

# Pont Sarn Ddu, Dolwyddelan / Sarn Ddu Bridge, Dolwyddelan

Briff Gwyllo Archeolegol/Archaeological Watching Brief/  
Cofnodi Adeiladau/Building Recording



Ymddiriedolaeth Archeolegol Gwynedd  
Gwynedd Archaeological Trust

# Pont Sarn Ddu, Dolwyddelan / Sarn Ddu Bridge, Dolwyddelan

## Briff Gwyllo Archeolegol/ Archaeological Watching Brief/ Cofnodi Adeiladau/Building Recording

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## **CRYNHODEB ANHECHNEGOL**

Yn 2022, gofynnodd CBSC i Ymddiriedolaeth Archeolegol Gwynedd wneud gwaith lliniaru archeolegol yn ystod gwaith gwella pontydd ym Mhont Sarn Ddu, Dolwyddelan. Mae Pont Sarn Ddu yn strwythur rhestredig Gradd-II ôl-ganoloesol sy'n cario'r ffordd o Ddolwyddelan i Flaenau Dolwyddelan ar draws Afon Lledr. Roedd angen y gwaith i gynyddu'r capasiti traffig presennol i ddarparu gwell mynediad i Flaenau Dolwyddelan ac i fynd i'r afael â dirywiad parhaus strwythur y bont. Roedd y briff gwylio yn monitro'r gwaith o gloddio naw ffos ar ben pob un o'r tyllau cerrig. Dangosodd y ffosydd fod y rhan fwyaf o'r slabiau cerrig llechi yn dal i fod yn y fan a'r lle yn plygu'r haenau dallu tarmac a choncrit. Mae presenoldeb olion pren pydredig, a phinnau haearn neu ddur yn awgrymu rhyw fath o strwythur ategol pren o dan y slabiau, ond nid oedd yn ymddangos bod dim o hyn yn parhau'n gyfan.

## **NON-TECHNICAL SUMMARY**

In 2022, Gwynedd Archaeological Trust was asked by CCBC to undertake archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan. Pont Sarn Ddu is a post-medieval Grade II listed structure that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The works were required to increase existing traffic load capacity to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of the bridge structure. The watching brief monitored the excavation of nine trenches located on top of each of the stone piers. The trenches demonstrated that most of the slatestone slabs were still in situ beneath the tarmac and concrete blinding layers. The presence of rotten timber remains, and iron or steel pins suggested some form of timber supporting structure under the slabs, however it appeared none of this remained intact.

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was asked by CCBC to undertake archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan, Conwy County Borough (NGR SH7112051580; postcode: LL25 0JG; Figure 01). Pont Sarn Ddu is a post-medieval Grade II listed structure (ref. no. 3157) that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The works (planning ref: NP4/16/LB104A) are required to increase existing traffic load capacity from 3te to 18te to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of the bridge structure. The works are detailed in CCBC Drawing Nos. RP19-13 / T180 (cf. Figure 02) and RP13 / T200 (cf. Figure 03), and comprised:

- The removal and replacement of existing bridge backfill with concrete;
- Isolation of the concrete backfill from the existing structure with impervious membrane; and
- Addition of steel road plates above the existing deck level.

The archaeological mitigation included an archaeological watching brief during excavation of the existing road bridge backfill to expose the stone piers, and recording and reporting to a Level 3 Building Record standard.

A total of 9No trenches, each measuring 2.5m long by 0.6m wide and to a maximum depth of 1.1m, were excavated. The trenches were opened and closed within the same working day to allow continued bridge access to the public. The contractor initially filled each trench with concrete and then covered it, to allow 3te traffic to use the bridge; the concrete sleepers and 18te capacity steel roadplates required to complete the works will be undertaken at a later date.

The archaeological mitigation was undertaken in January and February 2022, and was planned, managed and undertaken by GAT in accordance with the following standards and guidance:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015).
- Management of Archaeological Projects (English Heritage, 1991);



- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Standard and guidance for an archaeological watching brief (Chartered Institute for Archaeologists, 2020);
- Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2020);
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2020); and
- Understanding Historic Buildings: A Good to Good Recording Practice (Historic England, 2016).

The archaeological mitigation was monitored by the Gwynedd Archaeological Planning Service (GAPS) and undertaken in accordance with an approved written scheme of investigation (cf. [Appendix I](#)). In line with the GAPS Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession to the HER and followed that guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). A HER Enquiry Number (GATHER1564) and Event Primary Reference Number (46197) were assigned.

## 2 ARCHAEOLOGICAL & HISTORICAL BACKGROUND

Pont Sarn Ddu is located in Dolwyddelan, Conwy, and is currently the only crossing point over the Afon Lledr to Blaenau Dolwyddelan, a small agricultural community. The road from Pont Sarn Ddu leads to Pen-y-Rhiw farm and joins with the old Roman road that goes behind Dolwyddelan castle. The bridge which is also known as the 'Roman Bridge' was originally thought to be the crossing point of the primary Roman road from Ffestiniog to Dolwyddelan as shown in map edition of 1794 (Figure 04; Cadw LB report). However, further research of the map evidence by David Ellis-Williams suggests that the location of Pont Sarn Ddu was a lake until at least 1701 (Ellis-Williams, 2015) dating the construction of the bridge to the 18<sup>th</sup> Century.

The bridge is described as an eight-span clapper bridge, built of local stone rubble and is approximately 18m long, with long parapeted approaches of similar length, rising slightly at the bridge ends. The substructure is constructed from random coursed masonry with a superstructure comprising slate stone slabs and a filler joist concrete slab, with kerbed metallised carriageway and metal pedestrian parapets. The bridge's eight spans vary in length, the smallest is 1.6 and the longest 2.6m. The spans are separated by rectangular piers of equal width, rounded upstream as cutwaters. The intermediate supporting piers varies in depth from 0.9m to 1.6m. Downstream the piers have slate projections on their northern and southern inner faces, of which halfway up, could possibly relate to timber supporting struts in the original construction. The carriageway is single width, 2.5m between kerbs, and carries a class 5 road. The road stands approximately 3.5m to 4m above the river level (Edwards, 2021, 12; Cadw LB report). Currently the bridge has a weight restriction of 3 tonnes due to structural cracking of the stone deck slabs (clappers). The proposed works intend to remove the load from the clappers and distribute it more evenly to the substructure of the bridge (Ibid, 3 and 4).

The Listed Building entry for Pont Sarn Ddu suggests the bridge could have Medieval origins or earlier, this is based on the lateral projects on the piers which could have originally been intended as anchoring points for timber struts, implying the bridge was initially timber built on rubble piers (Cadw LB report). The mapping evidence discussed above suggests that this supposition is incorrect and the bridge dates to the 18<sup>th</sup> Century. A series of alterations and partial rebuilding of the bridge have occurred throughout its existence, this includes the later addition of slate lintels, parapeted approaches which could be dated to 18<sup>th</sup> or early 19<sup>th</sup> century, the wire fences forming the parapets which are modern, and the northern two piers and the abutments which appear to have been rebuilt.

In the mid-1950s the original structure was altered significantly, these alterations consisted of the construction of concrete filler joist slabs to the west elevation and the widening of the piers supporting the concrete slab (Edwards 2021, 12). A drawing dated to 1953 gives details of the structure before the works commenced. The randomly coursed masonry piers appear to have been constructed off the river bed with an original width of 8ft. At road level the structure had a width of 10ft 6", supported by slate slabs cantilevering transversely. These slabs were not present on all of the piers however. Above the slate slab level were 7 timber beams, 12" thick and placed longitudinally to support the road. It is the failure of the supporting stones that triggered the repairs to Pont Sarn Ddu which consisted of increasing the width of the piers to 10ft 6", removal of the timber beams and the construction of a new reinforced concrete longitudinal beam (Edwards, 2021, 14).

A Heritage Impact Statement report for the proposed works was completed by CCBC in September 2021 (Edwards 2021). The aim of the Heritage Impact Statement was to assess the impact of the proposed works on the heritage significance of Pont Sarn Ddu. The report concluded that:

- The removal of backfill and insertion of concrete impacts on the historic and evidential values of the bridge and may result in harm due to movement of broken clappers during the construction phase of the scheme. However this represents the most robust solution and assists in the long term conservation of the bridge, reducing the risk of further deterioration to the fabric.
- The evidential value of the asset will also be affected because of the removal of the bridge fill. However it is proposed to record any material of evidential value through conducting an archaeological watching brief during the removal of the bridge infill. This has the potential to help understand the construction methods.
- Less than substantial harm to the asset is considered to be outweighed by the heritage and public benefits. The works will assist the long-term conservation of the asset, increase the load capacity and extend the useful life of the bridge. It ensures the bridge's continued use as a vital link between Blaenau Dolwyddelan and other communities. Alternatives such as closure of the bridge and the continued imposition of a weight restriction will not allow for the communal value to be fully appreciated. The chosen strengthening method is designed to reduce the need for intervention into historic fabric, which present opportunities for harm to arise.

- It is therefore considered that the proposed works comply with local and national planning policy, where the public benefit accorded by the strengthening of Pont Sarn Ddu outweighs the less than substantial harm to the asset.

### **3 METHOD STATEMENT**

#### **3.1 Introduction**

The archaeological mitigation will comprise a watching brief, which is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2020). Recording and reporting will be completed to a Level 3 Record standard as defined by *Understanding Historic Buildings: A Good to Good Recording Practice* (Historic England, 2016). This will include drawn and photographic records to illustrate the structures' appearance and to support an historical analysis. (Historic England, 2016: 26).

The archaeological mitigation was completed between January and February 2022 and comprised an archaeological watching brief and recording and reporting to a Level 3 Building Record standard. The mitigation monitored the excavation of nine trenches through the existing road bridge backfill, which exposed the stone piers; each trench measured 2.5m long by 0.6m wide and had a maximum depth of 1.1m. The mitigation also monitored the temporary contractor compound, which was located next to an existing gated farm entrance, between the bridge and a railway bridge.

#### **3.2 Aims & Objectives**

The key aims and objectives were to:

- Create a mitigation record of any evidence exposed or altered by the works to improve understanding of the site
- Complete an archaeological watching brief during excavation works through the existing road infill.
- Complete an archaeological watching brief during stripping of a compound area due to the potential for buried archaeology.
- Record and report the results of the excavations to a Level 3 Building Record Standard

#### **3.3 Fieldwork Methodology**

All attendances were recorded using GAT watching brief pro-formas; the written record comprised day sheets and photographic record sheets. Photographic images were taken

using a digital SLR (Nikon D5100 & D3100) camera set to maximum resolution (4928x3264 & 4608x3072) in RAW format. A total of 55 photographic images were taken (archive reference numbers G2702\_001 to G2702\_055; cf. [Appendix II](#)), which were subsequently archived in TIFF format using Adobe Photoshop.

