


Frewin Hall Ground Source Heat Pump

Oxford

Archaeological Evaluation and Watching Brief Report

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Frewin Hall Ground Source Heat Pump, Oxford

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SUMMARY

Oxford Archaeology was commissioned by Lee/Fitzgerald Architects Ltd on behalf of Brasenose College to undertake an evaluation and watching at Frewin Hall, Oxford. The works were undertaken as part of a proposed development which includes the installation of an external ground source heat pump array and under-floor heating within the building. The test pit evaluation was undertaken between the 11th and 12th September 2023, with the watching brief taking place intermittently thereafter until 18th October 2023.

The combined investigations recorded a series of garden soils and other deposits that predominantly date to the early post-medieval period. These were most likely associated with the demolition of St Mary's College and the subsequent construction of Frewin Hall in 1582. Beneath the external courtyard, the watching brief also revealed the brick foundations for an adjacent structure of probable 17th century date and a probable garden wall.

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Oxford Archaeology would like to thank Tim Lee (Lee/Fitzgerald Architects Ltd) for commissioning this project on behalf of Brasenose College. Thanks are also extended to David Radford, who monitored the work on behalf of Oxford City Council.

The project was managed for Oxford Archaeology by Mark Dodd. The fieldwork was undertaken by Emma Winter and Ben Attfield. Digitising and illustration was carried out by Caroline Souday and Magdalena Wachnik. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the supervision of Leigh Allen and prepared the archive under the supervision of Nicola Scott.

1 INTRODUCTION

1.1 Project details

1.1.1 OxfordArchaeology (OA) was commissioned by Lee/Fitzgerald Architects Ltd (LFA) on behalf of Brasenose College to undertake an archaeological evaluation and watching brief at Frewin Hall, Oxford. The works were undertaken as part of a proposed development to install a ground source heat pump array (GSHP) and under-floor heating within the building.

1.1.2 The work was undertaken to inform the Planning Authority in advance of submission of a Listed Building Consent application. Although the Local Planning Authority had not set a brief for the work, discussions between Tim Lee (LFA) and David Radford, Archaeologist for Oxford City Council (OCC), had established the scope of work required; this document outlines how OA implemented those requirements and the results of the investigation.

1.2 Location, topography and geology

1.2.1 Frewin Hall is located in the historic core of the city of Oxford and 150m north-east of Oxford Castle. The site itself was located within the eastern part of the Frewin Hall complex, which is an annexe of Brasenose College(Fig. 1).

1.2.2 The GSHP array was excavatedwithin a courtyard bounded to the west and north by Frewin Hall. The southern limit of the courtyard is bounded by modern extensions to the hall and the eastern sideby a boundary wall dividing the site from Frewin Court and Clarendon House. The evaluation test pit waslocated withinthe ground floor of the southern wing of Frewin Hall.

1.2.3 The British Geological Survey records the underlying bedrock geology of the site as Oxford Clay Formation and West Walton Formation, a sedimentary mudstone formed approximately 157 to 166 million years ago during the Jurassic period. Superficial geological deposits within the historic centre of Oxford are situated on a promontory formed of two terraces; the Summertown-Radley (second terrace) Sand and Gravel Member and the Floodplain (first terrace) Northmoor Sand and Gravel (British Geological Survey 2023).

1.2.4 The current level in the external courtyard is approximately 64.5m OD and is relatively flat. Natural gravel has previously beenencountered within the site at between62.05and 62.19m OD (2.01-2.15m below ground). Modern layers around 0.5m thick were recorded during the 2018 evaluation and 2021 excavation just south-west of the site (Oxford Archaeology 2018; 2021). An evaluation undertaken in1993just south of the courtyardrecorded the archaeological horizon at around 61.9m OD.But based on the existing ground levels, this appears to be inaccurate by approximately 2mand should probably be63.9m OD(OA1993).

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site has been described in detail in an archaeological desk-based assessment produced by OA (2023a). Thiswas summarised in the written scheme of investigation for the project (OA 2023b)and this summary is reproduced below for reference.

Previous archaeological investigations

- 1.3.2 There have been seven previous archaeological investigations within the Frewin Hall complex. Archaeological investigations carried out at Frewin Hall in the 1970s revealed the remains of St Mary's College chapel and foundations for the cloister range. Subsequent investigations carried out in the 1990s uncovered the foundations of the eastern range of buildings relating to St Mary's College, as well as pits, garden soils and medieval walls. The 2018 evaluation and 2021 excavation recorded the substantial possible southern walls of St Mary's College cloister and truncated remains of earlier buildings, along with a large number of intercutting pits.

Prehistoric period (500,000 BP-AD 43)

- 1.3.3 There is limited evidence for early prehistoric activity within Oxford city centre. Some Palaeolithic artefacts have been found on the southern part of the first and second river terrace gravels, but not in high numbers (Lambrick 2013).
- 1.3.4 The site was part of a wider Neolithic and Bronze Age ritual landscape located across central and north Oxford. This includes the Oxford henge, a 200m wide Neolithic monument east of St Giles, and a row of east-west aligned Bronze Age ring ditches within the University Parks and Radcliffe Infirmary site (Lambrick 2013). Closer to the site, in 1997 a Neolithic core flake was recovered from the garden of Clarendon Hotel, 40m east of the site.
- 1.3.5 Lambrick (2013) suggests that this prehistoric ceremonial complex extended south of the University Parks to the edge of the second gravel terrace promontory which underlies the site. The location of this complex is thought to have some association with the confluence of the River Thames and River Cherwell (ibid.). Ring ditches and Bronze Age barrows have been recorded across this area and have been interpreted by the Oxford City Urban Archaeological Database as the remains of a late prehistoric barrow cemetery, potentially occupying much of central Oxford. Evidence for this complex has been mostly lost to the wholesale settlement and occupation of the area, although occasional observations of it have been made in rare pockets of undisturbed land. One such observation was made at 24a St Michael's Street, located c 70m north-north-west of the site, where a Bronze Age barrow was excavated in 1985. In 2021, the southern part of a Bronze Age barrow was recorded within the Frewin complex and c 15m south-west of the site. This barrow had a ditch which was 3.4m wide and the whole monument may have been up to 25m in diameter.

Roman period (AD 43-410)

- 1.3.6 The only Roman find to be recorded in the vicinity of the site was a glass bottle, found 30m east of Frewin Hall during the Clarendon Hotel excavation. No Roman features have been recorded in the study area.

