

Ashton House and Mandell House Water Main, The Precincts, Peterborough Cathedral

Scheduled Monument No: SM PE 140

Prepared by Caroline Atkins, and Dr Jackie Hall, Cathedral Archaeologist,
for the Church Commissioners

1 Introduction

This report outlines the observations made during a programme of archaeological observation and recording associated with the replacement of an existing water main serving Ashton House and Mandell House, a pair of semi-detached bungalows which stand within the precincts of Peterborough Cathedral. This work was granted Scheduled Monument Consent (Case No. S00130496) conditional upon the implementation of an approved programme of archaeological work.

No deposits, features or artefacts of archaeological significance were encountered but these absences have augmented the body of evidence relating to the poorly documented landscaping of this part of the cathedral precincts.

2 Site Location and Description

Ashton House, Mandell House, and the existing water meters, stand to the south-east of the cathedral's retrochoir (the New Building), within the area of an historic vineyard, part of which was given to the Monks' Cemetery, by Robert de Lindsey, in the early part of the 13th century. It is generally believed that the part of the vineyard given to the cemetery was that which lies immediately to the east of the cathedral, where the cemetery appears to cut into the Vineyard estate. Between 1822 and 1829, Dean Monk landscaped the churchyard, probably importing considerable quantities of soil (PCCHER 80082 and 80083), but it is not known to what extent this affected the area crossed by the water main. There is an unconfirmed reference to further landscaping of the cemetery in 1926 (Mackreth et al. 1997).

The existing and replacement pair of water mains run through this area, from the water meters in the cemetery (at NGR TL 1948 9864) to the domestic properties (NGR TL 1953 9861) to the south-east of it (Figure 1). Between the cathedral and water meters the ground is near-horizontal but to the south-east of the meters the ground slopes gently downwards towards the cobbled entrance to the residential properties and thereafter slopes more markedly down towards the bungalows.