### 3.4 Selection Strategy & Data Management Plan

As stated in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020), para. 3.3.1, “Project specifications, research designs or similar documents should include a project- specific Selection Strategy and a Data Management Plan. The Chartered Institute for Archaeologists states that “(I)t is widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation” (<https://www.archaeologists.net/selection-toolkit>). The working project archive in this instance comprises digital data including photographic data, documentation and written data, as well as paper records, including project pro-formas. This project archive data has been processed as follows:

1. Pro-formas: all cross referenced and scanned for digital archiving;
2. Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*;

The physical archive has been stored in a designated project folder and the location confirmed in the Data Management Plan. The digital dataset has been stored on a dedicated Trust server, with the location confirmed in the Data Management Plan via a specific hyperlink. The Data Management Plan is stored in GAT project database (format: *Microsoft Access*) and the Selection Strategy is based on a GAT pro-forma (format *Microsoft Word*) and is appended to this report (cf. [Appendix III](#)). The following dissemination and archiving of the report and digital dataset were applied:

- A digital report provided to the client & GAPS (draft report then final report);
- A digital report provided to the regional Historic Environment Record along with a digital dataset comprising an Event PRN summary. The report and dataset have been submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- A digital report and digital archive dataset have been provided to Royal Commission on Ancient and Historic Monuments, Wales, in accordance with the *RCAHMW*

*Guidelines for Digital Archives Version 1.* The dataset was prepared in the format required by RCAHMW and included:

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

## 4 RESULTS

### 4.1 Introduction

Pont Sarn Ddu (PRN 3720), is located near Dolwyddelan, Conwy County Borough (NGR SH7112051580; postcode LL25 0JG; Figure 01). The bridge spans the Afon Lledr providing vehicular access to Blaenau Dolwyddelan and was designated as Grade II Listed Building on the 17/03/1953 (amended 17/02/1997). The reason for its designation was “for its special interest as a particularly long, historic clapper bridge of probable early origins” (Cadw, 2022). The bridge is registered on the Gwynedd Archaeological Trust Historic Environment Record as PRN 3720, and with the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as NPRN 23815. The RCAHMW archives include a photograph of the bridge dated 14<sup>th</sup> July 1950 (Archive No: 6432196; Figure 05), which shows the upper part of the bridge before the addition of the metal railings but surmounted with coarser stonework possibly more representative of the original construction; a concrete kerb with concrete post and wire barriers are also visible.

Although it is considered the location of the original Roman crossing point over the Afon Lledr, the map evidence suggests that there was a lake in this area until at least 1701 (Ellis-Williams, 2015). The bridge first appears on John Evan’s map of North Wales dating to 1794 placing construction of the bridge at some point in the 18<sup>th</sup> Century (Figure 04).

The rubble piers are rounded on the western (upstream) side (Plate 01 & 2). There are some slatestone projections visible which were probably utilised during construction as supporting struts (Plates 03 & 04). The northern most piers appear to have been rebuilt and concrete kerbs and low slatestone copings were added in 1955 though it is clear from the image held by the RCAHMW that this was not the first major scheme altering and reinforcing the fabric of the bridge.

Pont Sarn Ddu is visible on all three editions of the Ordnance Survey 25-inch to 1-mile Caernarvonshire County Series map sheet XXIII.14 (Figure 06).



## 4.2 Watching Brief

### 4.2.1 Introduction

The watching brief at Pont Sarn Ddu was undertaken in January and February 2022 and included 10 site visits, one visit for each trench excavation and one for the reinstatement of the contractor compound area. All trenches were excavated using a combination of hand tools and hand operated power tools. The compound area was excavated using a 5-tonne tracked excavator. Trench 1 was located at the southern end of the bridge adjacent to the south abutment. Trenches were then excavated sequentially over the locations of the 7 rubble piers with Trench 9 located at the northern end of the bridge adjacent to the north abutment. All of the trenches measured 2.5m by 0.6m and spanned the bridge between the concrete kerbs. The trenches were located as follows:

### 4.2.2 Compound (Plates 05 and 06)

The temporary contractor compound was located between the road bridge (Pont Sarn Ddu) and the railway bridge, off an existing gated farm entrance. It measured approximately 120m<sup>2</sup> and was excavated, covered in terram and stoned before the archaeologist's arrival on site. The removal of the compound was monitored after the completion of the works. The grass and some topsoil had been removed to a depth of approximately 10cm across the area. The topsoil was still largely present and no archaeology was noted.

### 4.2.3 Trench 1 (Figure 07, Plate 07)

Trench 1 was located above the South Abutment. The tarmac over Trench 1 was 0.10m deep, which covered concrete blinding to a maximum depth of 0.16m. The blinding covered a series of angular slate slabs orientated N-S which were covered by dumps of concrete at the east and west sides of the bridge, adjacent to the concrete kerbs on which the metal railings are set.

### 4.2.4 Trench 2 (Figure 08, Plate 08)

Trench 2 was located above Pier 7. The tarmac at the location of Trench 2 had a maximum depth of 0.12m which overlaid concrete blinding, the depth of which varied but had a maximum depth of 0.28m. Removal of these layers revealed a series of angular slate slabs orientated roughly N-S. These slabs created a more uneven surface than that located in trench 1 and more random smaller pieces of slate had been used to fill in gaps between the larger slates.

#### *4.2.5 Trench 3 (Figure 09, Plates 09 and 10)*

Trench 3 was located above Pier 6. The tarmac and concrete blinding in Trench 3 was the same depth and composition as found in Trenches 1 and 2. Underlying this was one large slate slab with additional slabs on the eastern edge of the trench. One of the smaller slabs was unstable and had to be re-seated. Stone and rubble was removed under this slab to the level of the main pier. There was also rotten timber within the fill under this slab which could be the remains of the timbers described in the 1953 plans. Maximum depth of the trench was 0.15m at the western side, 0.25m in the centre and 0.55m at the eastern side where the unstable slab was located.

#### *4.2.6 Trench 4 (Figure 10, Plate 11)*

Trench 4 was located above Pier 5. The tarmac was 0.11m in depth in Trench 4 though the concrete blinding in this trench was deeper than elsewhere at the eastern and western ends of the trench. Because of the larger amount of concrete blinding in this trench, the large slate slabs were only visible in the central part of the trench making orientation of the slabs hard to discern. Maximum depth of the trench was 0.15m at the west, 0.22m in the centre and 0.10m at the eastern side.

#### *4.2.7 Trench 5 (Figure 11, Plates 12 and 13)*

Trench 5 was located above Pier 4. The tarmac on Trench 5 was the same as elsewhere. Large slabs were again visible in the central and western parts of the trench, orientated roughly N-S, but a large deposit of concrete was located at the eastern side. Under this concrete amongst the loose stone and rubble fill was some rotten timber and an iron pin measuring 25cm in length possibly the remains of the timbers and fixings described in the 1953 plan. The void was backfilled with stone in order to provide a stable platform for the new road supporting structure. The maximum depth of the trench was 0.27m.

#### *4.2.8 Trench 6 (Figure 12, Plate 14)*

Trench 6 was located above Pier 3. The tarmac and concrete blinding in Trench 6 was similar to elsewhere on site. Large slabs were present in the central and western parts of the trench orientated N-S. There was a void at the western part of the trench that was cleared out then repacked with stone for stability. More rotten timber and another iron pin measuring approximately 25cm in length was found in this void. The maximum depth of the trench was 0.28m at the western side, 0.30m in the central area and 0.27m at the eastern side.

#### *4.2.9 Trench 7 (Figure 13, Plate 15)*

Trench 7 was located above Pier 2. Tarmac and concrete blinding depth in this trench was the same as elsewhere on the site. In this trench there was no central stone slab, and the largest stone was located to the eastern side of the trench. The slabs in this trench appear to be orientated E-W. The smaller stones were removed and then replaced to provide stability for the bridge improvements in the central part of the trench. Maximum depth of the trench was 0.28m.

#### *4.2.10 Trench 8 (Figure 14, Plate 16)*

Trench 8 was located above Pier 1. Tarmac and concrete blinding the same as in the other trenches. Four large angular slabs, orientated E-W, were evident in this trench with smaller stones placed in between them. There was a slight void at the eastern side of the trench which was backfilled using smaller stones. Maximum depth of the trench was 0.23m.

#### *4.2.11 Trench 9 (Figure 15, Plate 17)*

Trench 9 was located above the North Abutment. The tarmac and concrete blinding in this trench was the same as elsewhere on the site. One large slab covered almost half the trench stretching from the eastern side of the trench to the centre. There was a slight void under the largest slab on the western side of the trench which was cleared out then repacked with smaller stones to provide stability for the new bridge strengthening. A small amount of rotten wood was found in the void but no iron pin like elsewhere.

## 5 CONCLUSION

Gwynedd Archaeological Trust was asked by CCBC to undertake archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan. Pont Sarn Ddu is a post-medieval Grade II listed structure that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The works are required to increase existing traffic load capacity from 3te to 18te to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of the bridge structure.

The bridge is described as an eight-span clapper bridge, built of local stone rubble with long parapeted approaches of similar length, rising slightly at the bridge ends. The substructure is constructed from random coursed masonry with a superstructure comprising slate stone slabs and a filler joist concrete slab, with kerbed metalled carriageway and metal pedestrian parapets. The structure of the bridge itself is very hard to date but mapping evidence suggests it was constructed at some point between 1701 and 1794. Before 1701 the area was lake suggesting that this is not the location of a Roman crossing point. A series of alterations and partial rebuilding of the bridge have occurred throughout its existence, this includes the later addition of slate lintels, parapeted approaches which could be dated to 18<sup>th</sup> or early 19<sup>th</sup> century, the wire fences forming the parapets which are modern, and the northern two piers and the abutments which appear to have been rebuilt.

In the mid-1950s the original structure was altered significantly, these alterations consisted of the construction of concrete filler joist slabs to the west elevation and the widening of the piers supporting the concrete slab. A drawing dated to 1953 gives details of the structure before the works commenced. The randomly coursed masonry piers appear to have been constructed off the river bed with an original width of 8ft. At road level the structure had a width of 10ft 6", supported by slate slabs cantilevering transversely. Above the slate slab level were 7 timber beams, 12" thick and placed longitudinally to support the road. It is possible that the timber remains and iron pins found during the watching brief are related to these beams.

The northern most piers appear to have been rebuilt and concrete kerbs and low slate stone copings were added in 1955 though it is clear from the image held by the RCAHMS that this was not the first major scheme altering and reinforcing the fabric of the bridge. The watching brief revealed that most of the slate stone slabs are still in situ under the tarmac and concrete blinding layers. The presence of rotten timber remains, and iron pins suggests some form of timber supporting structure under the slabs, however it appears none of this remains intact.

## 6 SOURCES CONSULTED

1. Cadw: Database of Listed Buildings in Wales ([Listed Buildings - Full Report - HeritageBill Cadw Assets - Reports \(cadwpublic-api.azurewebsites.net\)](#) Accessed 11/10/2021)
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7. Chartered Institute for Archaeologists, 2020, Standard and Guidance for an Archaeological Watching Brief
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10. English Heritage, 1991, Management of Archaeological Projects (MAP2)
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13. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives
14. The Welsh Archaeological Trusts, 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1.