Early medieval period (AD 410-1066)

- 1.3.7 No early Saxon heritage assets have been recorded within the site and the study area, but a number of early Saxon sites have been recorded in the wider area. Early Saxon settlement activity including sunken-featured buildings has

- been recorded on the south-eastern outskirts of the modern city at Oxford Science Park, Littlemore (Dodd 2003, 12).
- 1.3.8 Two late 8th century burials were recorded within the Bronze Age barrow located 15m south-west of the site which was excavated in 2021. This suggests that the Bronze Age barrow complex within central Oxford may have been reused for funerary activity during the middle Saxon period.
- 1.3.9 The town of Oxford may have developed in the 8th century round the monastery of St Frideswide, which perhaps provided a focus for settlement (Dodd 2003, 16–17). Oxford was probably founded in the first part of King Alfred's reign in the 870s/880s (Crossley 2021, 11) and it is possible that there were dispersed farms across central Oxford at this time.
- 1.3.10 By the early 10th century, Oxford was well established as a defended burh, part of the kingdom of Wessex, which protected a crossing over the River Thames. There were two principal roads through the town: one aligned roughly north-south including Cornmarket Street and St Aldates, which passed through the north and south gates of the town, and another that was aligned west-east and may have linked the west gate with Queen Street, the High Street and the east gate (Dodd 2003, 19-25).
- 1.3.11 The site is located west of Cornmarket Street and north of Queen Street, two of the original streets. Two additional parallel streets may be contemporary with these principal routes, including St Michael's Street and New Inn Hall Street, located to the north and the west of the site. Saxon road surfaces dating from the 10th century have been recorded along New Inn Hall Street. St Michael's Street was the most northerly street of the defended Saxon town, running just south of the defences. It is probable that Cornmarket Street, Queen Street, St Michael's Street and New Inn Hall Street would have had late Saxon properties fronting onto them (Crossley 2021, map sheet G). There may have been additional parallel lanes aligned roughly east-west linking New Inn Hall Street with Cornmarket Street.
- 1.3.12 Late Saxon sunken-featured buildings fronting Cornmarket Street were recorded during excavations in the 1950s at the Clarendon Hotel and in the 1960s at 55-58 Cornmarket Street. Occupation layers and Saxon pits were also recorded during the Clarendon Hotel excavation. Recently the excavations at Frewin Hall recorded two sunken-featured buildings, and the smaller of which was located only 10-15m south-west of the site. These sunken-featured buildings may have been fronting onto one of the roughly NE-SW aligned side streets which connected New Inn Hall Street with Cornmarket Street. Later Saxon pottery has also been recorded in the north-western and south-western parts of the study area.
- Later medieval period (1066–1550)*
- 1.3.13 After the Norman Conquest, Oxford Castle was built in AD 1071 at the western end of the town and 150m south-west of the site. The town is thought to have expanded by the 11th century. The main focus of settlement was confined within the town wall. The stone wall was strengthened, and bastions added, between 1224 and 1240 (Crossley 2021, 28). Part of Bastion 2 has been incorporated into No. 32 St Michael's Street and is Grade II listed.

1.3.14 During the medieval period, it is probable that timber buildings, some with stone cellars and shops, fronted onto Cornmarket Street, Queen Street, St Michael's Street and New Inn Hall Street. Buildings may have also fronted onto side streets such as Shoe Lane, which connected New Inn Hall Street and Cornmarket Street and was located 50m south of the site. The western part of this street is still in use, and it may date back to the late Saxon period. Shoe Lane may have had stone boundary walls either side of it. One short section of stone wall is still extant along the northern side of the lane, and another was recorded during archaeological investigations at 15-17 Clarendon Centre (Douglas *et al.* 2015, 12-15).

1.3.15 During the archaeological investigations at the Clarendon Centre, located 50m east of the site, medieval structures dating from the 12th and 16th centuries were revealed. A 12th-century half-sunken vault was also uncovered during these investigations, fronting onto Cornmarket Street.

1.3.16 A large number of 13th-15th century rubbish pits were recorded during excavations at 15-17 Clarendon Centre, located 30m south-east of the site. Many medieval finds and environmental remains were recorded within the rubbish pits and indicated diverse crafts and trades such as metal and glass working, lime burning, antler working and parchment making. An excavation at North Bailey House, New Inn Hall Street, located 60m south-west of the site, also record three rubbish pits and a ditch. These features contained domestic waste such as animal bone and pottery and also possible evidence of industry, including horn cores and tap slag.

Norman urban manor complex

1.3.17 Documentary evidence and several excavations suggest the presence of an Anglo-Norman manor, dating from the late 11th to early 12th century, located on the Frewin Hall site. The complex appears to represent a large property which may have initially belonged to Henry I's Chamberlain Geoffrey de Clinton. The property was owned by Henry de Oxford in the 12th century, and it passed to his son-in-law Geoffrey FitzDurland in the late 12th or early 13th century. This complex was later acquired by St Mary's College in 1435 (Blair 1978, 48-64).

1.3.18 A vaulted stone cellar which forms the basement of Frewin Hall was surveyed in the 1970s and appears to date from the period 1090-1150. It was probably associated with a complex of buildings including a hall, chambers, kitchens, stables and outbuildings, and some of these may have been made from timber. These buildings may have formed a courtyard arrangement around the principal hall and chamber buildings and most of these buildings may have been one storey high (Grenville 1997, 69-86).

1.3.19 During the 2021 excavations at Frewin Hall, intercutting medieval pits, structures and occupation layers were recorded 10-40m south-west of the site. Initial post-excavation work suggests that the earliest of the 11th century features were pits, including gravel pits, slaking pits for lime and others were rubbish pits containing pottery dating from 1075-1250. These may have been associated with the construction of the Norman manor. Fragmentary remains of structures were also recorded, and these were sealed by a garden soil containing pottery dating from 1225-1350. These structures may be associated

with the primary phase of the complex. Several further phases of building construction were noted including a stone well, stone ovens, occupation layers, stone walls and gravel surfaces pre-dating the mid-14th century. Another phase of construction dating to 1350-1450 included a north-south aligned stone cellar with a stone kitchen range to the west. The presence of these structures suggests that the ancillary buildings associated with the Norman complex may have extended as far south as Shoe Lane.

St Mary's College

- 1.3.20 In AD 1435, the Austin canons were granted the use of Geoffrey FitzDurland's manor house and land, and this became St Mary's College. The approximate extent of the college is shown on Salter's reconstruction of medieval landholdings in Oxford. A chapel was constructed on the site by 1443, but the construction of the rest of the college was slow, and it may have comprised timber buildings initially or they may have made use of surviving buildings from the manor. In 1518-24, the majority of the college buildings were rebuilt in stone by Cardinal Wolsey (Blair 1978, 64-8). By 1541, the college buildings included a hall, a chapel with a library above it, eight chambers, a kitchen, a bakery and a buttery (Chance *et al.* 1978, 368).
- 1.3.21 Known elements of the college include a possible stone chapel located 15m north of the site, the extant Anglo-Norman vaulted cellar, and the 16th century gateway adjacent to New Inn Hall Street. Blair (1978) proposed a layout of the college from the evaluation, building survey and documentary evidence including a cloistered range with a chapel projected from the north-east corner, chambers to the south-west and gardens to the south of the cloister. The plan is necessarily speculative and does not preclude the existence of college buildings and service structures at any point across the site. Blair's plan suggests that the site may be located east of the court, cloister and main buildings of the college. This may have been a yard or garden area located adjacent to the eastern boundary wall and passage to Cornmarket Street.
- 1.3.22 Blair's 1978 plan can be re-evaluated from the results of more recent archaeological evidence. In 1993, two north-south aligned stone walls were recorded during an evaluation located 5m south of the site. These were 5m apart and truncated 14th century garden soils. It is possible that these were part of the south-eastern part of the cloister range of the college and 15m east of Blair's prediction. Interestingly, the two walls are in alignment with the later 16th century range to the north and could suggest that the foundations of the 15th or early 16th century college buildings may have been reused.
- 1.3.23 During the 2021 excavation, a number of medieval stone structures were recorded including a substantial stone wall located 15m south-west of the site. This was aligned ENE-WSW and may have formed the outer wall of the southern range of the southern cloister. If these results are compared to Blair's plan, it suggests the southern range external wall may have been 5m further south than Blair suggested. Alternatively, the layout of the 15th to mid-16th century college may have been arranged differently to Blair's plan.

