DigVentures

Gatehouse Project, Pontefract Castle

Community Archaeology Project

Assessment Report

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Archaeological Assessment Report

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Purpose of document

This document has been prepared as an Assessment Report for Wakefield Metropolitan District Council, Historic England and other stakeholders. The purpose of this document is to provide a comprehensive account of the excavation undertaken in front of the gatehouse at Pontefract Castle, with specialist assessment of finds and samples, and recommendations for further investigation and analysis. It is supported by an easily accessible online database of all written, drawn, photographic and digital data, and recommendations for further analysis.

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Project summary

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Executive summary

DigVentures was commissioned by Wakefield Metropolitan District Council to undertake a community excavation on the Scheduled Monument at Pontefract Castle gatehouse, supported by Historic England with funding allocated under the terms of the NPPF Emergency Investigation Assistance.

Fieldwork took place in two stages. An initial community-focused excavation was undertaken between 30th September and 3rd November 2019 (DigVentures project code: PON19), followed by a targeted investigation of the drawbridge pit between 27th July and 14th August 2020. This project was designed to provide baseline information to contribute to the future management, research and presentation of the site, creating multiple educational and participatory learning experiences for community participants.

This report presents results from the excavation and remote sensing, incorporating specialist assessment. The potential of these results to achieve the aims and objectives of the project are discussed in the final section of this report, followed by a detailed list of specialist recommendations for further analysis. It is intended that full analysis and reporting will be undertaken once all stages of investigative work have been completed and assessed.

Results summary

Fieldwork was undertaken initially between 30th September and 3rd November 2019 to investigate parts of the gatehouse structure exposed during an earlier archaeological watching brief at Pontefract Castle, located at the base of the Victorian steps leading from the visitor centre into the castle's inner bailey. The community excavation was conducted in two stages; the first three weeks comprised hand and machine excavation by a team of professional archaeologists, followed by a two-week programme of excavation, recording and finds processing involving members of the local community. Based on the results of the work in 2019, a second phase of excavation was undertaken in 2020 to complete a targeted investigation to excavate the full stratigraphic sequence within the previously identified drawbridge pit. This phase of work comprised hand excavation of sealed deposits exclusively within the drawbridge pit and was completed by a team of three professional archaeologists.

Significant remains were uncovered during the investigation, enabling a reinterpretation of the building and surrounding landscape during the medieval and post-medieval periods. The excavation area was an irregular shape in plan, measuring approximately 15m long and 10m wide between the existing footpath in front of the visitor centre and the base of the steps into the inner bailey. All data was recorded by project archaeologists using a web accessible relational database. This is housed on the project microsite https://digventures.com/earth-trust and can be explored by following the links shown in green font throughout the report.

Seven distinct phases of activity were observed within the trench. The earliest represented by a casing wall which predated the construction of the gatehouse in the 14th or 15th century. The gatehouse structure is now understood to have been aligned north to south, forming a barbican passage bridge over the moat, within which was a large drawbridge pit. Mason's marks found inside this pit and on the surviving external elevations of the building indicate it was likely constructed as part of a larger scheme of castle renovation commissioned in the 14th century. Layers investigated from within the drawbridge pit demonstrated a gradual accumulation of deposits from as early as the 14th through to the 17th century.

Masonry of a different construction technique was found abutting one of the gatehouse towers. This structure has tentatively been interpreted as part of a redans built prior to the Civil War sieges in the 1640s. Further evidence for the sieges was found within the drawbridge pit where significant layers consisting of large stone rubble fragments indicated the castle's demolition. Numerous lead musket balls dating to this period were also found from these deposits.

Later episodes of robbing activity were evident around many of the walls, dating from the demolition of the gatehouse in 1649 through to the mid 19th century. By the 1880s much of the castle was subject to archaeological recording before the entire area was landscaped. At this time much of the upstanding gatehouse remains were remodelled to fit the aesthetic of a late Victorian romantic ruin.

Public engagement was a key part of the success of the project, providing a range of opportunities for local community members, school children and visitors to the area to learn more about the archaeology of Pontefract Castle. A significant impact was made on participants and visitors alike, attracting a diverse community of people from an area of high deprivation to explore their heritage in new and different ways. The project succeeded in changing people's perception of archaeology and local history while giving the opportunity to improve their skills and understanding of the discipline. Insights gained from this evaluation have established a clear community need and demand for more archaeological work at Pontefract Castle, and should assist with the impactful design and funding applications for any future activities.

Contents

Tables

Figures

Appendices

1 INTRODUCTION

1.1 Project background

1.1.1 DigVentures was commissioned by Wakefield Metropolitan District Council (WMDC) (hereafter 'the Client') to undertake a programme of archaeological investigations as part of the Gatehouse Project, a community-focused archaeological research project based at Pontefract Castle, West Yorkshire (hereafter 'the Site'; Figure 1). The Project Design was formulated by DigVentures (Casswell *et al* 2019) in consultation with the Client and Historic England. All DigVentures projects are designed in accordance with MoRPHE framework (*Management of Research Projects in the Historic Environment*, Historic England 2015. The project was supported by Historic England, with funding allocated under the terms of the NPPF Emergency Investigation Assistance.

1.1.2 The information contained in this report provides an account of the archaeological works focused on defining and characterising the physical extent of the remains of a recently discovered gate house through a programme of non-intrusive investigations and intrusive excavation, obtaining baseline data to facilitate its future management, research, presentation and enjoyment of Pontefract Castle. The results have been circulated for wider dissemination in accordance with the Project Design (Casswell *et al* 2019).

