



St. Deiniol's Church, Church Lane, Hawarden, Flintshire CH5 3LT.

July 2018
V 1.0



aeon archaeology



Archaeological Watching Brief
Project Code: A0146.1
Report no. 0173



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Archaeological Watching Brief

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1.0 NON-TECHNICAL SUMMARY

Aeon Archaeology was commissioned by St. Deiniol's Church Buildings Committee to maintain an archaeological watching brief during the groundworks associated with the installation of a new gas service within the churchyard of the grade II* Listed Building (ref: sourceID 12) of St. Deiniol's Church, Church Lane, Hawarden, Flintshire.

The archaeological watching brief uncovered three relocated grave-markers within trench A at the southern end of the graveyard, as well as an in-situ grave-marker stump, a sandstone burial vault, and a red-brick burial vault. In addition, five fragments of buried grave-marker were found within trench C.

Within trench E, F and G at the northern side of the Church the watching brief uncovered the remains of a former pathway constructed from large flat York stone slabs. Within this pathway a relocated grave-marker was found.

At the eastern end of trench G an infilled red-brick coal chute and inspection chamber was found immediately adjacent to the boiler room.

At the eastern end of trench H an in-situ sandstone and York stone grave monument was found that almost certainly predates the construction of the Vestry in 1910.

There were no articulated burials encountered within the new gas pipe trench but a total of 108 dis-articulated human bone fragments were recovered along with 3 animal bones. These were re-interred by the Vicar upon conclusion of the works. The artefact assemblage was surprisingly lacking, with only one sherd of 17th-20th century Pantheon ware ceramic, a piece of vitrified glass, and four fragments of a modern ceramic plate recovered.

2.0 INTRODUCTION

Aeon Archaeology was commissioned by St. Deiniol's Church Buildings Committee, hereafter the Client, to maintain an archaeological watching brief during the groundworks associated with the installation of a new gas service within the churchyard of the grade II* Listed Building (ref: sourceID 12) of St. Deiniol's Church, Church Lane, Hawarden, Flintshire CH5 3LT (NGR SJ 31544 65917) (figure 01 and 02).

The Church lies to the immediate north of Church Lane and Rectory Lane, both of which provide access to the southern part of the churchyard. The proposed scheme involved the excavation of a new pipe trench from an existing supply located on the west side of the southern main gates, northwards across the churchyard grass and the western pathway, before turning eastward and heading across the northern pathway to the boiler cellar. The meter box will be sited on the south boundary wall within Church Lane.

The programme of archaeological works was undertaken under the authority of a faculty licence (ref. 1822) granted by the Diocese of St Asaph. The following archaeological conditions were applied to the faculty licence:

The Church/Mission Area should contract an accredited archaeologist to undertake a watching brief during surface disturbance works in the churchyard of St Deiniol's, Hawarden. A detailed written scheme of investigation (WSI) should be submitted by the archaeologist to the DAC for approval prior to the commencement of the groundworks. The person(s) actually carrying out the work detailed in the WSI should preferably be a registered ClfA individual or at the very least belong to a ClfA registered organisation, and should be familiar with and must follow the Institute's standard and guidance.

Sufficient time must be allowed by the Contractor during the on-site works for the Archaeologist to record any significant remains that are exposed, including structural features, vaults and burials; it is not anticipated that features dropping below the level of the groundworks will need to be examined, though their precise position should be recorded. The Contractor should be made aware of the need to work closely with the Archaeologist during the on-site works; to this end the Contractor should give the Archaeologist reasonable notice as to when he wishes to start on the site, and maintain regular contact subsequently.

The Archaeologist shall be responsible for collecting any human bone, fragmentary or complete, which is dug up, following the implementation of any necessary legal procedures. In conjunction with the incumbent, the Archaeologist should make an appropriate decision as to how those bones or fragments should be reburied.

Upon completion of the archaeological works, the Archaeologist should produce a written report on the findings, positive or negative, including photographs, which will be lodged within an appropriate archive, with a copy being passed to the Churches Conservation and Development Officer at St Asaph Diocese as her capacity as secretary to the DAC.

In event of disarticulated human remains being discovered in the course of the works then the following were to be actioned:

a) The Incumbent is to be informed.

b) The remains are to be retained

c) The remains shall be reinterred as quickly as is reasonably practicable under the direction of the Incumbent in a place close to that from which they came save that osteological examination on site in accordance with the aforesaid scheme of investigation shall be permitted.

4. In the event of any articulated human remains being discovered in the course of the works then the following conditions shall apply:

a) Work is to cease.

b) The remains are to be immediately covered with suitable sheeting.

c) The Incumbent is to be informed and the Archdeacon to be consulted immediately.

d) Subject to any directions of the Archdeacon or this Court the remains are to be reinterred as quickly as possible under the direction of the Incumbent in a place close to that from which they came save that re-internment may be delayed until the directions of the court have been obtained in the event that it is wished to carry out osteological examination of such remains.

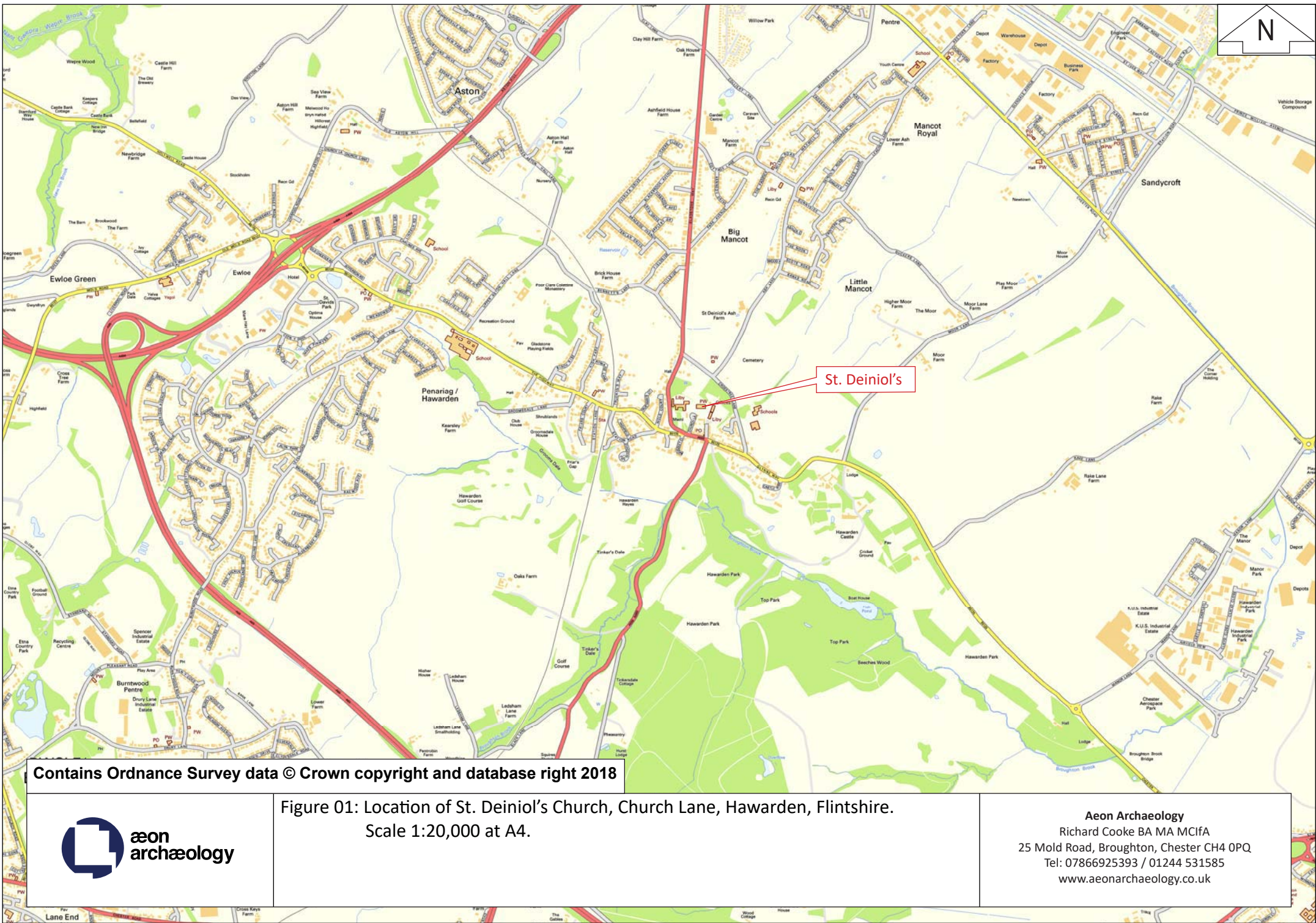
e) No human remains shall be removed from the churchyard without the authority of the Chancellor.

f) Work is to re-commence only under the direction of the Archdeacon or pursuant to such further directions as shall be made by this Court on application by the Petitioners or the Archdeacon.

The work adhered to the guidelines specified in Standards and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).

In accordance with the pre-commencement conditions specified by the faculty licence a written Scheme of Investigation (WSI) was prepared by Aeon Archaeology in December 2017 (appendix I) which outlined the principle aims of the watching brief and the methods by which they would be met. This formed the basis of a method statement submitted for the work. The archaeological watching brief was undertaken in accordance with this document.

A licence for the Removal of Human Remains was obtained by Aeon Archaeology from the Ministry of Justice in February 2018.



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Figure 01: Location of St. Deiniol's Church, Church Lane, Hawarden, Flintshire.
Scale 1:20,000 at A4.