Post-medieval period (1550–1900)

- 1.3.24 After the Dissolution, St Mary's College continued as a secular hall and in 1556 it became a charity school used by the city. In 1580, Brasenose College took over the site and they leased the property soon after. The lessee subsequently had permission to pull down the ruinous buildings. In 1582, the L-shaped building of Frewin Hall was constructed over the medieval cellar. In 1625 the property included the main house, two stables, a fuel house, a garden and eleven tenements, each with their own gardens. This suggests that the grounds associated with the property included tenements which probably fronted onto St Michael's Street, New Inn Hall Street and Shoe Lane (Blair 1978, 65-72). The chapel associated with the college remained extant until 1656, when it was demolished and the materials reused within Brasenose College chapel (Chance *et al.* 1978, 368).
- 1.3.25 Agas's original (1578) map of Oxford and its later re-engraving by Robert Whittlesley in the early 18th century show the area of the site as gardens located south of or close to an ENE-WSW passage leading from New Inn Hall Street to Cornmarket Street. The re-engraving also suggests there was a north-south boundary through the site.
- 1.3.26 Both Hollar's map of Oxford (1643) and Loggan's map of Oxford (1675) depict the site as being located within gardens or a yard and surrounded by boundary walls to the east and south. Loggan's map also shows changes to the streets adjacent to Frewin Hall, with new residential properties appearing along New Inn Hall Street, Shoe Lane and St Michael's Street.
- 1.3.27 Taylor's map of Oxford, published 1751, shows the site as part of a yard or garden associated with Frewin Hall, with the northern part used as part of a lane or passage from Cornmarket Street, later called Frewin Court.
- 1.3.28 The Oxford Town Plan, published 1878, shows that the site was probably used as an access yard from Frewin Court, with a tree on the eastern and western side of the yard. A small building had also been constructed on the southern part of the site.

Modern

- 1.3.29 There appears to have been little change to the site until the late 1990s, when an additional accommodation block was constructed to the south of the north-south range of Frewin Hall and just south of the site. As part of this development the ground level of the site appears to have been raised by around 0.5m.

2 PROJECT AIMS

2.1 Aims

2.1.1 The archaeological watching brief on the GSHP trenching array and the archaeological test pit aimed to gather sufficient information to generate a report on the state of preservation and depths of archaeological remains within the proposed development areas.

2.2 Specific aims and objectives

2.2.1 The specific aims and objectives of the watching brief and test pit were:

- i. To determine the presence or absence of any archaeological remains which may survive;
- ii. To determine or confirm the general nature of any remains present;
- iii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
- iv. To record the stratigraphic sequence within the areas of investigation, to improve the understanding of survivability and chronology of archaeological deposits within the site;
- v. To determine the degree of complexity of any surviving horizontal or vertical stratigraphy;
- vi. To assess the associations and implications of any remains encountered with reference to the historic landscape.

2.3 Methodology

2.3.1 The watching brief was maintained throughout the excavation of the GSHP ducting trenches, in the areas shown on Figure 2. The six boreholes associated with the heat pump system were not monitored. The evaluation test pit was hand excavated within the southern wing of Frewin Hall (Fig.3). Due to the presence of numerous services within the southern part of the excavated area, this portion was left unexcavated to prevent disturbing or destabilizing the revealed pipework. The excavation continued to a depth of 0.55m below floor level, which corresponds to the impact depth of the proposed development in this part of the site.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation and watching brief are presented below and include a stratigraphic description of the test pit and monitored areas that contained archaeological remains. The full details of all contexts, including dimensions and depths can be found in Appendix A. Finds data and spot dates are included in Appendix B.

3.2 Ground conditions

3.2.1 Ground conditions throughout the investigations were generally good. The test pit was excavated indoors and although the external areas of archaeological monitoring were exposed to variable weather conditions, the site was well drained and remained largely dry throughout. The main archaeological features revealed were both structural and consequently easy to identify.

3.3 General distribution of archaeological deposits

3.3.1 No significant archaeological features or deposits were exposed in the test pit. Externally, the general deposit sequence comprised garden soils mixed with construction-related debris and layers of made ground. Two wall foundations were also revealed in addition to the foundations for the existing southern wing of Frewin Hall.

3.4 Test Pit 1 (Fig. 3)

3.4.1 Excavated to a maximum depth of 63.94m OD (0.55m bgl), the earliest deposit revealed in Test Pit 1 was a homogenous sandy silt deposit recorded as layer 5 (Plates 1 and 2). A few fragments of late medieval/early post-medieval ceramic building material (CBM) and a small sherd of late medieval pottery (*c* 1400-1625) were recovered from this deposit, which likely represents a garden soil. This was overlain by a thin lens of sandy lime mortar (4) and then a further deposit of apparent garden soil (3) which produced two small sherds of Brill/Boarstall ware (*c* 1400-1625) and two fragments of medieval roof tile. Sealing layer 3, and covering a large portion of the excavated area, was a 0.1m thick layer of firm, compacted mortar and crushed limestone (2). Representing one of the latest deposits in the sequence, this was probably a construction horizon related to the building of Frewin Hall. Overlying this deposit was a mixed layer of sandy silt and mortar (1), which served as the bedding layer for the flagstone floor of the building. A residual assemblage of pottery comprising St Neots ware, Medieval Oxford Ware and Brill/Boarstall Ware was recovered from this deposit, alongside a piece of clay tobacco pipe stem of 17th century date.

3.4.2 Deposits 3 and 4 had been entirely truncated in the south-west portion of the test pit. This had evidently resulted from the insertion of numerous buried services which had been installed after the floor was originally laid down.