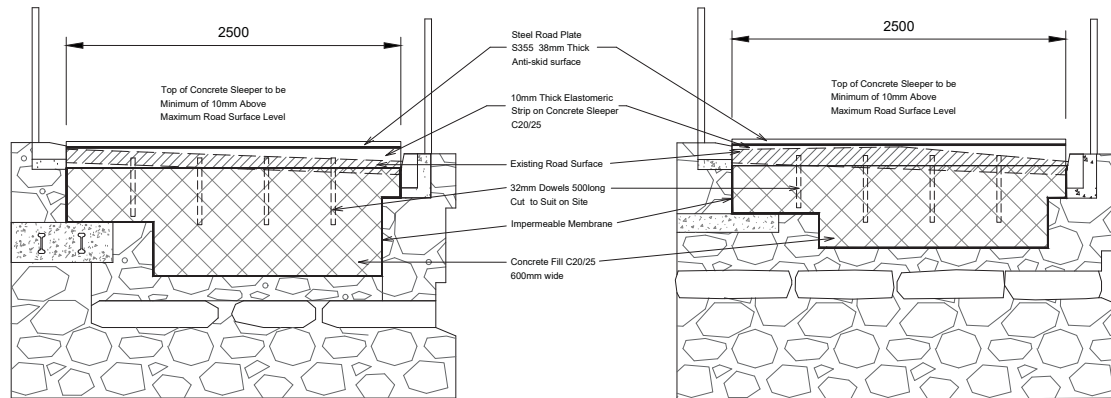
Figure 01: Map showing location of Pont Sarn Ddu. Source: CCBC, 2021



Rhoddir trwydded ddwyriadau nad yw'n gyfyngedig, heb freindai, i chi weld y Data Trwyddedig ar gyfer defnydd anfasnachol yn unig, o'r cyfnod y bydd ar gael gan Gyngor Bwrdeistref Sirol Conwy; Ni chewch gopïo, is-dwyddedu, dosbarthu, gwerthu neu fei arall dreftu bod y Data Trwyddedig ar gael mewn unrhyw flur i ddyddio partion; a Neilltuir hawliau trwyddedd parti i orodi telerau i dwyddedd hon i'r Arolwg Ordnans.

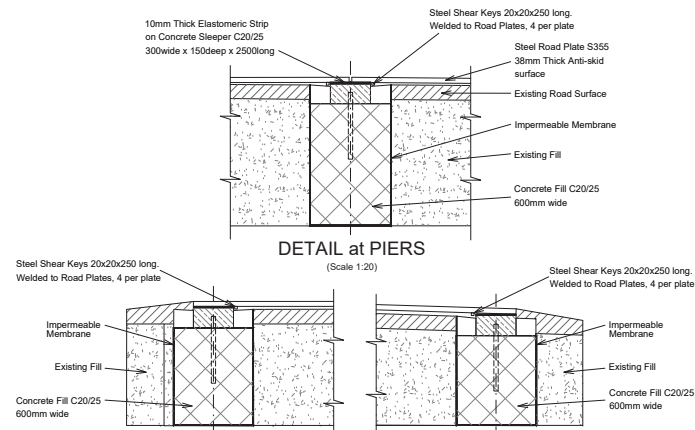
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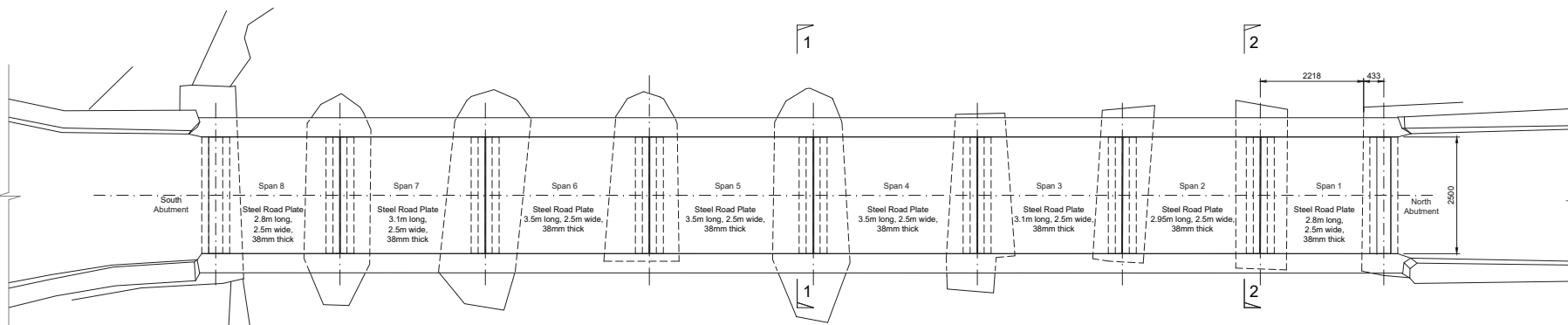
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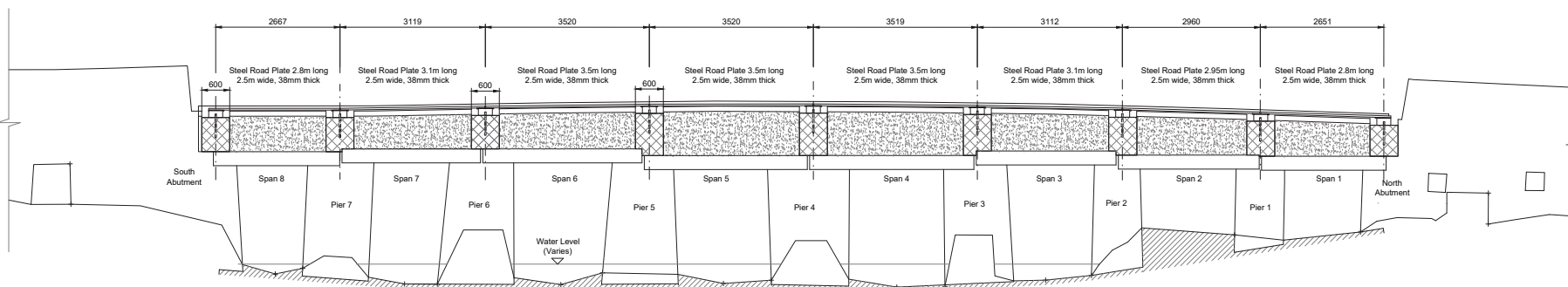
DETAIL at PIERS  
(Scale 1:20)

DETAIL at SOUTH  
ABUTMENT

DETAIL at NORTH  
ABUTMENT



PLAN ON BRIDGE DECK  
(Scale 1:50)



SECTION THROUGH CENTRE OF BRIDGE  
(Scale 1:50)

NOTES

1. Do not scale from this drawing.
2. Any anomalies on this drawing should be brought to the attention of Conwy County Borough Council.
3. All dimensions are in millimetres and all levels in metres unless stated otherwise.
4. The drawing shall be read in conjunction with all relevant drawings for the scheme.
5. All dimensions shall be confirmed by the Contractor and any discrepancies brought to the attention of the Supervisor as soon as a discrepancy arises.
6. All levels shown on this drawing are nominal and must be checked/agreed prior to construction. All levels to be agreed with the supervisor.

KEY

REV	DETAIL	DRAWN	CHECKED	DATE

PROJECT  
**PONT SARN DDU  
ROAD BRIDGE**

TITLE  
**BRIDGE DECK  
18te INTERIM WORKS DETAILS**

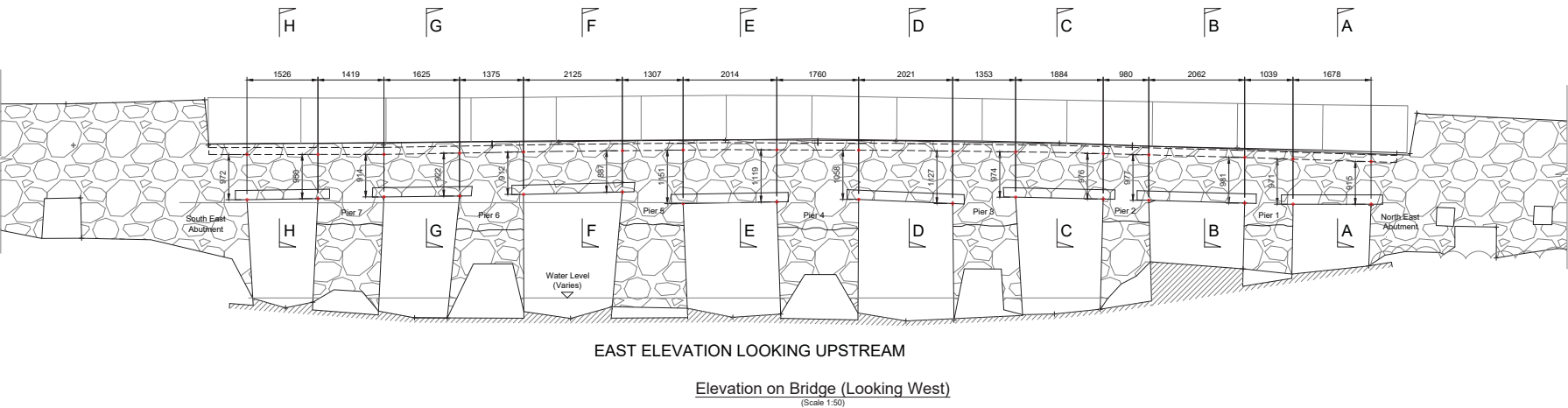
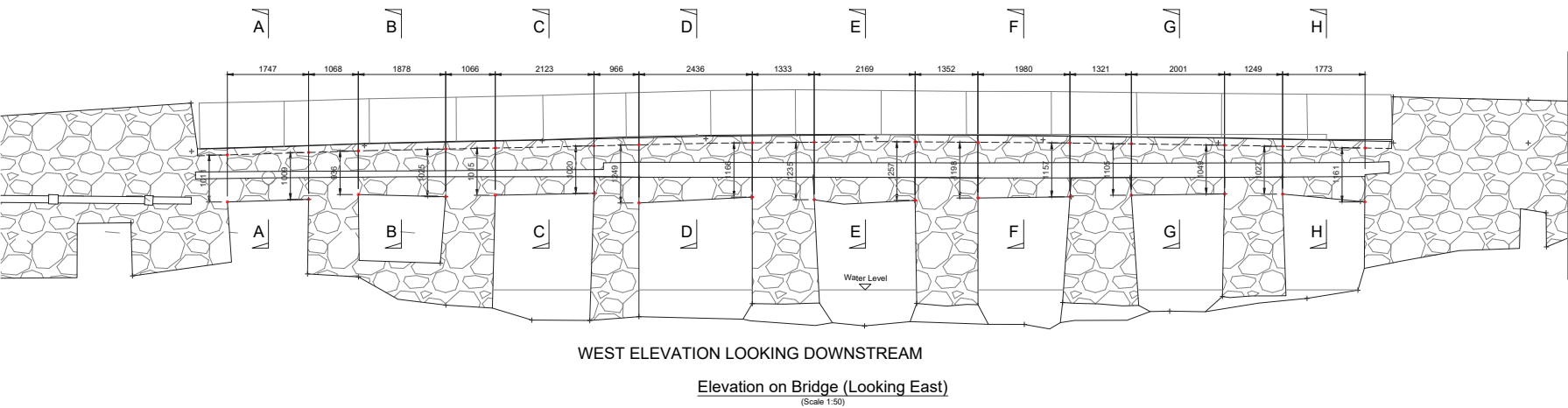
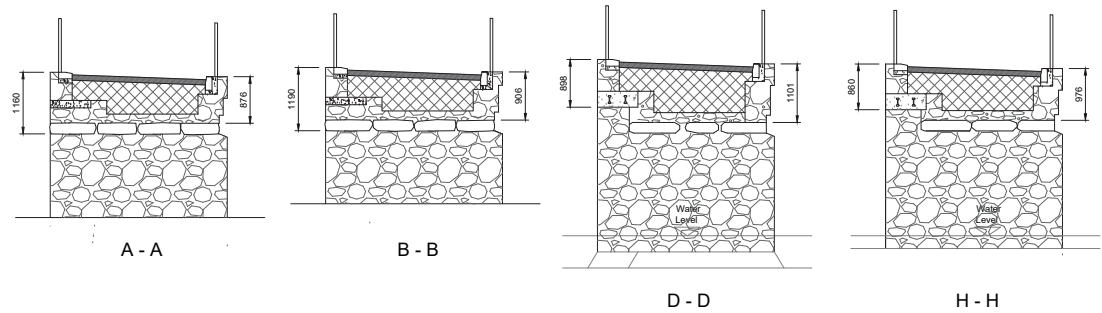
CLIENT  
**F R & I**


SCALE @ A1	DRAWN	CHECKED	APPROVED	DWG STATUS
As shown	ARW	DATE: Sept. '21	DATE:	Issue



PROJECT Ref: **RP19-13** / DRAWING No: **T180**

Figure 03 - Reproduction of CCBC Drawing No. RP13 / T200





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**NOTES**

- Do not scale from this drawing.
- Any anomalies on this drawing should be brought to the attention of Conwy County Borough Council.
- All dimensions are in millimetres and all levels in metres unless stated otherwise.
- The drawing shall be read in conjunction with all relevant drawings for the scheme.
- All dimensions shall be confirmed by the Contractor and any discrepancies brought to the attention of the Supervisor as soon as a discrepancy arises.
- All levels shown on this drawing are nominal and must be checked/agreed prior to construction. All levels to be agreed with the supervisor.

