The Great British Dig <u>Lenton Priory</u>, Nottingham

Report on an Archaeological Excavation



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# SOLSTICE

# Report on an Archaeological Excavation

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# **EXECUTIVE SUMMARY**

This archaeological excavation report has been prepared by Solstice Heritage and York Archaeology (then Trent and Peak Archaeology) on behalf of Strawberry Blond TV to report the results of a community excavation carried out as part of The Great British Dig television programme. This investigation included four trenches excavated by volunteers under professional archaeological supervision within private gardens and two open publicly owned spaces on Priory Street, Old Church Street, Friar Street, Nazareth Road and Gregory Street. The gardens and parks within this area overlie the known and putative extent of a medieval Cluniac Priory, its cloisters and adjacent marketplace.

Elements of the Priory are scheduled, and the trenching in these areas was undertaken in line with an extant Scheduled Monument Consent (SMC) (S00080448) secured by Trent and Peak Archaeology (TPA), who were involved in leading the on-site fieldwork.

Trenches were located to target the projected structures thought to be present within the Priory complex, thereby investigating their presence, character, and survival. In addition, putatively 'blank' areas were targeted with test pits in order to examine the extent of presumed remains and background character of the surroundings through profile of artefactual evidence. Finally, two cores were taken within a garden on Nazareth Road in order to examine the extent of the cloisters, believed to extend in this direction, and the medieval course of the River Leen.

Trench 1 was located at the eastern extent of the main Conventual Church, in an area known to contain a Lady Chapel. The excavation trench identified a substantial (partially robbed) rubble core of a buttress constructed at the north-east corner of the Lady Chapel. The identification of this feature strengthens arguments for a single large rectangular chapel with an apsidal end beyond the east end of the Conventual Church. Previous investigations have proposed several smaller chapels radiating from the east end, admittedly from keyhole investigation only (Hobson and Flintoft 2013). The buttress was observed to cut an undated sub-square posthole or shallow pit. Trench 1 also identified an excavation trench dug by the Lenton Historical Society (supervised by Alan McCormick and Mike Bishop) in 1976–77, which had identified the walls of the Lady Chapel and a burial within its interior (Lomax pers. comm). Relocating this earlier unpublished excavation will help us to better appreciate the layout of this poorly understood part of the Priory.

Trench 8, positioned in Priory Park, was in an area where previous investigation had identified post-medieval and medieval artefacts and soil features—surfaces, pits and post holes—relating to the use of the Outer Precinct as a medieval Market and Fair (Davies and Flintoft 2015). Unfortunately, the presence of 19<sup>th</sup>-century cellared structures and back plots of the former street, Mart Yard, had completely removed the potential for medieval and post-medieval deposits to be present in this area. The remains of the structural foundations and gennal were well-preserved and correlated with the historic mapping for this area.

In addition to the completion of the consented scheme, targeted investigations comprising test pitting and a borehole survey, were also undertaken outside the Scheduled Monument with the overall aim of better understanding land use around the Priory Church.

A test pit (Trench 10) on the north side of the Conventual Church, in the front garden of 14 Old Church Street, identified a sequence of post-medieval deposits which gave way to an undated sub-soil. This subsoil overlaid a mixed gravel/alluvium, suggestive of a naturally infilled hollow, similar to natural features identified north of Abbey Street during excavations of the medieval market/fair site in the Priory's Outer Precinct (Davies and Flintoft 2015). This is an area where burials have previously been identified (Hobson and Flintoft 2013), so the lack of burials or disarticulated human remains may suggest that burials become less frequent moving west, away from the east end of the Priory Church and towards the Inner Precinct.

In the garden of 25 Old Church Street, beyond the north-east extent of the Priory Church, a test pit (Trench 11) revealed an informative sequence of deposits, comprising a 19<sup>th</sup>-century outhouse, post-medieval levelling layers and intact medieval soil horizons and a cobbled surface. The pottery evidence suggests that the layer (11021)—immediately above the cobbled surface {11022}—was laid down in the 12<sup>th</sup> century, indicating that the surface was 12<sup>th</sup> century or earlier. This positions these contexts in a similar time frame to the foundation of the Priory and the nature of (11021) potentially indicates a horticultural use of this area of land between the Priory buildings and the River Leen to the east.

Geoarchaeological investigations to the south of the Priory Church comprised two targeted boreholes located in the garden of Nazareth House. The northern borehole, south of the Priory Church, identified the area of the Cloister and overlying demolition deposits, at a depth of 1.3 m below ground level (BGL). The cloister appeared to be sitting on a building



platform that utilised an elevated shelf of underlying sand and gravel. Dating of a thin deposit overlaying the sandstone and sandy gravel layers indicated that it was formed before the foundation of the Priory, during the Middle to Late Saxon periods. Further south, the second borehole identified the northern edge of the River Leen floodplain and the extent of overlying alluvial deposits. The identification of the River Leen floodplain seems to confirm earlier observations (WA 1993) that the channel was relatively steep sided and located significantly further northwards in the medieval period than it is today in its canalised form. This may explain the absence of archaeological features during the development of flats at the western extent of Nazareth House in the late 1990s (McAree 2003).

The 2020 Lenton Priory investigations have been invaluable, providing important new information relating to key ongoing research themes for the Priory. These include achieving a better understanding of the functional zones within the Priory complex, obtaining a better understanding of medieval water management and insight into the state of preservation and deposit quality within the Scheduled Monument and beyond.



# 1. Introduction

# 1.1 PROJECT BACKGROUND

This archaeological excavation report has been prepared by Solstice Heritage and York Archaeology (then Trent and Peak Archaeology) on behalf of Strawberry Blond TV to report the results of a community excavation carried out as part of *The Great British Dig* television programme. This investigation included four trenches excavated by volunteers under professional archaeological supervision within private gardens and two open publicly owned spaces on Priory Street, Old Church Street, Friar Street, Nazareth Road and Gregory Street. The gardens and parks within this area overlie the known and putative extent of a medieval Cluniac Priory, its cloisters and adjacent marketplace.

Elements of the Priory are scheduled, and the trenching in these areas was undertaken in line with an extant Scheduled Monument Consent (SMC) (S00080448) secured by Trent and Peak Archaeology (TPA), who were involved in leading the on-site fieldwork.

#### 1.2 GEOLOGY

The project site was centred at NGR SK 55277 38738, south of the Priory Church of St Anthony on Old Church Street, with the ground surface lying at an average across the site of approximately 29 m aOD. The bedrock geology comprises the Lenton Sandstone Formation, part of the Triassic Sherwood Sandstone series, with the overlying substrate comprising deep Holocene alluvium (a mixture of clay, silt, sand and gravel) (BGS 2021). Online mapping provided by the UK Soil Observatory (UKSO) characterises the soils across the site as 'freely draining floodplain soils'.

## 1.3 Trench Locations

Trench dimensions were constrained by the size of the existing garden plots, the resources and time available and, for those areas within the boundaries of the scheduled monument, the approach agreed within the existing Scheduled Monument Consent. Trenches were located to target the projected structures thought to be present within the Priory complex, thereby investigating their presence, character, and survival. In addition, putatively 'blank' areas were targeted with test pits in order to test the extent of presumed remains and background character of the surroundings through profile of artefactual evidence.

Four trenches were excavated over the course of one week, with their locations identified in collaboration with Trent and Peak Archaeology, local residents and landowners, and in order to meet the aims of extant research questions and the requirements of the extant Scheduled Monument Consent. The locations of fieldwork are shown on Figure 2 below and comprised:

- Trench 1 South of the southern extent of Old Church Street and east of the existing pathway connecting Old Church Street and Priory Street (SK 55303 38722). Trench 1 was situated to target the potential east end of the Conventual Church and also to attempt to locate and characterise previous excavation and evaluation works in the 1940s and 1970s (see below).
- Trench 8 North-west of the Priory Church of St Anthony within Priory Park (SK 55265 38830). Trench 8 (continuing the numbering sequence of the earlier community project) was situated to further investigate the enclosure surrounding the Priory Church graveyard and the Martinmas Fair fairground which was intimately tied to the economy of the medieval Priory.
- Trench 10 At the southern extent of Old Church Street within the front garden of No. 14 Old Church Street (SK 55297 38743). Trench 10 was situated to further investigate and sample the area to the north of the Conventual Church and within the environs of the northern side of the Priory complex.
- Trench 11 In the rear garden of No. 25 Old Church Street (SK 55321 38729). Trench 11 was situated to investigate the area to the east of the Conventual Church and within the immediate environs of the northern side of the core Priory complex.
- Finally, two cores were taken within a garden on Nazareth Road (SK 55263 38666, SK 55263 38657) in order to examine the extent of the Cloisters, believed to extend in this direction, and the medieval course of the River Leen.



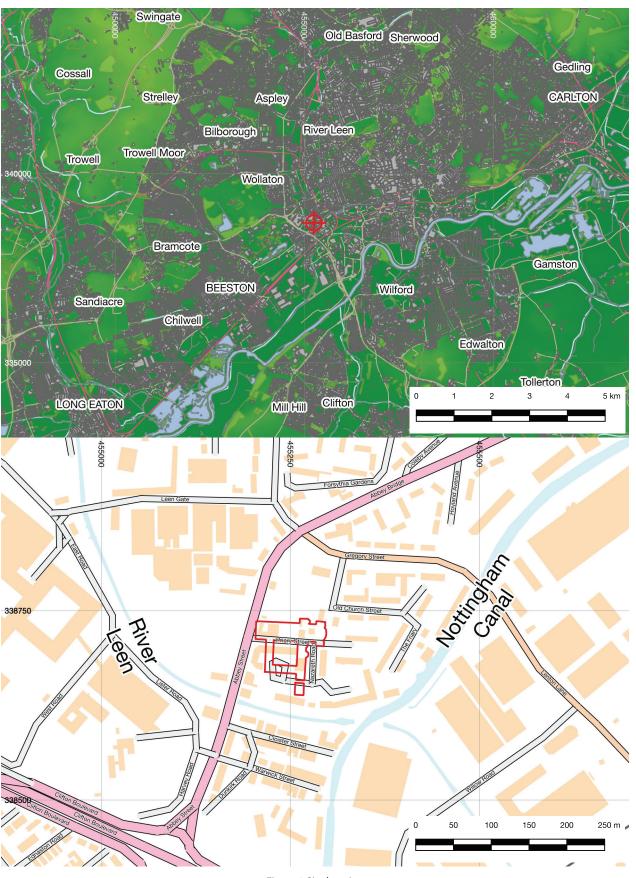
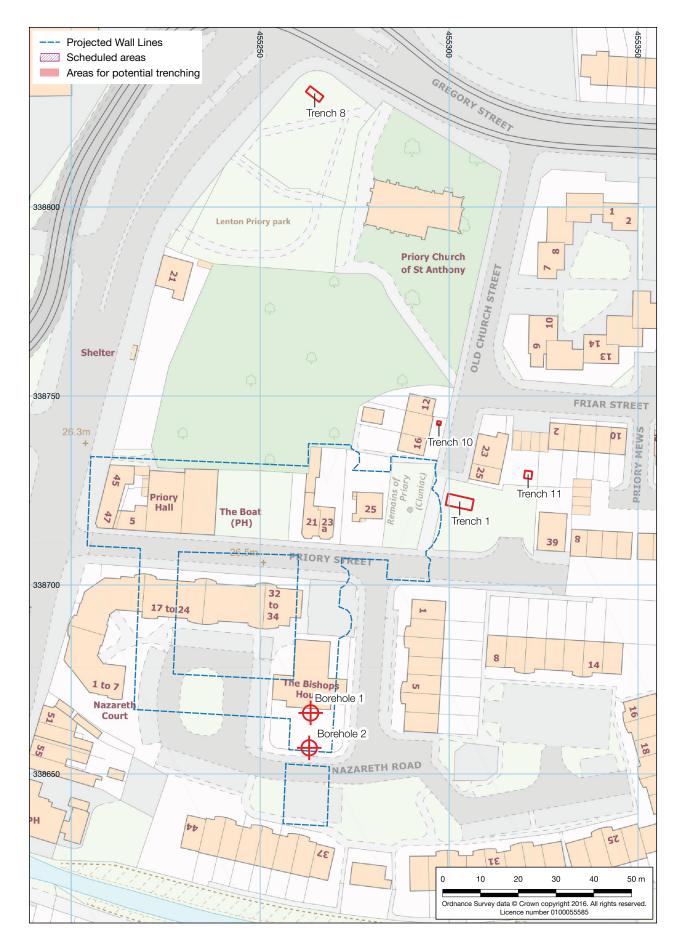


Figure 1 Site location







#### 1.4 Archaeological and Historical Background

Lenton Priory was a Cluniac monastery, founded at the beginning of the 12<sup>th</sup> century by William Peverel, a prominent Norman knight and favourite of William the Conqueror. He was greatly honoured after the Conquest and received as his reward over a hundred manors in central England from the new king. In 1086, the Domesday Book recorded William as holding 162 manors in Nottinghamshire and Derbyshire, known collectively as the Honour of Peverel and including Nottingham Castle (King 2004). As is typical for great landowners of the time, Lenton Priory was founded by Peverel as a combination of a conspicuous display of wealth and piety, an insurance to ensure a place in heaven after death and as a display of loyalty to the Crown (in whose name it was founded) (Page 1910). Peverel granted the priory a considerable endowment, which would have provided a significant income, and interestingly he also exempted it from all but a nominal annual tribute to the mother house in France. Lenton's mother house was Cluny Abbey in France, making it one of a network of Benedictine houses across western Europe which, since the early 10<sup>th</sup> century, followed the stricter Rule associated with the Cluniac Reforms.

After Peverel's death in 1115, his son was dispossessed of his lands by Henry II, leaving Lenton Priory without most of its former income. The lands, initially given to the future King John, were eventually transferred to Lichfield Cathedral, creating a simmering problem between the two establishments which would occasionally flare to open conflict. Perhaps the most well-known incident was a raid mounted by the monks of Lenton in 1250–1 on the disputed Tideswell—a church still known as the 'Cathedral of the Peak'. Livestock, which had been stalled in the nave of the church at the order of the Dean of Lichfield, was violently seized in defiance of sanctuary rights, with 18 lambs killed and 14 carried off back to Lenton (Page 1910). Ultimately, the legal arguments over the disputes and violence was brought to a reckoning after the Bishop of Lichfield made a direct appeal to Pope Innocent IV, and a commission met at St Mary's in Leicester in 1252. The monks of Lenton Priory were compelled to pay 100 marks as compensation in addition to the £60 already paid—a not inconsiderable amount for the time. Although resulting in a short-term accord, the bad blood and disputes resurface after around 25 years, and continued through to its dissolution (ibid.)

The reputation for dissension and conflict also extended to the relationship of the Priory with the worthies of Nottingham, in particular over the Martinmas Fair, held in the area now known as Priory Park to the north-west of the still-standing Priory Church of St Anthony. An agreement of *c*. 1300 over the particulars of the Fair (held over Martinmas), set down strict specifications over size of stall, types of stallholders and the prices they would pay, and in return the City agreed that no competitor market would be held in Nottingham for the eight days of the Fair (Page 1910). Despite the market and Martinmas Fair, documentary records show that Lenton Priory was often very short of funds and was periodically granted leases or protection at various times to maintain its solvency (*ibid*.). This state of affairs was exacerbated by the fact that, before 1392, the Priory was an 'alien' house (i.e., tied to a French mother house), and its assets were periodically seized and returned in parts during the long wars with France which characterised much of this period.

Lenton Priory was dissolved in 1538, with the Prior and eight monks imprisoned for high treason. They, along with another monk and four labourers, were tried and executed, potentially close to the Priory on the site of the Martinmas Fair as an explicit statement of power by the agents of the Crown (Page 1910). It should be noted, however, that records showing that Cow Lane, the main entrance to the town leading direct to the town gallows was cleaned on the day of the executions. This suggests an alternative possibility that the monks were hung at the town gallows, drawn into the town and quartered at the end of Cow Lane where it meets the Market Place.

A series of excavations have been undertaken over the years which have focused on the Priory and its surroundings. An overview of this work has been previously produced by Trent and Peak Archaeology (Davies and Flintoft 2015, 12–13). This has been reproduced below:

"Despite its importance, relatively little accurate detail is known of the overall plan of a number of parts of the Lenton Priory site. As late as 1845, the Monasticon Anglicanum (Dugdale 1846) summarised the state of knowledge pertaining to the priory rather well:

All vestiges of Lenton priory had long disappeared, when, a few years ago, the discovery of a brass plate of the Crucifixion (engraved in the Gentleman's Magazine, vol. lxvii. p. 281) drew attention to its site: subsequent to which a stone coffin, the bases of some pillars, and a large portion of the foundation walls, which had been uncovered by Mr. Stretton, the then owner, determined it more precisely.

(Dugdale 1846)



In 1935–36 H. Green exposed the foundations of the apsidal east end of the choir, as well as a section of the ambulatory to the north and the north side chapel (Green 1936, 77–90). Later on, in the years 1943–51, Elliot and Berbank either undertook, or reported on, a number of small interventions and observations, which included investigation within the garden at the corner of Priory Street/Old Church Street (1943), the choir north aisle wall/north side of the chapel/arc of the foundations/piers (1945–6), a short section of the inner facing transept (1947), and the north aisle wall (1950). The building of a chapel to the east of the 'chapter house site' in 1951 exposed no remains of the monastic infirmary.

In the late 1970s M. Bishop demonstrated that the apsidal nave of the Conventual Church continues to the east of Old Church Street in the form of Lady Chapels, perhaps similar to those observed at St Pancras, London. One of these chapels included a burial in the wall (Bishop 1977). In January 1984 the observation of a trench to lay replacement water mains at the west limit of Old Church Street, adjacent to the pavement, demonstrated that masonry of the priory survived at less than 0.5 m below the present road level (Young 1984). The following month, another service trench excavated immediately to the east (34 inches from the kerb) revealed the remains of three human skeletons. Several skulls were also noted, immediately north of the Conventual Church. The burials, of presumed medieval date, were observed and drawn by a planning officer and not an archaeologist, and the alignments of the burials depicted in this work should be regarded as speculative. Further human remains were later observed in a Diamond Cable trench on the opposite (east) side of Old Church Street by the police, but near to the previously identified skeletons.

Ever since Stretton's work in the early 1800s, there has been general agreement that the Priory's cloister was probably located on the south side of the Conventual Church. Conjectural plans to this effect were produced by Barnes (1987, 84), Elliott and Berbank (1952, 47) and most recently by Kinsley (2009)—a composite of which has been used in the putative outline of the complex shown in the site figure below. A more recent archaeological evaluation carried out by Northamptonshire Archaeology at Nazareth House, on the south side of Priory Street (McAree 2003), however, failed to find remains of the priory complex in this location. This cast some level of doubt over the reconstructed layout of the cloister of Lenton priory, provided by Barnes (1987, Figure 1), or indeed the Conventual Church layout as provided by Elliot and Berbank (1952, Figure II).

In 2012–2013 Trent & Peak Archaeology (TPA) were contracted by Vinci to complete various archaeological works and monitoring in advance of the construction of the NET-2 tram route through Nottingham city centre, including archaeological excavation of areas outside the scheduled zone and a watching brief that included a cable trench through the scheduled area.

In 2012, evaluation of a 500 m area on the corner of Abbey Street and Gregory Street revealed a well-preserved sequence of archaeological deposits which were considered to be significant enough to require a formal excavation (Kinsley 2009). The resulting excavation yielded evidence for settlement layout and use from the 11th/12th to 17th centuries, including enclosure ditches, refuse pits and material that is likely to have pertained to the use of the area during the annual Martinmas Fair event that was held in Lenton at least intermittently from 1164 into the 16th century (Flintoft and Davies 2013; Greig 1992; Page 1910).

Another component of the NET-2 development required the excavation of a cable trench running east to west along Priory Street before turning northwards into the scheduled area on Old Church Street (Hobson and Flintoft 2013). The results from this trench were remarkable considering the previous uncertainty about the condition of in situ sub-surface architectural elements of the Priory structure itself, particularly outside the scheduled area. Masonry was exposed along the entire length of the Priory Street trench, complete with fittings and possible entranceways which, based on Elliott and Berbank's (1952) projected plan, appear to have belonged to the northern wall of the cloister range and possibly a Chapter House. In situ masonry in the trench along Old Church Street also appeared to broadly fit with Elliott and Berbank's plan of the Conventual Church's apsidal end.