- 3.5 GSHP ducting trenches (Figs 2 and 4)
- 3.5.1 Within the ducting trench on the eastern side of the courtyard, a thick layer of homogenous grey brown garden soil (8) was observed at the base of the excavation. From this deposit three sherds of pottery were recovered, including post-medieval red earthenware (c 1550-1900), Raeren stoneware (c 1480-1550) and Medieval Oxford ware (c 1075-1300). It also produced two pieces of clay pipe stem of 17th century date and residual fragments of medieval CBM. Towards the south-east of the courtyard it was partially truncated by a broadly NNW-SSE aligned wall (7; Plate 3). It consisted of limestone rubble and lime mortar forming a structure up to 0.4m wide. The northern end of the wall appeared to have been truncated away, but at its southern end, three courses survived to a height of 0.5m, with the upper level at 64.14m OD. On its eastern side it appeared to be cut into further garden soils, but the western side was abutted by and overlain by a loose made-ground deposit of rubble (23; Fig. 4, Section 2).
- 3.5.2 On the western side of the courtyard, deposit 13 was revealed at the base of the trench, with its upper horizon at 63.78m OD. It comprised a brown silty clay matrix, with mortar and limestone fragments throughout. It was sealed beneath a 0.22m thick layer of orangey brown sandy silt with mortar flecks throughout (12). Whilst the origins of this deposit remain unclear, it appeared to have a large component of redeposited natural sandy gravel. This was then overlain by a slightly mixed soil horizon (11; Fig. 4, Section 3).
- 3.5.3 At the southern end of the trench, soil layer 11 was truncated by the construction cut (9) for a second wall (6). Structure 6 comprised a 0.55m high stepped foundation constructed with both roughly hewn limestone blocks and bricks, with a soft lime mortar (Plate 4). The orangey red, unfrogged bricks measured 200x 100x 60mm. A total of eight courses were observed, including the uppermost course which stepped in approximately 0.08m. In plan, the wall was aligned ENE-WSW, with either an adjacent buttress or dogleg in its alignment, which extended out on its northern side. Overlying the backfilled construction cut and partially abutting the wall was deposit 22, which comprised a dark grey brown sandy silt, similar to the garden soils recorded elsewhere.
- 3.5.4 To the north of structure 6 a short section of trenching connected with the exterior of the southern wing of Frewin Hall (Fig. 4, Section 4). In the adjoining sequence of deposits, the construction cut for the hall (16) truncated deposit 11. The wall foundations (20) comprised roughly hewn limestone blocks, up to 0.15m across. The construction cut was backfilled with a loose clay silt deposit (17). Abutting the wall and sealing the backfill was deposit 22. The construction horizons for structures 6 and 20 were at approximately 64.15m OD.
- 3.5.5 Across the majority of the courtyard these remains were sealed beneath modern construction horizons comprising made ground, sand and the existing brick paving.

3.6 Finds summary

A total of 11 sherds of pottery weighing 93g were recovered from four contexts. The pottery comprises ordinary domestic medieval and post-medieval wares typical of the Oxford area. Eleven fragments of CBM, mostly medieval roof tile was recovered from contexts 1, 3, 5, and 8 weighing a total of 557g. A total of three pieces of clay tobacco pipe weighing 10g were recovered from contexts 1 and 8.

4 DISCUSSION

4.1 Project objectives and results

4.1.1 The aims and objectives of the project were established in the WSI for the works (OA 2023b) and are outlined again in section 2.1 of this document. Overall, the combined elements of the project have successfully recorded the state of preservation and depths of archaeological remains within the excavated areas. Although only a small assemblage of finds was recovered, the archaeological remains have been broadly dated.

4.1.2 Within the building, the evaluation has demonstrated that any construction activity up to 0.55m below the existing floor is most likely to encounter homogeneous garden soils that pre-date the present structure. Although not identified during these works, there remains a potential for earlier structural remains to survive within these deposits.

4.2 Interpretation

4.2.1 The sequence of deposits revealed in Test Pit 1 appear to represent a series of garden soils, with subsequent construction debris that likely relates to the construction of Frewin Hall in 1582. The presence of a 17th century clay tobacco pipe stem beneath the current stone floor would suggest this is not the original floor surface. However, it was also obvious that the floor stones have been lifted on more than one occasion to add later services, so intrusive finds can also be reasonably expected on this upper horizon.

4.2.2 Within the external courtyard, the shallow depth and limited dimensions of structure 7 would suggest this was little more than a garden wall, perhaps constructed to form part of a raised bed at the edge of the courtyard. Based on the assemblage of finds from the earlier garden soil (8), this was evidently constructed at some point after the late 17th century.

4.2.3 A direct stratigraphic link between soil layer 8 and the other deposits on the western side of the courtyard was not observed and deposits 11-13 and 15 were also devoid of artefacts and consequently remain undated. However, it is evident that these deposits predated both structure 6 and the foundations of the adjacent Frewin Hall building.

4.2.4 With the construction of Frewin Hall recorded in 1582, it is very likely that wall 6 was constructed at a similar date. This is further supported by the fact its position and alignment match that of a structure depicted on Loggan's 1675 view of Oxford, but it is not evident on the earlier maps by Agas (1578) or Hollar (1643). What is presumably the same wall is then more clearly depicted on the 1878 Ordnance Survey Town Plan of Oxford, which also includes the corner revealed in these excavations.

4.2.5 Previous work to the west of Frewin Hall (OA 2017) and south-west of the courtyard (OA 1993) had determined that the horizon between medieval and post-medieval features was approximately 63.35m OD, with the upper horizon for 17th/18th century remains at c 63.7m OD. On balance, and considering the limited amount of dating evidence recovered during these works, the observations made during the watching brief and evaluation would broadly

support these observations and a continuation of this trend to the east of the hall.

4.2.6 It is also worth noting that Test Pit 1 did not reveal any evidence for the continuation of the large stone walls thought to have formed part of the cloister range associated with St Mary's College. Neither were they observed in the ducting trench adjoining the exterior of Frewin Hall. However, given the shallow depth of these excavations and the likelihood of earlier robbing events, the potential for their existence cannot be ruled out.

4.3 Significance

4.3.1 The results of this investigation are limited to observations of post-medieval horizons and a number of structures associated with the construction of Frewin Hall and its subsequent use. Due to the shallow depth of the works, no *in situ* medieval or earlier archaeological remains were encountered and, as a result, these observations are of limited significance. The finds assemblages did contain a high proportion of residual medieval material, attesting the potential of the site.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1	Layer		0.1	Made ground – loose, dark grey brown sandy silt with yellowish mortar	Pot, Pipe, CBM	C17th
2	Layer		0.1	Mortar deposit – compact, light yellowish white, lime mortar		
3	Layer		0.14	Garden soil – dark grey brown, sandy silt with moderate stones and some CBM fragments.	Pot, CBM	c 1225-1625
4	Layer		0.04	Mortar deposit – Compact, mid orange brown sandy silt and mortar		
5	Layer		>0.2	Garden soil – Homogenous dark grey brown, sandy silt with moderately frequent stones and some CBM fragments.	Pot, CBM	c 1400-1625
6	Structure	0.3	0.7	Brick wall – limestone and brick		
7	Structure	0.4	0.5	Stone wall – limestone rubble, roughly hewn		
8	Layer		0.8	Garden soil – dark grey brown, clay silt with occasional rounded stones	Pot, Pipe, CBM	c 1580-1750?
9	Cut	0.3	0.7	Construction cut for structure 6		
10	Fill	0.04	0.48	Backfill of 9 – dark, grey brown, clay silt		
11	Layer		0.2	Garden soil – Darkgrey brown, clay silt with occasional rounded stones		
12	Layer		0.22	Redeposited natural? – mid orange brown, sandy silt with mortar		
13	Layer		>0.17	Made ground – mid grey brown, silty clay with limestone rubble and CBM		
14	Cut	0.4	0.5	Construction cut for structure 7		
15	Fill	0.24	0.06	Backfill of 14 – dark grey brown, clay silt		
16	Cut	0.5	0.54	Construction cut for structure 20		
17	Layer		0.54	Backfill of 16 – dark grey brown, clay silt with occasional subrounded stones		
18	Void	-	-	-	-	-
19	Void	-	-	-	-	-
20	Structure		>0.5	Frewin Hall foundations – roughly hewn limestone rubble with lime mortar		
21	Layer		0.1	Mortar deposit – loose light brown yellow mortar. Possible construction horizon		
22	Layer		0.08	Construction horizon – disturbed horizon of moderately compact, dark grey brown, sandy silt		
23	Layer		0.52	Made ground – loose, light brown sand mortar and CBM deposit.		