1.1.3 This report is one of a number of archive and dissemination products generated by the project, including the digital archive and metadata, the paper archive and the artefact and environmental material recovered and recorded. All archive material is currently held by DigVentures and will, when the project is complete, be deposited with the Pontefract Museum, and will be freely disseminated through West Yorkshire Historic Environment Record (HER), Archaeological Data Service (ADS), OASIS portal and the project microsite https://digventures.com/pontefract-castle/.

1.2 Project scope

1.2.1 Pontefract Castle has a rich and nationally important heritage, one of England's strongest fortresses throughout the medieval period and beyond, it played a crucial role in politics and the balance of power in the North of England. It is mentioned in numerous historical sources, including by Oliver Cromwell, who described the castle as 'one of the strongest inland garrisons in the kingdom', and William Shakespeare, who wrote in his play Richard III of Pontefract Castle 'Pomfret, Pomfret! O thou bloody prison'. Nonetheless, relatively little is known about the archaeological resource and the recent discovery of a previously unidentified gate house indicate that much is still to be learned about physical structure of Pontefract Castle. In 2019, archaeological investigations were undertaken in order to define and characterise the physical extent of the site, and obtain baseline data to facilitate the future management, research, presentation and enjoyment of the historic monument (Wessex – report forthcoming).

1.2.2 Pontefract Castle is now situated within an area of significant deprivation, with 18% of residents falling within the top 10% of most deprived in England (Source: Index of Multiple Deprivation based on 2011 census data). The 'Gatehouse Project, Pontefract Castle' therefore provided a major opportunity to stimulate the heritage-led regeneration of the site and its environs, engage the local community in their heritage,

provide skills training and practical experience to the public, and build an audience and local appreciation for the castle's instrumental contribution to regional and national history.

1.3 Site description

1.3.1 Pontefract Castle is strategically situated on an outcrop which formerly commanded two of England's principal highways – the north road and the route west over the River Aire and the Pennines. The site is located towards the north eastern extent of the historic core of modern Pontefract (Grid Ref: SE 46075 22320, Figure 1) on a promontory formed of Coal Measures sandstone (Pontefract Rock) at a height of c 50m AOD.

1.3.2 Now owned by the Duchy of Lancaster and managed by Wakefield Metropolitan District Council, Pontefract Castle is now a Scheduled Monument (NHLE ref. no. 1010127) and one of Pontefract's most identifiable landmarks. However, much is still unknown about the castle, made apparent by recent discoveries at the inner bailey gatehouse.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Pre-Norman Conquest

2.1.1 Before the Norman Conquest, Pontefract consisted of two distinct townships, *Taddenesscylf* (*Tateshalle*) and *Kirkby*. *Taddenesscylf* is mentioned in the Anglo-Saxon Chronicles as place of importance where Archbishop Wulfstan and men of Northumbria pledged their allegiance to King Eadred of Wessex, and *Kirby* (translating from Scandinavian as 'church-settlement') a significant ecclesiastical establishment with at least three potential pre-Conquest churches. It has been suggested that there is strong circumstantial evidence for the promontory upon which the castle is now situated having been the site of the royal Anglo-Saxon burh, and *Kirkby* a minster (Roberts 2013). It is possible that the large ditch surrounding the motte of the Norman castle was originally part of the town ditch to the Anglo-Saxon settlement.

2.2 Norman

2.2.1 *Tateshalle-Kirkby* and the former royal manor were granted to Ilbert de Lacy by William the Conqueror following the Norman Conquest, and it was there that Pontefract Castle was constructed in c.1070. Although Pontefract is not referred to in the Domesday Book (1086), 'Ilbert's Castle' is mentioned, signifying that work on its construction was well under way by this point. This first phase of construction likely consisted of an earthen motte and bailey enclosing timber buildings, including a wooden keep and Anglo-Saxon church, later refounded as St Clement's Norman chapel.

2.2.2 The castle was confiscated from the de Lacy family by Henry I during the 12th century, where it remained property of the Crown until King John gave it back in 1199, only for the King to take possession of it again in the early 13th century. During the 11th and 12th centuries the Norman borough of Pontefract was created to the southwest of the

castle along Micklegate, its limits defined by Northgate and Southgate. As the borough grew in importance, so too did the castle. The fortifications were gradually rebuilt in stone during the 12th century. Early work included the construction of the curtain wall, gatehouse into the inner bailey and conversion of the keep into stone, all by the end of the 13th century.

2.3 Later medieval

2.3.1 Although the King had taken possession of the castle in the early 13th century, the de Lacy family continued to live in it until the early 14th century when, in 1311 the castle passed by marriage to the House of Lancaster. By the late 14th century the castle was in the hands of Edward III's son, John of Gaunt, who commissioned several major rebuilding works. The gatehouse was strengthened and given polygonal buttresses, new towers – including Swillington, Constable, King's and Queen's Towers – were constructed around the curtain wall, the barbican was walled and the keep extended. The strategic military and administrative significance of Pontefract Castle is visible through its association with some of the leading families of the medieval period, and was remodelled throughout the Wars of the Roses before gradually falling into decay during the 16th century.

2.4 17th century

2.4.1 The castle was a major Royalist stronghold, having profited greatly from substantial repairs made by Charles I between 1618 and 1620. Parliamentary forces first sieged the castle in 1644 but, despite irreparably damaging the Piper Tower, were forced to retreat. A second siege began the following year where, upon hearing of Charles I's defeat at the Battle of Naseby, the castle garrison surrendered. However, in 1648 Royalists regained control of the castle. The final siege of Pontefract Castle began in November 1648, led by Oliver Cromwell himself. Charles I was executed in January 1649 and the garrison agreed terms to hand the castle over to Major General John Lambert. Soon after this event, at the request of the local townspeople, the fortifications were slighted leading to the site's eventual strategic decline.