**KEY**

REV	DETAIL	DRAWN	CHECKED	DATE

**PROJECT**

**PONT SARN DDU ROAD BRIDGE**


**TITLE**

**BRIDGE ELEVATIONS GENERAL ARRANGEMENT**

**CLIENT**

**FR & I**

SCALE @ A1	DRAWN: SPH	CHECKED:	APPROVED:	DWG STATUS
As shown	DATE: 03.04.21	DATE:	DATE:	Issue



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PROJECT Ref:	DRAWING No:	REV
RP13	T200	



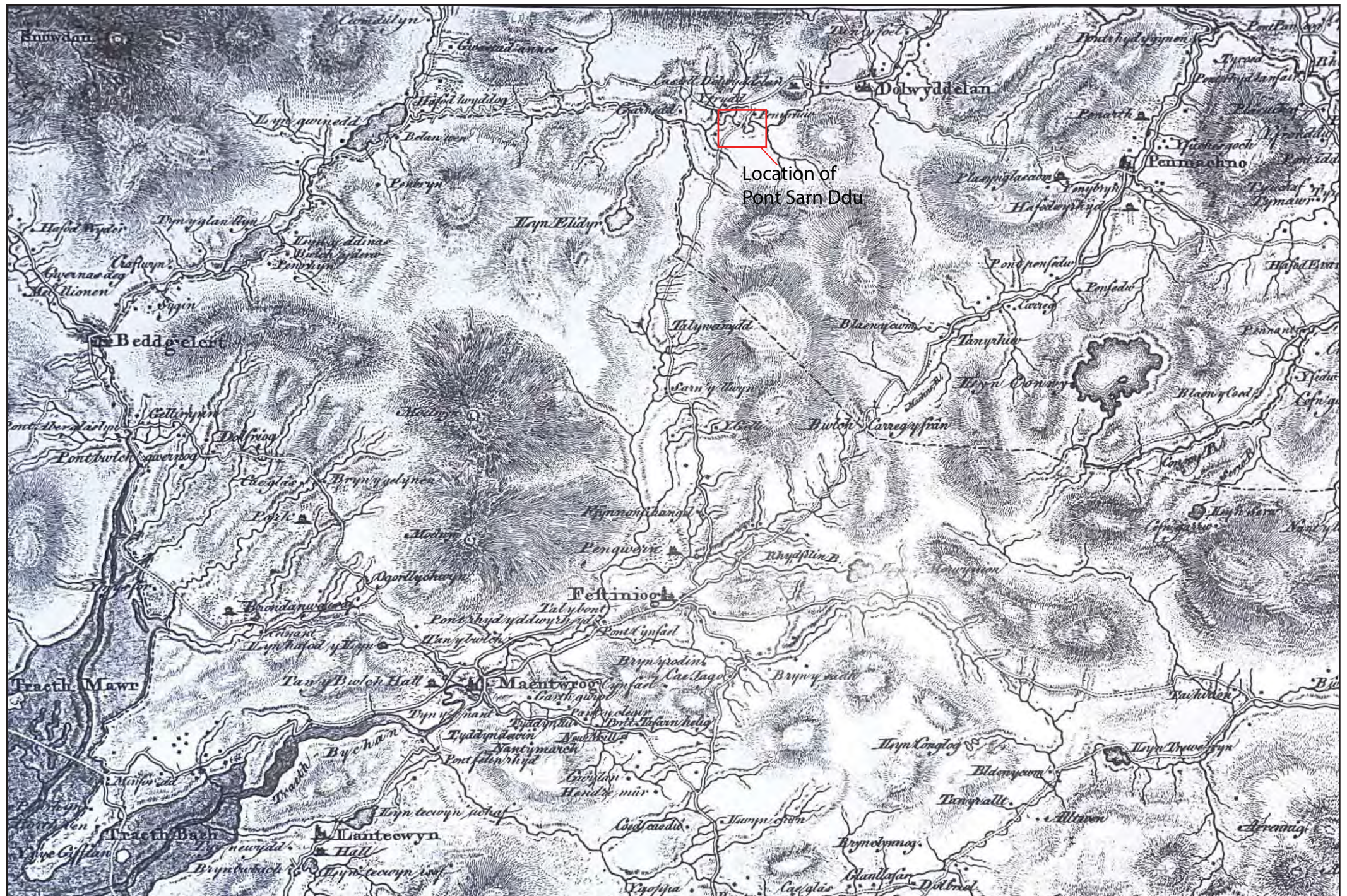


Figure 04: John Evans' Map of North Wales 1794 (Bangor Archives)





Figure 05: Photograph of Pont Sarn Ddu taken 14th July 1950 (RCAHMW Archive No: 6432196)

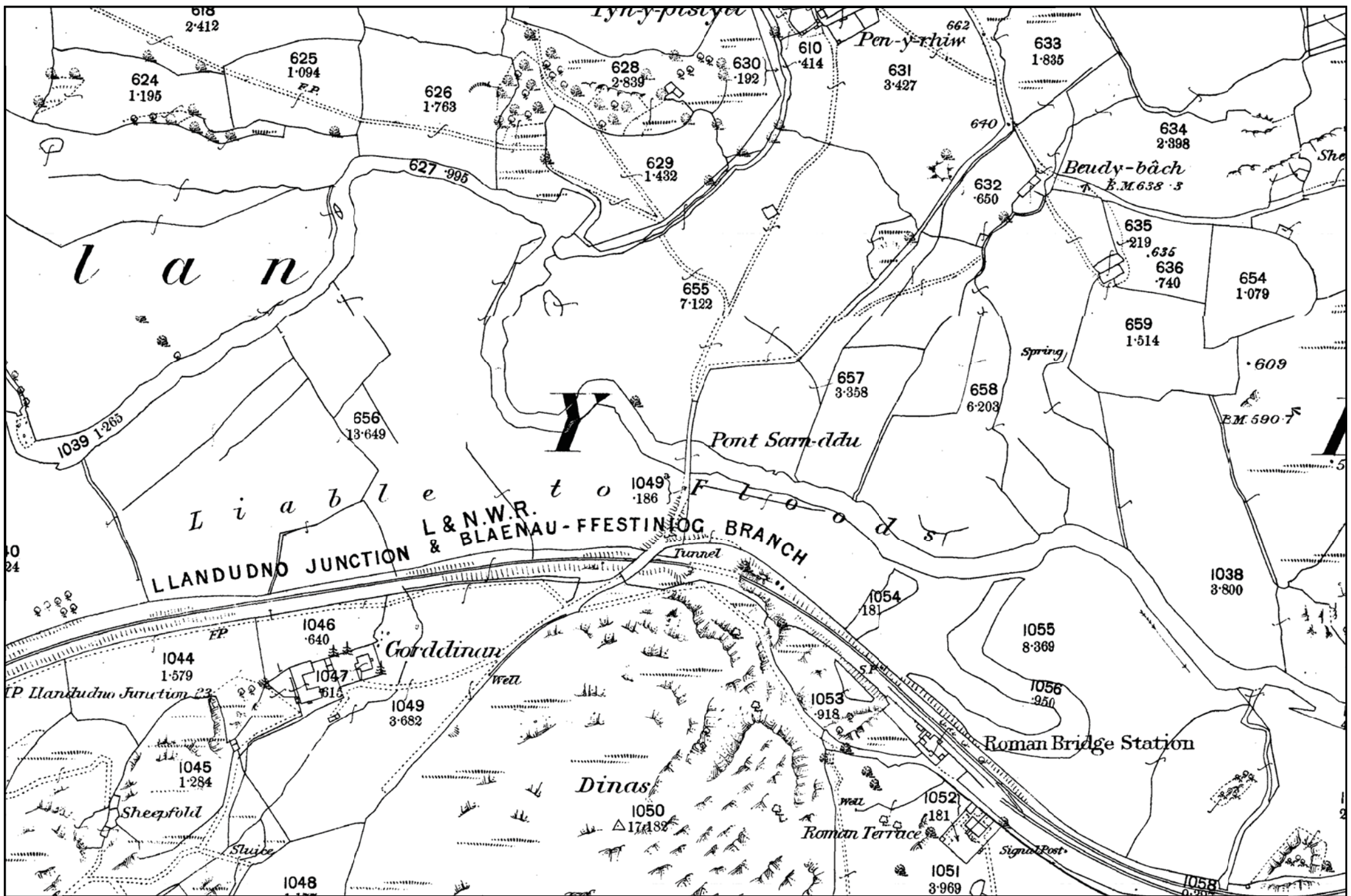


Figure 06: First Edition Ordnance Survey 25 inch Carnarvonshire Map Sheet XXIII.14, published 1888. Scale 1:3000@A4