APPENDIX B FINDS REPORTS

B.1 Pottery

By John Cotter

Introduction

- B.1.1 A total of 11 sherds of pottery weighing 93g were recovered from four contexts. Given the small quantity present, this has not been separately catalogued but is fully described below. Medieval fabric codes referred to are those of the Oxfordshire type series (Mellor 1994), whereas post-medieval fabric codes are those of the Museum of London (MoLA 2014).

Description

Context 1. Spot-date: c 1225-1625. Five sherds (weight 51g). One small fresh body sherd from a green-glazed jug in Brill/Boarstall ware (Fabric OXAM). 1x cooking pot rim in early Brill/Boarstall ware (OXAW, c 1175-1400). 1x small body sherd from a yellow-glazed jug in Medieval Oxford ware (OXY, c 1075-1300). 2x fresh sherds of St Neots ware (OXR, c 900-1100) including a cooking pot rim and a cooking pot body sherd (two separate vessels).

Context 3. Spot-date: c 1225-1625. Two sherds (weight 16g). One small body sherd from a green-glazed jug in Brill/Boarstall ware (OXAM), possibly after c 1350? 1x edge fragment from a green-glazed jug handle with slashed decoration, in early Brill/Boarstall ware (OXAW, c 1175-1400).

Context 5. Spot-date: c 1400-1625. One sherd (weight 2g). A small body sherd from a green-glazed jug in late medieval Brill/Boarstall ware (OXBX).

Context 8. Spot-date: c 1580-1750? Three sherds (weight 24g). One body sherd from a jar in post-medieval red earthenware (PMR, c 1550-1900). One body sherd from a drinking jug in Raeren stoneware (RAER, c 1480-1550). One small sherd from the sagging base of a cooking pot in Medieval Oxford ware (OXY, c 1075-1300).

Discussion

- B.1.2 The pottery comprises ordinary domestic medieval and post-medieval wares typical of the Oxford area. The sherds are generally in a good condition, though fragmentary. All these fabrics were common on the main Frewin Hall excavation (OXFRN21).

Recommendations regarding the conservation, discard and retention of material

- B.1.3 The pottery here has very little potential to inform future research through re-analysis. It may therefore be discarded, if so desired.

B.2 Clay Tobacco Pipe

By John Cotter

Introduction

- B.2.1 A total of three pieces of clay pipe weighing 10g were recovered from two contexts. Given the small quantity present, this has not been separately catalogued but is fully described below.

Description

Context 1. Spot-date: 17th century. One piece (weight 6g). Fresh stem fragment. Moderate quality burnish. Length 58mm.

- B.2.2 Context 8. Spot-date: 17th century. Two pieces (weight 4g). Fresh stem fragments up to 44mm long.

Recommendations regarding the conservation, discard and retention of material

- B.2.3 The pipe fragments here have very little potential to inform future research through re-analysis. They may therefore be discarded, if so desired.

B.3 Ceramic Building Material

By Kirsty Smith

Introduction

- B.3.1 Eleven fragments of ceramic building material (CBM), mostly medieval roof tile, was recovered from contexts 1, 3, 5, and 8 weighing 557g (Table B.3.1).
- B.3.2 The medieval and post-medieval fabrics were assigned from the CBM reference collection housed by Oxford Archaeology. This has been used to describe the fabrics from a number of Oxford sites, including Westgate (Poole and Smith forthcoming).
- B.3.3 The earliest fragments of CBM were two fragments of roof tile from context 8 which were made from fabric IB, which is dated as later 12th to early 13th century. The remaining fragments were made from fabric IIIB, which is broadly dated to the later 12th to 14th century. The exception was one fragment of early post-medieval roof tile recorded in context 5. This was made from fabric OXP3, which is similar to fabric IIIB but is finer and with less inclusions. The roof tile fragments were 13-17mm thick.

Table B.3.1: Summary of CBM assemblage

Context	No.	Weight (g)	Fabric	Class/Form	Date	Description
1	2	59	IIIB. Orange silty sandy clay with frequent coarse quartz.	Roof tile flat	Late C12th-14th	16mm thick
3	1	70	IIIB	Roof tile flat	Late C12th-14th	14-17mm thick
3	1	91	IIIB	Roof tile – ridge glazed	Late C12th-14th	15mm thick. Light green/light brown glaze
5	3	259	IIIB/EXP3	Roof tile/flat	Late C12th 14th / Early PM	One fragment is finer and denser and less inclusions (EXP3 and EPM). Hint of green glaze on EXP3 frag
8	1	10	IIIA. Light orange, cream core. Frequent rose quartz	Indeterminate – probably roof tile	Late C13th-C14th	Part of a sharp edge
8	2	47	IB. Pink/buff with grey core and frequent quartz and calc frags	Roof tile	Late C12th-early C13th	Usually used for ridge tile. Olive colour glaze on top surface
8	1	21	IIIB	Roof tile	Late C12th-C14th	
Total	11	557				

Recommendations

- B.3.4 The medieval roof tile appears to be residual within post-medieval garden soils and in itself is not significant.
- B.3.5 The CBM may have originated from medieval buildings in close proximity to the site. The same medieval roof tile fabrics were recorded during the Frewin Hall excavation (site code FRN21).
- B.3.6 The CBM from this site can be discarded, as a selection of CBM from the FRN21 excavation will be deposited.
- B.4 Shell

By Rebecca Nicholson

- B.4.1 Four valves (62g in total) of European flat oyster (*Ostrea edulis*) were recovered by hand. All are in fair to good condition.
- B.4.2 The shell has no additional research value and may be discarded.

Table B.4.1: shellfish summary

Context	No oyster left valves	No. oyster right valves	Weight (g)	Notes
1		1	9	Complete valve
3	1		24	Valve largely complete. Chalky deposit and blister internally, sponge borehole externally
5		1	11	Valve largely complete but missing hinge. Slight staining externally.
8	1		18	Valve almost complete. Possible open notch.