2.4.2 The site was subsequently used for liquorice cultivation before being converted into a public park by the Victorians in 1883, a move that has helped to preserve the buried remains of a wide range of structures and features relating to all phases of Pontefract's history.

2.5 Gatehouse

2.5.1 The original Norman gatehouse would have been of timber construction and its original location is not known; however, because of the nature of the local topology it is most likely to have been in approximately the same position as the stone one that followed. Its renovation to stone was, in all probability, made in the 12th or 13th century and consisted of a simple arched opening in the curtain wall, later converted to a simple rectangular gatehouse. A documentary reference form 1244-46 describes roofing '…the wooden tower in Pontefract Castle with lead' (Roberts 2001, 17). The site was developed further during the 13th century to include two drum towers, one either side of the gate. It is known that the gatehouse was then added to in the late 14th or early 15th century, although any attempt to phase its construction from the

visible extant remains is problematic because of its state or disrepair. Later paintings and engravings from the 17th century onwards depict how the structure may have looked before the fortifications were slighted. They show no ditch or drawbridge but do all identify flanking wall gate piers extending from the towers.

2.5.2 The presence of an additional tower between the two main drum towers has been suggested through a description of the site by Richard Holmes (1887), who apparently identified a small roundel projecting from the eastern drum tower at the gatehouse during excavations in the 19th century. This does not appear on any other illustrations and is at odds to what is currently understood to constitute the gatehouse. A large ditch is known to have passed the front of the gatehouse, which was filled by the time of the Civil War, and it is possible that there exist the remains of a drawbridge structure, at least one additional tower, and part of barbican dating from the 14th century between the Victorian steps and the Visitor Centre.

2.6 Previous archaeological work

2.6.1 Early investigations at the Castle appear to have taken place in the 1880s, with excavations referred to by Richard Holmes as taking place around the Great Gateway or Porter's Lodge (Holmes 1887, 403). Between 1982 and 1986 a major programme of work was carried out by the West Yorkshire Archaeology Service (WYAS - Roberts 2002). This work identified evidence of a Christian cemetery belonging to the 10th century royal town of Tanshelf underlying the inner bailey of the castle near the 11th century St Clements's Chapel. WYAS also conducted a geophysical resistance survey conducted in 2002, and together these reports have provided an archaeological framework for the 'Gatehouse Project' – motivated by the discovery of previously unidentified buildings associated with a gatehouse complex, revealed during pre-development works in 2016.

2.6.2 Preliminary assessment during the 2016 watching brief (Wessex Archaeology – report forthcoming) suggested that the 13th century gatehouse was re-fronted by the construction of a third tower set between the drum towers articulating with a drawbridge pit. The remains of this third tower consisted of a substantial curved masonry structure which appeared to incorporate an internal room. These structures appeared to represent a barbican, a further line of defence, added to the existing gatehouse, and most likely depicted in the 1560 survey drawing. The associated drawbridge pit measured c.2m wide and, although its length and depth were not revealed during excavation, comparative examples suggested that it may have measured *c.*5m long and 2m deep. It was suggested that the drawbridge pit was likely constructed within a pre-existing ditch, necessitating high retaining walls articulating with a bridge structure. The WYAS geophysical survey identified a substantial 10m wide ditch in this locality, though results were constrained due the upstanding Victorian tea house, lodge and access road, meaning that the survey could not extend beyond the gatehouse. Although this work is as yet unpublished, the project team have been granted access to the watching brief archive, and an appraisal of the material pertinent to the excavation is included alongside the results of the 2019 investigation below.

3 PROJECT AIMS AND OBJECTIVES

3.1 Background

3.1.1 The aims and objectives articulated below were defined in the Project Design for this stage of research (Casswell *et al* 2019). The project has been designed in accordance with priorities articulated in the Historic England Research Agenda (2017b) and Historic England Corporate Plan (2018-21). During the fieldwork project, weekly meetings were held between the Site Director (DigVentures), Neil Redfurn (HE), Ian Sanderson (WYAAS) and representatives from WMDC. This was undertaken to ensure the direction of the project was in accordance with the research aims outlined below, managed through the creation and updating of a compliance matrix.

3.2 Aims

3.2.1 The overarching aim of the archaeological excavation was to define and characterise the physical extent of the site through a scheme of non-intrusive and intrusive investigations combined with an integrated public engagement programme at its core. This approach enabled the collection of baseline data to facilitate its future management, research, presentation and enjoyment. The goal of this work was to fully record, analyse and report all archaeological remains within the area of interest ('preservation by record'); to place the results of this work in the public domain by publishing the results in an appropriate format as agreed by Historic England; and to inform how the Gatehouse might be presented to the public.

3.2.2 Aim 1: Identify the physical extent and character of the archaeological remains on the site with a programme of remote sensing. This aim entailed an initial review of the unpublished 2016 field archive and non-invasive survey of the site, including low-level aerial photography and photogrammetry to define and establish the physical extent and condition of the site. These low impact tools added to our understanding of the monument by addressing the following questions:

- Q1: In light of current findings from projects at similar Castle sites, do any outstanding research objectives from the earlier unpublished 2016 watching brief still remain to be addressed?
- Q2: Can the layout of the gatehouse and associated sub-surface archaeology be established by remote survey?
- Q3: Can we identify any phasing in the topographic or remote sensing anomalies indicative of an extended period of use?