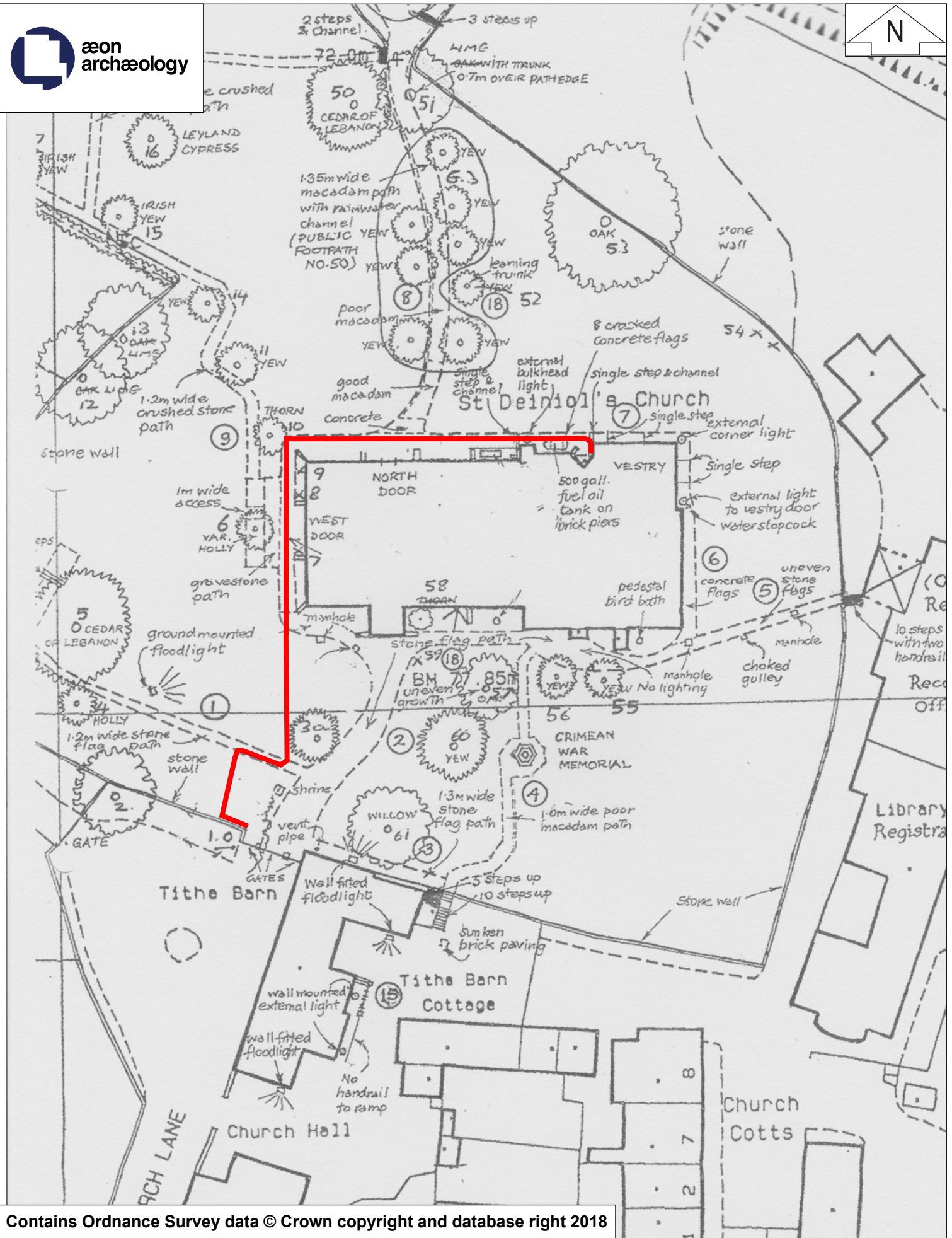
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Figure 02: Location of St. Deiniol's Church, Church Lane, Hawarden, Flintshire.
Scale 1:5,000 at A4.

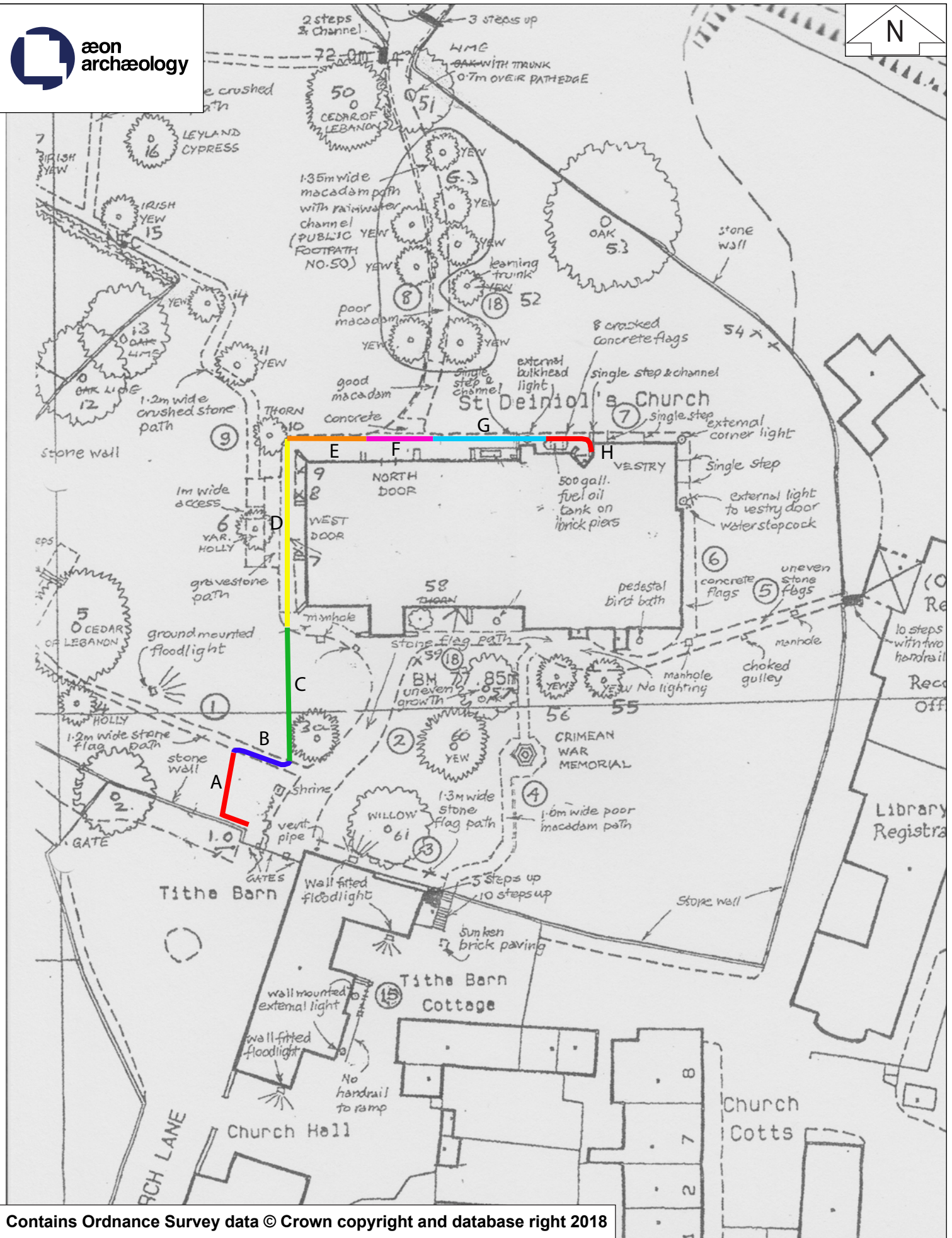


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Figure 03: Location of new gas service at St Deiniol's Church, Hawarden.
Scale 1:500 at A4.



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Figure 04: Location of trenches for new gas service at St Deiniol's Church, Hawarden. Scale 1:500 at A4.

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3.0 WATCHING BRIEF - ARCHAEOLOGICAL AIMS

The archaeological watching brief was to be maintained:

1. During the excavation of the utility trench associated with the new gas supply (figure 03).

The ClfA maintains a standard for archaeological watching brief which states that:

An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of ClfA.

An archaeological watching brief is defined by the ClfA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (ClfA 2014). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The ClfA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

The aims of the watching brief were:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.
- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The specific objectives of the watching brief were:

- To observe and recover any artefacts of archaeological significance.
- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.
- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.

- To recover and record any disarticulated human remains prior to reburial on site.
- To clean, record and remove any articulated human remains situated within the drainage trench and to oversee the reburial on site.
- To ensure minimal disturbance to any buried features via the careful re-routing of the drainage trenches over or around in-situ buried remains where possible. If fallen grave markers are encountered these will be recorded and then carefully lifted to facilitate the excavation of the trench.

4.0 METHODOLOGY

4.1 Archaeological Watching Brief

The methodology for the watching brief was prepared with reference to the ClfA's document Standards and Guidance for Archaeological Watching Brief (2014) and was kept under constant review during the project, in order to see how far it was meeting the terms of the aims and objectives, and in order to adopt any new questions should they arise.

Curatorial monitoring of the archaeological work on behalf of the Diocesan Registrar was to be carried out by the Diocesan Archaeologist (Dr. Bob Sylvester). To facilitate the curatorial monitoring, the officer was to be provided with a minimum of two weeks' notice of the start of the archaeological work.

A suitably qualified and experienced archaeologist(s) from Aeon Archaeology was commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist(s) reported to the site manager and conformed to the arrangements for notification of entering and leaving site. The archaeologist(s) kept a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist was provided with a Health & Safety Induction by the construction contractor and was to wear a safety helmet, safety footwear and high visibility jacket/vest at all times.

When deposits and or artefacts were exposed during excavations for the development which required recording and recovery, it may have been necessary to delay works whilst the proper investigation and recording took place. Watching brief recording can often be undertaken without delay to groundworks, depending upon the specific circumstances and flexibility of all the staff on site.

Within the constraints of the terms of the watching brief work, the archaeologist was not to cause unreasonable disruption to the maintenance of the work schedules of other contractors on site. In the event of archaeological discoveries the treatment of which (either arising from the volume/quantity of material and/or the complexity/importance of the material) is beyond the resources deployed the Client was to be notified and a site meeting/telephone consultation arranged with the Diocesan Archaeologist. The aim of the meeting would be to confirm that an archaeological find has been made for which the resources allocated to the watching brief itself were not sufficient to support treatment to a satisfactory and proper standard and identify measures which were sufficient to support treatment to a satisfactory and proper standard prior to destruction of the material in question.

Any archaeological deposits, features and structures identified which were to be investigated and recorded under the terms of the watching brief were to be excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project – subject to the limitations on site access.

It may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures were to be investigated sufficient to address the aims and objectives of the project and the complete stratigraphic sequence to geologically lain deposits were to be investigated where practicable.

The method of recording followed the normal principles of stratigraphic excavation and the stratigraphy was to be recorded in written descriptions even where no archaeological deposits have been identified. The archaeologist recorded archaeological deposits using proformae recording

forms and locate them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations were undertaken by hand as well as using a mechanical excavator fitted with a toothless ditching bucket.

The drawn record was to comprise of plans at scale 1:20 and sections at scale 1:10; propriety electronic hardware and software to prepare site drawings may be used as appropriate.

The photographic record was maintained throughout using a digital SLR camera (Canon 600D) set to maximum resolution (72 dpi) and all archaeological features were recorded photographically with photographs taken in RAW format and later converted to TIFF format for long-term storage and JPEG format for presentation and inclusion in the archive. The standards for the digital archive will adhere to those set out in '*Guidelines for Digital Archaeological Archives*' (RCAHMMW, 2015).