APPENDIX C BIBLIOGRAPHY

Blair, J, 1978 Frewin Hall, Oxford: Norman mansion and a monastic college, *Oxoniensia* **43**, 48-99

British Geological Survey, 2023 *Geology of Britain viewer*,
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [accessed Aug 2023]

Chance, E, Colvin, C, Cooper, J, Day, C J, Hassall, T G, Jessup, M and Selwyn, N, 1979 Sites and remains of religious houses, in *A History of the County of Oxford: Volume 4, the City of Oxford* (eds A Crossley and C R Elrington), London, 364-8, British History Online <http://www.british-history.ac.uk/vch/oxon/vol4/pp364-368> [accessed 19 April 2023]

Crossley, A, 2021 *British historic towns atlas Volume 7: Oxford*, Historic Towns Trust, Oxford

Dodd, A (ed.), 2003 *Oxford before the university: the late Saxon and Norman archaeology of the Thames crossing, the defences and the town*, Oxford Archaeology Thames Valley Landscapes Monograph **17**, Oxford

Douglas, A, 2015 *Medieval craft-working in Oxford. Excavations at 15-17 Clarendon Centre*, PCA Occasional Paper **11**, London

Grenville, J, 1997 *Medieval housing*, Leicester University Press, Leicester

Lambrick, G, 2013 Prehistoric Oxford (the Tom Hassall Lecture for 2012), *Oxoniensia* **78**, 1-48

Mellor, M, 1994 Oxfordshire pottery: a synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford region, *Oxoniensia* **59**, 17-217

MoLA 2014 *London medieval and post-medieval pottery codes*, Museum of London Archaeology, <http://www.mola.org.uk/rmedieval-and-post-rmedieval-pottery-codes> (Accessed 11 Jan 2019)

OA, 1993 Frewin Hall, Oxford: archaeological evaluation,
<https://eprints.oxfordarchaeology.com/3554/1/OXFH93.pdf>

OA, 2018 Frewin Hall, Frewin Hall, Brasenose College, Oxford: archaeological evaluation report, unpublished client report

OA, 2021 Frewin Hall, Brasenose College, Oxford – OXFRN21: phased site summary, unpublished client report

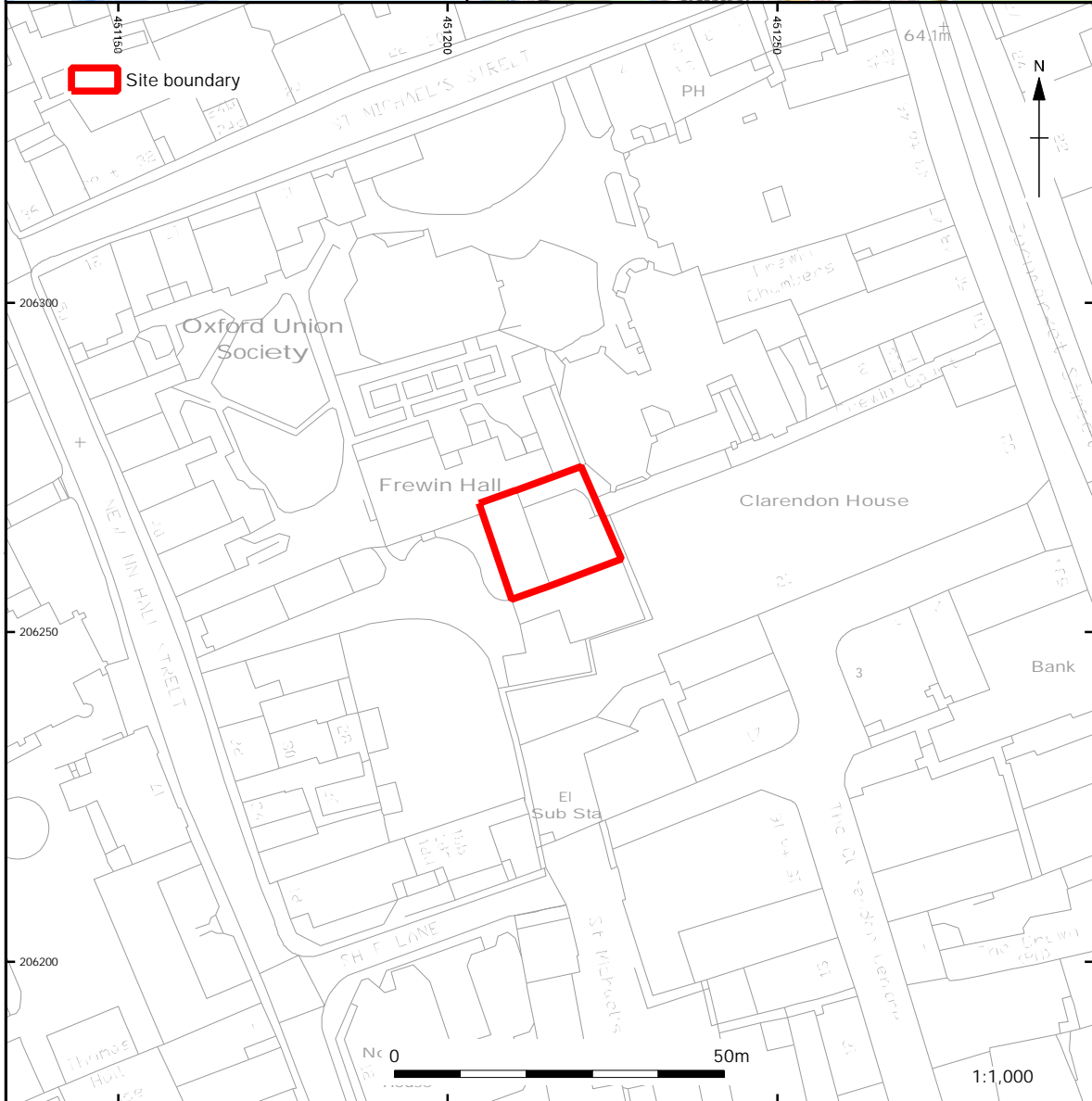
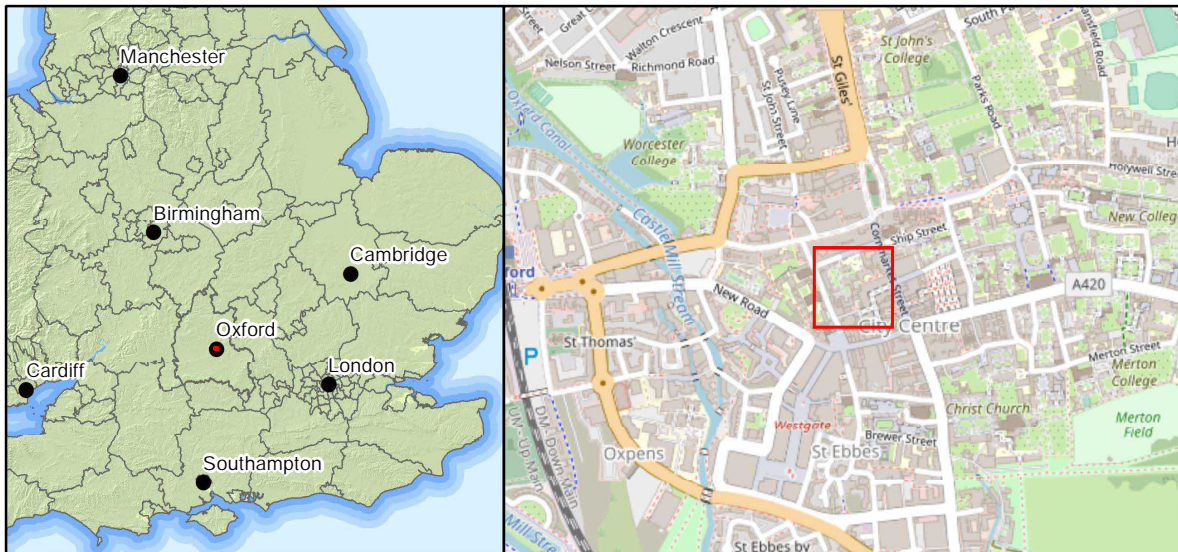
OA, 2023a, Frewin Hall, Oxford, Ground Source Heat Pumps: desk-based assessment, unpublished client report