3.2.3 Aim 2 – Characterise the results of non-invasive survey, refining the chronology and phasing of the site with a programme of trenching. In the light of the evidence base collated for Aim 1, this aim was addressed with a targeted trench to address the following questions:

- Q4: What evidence is there for the use of the site pre-Norman Conquest, and how does this compare with remains recovered through recent archaeological investigations within the castle and the surrounding area?
- Q5: Can we elucidate the plan, character, function, phasing, contemporary significance and chronological development of the gatehouse structures, with the

aim of establishing the possible presence of bridge structures and / or a barbican in front of the gatehouse?

- Q6: What are the specific characteristics of the apparent ditch / drawbridge pit, including its width and depth?
- Q7: What is the date of the feature's original construction, and the date of its infilling?
- Q8: Can we establish and date the sequence and morphological development of archaeological remains encountered from the ditch through environmental sampling and scientific dating?
- Q9: Is it possible for a comparison to be made between masonry styles / techniques found during excavation with those identified from other dated structural elements of the castle?

3.2.4 Aim 3 – Understand the site's archaeological and palaeoenvironmental conditions. This aim was achieved with an assessment of the samples as defined and recovered in Aim 2, using appropriate palaeoenvironmental and archaeological techniques to establish preservation and significance.

- Q10: What is the current state of the archaeological and palaeoenvironmental material across the site?
- Q11: How well do deposits and artefacts survive, and how deeply are they buried?
- Q12: Can the palaeoenvironmental data recovered from sampling in the excavation inform us about the provision of consumable goods to a high-status residence, and any specialised food processing or industrial activities that may have taken place at the site?
- Q13: Can we increase our understanding of the local environment during the multi-period occupation of the site and the process by which the ditch was filled?

3.2.5 Aim 4 – Making recommendations, analysis and publication. This aim required all data from Aims 1-3 to be collated, with an integrated analysis of the archaeological and palaeoenvironmental resource at the site, making recommendations to conserve, enhance and interpret the heritage significance of the site.

- Q14: Following a comprehensive assessment of all archaeological material, how can the results of this work aid in our interpretation of contemporary regional sites?
- Q15: In light of the evidence recovered from this and previous work, can we articulate a link between the multi-phased use of the site and its different areas?
- Q16: Can we highlight any particular themes within the complete and stable archaeological archive that would benefit archives, local museums and education, improving regional accessibility?

3.2.6 Aim 5 – Public engagement. The project offered a range of opportunities for local community members, school children and visitors to the area to get involved and learn more about the archaeology of Pontefract Castle. Working closely with the wider project team and other local stakeholders, participation opportunities included excavation, finds processing, photogrammetry and guided visits. The engagement and participation programme was designed to:

- Involve volunteers in supervised finds handling and processing sessions during the excavation, learning how archaeological materials are recovered and managed from professional staff
- Engage with local school children
- Host a series of open days and guided tours for visitors
- Reach thousands through digital engagement with the project microsite
- Provide full access to the archaeological results via the project microsite as the trenches, finds and feature are recorded
- Disseminate results of the excavations via media, broadcast, print and popular publications

4 METHODOLOGY

4.1 Remote sensing

4.1.1 A photogrammetric survey of the site and surrounding area was made in accordance with Historic England's Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice (2017a), to assist in recording any remains encountered. The survey utilised Agisoft Metagshape 3D Modelling software to detect the feature points of the structure and match these in different images to create a point cloud, from which a photo realistic 3D models were generated. All models were georeferenced using eight coded targets for each model, surveyed into the National Grid using a robotic total station. The resulting DSM was intended to provide an accurate and versatile record of the form and condition of the site and as such to provide a baseline dataset for comparison with future surveys to place the castle's environs and interventions into a landscape context to facilitate more detailed invasive and non-invasive work at the site.

4.2 Excavation

4.2.1 All work was completed to CIfA *Standard and guidance for archaeological excavation* (2014a) and was undertaken in accordance with the standards set out within the WSI (Casswell et al 2019) and through bespoke public programming designed by DigVentures working in collaboration with WMDC. The excavation was carried out in accordance with the company Health and Safety Policy, to standards defined in The Health and Safety at Work etc. Act 1974, and The Management of Health and Safety at Work Regulations 1992.

4.2.2 Excavation at Pontefract Castle was undertaken in two phases of investigation. The first phase comprised hand excavation of an area measuring approximately 15m by 10m, in plan by a team of four professional archaeologists over the course of five weeks between 30th September and 3rd November 2019. Public engagement activities were key to the completion of the project, with Finds Lab Workshops every day for the last two weeks, and Dig Experience activities the final week. This integrated approach gave members of the public the opportunity to engage with the archaeology through a supervised programme of excavation and recording, while aiding in the site's final recording. Where public participation was encouraged in the final weeks of the fieldwork, excavation and recording was undertaken at a ratio of one professional archaeologists for every two members of the public. Work

undertaken with groups of volunteers included cleaning and defining masonry and excavating (cutting-back) sections. The second phase of investigation comprised a targeted excavation of the remaining depositional sequence from within the drawbridge pit identified during the initial phase of work. This was undertaken by a team of three professional archaeologists between 17th July and 14th August 2020.

4.2.3 Spoil was visually scanned and metal detected for artefacts throughout the excavation and as soon as archaeological deposits or features were recognised they were cleaned, planned and photographed prior to any further hand-excavation. All sections were recorded so that the full depositional sequence could be illustrated throughout. The drawbridge pit posed a particular issue during the first phase of investigation because of its depth. A running section was established down the middle of the length of the area and work proceeded by excavating to a depth of 1.2m, whereupon the section was recorded before the remaining half was excavated. This approach continued for the next 1.2m but the half that was left unexcavated remained that way to enable safe access to the area and to provide a platform for spoil removal. Following this a 1m test pit was excavated down for 1.2m in the deepest part to investigate the earlier depositional sequence. When no base to the pit was found the sondage was hand-augered in an attempt to find bedrock. The purpose of the second phase of investigation was to continue excavation within the drawbridge pit to the base using the previously described methodology safely. This required the installation of a winch on the north side of the drawbridge pit and the use of a ladder for access/egress.