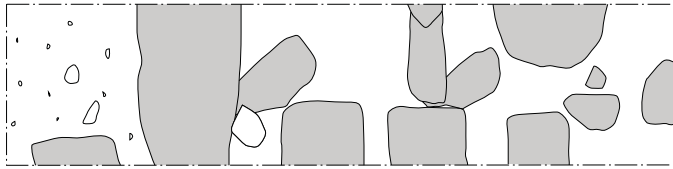


Figure 07: Trench 01 Plan; Scale 1:20@A3

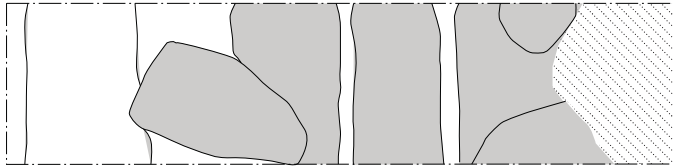


Figure 08: Trench 02 Plan; Scale 1:20@A3



Figure 09: Trench 03 Plan; Scale 1:20@A3

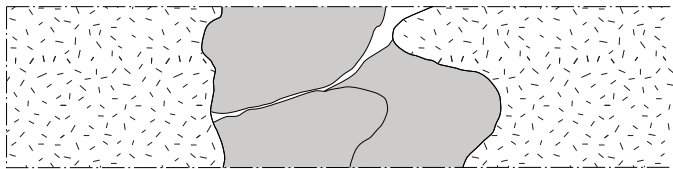


Figure 10: Trench 04 Plan; Scale 1:20@A3

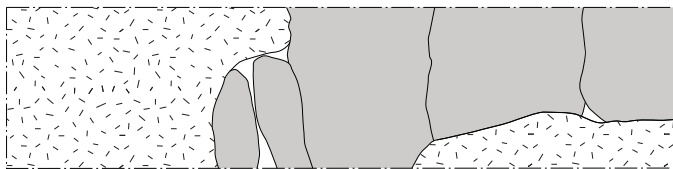


Figure 11: Trench 05 Plan; Scale 1:20@A3

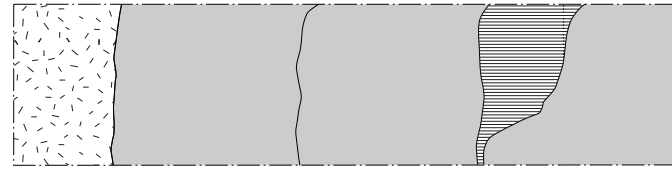


Figure 12: Trench 06 Plan; Scale 1:20@A3

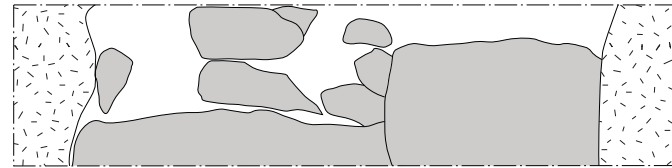


Figure 13: Trench 07 Plan; Scale 1:20@A3

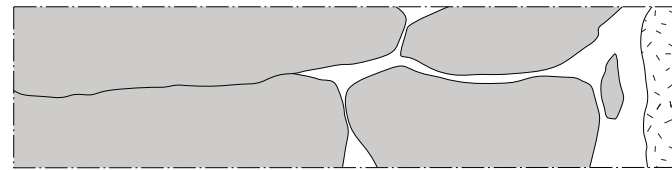


Figure 14: Trench 08 Plan; Scale 1:20@A3

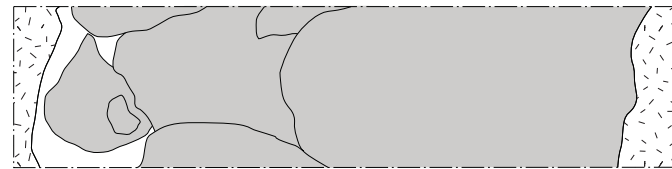
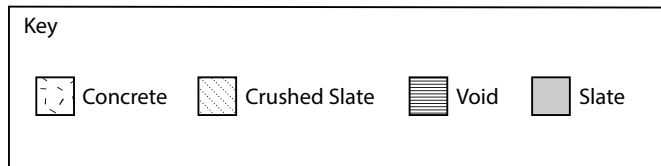


Figure 15: Trench 09 Plan; Scale 1:20@A3







**Plate 1: Close-up of underside of bridge and piers; scale not used; view from SW**  
(archive reference: G2702\_013).



**Plate 2: Pont Sarn Ddu upstream face; scale not used; view from SW** (archive reference: G2702\_011).





Plate 3: Close-up of piers at downstream face; scale not used; view from SE (archive reference: G2702\_055).



Plate 4: Downstream face of bridge; view from SE (archive reference: G2702\_054).





Plate 5: Compound - with terram and stone removed; scale 1x1m; view from SSW  
(archive reference: G2702\_050).



Plate 6: Compound - with terram and stone removed; scale 1x1m; view from NNE  
(archive reference: G2702\_051).





Plate 7: Slate slabs exposed in Trench 1; scale 1x1m; view from ESE (archive reference: G2702\_007).



Plate 8: Trench 2 excavated with slate slabs exposed; scale not used; view from WNW (archive reference: G2702\_016).





Plate 9: Trench 3 ; scale 1x1m; view from S (archive reference: G2702\_023).



Plate 10: After stone removed and timber remains; scale not used; view from W (archive reference: G2702\_027).





Plate 11: Trench 4 ; scale 1x1m; view from S (archive reference: G2702\_030).



Plate 12: Trench 5 ; scale 1x1m; view from N (archive reference: G2702\_036).





Plate 13: Iron pin from under concrete; scale Compass; view from - (archive reference: G2702\_034).



Plate 14: Trench 6; scale 1x1m; view from N (archive reference: G2702\_039).





Plate 15: Trench 7; scale 1x1m; view from N (archive reference: G2702\_042).



Plate 16: Trench 8; scale 1x1m; view from S (archive reference: G2702\_044).





Plate 17: Trench 9; scale 1x1m; view from N (archive reference: G2702\_048).

## **APPENDIX I**

**Gwynedd Archaeological Trust Written Scheme of Investigation, October  
2021**

# **PONT SARN DDU, DOLWYDDELAN (G2702)**

## **WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MITIGATION**

**Prepared for**

*CCBC*

**January 2022**



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust

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

Name

Signature

Date



## **PONT SARN DDU, DOLWYDDELAN (G2702)**

### **WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MITIGATION:**

#### **Watching Brief & Level 3 Building Record Prepared for CCBC, January 2022**

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# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by CCBC to prepare a written scheme of investigation for archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan, Conwy County Borough (NGR SH7112051580; postcode: LL25 0JG; [Figure 01](#)). Pont Sarn Ddu is a post-medieval Grade II listed structure (ref. no. 3157) that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The proposed works are required to increase existing traffic capacity from 3te to 18te to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of the bridge structure.

As stated in Heritage Impact Statement (Edwards 2021), the proposed repair works at Pont Sarn Ddu consist of:

- Removal and replacement of existing bridge backfill with concrete;
- Isolation of the concrete backfill from the existing structure with impervious membrane; and
- Addition of steel road plates above the existing deck level.

The proposals are detailed in the following drawings prepared by CCBC:

- CCBC Drawing No. RP19-13 / T180 (cf. [Figure 02](#))
- CCBC Drawing No. RP13 / T200 (cf. [Figure 03](#))

The archaeological mitigation will comprise:

- An archaeological watching brief during excavation of the existing road bridge backfill; and
- Recoding and reporting to a Level 3 Building Record standard.

The works' scheduled is to be confirmed, but is expected from late January 2022 and is scheduled to last 9No days (Mondays to Fridays only). A total of 9No of trenches, each measuring 2.5m long by 0.6m wide and to a maximum depth of 1.1m, will be excavated, with the intention that trenches will be opened and closed within the same working day in order to allow continued bridge access to the public. The contractor will initially fill each trench with

concrete and then cover, to allow 3te traffic to use the bridge; the concrete sleepers and 18te capacity steel roadplates required to complete the works will be undertaken at a later date.

The mitigation will be planned, managed and undertaken by GAT in accordance with the following standards and guidance:

- *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1 (The Welsh Archaeological Trusts, 2018);
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015).
- *Management of Archaeological Projects* (English Heritage, 1991);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
- *Standard and guidance for an archaeological watching brief* (Chartered Institute for Archaeologists, 2020);
- *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (Chartered Institute for Archaeologists, 2020);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (Chartered Institute for Archaeologists, 2020);
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020); and
- *Understanding Historic Buildings: A Good to Good Recording Practice* (Historic England, 2016).

Gwynedd Archaeological Trust is certified to ISO 9001:2008 and ISO 14001:2004 (Cert. No. 74180/A/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).

## 1.1 Aims and Objectives

The key aims and objectives are to:

- Complete an archaeological watching brief during excavation of the existing road bridge backfill; and
- Dependant on results, complete and analytical record of any earlier bridge structure encountered to ensure that the structure's use and development are understood and the main features, character and state of preservation are recorded.

## 1.2 Monitoring Arrangements

The archaeological mitigation will be monitored by the Gwynedd Archaeological Planning Service (GAPS). Both the written scheme of investigation and all subsequent reporting must be approved by GAPS before final issue. GAPS must also be kept informed of the project timetable. The GAPS contact details are:

- Jenny Emmett | [jenny.emmett@heneb.co.uk](mailto:jenny.emmett@heneb.co.uk) | 07824481052;
- Tom Fildes | [tom.fildes@heneb.co.uk](mailto:tom.fildes@heneb.co.uk) | 07920264232.

## 1.3 Historic Environment Record

In line with the Gwynedd Archaeological Trust Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). In line with this guidance, all submitted reporting will need to include the equivalent of a non-technical summary in Welsh and English at the front of the report combined with short bilingual summaries of the principal Historic Assets recorded during the event. These requirements are mandatory.

The HER enquiry no. is GATHER1564 and the Event Primary Reference Number is 46197.

## 2 ARCHAEOLOGICAL & HISTORICAL BACKGROUND

Pont Sarn Ddu is located in Dolwyddelan, Conwy, and is current the only crossing point over the Afon Lledr to Blaenau Dolwyddelan, a small agricultural community. The road from Pont Sarn Ddu leads to Pen-y-Rhiw farm and joins with the old Roman road that goes behind Dolwyddelan castle. The bridge which is also known as the 'Roman Bridge' was originally the crossing point of the primary Roman road from Ffestiniog to Dolwyddelan as shown in map edition of 1794 (Cadw LB report).

The bridge is described as an eight-span clapper bridge, built of local stone rubble and is approximately 18m long, with long parapeted approaches of similar length, rising slightly at the bridge ends. The substructure is constructed from random coursed masonry with a superstructure comprising slate stone slabs and a filler joist concrete slab, with kerbed metalised carriageway and metal pedestrian parapets. The bridge's eight spans vary in length, the smallest is 1.6 and the longest 2.6m. The spans are separated by rectangular piers of equal width, rounded upstream as cutwaters. The intermediate supporting piers varies in depth from 0.9m to 1.6m. Downstream the piers have slatestone projections on their northern and southern inner faces, of which halfway up, could possibly relate to timber supporting struts in the original construction. The carriageway is single width, 2.5m between kerbs, and carries a class 5 road. The road stands approximately 3.5m to 4m above the river level (Edwards 2021, 12; Cadw LB report).

It is currently understood that Pont Sarn Ddu could have Medieval origins or earlier, this is based on the lateral projects on the piers which could have originally been intended as anchoring points for timber struts, implying the bridge was initially timber built on rubble piers (Cadw LB report). A series of alterations and partial rebuilding of the bridge have occurred throughout its existence, this includes the later addition of slatestone lintels, parapeted approaches which could be dated to 18<sup>th</sup> or early 19<sup>th</sup> century, the wire fences forming the parapets which are modern, and the northern two piers and the abutments which appear to have been rebuilt. In the mid-1950s the original structure was altered significantly, these alterations consisted of the construction of concrete filler joist slabs to the west elevation and the widening of the piers supporting the concrete slab (Edwards 2021, 12).

A Heritage Impact Statement report for the proposed works was completed by CCBC in September 2021 (Edwards 2021). The aim of the Heritage Impact Statement was to assess

the impact of the application on the heritage significance of Pont Sarn Ddu. The report concluded that:

- The removal of backfill and insertion of concrete impacts on the historic and evidential values of the bridge and may result in harm due to movement of broken clappers during the construction phase of the scheme. However this represents the most robust solution and assists in the long term conservation of the bridge, reducing the risk of further deterioration to the fabric.
- The evidential value of the asset will also be affected because of the removal of the bridge fill. However it is proposed to record any material of evidential value through conducting an archaeological watching brief during the removal of the bridge infill. This has the potential to help understand the construction methods.
- Less than substantial harm to the asset is considered to be outweighed by the heritage and public benefits. The works will assist the long-term conservation of the asset, increase the load capacity and extend the useful life of the bridge. It ensures the bridge's continued use as a vital link between Blaenau Dolwyddelan and other communities. Alternatives such as closure of the bridge and the continued imposition of a weight restriction will not allow for the communal value to be fully appreciated. The chosen strengthening method is designed to reduce the need for intervention into historic fabric, which present opportunities for harm to arise.
- It is therefore considered that the proposed works comply with local and national planning policy, where the public benefit accorded by the strengthening of Pont Sarn Ddu outweighs the less than substantial harm to the asset.