OA, 2023b, Frewin Hall, Ground Source Heat Pump, Oxford: written scheme of investigation, unpublished client report

Poole, C, and Smith, K, forthcoming Ceramic building material in Oxford Westgate Excavations (S Teague and B Ford), Oxford Archaeology Monograph

APPENDIX D SITE SUMMARY DETAILS

Site name:	Frewin Hall, Ground Source Heat Pump
Site code:	OXFRHA23
Grid Reference	SP 5121 0626
Type:	Archaeological evaluation and watching brief
Date and duration:	September to October 2023
Area of Site	<0.5 ha
Location of archive:	The archive is currently held at OA, Janus House, Osney Mead Industrial Estate, and will be deposited with Oxfordshire County Museum Service in due course, under the following accession number: OXCMS: 2023.107.
Summary of Results:	<p>Oxford Archaeology was commissioned by Lee/Fitzgerald Architects Ltd on behalf of Brasenose College to undertake an evaluation and watching at Frewin Hall, Oxford. The works were undertaken as part of a proposed development which included the installation of an external ground source heat pump array (GSHP) and under-floor heating within the building.</p> <p>The combined investigations recorded a series of garden soils and other deposits that predominantly date to the early post-medieval period. These were most likely associated with the demolition of St Marys College and the subsequent construction of Frewin Hall in 1582. Beneath the external courtyard, the watching brief also revealed the brick foundations for an adjacent structure of likely 17th century date and a probable garden wall.</p>