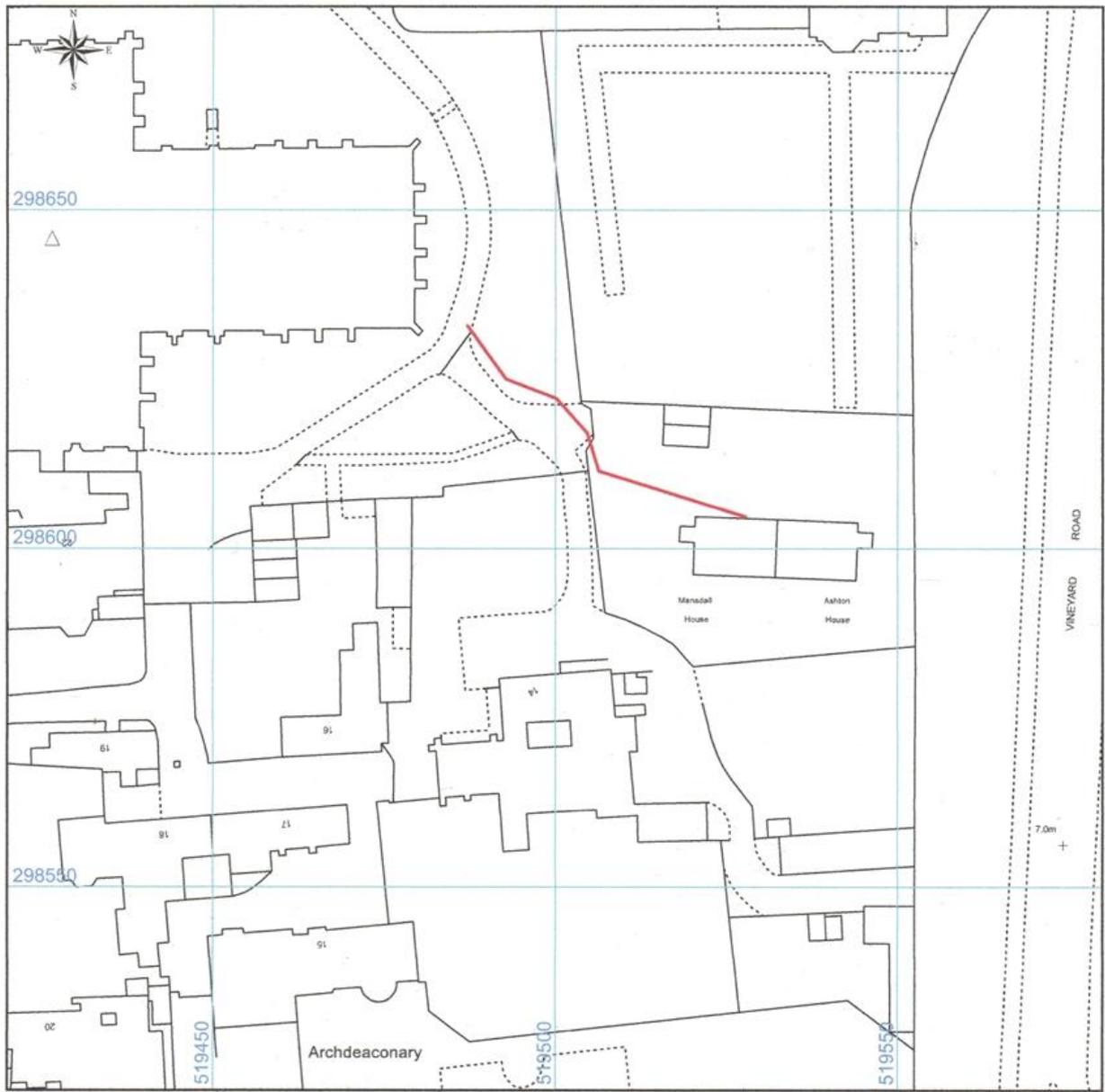
3 Planning Background

Scheduled Monument Consent (Scheduled Monument No. SM PE 140, Case No. S00130496) was granted for the replacement of the burst water main subject to a condition which required the implementation of an archaeological mitigation strategy, approved by Historic England, during groundworks. The Church Commissioners undertook to implement the approved mitigation strategy. The written scheme of investigation, which details the mitigation strategy, is appended to the archive version of this report.

The preliminary, site-based and post-excavation archaeological work was carried out by Caroline Atkins, under the supervision of, and assisted by, Jackie Hall, the Cathedral Archaeologist, who provided a brief assessment of the area before work commenced on site (Hall 2016).

4 Archaeological Background

A watching brief was observed in 2009 at the same water meter (Upex 2009) but only 1m² in plan was excavated to a depth of 0.85m. Finds consisted of one fragment of probable Victorian glass, small bone fragments and two fragments of Roman pot. All finds were from a layer of dark grey loam, which may have been imported during the 19th century landscaping project.



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Scale: 1:1000, paper size: A4

Figure 1
Water Main Replacement Route

plans ahead by emapsite



Plate 1
(Archive image PCAMW 001)

The area to the east of the cathedral, viewed from the NNE, showing the lamp post adjacent to the water meters near top left and the buttress on the SE angle of the new building.



Plate 2
(Archive image PCAMW 006)

The NW end of the new water main trench, adjacent to the lamp post.

5. Archaeological Observations

Archaeological supervision of the water main replacement groundworks commenced on the 6th June and was concluded on the 7th of June 2016, when the trench for the new main had been excavated up to the north wall of Mandell House. The groundworks were carried out by LandTech Limited. It was agreed that the trench between Mandell House and Ashton House could be excavated without archaeological supervision because its route would follow that of the more deeply set foul water drain and there was a substantially reduced possibility that the groundworks would encounter anything of archaeological significance.

Excavation commenced at the north-west end of the pipe run (Figure 1, Plate 1), at the existing water meters (Plate 2), within the small area previously excavated and reported on in December 2009 (Upex, 2009). The ground level and water meter caps at this point are at 9.176m OD and the bottom of the new excavation 0.85m below that (8.326m OD). The existing water pipes were exposed at this lower limit (Plate 3). Only previously disturbed deposits were exposed in this north-western end of the new trench.



Plate 3
(Archive image PCAMW 007)

The existing water pipes, blue plastic to the north and copper to the south, exposed in the bottom of the 2016 excavation trench, viewed from the NW.