The archive produced will be held at Aeon Archaeology under the project code **A0146.1**.

4.2 Watching brief report

4.2.1 Post-excavation Assessment

A report on the results of the watching brief, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014) was required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

The scope of post-excavation assessment will subject to a specification for approval by the Diocesan Archaeologist, upon the conclusion of the fieldwork project and preliminary report.

4.2.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the

National Grid.

- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.
- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

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

A draft copy of the report will be sent to the Diocesan Archaeologist and to the client for comment and approval prior to production of the final report.

5.0 ARCHEOLOGICAL BACKGROUND

The church is said to have been founded by St Deiniol, a 6th century monk at Bangor-is-y-coed. A legend reports that in AD 946, the statue of the Virgin on the rood loft fell on the head of Lady Trawst, wife of the Governor of Hawarden Castle, and killed her. The statue was tried by jury and condemned to be thrown into the River Dee, eventually being washed up at the Roodee in Chester. An early medieval origin for Hawarden church seems assured from its appearance in Domesday Book; and in AD 1093, the Earl of Chester granted a tithe to St Werburgh's Abbey at Chester (Hubbard, E. 1986).

The large church of St. Deiniol (PRN: 16792) may retain some 13th century fabric in the chancel, while the nave and aisles together with a chancel arch are of 14th century date and the central tower and Whitley Chapel are from the following century. It has two chapels at the east end, that on the north containing the Gladstone tomb and the Whitley Chapel to the south holding good examples of 17th and 18th century monuments. The building was restored in 1855-6, but almost immediately damaged by fire, so that a second restoration, by Sir Gilbert Scott, was required. It is sited on raised ground, within a polygonal churchyard.

The east end of the chancel is believed to be part of a church erected in 1272 and its axis deviates slightly from that of the nave. The nave with its blind clerestories, aisles and arcades dates from the 14th century, but it seems probable that most of the stonework both outside and perhaps inside has been refaced, presumably in the 19th century. The piers and arches that support the central tower are of different character and have been attributed to the 15th century, as has the Whitley Chapel on the south side of the church. The upper part of the tower is clearly Perpendicular (CPAT).

The principle archaeological interest at the Site is that of disarticulated human remains and articulated in-situ human burials which have been interred within the churchyard. In addition there is the potential for archaeological remains associated with the early medieval and medieval development of both the Parish Church of St. Deiniol and Churchyard, as well as the village of Hawarden.

6.0 QUANTIFICATION OF RESULTS

6.1 The Documentary Archive

The following documentary records were created during the archaeological evaluation:

Digital photographs	86
Context Sheets	11
Drawings	4 on 4 sheets

6.2 Environmental Samples

No bulk samples were taken as no suitable secure contexts were encountered.

6.3 Artefacts

Vitrified glass:	1
Post-medieval ceramic:	1
Modern ceramic:	4
Disarticulated human bone:	108
Disarticulated animal bone:	3

7.0 SPECIALIST ANALYSIS – ARTEFACTS

7.1 Artefact Summary

The finds assemblage recovered during recent archaeological works at the church of St Deiniol's, Hawarden, Flintshire comprised the following range of artefacts: 1 x sherd vitrified glass, 1 x post-medieval ceramic sherd, 4 x modern ceramic sherds, 108 x fragments of disarticulated human bone, 3 x fragments of disarticulated animal bone.

The finds span approximately a 300 year period between the 17th-20th century.

Artefact Category	Vitrified glass		Post Medieval Pottery		Modern ceramic		Disarticulated human bone		Disarticulated animal bone	
	No.	Wt.	No.	Wt.	No.	No.	Wt.	Wt.	No.	Wt.
(1001)	1	140g	1	196g	4	199g	108	-	3	-
Total	1	140g	1	196g	4	199g	108	-	3	-

Table 1: Quantification of all finds by category and context (weight in g)

Vitrified glass

One fragment of vitrified glass weighing 140g was recovered from general graveyard soil deposit (1001). This artefact cannot be reliably dated but is likely of post-medieval / modern date and the result of localised burning, perhaps as part of churchyard maintenance and the burning of vegetation.

Post-medieval pottery

One sherd of North Midlands Earthen ware known as 'Pancheon ware' and weighing 196g was recovered from general graveyard soil deposit (1001). This name is usually given to a range of pottery forms, which does include pancheons, that were used in the dairy industry from the 17th-20th centuries. The fabric is a mid to dark purple-brown with large and frequent silica inclusions, and a lead black glaze on the inside.

Modern ceramic

Four sherds of the same modern black and cream glazed dish were recovered from general graveyard soil deposit (1001). They are of a hard white-grey fabric and formed part of a small flat dish, probably for standing a candle or vase upon, and most likely associated with graveyard ephemera.

Disarticulated human bone

One hundred and eight fragments of disarticulated human bone were recovered from general graveyard soil deposit (1001) during the archaeological watching brief. These were counted and then reburied on site with no further analysis taking place.

Disarticulated animal bone

Three fragments of disarticulated animal bone were recovered from general graveyard soil deposit (1001) during the archaeological watching brief. These were counted and then reburied on site with no further analysis taking place.

8.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

The location of all excavations associated with the new gas main at St. Deiniol's, Hawarden are shown on figure 4. The archaeological watching brief was maintained between the 5th – 8th June 2018.

Where relevant context numbers have been assigned and are shown enclosed within brackets.

Trench A (Plates 1-12, figure 4-6)

Trench A was located to the immediate west of the southern gate into the churchyard, and ran 3.0m from east to west before turning and heading north for 6.94m. The trench was excavated by hand through a soft dark black-grey silt-clay (1001), which is described here as a general graveyard soil, to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

At the eastern end of trench 1 and partially beneath the new gas meter box, a flat sandstone grave marker (1002) (plate 04) was uncovered at 0.2m below ground level (BGL) (75.37m OD). This marker measured 0.82m in length by 0.5m in width by 0.05m in depth, orientated east to west, with rounded shoulders and top at the west end. Due to the location of the grave marker within trench A it required lifting so that the new gas pipe could be laid, and as such its upward face was found to carry the following inscription:

*Memory
of William
Son of Charles and
Sophia Shone of Hawd
Rden, who died May 26th
1812: Aged 10 years
Also John son of the
Above who died July 10th
1812 Aged 8 years
Also Charles Aged 6
Months
Also Charles Aged 2
weeks*

Grave marker (1002) is likely to have been relocated from elsewhere within the churchyard and laid flat within the position it was found and against the outer churchyard wall. Upon conclusion of the works the marker was relocated close to where it was found, and placed upright against the churchyard boundary wall.

At the western end of trench A (east-west section) two further flat sandstone grave markers were uncovered (plate 05). The first (1003) (plate 06) lay at the junction with trench A (north-south section) and was located 0.28m BGL (75.17m OD). This marker measured 1.0m in length by 0.45m in width by 0.06m in depth, orientated east to west, with rounded shoulders and top at the west end. Upon removal the marker carried the following inscription on its downward face:

*Mary daughter of
John and Ann Lee
of Penr -illegible-
was interred
March 5th 1774
Aged 3 years*

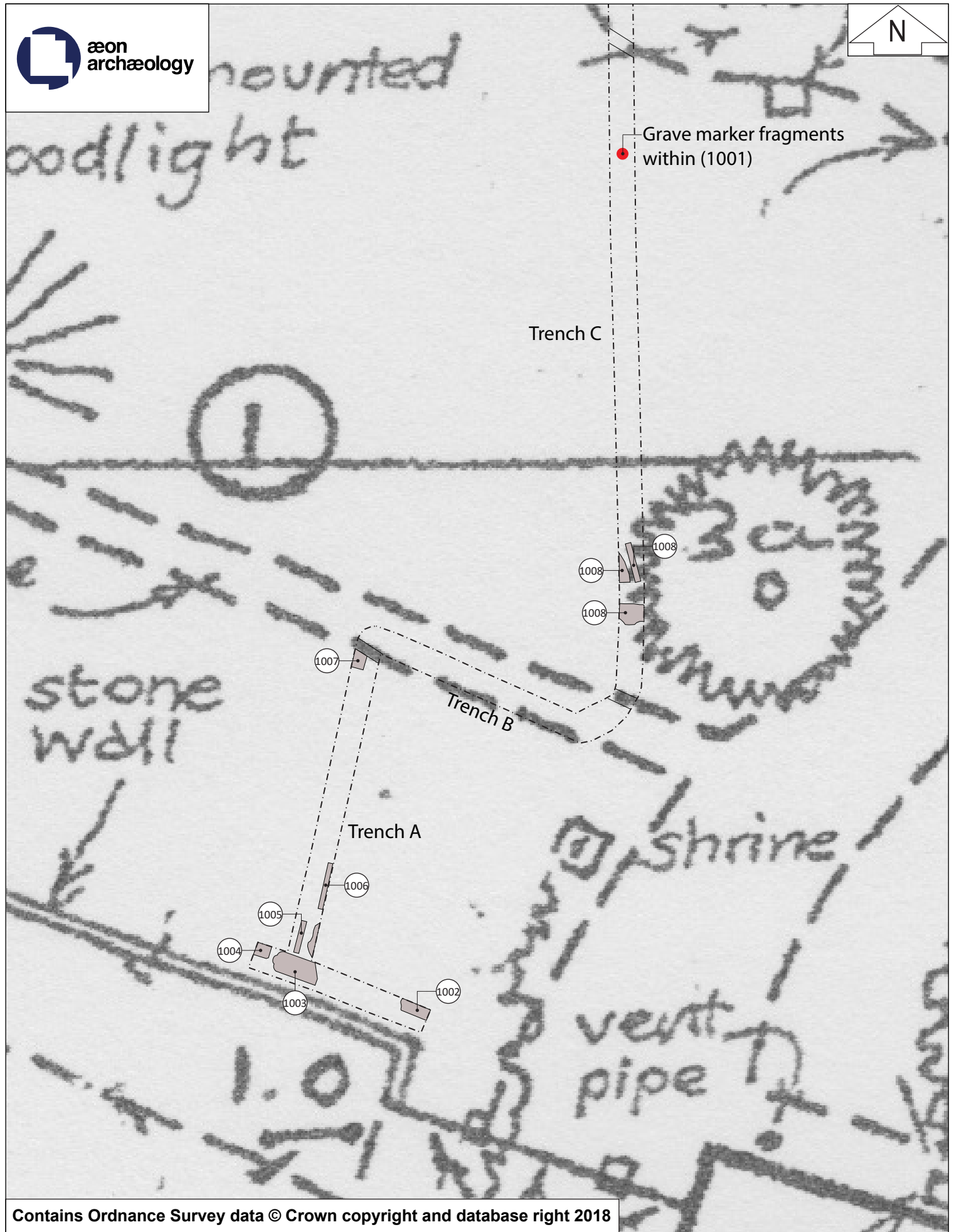
Grave marker (1003) is likely to have been relocated from elsewhere within the churchyard and laid flat within the position it was found and against the outer churchyard wall. Upon conclusion of the works the marker was relocated close to where it was found, and placed upright against the churchyard boundary wall.