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Figure 1: Site location

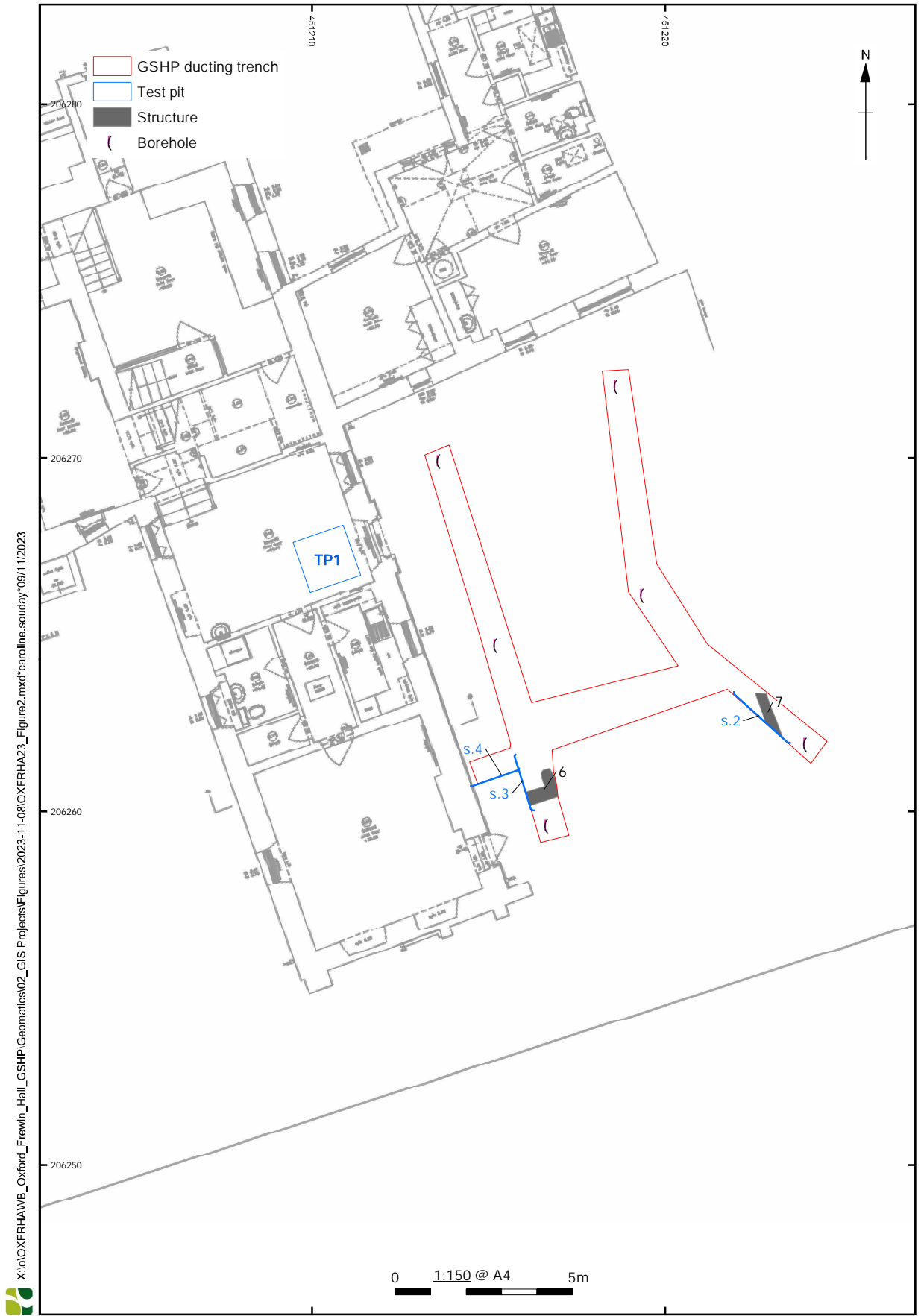


Figure 2: Location of Test Pit 1 and the GSHP ducting trench

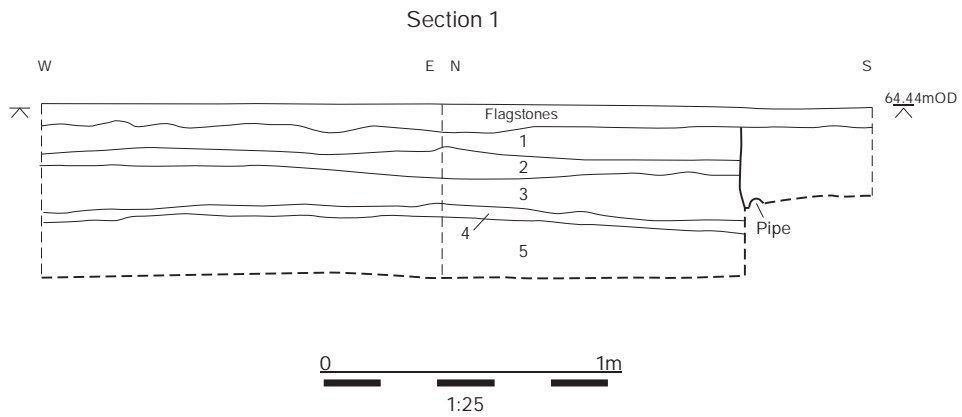
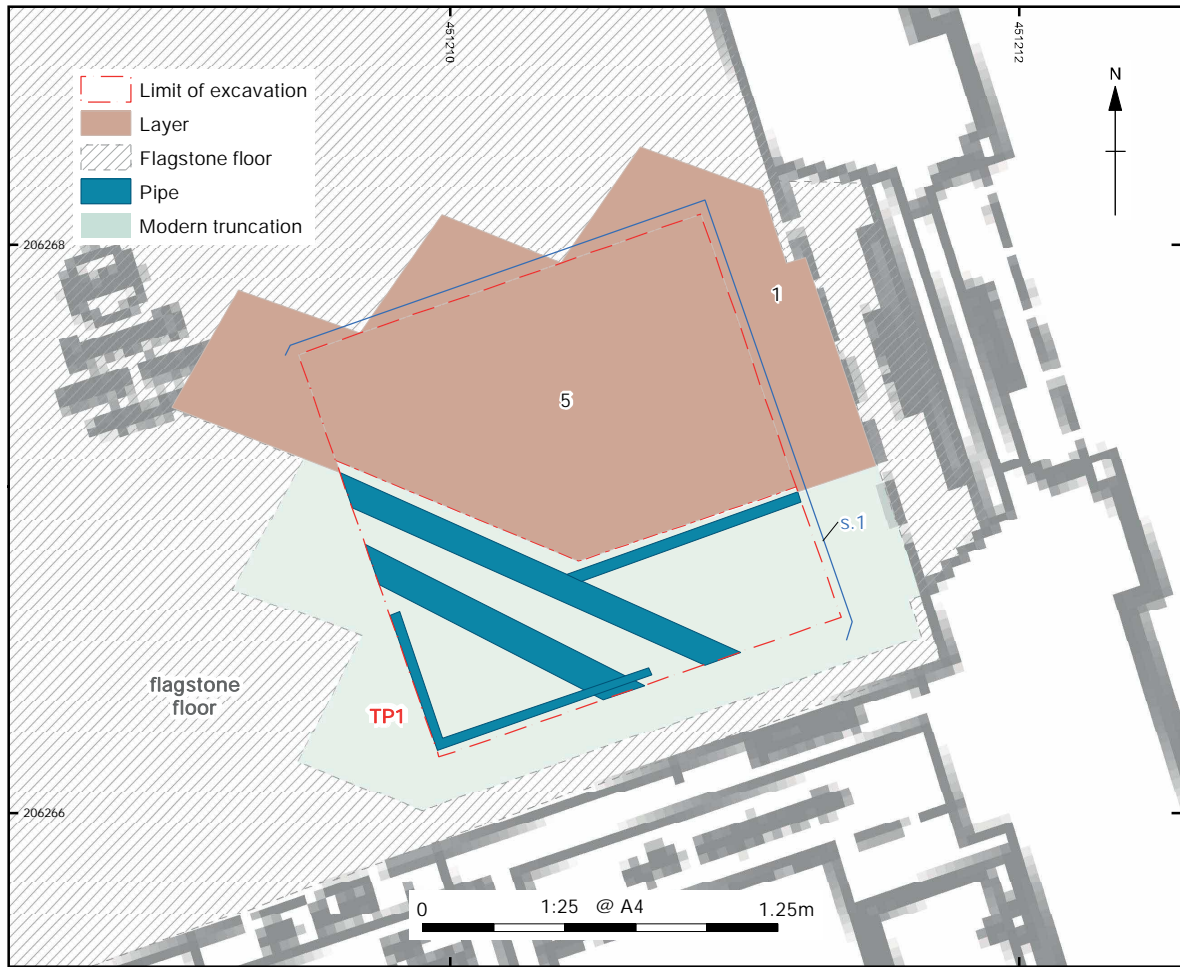


Figure 3: Plan and section of Test Pit 1

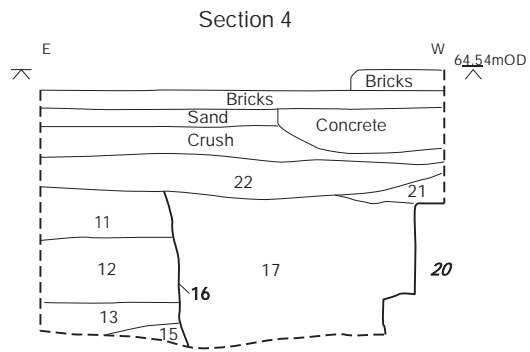
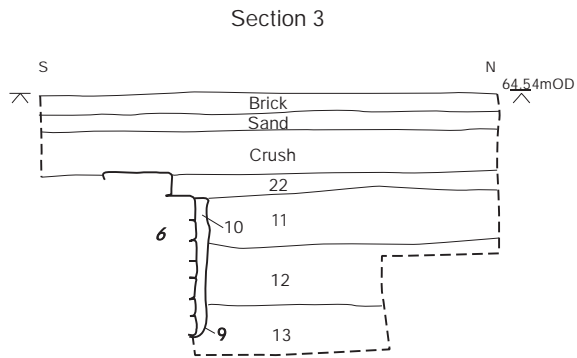
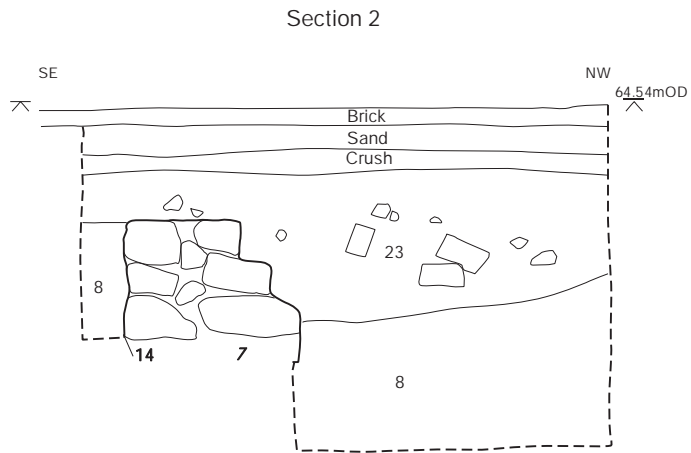


Figure 4: Sections 2, 3 and 4



Plate 1: General view of Test Pit 1 (view to south)



Plate 2: South facing section of Test Pit 1 (view to north)



Plate 3: Section across Structure 7 and related deposits (view to west)



Plate 4: Overview of structure 6 (view to south)

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