Approximately 2m to the south-east of the water meters, an electricity cable was encountered 0.50m below the turf and 0.30m above the two water pipes. The remainder of the new trench followed the route of the electricity cable, at an average depth of 0.60m, and the continued presence of the water pipes on the same route was tested both by CAT scan and trial excavation when practical (Plate 4). At point K, 37.50m (as the crow flies) south-east of the water meters, the ground surface lies at 8.113m; the electricity cable at 7.528m; the general trench bottom at approximately 7.55m; and the existing water pipe at 7.168m OD.



Plate 4
(Archive image PCAMW 025)

The new trench at point K, viewed from the NE, showing the existing electricity cable and the blue plastic water pipe beneath it.

The progress of pipe trench excavation was essentially north-west to south-east across the turfed areas but the length across the tarmac surface inside the west wall of the property (Plates 5 and 6) was left until almost last and the short length beneath the cement-bedded cobbles across the entrance to the properties (Plate 7) was completed using a tunnelling mole, after the conclusion of archaeological supervision.



Plate 5
(Archive image PCAMW 037)
The water pipe trench inside the west wall of the property, viewed from the SE.



Plate 6
(Archive image PCAMW 038)
The pipe trench abutting the south wall splay, viewed from the SE, showing the splay's substantial footing.



Plate 7
(Archive image PCAMW 42)

The entrance to the residential property, viewed from the WNW, showing the wall splays and cobbled surface and the open water pipe trench.

The deposits exposed in the water main trench were almost exclusively shaded variants of the dark grey-brown loam recorded in 2009 (Upex, 2009), with the addition of a deposit of clean sand around the existing water pipes, in a few places. The dark loam excavated from the new trench and exposed in both trench sides, along almost the entire length of the trench, indicated both that the new trench followed the existing one and that the original water pipe trench had been cut through a single, deep and homogenous, deposit of topsoil.

One of two exceptions to this norm was in the approximately 2.50m-wide strip along the north side of Mandell House, where the dark loam was sandwiched between the tarmac and hardcore of the path and an unbottomed deposit of dirty yellow clay (Plate 8). The yellow clay contained small fragments of stone and streaks of mid-brown sandy loam, indicating that it was a disturbed deposit, most probably the up-cast material from the excavation of the footings trenches for Mandell House. The upper limit of the yellow clay adjacent to the path was recorded at an average of 7.36m OD.



Plate 8
(Archive image PCAMW 031)

The new water pipe trench, viewed from the east, showing the trench parallel to the north wall and path of Mandell House, with yellow clay in the trench bottom.

At the south-eastern end of the trench, where it abutted the north wall of Mandell House, attempts to locate the existing water pipe and its entry point into the building resulted in a 0.80m-deep excavation which exposed the north wall's footing and its construction trench backfill. At the very limit of excavation (7.088m OD) a foul water drain was encountered but the wall footing and construction backfill were not bottomed.

The other area in which topsoil was not the only deposit was across the entrance into the residential property, at which point the cement-bedded cobble surface lay on a dark loam mixed with pieces of stone (average size 15cm x 12cm x 9cm). Contrary to expectation there was no sign of the lower courses or footing for the boundary wall.

The only artefacts encountered were an off-cut and cap from the blue plastic pipe used to repair the mains in 2009; small fragments of salt-glazed drain pipe; two oyster shells; a sherd of blue and white glazed china and a base sherd from a stoneware jar. Eleven fragments (average 3cm x 2cm x 1cm; maximum 5cm x 3cm x 1cm) of potentially human bone were encountered during the period of supervised excavation and all were reburied within the new pipe trench.

6 Conclusions

Under similar circumstances elsewhere, any excavation within a cemetery would encounter human remains, usually in substantial quantity. The absence of all but the very smallest fragments of human bone in the average 0.60m depth of the new water pipe trench to the south-east of Peterborough Cathedral is therefore significant. There are three possible explanations for this near absence of human bone. One possibility is that only one scheme of deeply set and well marked burials was made in this part of the cemetery, and therefore that no burials were disturbed by subsequent schemes of burial and no disarticulated human bone was introduced into the graveyard soil. However, this is highly unlikely, since this area has almost certainly been used for burial from the 12th century and, in 1687, it was ordered that 'no burials hereafter in the Minster Yard, but in the east end of it till that be as full as other parts' (Mellows 1947 vii-xii). Alternatively, perhaps the graveyard soil up-cast from the service trenches when the bungalows were built in the 1960s was very thoroughly stripped of human bone and that bone was reburied elsewhere, but such thoroughness is unlikely and no record of such work is currently known. Perhaps most likely, is that a burial and disarticulated bone-rich graveyard soil lies below the maximum level of the 21st century excavations.