The 2012–2013 excavations inspired a great deal of community interest, and in June 2013 TPA held an open day as part of the CBA (Council for British Archaeology) Festival of Archaeology. To coincide with this event, Nottingham City Council commissioned and funded a geophysical survey in the five green areas surrounding the priory and the Chapel of St. Anthony, which was completed by TPA with volunteers from the University of Nottingham and the Lenton Local History Society. This produced evidence of further sub-surface archaeological features, perhaps on contrasting alignments to some of the high medieval priory layout and led to a series of recommendations for future work".



Most recently, TPA led a community excavation project targeting several aspects of the Priory Complex and its environs (Davies and Flintoft 2015), the summary of results for which is reproduced in brief here:

"The two trenches excavated within the footprint of the main priory church identified well-preserved structural remains. Trench 2 reinvestigated excavation areas opened by Herbert Green in the 1930s on the east end of the Conventual Church and demonstrated that the one extant column sits on top of the internal curved wall of the ambulatory. Although no stone-flagged or tiled floors remained, wall lines (including the external wall of the east end of the Conventual Church are well preserved immediately below ground level.

Further along the nave to the west, Trench 3 in the Boat Inn public house garden successfully identified the original flagged floor level of the Conventual Church (heavily robbed), a pier base and some possible choir stalls that re-used earlier medieval masonry. This trench also established that the north wall of the Boat Inn pub garden was indeed the internal face of the medieval north wall of the Conventual Church, although the extant wall had been rebuilt, probably in the 19<sup>th</sup> century. A significant assemblage of architectural stone, dominated by 12<sup>th</sup>-century pieces, was recovered, and there was also some evidence for the post-medieval re-use of the priory nave.

The two trenches situated at the southern extent of the churchyard of St Anthony's (Trench 4 and 5) also confirmed that the churchyard wall was rebuilt upon the medieval north wall of the main priory church. Both trenches revealed north-facing external buttresses of the main priory church. Trenches 4 and 5 also confirmed that there were no built structures (e.g., a northern cloister) abutting the northern exterior of the Conventual Church, suggesting that the inner precinct (which later became the churchyard) was perhaps always reserved as an open area from the medieval period onwards. Significant residual finds included three sherds of late Anglo-Saxon pottery.

Trench 6 investigated the current Church boundary wall to the west. This wall was found to cut a layer that overlaid a pit containing 16<sup>th</sup>- to 17<sup>th</sup>-century finds, and it can be concluded that the wall was relatively modern and has no relation to the priory church or its precinct.

Two final excavation trenches were located further north in the western part of the churchyard (Trench 9) and within Priory Park, west of St Anthony's Church (Trench 7). A north-south-aligned medieval wall that may well represent the western boundary wall of the inner precinct of the priory was identified in Trench 9. Trench 7, identified a complex sequence of intercutting soil features, including numerous pits and ditches, with a sequence of activity extending from the 14th to the 19th centuries. The stratigraphic sequence was very similar to the market/fair site excavated to the north-west of Abbey Street in 2012–13 (Flintoft and Davies 2013), suggesting that similar medieval and early post-medieval trade activities were occurring in the outer precinct on both sides of what is now Abbey Street. Further significant finds in Trench 7 included a 15th- to 16th-century cobbled surface and, beneath this, an east-west-aligned medieval wall that may well represent the northern boundary wall of the inner precinct.



# 2. EXCAVATION RESULTS

#### 2.1 Introduction

A total of four trenches were excavated, with the results discussed below by trench.

# 2.2 TRENCH 1

Trench 1 was the principal trench excavated within the scheduled area at the Priory. It measured 3 m x 7 m in plan, smaller than intended, but the extents were curtailed by the presence of root spread from the adjacent trees. The trench was targeted on the projected east end of the Conventual Church to test the potential for the presence of Lady Chapels or other ancillary structures, as well as to attempt to locate previous trenches from investigations in the 1940s and 1970s.

The lowest deposit encountered within the trench was a mid-orange-brown silty clay (1014) with a firm compaction. Its upper surface was at an average of 0.82 m below the modern ground level, and although it was initially thought to be the underlying substrate, flecks of charred and organic material suggest it may be the fragmentary remains of a relict subsoil overlying the unrevealed substrate.

The principal archaeological features relating to the medieval period, and potentially earlier, were all cut into or immediately above (1014), suggesting that if it is the remains of a relict land surface then it may relate to the time of the Priory's construction. The earliest cultural feature identified was the cut of a probable shallow pit [1012], itself truncated by the structural remains above. The surviving portion of the pit displayed steep, almost vertical, sides with a maximum surviving depth of 0.08 m and an apparently sub-rectangular plan form, though this interpretation is tentative. The fill of the pit (1013) comprised a relatively compact mid-brown clayey silt with no notable inclusions, artefacts or ecofacts.



Figure 3 View south-west across the excavated trench showing the remains of the buttress against the trench section, the road make-up at the back of shot, and the substantial unexcavated accumulation deposit (1004) along the near section. Scales 2 x 1 m





Figure 4 Partially excavated earlier pit feature [1012] cut by the compacted foundation fill of the buttress to the right. Scale 0.2 m

Cutting through the earlier pit was the foundation cut [1010] for the semi-collapsed remnants of a stone buttress (1009). The foundation cut largely followed the outline of the collapsed stone above, though with some irregularities to the edge, and was packed with a compact light brown clay-rich fill (1011) which included degraded mortar fragments and poorly sorted sub-angular pebbles. Significantly, fragments of disarticulated human bone—present in a number of other contexts within the trench—were recovered from the fill of the foundation cut, suggesting that the area had already been in use as a graveyard prior to the construction of the buttress, and therefore the extension which this structure represents is a later development in the life of the Prior rather than contemporary with its construction. In addition, a single sherd of possible Iron Age or Romano-British pottery was recovered from (1011), though given the stratigraphic context this must be considered residual.

The buttress foundation itself had lost most of its form to collapse, though the angular form of the northern corner could still be discerned. The surviving elements of the buttress comprised a mix of angular stones of different sizes—largely comprising magnesian limestone but also including Mansfield red dolomitic sandstone—and clearly represented the rubble core of a substantial stone-built structure. The original position of facing stones was shown in the outline of a robber cut [1016] and clay-rich backfill (1017) visible in the adjacent trench section. The position and angle of the buttress in relation to the projected outline of the Conventual Church indicates that it most likely sprung from a single Lady Chapel extending from the east end of the church—either a corner buttress to a rectangular chapel or one of a series of emanating buttresses from an apsidal-ended chapel.

The period between the disuse of the Priory (perhaps best illustrated by the robbing of the facing stones) and the modern features identified higher in the stratigraphic sequence was represented by a substantial (maximum 0.61 m thickness) accumulation of mid-red-brown clayey silt (1004) observed across the entire trench. Whilst there had clearly been some element of natural accumulation of this deposit, it is possible that it also included periods of intentional ground build-up or dumping though evidence of lensing was not visible within the section. The majority of disarticulated human bone recovered from the trench came from deposit (1004). The breakdown of the human bone assemblage is discussed in more detail below, but the volume and nature of the bone suggests the presence of a long-lived and regularly disturbed graveyard in the vicinity. In addition, the long-term nature of





Figure 5 Remaining elements of the buttress's rubble core, with the robber cut for the facing stones visible as a change in texture and inclusions in the section to the right of the stones. Scale 1 m

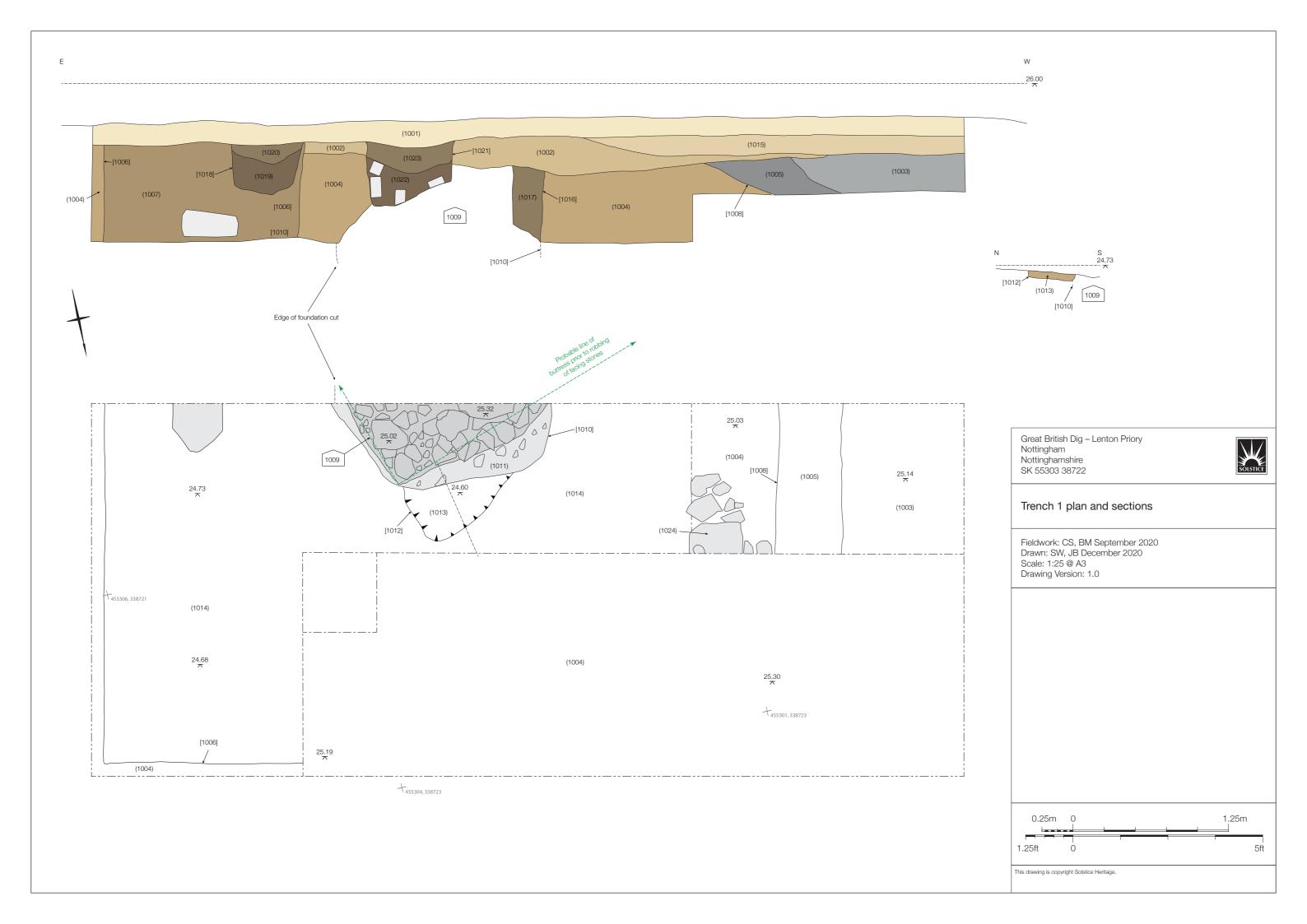
this deposit is well illustrated by the range of pottery finds, which span from the 12<sup>th</sup> century through to the mid-19<sup>th</sup> century, and the only find of dressed stone on site—a fragment of small gritstone column.

Between the post-medieval accumulation deposit (1004) and a spread of modern levelling material (1002), the construction of a trackway or road was identified at the west end of the trench, essentially paralleling the current pathway between Old Church Street and Priory Street. The observed sequence comprised a shallow cut [1008] into (1004), an angled dump of dark brown silty clay (1005) containing broken brick and poorly sorted angular chunks of rock, and a hard compacted levelling layer (1003) of crushed stone in a clay matrix to carry the road surface. The full width southern extension of Old Church Street is shown extant on the 1889 Ordnance Survey mapping, and so these deposits must have been laid down at least in the 19th century.

A thin lens of dark brown material (1002) had been imported or had accumulated to the east of the line of the 19th-century road, capping the post-medieval deposit (1004) and partially overlying the road's curb material (1005). This was in turn cut by several modern interventions. The most notable of these modern features was the large rectangular cut [1006] of the excavation trench dating to the late 1970s and described above. The backfill of the earlier trench (1007) comprised a mid-brown fine silty sand with lumps of orange-brown clay and a mixture of fragmented mortar and small stones.

Cut into the top of the excavation backfill and the underlying deposits were two substantial postholes [1018; 1021], each containing a notable split between a packing of stones and broken bricks (1019; 1022) and a looser upper fill with a loamier matrix (1020; 1023). Given their position within the observed stratigraphy, these two features almost certainly represent the line of a modern fence or railing. A subsoil (1015) had accumulated above the road deposits at the western end of the trench, and the whole sequence within the trench was capped with the modern topsoil and turf horizon (1001).





# 2.3 TRENCH 8

A trench measuring 1.9 m in width and 4.5 m in length was excavated to the south of Gregory Street, situated to the north-west of Priory Church (Figure 7). It was situated to further investigate the enclosure surrounding the Priory Church graveyard and potential remains relating to the Martinmas Fair fairground.

The trench was excavated through a friable, orangey-brown sandy topsoil with occasional small angular stones (8001), that measured an average of 0.2 m in thickness. Immediately below the topsoil was a firm greenish grey sandy clay (8002) with occasional small, rounded stones and CBM inclusions, which measured an average of 0.6 m in thickness. Directly underneath was a friable black sand (8003), which measured 0.28 m in thickness and included a high concentration of CBM. The deposits observed were identified as the probable demolition material originating from the cottages of Mart Yard, that previously stood to the south of Gregory Street—as identified on the Ordnance Survey map of 1884.

#### 2.3.1 GENNAL OR BACK ALLEY

Directly below (8003) were the remnants of a gennal (Figure 8) and the northern section of outhouses that once stood on the southern side of Gregory Street. The gennal comprised a brick surface  $\{8004\}$  which measured 0.72 m in width and 3.46 m in length as observed. The bricks—custom-made blue paviours which measured 260 x  $130 \times 55$  mm ( $10^{1/4} \times 4^{1/8} \times 2^{1/8}$ ")—were laid as stretchers which were bonded through bedding-down into a sand deposit beneath. The bricks of the gennal were aligned in a north-north-east to south-south-west orientation, except at their western side where three skins were arranged in a north-north-west to south-south-east alignment which formed a small gulley against wall  $\{8005\}$ . All the bricks had a diamond pattern imprinted into their face, except for the centre line of the 'channel', which was smooth. The exterior skins of the gulley were slightly inclined inwards, with the central skin set at a lower elevation to create a drainage channel.



Figure 7 Trench 8, facing south-east and showing the surviving Victorian and early 20th-century levels. Scale 2 x 1 m





Figure 8 The brick-laid surface of the gennal can be seen against the far side of the trench. Scale 1  $\times$  1 m



Figure 9 The foundations and floors of the outhouses can be seen to the right. Scale 2 x 1 m  $\,$ 



#### 2.3.2 OUTHOUSE WALLS AND FLOORS

Wall {8005} was constructed of red brick—which measured 240 mm by 110 mm by 60 mm  $(9^3/8 \times 4^3/8 \times 2^3/8'')$ — of which three courses remained extant. The width of the wall was two skins thick, and the bricks were laid in a stretcher bond. The size and standardised regularity of the bricks within the wall fits well with a late 19th-century date. This wall, which was aligned north-east to south-west, formed the front wall of the outhouses (Figure 9) and abutted the bricks {8004} that formed the floor of the gennal.

The floor remnants of the outhouses observed along the south-western side of the trench were constructed of brick and flagstone and were immediately overlain by the demolition material (8003) from the cottages. A flagged stone (8013), measuring 400 x 440 x 60 mm, represented the westernmost floor element in the trench and was bounded to the south by wall {8006} and to the east by a brick-built plinth {8012}. The plinth was constructed of red brick, measuring 230 x 110 x 60 mm ( $9^{1}/_{4}$  x  $4^{3}/_{8}$  x  $2^{3}/_{8}$ "), and may have been part of a support structure, possibly adjacent to a door.

Wall {8006} was constructed of similar red brick to the other structural elements within the trench—measuring 240 x 110 x 60 mm ( $9^{3}$ /<sub>8</sub> x  $4^{3}$ /<sub>8</sub> x  $2^{3}$ /<sub>8</sub>")—of which a single course remained. The width of the wall was two skins, and the bricks were laid as stretchers on a bed and bonded by a strong orange-cream mortar. This wall formed a dividing or internal wall of the outhouses and abutted wall {8005}.

To the south of wall {8006} was another internal floor/surface (8008) of an outhouse, which was constructed of a single course of red bricks in stretcher, measuring  $240 \times 110 \times 60 \text{ mm}$  ( $9^3/_8 \times 4^3/_8 \times 2^3/_8$ ")—laid flat as stretchers. The bricks, which were bonded by a strong, grey-cream mortar, were also capped by a light grey concrete screed to form a flat floor. Surface {8008} was probably the same as {8007}.

#### 2.3.3 FLOOR FOUNDATIONS

A compact, dark brown sand and mortar deposit (8011), which measured 0.3 m in width, 0.58 m in length and 0.08 m in thickness, underlay the floor surface {8008}. This was a construction foundation bounded by walls {8005} to the east and {8006} to the north.

Immediately below the red brick floors {8007} and {8008} was a deposit of friable black sand/clinker (8009) with a high concentration of stone and CBM inclusions, which measured 0.62 m in width by 2 m in length by 0.08 m in thickness, as observed. The stone and CBM fragments appear to have been laid flat and then filled around and compacted down to form a firm foundation onto which the brick floors were laid.

Immediately to the north of floor surface {8007}, a compacted, grey-brown sand and mortar (8010) deposit, measuring 0.36 m in width by 0.6 m in length and 0.02 m in thickness, underlay the surface. This was a construction foundation for floor {8007} and was bounded by wall {8005} to the east.

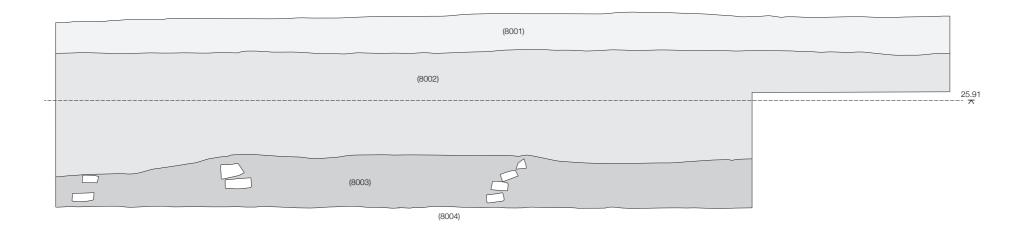
# 2.4 Trench 10

Trench 10 comprised a 1 x 1 m test pit in the front garden of No. 14 Old Church Street, to the north of the projected east end of the Priory's Conventual Church. The uppermost deposit comprised a compact, dark greyish, brown clayey silt topsoil (10000) that measured 0.18 m in thickness. The topsoil contained dumped material, most likely resulting from the construction of the adjacent house or the demolition of 19<sup>th</sup>-century or earlier buildings nearby. The topsoil within the trench contained a mix of residual finds including a fragment of Roman greyware.

Immediately underneath the topsoil was a friable, dark brown to black, sandy silt (10001) that measured between 0.16–0.20 m in thickness. The deposit contained a high concentration of animal bone from various domesticated species, degraded oyster shells, as well as extensive charcoal inclusions, coal and other burning residues. Some charcoal was observed within the marrow cavity of the bones. This deposit of material was suggestive of 19<sup>th</sup>-century refuse and fire rake-out.

An east-to-west-aligned service trench [10003] was observed at the western end of the trench. The cut of the trench measured *c*. 0.2 m in depth and contained a large, glazed sewer/waste pipe that was surrounded by a compact mid-greyish brown sandy silt (10002). The trench and contents most likely date to the 1930s when the house was constructed.







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# Trench 8 plan and section

Fieldwork: CS, BM September 2020 Drawn: SW, JB December 2020 Scale: 1:20 @ A3 Drawing Version: 1.0



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Figure 11 Trench 10 post-excavation, facing north. Scale 1 x 1 m

Immediately below deposit (10001), a soft layer of mid-yellowish brown, clayey silty sand (10004) was observed. The deposit included an animal bone fragment and a piece of tile of uncertain, though possibly pre-19<sup>th</sup> century, date. The formation process of the deposit was uncertain, either resulting from natural alluviation or a purposeful levelling event. The deposit contained frequent dark staining which had leached from the overlying deposit (10001).