To the immediate west of (1003) a third flat sandstone grave marker (1004) was uncovered lying 0.15m BGL. The marker measured >0.23m in length by >0.23m in width by 0.05m in depth, orientated east to west, and continued into the western limit of excavation. Of the part exposed the marker did not appear to carry an inscription on its upward face. This marker did not require lifting as part of the works and as such was retained in-situ.

At the southern end of trench A (north-south section) and to the immediate north of grave marker (1003), an in-situ upright stump of a sandstone grave marker (1005) Plates 08 and 09) was uncovered at 0.15m BGL. This measured 0.68m in length by 0.24m in width by 0.08m in depth, with the broken remnants of the upper part of the stone lying flat to the immediate east and continuing into the eastern limit of excavation. The marker was lifted as part of the excavation works and was found to carry the remnants of an inscription but which was too illegible to transcribe.

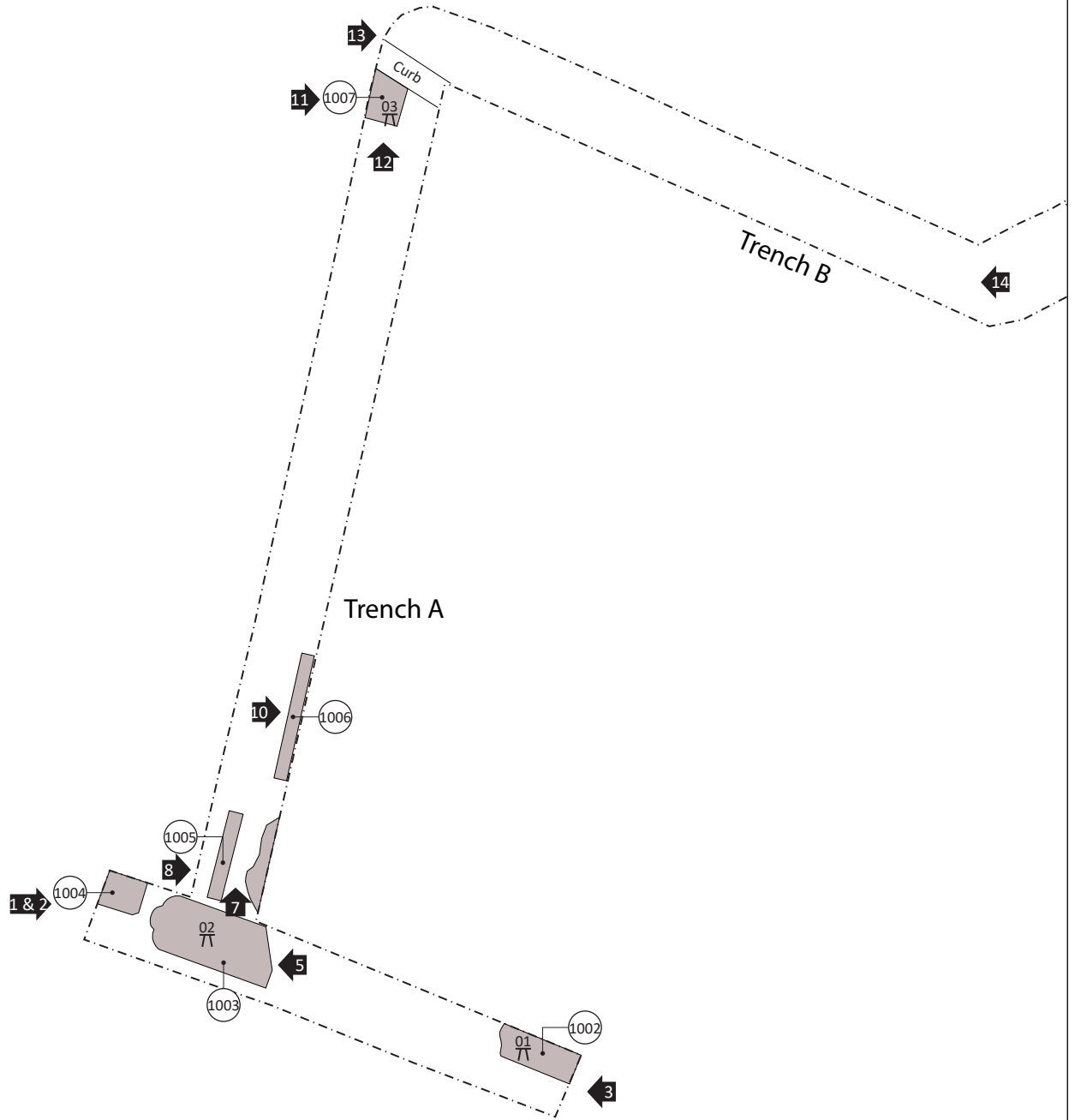
Located 0.32m to the north of marker (1005) the western end of an upright sandstone slab (1006) (plate 10) was uncovered lying 0.22m BGL. This measured >0.16m in length by 0.86m in width by >0.43m in depth, orientated east to west, and continued into the eastern limit of excavation as well as beyond the trench depth limit. It was constructed from a single slab of sandstone and appeared to be part of a sandstone burial vault. This feature was of unknown age and was retained in-situ.

At the northern end of trench A (east-west section) the south-eastern corner of a red-brick burial vault (1007) (plates 11 and 12) was encountered within the trench at 0.18m BGL (75.11m OD). This vault measured >0.3m in length by >0.35m in width by >0.52m in depth, orientated east to west, and continued into the northern and western limits of excavation, as well as beyond the trench depth limit. It was constructed from unfrogged red-brick bonded by mortar using bricks measuring 0.23m in length by 0.1m in width by 0.075m in depth, and standing to at least six courses in height. A flat slab of sandstone appeared to function as a capstone and also continued into the northern and western limits of excavation. The vault is of unknown age but is of a form commonly seen within the Victorian period. This feature was retained in-situ.



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Figure 05: Overview of trenches A, B and C for new gas service at St Deiniol's Church, Hawarden. Scale 1:100 at A4 (located on figure 04).



Levels (m OD)

- 1 = 75.37
- 2 = 75.17
- 3 = 75.11



Figure 06: Detailed plan of trenches A and B and location of photographic plates for new gas service at St Deiniol's Church, Hawarden. Scale 1:50 at A4 (Located on figure 05).



Plate 01: Trench A (east-west section) post excavation, from the west. Scale 0.3m.



Plate 02: Trench A (east-west section) showing grave markers (1002) (1003) and (1004), from the west. Scale 0.3m.



Plate 03: Trench A (east-west section) showing grave markers (1002) (1003) and (1004), from the east. Scale 0.3m.



Plate 04: Grave marker (1002) recovered from trench A (east-west section). Scale 0.3m.



Plate 05: Trench A (east-west section) showing grave markers (1003) and (1004), from the east.
Scale 0.3m.



Plate 06: Grave marker (1003) recovered from trench A (east-west section). Scale 0.3m.



Plate 07: Trench A (north-south section) post excavation, from the south. Scale 0.3m.



Plate 08: Grave marker (1005) within trench A (north-south section), from the west. Scale 0.3m.



Plate 09: Grave marker (1005) recovered from trench A (north-south section). Scale 0.3m.



Plate 10: Sandstone vault (1006) within trench A (north-south section), from the west. Scale 0.3m.



Plate 11: Burial vault (1007) within trench A (north-south section), from the west. Scale 0.3m.



Plate 12: Burial vault (1007) elevation within trench A (north-south section), from the south. Scale 0.3m.

Trench B (Plates 13-14, figure 4-6)

Trench B was located within the existing east-west churchyard pathway, and ran 5.0m from west to east. The trench was excavated by hand first by lifting the existing flagstones and then through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

There were no archaeological features uncovered within the trench limits.

Trench C (Plates 15-19, figure 4, 5 and 7)

Trench C was located within the churchyard itself, and ran 12.0m from south to north. The trench was excavated by hand through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

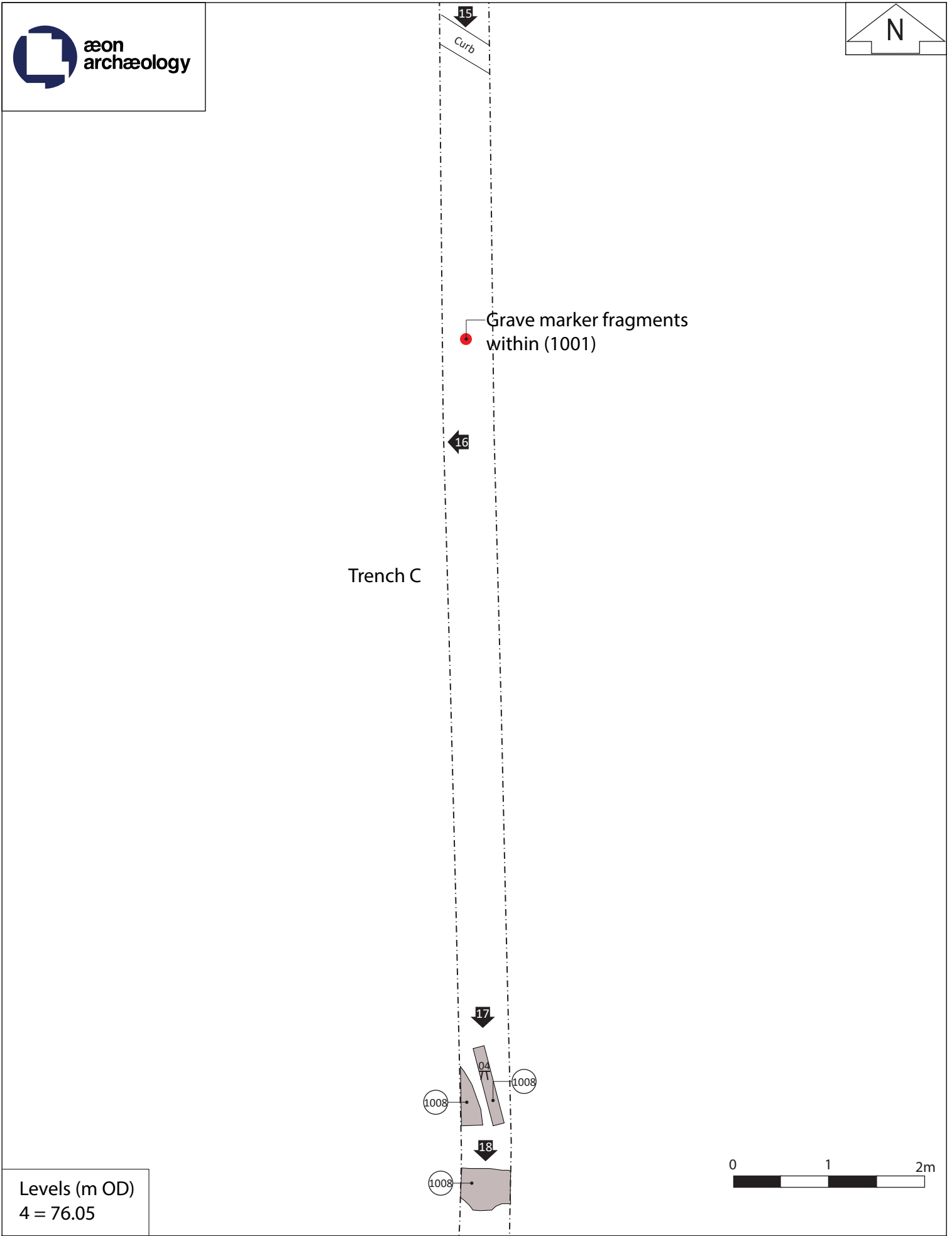
Towards the centre of the trench three broken fragments of sandstone grave marker (1008) (plates 17 and 18) were uncovered at 0.25m BGL (76.05m OD). These fragments were all from the same marker but were not in-situ, most likely having been reburied once they had broken apart. They measured >0.63m in length by >0.23m in width by 0.1m in depth; 0.88m in length by >0.58m in width by 0.12m in depth; and 0.44m in length by >0.3m in width by 0.08m in depth. The southernmost fragment carried an inscription but which was illegible. These fragments were suspended mid-way up the trench due to continuing into the eastern and western limits of excavation, and were retained in-situ.