4.2.4 All recording was undertaken using the DigVentures Digital Dig Team recording system. Digital Dig Team is DigVentures' bespoke, cloud-based, open data recording platform, designed to enable researchers to publish data directly from the field using any web-enabled device (such as a smartphone or tablet) into a live relational database. Once recorded, the born-digital archive is instantly accessible via open-access on a dedicated website, and published to social profiles of all project participants (community, professional and specialist). Links to all individual trench, feature and context records are provided in Appendix A, from where all associated finds, samples, plans, sections, photographic records and 3D models can also be explored. A single context recording system was used to record the deposits. All context numbers are a four-digit number; layers and fills are recorded with curved brackets (1001), whilst the cut of the feature is shown with square brackets [1002]. Feature numbers were assigned to groups of contexts pertaining to similar events and are displayed as three-digit numbers pre-fixed with the letter F (i.e. F601).

4.2.5 Full written, drawn and photographic records were made of each excavated section, even where no archaeological remains are identified. A plan at an appropriate scale was prepared, showing the areas investigated and their relation to more permanent topographical features, and the location of contexts observed and recorded in the course of the investigation. Plans, sections and elevations of archaeological features and deposits were drawn as necessary at an appropriate scale. Drawings were made in pencil on permanent drafting film and digital photography was used for all photography of significant features, finds, deposits and general site working. The photographic record illustrates both the detail and the general context of the principal features and finds excavated, and the site as a whole.

4.3 Artefacts and ecofacts

4.3.1 Finds were treated in accordance with the relevant guidance given in the CIfA's *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (2014b), excepting where they were superseded by statements made below. Archaeological material was handled and sorted following advice in Watkinson and Neal (1998). All artefacts from excavated contexts were washed, counted, weighed and identified. Finds recovered were assessed by appropriately qualified specialists, who examined the finds to provide an identification, date and provenance of the material, and to also evaluate the significance of the assemblage.

Pottery

4.3.2 The pottery assemblage was identified to type and quantified using the number of sherds, the weight of the sherds and the estimated (maximum) number of vessels (ENV) following the principles set out in the current standards and guidance document (Barclay et al 2016). The classification system used to define and describe the pottery was the same as that used for the assemblages from the earlier phases of excavation on the site and is fully described in the published report (Cumberpatch 2002) and in archive reports. The major types of medieval pottery involved are also covered in the regional type series for the neighbouring area of South Yorkshire and north Derbyshire (Cumberpatch 2004) as there is currently no generally accessible or accepted ceramic type series for West Yorkshire.

Ceramic Building Material (CBM)

4.3.3 The CBM was recorded to a fabric series already used for other sites in West Yorkshire with form recorded where possible, and unidentifiable fragments recorded as 'B/T' (Brick/Tile) . Metrics recorded were number of fragments (No), weight in grams (Wt) and number of corners (Cnr), with complete dimensions recorded in mm and evidence of sooting, mortar, or marks alongside comments as appropriate noted.

Animal bone

4.3.4 All animal remains were identified to element, side and to as low a taxonomic level as possible using the specialist's reference collection and published and online identification guides (BoneID; Hillson 2003; 2005). Quantification for mammal bones used the diagnostic zone method as presented by Dobney and Rielly (1988). Sheep (*Ovis* sp.) and goat (*Capra* sp.) or equid (horse/donkey/mule) distinctions were not considered. Bird remains were identified and quantified using the diagnostic zone method as presented by Cohen and Serjeantson (1996). Identification of fish remains was made using widely available identification guides (Archaeological Fish Resource; Camphuysen and Henderson 2017; Nabone Fish; Osteobase; Wheeler and Jones 1989), and quantification used the diagnostic zone method as presented by Barrett (2001) and Harland et al. (2003). Remains of cod family fish were allocated to size categories as described by Cerón-Carrasco (2004). The molluscs remains were identified using online identification guides (Hayward and Ryland 1995), with quantification made useing a diagnostic zone method.

4.3.5 A taphonomic assessment of each fragment was undertaken, recording the presence and absence of cut and chop marks, burning and calcination, any evidence for animal activity (canid or rodent gnawing), pathology, and surface preservation; any other surface modifications of note were also recorded. Fragments of bones that could be identified to element but not any specific species were grouped as far as possible using size and class or order categories. At this stage, no attempt was made to sex any of the remains, or to measure any elements.

4.3.6 The assessment was undertaken in line with current standards and guidelines (CIfA 2014b; Baker and Worley 2019) with reference to the Project Design (Casswell et al. 2019) and the Yorkshire Archaeological Research Framework's resource assessment (Roskams and Whyman 2005) and research agenda (Roskams and Whyman 2007).

Environmental

4.3.7 Environmental samples were processed using a water separation machine. Floating material was collected in a 300µm mesh, and the remaining heavy residue retained in a 1mm mesh. Flots and heavy residues were air dried and the >4mm fraction of the heavy residues were sorted for organic remains and artefacts.