That considerable quantities of soil were imported in the 1820s is documented, but not exactly where it was placed (PCCHER 80082). It is also not clear how much additional material may have been spread over the area during the 1926 landscaping of the cemetery, although the half-buried appearance of the closely set lines of re-positioned headstones close to the cemetery's east boundary wall suggests that 15cm or more of topsoil has built up or has been deposited since they were reset (Plates 9 and 10).



Plate 9

(Archive image PCAMW 018)

Reset headstones aligned on the east boundary wall of the cemetery, viewed from the west.



Plate 10

(Archive image PCAMW 010)

The headstone front right in Plate 9 as exposed by the new trench.

The current ground level abutting the east end of the new building appears to be approximately the level intended when the retrochoir was constructed in the time of Abbott Kirkton (1496 – 1528), but the area to the east and south-east of it, particularly to the east of the cemetery's west boundary wall, clearly has a very different profile from the one which existed at that time. The current ground surface falls 1.36m from its 9.176m OD level at the existing water meters to 7.818m OD adjacent to Mandell House, but clearly the semi-detached bungalows were built from a much lower level, if the dirty yellow clay recorded in the south-eastern part of the new water pipe trench is indeed up-cast from the bungalows' footing trenches. Given that the top of the yellow clay lies at 7.36m OD, the pre-construction ground level could be as low as 7m OD, a good 2m below the ground level adjacent to the retrochoir when it was built. This potentially marked fall, over a 48m distance, towards the south-east and the valley of the River Nene, would indeed make the site a suitable position for a vineyard.

If, as seems probable, there used to be a marked downward slope away from the cathedral, in part eradicated during the 19th and 20th centuries, particularly to the east of the cemetery's eastern boundary wall, then that boundary wall should have a substantial portion of its lower courses and its footing buried beneath the 21st century ground surface. The absence of these courses of stonework across the gateway to Ashton House and Mandell House suggests that a very substantial portion of the boundary wall was dismantled and/or quarried away when the bungalows were built.

7 References

Hall, J, February 2016, Archaeological Assessment for Water Main Replacement between the Water Meters and Ashton and Mandall House.

Mackreth, D. F., Richardson, A., Duckett, M., Baggs, A., Richardson, M., Fletcher, F., and Brown, J. : 1990 – 1997. 'Peterborough Cathedral Minster Precincts. Archaeology and Topographical and Historical Notes on the Precincts and its Buildings'. Unpublished report.

Mellows, WT, 1947, 'The Old Churchyard of Peterborough', Peterborough Natural History, Scientific and Archaeological Society.

PCCHER, Peterborough City Council Historic Environment Record

Upex, SG, 10 December 2009, Peterborough Cathedral Precincts, Archaeological Watching Brief

Caroline Atkins
17th August 2016

Appendix A

Archive Catalogue

Archaeological site drawing – 1 x A3
Site diary and notes
Record photographs and catalogue
Levels sheet
Report

Appendix B

A Written Scheme of Investigation for a
Programme of Archaeological Observation and Recording
Associated with the Replacement of the Water Main Serving
Ashton House and Mandall House, The Precincts, Peterborough Cathedral
Scheduled Monument No: SM PE 140

Prepared by Caroline Atkins, on behalf of Dr Jackie Hall, Cathedral Archaeologist,
for the Church Commissioners

1 Summary

This written scheme of investigation details an archaeological mitigation strategy which, if approved, will be implemented during groundworks associated with the replacement of an existing water main which serves Ashton House and Mandall House.

This development has been granted Scheduled Monument Consent (Case No. S00130496) conditional upon the implementation of an appropriate programme of archaeological work.

2 Site Location and Description

Ashton House, Mandall House, and the existing water meter, stand to the south-east of the cathedral's retrochoir, within the area of an historic vineyard, part of which was given to the Monks' Cemetery, by Robert de Lindsey, in the early part of the 13th century. It is reasonable to assume that the part of the vineyard given to the cemetery was that which lies immediately to the east of the cathedral, where the cemetery appears to cut into the Vineyard estate. The existing water main runs through this area.