Immediately beneath deposit (10004) was a compact, yellow brown layer (10005) of sandstone and crushed sandstone in a sandy matrix that measured c. 0.12 m in thickness. Frequent inclusions of dark, charcoal rich material which were observed within this deposit had either leached through (10004) from (10001) above or had been transferred through root action or bioturbation.

Directly beneath deposit (10005) was a soft, mid-reddish brown, clayey silty sand (10006) which measured *c*. 0.4 m in thickness. The deposit continued below the limit of excavation and was possibly the result of alluviation, suggested by the inclusion of rounded pebbles and the historical proximity of the River Leen.

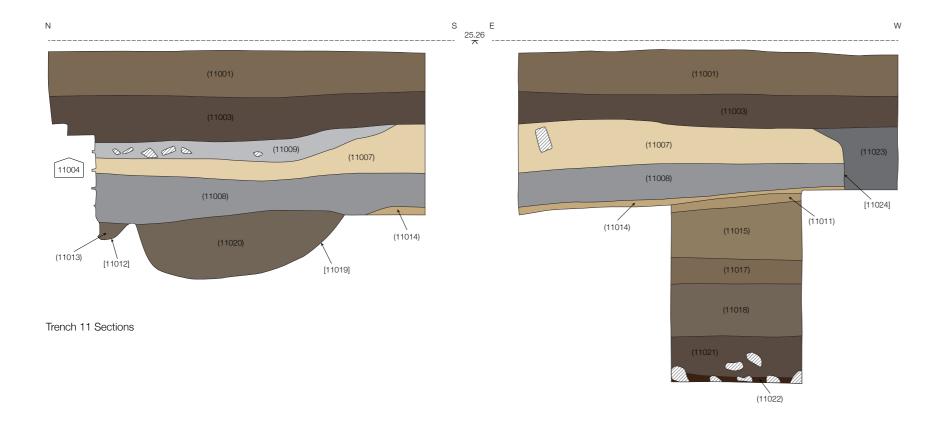
## 2.5 Trench 11

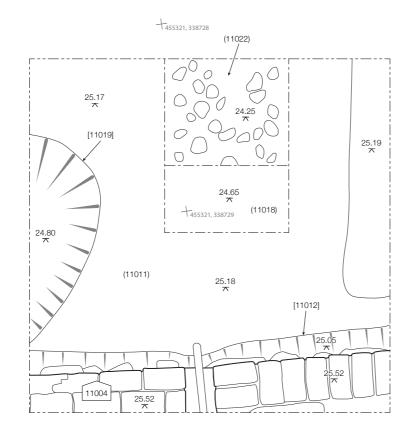
Trench 11 measured 2 m  $\times$  2 m and was located within the back garden of 25 Old Church Street, to the east of the projected location of the Priory's Conventual Church.

At the base of the trench a layer of packed, small, rounded pebbles was observed, set into a firm grey silty clay matrix (11022). This roughly level layer of cobbles—measuring on average 0.07 m in diameter—was revealed below a mid-grey silty clay trample layer (11021) found to contain only pottery indicative of an 11<sup>th</sup> to 12<sup>th</sup>-century date with no later material mixed in, as was the case with all but one other context on the site containing medieval pottery. The dating of trample layer (11021) suggested the pebbled surface to have once functioned as a medieval trackway or yard surface.

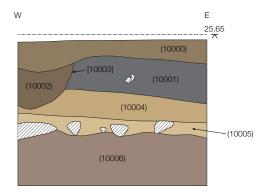
Above trample layer (11021), a thick clayish silt deposit (11018), measuring approximately 0.28 m thick, was revealed. It was interpreted as a possible cultivation layer, likely to have been in use after the pebbled surface







Trench 11 Plan



Trench 10 Section

Great British Dig – Lenton Priory Nottingham Nottinghamshire SK 55303 38722



# Trenches 10 and 11 plan and sections

Fieldwork: CS, BM September 2020 Drawn: SW, JB December 2020 Scale: 1:20 @ A3 Drawing Version: 1.0



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Figure 13 Post-medieval topsoil (11011) and wall {11004}, facing north. Scale 1 x 1 m  $\,$ 



Figure 14 Detail of wall {11004}, facing north. Scale 1 x 1 m





Figure 15 Trench 11 post-excavation, facing east. Scale 1 x 1 m

had fallen out of use and been abandoned. A radiocarbon date obtained from a charred grain from this context returned a date of cal AD 892–994 (95.4% probability). However, given the dating of the layer immediately below as 12<sup>th</sup> century, it appears that the charred grain is residual, perhaps worked in during cultivation. Additional botanical macrofossils recovered from this deposit included rye, oat, barley, onion couch grass (a weed associated with cultivation), evidence of nearby field maple and birch trees and three discarded plum stones, as well as the recovery of a single oyster shell.

A thick, even, deposit of crushed sandstone fragments and lime mortar fragments within a grey fine clayish silt matrix (11017), measuring 0.14 m thick, was revealed above (11018) and was possibly related to quarrying or robbing of the priory complex after its dissolution in 1536–8.

A well-developed, mid-grey brown, sandy silt subsoil (11015), measuring approximately 0.2 m thick, overlay (11017) and could have been related to post-medieval cultivation. Above this was a buried topsoil (11011), also measuring around 0.2 m thick (Figure 13).

A sub-ovoid pit [11019] filled with grey, sandy silt, and construction dump material (11020) was revealed cutting into a post medieval topsoil layer (11014). Its fill (11020), was a loose, grey, sandy silt, containing pottery indicative of a late 18<sup>th</sup>- to mid-19<sup>th</sup>-century date, along with a sherd of residual medieval pottery. This pit could relate to further ground clearance in order to construct the outbuildings that once stood on the site.

Contexts [11004], (11005–11009) and (11012–11014) all relate to the construction of the cottage and its outbuildings, which are visible on the 1st edition OS 1899/1900 map of Nottingham.

Cutting through the post-medieval topsoil (11011) was a  $45^{\circ}$  angled construction cut [11012] for an east-to-west-aligned wall {11004} (Figure 14), filled with a brown black, sandy silt fill (11013). It was abutted by a cream, lime mortar trample layer (11014), created during the construction of the cottage and outbuildings in the  $19^{th}$  century. Wall [11004] measured 0.23 m wide and consisted of two skins in irregular bond. Five courses remained and were mortared with a thick cream lime mortar. The bricks individually measured  $235 \times 115 \times 75 \times 10^{14} \times 4\frac{1}{2} \times 3^{\circ}$ ). The brick section was built onto an irregular foundation of roughly hewn sandstone frag-



ments. Whether the stone in this wall represented reused stone from the Priory is unknown. The wall continued beyond the limit of excavation and, based on its alignment, is likely to be associated with the brick walls that form the current property's garden walls, which together would have once formed a square outbuilding. A cut, [11005], was observed within the brick wall for a water pipe. It was likely to have been cut through the wall after it had been constructed, as suggested by smashed and damaged brickwork.

Deposits (11007) and (11009) were interpreted as levelling layers, used to build up a solid foundation on which to lay a floor surface within the outbuilding. They ranged from sandy rubble to ash and clinker in composition.

A loose levelling layer (11003) was observed capping the remains of wall [11004], which was deposited after its demolition and found across the entirety of Trench 11. It contained a number of pottery sherds, indicating a mid-to late 19<sup>th</sup>-century date, with residual medieval and post-medieval wares also present, along with glass bottles. This context was covered by an imported mid-brown/ grey sandy clay garden topsoil layer (11001).



# 3. POTTERY

#### 3.1 Prehistoric and Roman Pottery

Jeremy Evans (York Archaeology), Sarah Percival (York Archaeology) and Dr C.G. Cumberpatch

Four sherds were presented for examination:

- Trench 1 (1004): A handmade shelly body sherd with a grey core and orange-brown surfaces, with common shell c. 0.3–3mm, perhaps mid- to Late Iron Age or possibly early Roman. Weight 3 g.
- Trench 1 (1004): A handmade shelly jar(?) rim fragment with a grey core and orange-brown surfaces. Fabric as above, perhaps same vessel. Rim fragment is rising and tapering. Not illustratable. Possibly mid- to Late Iron Age or possibly early Roman. Weight 5 g. Sherd represents c. 3% of a vessel diameter c. 180 mm
- Trench 1 (1011): A single sherd in coarse, quartzite tempered fabric. The sherd is comparable to Late
  Bronze Age to Early Iron Age pottery found locally at Bingham (McSloy 2014, 84) and Clifton Park and
  Ride site (Percival 2014). The fabric contains moderate to common, medium, white angular quartzite in
  a fine quartz rich clay matrix. Weight 8 g.
- Trench 10 (10000): A necked greyware jar with a beaded rim in a Roman greyware, with a mid-grey core, margins and surfaces, with occasional moderate sand (c. 0.3 mm) and common fine sand (>0.1 mm). Not illustratable. Weight 10g. Sherd represents c. 1% of a vessel of uncertain diameter.

Two sherds of earlier pottery were also included in the assessment of the medieval and later pottery (see below), and the note on this sherd has been included here.

- Trench 1 (1011): Fragmentary body sherd appearing to be of later prehistoric date.
- Trench 10 (10000): An abraded sherd of Roman Greyware which was most probably residual in a later context as it was associated with a sherd of 19<sup>th</sup>-century Cane Coloured ware.

## 3.2 MEDIEVAL AND LATER POTTERY

Dr C.G. Cumberpatch

# 3.2.1 Introduction

The pottery assemblage from Lenton Priory consisted of 78 sherds of pottery weighing a total of 866 grams and representing a maximum of 72 vessels. The data are summarised in Table 1 below. A small quantity of other items (ceramic wall tile fragments and bone) was included with the pottery, and these are listed in Table 2.

#### 3.2.2 THE POTTERY

Medieval pottery was identified in contexts (1004), (1013), (10002), (11003), (11020) and (11021) and was classified with reference to the provisional local type series (Nailor and Young 2001). In all cases except those of contexts (1013) and (11021) the medieval pottery was associated with later wares suggesting that it was residual in later, 19<sup>th</sup>-century, contexts. Context (11021) contained a small group of 11<sup>th</sup>- and 12<sup>th</sup>-century wares, one of them apparently hand-made (rather than wheel-thrown) alongside two sherds of Nottingham Splashed ware. Context (1013) contained just two small sherds (totalling 2 grams) of Nottingham Coarse Sandy ware, a type with a very broad date range spanning the 12<sup>th</sup> to 15<sup>th</sup> centuries. The remaining medieval wares spanned the medieval period, suggesting an extensive history of activity on the site. It should be noted that the very long date ranges of some types (notably Nottingham Coarse Sandy ware) limit any attempt to narrow down this activity any more closely. Context (1004) produced two sherds of a Shell Tempered ware, including one rim fragment. These were most probably of medieval date although a late Roman date cannot be ruled out.

Post-medieval pottery was notable by its absence, but early modern wares, dating to the period between *c*. 1720 and 1840, were slightly better represented, with sherds of formal tableware (Pearlware and Edged ware) from contexts (1001), (11013) and (11020). Context (1001) contained a mixed group of wares with the early modern types probably residual. In contrast, context (11020) contained only early modern wares alongside a single sherd of residual medieval pottery, perhaps suggesting that this context, the fill of a post hole, was of early



modern date. The base of a cup or tea bowl from this context was notable for the maker's mark on the underside ('Semi-China' within a decorative border) although unfortunately it was not possible to identify the manufacturer, the term 'semi-china' being in common use in the later 18<sup>th</sup> and 19<sup>th</sup> centuries.

Context (11013) contained only a single sherd, the rim of an Edged ware plate, an insecure basis upon which to base the dating of the feature.

It is possible that some of the utilitarian wares were of early modern date (see, for example, contexts (1004) and (11010)), but dating such wares is difficult in the absence of any comprehensive study of this important but neglected aspect of the pottery industry.

The remainder of the assemblage was of 19<sup>th</sup>- and 19<sup>th</sup>- to early 20<sup>th</sup>-century date, as summarised in the data table. The range of wares was not unusual, with utilitarian, kitchen and tablewares all represented.

Utilitarian wares included not only the Brown Glazed Coarsewares but also sherds from flowerpots (contexts (1004) and (1007)), jam jars, bottles and flagons (contexts (1002) and (1007)) in various kinds of stoneware. Kitchenwares included the white-slipped Cane Coloured wares (large kitchen bowls; contexts (1001) and (1007)), Whitewares and Cane Coloured wares (pie dishes; contexts (1002) and (11003)) with a probable stoneware napper or loaf pot from context (1007).

The remaining pottery included a variety of tablewares including transfer printed, slip-banded, colour glazed and plain wares in Whiteware and Bone China bodies. These were all typical of the recent period.

#### 3.2.3 DISCUSSION

The assemblage proved to be too small for any definite conclusions to be drawn from it, beyond indicating a long, if perhaps discontinuous, history of activity on and around the site. Despite the small quantity of medieval pottery present (and its largely residual nature) its presence suggests activity throughout the medieval period.

The lack of post-medieval material is unusual but may perhaps be explained by the small size of the assemblage rather than by postulating the abandonment of the site during this period.

The early modern and recent pottery was typical of the period (although the absence of both White Salt Glazed Stoneware and Creamware is unusual) and, while the absence of vernacular tablewares is both unusual and unexpected, it would be unwise to draw any definite conclusions from this fact, again due to the small size of the assemblage.



Trench	Trench Context	Туре	Š	Wt	EN	Part	Form	Decoration	Date range	Notes
<b>←</b>	1001	Brown Salt Glazed Stoneware	-	6	1	Rim	Bowl	Clubbed rim w/ grooves below	C19th	
_	1001	Brown Salt Glazed Stoneware	<del></del>	9	_	BS	Hollow ware	Rouletted wavy lines ext	C19th	
-	1001	Cane Coloured ware	<del></del>	9	_	Recessed base	Bowl	White slip int only	MC19th – EC20th	Part of a kitchen bowl
<b>—</b>	1001	Cane Coloured ware	<del></del>	3	_	BS	Bowl	White slip int only	MC19th – EC20th	Relief moulding ext
₩	1001	Colour Glazed ware	<del>-</del>	12	_	Rim	Plate/dish	Dark blue int, turquoise ext w/ yellow rim	C19th – EC20th	Wide flat rim w/ beaded lip
₩	1001	Edged ware	-	33	-	Rim	Plate	Moulded rim w/ dark blue edging	E – MC19th	Flaked internally
<b>—</b>	1001	Pearlware?	-	<del></del>	_	BS	Flake	U/Dec	LC18th – EC19th	Flaked, no ext surface
<del>-</del>	1001	Stoneware	<del></del>	71	<b>—</b>	BS	Flagon	Green glaze int & ext	C19th – EC20th	
<del>-</del>	1001	TP Whiteware	3	26	<del>-</del>	Recessed base	Bowl?	Blue design inside base; leaf & foliage	M – LC19th	Use-wear on internal surface
<b>—</b>	1001	Whiteware	<del></del>	13	_	Recessed base	Bowl?	U/Dec	M – LC19th	Crazed & discoloured
<del>-</del>	1002	Bone China	-	3	<del></del>	Rim	Flatware	Gold line on top of rim	LC19th – EC20th	
<del>-</del>	1002	Brown Salt Glazed Stoneware	_	œ	_	BS	Hollow ware	Brown glaze ext; dark mottled green int	C19th	
<del>-</del>	1002	Brown Salt Glazed Stoneware	_	5	_	BS	Hollow ware	Part of a low-relief roulet- ted band ext	C19th	
<del>-</del>	1002	Stoneware	<del>-</del>	12	<del>-</del>	BS/shoulder	Bottle	Dull green salt glaze int & ext	C19th	
<del>-</del>	1002	Stoneware	_	53	<del>-</del>	Rim	Bowl?	Brown glaze ext, green glaze int	C19th	Odd form; flat-topped clubbed rim
<del>-</del>	1002	TP Whiteware	-	_	<b>—</b>	BS	Hollow ware	Willow?	M – LC19th	
<del></del>	1002	Whiteware	<del>-</del>	30	<del>-</del>	Profile	Pie dish	U/Dec	M – LC19th	Deep pie dish w/ a flat everted rim
<del>-</del>	1002	Whiteware	<del></del>	4	_	BS	Jar?	U/Dec	M – LC19th	
<del></del>	1004	Bone China	<del></del>	<del></del>	<del></del>	BS	Cup/bowl	U/Dec	C19th	Small, thin sherd
<b>—</b>	1004	Brown Glazed Coarseware	<del>-</del>	<b>∞</b>	<del></del>	BS	Bowl	Red slip int under brown glaze int	C18th – C19th	Early BGCW?; hard fabric w/red & white streaks & common quartz & red grit



Trench	Trench Context	Туре	Š	Wt	EN	Part	Form	Decoration	Date range	Notes
<b>←</b>	1004	Nottingham Coarse Sandy ware	<del>-</del>	3	-	BS	Hollow ware	U/Dec	LC12th – C15th	Even orange fabric w/ abundant quartz & moderate round red grit
-	1004	Nottingham Coarse Sandy ware type	<del></del>	6	<del></del>	Rim	Bowl	U/Dec	LC12th – C15th	Wide everted rim w/a dished inner surface; buff to white sandy fabric
<del></del>	1004	Nottingham Reduced Green Glazed ware type	2	_	2	BS	Hollow ware	Thick dark green flaky glaze ext	LC13th – LC15th	Oxidised throughout
<b>←</b>	1004	Nottingham Splashed ware – Sandy	-	19	-	Base	Hollow ware	Blue & red-brown slip bands ext	MC12th – E/ MC13th	Flat base
<b>—</b>	1004	Shell Tempered ware	<del></del>	2	<b>—</b>	Rim	Hollow ware	U/Dec	Medieval	Slightly vesicular
<del></del>	1004	Shell Tempered ware	_	4	<del></del>	BS	Hollow ware	U/Dec	Medieval	
<del></del>	1004	Slip-banded Whiteware	<del>-</del>	2	-	Base	Hollow ware	Blue & red-brown slip bands ext	C19th	
<del></del>	1004	Unglazed Red Earthenware	<del></del>	5	_	BS	Hollow ware	U/Dec	MC19th – EC20th	
<b>—</b>	1007	Brown Glazed Coarseware	<del>-</del>	22	<del></del>	BS	Pancheon	Brown glaze int only	C19th	Fine, even dark red fabric
<del>-</del>	1007	Brown Salt Glazed Stoneware	<del></del>	12	-	BS	Hollow ware	Brown salt glaze ext; odd surface int	C19th	
<b>—</b>	1007	Cane Coloured ware	3	31	_	Ring foot base	Bowl	U/Dec	C19th	
<del>-</del>	1007	Cane Coloured ware	<del>-</del>	6	<del>-</del>	Rim	Bowl	White slip int; relief-moulded ext surface	C19th	Crazed & discoloured; kitchen bowl
<del>-</del>	1007	Stoneware	<del>-</del>	40	<del>-</del>	Rim	Loaf pot?	Brown salt glaze ext; grey lead glaze int	C19th	Flat-topped bevelled rim
<del></del>	1007	Stoneware	_	4	<del>-</del>	BS	Bottle	Green lead glaze int & ext	MC19th – EC20th	
<b>←</b>	1007	Stoneware	<del>-</del>	4	<del>-</del>	BS	Jam jar	Narrow fluting ext; ironwash band below rim	MC19th – EC20th	
<b>←</b>	1007	TP Whiteware	<del>-</del>	_	<del>-</del>	Flat base	Dish/bowl	Pale blue TP design int & ext	M – LC19th	Crazed & discoloured
<b>←</b>	1007	TP Whiteware	<b>—</b>	_	_	BS	Hollow ware	Green transfer-printed design ext	M – LC19th	
<del></del>	1007	Unglazed Red Earthenware	_		_	Perforated base	Flowerpot	U/Dec	MC19th – EC20th	
-	1007	Unglazed Red Earthenware	<del></del>	_	_	Rim	Flowerpot	U/Dec	MC19th – EC20th	Clubbed rim w/a pointed lip