At the northern end of the trench two fragments of inscribed grave marker were recovered from deposit (1001) (plate 19).

Trench D (Plates 20-22, figure 4 and 8)

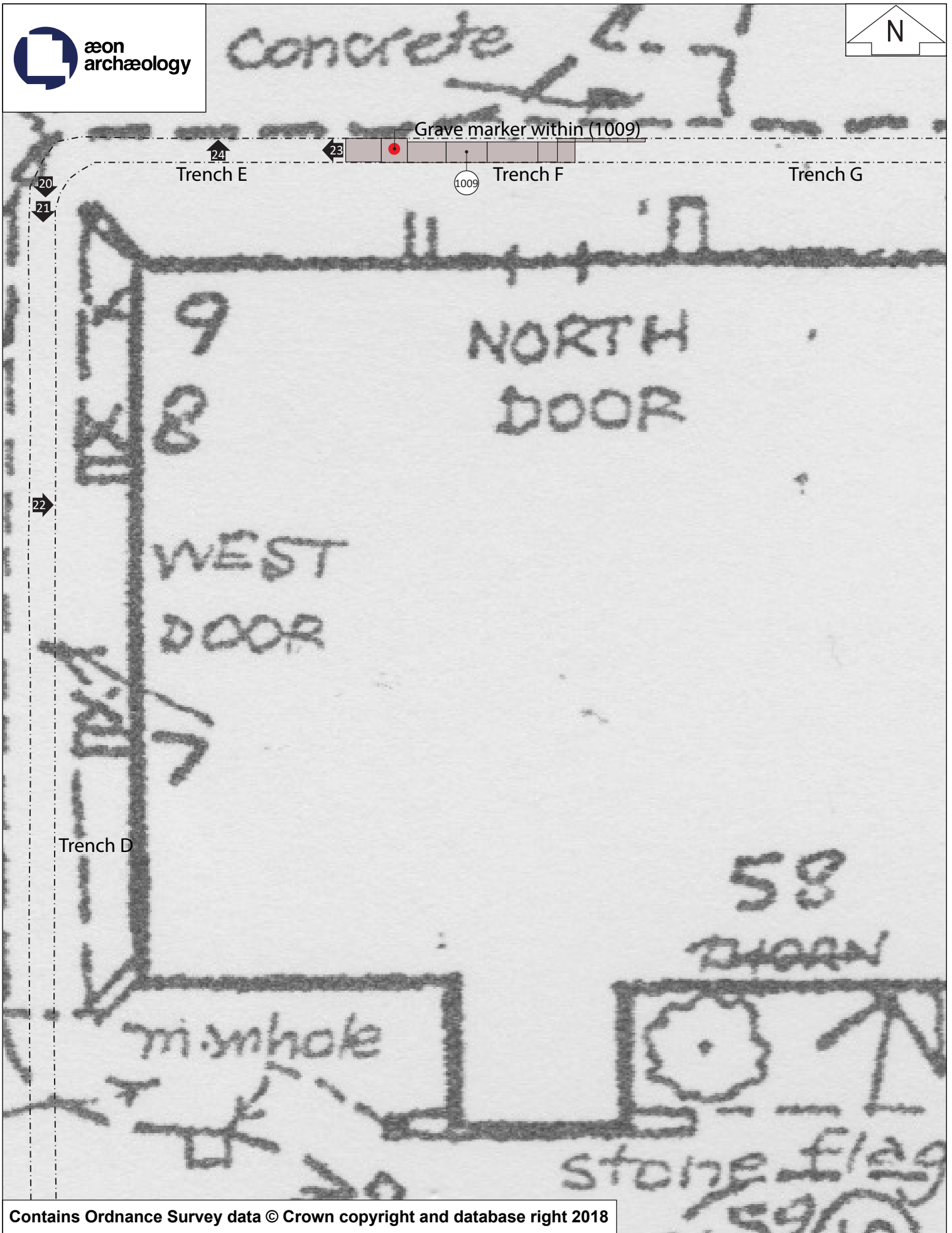
Trench D was located within the existing north-south churchyard pathway to the immediate west of the Church, and ran 19.0m south to north. The trench was excavated by first lifting the existing flagstones and by a mini-tracked excavator with toothless ditching bucket equipped through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

There were no archaeological features uncovered within the trench limits.



Levels (m OD)
4 = 76.05

Figure 07: Detailed plan of trench C and location of photographic plates for new gas service at St Deiniol's Church, Hawarden. Scale 1:50 at A4 (located on figure 05).



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Figure 08: Overview of trenches D, E and F and location of photographic plates for new gas service at St Deiniol's Church, Hawarden.
Scale 1:100 at A4 (located on figure 04).



Plate 13: East-west Churchyard pathway at the location of trench B, from the west. Scale 1.0m.



Plate 14: Trench B, from the east. Scale 0.3m.



Plate 15: Trench C, from the north. Scale 0.3m.



Plate 16: Trench C east facing section, from the east. Scale 0.3m.



Plate 17: Grave marker fragments (1008) within trench C, from the north. Scale 0.3m.



Plate 18: Grave marker fragments (1008) showing inscription, from the north. Scale 0.3m.



Plate 19: Grave marker fragments recovered from deposit (1001) in trench C. Scale 0.3m.



Plate 20: North-south Churchyard pathway at the location of trench D, from the north. Scale 1.0m.



Plate 21: Trench D, from the north. Scale 0.3m.



Plate 22: Trench D west facing section, from the west. Scale 0.3m.

Trench E (Plates 23-25, figure 4, 8 and 9)

Trench E was located within the existing east-west churchyard pathway to the immediate north of the Church, and ran 7.0m west to east. The trench was excavated by first lifting the existing flagstones and by a mini-tracked excavator with toothless ditching bucket equipped through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

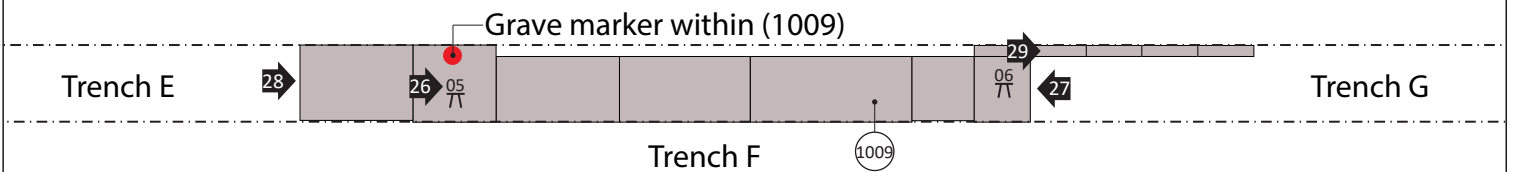
At the eastern limit of trench E a former pathway (1009) constructed from flat York stone slabs was uncovered immediately beneath the existing flagstones, which continued into trenches F and G (see below). The slabs averaged 1.07m in length by 0.9m in width by 0.09m in depth, however they were not uniform in dimension. They formed a pathway focused primarily in the location of the northern entranceway into the Church, and continued for 6.35m running east-west at 0.1m BGL (75.68m OD). All of the slabs within the trench route required lifting and as such were inspected for any inscriptions, however none were found apart from one reused grave-marker which was located at the western end of the pathway and formed the second stone slab from the west (plate 25). This marker measured 1.0m in length by 0.55m in width by 0.07m in depth, orientated north to south and had rounded shoulders and a rounded top. It carried the following inscription on its downward face:

*In memory of Mary wife of Edward
-illegible- Ewloe -illegible- 1853 -illegible-*

Upon conclusion of the works the marker was relocated upright against the churchyard boundary wall.

Trench F (Plates 26-28, figure 4, 8 and 9)

Trench F was located within the existing east-west churchyard pathway to the immediate north of the Church, and ran 4.85m west to east. The trench was excavated by first lifting the existing flagstones beneath which pathway (1009) was exposed and was as described above. Once these were lifted the trench was excavated by a mini-tracked excavator with toothless ditching bucket equipped through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.



Levels (m OD)
5 = 76.24
6 = 75.68

Figure 09: Detailed plan of trenches E, F and G and location of photographic plates for new gas service at St Deiniol's Church, Hawarden. Scale 1:50 at A4 (located on figure 08).



Plate 23: Trench E, from the east. Scale 0.3m.



Plate 24: Trench E south facing section, from the south. Scale 0.3m.



Plate 25: Grave marker recovered from pathway (1009) within trench E. Scale 0.3m.



Plate 26: Former stone pathway (1009) at the location of trench F, from the west. Scale 0.3m.



Plate 27: Former stone pathway (1009) at the location of trench F, from the east. Scale 0.3m.



Plate 28: Trench F, from the west. Scale 0.3m.