Between 1822 and 1829, Dean Monk landscaped the churchyard, probably importing considerable quantities of soil (PCCHER 80082), but it is not known to what extent this affected the area crossed by the water main.

3 Planning Background

Scheduled Monument Consent (Scheduled Monument No. SM PE 140, Case No. S00130496) has been granted for the replacement of the burst water main subject to a condition which requires the implementation of an archaeological mitigation strategy, approved by Historic England, during groundworks. The Church Commissioners have undertaken to implement the approved mitigation strategy.

Given the necessary approval, it is hoped that work will commence on site during April 2016.

4 Archaeological Background

A watching brief was observed in 2009 at the same water meter (Upex 2009) but only 1sqm in plan was excavated to a depth of 0.85m. Finds consisted of one fragment of probable Victorian glass, small bone fragments and two fragments of Roman pot. All finds were from a layer of dark grey loam, which may have been imported during the 19th century landscaping project.

5 Aims of the Archaeological Project

It is the aim of the project to investigate and interpret the exposed archaeological evidence for previous use of the site and to record that evidence, which would otherwise be destroyed by the proposed groundworks, for future use in local research projects. The specific objectives of the project are:

To identify and record all archaeological features and artefacts exposed during development groundworks.

To determine the form, function, spatial arrangement and sequence of the archaeological features encountered.

To recover dating evidence from the archaeological features.

To retrieve environmental evidence relating to the environment and economy of the site.

To interpret the archaeological features and finds within the context of the known archaeology of the site and surrounding area.

6 Methodology

6.1 SITE WORK

- 6.1.1 All groundworks associated with the replacement of the water main will be undertaken under archaeological supervision. The groundworks will be confined to the existing mains water pipe trench but in the event that significant archaeological deposits are exposed, the affected part of the trench will be excavated by hand.
- 6.1.2 The groundworks contractor will allow adequate time and access for the archaeological contractor, who for this project is Caroline Atkins, to make a full and detailed record of any archaeological deposits which are uncovered within the limits of the excavations. The archaeological work will be carried out in accordance with the works timetable and will cause no significant delay unless otherwise agreed if, for example, human remains or other major archaeological finds are encountered (see paragraphs 6.1.8 and 6.1.9).
- 6.1.3 All archaeological features encountered will be located on a copy of the Church Commissioners' plan, at a scale of 1:1000, with levels relative to Ordnance Datum, and details of each feature or deposit will be recorded to enable the determination of their form and function and stratigraphic sequence. Any significant features will be recorded at a scale of 1:20 or 1:10, as appropriate, and in sectional drawings.
- 6.1.4 A digital photographic record will be made of archaeological features, where appropriate, and general views of the site will be taken to record the context.
- 6.1.5 All finds made during the groundworks will be collected, located and assessed for later analysis by the appropriate specialists. Modern artefacts will be noted but will not be retained.
- 6.1.6 In the unlikely event that the groundworks expose historically waterlogged deposits which have the potential to contain environmental remains, minimum 40L samples will be collected for analysis and submitted for assessment to the most readily available and appropriate specialist at the time.
- 6.1.7 In the event that deposits relating to industrial activity are encountered, samples and/or assemblages of slags and residues will be submitted to the appropriate specialists for analysis. Even a small sample of any of these materials may have the potential to provide information on the industrial processes concerned.
- 6.1.8 In the likely event that human skeletal remains are exposed, *in situ* burials will be left undisturbed as far as is practical, and disarticulated bones will be saved for reburial in the pipe trench. If preservation *in situ* is not possible, and the lifting of human skeletal remains is necessary, then a licence will be obtained from the Ministry of Justice and a detailed record will be made before the remains are lifted and before any further work is permitted on the site. Reburial, after the new water pipe has been laid, will be the preferred option.
- 6.1.9 In the event that a major archaeological find is identified, the archaeological contractor will immediately inform the Cathedral Archaeologist and Historic England and a site meeting will be convened with the Church Commissioners, the archaeological contractor and relevant specialists at the earliest opportunity. The preferred mitigation option will be to secure the *in situ* preservation of the remains, beneath the water pipe. Completion of the groundworks in the relevant part of the site will not be permitted until a mitigation strategy has been agreed and implemented.