Trench	Context	Туре	9 Z	Wt	EN	Part	Form	Decoration	Date range	Notes
<b>←</b>	1007	Whiteware	<del>-</del>	2	<del>-</del>	Rim & handle	Cup	Hand-painted red lines around int & ext of rim	LC19th – EC20th	
<del></del>	1011	Hand-made Gritty ware	<b>←</b>	8	<del>-</del>	BS/Flake	UND	U/Dec	PRIA?	A hard grey body w/ common, sub-rounded quartz up to 3mm
-	1013	Nottingham Coarse Sandy ware	2	2	2	BS	Hollow ware	U/Dec	LC12th – C15th	Small sandy sherds; slightly burnt & discoloured
10	10000	Cane Coloured ware	_	16	_	BS	Hollow ware	U/Dec	C19th	
10	10000	Greyware	<b>—</b>	6	_	Rim	Jar	U/Dec	Roman	Heavily abraded everted rim
10	10002	Bone China	-	3	_	Footring base	Plate	U/Dec	C19th	
10	10002	Nottingham Reduced Green Glazed ware type?	<del></del>	15	<del></del>	BS	Hollow ware	Mottled green glaze ext	LC13th – EC15th	Could be NOTGL
10	10002	TP Whiteware	<del></del>	3	<del></del>	BS	Flatware	Willow int	M – LC19th	
=======================================	11003	Bone China	<del></del>	4	<b>—</b>	Handle	Cup	U/Dec	C19th	
11	11003	Brown Glazed Coarseware	2	26	2	BS	Pancheon	Brown glaze int only	C19th	Fine sandy red fabric
<del></del>	11003	Brown Salt Glazed Stoneware	<del>-</del>	20	<del>-</del>	Base	Bottle	Pale brown mottled salt glaze ext, grey int	C19th	
Ξ	11003	Brown Salt Glazed Stoneware	<del></del>	19	<del>-</del>	Base	Hollow ware	Dark brown glaze int & ext	C19th	
=======================================	11003	Cane Coloured ware	<del>-</del>	12	<b>—</b>	Flat base	Pie dish	U/Dec	C19th	
<del>-</del>	11003	Cane Coloured ware	<del></del>	9	<del></del>	Base	Pie dish	Part of a stamped maker's mark on underside	C19th	
<del></del>	11003	Nottingham Coarse Sandy ware type	-	5	-	BS	Hollow ware	U/Dec	LC12th – C14th	Grey core w/ buff-orange int & ext margins; fine sandy fabric
1	11003	Nottingham Early Green Glazed ware	2	31	2	BS	Hollow ware	Bright green glaze ext	E – MC13th	Friable dark green glaze ext; Hard, dense, fine reduced fabric w/ moderate fine quartz
1	11003	Sponged ware	_	2	<del></del>	BS	Hollow ware	Blue sponging ext	c.1830+	
=	11003	TP Bone China	<b>←</b>		<del></del>	Ring foot base	Dish?	U/ID TP design int; grid w/floral elements	C19th	



Trench	Trench Context	Туре	o Z	Wt	EN	Part	Form	Decoration	Date range	Notes
1	11003	TP Whiteware	-	3	<del>-</del>	Rim	Cup/bowl	Poorly printed cellular pattern int & ext	M – LC19th	
11	11003	Whiteware	-	2	<del>-</del>	Rim	UAD	Relief moulded pattern int w/ painted highlights	M – LC19th	
<del>-</del>	11010	Brown Glazed Coarseware	<del></del>	35	<del></del>	BS	Bowl/pancheon	Thin red slip int under brown glaze int; thin red slip ext	C18th – EC19th	Pale orange fabric w/ moderate, poorly sorted rock frags up to 2mm, occ larger
11	11013	Edged ware	_	8	<del>-</del>	Rim	Plate	Wavy rim w/ moulded lip & blue feather-edge paint	LC18th – EC19th	Finely finished; Pearlware type
11	11020	Edged ware	_	2	<del>-</del>	Rim	Plate	Wavy edge w/ moulded edge & blue paint	LC18th – EC19th	
	11020	Nottingham Coarse Sandy ware type	-	15	<del>-</del>	BS	Hollow ware	U/Dec	LC12th – C15th	Slightly coarser than typical & w/ sparse muscovite
<del>-</del>	11020	Pearlware	_	9	_	BS	U/ID	U/Dec	c.1780 – c.1840	
=	11020	TP Pearlware	<del></del>	12	<del>-</del>	Ring foot base	Cup/bowl	U/ID TP design ext & in centre int	c.1780 – c.1840	Maker's mark on underside; Semi China in a square cartouche
Ε	11021	Hand-made Sandy ware	<del>-</del>	_	<del>-</del>	BS	Hollow ware	U/Dec	MC11th – C12th	Grey body w/ dull orange int margin; abundant round quartz & rock frags w/ fine muscovite
1	11021	Nottingham Splashed ware type	<del></del>	19	<del></del>	Rim	Jar/pitcher	U/Dec	C12th	A small square clubbed rim on a tall dished rim, slightly everted
11	11021	Nottingham Splashed ware type	3	20	<del>-</del>	BS	Hollow ware	A small spot of splashed glaze int	C12th	Grey core w/dull orange int & ext margins; sandy texture
		Total	78	998	72					

Table 1 Pottery catalogue



Trench	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	1013	Bone	1	2	1	Fragment	N/A	N/A	Undated	Abraded bone fragment
11	11003	Wall tile	2	15	2	Frag- ments	Wall tile	White glazed tile	LC19 <sup>th</sup> – C20 <sup>th</sup>	
11	11003	Wall tile	1	7	1	Fragment	Wall tile	U/ID; no ext surface	LC19 <sup>th</sup> – C20 <sup>th</sup>	
11	11003	Wall tile	1	3	1	Fragment	Wall tile	Blue-green cur- vilinear printed design	LC19 <sup>th</sup> – C20 <sup>th</sup>	

Table 2 Catalogue of other materials



# 4. HUMAN BONE

Victoria Owen (York Archaeology)

#### 4.1 Introduction

A total of 131 fragments of commingled human bone were recovered from Trench 1 in the grounds of Lenton Priory from within four deposits (1001, 1004, 1007 and 1011). These remains were largely intermixed with faunal bone (discussed below) and are more likely associated with the background signature of the site and churchyard deposits.

## 4.2 METHODOLOGY

The material was processed as per standard post-excavation methodologies and analysed according to standards laid out by Buikstra and Ubelaker (1994), Schaefer *et al.* (2009) and Mitchell and Brickley (2017). Each element was weighed and assessed macroscopically before being assigned to broad element categories (skull, thorax, upper limb, lower limb). In most cases, specific element identification could be identified. These were recorded below in greater detail (Table 3).

Where possible, biological sex and age was assessed using standard macroscopic or metric methodology proscribed by Bass (2005), Buikstra and Ubelaker (1994), Schaefer *et al.* (2009), White (2000) and Schwartz (1995). Dentition was inventoried according to Buikstra and Ubelaker (1994). Dental attrition and pathology was assessed according to Brothwell (1968) and Hillson (1996).

## 4.3 Preservation

Skeletal preservation is determined by several factors, including age of deposit, ground conditions, post-depositional disturbance, individual age and sex, and element size. Preservation was assessed according to McKinley (2004) and ascribed into categories of excellent, good, moderate and poor. Excellent preservation would imply little post-depositional alteration of the bony element due to taphonomic cortical erosion or fragmentation. A large proportion of the disturbed remains from this collection were considered to have moderate to good levels of preservation which aided in specific element identification.

# 4.4 Demography

The assemblage of commingled human remains represented a broad age range of individuals, from infant to adult. Sexually diagnostic fragments of skeletal material, cranial and pelvic fragments (glabella, nuchal crest, pubic symphysis) and metric assessment of intact epiphyses suggest the presence of both adult male and adult female remains. The relatively limited sample size and confined nature of the evaluation precludes further assessment of sex prevalence and overall site demographics.

#### 4.5 OSTEOLOGICAL ANALYSIS

It was possible to positively identify 88.5% (n = 116) of the commingled and fragmentary remains recovered from the evaluation. The majority of the assessed skeletal material was derived from 2 contexts (1004) and (1007), which formed 87% (n = 115) of the total material. The remaining 13% was derived from contexts (1001) and (1011). The bulk of the assessed material comprised rib fragments (17.5% n = 23), cranial fragments (12.2% n = 16) and diaphyseal long bone fragments (tibia, femur, humerus) (12.2% n = 16). The remaining material comprised fragments of vertebral body, pelvis scapulae, ulnae, radii, bones of the hands and feet, and loose dentition (see Table 3 for a full inventory of remains).

## 4.6 MINIMUM NUMBER OF INDIVIDUALS

Calculation of a minimum number of individuals allows for a better understanding of palaeodemography and the wider context of the site (important as this could otherwise be obscured by the continual turnover of medieval and post-medieval burial grounds; however, it often vastly underestimates the true depositional rate). In the case of Trench 1, fragments suitable for MNI calculation were grouped by type, completeness and landmark visibility. Given the very limited sample size and heavy fragmentation of material included within this assessment,



traditional zoning methods (Knusel and Outram 2004) for the calculation of MNI (i.e., identification of recurring elements such as proximal left or right femur) could not be used for the calculation of a minimum number of individuals.

For the current assessment, this number was based on the presence of diagnostically male, female and infant remains when combined with the assessment of repeating skeletal elements. Repeating elements within the assemblage were constrained to the presence of adult right distal humerus (n = 2), infant right humeral diaphysis (n = 1), adult acromial portion of the scapula (n = 3). Assessment of the recovered material produced an MNI of at least 3 individuals.

The assemblage contained one diagnostically male individual (based on pubic symphyseal morphology), one diagnostically female individual (based on epicondylar width of the distal humerus), and one infant or perinatal individual (based on metric assessment of the pubis, which produced an age range of 0–3 months).

#### 4.7 PATHOLOGY

Pathological lesions were identified on 11 elements of fragmentary bone or dentition. In cases where diagnoses could be made, these followed operational definitions set out by Waldron (2009), and disease classifications following Ortner and Putschar (1981). In cases where pathological lesions could not be attributed to specific diagnostic criteria, the lesion types were described and broadly classified (i.e., traumatic, lytic, proliferative, arthritic, infectious, etc.), but no additional attempt to establish cause was made.

On average, the most common pathological changes noted within the disarticulated material were the presence of marked or uneven dental attrition, largely attributed to the antemortem loss of teeth which result in the overuse of remaining teeth for chewing or grinding. In some cases, this attrition was so severe that the pulp chamber was exposed. One carious lesion was identified on the distal approximal portion of a mandibular 4th premolar, along the line of the cementum-enamel junction (CEJ).

Successive hypoplastic groove defects were identified on a loose maxillary left canine, suggestive of several periods of arrested secretion of enamel matrix during crown development, commonly associated with extended periods of childhood illness.

Osteophytic new bone was identified less frequently on the articular facets of individual rib heads, consistent with age or lifestyle.

Significant osteoarthritic change was identified affecting the metacarpophalangeal and proximal interphalangeal joints of the right 3rd metacarpal and adjoining third proximal hand phalanx. This resulted in marked destruction and erosion of the joint surface, macroporosity and proliferation of bone along the joint margins. The positioning of the joint erosions suggest the individual also dealt with an inflamed flexor tendon affecting the proximal hand phalanx, which had resulted in flexion deformity and joint stiffness. It is possible that this pathological change has occurred secondarily as a result of trauma; however, this cannot be determined within a disarticulated assemblage.

The presence of post-traumatic arthroses was identified on the distal epiphysis of an adult right humerus, resultant from an unreduced traumatic dislocation (and probable fracture) of the ulnar olecranon posterolaterally from the olecranon fossa of the humerus. A large, rounded pseudo-joint, probably formed by the posteriorly displaced ulnar olecranon, was present within the area of the humeral trochlea and capitulum. Extensive osteophytic new bone was identified around the margins of the pseudo-joint, and marked eburnation was visible internally. The individual would not have been able to achieve full extension of the joint subsequent to the injury and may have struggled to keep the forearm stabilised or bear weight. This type of injury will also likely affect peripheral nerves causing pain, tingling and numbness in the forearm or fingers, and cause considerable localised pain.

All other descriptions of pathological lesions identified within the assemblage can be found below.

# 4.8 DISCUSSION AND CONCLUSIONS

The disarticulated human bone recovered from the trench is diagnostic of the general background signature of the later post-medieval churchyard site. In this instance, the material is formed within sub-soil and burial horizon deposits as part of the continual churning of the burial environment and intact inhumations for the excavation of



fresh graves. Churchyards such as these generally produce vast quantities of disarticulated bone dating from the medieval to post-medieval periods, and as such their presence within deposits associated with Lenton Priory are unsurprising. The limited nature of the evaluation means that the recovered skeletal remains are of little diagnostic value to the palaeodemography of the parishioners of the Priory Church of St Anthony.



Comments		Post depositional crushing defects, plantar surface	Photographed										
Pathology			Marked arthritic change to distal MCP. Destruction of most of the cortical joint surface with exposure of trabeculae. Some marginal lipping assiciated with changes to the joint contour, marked coalecesed porosity without eburnation. Possible rheumatic origin (sero-neg arthropathy).										
Measurements   Pathology													
Age	N/A Adult?	N/A Adult	Adult	N/A Adult	N/A Adult	N/A Adult	Perina- tal 0-3 months	Adult	Adult	N/A Adult	N/A Adult?	Adult	N/A Adult
Sex	N/A	₹ Z	₹ Z	Z/A	₹ Z	¥ Z	₹ Z	Ž Z	₹ Z	X X	₹ Z	₹ Z	₹ Z
Proximal, Distal, Shaft or Area	Distal metaphysis	Complete	Complete	Parietal fragment	Head, neck & partial shaft	Proximal end	Mostly complete	Head & part neck	Occipital, partial internal ocipital crest	Parietal fragment	Temporal, squa- mous portion	Caudal edge, partial shaft	C1, lamina and superior articular process
Side	~	Г	~	X X	~	_	~	$\simeq$	₹ Z	₹ Z	Š	~	₹ Z
Element	Humerus	1st meta- tarsal	3rd meta- carpal	Cranial	Rib	5th meta- tarsal	Pubis	Rib (10th or 11th)	Cranial	Cranial	Cranial	Rib	Vertebrae
Fragment Count	1	-	-	1	<del>-</del>	-	-	<del>-</del>	<b>—</b>	_	<del>-</del>	-	-
Weight(g)	18g	4g	78	5g	<u>p</u>	38		28	3g	3g	2g	2g	38
Context	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



Comments																
Pathology	Small enthesophte on transverse articular facet				Heavily worn, but masked by post depositional fragmentation											
Measurements   Pathology															EPI width: 52mm	
Age	N/A Adult	Adult	N/A Adult	N/A Adult	N/A Adult	Adult	Adult	N/A Adult	N/A Adult	N/A N/A	Adult	N/A Adult	N/A Adult	N/A Adult	Adult	N/A Adult
Sex	X X	Š	X X	¥ Z	₹ Z	F??	₹ Z	₹ Z	₹ Z	× X	₹ Z	₹ Z	₹ Z	₹ Z	F3	¥ Z
Proximal, Distal, Shaft or Area	Caudal edge, part shaft	small shaft frag- ment	Occipital planum	Temporal frag- ment	Root and partial crown	Frontal, glabella with metopic suture	Partial acromion only	Partial frontal sinus	Parietal, partial parietal strations	Partial shaft	Partial head	Poss. humeral shaft fragment	Posterior border and alae only	Cortical frags	Distal, metaphysis and epiphysis	Proximal L femur greater trochanter
Side	_	₹ Z	X X	¥ Z	~	₹ Ż	~	₹ Z	F.	₹ Z	₹ Z	₹ Z	₹ Z	₹ Ž	_	_
Element	Rib	Rib	Cranial	Cranial	Maxil- lary 1st incisor	Cranial	Scapula	Cranial	Cranial	Tibia	Humerus	Long	Vomer	Long bone?	Humerus	Femus
Fragment Count	-	<del>-</del>	_	<del>-</del>	<del></del>	<del></del>	<del>-</del>	<del>-</del>	<del>-</del>	<b>—</b>	1	<del>-</del>	<del>-</del>	2	<del>-</del>	2
Weight(g)	38	18	3g	2g	<u>7</u>	st >	<del>2</del>	<u>5</u>	<u>×</u>	1g	<18	21 8	<u>5</u>	<u>5</u>	34g	30g
Context Weight(g)	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



Comments	Pubic symphyseal surface phase 5 (34-86)											
Pathology												Moderate tooth wear and calculus build up, hypercementosis at root apex
Measurements												
Age	M-L Adult	Adult	Adult	Adult	Adult	Adult	N/A Adult	N/A Adult	Adult	Adult	<b>∀</b> /Z	N/A Adult
Sex	Σ	Š Z	Ž	N/A	Ž Z	Š Ž	₹ Ž	Š Š	Ž	Š Ž	Ž	₹ Z
Proximal, Distal, Shaft or Area	Pubis, broken at iliopubic ramus	Thoracic vertebral body	C7 Cervical body surface with partial transerve process	Partial acetabulum	Missing proximal epiphyses	Cervical body, C3 or 4	Fragments of partial neural arch, cervical	Small rib shaft fragments	Missing proximal articular facet	Cortical shaft fragment	Small cortical frags <5mm	Complete
Side	~	Ž Ž	Ž	₹ Z	~	Ž Ž	₹ Ž	Š Ž	_	R?	Ž	J
Element	Pelvis	Vertebrae	Vertebrae	Pelvis	3rd proximal hand phalanx	Vertebrae	Vertebrae	Rib	3rd interme- diate toe phalanx	Tibia	Unidenti- fied long bone fragments	Maxillary left 3rd premolar
Fragment Count	1	<del>-</del>	<del>-</del>	-	<del>-</del>	<del>-</del>	2	8	_	_	6	<del></del>
Weight(g)	10g	5g	58	2g	2g	18	2g	11g	<u>&gt;</u>	28	88	<del>2</del> 0
Context	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1011
Area			TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



							sloca- also natic ulna d not .ced	post			
Comments							This type of dislocation probably also included traumatic fracture of the ulna and likely could not have been reduced without surgery.	No dentition - post depositionally lost			
Pathology				Marked tooth wear exposing dentine. 5 sucessive hypoplastic defects - grooved.	Marked tooth wear exposing dentine, moderate calculus build up along CEJ	Marked tooth wear exposing dentine and partial pulp chamber. Large CEJ interproximal carious lesion, distal.	Post-traumatic arthroses, pseudo joint with marked eburnation and coalesed porosity resultant from probable posteriolateral dislocation and non union of ulnar olecranon. Increased vascularisations suggests post-traumatic infection (inactive).			Moderate tooth wear	Marked tooth wear/ part exposure of pulp chamber
Measurements											
Age	Adult	Adult	Adult	Adult		Adult	Adult	Adult	Adult	Adult 35+	Adult 35+
Sex	Z Z	¥ Z	¥ Z	₹ Z	₹ Z	₹ Z	₹ Z	ž	× Z	₹ Z	₹ Z
Proximal, Distal, Shaft or Area	Small frags of rib head and shaft	Mostly complete	Small cortical shaft fragment	Complete	Complete	Complete	Distal epiphysis and metaphysis	Partial fragment of right mandible (body and partial ramus)	Small shaft fragment	Complete	Complete
Side	X X	_	Š	_	~	~	œ.	~	Š	_	_
Element	Rib	Trape- zoid	Femur?	Maxil- lary left canine	Mandib- ular 3rd premolar	Mandib- ular 4th premolar	Humerus	Mandible	Fibula	Mandib- ular 2nd molar	Mandib- ular 1st molar
Fragment Count	3	<del>-</del>	<del>-</del>	<del></del>	<del></del>	<del></del>	<del></del>	<b>—</b>	<del>-</del>	<del></del>	<del></del>
Context Weight(g)	<118	1g	38	21g	<u>~</u> 00	5 8	518	26g	10g	<u>×</u>	21 8
Context	1011	1011	1007	1007	1007	1007	1007	1007	1007	1007	1007
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



		vith												
Comments		Photographed (with bone 4 also)												
Pathology		Marked arthritic change to the PIP surface, including marked alteration of the joint contour & destruction of the cortex with increased coalesed porosity on articular surface. Matches Bone 4.												
Measurements   Pathology														
Age	N/A Adult	N/A Adult	Adult	N/A Adult	N/A Adult	N/A Adult	N/A Adult	N/A Adult	N/A Adult	N/A Infant	N/A Adult	N/A Adult	N/A Infant	N/A Adult
Sex	₹ Z	₹ Z	₹ Z	₹ Ž	₹ Z	₹ Z	₹ Z	₹ Z	₹ Z	ĕ Z	₹ Z	₹ Z	₹ Z	₹ Z
Proximal, Distal, Shaft or Area	Parietal fragment	Complete	Mostly complete, missing proximal epiphyses	Cervical partial body and lateral transverse process C3-6)	Shaft fragment	Shaft fragment	Head, neck & partial shaft	Head and neck	2nd or 4th proximal hand phalanx, complete	Shaft fragment	Partial distal epiphyses	Cortical shaft fragments	Partial proximal metaphysis	Partial acromion only
Side	X X	~	~	∢ Ž	₹ Z	X X	_	٦	~	Z Z	₹ Z	₹ Z	~	7
Element	Cranial	Third proximal hand phalanx	1st Meta- carpal	Vertebrae	Rib	Rib	Rib	Rib	Hand phalanx	Humerus	4th meta- tarsal	Humerus	Humerus	Scapula
Fragment Count	1	<del>-</del>	<del></del>	<del></del>	<b>—</b>	_	<del>-</del>	_	-	-	-	2	_	_
Weight(g)	98	38	2g	<u>⇔</u>	2g	2g	38	2g	38	2g	38	7g	1g	7g
Context	1011	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