4.3.8 The samples were assessed in accordance with Historic England guidelines for environmental archaeology assessments (Campbell et al. 2011) and are presented in Table 13. A preliminary assessment of the samples was made by scanning using a stereo-binocular microscope (x10 - x65) and recording the abundance of the main classes of material present. Macroscopic plant material was quantified using a scale of abundance (- = < 5 items, + = > 5 items, ++ = > 10 items, +++ = > 50 items, ++++ = > 100 items, +++++ = > 500 items). The abundance of other palaeoenvironmental material such as molluscs was also recorded along with the abundance of other material such as coal / vitrified charcoal, cinders and the abundance of artefacts and organic remains from the >4mm fraction of the heavy residues. All charcoal fragments greater than 2mm in size in cross section were counted.

4.3.9 Preliminary identifications of plant material were carried out by comparison with material in the reference collections at the Department of Archaeology, University of Sheffield and various reference works (e.g. Cappers et al, 2006). Cereal identifications and nomenclature follow Zohary et al. (2012) and other plant nomenclature follows Stace (2010). The seed, in the broadest sense, of the plant is always referred to in the table, unless stated otherwise. The abbreviation cf. means 'compares with' and denotes that a specimen most closely resembles that particular taxon more than any other.

5 REMOTE SENSING RESULTS

5.1 Aerial survey

5.1.1 An aerial survey of Pontefract Castle was undertaken by the project team, led by Adam Stanford of Aerial-Cam. The principle aim of this work was to identify, define and map the physical layout of the gatehouse and associated remains (Aim 1). This fulfils Stage

2 and addresses Aim 1 Questions 1–3 of the Project Design (Casswell et al. 2019) by mapping the physical extent and condition of the site.

5.1.2 The aerial survey resulted in the production of an accurate Digital Surface Model (DSM) (Figure 2) and a photo-realistic 3D model of the survey area, which can be viewed at https://skfb.ly/6ROUA. It showed the full layout of the Castle, placing the final results of the excavation in context with the upstanding structural remains still extant. The angle at which the drawbridge pit was aligned with the gatehouse was clearly depicted, as were other elements of the structure. The Great Tower has also been recorded, illustrating in detail the multiple tower arrangement and providing an insight into the possible phasing of the structure (see Section 10.2).

6 EXCAVATION RESULTS

Chris Casswell

With specialist contributions by Chris Cumberpatch (pottery), Hannah Russ (animal bone), Elizabeth Foulds (small finds), Stuart Noon (small finds), and Ellen Simmons (environmental)

All digital context and feature records have been archived on the Digital Dig Team system and can be reviewed here at https://digventures.com/pontefract-castle/ddt/browser.php and by clicking on the links in green in the text.

6.1 Introduction

6.1.1 An archaeological excavation was carried out from 30th September and 3rd November 2019, and then again between 17th July and 14th August, on the site of the gatehouse structure at Pontefract Castle. Significant remains were uncovered during the investigation, enabling a reinterpretation of the gatehouse structure during the medieval and post-medieval periods. The following stratigraphic assessment fulfils Stage 4 (Tasks 4.1 and 4.2) and addresses Aim 2 Questions 4–9 of the Project Design (Casswell et al. 2019, see Sections 12.1.1 and above) by establishing a phased chronological narrative for development of deposits at the gatehouse.

6.1.2 The excavation area was an irregular shape in plan, measuring approximately 15m long and 10m wide between the existing footpath in front of the visitor centre and the base of the steps into the inner bailey. Figure 3 shows the final post-excavation plan of the site derived from a rendered 3D model. Figures 4 – 8 show the elevations of the walls of the gatehouse, Figure 9 the section through the drawbridge pit fills and Figures 10 – 11 the baulk trench sections. Detailed descriptions of every context are included in Appendix A.

6.2 Phase 1 – Casing Wall (12th to 13th century)

6.2.1 The earliest remains encountered during the excavation was a heavily degraded limestone wall F120 fronting the natural sandstone edge within the drawbridge pit (Figure 5). It comprised four courses of degraded ashlars to a maximum height of 0.8m mortared in a single 0.3m wide skin to the outer facing edge of the moat. The upper two courses had suffered from significant erosion, particularly towards the centre, and

it is most probable this had occurred through weathering of the surface as water drained into the base of the drawbridge pit. Below the wall the natural sandstone upon which it had been constructed was noticeably redder than the surrounding geology and had began to erode, almost undercutting it.

6.2.2 Dating the casing wall was problematic, but a comparison between it and other remains suggests it had been exposed for significantly longer. Sandstone was quarried locally for building works commissioned at the castle from the 13th century onwards; however, the construction of this wall in limestone indicates it may predate these works, having been erected in the 12th or 13th century.

6.3 Phase 2 – Gatehouse construction (14th century)

6.3.1 The remains of the gatehouse investigated within the trench were constructed during building works in the 14th century. Structural elements were built using sandstone ashlar and included part of the eastern gatehouse tower, an adjoining central tower, and a drawbridge pit extending from what would have been the inner end of a barbican passage.

6.3.2 The inside of the eastern gatehouse tower base F119 was visible prior to excavation as it formed the side of the Victorian steps. Excavation of this structure was limited within the excavation area but did enable part of the front of the building to be exposed and its relationship with the adjoining tower to be established. These external remains were stepped for three courses and survived to a height of 1.2m. They were a polygonal shape in plan, with each of the two faces visible measuring 1.5m, splayed at an angle of 145˚. The previously exposed parts of the structure appeared to form a straight side next to the steps, however this part of the structure contained concrete replacements in the make-up of the masonry representing later Victorian remodelling.