## 2 METHOD STATEMENT

### 2.1.1 Introduction

The archaeological mitigation will comprise a watching brief, which is defined by the Chartered Institute for Archaeologists as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA, 2020). Recording and reporting will be completed to a Level 3 Record standard as defined by *Understanding Historic Buildings: A Good to Good Recording Practice* (Historic England, 2016). This will include drawn and photographic records to illustrate the structures' appearance and to support an historical analysis. (Historic England, 2016: 26).

Works are currently scheduled from January 2022. All attendances and any identified features will be recorded using GAT watching brief pro-formas ([Appendix I](#)). The mitigation record will be limited to accessible areas and in accordance with a suitable risk assessment and health & safety parameters. The client will be responsible for safe access. Any key structural details and phasing will be examined and recorded to determine extent, function, date and relationship to adjacent activity. Key dimensions and detailed measurements will be completed and the CCBC plans and elevations listed in [para. 1.0](#) ( Figures [02](#) and [03](#)), will be consulted and annotated as required. *Additional time, resourcing, specialist input and costs may be required for GAT to complete an appropriate programme of works.*

It is recommended that a toothless bucket is used, where practical, and that the archaeologist must be allowed to halt investigation works to complete any investigation and recording required.

### 2.1.2 *Photographic Record*

This will include:

- a general view or views of the bridge (where practical), including the bridge's external appearance. Typically a series of oblique views will show all external elevations of the building, and give an overall impression of its size and shape. Where individual elevations include complex historical information it may also be appropriate to take views at right-angles to the plane of the elevation;
- further views may be desirable to reflect the original design intentions of the builder or architect, where these are known from documentary sources or can be inferred from the building or its setting;
- any structural or decorative detail, which is relevant to the bridge's design, development and use, with scale where appropriate;
- any dates or other inscriptions; any signage, makers' plates or graffiti which contribute to an understanding of the structure. A transcription should be made wherever characters are difficult to interpret; and
- Photographic images will be taken using a digital SLR (camera set to maximum resolution in RAW format; a photographic record will be maintained on site using GAT pro-formas ([Appendix III](#)) and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from G2702\_001. When practical, a photographic ID board will be used to record site code, image orientation and any relevant context numbers. Suitable scales will be used.



### 2.1.3 *Written Record*

This will include:

- The precise location of the building (NGR format) and an address;
- A note of any statutory or non-statutory designations;
- The date of when the record was made as well as the name of the recorder and location of the project archive;
- A description of the bridge's form, function, date and sequence of development. The names of architects, builder, patrons and owners should be included if known;
- An introduction briefly setting out the circumstances in which the record was made, its objectives, methods, scope and limitations, and any constraints. Where appropriate the brief for the work or the project design should be stated or appended;
- Acknowledgements to all those who have made a significant contribution to the making of the record, or who have given permission for copyright items to be reproduced;
- A discussion of the published sources relating to the bridge location and setting, an account of its history as given in published sources, an analysis of historic map evidence (map regression) and a critical evaluation of previous records of the bridge, where they exist, including those highlighted in the Heritage Impact Statement (Attwood and Farrow, 2021: 17);
- An account of the bridge's overall form (structure, materials, layout) and of its successive phases of development, together with the evidence supporting this analysis;
- An account of the bridge's past and present use, and of the uses of its parts, with the evidence for these interpretations. Copies of historic maps, drawings, views and photographs will be consulted (where available) that illustrate the development and use of the bridge. This will include the Ordnance Survey Merionethshire County Map series of the area and any other historic mapping/information deemed useful.
- Full bibliographic and other references, or a list of the sources consulted (in long reports it is preferable to include both). Websites which may prove to be ephemeral should be avoided as references wherever possible; where their use is unavoidable the full web address and the date on which the site was consulted should be noted.

#### 2.1.4 Drawn Record

This will include:

- Measured plans (to scale or fully dimensioned) as existing. These will be based on the CCBC plans and elevations listed in [para. 1.0](#) (reproduced as Figures 02 and 03), with suitable copies of the CCBC plans and elevations reproduced and annotated.
- A plan or plans identifying the location and direction of accompanying photographs.
- Copies of earlier drawings throwing light on the bridge's history (if available).
- Three-dimensional projections will be consulted when these are of value in understanding the bridge. If these are to be considered components of the record they must always be accompanied by measured plans, sections and elevational details; these will be sourced from the existing CCBC illustrations;
- Reconstruction drawings and phased drawings, when these are of value. In phased drawings successive phases of a bridge's development may be shown by graded tone (dark to light, with the darker being the earlier) or by colour, by sequential diagrams or by annotation. Whenever phased drawings are included in a record, they must be accompanied by the unmarked drawings on which they are based.
- If practical plans or sections to be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace. However, if there are time restraints for recording (e.g., inclement weather), 3D photogrammetry may also be an option. Where applicable, annotated copies of the CCBC plans and elevations will be reproduced in the mitigation report.

### 2.1.5 Artefacts

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19<sup>th</sup> and 20<sup>th</sup> century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: [lucy.whittingham@aocarchaeology.com](mailto:lucy.whittingham@aocarchaeology.com)).

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Conwy Archive Service, Old Board School, Lloyd Street, Llandudno LL30 2YG), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters, and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Conwy Archive Service). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Conwy Archive Service in accordance with their guidelines.

The following selection review points during the project will be undertaken:

- Working project archive processing;
- Reporting; and
- archive compilation.

## 2.2 Working Project Archive & Data Management Plan

Following the completion of the fieldwork, a programme of fieldwork archiving will be completed based on following task list:

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

This data will then be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated digital management plan appended to the final report.

A draft report will be submitted within one month of fieldwork completion and a final report will be submitted to the regional Historic Environment Record within six months of project completion. The report will include the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusion
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – photographic metadata

On final approval, the following dissemination and archiving of the report and digital dataset will apply:

- A digital report(s) will be provided to the client and GAPS (draft report then final report);
- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a

digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and

- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMMW and will include:
  - Photographic metadata (Microsoft Access);
  - Photographic archive (TIFF format);
  - Project Information form (Excel);
  - File Information form (Excel) – Microsoft Word report text final;
  - File Information form (Excel) – Photographic metadata (general);
  - File Information form (Excel) – Adobe PDF report final; and
  - File Information form (Excel) - Photographic metadata (detail).

## 2.3 Selection Strategy

As defined in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020) section 3.3.1, a project specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologist (CIfA), have stated that it is “widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation”. The aim of selection is to ensure that all the elements retained from the Working Project Archive for inclusion in the Archaeological Archive are appropriate to establish the significance of the project and support “future research, outreach, engagement, display and learning activities”. Selection should be “focused on selecting what is to be retained to support these future needs, rather than deciding what can be dispersed” and can be qualified by a selection strategy, which details the project-specific selection process, agreed by all parties (including GAPS, client and/or landowner), which will be applied to a Working Project Archive prior to its transfer into curatorial care as the Archaeological Archive.

The selection strategy is summarised in [Appendix IV](#) will be confirmed in the mitigation report and will take into account:

- The aims and objectives of the project.
- The brief and/or Written Scheme of Investigation (WSI)).
- The Collecting Institution’s collection policy and/or deposition guidelines.
- Local and regional research frameworks.
- Relevant thematic or period specific research frameworks.
- The project’s Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

### **3 PERSONNEL**

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section and undertaken by a Project Archaeologist. The Project Archaeologist will be responsible for all field management duties, including GAPS liaison, client liaison, coordination and delegation of tasks. The Project Archaeologist will also be responsible for the completion of all on site pro-formas and the fieldwork archive as well as for submitting a draft final report (or interim report) for project manager review and approval. The report will then be submitted as per the arrangements defined above.



## **4 HEALTH AND SAFETY**

A site specific risk assessment will be prepared by the GAT Project Archaeologist in advance of works, with any additional risks identified on site highlighted in the dynamic risks section and appropriate mitigation undertaken. The GAT Project Archaeologist will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and safety helmet. All site work will be managed and undertaken in accordance with the GAT Health & Safety Policy and Covid-19 guidelines.

## **5 SOCIAL MEDIA**

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

## **6 INSURANCE**

### **6.1 Public/Products Liability**

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

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2022

### **6.2 Employers Liability**

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2022

### **6.3 Professional Indemnity**

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER PL-PSC10002389775/00

EXPIRY DATE 22/07/2022

## 7 SOURCES CONSULTED

1. Cadw: Database of Listed Buildings in Wales ([Listed Buildings - Full Report - HeritageBill Cadw Assets - Reports \(cadwpublic-api.azurewebsites.net\)](#) Accessed 11/10/2021)
2. CCBC Drawing No. RP19-13 / T180
3. CCBC Drawing No. RP13 / T200
4. Chartered Institute for Archaeologists, 2020, Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures
5. Chartered Institute for Archaeologists, 2020, Standard and guidance for the collection, documentation, conservation and research of archaeological materials
6. Chartered Institute for Archaeologists, 2020, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives
7. Chartered Institute for Archaeologists, 2020, Standard and Guidance for an Archaeological Watching Brief
8. Edwards, G.B., 2021, Pont Sarn Ddu, Dolwyddelan, Heritage Impact Statement
9. English Heritage, 1991, Management of Archaeological Projects (MAP2)
10. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE)
11. Historic England, 2016. *Understanding Historic Buildings: A Good to Good Recording Practice*
12. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives
13. The Welsh Archaeological Trusts, 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1.

## **FIGURE 01**

**Map showing location of Pont Sarn Ddu. Source: CCBC, 2021**



Figure 1: Location Plan



Rhoddir trwydded ddwyriadau nad yw'n gyfyngedig, heb freindai, i chi weld y Data Trwyddedig ar gyfer defnydd anfasnachol yn unig, o'r cyfnod y bydd ar gael gan Gyngor Bwrdeistref Sirol Conwy; Ni cheiwch gopïo, is-dwyddedu, dosbarthu, gwerthu neu fei arall dreftu bod y Data Trwyddedig ar gael mewn unrhyw flur i ddyddid partion; a Neilltuir hawliau trwyddid parti i orodi telerau i dwyddedd hon i'r Arolwg Ordnans.

You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which Conwy County Borough Council makes it available; You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form; and Third party rights to enforce the terms of this licence shall be reserved to Ordnance Survey.

