to produce a smooth surface. The most likely origin of this stone was as part of the window tracery for the earlier Medieval church. Based on the shape and size of the stone it is most likely to be part of a window mullion (the vertical element of a large window which separates individual panes).

Drain 2 (Plates 6 - 8)

Drain 2 ran from the northern church wall and proceeded in a northerly direction for 1.80m. At this point it turns sharply, almost at a 90 degree angle, before continuing for a further 2m in order to pass between upstanding tombs.

The trench had a maxim depth of 0.70m from ground level. Three contexts were identified within this trench. The topsoil (201) had an average depth of 0.20m and was a brown clay-silt with frequent small angular stones. Context (202) had an average depth of 0.34m and was a yellow-brown clay-silt mixed subsoil. It contained regular rounded and angular stones and broken slate roof tiles. Context (203) was excavated to a depth of 0.16m but continued below this level. It was a mid-brown clay soil containing frequent slate, and a regular distribution of rounded stone. Late 18th century coarse ware was also recovered from this deposit.

Drain 3 (Plates 9 - 11)

Drain 3 ran from the eastern wall of the church on a south-western - north-eastern axis for 2m. At this point it turns to avoid gravestones before continuing on an east – west axis for 2m. It was excavated to a maxim depth of 0.64m from ground level. Three contexts were identified within this trench. The topsoil (301) had an average depth of 0.22m and was a brown clay silt with frequent small angular stones. Context (302) had an average depth of 0.32m and was a yellow-brown clay-silt mixed subsoil. It contained frequent rounded and angular stones of assorted sizes and broken slate roof tiles. Context (303) was excavated to a depth of 0.10m but continued below this level. It was a mid-brown soil clay containing frequent slate, and a regular distribution of rounded stone.

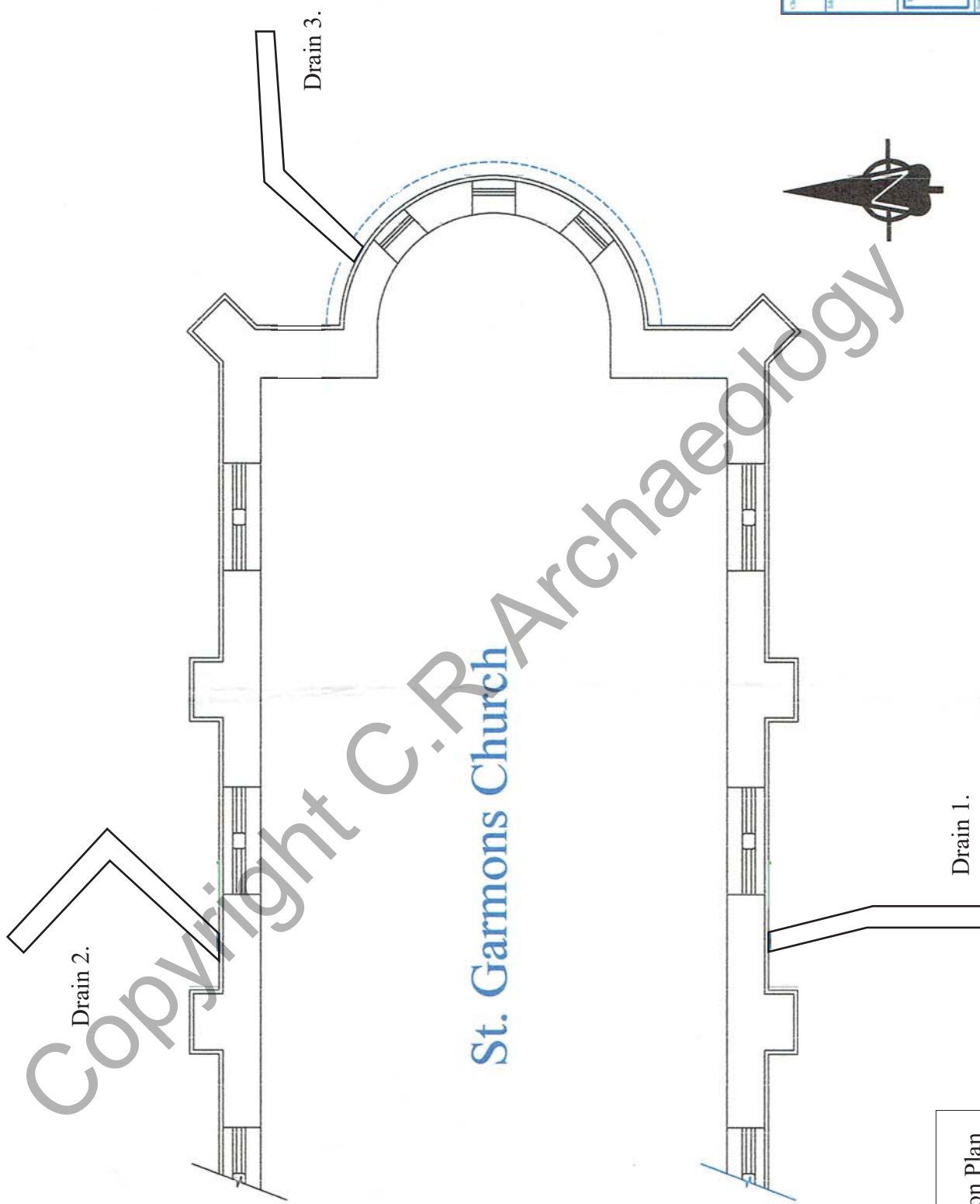


Figure 7. Trench Location Plan

Client	Betws Garmon Church
Site Name	St. Garmons Church Betws Garmon.
Drawing Title	Soakaway drainage details
Scale	1:75 @ A3
Date	Oct 2014
Drawn by	M.E.L.
Drawing No.	BG/10/2014/SW
Page	0



Plate 1. General View of Betws Garmon Church, Waun Fawr



Plate 2. General View of Betws Garmon Church, Waun Fawr



Plate 3. Drainage Trench 1



**Plate 4. Drainage Trench 1
Sample Section**



**Plate 5. Drainage Trench 1
Plan View**



Plate 6. Drainage Trench 2



Plate 7. Drainage Trench 2



Plate 8. Drainage Trench 2



Figure 8. Medieval Stone Corbel



Plate 9 (Above). Drain 3 Plan View

Plate 10 (Top Right). Drain 3 Sample Section

**Plate 11 (Below Right). Drain 3 Showing
Terram Covering Possible Grave**

The possible cut of a grave was identified within this deposit and could have been associated with a family tomb located close to the edge of the drainage trench cut. Some toe bones were recovered eroding from this cut. These human remains were placed back into a small hollow made in the trench section. Protective terram was placed over the trench side in order to protect the remains from disturbance for the duration of the drainage works. No excavation works were undertaken as the majority of the remains were located outside the development area.

7.0 Conclusion

No structural remains were encountered during the excavation of the three drainage trenches. A single grave cut was encountered in trench 3 but was not excavated as it lay outside the development area. The mixed nature of the soils encountered during the works attests to the high level of disturbance within the area which clearly corresponds with the use of the site as a grave yard.

The carved stone window mullion is believed to have originated from the earlier, Medieval, church. It does not appear to have been used as part of a foundation deposit for the current building and is most likely building rubble which has been mixed into the surrounding area following the demolition of the original church.

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Anglesey Archives

1840 Tithe Map

1887 Ordnance Survey Map

1899 Ordnance Survey Map

1923 Ordnance Survey Map

1949 Ordnance Survey Map