6.3.3 The base of a central tower F108 had been keyed into the front of the eastern gatehouse tower, either as a contemporary build or later addition (Figure 4). This structure was circular in plan and formed a plinth course comprising five courses of sandstone ashlar constructed directly on top of bedrock. It formed part of the same building as the passage barbican bridge F101 that extended to the south, highlighting that these were constructed entirely at the same time. Seven courses of the eastern external side of the bridge were revealed, albeit staggered down into the moat, surviving as parts of the structure that were not demolished or removed from the 17th century onwards. Overall, the outer wall was 5.5m long with a 1.5m long, 0.4m deep angled recess where it met the circular tower at its northern end. The width of the east wall of the bridge was 2.5m and the north wall 1.5m; the external elevation of the west wall was not seen inside the trench, but was observed measured at least 1.5m wide.

6.3.4 A large rectangular drawbridge pit – measuring 5.6m long, 2.45m wide and 6.5m deep – was found in the middle of the bridge. As with external faces of the structure, it was constructed entirely with sandstone random ashlar blocks on top of cut bedrock. The north wall (Figure 5) had been built where the bedrock was at its highest point and eight courses survived in excellent condition. The west wall (Figure 6) was 27 courses deep to the base and the east wall (Figure 7) 26 courses. The smaller, 0.55m thick south wall of the pit had been robbed and 17 courses survived; on the third course down slightly worn stone corbels protruded 0.24m from the wall face. These

architectural elements had evidently been placed during the initial construction of the wall and probably formed brackets upon which timber uprights were positioned, possibly related to the function of the drawbridge. Three recesses were observed further down the wall. The uppermost depression was roughly circular, measuring 0.12m diameter and 0.1m deep, slightly off-centre and had evidently worn through repeated motion of an object in this space. Below this was a larger, 0.35m deep recess on a similar vertical alignment that also appeared to have formed through repeated striking of a roughly circular object, leading to the removal of the masonry facing. The angle at which the hole had formed suggested striking had occurred from an elevated position. The lowest recess was found three courses from the base of the drawbridge pit and was positioned more centrally. Unlike the other two, this appeared to have formed through the deliberate removal of a square section of wall, possibly to support a horizontal beam; however, no working was found into the bedrock opposite to suggest it spanned the base of the pit. No structural elements were found within the recesses and none contained layers unique to their situation.

6.3.5 Mason's marks were found on each of the faced walls relating to the construction of the gatehouse; 22 in total. The east wall contained 15 unique marks, the west wall 13, the south wall four, north wall six, and external wall two. Many of these marks were found on more than one wall, and there were two instances in the east wall where blocks of masonry were found with two marks. There appeared to be no pattern to the placement of marked stones from the base of the drawbridge pit to the top, suggesting that the gatehouse was constructed as one scheme of work.

6.3.6 Vertical striations were found on both the east and west walls, appearing as very faint pale stripes from the top of the walls down towards the base. This pattern was most noticeable on the east wall where three were spaced at 0.75-0.9m intervals from the south wall. These stripes were not cut into the ashlar walls, had not formed through weathering and were observed down almost the full elevation of the walls. It is possible that they were areas of the wall less exposed and

6.4 Phase 3 – Drawbridge pit fill (14th to mid 17th century)

6.4.1 Following the initial definition of the gatehouse structure, most of the excavation work was focused on investigating deposits from within the drawbridge pit. Due to time constraints and safe depth of excavation, it was not possible to excavate to the bottom during the community excavation in October 2019. A second phase of excavation was undertaken in July and August 2020 whereupon the full stratigraphic sequence was recorded to an overall depth of 6.5m and is illustrated in an accurate photorealistic section in Figure 9.

6.4.2 The drawbridge pit was filled predominantly by soft laminated sands that had accumulated through the erosion of the natural local sandstone upon which the castle was constructed. Although numbers were assigned to different layers it is best to think of the development of these contexts as a continuous process involving the slow build-up of sediment between the 14th and 17th century, with diffuse horizons between events.

6.4.3 Filling the base of the drawbridge pit was a hard, mostly sandstone layer within a silty matrix (1082), differing somewhat from the overlying layers in that there were

considerably more stone inclusions and it had been heavily compacted. This layer may represent trample that formed during the construction of the drawbridge pit walls. No datable material was encountered from this basal fill, however sherds of predominantly Humberware pottery – dating to the 14th and 15th century – were found in over half of the 11 layers that had formed above (1098, 1100, 1097, 1096, 1080, 1079, 1099, 1101, 1095, 1094 and 1076). This initial phase of infilling produced a varied assemblage of animal bones that included diagnostic pieces from sheep/goat, cattle, deer, pig, carp, mussel and oyster, along with a range of bird remains: domestic goose, mute swan, fowl, chicken and grey heron. Many of the bones recovered displayed signs of carcass processing through butchery but there was evidence from some of the chicken remains that to indicate they were laying eggs. Other finds of note from these layers included a late medieval turned bone 'parchment pricker' or stylus SF21, a heavy copper alloy object SF32 that may have served as part of a pivot for the drawbridge mechanism, and a heavily corroded probable axe SF34.

6.4.4 The late 15th to 16th century fill of the drawbridge pit was initially represented by two large rectangular masonry blocks (1088 and 1089) that had been placed 0.7m from the south wall against the east and west walls. They were found at the same level on opposite sides of the pit and shared similar dimensions, each measuring approximately 0.75m long, 0.45m wide and 0.3m thick. The apparent deliberate placement of these substantial masonry pieces 1.7m from the base of the drawbridge pit indicates a new phase of construction, with each one likely serving as foundations upon which large timber vertical supports were placed. This may have been required to either provide additional support for the drawbridge or could represent the establishment of a more permanent superstructure. Layers overlying these foundation stones produced notably later pottery than those beneath them, dating to the late 15th and 16th century. Although no clear cut was observed during excavation, it is possible that the drawbridge pit was cleared to a specified level before these stone blocks were placed and the pit began to fill again.