## **FIGURE 02**

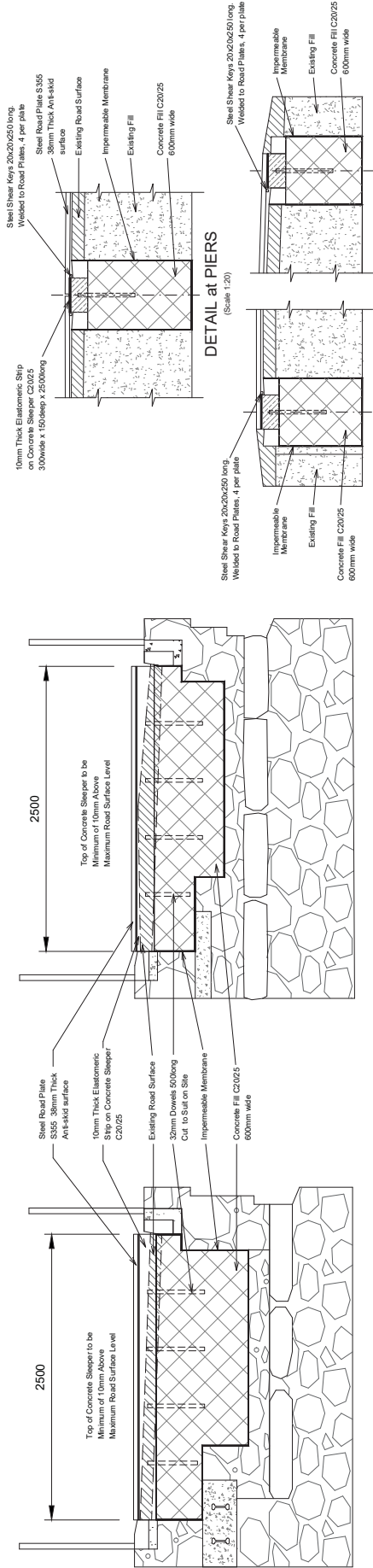
**Reproduction of CCBC Drawing No. RP19-13 / T180**



## NOTES

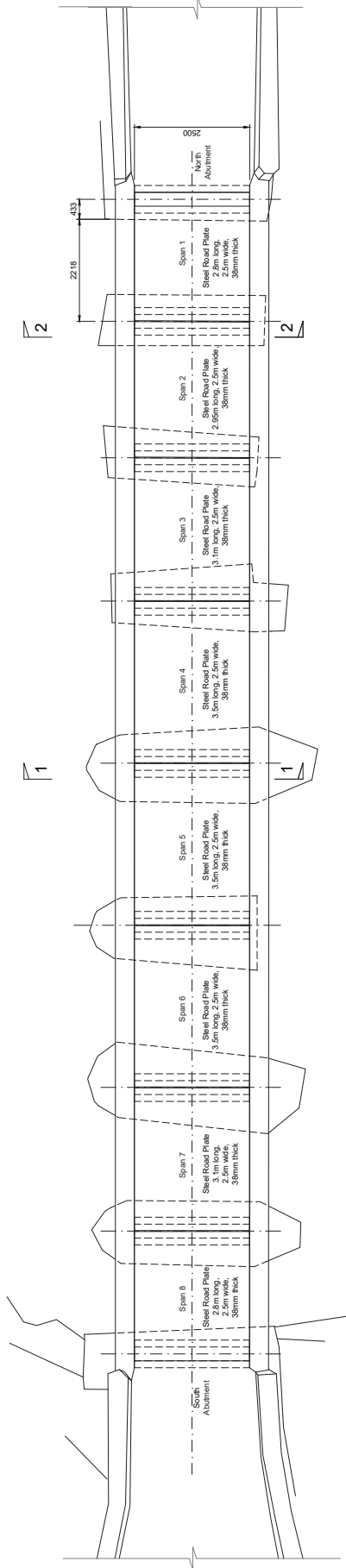
1. Do not scale from this drawing.
2. Any anomalies on this drawing should be brought to the attention of Conwy County Borough Council.
3. All dimensions are in millimetres and all levels in metres unless stated otherwise.
4. The drawing shall be read in conjunction with all relevant drawings for this scheme.
5. All dimensions shall be confirmed by the Contractor and any discrepancies brought to the attention of the Supervisor as soon as a discrepancy arises.
6. All levels shown on this drawing are nominal and must be checked/signed prior to construction. All levels to be agreed with the supervisor.

**KEY**

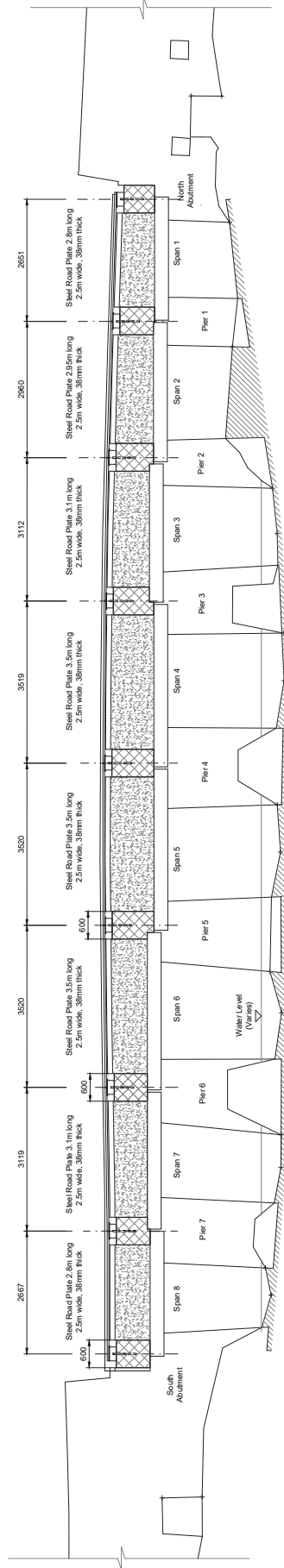


SECTION 1 - 1  
(Scale 1:20)

SECTION 2 - 2  
(Scale 1:20)



PLAN ON BRIDGE DECK  
(Scale 1:50)



SECTION THROUGH CENTRE OF BRIDGE  
(Scale 1:50)

REV	DETAIL	DRAWN	CHECKED	DATE
PROJECT				

PONT SARN DDU  
ROAD BRIDGE

BRIDGE DECK  
TERIM WORKS DETAILS

FBI

SCALE @ A1: <b>As shown</b>	DRAWN: <b>ARW</b> DATE: <b>Sept. '21</b>	CHECKED: DATE:	APPROVED: DATE:	OWWG STATUS: <b>Issue</b>
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**CONWY**  
CYNCON BRANDSTREE SCHOOL  
CONWY BOROUGH COUNCIL

 ENVIRONMENT,  
ROADS & FACILITIES

G.B. Edwards BSc (Hons) CEng FCE  
Head of Environment  
Machine Officers, Conwy Road,  
Machynallt, L24 5AB

Tel: 014921 975337

PROJECT of: **RP19-13** / **T180** DRAWING No:

## **FIGURE 03**

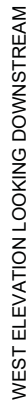
**Reproduction of CCBC Drawing No. RP13 / T200**



## NOTES

1. Do not scale from this drawing.
2. Any anomalies on this drawing should be brought to the attention of Conwy County Borough Council.
3. All dimensions are in millimetres and all levels in metres unless stated otherwise.
4. The drawing shall be read in conjunction with all relevant drawings for the scheme.
5. All dimensions shall be confirmed by the Contractor and any discrepancies brought to the attention of the Supervisor as soon as a discrepancy arises.
6. All levels shown on this drawing are nominal and must be checked/verified prior to construction. All risks to be agreed with the supervisor.

KEY



Elevation on Bridge (Looking East)  
(Scale 1:50)



Elevation on Bridge (Looking West)  
(Scale 1:50)

REV	DETAIL	DRAWN	CHECKED	DATE

PONT SARN DDU  
ROAD BRIDGE

**BRIDGE ELEVATIONS  
GENERAL ARRANGEMENT**

**CLIENT**

F

SCALE @ A1	DRAWN: SPH	CHECKED:	APPROVED:	DWG STATUS:
As shown	DATE: 03.04.21	DATE:	DATE:	Issue

**CONWY**

CYNOCOR BUILDING SERVICES  
COUNTY BOROUGH COUNCIL

**ENVIRONMENT,  
ROADS & FACILITIES**

G.B. Edwards BEing Home iCEng FICE  
Head of Environment/Roads & Facilities,  
Medicine Offices, Conway Road,  
Machynell, LL28 5AB.

Tel. 014921 675337  
Fax 014921 573399  
E-mail g.b.edwards@conwy.gov.uk

PROJECT Ref:	DRAWING No:	REV
RP13	/ T200	

## **APPENDIX I**

### **Gwynedd Archaeological Trust Watching Brief pro-forma**

[illegible]

## **APPENDIX II**

### **Gwynedd Archaeological Trust Building Record pro-forma**



YMDDIRIEDOLAETH ARCHAEOLEGOL GWYNEDD ARCHAEOLOGICAL TRUST		
BASIC RECORDING FORM	Project name	Project number
Feature name		Feature Number
NGR		
<div>Description</div>		
<div>Recommendations for further assessment</div>		
<div>Photographic record numbers</div>		
<div>Digital</div>		
	Visit date	Visit by

## **APPENDIX III**

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

# Digital Photographic Record

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing. Regularly upload photographs to computer. Delete any unwanted photos **immediately** from the camera.

[illegible]

## **APPENDIX IV**

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



# G2702\_Pont\_Sarn\_Ddu

## 28/07/2021 v1.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>	
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>	
<b>Organisation</b>	Gwynedd Archaeological Trust	
Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	January 2022
	RCAHMW	On completion of Project Archive
<b>Project Lead / Project Assurance</b>	Tom Fildes, Gwynedd Archaeological Planning Service	November 2021
<b>Landowner / Developer</b>	CCBC	November 2021
<b>Other</b>	n/a	n/a

##### Resources

<b>Resources required</b>	No unusual resources required outside of GAT normal operating equipment and personnel.
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##### Context

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust has been asked by CCBC to prepare a written scheme of investigation for archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan, Conwy (NGR SH7112051580; postcode: LL25 0JG; WSI Figure 01). Pont Sarn Ddu is a post-medieval Grade II listed structure (ref. ID 3157) that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The proposed works are required to

increase existing traffic capacity from 3te gyw to 18t gyw to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of bridge structure.

The archaeological mitigation will comprise:

- An archaeological watching brief during excavation of the existing road bridge backfill;  
and
- Recoding and reporting to a Level 3 Building Record standard.

Gwynedd Archaeological Trust. 2022. *Pont Sam Ddu, Dolwyddelan: Written Scheme of Investigation*. Project G2702.

# 1 – Digital Data

## Stakeholders

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

All digital data will be collected and stored in line with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

Archiving will be completed based on following task list;

- Pro-formas: all cross referenced and scanned for digital archiving;
- Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*.

This data will be used as the basis for the physical and digital dataset archives and to compile the project report.

The physical paper archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the regional HER and RCAHMW have been prepared and submitted.

Archiving will be undertaken in accordance with the following standards and guidance:

- *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1* (The Welsh Archaeological Trusts, 2018);
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (Chartered Institute for Archaeologists, 2020); and
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020).

A selection review point will be completed during processing of the working project archive and again during final project archiving. There are no selection decisions that differ from standard guidelines.

<b>De-Selected Digital Data</b>
De-selected digital data to be confirmed on project completion.