Comments													
Measurements   Pathology													
Age	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult
Sex	N/A Adult	₹ Z	N/A Adult	N/A Adult	N/A Adult	₹ Z	N N	₹ Ž	N/A Adult	N/A Adult	₹ Z	₹ Z	N/A Adult
Proximal, Distal, Shaft or Area	Partial shaft	Partial neck frag- ment	Shaft fragment	Unidentified cortical fragments of long bone (mostly tib and fem)	Proximal and shaft	Proximal, partial head only		Partial maxilla and palate, alveolar sockets present up to M1	Partial frontal bone, coronal suture	partial base and shaft	Distal epiphysis and metaphysis	Distal epiphysis and metaphysis	Partial maxilla and palate, alveolar sockets present up to PM3
Side	R?	₹ Z	Z Z	₹ Ž	24	R?	Z Z	_	₹ Ż	7	~	~	7
Element	Interme- diate foot phalanx	Rib	Rib	Long	Radius	Radius	Tarsal	Maxilla	Cranial	3rd meta- tarsal	Ulna	Ulna	Maxilla
Fragment Count	<del></del>	_	-	13	-	<del>-</del>	-	<del>-</del>	-	_	-	<del>-</del>	_
Weight(g)	21s	18 8	18	12g	14g	2g	38	58	6g	4g	2g	38	28
Context Weight(g)	1004	1004	1004	1004	1007	1007	1007	1007	1007	1007	1007	1007	1007
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



S.								sitional defect				
Comments								Post-depositional crushing defect				
Pathology									Thickened cortical bone with narrowing of the medullary cavity		Erosive defect, sclerotic margins with no evidence for remodeling, increased vascularisation around lesion.	
Measurements												
Age	N/A Adult	Adult	Adult	Adult	Adult	N/A Adult	Adult	Adult	N/A Adult	N/A Adult	Adult	N/A Adult
Sex	₹ Z	₹ Ž	K Z	₹ Ž	₹ Z	X X	Z Z	₹ Z	X X	X X	₹ Z	× Z
Proximal, Distal, Shaft or Area	2nd or 4th interproximal, complete	4th interproximal hand phalanx	2nd or 3rd, complete	Proximal cortical fragment with small area of tibial tuberosity	Shaft fragment	Partial scapulae fragments	Acromion, superior border and scapular spine	Lateral process, calcaneal tuber	Shaft fragment	Frontal and pari- etal fragments	Shaft fragment	Complete
Side	R?	₩.	_	₹ Ž	₹ Z	¥ Z	~	_	¥ Z	X Z	₹ Ž	~
Element	Inter- proximal hand phalanx	Inter- proximal hand phalanx	Proximal hand phalanx	Tībia	Rib	Scapula?	Scapula	Calca- neus	Femur?	Cranial	Fibula	4th meta- tarsal
<b>Fragment Count</b>	-	<del>-</del>	<del>-</del>	<del>-</del>	_	3	<del>-</del>	-	<del>-</del>	4	<del>-</del>	<del>-</del>
Weight(g)	<18	<u>^</u>	2g	38	1g	98	21g	24g	13g	10g	5g	4g
Context	1007	1007	1007	1007	1007	1007	1007	1007	1007	1001	1001	1001
Area	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1	TR1



Area	Context	Weight(g)	Fragment Count	Element	Side	Area Context Weight(g) Fragment Element Side Proximal, Distal, Sex Age Count	Sex		Measurements Pathology	Pathology	Comments
TR1	1001	88	1	Tibia	Z Z	Shaft fragment N/A Adult	K/Z	Adult			
TR1 1001	1001	<del>2</del>	-	Cranial	_	Partial occipital N/A Adult condyle	Y X	Adult			
TR1 1001	1001	<u>^</u>	2	Long	Š Ž	Cortical fragments N/A N/A <5mm	₹ Z	Y X			
Total	Total 131										

Table 3 Inventory of human remains



# 5. FAUNAL ASSESSMENT

Dr Kris Poole

#### 5.1 Introduction

A total of 95 fragments of animal bone were recorded for this report, of which 63 were retrieved by hand collection and the other 32 were extracted from environmental samples (Table 4 and Table 5). This total differs from the actual total originally recovered for a number of reasons. Vertebrae (except axis and atlas vertebrae) were only recorded where the centrum was present, whilst ribs were only recorded where the rib head was present. A number of bones also had fresh breaks, which were refitted where possible and, in each case, also counted as one specimen. In addition, where partial skeletons were present, these were recorded as one specimen. A full statement of the methodology employed can be found in Poole (2010).

Bone was recovered from Trenches 1, 10 and 11 and from contexts dating to the medieval period ((1013), (11013), (11016), (11018) and (11020)) and modern period (1004), (10002) and from one undated context (10006). The material from modern features is of limited interpretive value, particularly as it likely contains much residual material and is not discussed further here, with focus instead on the bone from medieval contexts.

#### 5.2 RESULTS

#### 5.2.1 TAPHONOMY

The majority of the bone from medieval contexts was in good or fair condition, with only a few fragments determined to be in poor condition. No bones showed signs of dog gnawing, and none had been burnt. A small number of bones had butchery marks, all within contexts (11020) and (11016) in Trench 11. These will be discussed further below.

#### 5.2.2 Species Represented

A relatively narrow range of species were present, with only cattle, sheep/goat, pig and horse present in hand collected material, with common shrew and field vole in samples from (1013). Of these species, cattle were the most frequently represented species, followed by bones identified as sheep/goat and sheep, with single instances of horse and pig. The common shrew and field vole identified from (1013) were represented by partial skeletons and likely represent accidental deaths of animals living around the site.

#### 5.2.3 AGEING AND SEXING

Dental ageing was restricted to a cattle mandible from (11018), which derived from an adult individual. All epiphyses of cattle within the assemblage had fused, but all are relatively early or middle fusing epiphyses and could have been from animals that were a range of ages, but this cannot be determined.

Only four sheep/goat or sheep bones could be assessed for epiphyseal fusion, with an unfused proximal femur, which is one of the latest sheep epiphyses to fuse. Of the other three bones, two were relatively late fusing epiphyses (proximal femur and proximal radius), suggesting the presence of adult animals, with one other (distal tibia) being a medium fusing bone.

Both pig bones from medieval contexts could be assessed for epiphyseal fusion, with an unfused distal radius and unfused proximal tibia (both late fusing elements), indicating that an adult individual and an immature individual was present.

## 5.2.4 BODY-PARTS AND BUTCHERY

Cattle bones comprised a range of elements, including those from the head (skull fragments, teeth and a mandible), upper limbs (humerus, femur), lower limbs (radius, tibia) and feet (astragulus, metapodials) and the spine (axis and atlas vertebrae). It is likely that many of the large mammal-sized bones were also from cattle. There was no obvious disparity in terms of parts of the body represented, although the sample size is very small. Nonetheless, it would seem that parts of the body associated with primary and later stages of butchery are present in the assemblage. All of the six butchered bones were from cattle and all represented chopping marks. These appeared



to result from carcass division, with the bones (all long bones) either being chopped across the middle of their shafts, or in close proximity to their proximal or distal ends.

Sheep element data also show a variety of body parts being present, with a tooth, femur, radius and tibiae present, but the sample size is too small to infer anything from these data.

Pig was represented by a tibia and radius and horse by a single astragalus.

## 5.2.5 Metrics

Metrical data from the assemblage were limited, although a sheep radius was from an individual measuring 55.9 cm at the shoulder.

## 5.3 DISCUSSION

The relatively small size of the assemblage and the limited ageing data restrict what can be said about the site based on the animal remains. All species present are those which we might expect to find on a medieval site, but the low numbers of bones precludes saying anything further about species proportions, age structures, diet and other matters.

Despite the priory itself originating in the medieval period and a number of excavations on and around its location, well-dated medieval bone assemblages are scarce and contain only small numbers of bones (see, for example the excavations in the outer precinct (Whyte and Miller 2015)). However, although numbers of medieval bones are low, those from this project and other previous works will provide useful information in the future when combined with those medieval bones recovered in future archaeological excavations in the Lenton Priory environs. These would provide a useful comparison to the slightly larger assemblages which have been recovered from post-medieval contexts in previous excavations at the site.

6 .			Medieva	ıl		Мо	dern	Undated	T. 1
Species	1013	11013	11016	11018	11020	1004	10002	10006	Total
Cattle		1	7	6	2	3	2		21
Sheep/Goat	1		1	1	1	4			8
Sheep		1	1						2
Pig			2				1		2
Horse				1					1
Chicken						1			1
Goose						1			1
Cod family						1			1
Amphibian						1			1
Large mammal		2	3	1	3	5		1	15
Medium mammal			1			1			2
Bird						1			1
Unidentifiable	6								6
TOTAL	7	4	15	9	6	18	3	1	62

Table 4 Number of Identified Specimens (NISP) recovered by hand collection.



Species	NISP
Common Shrew	1
Field Vole	1
Unidentified	30
Total	32

 $Table\ 5\ Number\ of\ Identified\ Specimens\ (NISP)\ retrieved\ from\ environmental\ samples\ (all\ from\ fill\ (1013)\ of\ medieval\ pit\ [1012])$ 



# 6. CERAMIC BUILDING MATERIAL, MORTAR AND PLASTER

Dr Phil Mills

#### 6.1 Introduction

There were 94 fragments, weighing a total of 7149 g of material presented for study. These included 72 fragments of ceramic building materials (CBM) and 13 fragments (582 g) of identifiable mortar. Within this assemblage there were 42 fragments (5375 g) of stratified CBM (excluding topsoil and back fill of the 1997 excavation) and with all the mortar from stratified contexts.

The material was recorded by context, with fabrics coded according to a fabric series used for other sites in Nottingham (Mills 2018). Metrics recorded were number of fragments (No), weight in grams (Wt) and number of corners, (Cnr) with dimensions recorded in mm.

## 6.2 DATING

The earliest material included an unidentifiable fragment in TZ23 from (1002), a fabric used in floor tiles of the 15<sup>th</sup> century (Mills 2020). There was also a brick and tile fragment in TZ13 which would have been of a similar date. Slightly later in date was a brick in TZ31 which had a probable date range of 16<sup>th</sup> to mid-18<sup>th</sup> century. There was a small component of material with a 17<sup>th</sup>-century or later date based on the fabrics (TZ13 and TZ21) and a glazed fragment of tile from (1002) which may be of 15<sup>th</sup>- to 16<sup>th</sup>-century date.

The rest of the material is of  $19^{th}$ -century or later date and includes Staffordshire blue brick, a product of the Wood and Ivery company of c. 1876-1904 date, from context (1002).

## 6.3 TAPHONOMY

The break down by context type is shown in Table 6. The majority of the material comes from levelling layers, with a small amount from drain deposits and the smallest quantity from wall structures. The average sherd size (MSW) is relatively large.

Context Type	No%	Wt%	CNR%	MSW
Levelling	61.9%	88.4%	91.7%	182.65
Layer	16.7%	4.9%		37.43
Drain	14.3%	6.5%	8.3%	58.00
Wall	7.1%	0.3%		5.33
N/AVG	42	5375	12	127.98

Table 6 CBM by context type

## 6.4 SUPPLY

Table 7 shows the breakdown by fabric for the stratified material.

Fabric Code	No%	Wt%	CNR%
TZ09	4.8%	0.6%	
TZ13	2.4%	0.9%	
TZ21	7.1%	5.8%	25.0%
TZ23	2.4%	0.2%	
TZ31	64.3%	31.9%	
TZ51	4.8%	48.1%	66.7%



Fabric Code	No%	Wt%	CNR%
TZ101	2.4%	0.4%	
TZ154.1	11.9%	12.0%	8.3%
N	42	5375	12

Table 7 CBM Fabric proportions

TZ01 Clean fabric not stratified

TZ01/1 fragment of floor tile, with plain black gloss glaze, 20 mm thick, probably 17th-century or later.

TZ02 Clean fabric not stratified

Only an unidentifiable fragment was noted in this fabric.

TZ09 Fine sand 5%

T09/1 Brick, solid with sharp regular arrises, 75 mm thick, probably 19th-century or later.

T09/02 Pan tile, probably 17th-century or later, probably 19th-century or later.

TZ13 Moderate sand 2%

TZ13/01 Brick fragment, probably medieval.

TZ13/02 Tile, 23 mm thick, probably medieval.

TZ21 Fine calcareous fabric less than 7%

TZ21/01 Slop moulded brick with regular rounded arrises, 75 mm thick, probably 17th-century or later.

TZ21/02 Tile, c. 15 mm thick.

TZ23 Quartz and ironstone less than 1%.

Only an unidentifiable fragment was noted in this fabric. Possibly 15th-century.

TZ31 Coarse ironstone inclusions 50%

TZ31/01 Brick, 50x115mm, very worn with rounded regular arrises, possibly C16–MC18

TZ31/02 Plain tile, 15-20mm thick

TZ31/03 Plain tile with brown glaze, 10mm thick

TZ51 Staffordshire Blue brick

There were two bricks in this fabric

TZ51/01 brick with dimensions 125 x 45–50 mm (5 x  $1^{7}/8^{\circ}$ )

a. Frogged with base formed of a raised square lattice

b. Frogged with knot stamp "W..."—product of Woods and Ivery, Stoke-on-Trent 1876–1904.

TZ101 Bone China 2%

Fragment of wall tile, one with a cream glaze, one with a white dot with brown border and one with green glaze.

TZ154.1 High fired dark fabric

TZ154.1/01 Club tile with moulded nibs and nail holes.

TZ154.1/02 Probably end of club tile with moulded nibs, round stamp "...SBURY".

TZ154.1/03 Plain tile probably from club tile



## 6.5 Function

Function	No%	Wt%	Cnr%
B/T	26.2%	1.5%	
Brick	14.3%	73.5%	91.7%
Club Tile	11.9%	12.0%	8.3%
Pan Tile	2.4%	0.5%	
Tile	42.9%	12.1%	
wall tile	2.4%	0.4%	
N	42	5375	12

Table 8 CBM by Form

Table 8 shows the breakdown by form for the stratified material. Plain tile forms the most common type found, as is usual. There is a relatively high level of club tiles, suggesting these derived from a decorative roof.

## **6.6** OTHER ASPECTS

#### 6.6.1 GLAZING

There was 1 glazed tile fragment from (1002) which was probably residual.

## 6.6.2 THE MORTAR

All the mortar was fine grain buff mortar which is of post-medieval character, probably wall underlay, and a finer variant for a plaster finish with traces of blue paint.

## 6.7 Discussion

This is a medium sized group from near Nottingham. There is a small amount of early material which probably derives from the original Priory and is present residually. The majority of the material is of 17<sup>th</sup>- or 19<sup>th</sup>-century date, with fabrics and forms of the later material reflecting that already noted for later phases at the site (Mills 2020). The 19<sup>th</sup>-century material includes a number of products from Stoke-on-Trent which have also been noted in later deposits from the site (Mills 2020).

Trench	Context	Fabric Code	Function	Form code	NoSh	Wt	corner	Width	Thickness	Mortaring	Reuse	Period	Comments
0	core1	TZ01	Floor tile	TZ01/01	1	106	0	0	30			C17+	1.4m black gloss
0	core1	TZ101	wall tile	TZ101/01	4	15	0	0	10			C19+	0.4m green glaze wall til
0	core1	TZ13	Brick	TZ13/01	4	168	0	0	0			C17+	1m over fired/ burnt
1	1001	TZ02	Brick	TZ02/01	10	303	0	0	0			C17+	friable underfired
1	1001	TZ154.1	Tile	TZ154/02	1	69	0	0	11			C19+	
1	1002	M13	wall		1	11	0	0	0			Post Medi- eval	trace of grey blue paint over cream under coat
1	1002	TZ101	wall tile	TZ101/01	1	24	0	0	6			C19+	cream glaze



Trench	Context	Fabric Code	Function	Form code	NoSh	Wt	corner	Width	Thickness	Mortaring	Reuse	Period	Comments
1	1002	TZ154.1	Club Tile	TZ154/01	1	206	1	0	0	2	~	C19+	nail hole and crest stamp JSBURY
1	1002	TZ154.1	Club Tile	TZ154/01	1	165	0	0	15			C19+	nail hole
1	1002	TZ154.1	Club Tile	TZ154/01	1	103	0	0	15			C19+	nail hole
1	1002	tz51	Brick	TZ51/01a	1	1254	4	125	50			LC19- EC20	staffs bb raised sq base and frog
1	1002	tz51	Brick	TZ51/01b	1	1329	4	125	45			LC19- EC20	staffs bb knot stamp W[
1	1004	M13	wall		12	385	0	0	0			Post Medi- eval	underlay wall?
1	1004	TZ154.1	Club Tile	TZ154/01	1	141	0	0	20			C19+	moulded nib
1	1004	TZ21	Tile	TZ21/02	1	22	0	0	20			C17+	
1	1004	TZ31	b/t		5	31	0	0	0				
1	1004	TZ31	Tile	TZ31/02	1	87	0	0	20				
1	1007	TZ101	wall tile	TZ101/01	1	8	0	0	0			C19+	brown with white dot frag
1	1007	tz154.1	Tile	TZ154/02	1	36	0	0	15			C19+	
1	1007	TZ31	Tile	TZ31/02	1	113	0	0	20	1	1		
1	1011	M13	wall		1	137	0	0	0			Post Medi- eval	underlay?
1	1013	m13	wall		8	49	0	0	0			Post Medi- eval	
10	10000	tz09	brick	TZ09/01	1	222	2	0	75			C19+	modern
10	10000	TZ21	Brick		6	152	0	0	0			C17+	
10	10001	tz09	В/Т		1	6	0	0	0			C19+	
10	10001	tz09	Pan Tile	TZ09/02	1	28	0	0	0			C19+	
10	10001	TZ21	Brick	TZ21/01	1	140	2	0	75			C17+	rounded reg arrises LC18+
10	10001	TZ31	Brick		1	31	0	0	0				
10	10001	TZ31	Brick	TZ31/01	1	1046	0	115	50			C16-MC18	rounded reg arrises worn
10	10001	TZ31	Tile	TZ31/02	1	59	0	0	0				
10	10001	TZ31	Tile	TZ31/02	1	39	0	0	19				
10	10001	TZ31	Tile	TZ31/02	2	38	0	0	15				
10	10001	TZ31	Tile	TZ31/02	3	0	0	0	20				
10	10002	TZ154.1	Club Tile	TZ154/01	1	29	0	0	12			C19+	Round moulded nib



Trench	Context	Fabric Code	Function	Form code	NoSh	Wt	corner	Width	Thickness	Mortaring	Reuse	Period	Comments
10	10002	TZ21	Brick	TZ21/01	1	152	1	0	75			C17+	slop moulded
10	10002	TZ23	b/t		1	13	0	0	0			C15?	
10	10002	TZ31	Tile	TZ31/02	2	95	0	0	20			1	
10	10002	TZ31	Tile	TZ31/03	1	59	0	0	10			C15/16	glazed brown
10	10004	TZ31	Tile	TZ31/02	5	201	0	0	15				
11	11013	TZ31	В/Т		3	16	0	0	0				v soft
11	11016	TZ13	Tile	TZ13/02	1	48	0	0	23			C17+	
11	11016	TZ31	b/t		1	13	0	0	0				

Table 9 Full catalogue of fabrics



# 7. ARCHITECTURAL STONE

James Wright (Triskele Heritage)

## 7.1 Introduction / Methodology

35 pieces of stone were assessed visually, and fabric analysis was undertaken. It was not deemed that the stones were of sufficient architectural merit to require more detailed recording in accordance with the guidance on archaeological stonework (Peacock 1998; MoLAS 1999).