Trench G (Plates 29-32, figure 4, 10 and 11)

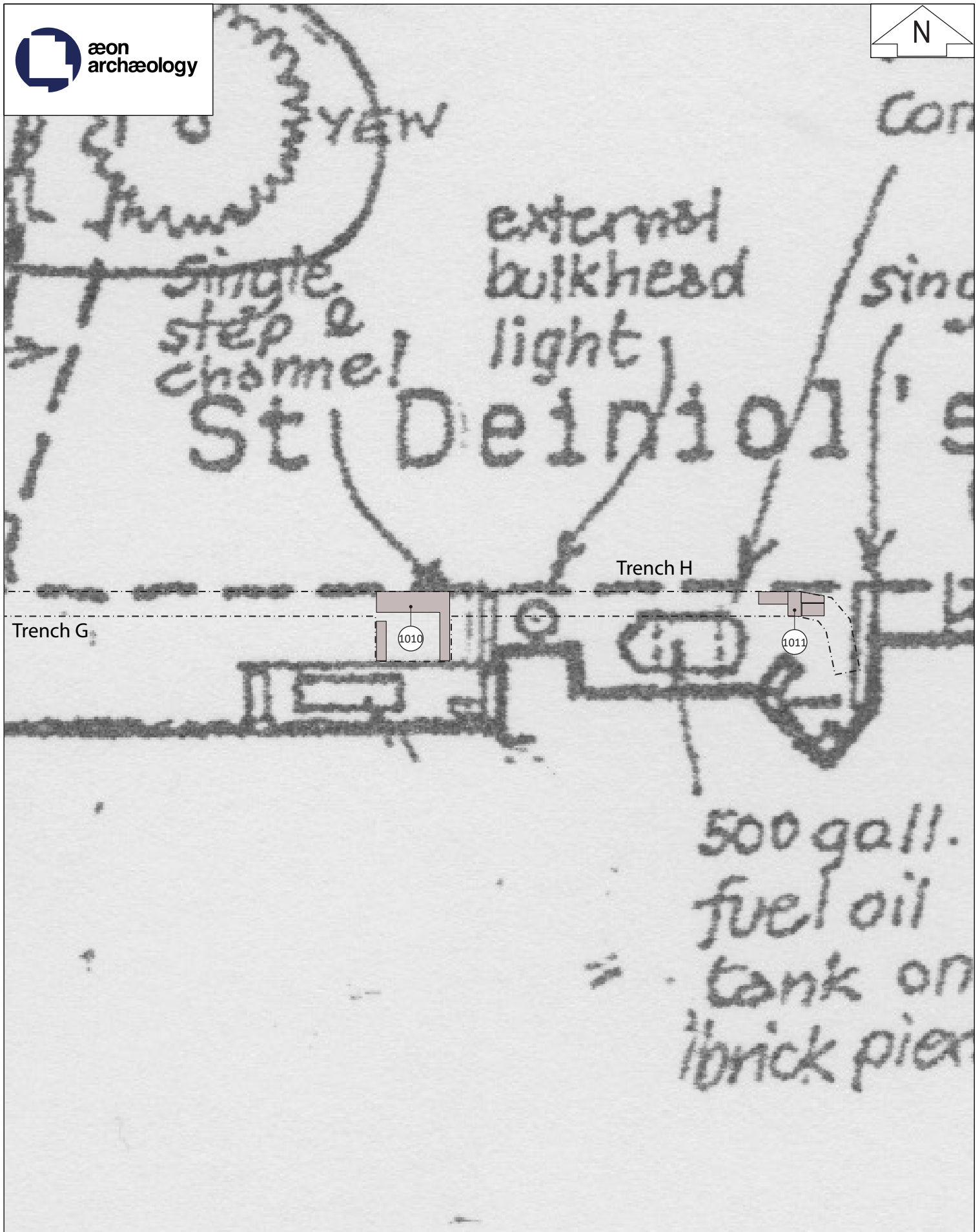
Trench G was located within the existing east-west churchyard pathway to the immediate north of the Church, and ran 9.78m west to east. The trench was excavated by first lifting the existing flagstones beneath which pathway (1009) was exposed and was as described above. Once these were lifted the trench was excavated by a mini-tracked excavator with toothless ditching bucket equipped through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

At the eastern limit of the trench and immediately adjacent to the boiler house entrance a probable coal chute (1010) (plates 30-32) was uncovered. This structure was of unfrogged red-brick bonded by mortar and measuring 1.5m square by >0.55m in height. The centre of the chute had been infilled with stone rubble, slate and pieces of iron, and the walls stood to greater than five courses in height by two courses in width. The red-bricks utilised in its construction measured 0.23m in length by 0.11m in width by 0.08m in depth. The northern part of the structure continued into the northern limit of excavation and had a single salt-glazed pipe running into its western side suggesting that it was an inspection chamber. Both the salt-glazed pipe and the brick type suggests a Victorian date, and it is probable that it functioned as a coal chute into the boiler room for the coal fired boiler.

Trench H (Plates 33-36, figure 4, 10 and 11)

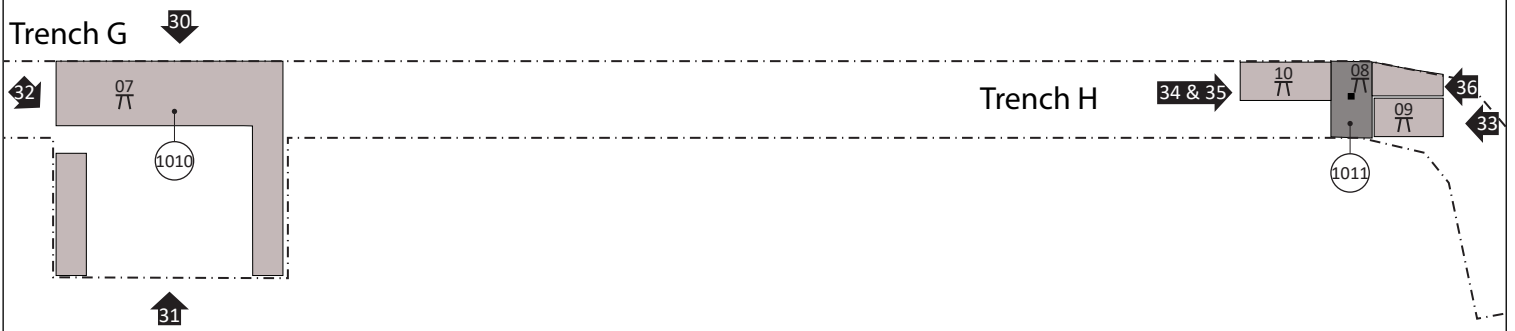
Trench H was located within the existing east-west churchyard pathway to the immediate north of the Church, and ran 7.0m west to east before turning and running southwards for 1.2m. The trench was excavated by first lifting the existing flagstones and once these were lifted the trench was excavated by a mini-tracked excavator with toothless ditching bucket equipped through general graveyard soil (1001) to a depth of 0.6m. The limit of deposit (1001) was not encountered within the trench depth limit.

At the eastern end of the trench two blocks of chamfered sandstone (1011) (plates 34-36), one atop the other, were uncovered at 0.3m BGL (75.05m OD). These measured >0.3m in length by 0.26m in width by >0.4m in depth, orientated north to south and continuing into both the southern and northern limits of excavation. In addition three flat York stone slabs had been laid to the immediate east and west (2 x east, 1 x west) and were butting up against the north-south sandstone blocks. This formed a feature measuring >0.3m in length by >1.3m in width by >0.4m in depth but continuing into the north, south and eastern limits of excavation. Within the top of the uppermost sandstone block there was a square socket measuring 0.04m in length and width which had almost certainly once contained part of an iron railing. It is probable that this feature was part of a burial monument with raised sandstone curb with iron railings. Moreover the close proximity of the Vestry, located 1.5m to the southeast, suggests that this feature predates its construction in 1910, most likely having been an above-ground monument of Victorian date.



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Figure 10: Overview of trenches G and H for new gas service at St Deiniol's Church, Hawarden. Scale 1:100 at A4 (located on figure 04).



Levels (m OD)
 7 = 75.78
 8 = 75.05
 9 = 74.68
 10 = 74.77

Figure 11: Detailed plan of trenches G and H and location of photographic plates for new gas service at St Deiniol's Church, Hawarden. Scale 1:50 at A4 (located on figure 10).



Plate 29: Trench G showing remnants of (1009), from the west. Scale 0.3m.



Plate 30: Red-brick coal chute (1010) within trench G, from the north. Scale 0.3m.



Plate 31: Red-brick coal chute (1010) within trench G, from the south. Scale 0.3m.



Plate 32: Red-brick coal chute (1010) within trench G, from the northwest. Scale 0.3m.



Plate 33: Trench H, from the east. Scale 0.3m.



Plate 34: Monument (1011) in trench H, from the west. Scale 0.3m.



Plate 35: Monument (1011) in trench H, from the west. Scale 0.3m.



Plate 36: Monument (1011) in trench H, from the east. Scale 0.3m.

9.0 CONCLUSION

The archaeological watching brief was maintained during the excavation of the trench for the new gas supply at St Deiniol's Church, Hawarden.

There were no articulated burials encountered within the new gas pipe trench but a total of 108 disarticulated human bone fragments were recovered along with 3 animal bones. These were re-interred by the Vicar upon conclusion of the works. The artefact assemblage was surprisingly lacking, with only one sherd of 17th-20th century Pantheon ware ceramic, a piece of vitrified glass, and four fragments of a modern ceramic plate recovered.

At the southern end of the scheme within trench A three relocated grave-markers (1002) (1003) (1004) were found laid flat against the southern boundary wall. Two of these required moving and their inscriptions were recorded. The third was only partially visible and was retained in-situ. Further to the north in trench A an in-situ upright grave-marker stub (1005) was found which was removed and recorded. Further to the north again the edge of a sandstone vault (1006) was uncovered as well as the edge of a red-brick vault (1007), both of which were recorded and retained in-situ.

Within trench C several fragments of broken grave-marker were recovered from the general graveyard deposit (1001).

At the northern side of the Church within trench E the remnants of a former pathway (1009) of laid York stone was uncovered directly beneath the existing flagstones and included a reused upturned inscribed grave-marker which was recorded. Further to the east within trench G a probable coal chute and drain inspection chamber (1010) of unfrosted red-brick was uncovered and recorded. Further to the east again and approximately 1.5m west of the scheme terminus a chamfered sandstone block (1011) was uncovered running north-south with laid York stone to the immediate east and west. The sandstone block retained a cut notch for former iron railings and it is likely that this was a grave-marker / monument pre-dating the Vestry extension of 1910 which lies very close to it.