- 6.1.10 All relevant Health and Safety Legislation will be complied with throughout the period of site work.
- 6.1.11 The supervising archaeologist will be covered by current Public Liability Insurance.
- 6.2 ANALYSIS & REPORT
- 6.2.1 All saved finds will be recorded and reported upon by appropriately skilled archaeologists. The finds will be assessed for their suitability for inclusion in the site archive.
- 6.2.2 Within three months of the completion of the watching brief a written description and analysis of the methods and results of the watching brief will be produced, incorporating specialist artefact and environmental reports where necessary and/or available.
- 6.2.3 Copies of the report will be supplied to Historic England, the Cathedral Archaeologist, the Peterborough City Council Historic Environment Record, and the Church Commissioners.
- 6.2.4 Whatever the outcome of the archaeological watching brief, a short note or longer report if appropriate, will be submitted to the OASIS recording project.
- 6.2.5 Caroline Atkins will retain copyright of the report relating to the programme of archaeological investigation associated with the replacement of the water main serving Ashton House and Mandall House but agrees that Historic England, Peterborough Cathedral and the Peterborough City Council Historic Environment Record (PCCHER) have licence to reproduce any or all material contained in the report and archive for reference purposes on the understanding that this licence does not cover commercial use of the material by Historic England, the Cathedral, the PCCHER or any third party. In all cases Caroline Atkins retains the right to be identified as the originator of the work.
- 6.3 ARCHIVE DEPOSITION
- 6.3.1 A paper and electronic archive, ordered to MoRPHE PPN3 standards, and containing all primary and secondary written and photographic material will be prepared and lodged with the Peterborough Museum, or another suitable repository agreed by the Chapter.
- 6.3.2 A copy of the archive index, including the location of archive materials, will be supplied to Historic England and to the PCCHER.

References

PCCHER, Peterborough City Council Historic Environment Record

Upex, SG, 10 December 2009, Peterborough Cathedral Precincts, Archaeological Watching Brief

Caroline Atkins
30th March 2016

Appendix C

OASIS DATA COLLECTION FORM: England

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OASIS ID: caroline2-260394

Project details

Project name	Ashton House and Mandell House, The Precincts, Peterborough Cathedral
Short description of the project	Scheduled Monument Consent (Case No. S00130496) has been granted for the replacement of a burst water main, between existing water meters inside the cemetery of Peterborough Cathedral and the adjacent residential properties of Ashton House and Mandell House, subject to a condition requiring the implementation of an archaeological mitigation strategy. During archaeological supervision of the excavation of the new pipe trench, following the route of the existing water main, no features, deposits or finds of archaeological significance were encountered. Details of existing and buried ground levels were recorded and knowledge of the extent and nature of cemetery landscaping works during the 19th and 20th centuries was increased.
Project dates	Start: 06-06-2016 End: 07-06-2016
Previous/future work	Yes / No
Any associated project reference codes	PDA 2009/12/1 - Contracting Unit No.
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Other 4 - Churchyard
Monument type	CATHEDRAL PRECINCT Uncertain
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	CAMBRIDGESHIRE PETERBOROUGH PETERBOROUGH Ashton House and Mandell House, The Precincts, Peterborough Cathedral
Postcode	PE1 1XX
Study area	30 Square metres
Site coordinates	TL 1948 9864 52.572070150696 -0.236787358115 52 34 19 N 000 14 12 W Point

Project creators

Name of Organisation	Caroline Atkins
Project brief originator	Cathedral Archaeologist
Project design originator	Caroline Atkins
Project director/manager	Caroline Atkins
Project supervisor	Caroline Atkins
Type of sponsor/funding body	Landowner
Name of sponsor/funding body	The Church Commissioners

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Peterborough Museum
Digital Archive ID	PCAMW
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive recipient	Peterborough Museum
Paper Archive ID	PCAMW
Paper Contents	"Stratigraphic"
Paper Media available	"Drawing", "Notebook - Excavation", "Research", "General Notes", "Plan", "Report"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Ashton House and Mandell House Water Main, The Precincts, Peterborough Cathedral
Author(s)/Editor(s)	Atkins, C. and Hall, J.L.
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