## 7.2 PETROLOGY AND BULK

- Birchover: Buff-pink, medium grained, Carboniferous millstone grit laid down during the Namurian period and historically quarried from the Birchover side of Stanton Moor, Derbyshire.
- Bulwell/Linby: Orange-brown, coarse grained, lower magnesian limestone laid down during the Late Permian period and historically quarried from the Bulwell and Linby region of Nottinghamshire.
- Derbyshire gritstone: Buff-red, medium to coarse grained, Carboniferous millstone grit laid down
  during the Namurian period and historically quarried from moors between the Derwent and the coalfields.
- Magnesian Limestone: Light grey-green shelly dolomitic limestone laid down during the Permian period and historically quarried from the region south-east Derbyshire, north Nottinghamshire and south Yorkshire.
- Mansfield Red: Deep red-purple lower magnesian limestone, fine grained, laid down during the Late Permian period and historically quarried in the Mansfield region of Nottinghamshire.
- Stanton Moor: Buff medium grained, Carboniferous millstone grit laid down during the Namurian period and historically quarried from Stanton Moor, Derbyshire.

Petrology				Number	of stones b	y context			
	1001	1004	1007	1013	10002	11003	11016	11020	Total
Birchover		1							1
Bulwell / Linby		4	1				2		7
Derbyshire gritstone	1	7					3		11
Magnesian Limestone		2							2
Mansfield Red		7			1	3			11
Stanton Moor				1					1
Slate		1						1	2
Total	1	22	1	1	1	3	5	1	35

Table 10 Number of stones by context and petrology

#### 7.3 Assessment

Column shaft fragment (Figure 16) in Derbyshire gritstone. Part of one bed and the outer face of the stone survive and incorporate a bowstered finish. The shaft has a radius of 62 mm and may possibly have been part of a blind arcade or similar. There is no significant evidence of weathering which may suggest that it came from an internal feature. The fragment is potentially medieval in date, but it is not possible to be any more accurate.

One of the bulk stones from (1004) had evidence of 'crazing' (cracks and fissures) and a discoloured deepening of the natural colour of the stone which may be the result of exposure to intense fire.

Several pieces of lime mortar were included in the assemblage from contexts (1004) & (11016). These were not included in the assessment.



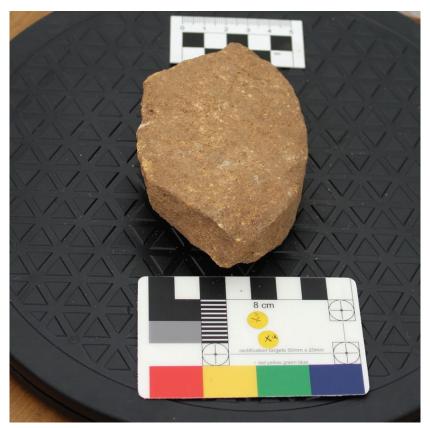


Figure 16 Column shaft fragment

## 7.4 SIGNIFICANCE OF THE DATA

Moulded stone always represents a significant investment of income and therefore relates to a high-status structure. Precise dating was not possible, but the petrologies present largely point towards relatively local quarries of origin and include stones from Bulwell/Linby and Derbyshire which are known to have been present on the site of medieval Lenton Priory (Marcombe and Hamilton 1998, 23–24). One of the stones showed evidence of workmanship and was probably part of a blind arcade. However, it was highly fragmented and little more could be noted. The assemblage is deemed to be of low significance.



# 8. LITHICS

Peter Webb (York Archaeology)

#### 8.1 Introduction

The lithic assemblage is composed of three pieces of flint and one piece of chert weighing a total of 10 g. Of these, the three piece of flint (8 g) show signs of human influence, the remaining piece of chert (2 g) being natural and showing only evidence of natural or taphonomic processes. Only the pieces showing anthropogenic modification are discussed here. The lithic material was collected from within layers/deposits (1004) and (1014), the assemblage being residual from undated phase(s) of prehistoric activity within the vicinity of the site.

#### 8.2 METHODOLOGY

Artefacts were studied individually and quantified by number and weight of piece types. In order to assess the nature of the assemblage the lithics were examined under a 20x magnification hand-lens for signs of retouch and indications of use-wear and were subdivided by type category based on tool form, presence of retouch and use-wear. Complete cores were classified based on Clark's 1960 typology with the addition of removal type. Measurements of each artefact were taken to ascertain the original form of blank, based on the length:breadth ratio (squat flakes <1:1; flakes ≥1:1 - <1.5:1; long flakes ≥1.5:1 - <2:1; blades ≥2:1) using digital Vernier calipers rounded to 0.1 mm accuracy. Length measurements were taken at the maximum distance between two points along the bulbar axis at right angles to the bulbar platform. Where this could not be identified, the measurement was taken following the percussion ripples. Width measurements were taken at the maximum distance between two points perpendicular to the length. Thickness measurements were taken at the maximum distance between points on the ventral and dorsal surfaces. Where artefacts were incomplete, measurement data was deemed not suitable for analysis, though all measurements were recorded. All artefacts were weighed on digital scales and rounded to 0.1 g accuracy. Colour comparisons were made using the Munsell Rock Colour Book (2013) based on the dominant hue of the material, excluding the cortex, patination or burning discolouration to ascertain if there was a preferred colour for particular tool types. The nature of the cortex (whether rolled or not) was used to establish whether the material was from a nodule or river gravel source. The amount and nature of the cortex was also measured to establish the presence of primary, secondary and tertiary flaking waste. The presence of burning was also noted.

## 8.3 RESULTS

## 8.3.1 RAW MATERIALS

The worked assemblage demonstrates the use of flint (8 g), derived from a probable mix of gravel and nodular clay with flint deposits. The colour of the material recovered is mixed, comprising shades of black (33%), brown (33%), and grey (33%).

#### 8.3.2 Composition and technology

The assemblage shows evidence of a complex approach to lithic production, with examples of controlled reduction using hammerstones, pressure flaking and casual expedient working. This has resulted in a range of piece types including debitage and retouched tools (see below).

All of the pieces are damaged, though whether through use or later taphonomic processes is unclear. They do, however, show a mix of both blade and flake production (Table 11) which, along with the small size of the pieces, may suggest that the assemblage reflects either a possible earlier Neolithic date or that the assemblage reflects multiple phases of prehistoric activity.



Piece for	m	Count	%
Flint	Blade	1	33%
	Flake	2	67%
Grand To	tal	3	100%

Table 11 Piece form (anthropogenic pieces only)

The production stages present (Table 12), indicated by the amount of cortex has the assemblage weighted towards the final stages of tool production and refinement with 33% tertiary and 67% non-cortical pieces. This suggests that the early stages of lithic tool production were carried out away from the site.

Production	ı stage	Count	%
Flint	Non-cortical	2	67%
	Tertiary	1	33%
Grand Tota	ıl	3	100%

Table 12 Production stage (anthropogenic pieces only; not including objective pieces)

Further to the general production stage, the assemblage contains piece types reflecting later stages of production, including waste material as well as retouched tools (Table 13). There is a dominance in the quantity of retouched tools (67%) over debitage (33%), with no objective pieces, suggesting that the bulk of production was carried out elsewhere. Similarly, the small size of the assemblage and minimal presence of debitage suggests only limited production and discard was carried out on the site.

Piece stage	2	Count	%
Flint	Debitage	1	33%
	Retouched tool	2	67%
Grand Tota	d	3	100%

Table 13 Piece stage

#### 8.3.3 DEBITAGE

The debitage comprises a single tertiary flake (Table 14). The absence of both primary and secondary removals, along with the small quantity of debitage, indicates that the initial stages of core reduction occurred elsewhere, and that production was limited and restricted to later stages. This is supported by the small size of the debitage (less than 30 mm in any dimension), indicating that it was likely removed from a near exhausted or small core.

The small size of the assemblage, small size of all the pieces and dominance of tertiary and non-cortical flakes all indicate that only the later stages of tool production and repair occurred at the site. However, the debitage was recovered from a layer of possible modern disturbance and is therefore residual and can only indicate the broad presence of prehistoric activity, rather than the location of a specific site type, subsequent re-distribution by taphonomic processes making this difficult to ascertain.

Debitage	type	Count	%
Flint	Flake	1	100%
Grand To	tal	1	100%

Table 14 Debitage type



#### 8.3.4 RETOUCHED TOOLS

A total of two retouched tools were recovered during the excavations, including one edge-retouched blade and one edge-retouched flake (Table 15). Both pieces demonstrate only limited marginal working of a largely expedient nature.

Retouched	tool type	Count	%
Flint	Edge-retouched blade	1	50%
	Edge-retouched flake	1	50%
Grand Tota	ıl	2	100%

Table 15 Retouched tool type

#### 8.3.5 EDGE-RETOUCHED PIECES

The edge-retouched pieces comprise a single edge-retouched blade from layer/deposit (1004) and a single edge-retouched flake from layer/deposit (1014). Both were produced on flint derived from a probable nodular source, are non-cortical and are small in size, not exceeding 30 mm in any dimension. Edge-retouched pieces were used throughout prehistory as relatively expedient cutting tools on all site types, the retouch extending their use-life.

Both, however, are incomplete, and it is possible that they formed parts of different tool types. This is particularly true of the edge-retouched blade, the triangular profile making its use as a knife more awkward, suggesting that the distal end of the blade was the more functional part of the tool and that its use as an awl or piercer may have been more likely.

#### 8.4 Discussion

The material recovered suggests that if tool production was being carried out on the site, it was only the later stages, with initial core selection, testing and preparation being carried out elsewhere. The presence of debitage, however, suggests that this was not necessarily far away. The small size of the debitage indicates that the final stages of production, including tool creation, may have been carried out. Of the pieces that could be identified to their source material, they appear to have come from probable nodular sources derived from nearby clay with flint deposits.

The assemblage is non-diagnostic, being composed of a mix of debitage and retouched tools created throughout prehistory. However, the presence of a blade-produced tool alongside flakes, and the limited dimensions of all of the material, suggests that this activity is likely to have pre-dated the Bronze Age.

The chipped stone tool assemblage indicates that there was prehistoric activity at, or at least very close to, the site during prehistory. Archaeological evidence for settlement and activity in the locality prior to the Bronze Age is relatively sparse, the bulk of evidence being derived from flint scatters. This can be seen in the local area, particularly along the Trent Valley to the south with suggested Neolithic settlement at Holme Pierrepont (L12205-12207), and further afield at Willington (Knight and Howard 2004), with further lithic scatters at sites such as: Adbolton (L12053, L12060), Beeston (L5252) and Gamston (L11436). This indicates a pattern of activity and settlement along the Trent Valley into which the site at Lenton Priory could easily fit.



Context	Material Source Colour	Source	Colour	Flake type	Max length (mm)	Max width (mm)	Max width Max thick- We (mm) ness (mm) (g)	ight	Complete	Stage	Piece type	Piece type sub-category	Burnt
(1004)	Flint	Nodule	Nodule Greyish black	Non-cortical	28.9	8.6	7.4	2.4	N - medial	Retouched tool	Edge-re- touched blade	Edge-re- touched blade	Z
(1004)	Flint	Gravel	Dark yellowish Tertiary brown	Tertiary	22.0	19.2	5.0	2.2	N - axial	Debitage	Flake	Flake	Z
(1014)	Flint	Unclear	Unclear Dark grey	Non-cortical	22.0	20.8	6.7	3.0	N - axial	Retouched tool	Edge-re- touched flake	Edge-re- touched flake	Z
(1014)	Chert	Gravel	Gravel Light brown	Non-cortical	19.3	15.3	5.8	2.1	>	Natural	Natural piece	Natural piece N	Z

Table 16 Catalogue of lithics



# 9. GENERAL SMALL FINDS

Alison Wilson (York Archaeology)

## 9.1 CLAY TOBACCO PIPE

6 fragments of clay tobacco pipe stem were recovered. In the absence of any identifying features such as makers stamps or decoration, the stems were dated using bore diameter (early clay pipes have a bore diameter of 3 mm, decreasing over time until stems by the middle of the 18<sup>th</sup> century had a bore of less than 2 mm). Except for one 2 mm fragment in context (1004), the fragments recovered all had a bore diameter of 1.5 mm giving a likely later date of manufacture in the 18<sup>th</sup> to 19<sup>th</sup> century.

Trench	Context	Context description	Pipe stem diameter	Description	Date range
1	1001	Topsoil/overburden	1.5mm	3 x unmarked partial stems	18 <sup>th</sup> -19 <sup>th</sup> century
1	1002	Levelling material below 1001	1.5mm	1 x unmarked partial stem	18 <sup>th</sup> -19 <sup>th</sup> century
1	1004	Make up layer/possible levelling	2mm	1 x unmarked partial stem	18 <sup>th</sup> -19 <sup>th</sup> century
1	1007	Fill of 1977 excavation cut	1.5mm	1 x unmarked partial stem	18 <sup>th</sup> -19 <sup>th</sup> century

Table 17 Clay tobacco pipe catalogue

## 9.2 GLASS

19 fragments of glass were recovered. All fragments were of a modern date and included clear glass bottles and window glass, except for a small fragment of green wine/beer bottle glass.

Trench 1 (1002) contained the highest number of fragments, including fragments from two separate clear bottles, one embossed with "NORTH... CONTEN...", which is almost certainly a fragment of a Northern Dairies milk bottle, a company operating in the early to mid-20<sup>th</sup> century in the Nottingham area. The same context also contained a moderate sized piece of clear flat glass with a bevelled edge, possibly window glass, and a small fragment of medicine bottle with dosage measures embossed on the side. The remaining fragments of glass had no distinguishing features.

Trench	Context	Description	Description	Date range
1	1001	Topsoil/overburden	1 x flat embossed base of soda bottle	Modern
			1 x window glass fragment	
1	1002	Levelling material below 1001	1 x window glass	Modern
			7 X clear bottle fragments	
1	1004	Make up layer/possible levelling	1 x clear bottle fragment	Modern
10	10000	Topsoil levelling dump	1 x medicine bottle fragment	Modern
10	10001	Dumping/levelling	1 x green bottle fragment	Modern
11	11003	Black clinker/ash layer	7 clear bottle fragments	Modern

Table 18 Glass catalogue



## 9.3 METAL

20 metal items were recovered. The bulk of these were modern fragments, including a coke can, assorted nails and bicycle parts. However, a small strip of lead window came from context (1011), is likely to be medieval in date and could relate to the priory. Further thicker strips of lead with nail holes were found in context (1004), probably used for roofing. Except for the lead, all fragments were heavily corroded.

Trench	Context	Context Description	Description	Date
1	1001	Topsoil/overburden	1 x iron bicycle part	Modern
			1 x iron ring	
			1 x iron screw	
1	1004	Make up layer/possible levelling	5 x lead fragments	Modern
			7 x nails	
			1 x plate metal fragment	
1	1007	Fill of 1977 excavation cut	Coke can	Modern
1	1011	Fill between buttress and buttress	1 x lead window came fragment	Possible
		cut		medieval
10	10001	Dumping/levelling	1 x indet. iron fragment	Modern
11	11003	Black clinker/ash layer	1 x iron nail	Modern
			1 x copper alloy hook	

Table 19 Metal catalogue

## 9.4 SHELL

A total of 3 badly worn fragments of oyster shell were recovered. Deposits (10016) and (11018) also contained fragments of animal bone, which would suggest kitchen waste, possibly from the Priory.

Trench	Context	Context description	Description
10	10001	Dumping/levelling	1 x oyster shell fragment
11	11016	Layer	1 x oyster shell fragment
11	11018	Layer	1 x oyster shell fragment

Table 20 Shell catalogue



# 10. Environmental Analysis

Stacey Adams (York Archaeology)

#### 10.1 Introduction and Methodology

Three bulk environmental samples were taken during the archaeological excavation for the recovery of environmental remains. Sampled features included a pit, the foundation wall of an outbuilding and a medieval layer. The samples were processed in their entirety by flotation using a 500 µm aperture mesh for the heavy residue and a 250 µm aperture mesh for the flot. The heavy residues were sorted by hand for ecofacts and artefactual material (Table 21) and feature in this report where they add additional information to the existing assemblage. The flots were sorted, in their entirety, under a stereozoom microscope at x7 to x45 magnifications. Identification of the plant macrofossils was based on observations of gross morphology and surface cell structure and where necessary relevant identification manuals (Jacomet 2006; Cappers and Bekker 2013) were consulted. Quantification was based on minimum number of individuals and results recorded in Table 22. Nomenclature follows Stace (1997) for wild plants and Zohary and Hopf (1994) for cereals. Charcoal was not present in sufficient quantities (>3 g from the >4 mm fraction of the heavy residue) to be submitted for identification.

#### 10.2 RESULTS

The bulk environmental samples contained small quantities of cultural material including pot, metal, glass and mortar as well as the domestic refuse of charcoal, animal bone and land snail shell. The flots from pit [1012] and outbuilding wall [11004] contained charcoal flecks, land snail shell and coal and no charred or uncharred plant macrofossils. Several cereal caryopses were identified in the flot from medieval layer (11018) and included rye (Secale cereale), oat (Avena sp.) and barley (Hordeum sp.) as well as an onion couch-grass (Arrhenatherum elatius) tuber. Uncharred field maple (Acer campestre) fruitlets and a birch (Betula sp.) bract were identified in the medieval layer (11018) in addition to three plum (Prunus domestica) drupes.

## 10.3 Interpretation and Discussion

The small quantities of charred cereal caryopses identified in medieval layer (11018) are too few to indicate cereal crop processing at Lenton Priory and likely occur as inclusions of the infrequent charcoal remains. Mixed cereal assemblages of rye, oat and barley are common in medieval deposits (Giorgi 2006, 215) and the onion couch-grass tuber likely represents a weed of the cereals. The uncharred plant macrofossils may occur as modern contaminants within the sample although it is possible that they are archaeological in origin considering the recovery of contemporary waterlogged deposits at Gregory Street (Adams forthcoming). Field maple and birch were likely growing in the vicinity with their tree components incidental within the flot. The plum stones may have a similar origin, or they may have been discarded after consumption.