The archaeological watching brief enables an informed, sustainable and responsible approach to the development of the new gas supply at St Deiniol's Church, Hawarden. The information provided meets the expectations of the archaeological condition in that the applicant has secured the implementation of a programme of archaeological work that has exposed and recorded all archaeological assets affected by the development at the site. Ultimately, therefore, and without prejudice to the findings of any future archaeological, or other investigations at the Site, it is considered that the archaeological condition has been met and that it now be discharged.

10.0 SOURCES

OS Maps

OS 1:10 000 Series sheet SJ 36NE, SJ 36SE, SJ 36SW, and SJ 36NW.

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11.0 APPENDIX I – WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF



**St. Deiniol's Church, Church Lane,
Hawarden, Flintshire CH5 3LT.**

**Written Scheme of Investigation
for Archaeological Watching Brief.**

December 2017 v2.0

aeon archaeology



Project Code: A0146.1

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1.0 INTRODUCTION

Aeon Archaeology has been commissioned by St. Deiniol's Church Buildings Committee, hereafter the Client, to provide a written scheme of investigation (WSI) for carrying out an archaeological watching brief during the groundworks associated with the installation of a new gas service within the churchyard of the grade II* Listed Building (ref: sourceID 12) of St. Deiniol's Church, Church Lane, Hawarden, Flintshire CH5 3LT (NGR SH 31544 65917) (figure 01 and 02).

The Church lies to the immediate north of Church Lane and Rectory Lane, both of which provide access to the southern part of the churchyard. The proposed scheme will involve the excavation of a new pipe trench from an existing supply located on the west side of the main gates, across the churchyard grass and the path to the bier house and then along the route of the existing oil pipe around the west and north sides of the church to the boiler cellar. The meter box will be sited on the south boundary wall within Church Lane.

The programme of archaeological work will be undertaken under the authority of a faculty licence (ref. 1822) which requires that the archaeological work must proceed in accordance with the Aeon Archaeology WSI dated December 2017 (this document) and in compliance with the following conditions:

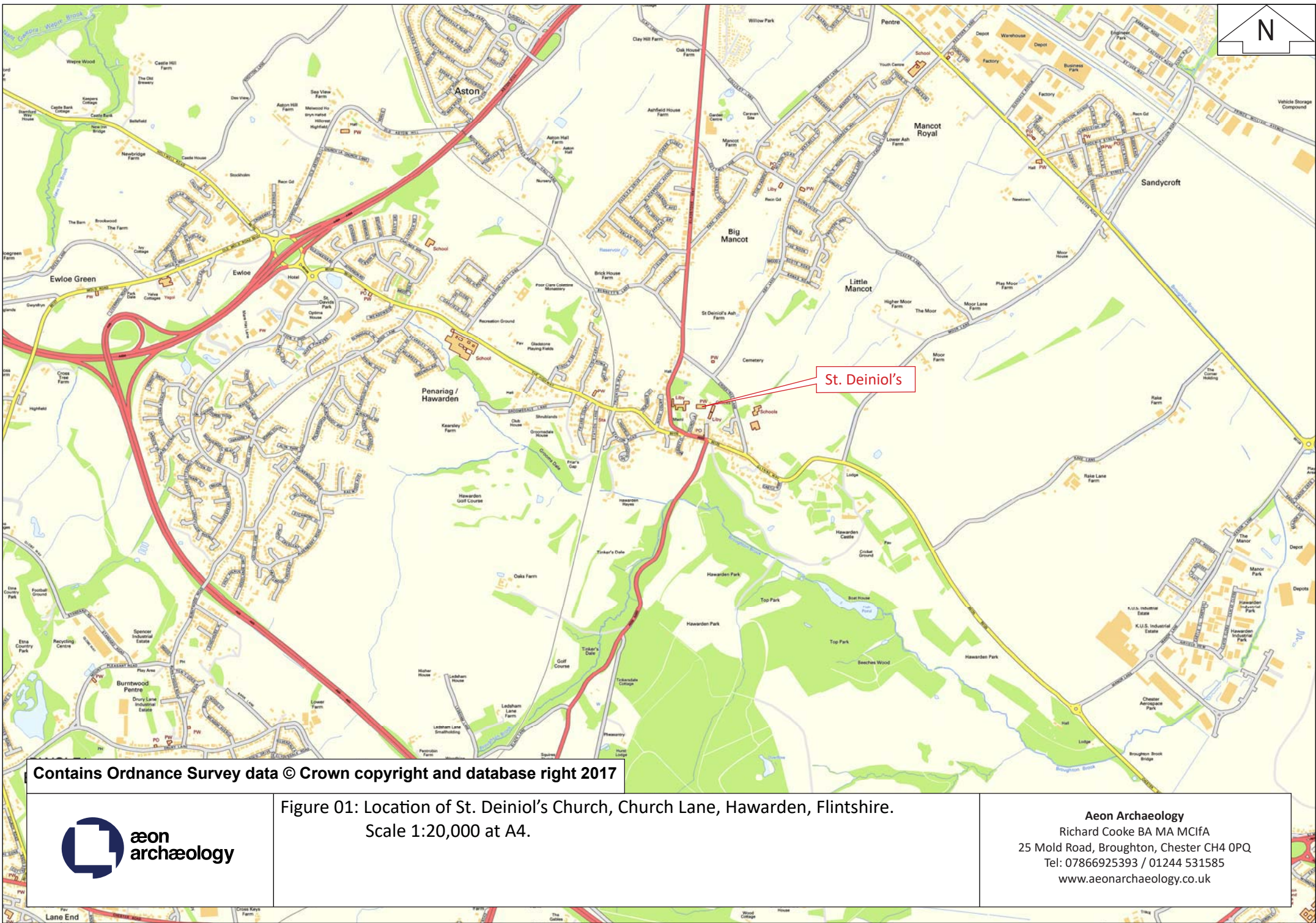
If any human remains become exposed or are otherwise encountered during the course of the work:

- All work in the vicinity must stop immediately.
- The remains must be lightly covered with soil.
- The Diocesan Registrar (or in their absence the Secretary to the Diocesan Advisory Committee) must be notified.
- The directions of the Diocesan Registrar must be followed.

A mitigation brief was not prepared for this scheme by the Diocesan Archaeologist (Dr Bob Silvester) but it is a requirement that this WSI is approved prior to the implementation of the archaeological watching brief at the Site.

The requirement for archaeological monitoring is in line with relevant UK legislation on heritage which includes the Welsh Government's Planning Policy Wales Technical Advice Note 24 (TAN-24 2017), and the Historic Environment Act (Wales) 2016.

The work will adhere to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).



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Figure 01: Location of St. Deiniol's Church, Church Lane, Hawarden, Flintshire.
Scale 1:20,000 at A4.

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www.aeonarchaeology.co.uk

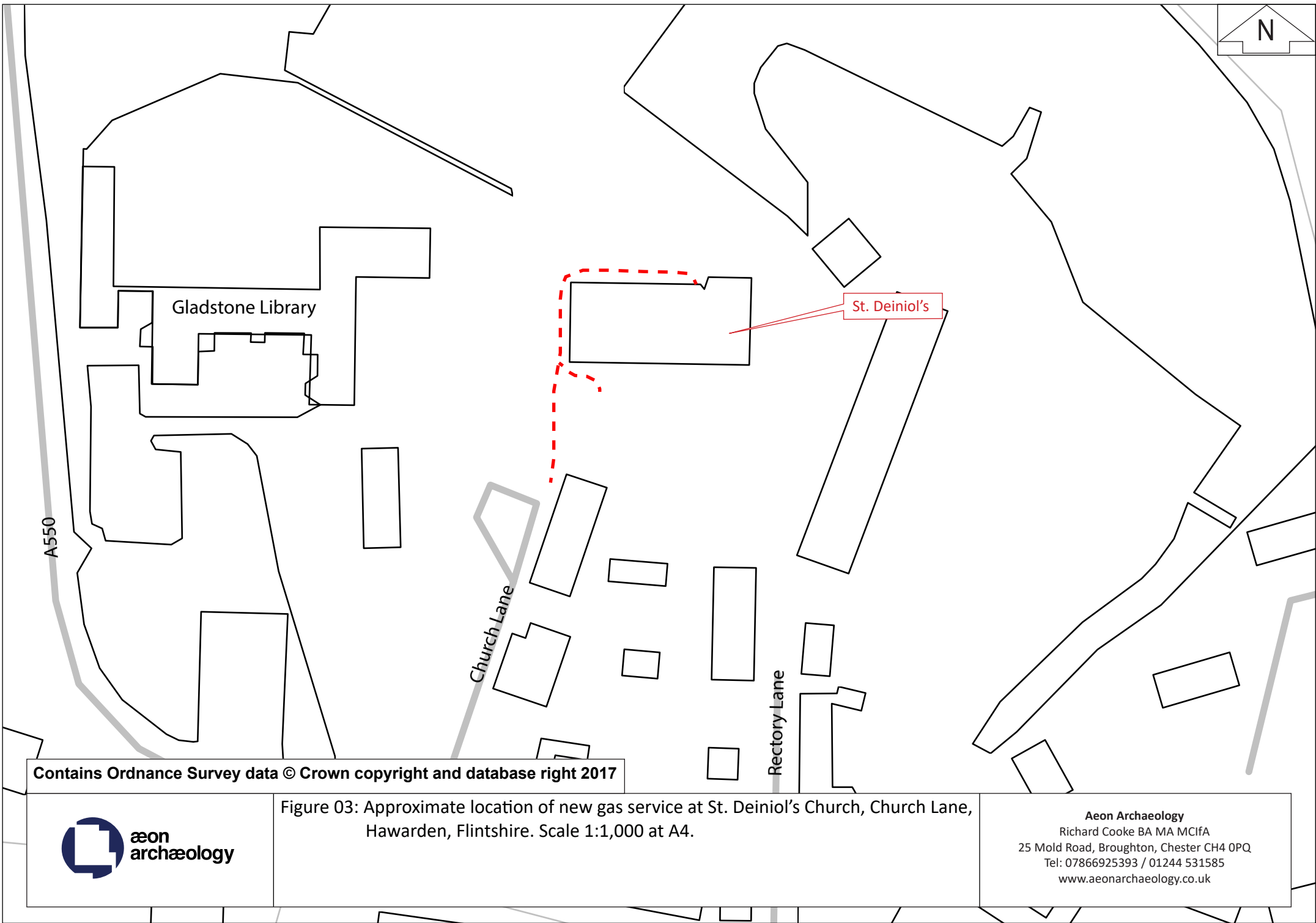


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Figure 02: Location of St. Deiniol's Church, Church Lane, Hawarden, Flintshire.
Scale 1:5,000 at A4.