## 2 – Documents

### Stakeholders

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;  
Sean Derby – Historic Environment Record, Clwyd Powys Archaeological Trust;  
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMMW*

### Selection

- 1 A digital report will be provided to the regional Historic Environment Record; along with a digital dataset comprising an Event PRN summary. The report and dataset have been submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- 2 A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMMW Guidelines for Digital Archives Version 1*. The dataset was prepared in the format required by RCAHMMW and included:
  - 2.1 Photographic metadata (Microsoft Access);
  - 2.2 Photographic archive (TIFF format);
  - 2.3 Project Information form (Excel);
  - 2.4 File Information form (Excel) – Microsoft Word report text final;
  - 2.5 File Information form (Excel) – Photographic metadata (general);
  - 2.6 File Information form (Excel) – Adobe PDF report final; and
  - 2.7 File Information form (Excel) - Photographic metadata (detail).
- 2.8 A selection review point will be completed during processing of the working project archive and again during final project archiving. There are no selection decisions that differ from standard guidelines.

### De-Selected Documents

Material de-selected from inclusion in the preserved archive are likely to be duplicates and reproductions created during the project. De-selected material will be retained to supplement GAT's research files or recycled.

## 3 – Materials

**Note:** This step should be completed for each material component of the archaeological archive. Copy this table for the various materials as required, providing the 'Material Type' and a section identifier (eg. '3.1') for each.

<b>Material type</b>	TBC	<b>Section 3.</b>	
----------------------	-----	-------------------	--

### Stakeholders

## Selection

The artefacts will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy.

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Conwy Archive Service, Old Board School, Lloyd Street, Llandudno LL30 2YG), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Conwy Archive Service). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Conwy Archive Service in accordance with their guidelines.

The following selection review points during the project will be undertaken:

- Working project archive processing;
- Reporting; and
- archive compilation

### Uncollected Material

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19<sup>th</sup> and 20<sup>th</sup> century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained.

### De-Selected Material

All processed material will be recorded before de-selection and identified in an amended Materials Selection table. Artefacts de-selected for museum accessioning will be retained at GAT as research and diagnostic tools.

### Amendments

Date	Amendment	Rationale	Stakeholders

### Materials Selection Template

Find Type	Selection Strategy	Stakeholders	Review Points

## **APPENDIX II**

### **Gwynedd Archaeological Trust Photographic Metadata**

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_001	Compound	Contractor temporary compound	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_002	Compound	Location of compound and road bridge	SSW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_003	Compound	Compound viewed from road bridge	N	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_004	Trench 1	Large block of slate and dump of concrete - Trench 1	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_005	Trench 1	Large block of slate and dump of concrete - Trench 2	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_006	Trench 1	Excavation of Trench 1 with hand tools	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_007	Trench 1	Slate slabs exposed in Trench 1	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	07



PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_008	Trench 1	Oblique view of slate slabs in Trench 1	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_009	Trench 1	Tarmac and concrete blinding in section	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_010	Trench 1	Slate slabs exposed in Trench 1	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_011	Bridge	Pont Sarn Ddu	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	02
G2702_012	Bridge	Underside of bridge with increased span with concrete support	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	
G2702_013	Bridge	Close-up of underside of bridge and piers	SW	not used	Photographic Record of Watching Brief	Stuart Reilly	28/01/2022	Gwynedd Archaeological Trust	01
G2702_014	Trench 2	Trench 2 excavated with slate slabs exposed	ESE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_015	Trench 2	Close-up of slate slabs in Trench 2	NNE	not used	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	
G2702_016	Trench 2	Trench 2 excavated with slate slabs exposed	WNW	not used	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	08
G2702_017	Trench 2	Close-up of slate slabs in Trench 2	NNE	not used	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	
G2702_018	Trench 2	Depth of Trench 2	W	not used	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	
G2702_019	Trench 2	Location of Trench 2 on bridge	NNE	not used	Photographic Record of Watching Brief	Stuart Reilly	31/01/2022	Gwynedd Archaeological Trust	
G2702_020	Trench 3	Trench 3	WSW	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	
G2702_021	Trench 3	Trench 3	ESE	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_022	Trench 3	Trench 3	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	
G2702_023	Trench 3	Trench 3	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	09
G2702_024	Trench 3	Trench 3	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	
G2702_025	Trench 3	Lifting loose stone Tr 3	W	not used	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	
G2702_026	Trench 3	After Stone removed	W	not used	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	
G2702_027	Trench 3	After stone removed and timber remains	W	not used	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	10
G2702_028	Trench 3	Solid stone	S	not used	Photographic Record of Watching Brief	Carol Ryan Young	01/02/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_029	Trench 4	Trench 4 Concrete removal	S	not used	Photographic Record of Watching Brief	Carol Ryan Young	02/02/2022	Gwynedd Archaeological Trust	
G2702_030	Trench 4	Trench 4	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	02/02/2022	Gwynedd Archaeological Trust	11
G2702_031	Trench 4	Trench 4	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	02/02/2022	Gwynedd Archaeological Trust	
G2702_032	Trench 4	Stones in centre Tr 4	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	02/02/2022	Gwynedd Archaeological Trust	
G2702_033	Trench 5	Trench 5 cast iron pin	-	not used	Photographic Record of Watching Brief	Carol Ryan Young	03/02/2022	Gwynedd Archaeological Trust	
G2702_034	Trench 5	cast iron pin from under concrete	-	Compass	Photographic Record of Watching Brief	Carol Ryan Young	03/02/2022	Gwynedd Archaeological Trust	13
G2702_035	Trench 5	Trench 5	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	03/02/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_036	Trench 5	Trench 5	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	03/02/2022	Gwynedd Archaeological Trust	12
G2702_037	Trench 5	Trench 5	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	03/02/2022	Gwynedd Archaeological Trust	
G2702_038	Trench 6	Trench 6	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	04/02/2022	Gwynedd Archaeological Trust	
G2702_039	Trench 6	Trench 6	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	04/02/2022	Gwynedd Archaeological Trust	14
G2702_040	Trench 6	Trench 6	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	04/02/2022	Gwynedd Archaeological Trust	
G2702_041	Trench 7	Trench 7	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	07/02/2022	Gwynedd Archaeological Trust	
G2702_042	Trench 7	Trench 7	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	07/02/2022	Gwynedd Archaeological Trust	15



PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_043	Trench 7	Trench 7	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	07/02/2022	Gwynedd Archaeological Trust	
G2702_044	Trench 8	Trench 8	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	08/02/2022	Gwynedd Archaeological Trust	16
G2702_045	Trench 8	Trench 8	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	08/02/2022	Gwynedd Archaeological Trust	
G2702_046	Trench 8	Trench 8	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	08/02/2022	Gwynedd Archaeological Trust	
G2702_047	Trench 9	Trench 9	S	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	09/02/2022	Gwynedd Archaeological Trust	
G2702_048	Trench 9	Trench 9	N	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	09/02/2022	Gwynedd Archaeological Trust	17
G2702_049	Trench 9	Trench 9	W	1x1m	Photographic Record of Watching Brief	Carol Ryan Young	09/02/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	SITE SUB- DIVISION	DESCRIPTION	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2702_050	compound reinstatement	Compound - with terram and stone removed	SSW	1x1m	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	05
G2702_051	compound reinstatement	Compound - with terram and stone removed	NNE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	06
G2702_052	compound reinstatement	Oblique view of compound	NE	1x1m	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	
G2702_053	compound reinstatement	Soil bund at base of slope for compound	SSW	1x1m	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	
G2702_054	compound reinstatement	Downstream face of bridge	SE	not used	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	Cover 04
G2702_055	compound reinstatement	Close-up of piers at downstream fae	SE	not used	Photographic Record of Watching Brief	Stuart Reilly	22/02/2022	Gwynedd Archaeological Trust	03

## **APPENDIX III**

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

# G2702\_Pont\_Sarn\_Ddu

## 25/03/2022 v2.0

### Selection Strategy

#### Project Information

##### Project Management

<b>Project Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Archaeological Archive Manager</b>	John Roberts <a href="mailto:john.roberts@heneb.co.uk">john.roberts@heneb.co.uk</a>
<b>Organisation</b>	Gwynedd Archaeological Trust

Stakeholders		Date Contacted
<b>Collecting Institution(s)</b>	GAT Historic Environment Record	January 2022
	RCAHMW	On completion of Project Archive
<b>Project Lead / Project Assurance</b>	Tom Fildes, Gwynedd Archaeological Planning Service	November 2021
<b>Landowner / Developer</b>	CCBC	November 2021
<b>Other</b>	n/a	n/a

##### Resources

<b>Resources required</b>	No unusual resources required outside of GAT normal operating equipment and personnel.
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##### Context

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust were commissioned by CCBC to undertake archaeological mitigation during bridge improvement works at Pont Sarn Ddu, Dolwyddelan, Conwy (NGR SH7112051580; postcode: LL25 0JG; WSI Figure 01). Pont Sarn Ddu is a post-medieval Grade II listed structure (ref. ID 3157) that carries the road from Dolwyddelan to Blaenau Dolwyddelan across Afon Lledr. The works were required to increase existing traffic capacity from 3te gyw to

18t gyw to provide improved access to Blaenau Dolwyddelan and to address the continuing deterioration of bridge structure. The archaeological mitigation comprised:

- An archaeological watching brief during excavation of the existing road bridge backfill; and
- Recoding and reporting to a Level 3 Building Record standard.

Gwynedd Archaeological Trust. 2022. *Pont Sarn Ddu, Dolwyddelan: Written Scheme of Investigation*. Project G2702.



# 1 – Digital Data

## Stakeholders

John Roberts (GAT Principal Archaeologist)

## Selection

### Location of Data Management Plan (DMP)

All digital data has been collected and stored in line with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

Archiving has been completed based on following task list;

- Pro-formas: all cross referenced and scanned for digital archiving;
- Photographic Metadata: cross-referenced with all pro-formas and completed in *Microsoft Excel*.

This data has been used as the basis for the physical and digital dataset archives and to compile the project report.

The physical paper archive has been stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset has been stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the regional HER and RCAHMW have been prepared and submitted.

Archiving has been undertaken in accordance with the following standards and guidance:

- *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1 (The Welsh Archaeological Trusts, 2018);
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (Chartered Institute for Archaeologists, 2020); and
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020).

A selection review point has been completed during processing of the working project archive and again during final project archiving. There are no selection decisions that differ from standard guidelines.

<b>De-Selected Digital Data</b>
De-selected digital data to be confirmed on project completion.
There is no de-selected digital data

## 2 – Documents

### Stakeholders

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;  
Sean Derby – Historic Environment Record, Clwyd Powys Archaeological Trust;  
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*

### Selection

- 1 A digital report has been provided to the regional Historic Environment Record; along with a digital dataset comprising an Event PRN summary. The report and dataset have been submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- 2 A digital report and digital archive dataset has been provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset was prepared in the format required by RCAHMW and included:
  - 2.1 Photographic metadata (Microsoft Access);
  - 2.2 Photographic archive (TIFF format);
  - 2.3 Project Information form (Excel);
  - 2.4 File Information form (Excel) – Microsoft Word report text final;
  - 2.5 File Information form (Excel) – Photographic metadata (general);
  - 2.6 File Information form (Excel) – Adobe PDF report final; and
  - 2.7 File Information form (Excel) - Photographic metadata (detail).
- 2.8 A selection review point has been completed during processing of the working project archive and again during final project archiving. There are no selection decisions that differ from standard guidelines.

### De-Selected Documents

Material de-selected from inclusion in the preserved archive are likely to be duplicates and reproductions created during the project. De-selected material has been retained to supplement GAT's research files or recycled.

There is no de-selected documentary data



Gwynedd Archaeological Trust  
Ymddiriedolaeth Archaeolegol Gwynedd

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