Weight (g)         □           Mortar         :           Weight (g)         □           Metal         □           Weight (g)         □           Pottery         □           Weight (g)         □           Land Snail Shells         □           Weight (g)         □           Fishbone and Microfauna         :           Weight (g)         □           Bone and Teeth         :           Weight (g)         □           Charcoal 2-4mm         :           *         *           Weight (g)         □           Charcoal >4mm         •           Sample Volume (L)         ○           Context         (E1011)           Augustion (Context         (E1011)           Context         (E1011)           Sample Number         ○				
Weight (g)         □ <td< th=""><th>Weight (g)</th><th>_</th><th></th><th></th></td<>	Weight (g)	_		
Glass         *           Weight (g)         6           Metal         *           Weight (g)         6           Pottery         *           Weight (g)         1-           Land Snail Shells         *           Weight (g)         7           Bone and Microfauna         *           Weight (g)         1-           Charcoal 2-4mm         *           Weight (g)         7           Charcoal 2-4mm         *           Sample Volume (L)         01           Context         01           Light (g)         01           Context         01	Mortar	*		
Weight (g)         6           Metal         *           Weight (g)         *           Land Snail Shells         *           Weight (g)         C           Fishbone and Microfauna         *           Weight (g)         F           Bone and Teeth         *           Weight (g)         F           Charcoal 2-4mm         *           **         *           Weight (g)         C           Charcoal 2-4mm         *           *         *           Context / Deposit Type and Parent Context         01           Context         (E101)           (E101)         (E101)	Weight (g)		$\overline{\vee}$	
Metal       *         Weight (g)       *         Pottery       *         Weight (g)       -         Land Snail Shells       *         Weight (g)       -         Fishbone and Microfauna       *         Weight (g)       +         Charcoal 2-4mm       *         *       *         Weight (g)       -         Charcoal >4mm       *         Sample Volume (L)       00         Context / Deposit Type and Parent Context       01         Context       (El01)         (1018)       Wedjecyal Fayer         Context       (El01)	Glass		*	
Weight (g)       *         Pottery       *         Weight (g)       *         Land Snail Shells       *         Weight (g)       *         Fishbone and Microfauna       *         Weight (g)       *         Charcoal 2-4mm       *         *       *         Weight (g)       *         Charcoal >4mm       *         Sample Volume (L)       *         Context / Deposit Type and Parent Context       *         Context       (E) (1101)     **  **  **  **  **  **  **  **  **	Weight (g)			6
Pottery         *           Weight (g)         -           Land Snail Shells         *           Weight (g)         C           Fishbone and Microfauna         *           Weight (g)         F           Bone and Teeth         *           Weight (g)         F           Charcoal 2-4mm         *           Weight (g)         C           Charcoal >4mm         *           Sample Volume (L)         01           Medieval   Type and Parent Context         (11017)           Context         (1018)	Metal			*
Weight (g)         -           Land Snail Shells         *           Weight (g)         5           Fishbone and Microfauna         *           Weight (g)         4           Bone and Teeth         *           Weight (g)         1           Charcoal 2-4mm         *           Weight (g)         0           Charcoal >4mm         *           Sample Volume (L)         0           Context         01    Context  Context  Context  Context	Weight (g)			30
Land Snail Shells  Weight (g)  Fishbone and Microfauna  Weight (g)  Bone and Teeth  Weight (g)  Charcoal 2-4mm  Weight (g)  Charcoal >4mm  Sample Volume (L)  Context / Deposit Type and Parent Context	Pottery			*
Weight (g)         *         *           Fishbone and Microfauna         *         *           Weight (g)         *         *           Bone and Teeth         *         *           Weight (g)         Charcoal 2-4mm         *           Weight (g)         *         *           Charcoal >4mm         *         *           Sample Volume (L)         *         *           Context / Deposit Type and Parent Context         *         *           Context         *         *	Weight (g)			<del>-</del>
Fishbone and Microfauna  Weight (g)  Bone and Teeth  Weight (g)  Charcoal 2-4mm  Weight (g)  Charcoal >4mm  Sample Volume (L)  Context / Deposit Type and Parent Context  Context  Context  Context  Context  Context  Weight (g)  Context  Context  Context  Context  Context  Context  Context  Fishbone and Microfauna  **  **  **  **  **  **  **  **  **	Land Snail Shells			*
Weight (g)         *         **           Bone and Teeth         **         **           Weight (g)         **         **           Charcoal 2-4mm         *         **           Weight (g)         0         01           Charcoal >4mm         *         *           Sample Volume (L)         01         O1    Context  Context  Context  Context  Context	Weight (g)	2		
Bone and Teeth * * * * * * * * * * * * * * * * * * *	Fishbone and Microfauna	* *	*	
Weight (g)         1013)         Weight (g)         7         1011         Weight (g)         10	Weight (g)	4		<del></del>
Charcoal 2-4mm  Weight (g)  Charcoal >4mm  Sample Volume (L)  Context / Deposit Type and Parent Context  Contex	Bone and Teeth	*		*
Weight (g)  Charcoal >4mm  *  Sample Volume (L)  Context / Deposit Type and Parent Context  C	Weight (g)	∀	$\overline{\vee}$	33
Context / Deposit Type and Parent Context  Conte	Charcoal 2-4mm	* *	* *	* * * *
Context / Debosit Line Wall [11004]  Coutext  Coutext  Context  Co	Weight (g)			2
Coutext / Debosit Library Pit [1012]  Foundation Cut for Outbuilding/ Toilet Wall [11004]  Medieval Layer	Charcoal >4mm		*	*
(1013) Pit [1012] Toilet Wall [1018) Medieval La	Sample Volume (L)	20	10	10
		Pit [1012]		
Sample Number $\begin{array}{c cccc} & & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & $	Context	(1013)	(11012)	(11018)
	Sample Number	<100>	<101>	<102>

Table 21 Ecofacts and artefacts from bulk environmental samples from Lenton Priory. Quantification: \* = 1-10, \*\* = 11-50, \*\*\* = 51-150, \*\*\* = 151-250, \*\*\*\* = 151-250, \*\*\*\* = 150 and weights in grams.



	Sample Number	<100>	<101>	<102>
	Context Number	(1013)	(11012)	(11018)
	Parent Context	[1012]	[11004]	(11018)
	Feature Type	Pit	Outbuilding/ Toilet Wall Foundation	Layer
	Sample Volume (L)	20	10	10
	Flot Volume (ml)	<5	10	80
	Flot Weight (g)	35	2	8
	Number of Individuals per Litre	-	-	2
	Preservation	-	-	++
Taxonomic Identification	English Name			
Charred Plant Macrofossils				
Hordeum sp. L.	Barley caryopsis	-	-	1
Hordeum/Triticum	Barley/ wheat caryopsis	-	-	1
Secale cereale L.	Rye caryopsis	-	-	2
Avena sp. L.	Oat caryopsis	-	-	1
Cerealia indet.	Indeterminate cereal caryopsis	-	-	2
Arrhenatherum elatius (L.) P. Beauv. Ex J. & C. Presl	False oat-grass tuber	-	-	1
	Total Cereals	-	-	8
Uncharred Plant Macrofossils				
Betula sp. L.	Birch bract	-	-	1
Prunus domestica L.	Plum drupe	-	-	3
Acer campestre L.	Field maple fruitlet	-	-	7
	Total Other Cultivars/ Wild	-	-	11
	Total Charred Plant Macrofossils	-	-	19
	Uncharred (%)	99	50	20
	Charcoal 2-4mm	-	**	***
	Charcoal <2mm	*	***	****
	Fishbone/ Microfauna	-	*	*
	Land Snail Shell	*	**	***
	Coal	**	**	**
	Modern Roots	-	**	***

Table 22 Plant Macrofossils from Lenton Priory. Preservation: + = poor, ++ = moderate, +++ = good. Quantification: \* = 1-10, \*\* = 11-50, \*\*\*\* = 51-150, \*\*\*\* = 151-250, \*\*\*\*\* = >250.



# 11. GEOARCHAEOLOGY

Kristina Krawiec (York Archaeology)

#### 11.1 Introduction

A total of two window samples were undertaken to the south of Nazareth House in order to record and characterise the deposits of the former Rive Leen floodplain. In addition, a total of two samples were submitted for radiocarbon age determination and four samples for palynological assessment.

### 11.2 METHODOLOGY

A total of two window samples were undertaken using a terrier rig. The cores were recovered in 1 m plastic sleeves and were split open on site. The lithology was recorded using the Troels-Smith (1955) system of sediment classification. The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are darkness (Da), stratification (St), elasticity (El), dryness of the sediment (Sicc) and the sharpness of the upper sediment boundary (UB). The logs were supplemented by digital photography. The cores were subsampled at TPA facilities for radiocarbon dating and palynological assessment.

A total of three samples from Core 1 were selected for pollen assessment.

Depth in core (m bgl)	Sediment description
2.49	Alluvium
2.54	Alluvium
2.52	Alluvium

Table 23 Samples for palynological assessment

The subsamples were submitted to the laboratories at Quaternary Scientific (QUEST), University of Reading for chemical preparation. The pollen was extracted as follows (1) sampling a standard volume of sediment (1 ml); (2) adding two tablets of the exotic clubmoss Lycopodium clavatum spores to provide a measure of pollen concentration in each subsample; (3) deflocculation of the subsample in 1% Sodium pyrophosphate; (4) sieving of the subsample to remove coarse mineral and organic fractions (>125  $\mu$ ); (5) acetolysis; (6) removal of finer minerogenic fraction using Sodium polytungstate (specific gravity of 2.0 g/cm3); (7) mounting of the subsample in glycerol jelly. Each stage of the procedure was preceded and followed by thorough subsample cleaning in filtered distilled water.

An Olympus binocular polarising microscope was used for identification at x400 magnification. The pollen reference manuals by Moore *et al.* (1991) and Beug (2004) were used to aid in pollen identification alongside the author's own reference collection. Nomenclature for pollen follows Beug (2004). Reference photographs and criteria from van Geel *et al.* (2003) were used to aid in the specific identification of NPPs. Types of microscopic charcoal were identified according to Courtney-Mustaphi and Pisaric (2014).

All three samples were assessed by scanning four transects (10%) of the prepared slides and recording the concentration and preservation of pollen grains, spores and non-pollen palynomorphs (NPPs), along with the principal taxa.

## 11.3 LITHOLOGY

#### 11.3.1 CORE 1

The underlying sandstone was encountered at 3.62 m bgl and was overlain by a sandy gravel which became clayey at the top of the deposit (2.45–3.62 m bgl). This was overlain by a thin (c. 0.11 m thick) deposit of sandy organic silt clay. The organic component was well humified with no visible plant remains. This was overlain by a mixed silt sand clay with sandstone fragments. This may represent an archaeological layer.



This was overlain by a black silt sand layer c. 0.05 m thick which may represent a former topsoil layer. Overlying this were a series of made ground and rubble layers which are likely to be relatively recent.

This core was retained for assessment and subsampled for pollen and radiocarbon dating.



Figure 17 Core 1

#### 11.3.2 Core 2

The deepest deposit encountered was a sandy gravel c. 2.60 m bgl. This was overlain by a grey brown gritty silt clay which may represent the edge of an alluvial deposit although it was highly disturbed. This was then overlain by a deposit of sandstone fragments which was overlain by a mixed brown sandy silt with sandstone fragments (0.90–1.94 m), charcoal and slate which may represent an archaeological deposit. This was overlain was an *in situ* wall or floor constructed of mortared brick on a gravel foundation. This was sealed by a plastic sheet with brick rubble made ground.



Figure 18 Core 2



## 11.4 POLLEN

Dr Suzi Richer (Richer Environmental)

The results of the pollen assessment indicate that pollen, spores or non-pollen palynomorphs were present in all three samples; however, concentrations were low, and many grains were folded. This folding indicates that the grains had been physically transported to their final resting place or that the sediments had been compacted and water extruded (Delcourt and Delcourt 1980).

Depth in core (m bgl)	2.49	2.54	2.52
Shrubs			
Corylus avellana		1	1
Herbs			
Poaceae undiff.	7	1	2
Cyperaceae	1		
Cerealia-type	4		1
Centaurea cyanus-type		1	1
Asteraceae	1		
Brassicaeae	1		
Crepis-type	7	1	4
Matricaria-type		1	
Plantago lanceolata-type	2		
Ranunculus acris-type	1		
Urticaceae		1	
Non-pollen palynomorphs			
Sordaria-type			
Spores			
Sporormiella-type	2		
Sodaria-type	7		
Microcharcoal: wood	53	111	67
Microcharcoal:leaf/grass	81	180	65
Exotic marker counted	52	108	143
Total Land Pollen (identifiable)	24	6	9
Concentration	Р	Р	Р
Preservation	G	G	G

Table 24 Results of the pollen assessment from Lenton. a = absent p = poor, g = good = e = excellent

Whilst the amount of pollen preserved was low, certain interpretations can still be made. The pollen was dominated by herbaceous taxa, in particular grasses (Poaceae) and dandelion (*Taraxacum* is included within *Crepis*-type). Dandelion pollen is particularly resistant to decay, so whilst its occurrence in the samples indicates it was present, it does not necessarily mean it was dominant in the wider environment. Other herbaceous taxa that were present include: yarrow (*Achillea* is included within *Matricaria*-type), nettle (Urticaceae) and cornflower (*Centaurea cyanus*).

*Cerealia*-type pollen was present in two samples (2.49 m and 5.52 m). The uppermost sample (2.49 m) contained the most pollen grains, and displayed a greater variety of taxa, including sedges (Cyperaceae), crucifers (Brassicaee), plantain (*Plantago lanceolata*-type) and buttercup (*Ranunculus acris*-type).



Microcharcoal was present in all three samples in high quantities, showing that both wood/branch material was being burnt alongside grasses/leaves.

Tree pollen was entirely absent and shrub pollen was scarce, with only hazel (*Corylus avellana*) being observed in the samples.

Dung fungal spores from *Sordaria*-type and *Sporormiella*-type were present in the uppermost sample (2.49 m), suggesting that animals were either grazing close by, or that waste from animal bedding was being discarded here.

#### 11.5 RADIOCARBON DATING

Initially two samples were submitted for radiocarbon age determination; a fragment of burnt bone and a bulk sediment sample (humin fraction). However, the bone failed to return a date and therefore the humic fraction of the bulk sediment date was submitted as a replacement (Table 25).

The age determinations returned for the alluvial sediment in the base of Core 1 are statistically consistent and suggest accumulation was occurring in the late 8th to late 10th century.

Lab No./TPA no	Window sample number	Depth (m BGL)	Depth (m OD)	Species / Fraction	Туре	C <sup>13</sup>	Radiocarbon Age (BP)	Calibrated Date 95.4%
GU-56811	Core 1	2.52		Unknown	Burnt bone		failed	failed
SUERC-96815 TPA_254	Core 1	2.51- 2.54		Humin	Bulk sedi- ment	-26	1144+/-26	773 to 788 cal AD, 828 to 860 cal AD and 870 to 990 cal AD
SUERC-97052 TPA_263	Core 1	2.51- 2.54		Humic	Bulk sedi- ment	-23.5	1146+/-22	773 to 787 cal AD, 828 to 859 cal AD and 871 to 980 cal AD

Table 25 Radiocarbon dating results

#### 11.6 Discussion

The two window samples carried out to the south of Nazareth House have demonstrated the presence of potential in situ archaeological deposits in addition to recording a thin alluvial sequence. These deposits were sealed by 0.90–1.50 m of made ground composed of brick rubble and concrete.

The radiocarbon dating has indicated that the alluvial deposits were accumulating during the late 8th to late 10th century AD and it is likely the sample site lay at the edge of the Leen floodplain. There remains the possibility that the development of the priory has truncated the upper part of the alluvium leading to a curtailed sequence. The deposits associated with the Leen have been investigated recently at Broadmarsh and at London Road in the city centre (Keyworth 2018; Poole *et al.* 2018). These interventions have shown the deposits associated with Leen are sand dominated with more thinly developed organic horizons than those recorded in other river valleys of the region, i.e., the Trent. These laminated sediments demonstrates changes in fluvial energy through the life of the channel and has often led to variable preservation of environmental proxies.

The alluvial sequence recorded at Lenton is also minerogenic in nature although a well humified organic component was present. Whilst the pollen preservation was generally poor, a number of interpretations can be made concerning the environment of the site and human activity taking place.

The site in the 8<sup>th</sup>–10<sup>th</sup> centuries was located in an open landscape, with hazel being the only tree or shrub present within the vicinity; given that the site is located close to the river, this is unsurprising. The surrounding vegetation was characterised by grasses, with some meadow taxa (e.g., dandelion, yarrow and buttercup) present. Evidence for disturbance in the area comes from pollen grains from nettle and plantains (Behre 1981). It is not known whether this represents anthropogenic disturbance, such as clearance of the landscape prior to the



construction of the main priory site, or as a result of the presence of large grazing herbivores, as represented by dung fungal spores.

It is likely that people were growing cereal crops close-by, this is seen from the presence of cereal pollen grains in the upper and lower samples. The arable weed, cornflower, is also present in the two lower samples. Cornflower is known to have been present in Britain from the 5<sup>th</sup>–6<sup>th</sup> centuries AD and became increasingly wide-spread in the late 9<sup>th</sup>–early 10<sup>th</sup> centuries (M. McKerracher pers. comm.). Cornflower is insect pollinated and therefore is unlikely to fall naturally into a waterlogged sediment some distance from where it was originally growing, therefore taphonomic processes need to be considered. The most likely route of entry into the deposits, is through the disposal of waste from crop processing. The 9<sup>th</sup>–10<sup>th</sup> century AD date from 2.51–2.54 m along with the current knowledge of the spread of cornflower in Britain would suggest that the lower sample (5.52 m) has a terminus post quem of the 5<sup>th</sup>–6<sup>th</sup> centuries AD. However, given that waste disposal is likely to have occurred here, the possibility of redeposition of waste from a number of sources and time periods cannot be ruled out.

The uppermost sample does not contain any evidence of cornflower, but it does have pollen from cereals and spores from fungi associated with herbivore dung. This would suggest that different types of waste (possibly from animal bedding) might have been disposed of here, or that animals were grazing in close proximity to the site. It is not possible to differentiate between the two interpretations. The floodplain is likely to have been a convenient location to graze cattle, particularly in the summer months.

The presence of microcharcoal from both the burning of wood and leaves/grasses, suggests that ash was entering the deposits, either intentionally or naturally. However, given the presence of animal dung and cereal pollen it is considered that this represents a disturbed alluvial deposit with refuse originating from nearby human activity. In addition, given the lack of trees growing locally, it also suggests that wood for fuel would have been sourced at some distance from the site.

The deposits overlying the alluvium are characterised by mixed brown sandy silt clays with frequent sandstone fragments and charcoal. These are interpreted as archaeological layers due to the lack of modern CBM/rubble which characterises the top *c*. 1.50 m of the sequence. In Core 2 the distinction between the modern levelling layers and the archaeological horizon was clear with a gravel foundation for a wall or floor recorded. These layers are similar to those excavated to the north and suggests either post-10<sup>th</sup>-century levelling or reclamation of the floodplain edge. The dumping of material to elevate the ground above the flood zone has been recorded elsewhere along the Leen with medieval dump deposits recorded at the Broadmarsh Bus Station and London Road sites (Poole *et al.* 2018; Keyworth 2018). The sandstone fragments recorded in both cores may also represent in situ wall/floors perhaps related to the construction of the cloister. Again, such structures, in a floodplain context, were recorded at London Road, where a borehole survey carried out as part of SI works recorded the presence of sandstone rubble but did not recognise this as structures due to the loose unconsolidated nature of the material and the softness of the sandstone.

The more recent made ground deposits are thicker to the south which suggests the underlying topography slopes away from Nazareth House and that the site lies at the edge of the floodplain. This would suggest that deeper deposits may be preserved under the road surface of Nazareth Court.

#### 11.7 Conclusions

This small investigation into the edge of the River Leen Floodplain has demonstrated that pre-Priory the land-scape was fairly open, and that the area was used for the deposition of refuse from nearby settlement. Further phases of ground-raising were recorded which are likely to represent the construction phase of the Priory cloister. In addition, the crushed sandstone recorded in both cores may suggest *in situ* walls/floors are also preserved. More extensive areas of both alluvial and archaeological deposition are likely to be present to the south of the site within the main core of the floodplain.



# 12. Discussion

Trench 1 was located at the eastern extent of the main Conventual Church, in an area known to contain a Lady Chapel. The excavation trench identified a substantial (partially robbed) rubble core of a buttress constructed at the north-east corner of the Lady Chapel. The identification of this feature strengthens arguments for a single large rectangular chapel with an apsidal end beyond the east end of the Conventual Church. Previous investigations have proposed several smaller chapels radiating from the east end, admittedly from keyhole investigation only (Hobson and Flintoft 2013). The buttress was observed to cut an undated sub-square posthole or shallow pit. Trench 1 also identified an excavation trench dug by the Lenton Historical Society (supervised by Alan Mc-Cormick and Mike Bishop) in 1976–77, which had identified the walls of the Lady Chapel and a burial within its interior (Lomax pers. comm). Relocating this earlier unpublished excavation will help us to better appreciate the layout of this poorly understood part of the Priory.

Trench 8, positioned in Priory Park, was in an area where previous investigation had identified post-medieval and medieval artefacts and soil features—surfaces, pits and post holes—relating to the use of the Outer Precinct as a medieval Market and Fair (Davies and Flintoft 2015). Unfortunately, the presence of 19<sup>th</sup>-century cellared structures and back plots of the former street, Mart Yard, had completely removed the potential for medieval and post-medieval deposits to be present in this area. The remains of the structural foundations and gennal were well-preserved and correlated with the historic mapping for this area.

In addition to the completion of the consented scheme, targeted investigations comprising test pitting and a borehole survey, were also undertaken outside the Scheduled Monument with the overall aim of better understanding land use around the Priory Church.

A test pit (Trench 10) on the north side of the Conventual Church, in the front garden of 14 Old Church Street, identified a sequence of post-medieval deposits which gave way to an undated sub-soil. This subsoil overlaid a mixed gravel/alluvium, suggestive of a naturally infilled hollow, similar to natural features identified north of Abbey Street during excavations of the medieval market/fair site in the Priory's Outer Precinct (Davies and Flintoft 2015). This is an area where burials have previously been identified (Hobson and Flintoft 2013), so the lack of burials or disarticulated human remains may suggest that burials become less frequent moving west, away from the east end of the Priory Church and towards the Inner Precinct.