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Figure 03: Approximate location of new gas service at St. Deiniol's Church, Church Lane, Hawarden, Flintshire. Scale 1:1,000 at A4.

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2.0 ARCHEOLOGICAL BACKGROUND

The church is said to have been founded by St Deiniol, a 6th century monk at Bangor-is-y-coed. A legend reports that in AD 946, the statue of the Virgin on the rood loft fell on the head of Lady Trawst, wife of the Governor of Hawarden Castle, and killed her. The statue was tried by jury and condemned to be thrown into the River Dee, eventually being washed up at the Roodee in Chester. An early medieval origin for Hawarden church seems assured from its appearance in Domesday Book; and in AD 1093, the Earl of Chester granted a tithes to St Werburgh's Abbey at Chester (Hubbard, E. 1986).

The large church of St. Deiniol (PRN: 16792) may retain some 13th century fabric in the chancel, while the nave and aisles together with a chancel arch are of 14th century date and the central tower and Whitley Chapel are from the following century. It has two chapels at the east end, that on the north containing the Gladstone tomb and the Whitley Chapel to the south holding good examples of 17th and 18th century monuments. The building was restored in 1855-6, but almost immediately damaged by fire, so that a second restoration, by Sir Gilbert Scott, was required. It is sited on raised ground, within a polygonal churchyard.

The east end of the chancel is believed to be part of a church erected in 1272 and its axis deviates slightly from that of the nave. The nave with its blind clerestories, aisles and arcades dates from the 14th century, but it seems probable that most of the stonework both outside and perhaps inside has been refaced, presumably in the 19th century. The piers and arches that support the central tower are of different character and have been attributed to the 15th century, as has the Whitley Chapel on the south side of the church. The upper part of the tower is clearly Perpendicular (CPAT).

The principle archaeological interest at the Site is that of disarticulated human remains and articulated in-situ human burials which have been interred within the churchyard. In addition there is the potential for archaeological remains associated with the early medieval and medieval development of both the Parish Church of St. Deiniol and Churchyard, as well as the village of Hawarden.

3.0 WATCHING BRIEF - ARCHAEOLOGICAL AIMS

The archaeological watching brief shall be maintained:

1. During the excavation of the utility trench associated with the new gas supply.

The CifA maintains a standard for archaeological watching brief which states that:

An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of CifA.

An archaeological watching brief is defined by the CifA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (CifA 2014). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The CifA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

The aims of the watching brief are:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.
- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The specific objectives of the watching brief are:

- To observe and recover any artefacts of archaeological significance.
- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.
- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.
- To recover and record any disarticulated human remains prior to reburial on site.
- To clean, record and remove any articulated human remains situated within the utility trench and to oversee the reburial on site.
- To ensure minimal disturbance to any buried features via the careful re-routing of the utility trench over or around in-situ buried remains where possible. If fallen grave markers are encountered these will be recorded and then carefully lifted to facilitate the excavation of the trench.

4.0 METHODOLOGY

4.1 Archaeological Watching Brief

The methodology for the watching brief has been prepared with reference to the CIFA's document Standards and Guidance for Archaeological Watching Brief (2014) and will be kept under constant review during the project, in order to see how far it is meeting the terms of the aims and objectives, and in order to adopt any new questions which may arise.

Curatorial monitoring of the archaeological work on behalf of the Diocesan Registrar will be carried out by the Diocesan Archaeologist. To facilitate the curatorial monitoring, the officer shall be provided with a minimum of two weeks' notice of the start of the archaeological work.

A suitably qualified and experienced archaeologist(s) from Aeon Archaeology will be commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist(s) will report to the site manager and conform to the arrangements for notification of entering and leaving site. The archaeologist(s) will keep a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist will be provided with a Health & Safety Induction by the construction contractor and wear a safety helmet, safety footwear and high visibility jacket/vest at all times.

If deposits and or artefacts are exposed during excavations for the development which require recording and recovery, it may be necessary to delay works whilst the proper investigation and recording takes place. Watching brief recording can often be undertaken without delay to groundworks, depending upon the specific circumstances and flexibility of all the staff on site.

Within the constraints of the terms of the watching brief work, the archaeologist will not cause unreasonable disruption to the maintenance of the work schedules of other contractors on site. In the event of archaeological discoveries the treatment of which (either arising from the volume/quantity of material and/or the complexity/importance of the material) is beyond the resources deployed the Client will be notified and a site meeting/telephone consultation arranged with the Diocesan Archaeologist. The aim of the meeting will be to confirm that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard and identify measures which would be sufficient to support treatment to a satisfactory and proper standard prior to destruction of the material in question.

Any archaeological deposits, features and structures identified which can be investigated and recorded under the terms of the watching brief will be excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project – subject to the limitations on site access.

It may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures will be investigated sufficient to address the aims and objectives of the project and the complete stratigraphic sequence to geologically lain deposits will be investigated where practicable.

The method of recording will follow the normal principles of stratigraphic excavation and the stratigraphy will be recorded in written descriptions even where no archaeological deposits have been identified. The archaeologist will record archaeological deposits using proformae recording forms and locate them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations shall be undertaken using a mechanical excavator fitted with a toothless ditching bucket.

The drawn record will comprise plans at scale 1:20 and sections at scale 1:10; propriety electronic hardware and software to prepare site drawings may be used as appropriate.

The photographic record will be maintained throughout using a digital SLR camera (Canon 600D) set to maximum resolution (72 dpi) and all archaeological features will be recorded photographically with photographs taken in RAW format and later converted to TIFF format for long-term storage and JPEG format for presentation and inclusion in the archive. The standards for the digital archive will adhere to those set out in '*Guidelines for Digital Archaeological Archives*' (RCAHMW, 2015).

The archive produced will be held at Aeon Archaeology under the project code **A0146.1**.

4.2 Watching brief report

4.2.1 Post-excavation Assessment

A report on the results of the watching brief, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014) will be required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

The scope of post-excavation assessment will subject to a specification for approval by the Diocesan Archaeologist, upon the conclusion of the fieldwork project and preliminary report.

4.2.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.
- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

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

A draft copy of the report will be sent to the Diocesan Archaeologist and to the client for comment and approval prior to production of the final report.

5.0 FURTHER ARCHAEOLOGICAL WORKS DESIGNS (FAWDs)

The discovery of substantial archaeological remains and/or features during the archaeological works may result in the requirement for an extended programme of archaeological mitigation. This may require the submission of revised quotes to the client as well as a new specification which will be required to be approved by the Diocesan Archaeologist prior to implementation.

6.0 ENVIRONMENTAL SAMPLES

Relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs will be obtained from Oxford Archaeology.

For guidance purposes the following volume criteria represent the minimum feature sampling requirements:

- 50% of each discrete feature (e.g. pits and postholes)
- 25% of the exposed areas of each linear feature and all terminals/intersections
- 50% of structural features (e.g. beamslots, ring-ditches)
- 50%-100% of domestic/industrial working features (e.g. hearths and ovens)

7.0 HUMAN REMAINS

During the watching brief thorough inspection of removed soils will take place and all disarticulated bone collected and catalogued. All disarticulated bone will remain securely stored on site and will be reburied within the utility trench prior to backfilling.

If articulated human remains are encountered all work in the vicinity must stop immediately and the following undertaken:

- The remains must be lightly covered with soil.
- The Diocesan Registrar (or in their absence the Secretary to the Diocesan Advisory Committee) must be notified.
- The directions of the Diocesan Registrar must be followed.

If articulated remains are encountered an Osteoarchaeologist will be commissioned to attend site and provide osteological analysis of the remains. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. All articulated remains will be cleaned, recorded photographically, and drawn plans produced at 1:10 scale before being carefully removed and securely stored on site, prior to reburial. There will be a presumption against chasing articulated remains beyond the limits of excavation.

8.0 ARTEFACTS

All artefacts and ecofacts will be retrieved for identification and recording and will be treated in accordance with CIFA 2008 Guidelines for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2014).

All artefacts are the property of the landowner but it is recommended that finds are deposited with the rest of the project archive within an appropriate museum. Furthermore, the client agrees to granting access to all artefacts recovered by Aeon Archaeology for analysis, study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the archaeological works. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the Diocesan Archaeologist. There will be a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

All finds will be collected and processed including those found within spoil tips. Their location and height will be plotted; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.

After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All artefacts will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)

Depending upon the material of the remains the following experts will be consulted regarding the conservation and analysis of artefacts:

- Articulated human remains: Dr Genevieve Tellier, North Wales Osteology
- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: George Smith, Gwynedd Archaeological Trust, Bangor.
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Environmental Material: Dr Mike Allen, Allen Environmental Archaeology.
- Numismatics: Peter Guest, Barbican Research Associates.
- Ceramics: Leigh Dodd

If well preserved materials are found it may be necessary to employ additional staff. Furthermore, it may be necessary to suspend work within a specific region of the site, or across the whole site, while conservation and excavation/recording takes place.

9.0 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.
- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.
- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.
- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.
- Objects from the foreshore which are not wreck.

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.

The British Museum 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.

10.0 ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged with the National Monument Record, RCAHMW within six months of the completion of the project.

A draft copy of the report will be produced within six months of the completion of the fieldwork and sent to the Client and the Diocesan Archaeologist for comment prior to finalisation of the report and

dissemination. Bound copies of the report and an archive CD will be sent to the regional HER, the Diocesan Archaeologist, and to National Monument Record, of the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) for long term archiving. Furthermore, a summary of the project will be sent to *Archaeology in Wales* for publication. Copies of all digital files (inc. photos, report as PDF and Word, spreadsheets, databases, survey data etc) to be presented to each of above on optical disc (ie DVD).

11.0 PERSONNEL

The work will be managed by Richard Cooke BA MA MCIfA, Archaeological Contractor and Consultant at Aeon Archaeology. The archaeological watching brief shall be maintained by Josh Dean BA ACIfA, Archaeological Contractor at Aeon Archaeology with six years' experience in field archaeology.

12.0 MONITORING AND LIAISON

Regular liaison and site monitoring meetings will take place during all stages of work. The Diocesan Archaeologist will be informed of the start date and of discreet subsequent stages.

13.0 HEALTH AND SAFETY

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

14.0 INSURANCE

Liability Insurance – Insignia Underwriting Policy 347002

Employers' Liability: Limit of Indemnity £10m in any one occurrence

Public Liability: Limit of Indemnity £2m in any one occurrence

Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 07/09/18

Professional Indemnity Insurance – Insignia Underwriting Policy 347002

Limit of Indemnity £500,000 any one claim

The current period expires 07/09/18