In the garden of 25 Old Church Street, beyond the north-east extent of the Priory Church, a test pit (Trench 11) revealed an informative sequence of deposits, comprising a 19<sup>th</sup>-century outhouse, post-medieval levelling layers and intact medieval soil horizons and a cobbled surface. The pottery evidence suggests that the layer (11021)—immediately above the cobbled surface {11022}—was laid down in the 12<sup>th</sup> century, indicating that the surface was 12<sup>th</sup> century or earlier. This positions these contexts in a similar time frame to the foundation of the Priory and the nature of (11021) potentially indicates a horticultural use of this area of land between the Priory buildings and the River Leen to the east.

Geoarchaeological investigations to the south of the Priory Church comprised two targeted boreholes located in the garden of Nazareth House. The northern borehole, south of the Priory Church, identified the area of the Cloister and overlying demolition deposits, at a depth of 1.3 m below ground level (BGL). The cloister appeared to be sitting on a building platform that utilised an elevated shelf of underlying sand and gravel. Dating of a thin deposit overlaying the sandstone and sandy gravel layers indicated that it was formed before the foundation of the Priory, during the Middle to Late Saxon periods. Further south, the second borehole identified the northern edge of the River Leen floodplain and the extent of overlying alluvial deposits. The identification of the River Leen floodplain seems to confirm earlier observations (WA 1993) that the channel was relatively steep sided and located significantly further northwards in the medieval period than it is today in its canalised form. This may explain the absence of archaeological features during the development of flats at the western extent of Nazareth House in the late 1990s (McAree 2003).

The 2020 Lenton Priory investigations have been invaluable, providing important new information relating to key ongoing research themes for the Priory. These include achieving a better understanding of the functional zones within the Priory complex, obtaining a better understanding of medieval water management and insight into the state of preservation and deposit quality within the Scheduled Monument and beyond.



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# APPENDIX 1 – CONTEXT REGISTERS AND MATRICES

Context	Туре	Description	Probable Date
1001	Deposit	Topsoil	Modern
1002	Deposit	Dark brown levelling material below (1001)	Modern
1003	Deposit	Road make up and levelling within [1008]	19 <sup>th</sup> century
1004	Deposit	Substantial accumulation deposit potentially combining natural and anthropogenic processes	Modern
1005	Deposit	Kerb construction for 19th-century road	19 <sup>th</sup> century
1006	Cut	Cut of 1977 excavation trench	Modern
1007	Fill	Fill of 1977 excavation trench	Modern
1008	Cut	Cut for 19th-century road	19 <sup>th</sup> century
1009	Structure	Surviving core of stone buttress	Medieval
1010	Cut	Foundation cut for stone buttress	Medieval
1011	Fill	Foundation fill for stone buttress	Medieval
1012	Cut	Cut of possible pit	Medieval?
1013	Fill	Fill of [1012] – cut by [1009]	Medieval?
1014	Deposit	Possible relict subsoil, presumed to be capping the natural substrate.	Medieval
1015	Deposit	Subsoil	Modern
1016	Cut	Robber cut for removal of buttress' facing stone	Medieval to post-medieval
1017	Fill	Backfill of [1016]	Medieval to post-medieval
1018	Cut	Modern posthole	Modern
1019	Fill	Post packing within [1018]	Modern
1020	Fill	Fill of [1018]	Modern
1021	Cut	Modern post hole	Modern
1022	Fill	Post packing in [1021]	Modern
1023	Fill	Fill of [1021]	Modern

Table 26 Trench 1 context register

Context	Туре	Description	Probable Date
8001	Deposit	Topsoil	Modern
8002	Deposit	Imported sandy clay deposit	Modern
8003	Deposit	Demolition deposit relating to removal of the earlier cottages and outbuildings.	20 <sup>th</sup> century
8004	Structure	Gennal floor in blue paviour bricks	19 <sup>th</sup> century
8005	Structure	Section of outbuilding wall in red brick	19 <sup>th</sup> century
8006	Structure	Section of outbuilding wall in red brick	19 <sup>th</sup> century
8007	Structure	Section of outbuilding wall in red brick	19 <sup>th</sup> century
8008	Structure	Section of outbuilding wall in red brick	19 <sup>th</sup> century



Context	Туре	Description	Probable Date
8009	Deposit	Friable deposit of black sand and clinker	19 <sup>th</sup> century
8010	Deposit	Area of sand and mortar spread	19 <sup>th</sup> century
8011	Deposit	Area of sand and mortar spread	19 <sup>th</sup> century
8012	Structure	Structural brick plinth	19 <sup>th</sup> century
8013	Structure	Section of stone flagging	19 <sup>th</sup> century

Table 27 Trench 8 context register

Context	Туре	Description	Probable Date
10000	Deposit	Topsoil	Modern
10001	Deposit	Dumped material	19 <sup>th</sup> century
10002	Fill	Fill of waste pipe	Modern
10003	Cut	Cut of waste pipe	Post-medieval
10004	Deposit	Imported or alluviation deposit	Medieval?
10005	Deposit	Compact layer of sandstone	Medieval?
10006	Deposit	Alluvial deposit	Medieval?

Table 28 Trench 10 context register

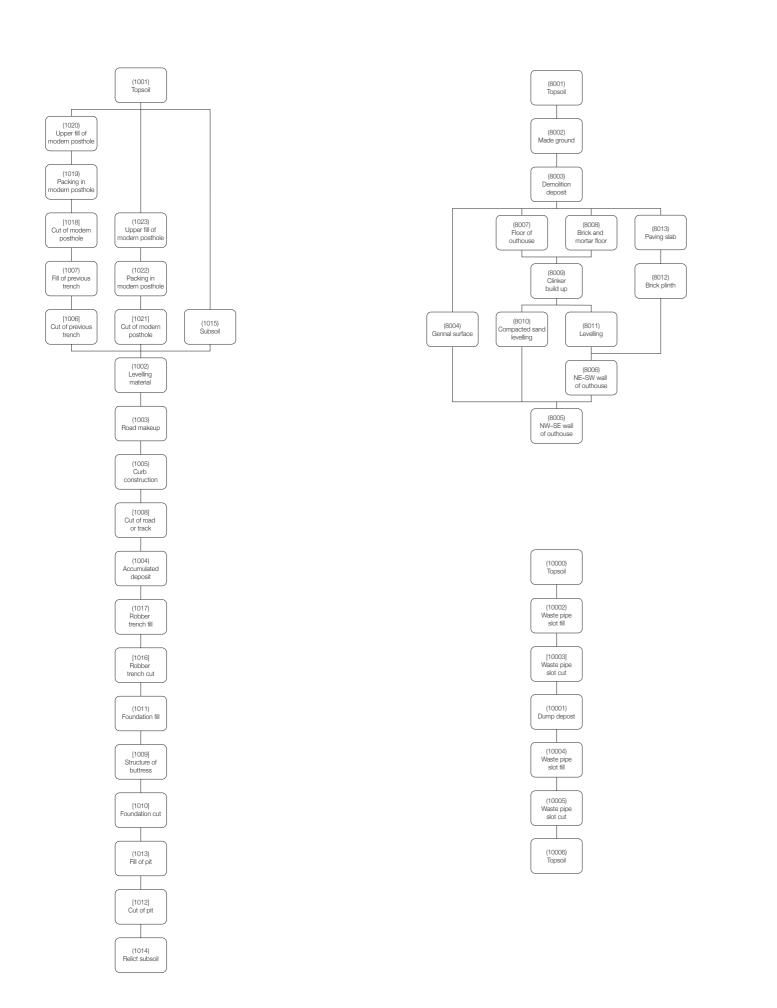
Context	Туре	Description	Probable Date
11001	Deposit	Topsoil	Modern
11002	Voided		
11003	Deposit	Black loose soil and clinker ash layer	Modern
11004	Structure	Outbuilding/toilet wall, east-west-aligned	Modern
11005	Cut	Toilet pipe cut through (11004)	Modern
11006	Fill	Fill of [11005] including pipe abutted by (11007)	Modern
11007	Deposit	Crushed levelling deposit for floor	Modern
11008	Deposit	Grey black lensed deposits (11007)	Modern
11009	Deposit	Loose rubble deposit (1108) + [11004]	Modern
11010	Voided		
11011	Deposit	Firm silt clay below 11010 cut by [11012]	Post-Medieval
11012	Cut	Foundation cut for wall [11004]	Modern
11013	Fill	Dark grey fill of [11012]	Modern
11014	Deposit	Mortar trample deposit above (11011)	Modern
11015	Deposit	Friable sandy silt below (11011)	Post-Medieval
11016	Voided		
11017	Deposit	Lens of redeposited natural substrate with crushed limestone and mortar fragments	Post-Medieval
11018	Deposit	Possible cultivation layer	Medieval
11019	Cut	Cut of pit	Post-Medieval
11020	Fill	Fill of [11019]	Post-Medieval
11021	Deposit	Trample or accumulation deposit above cobbles	Medieval

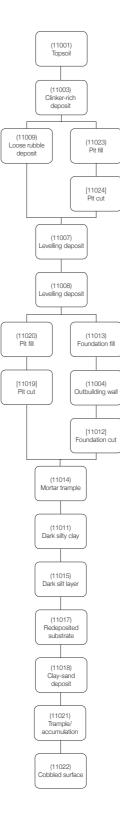


Context	Туре	Description	Probable Date
11022	Structure	Clay with inset cobbled surface	Medieval
11023	Fill	Fill of pit [11024]	Medieval?
11024	Cut	Cut of pit	Medieval?

Table 29 Trench 11 context register







Great British Dig – Lenton Priory Nottingham Nottinghamshire SK 55303 38722



### Trench matrices

Fieldwork: September 2020 Drawn: JB December 2020 Scale: n/a Drawing Version: 1.0



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## APPENDIX 2 – FIELDWORK METHODOLOGY

#### AIMS AND OBJECTIVES

The limited and targeted excavation undertaken as part of this project was considered a form of archaeological evaluation, defined as:

"... a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts and their research potential, within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, reports on them and enables an assessment of their significance in a local, regional, national or international context as appropriate." (CIfA 2020a, 4).

The overarching aim of the excavation was:

• To gain information about the presence or absence, character, extent, date, integrity, state of preservation and quality of any archaeological deposits and artefacts relating to Lenton Priory.

The objectives of the excavation were:

- To attempt to establish the date, character and significance of any archaeological and palaeoenvironmental deposits, including in relation to other similar features within the area.
- To investigate those areas of the Priory complex, in particular to the north and south of the Conventual Church where there is still some question about the location, layout and extent of the cloisters and associated buildings.
- To investigate the areas in and around Nazareth House, specifically:
- Examine the depth of covering sediment revealed during construction of the flats and whether this represents removal or burial of the medieval remains;
- Examine the potential historical courses of the River Leen and whether this represented a southern boundary of the monastic precinct
- Examine the areas adjacent to The Bishops House to assess the location and extent of cloisters buildings
- To ensure there was a permanent record of the work undertaken deposited with the local Historic Environment Record (HER) and made available online.
- To ensure all work was undertaken in compliance with the Code of Conduct of the Chartered Institute for Archaeologists (CIfA) (2019) and relevant Historic England and CIfA standards and guidance.
- To ensure compliance with the agreed WSI.

#### **EXCAVATION METHODOLOGY**

All excavation was undertaken by hand, under the supervision of experienced archaeologists. Excavation was undertaken by stratigraphic context and, where a context was thicker than 100 mm, in spits of no greater than 100 mm. This allowed for differentiation of finds in terms of both context and depth. Where structural remains were encountered, their full extent within the trench was exposed and recorded. Cut features were exposed, they were cleaned and delimited as much as is practicable within the trench and investigated through excavation of a 50% sample of any visible fill. Where there was any doubt about the potential value of knowledge gain derived from investigating an in situ feature, then it was recorded in plan only and left undisturbed. Following completion of fieldwork, all trenches were reinstated.

#### RECORDING METHODOLOGY

All archaeological features were recorded on *pro forma* sheets, creating a primary written record that will was accompanied by drawn and photographic records. A record of each trench was made on a *pro forma* sheet which described its overall form, the local geomorphological and soil profile, features within and artefacts recovered.



A drawn record was compiled of all trenches, including plans and section/profile illustrations at a suitable scale (1:10, 1:20). Plans and sections of any features were made where they were not suitably captured on the overall drawings of the trenches.

The photographic record of the excavation was undertaken in high-resolution digital format. Photographs were taken of all trenches and features in addition to general site photography.

All trenches were located and tied to the national grid through an established survey network. Initial survey control was established with a site datum located using a Leica Smartrover survey-grade GPS with an accuracy of  $\pm 10$  mm. A control network from the site datum and all further survey measurements were undertaken using a Leica TCR805 total station (5" accuracy). All trenches and features were located accurately within this network and their height above ordnance datum recorded.

#### **S**MALL FINDS

All small finds were retained and bagged by context or spit for assessment at the post-fieldwork stage. Small finds were handled, packed, and stored in accordance with the guidelines in *First Aid for Finds* (Watkinson and Neal 1998). In the event that finds of 'treasure' were uncovered, then the local Coroner was to be informed, and the correct procedures followed as outlined under the Treasure Act 1996.

#### **HUMAN REMAINS**

Given the previous discovery of articulated burials within the vicinity of the east end of the Conventual Church there was considered some potential for articulated human remains to be discovered during the course of fieldwork. Where such remains were encountered then work was to cease, the local coroner was to be informed, and excavation of the remains would only proceed if deemed necessary in consultation with the landowner and the local authority archaeological curator. In anticipation of this eventuality, a pre-emptive Ministry of Justice (MoJ) licence was obtained prior to the commencement of fieldwork. The default position for human remains was that they were to be revealed, recorded and re-buried unless there was a compelling research reason to excavate the remains for further analysis. In this instance, excavation was only to proceed in line with agreed legal processes and licensing and in accordance with industry-standard guidance on the treatment of human remains within archaeological excavations (CIfA and BABAO 2018).

#### SCIENTIFIC AND PALAEOENVIRONMENTAL SAMPLING STRATEGY

AIM OF THE SAMPLING STRATEGY

Given the uncertainty of the presence or level of archaeological remains likely to be encountered, the general aim of the scientific and palaeoenvironmental sampling strategy was:

• To provide information on the nature of human activity and the past environment at Lenton Priory and its environs, in relation to the archaeological deposits uncovered during the project.

#### **CHRONOLOGY**

Where chronological and archaeological periods are referred to, the relevant date ranges are broadly defined as follows:

• Palaeolithic (Old Stone Age): 1 million–12,000 BP (Before present)

• Mesolithic (Middle Stone Age): 10000–4000 BC

• Neolithic (New Stone Age): 4000–2400 BC

• Chalcolithic/Beaker Period: 2400-2000 BC

• Bronze Age: 2000–800 BC

• Iron Age: 800 BC-AD 70

• Roman/Romano-British: AD 70-410

Anglo-Saxon/Anglo-Scandinavian/early medieval: AD 410–1066

• Medieval: AD 1066-1540



• Post-medieval: AD 1540–1750

» Tudor: AD 1485–1603» Stuart: AD 1603–1714

» Georgian: AD 1714–1837

Industrial: AD 1750–1900
 » Victorian: AD 1837–1901

• Modern: AD 1900–Present



# Appendix 3 – Physical and Sedimentary Properties of Deposits According to Troels-Smith (1955)

Darkness		
nig.4	black	
nig.3		
nig.2		
nig.1		
nig.0	white	

Degree of Stratification		
strf.4	well stratified	
strf.3		
strf.2		
strf.1		
strf.0	no stratification	

Degree of Elasticity		
elas.4	very elastic	
elas.3		
elas.2		
elas.1		
elas.0	no elasticity	

Degree of Dryness		
sicc.4	very dry	
sicc.3		
sicc.2		
sicc.1		
sicc.0	water	

	Sharpness of Upper Boundary
lim.4	< 0.5mm
lim.3	< 1.0 &> 0.5mm
lim.2	< 2.0 &> 1.0mm
lim.1	< 10.0 &> 2.0mm
lim.0	> 10.0mm

	Sh	Substantia humosa	Humous substance, homogeneous microscopic structure
	Tb	T. bryophytica	Mosses +/- humous substance
I Turfa	TI	T. lignosa	Stumps, roots, intertwined rootlets, of ligneous plants
	Th	T. herbacea	Roots, intertwined rootlets, rhizomes of herbaceous plants
	DI	D. lignosus	Fragments of ligneous plants >2mm
II Detritus	Dh	D. herbosus	Fragments of herbaceous plants >2mm
	Dg	D. granosus	Fragments of ligneous and herbaceous plants <2mm >0.1mm
III Limus	Lf	L. ferrugineus	Rust, non-hardened. Particles <0.1mm
07.4 :11	As	A.steatodes	Particles of clay
IV Argilla	Ag	A. granosa	Particles of silt
	Ga	G. arenosa	Mineral particles 0.6 to 0.2mm
V.C	Gs	G. saburralia	Mineral particles 2.0 to 0.6mm
V Grana	Gg(min)	G. glareosa minora	Mineral particles 6.0 to 2.0mm
	Gg(maj)	G. glareosa majora	Mineral particles 20.0 to 6.0mm
	Ptm	Particulaetestaemolloscorum	Fragments of calcareous shells



## APPENDIX 4 – CORE LOGS

Core 1								
0–0.14 m	Red brick rubble- Made ground							
0.30-0.66 m	Rubble in brown grey silt clay matrix, concrete fragments and glazed tile- Made ground							
0.66–0.80 m	DA	ST	EL	SICC	UB			
	4	0	0	4	4			
	Ag2 Ga 1 As1							
	Gritty black silt clay with coal and brick fragments							
0.80–1.04 m	Whole brick with rubble and concrete							
1.04– 1.45 m	DA	ST	EL	SICC	UB			
	2/3	0	0	4	4			
	Ag2 Ga 1 As1 Gmaj							
	Red-brown sandy silt clay, brick and sandstone fragments at base							
1.45–1.50 m	DA	ST	EL	SICC	UB			
	2	1	0	4	4			
	Ag+ Ga 4							
	Weakly laminated sand							
1.50–1.55 m	DA	ST	EL	SICC	UB			
	4	2	0	4	4			
	Ag2 As1 Sh+ Ga1							
	Laminated black silt sand, well humified organics – Former topsoil?							
1.55–2.45 m	DA	ST	EL	SICC	UB			
	3	0	0	4	4			
	Ag1 As2 Ga1 Gmaj							
	Mixed brown silt clay sand with frequent sandstone, Archaeological layer?							
2.45–2.56 m	DA	ST	EL	SICC	UB			
	3	0	0	3	4			
	Ag1 As1 Sh+ Ga2 Gmaj							
	Sandy black silt clay	Sandy black silt clay occasional gravel						
2.45–2.66 m	DA	ST	EL	SICC	UB			
	3	0	0	3	4			
	Ag1 Gmaj2 Ga1							
	Sandy clay gravel							
2.66–3.62 m	DA	ST	EL	SICC	UB			
	3	0	0	2	1			
	Gmaj2 Ga2							
		Wet sandy gravel, less sand with depth						
3.62–4.00 m	Weathered red sandstone							



Core 2							
0–0.28 m	Topsoil						
0.28–0.50 m	Gritty brick rubble, plastic at base- Made ground						
0.50–0.67 m	Mortared in situ brick wall/floor?, 2 courses on a concrete foundation						
0.67–0.90 m	Gravel- wall foundation?						
0.90–1.00 m	Crushed red and buff sandstone. Archaeological layer?						
1.00–1.25 m	Gap						
1.25–1.76 m	Mixed brown sandy silt with sandstone fragments, charcoal and slate at base Archaeological layer?						
1.76–1.94 m	DA	ST	EL	SICC	UB		
	2/3	0	0	4	4		
	Ga4 Gmaj+						
	Pale brown sand occasional gravel						
1.94–2.00 m	Buff sandstone fragments						
2.00–2.40 m	Gap						
2.40–2.60 m	DA	ST	EL	SICC	UB		
	3	0	0	4	4		
	Ag1 Ga2 Ag1						
	Grey brown gritty silt clay						
2.60–3.00 m	DA	ST	EL	SICC	UB		
	3	0	0	3	4		
	Ga2 Gmaj2						
	Brown red sandy gravel, wet at base						