6.4.5 Late 15th and 16th century filling of the drawbridge pit was represented by 13 layers (1084, 1075, 1085, 1074, 1090, 1091, 1086, 1073, 1070, 1063, 1069, 1068 and 1067) measuring a total thickness of 1.5m. As with the layers that had been deposited before, each one consisted of mainly laminated sands, but with a slightly more clayey composition than those they overlay. Although some intrusive and residual sherds of pottery were evident, the majority of the assemblage comprised 15th to 16th century material. A range of animal species were represented in the bone recovered from these layers, including cattle, sheep/goat, goose, pheasant and edible oyster, with several of the remains exhibiting signs of butchery. Two stone cannon balls, SF29 and SF30, were recovered, each with the same diameter, one of which had been damaged either through firing or other means. In addition to this, two stone discs of unknown purpose were recorded from the latest deposit in this sequence SF22 together with two fragments of heavily corroded iron.

6.4.6 Accumulation of more clayey sand layers into the drawbridge pit continued into the 17th century. Six contexts (1064, 1059, 1058, 1050, 1056 and 1055) measuring a combined thickness of 1.1m were identified as having formed during this period. Dating was done primarily through the pottery; 17th century material was present throughout, with an increase in the number of late medieval sherds from the earlier

deposits, and some intrusive 18th century material from the later deposits. A 17th century coin from the Spanish Netherlands SF10 was found alongside a small fragment of window glass SF9 and 4 stone discs, SF17 and SF18. In general, there were more finds encountered in these layers, particularly in relation to the animal bone assemblage recovered. A wide range of domesticated livestock animals and birds, wild or managed mammals and birds, fish and shellfish were recorded, many of which displayed signs of butchery. Species present across most layers included cattle, sheep/goat, and edible oysters, with cod, hare, pig and chicken evident to a lesser degree. A particularly high species diversity was found in one of the later contexts from this part of the sequence (1050) where, in addition to the above, red and fallow deer, dog, cat, swan, and amphibian remains were also identified. The only layer that had not formed naturally was the penultimate one in the sequence; a deliberate mixed deposit of charcoal and coal (1056) that may have been backfilled from a hearth relating to industrial activity.

6.4.7 For the most part Phase 3 represents the natural accumulation of sands into the drawbridge pit for over three centuries, beginning in the 14th century and ending in the 17th. A distinct increase in the depth of deposits and amount of cultural material recovered from the latter stages of its filling suggests that less care was taken in its upkeep immediately prior to events surrounding the English Civil War in the mid-17th century.

6.5 Phase 4 – Civil War defences (mid 17th century)

6.5.1 Bonded to the outer face of the eastern gatehouse tower and the circular tower in front was a later piece of masonry F118 (Figure 12). No attempt had been made to tie the masonry into the Phase 2 gatehouse structure, rather it had been cemented onto the outside. It extended to the east, at right angles to the curve of the circular tower but was in poorer condition than the earlier remains having been truncated by later landscaping activity. The coursing was much thinner, comprising eight courses to a height of 1.36m, but just the southern side of the structure lay within the trench. Dating this feature was difficult but it seems likely this angular addition to the outside of the gatehouse tower was a redans relating to Civil War fortifications.

6.6 Phase 5 – Demolition (1649)

6.6.1 The demolition of the gatehouse is known to have occurred in 1649 and was clearly evident in the excavation as a 1m thick layer of stone rubble deposits (1052, 1046 and 1045) (Figure 9). The composition of this material comprised predominantly large fragments of sandstone – some of which displayed elements of working – within a crushed sandstone and sand matrix. These layers represent a significant build-up over a very short space of time and almost certainly formed through the demolition of the gatehouse. Overlying these stony layers were a number a discrete, thin sandy deposits (1043, 1044, 1040 and 1041). Finds recovered from them and the layers below were scarce but did include seven musket balls, SF1, SF2, SF3 and SF4, and a very small group of pottery dating to the late medieval period. Their stratigraphic position suggests that they may have been lain on top of the demolition rubble as levelling deposits following the slighting of the Castle.

6.7 Phase 6 – Deconstruction of the gatehouse (mid 17th to mid 19th century)

6.7.1 Following the demolition of the Castle at end of the Civil War the nature of archaeological remains encountered changed significantly. They were characterised initially by pitting over the walls surrounding the drawbridge pit for the extraction of building materials.

6.7.2 The earliest and most extensive stone-robbing event was found over the south wall of the drawbridge pit and along the inside edge of its west wall F111 (Figure 12). On the south side a cut had been made directly over the wall for the removal of masonry, whereas on the west wall a 0.45m wide trench had been tunnelled down into the demolition layer within the drawbridge pit deeper than the that of the robbing event. Pottery found within the backfill of the robber trench suggests that this activity was undertaken in the latter half of the 17th century, conceivably very soon after the demolition phase.

6.7.3 Two large intercutting pits with vertical sides were found having been excavated down directly onto the top of the wall west of the drawbridge pit. The earliest F113 was as long as the wall was wide and had been backfilled with mixed sandstone and 18th or 19th century CBM rubble. Sherds of 17th and 18th century pottery also recovered from the fill indicate that the pit was most likely created in the 18th century. The pit that cut it F114 was somewhat smaller and had a circular in plan; it was filled with similar material although a number of pottery sherds date it to the 19th century.

6.8 Phase 7 – Victorian remodelling (1880s)

6.8.1 Later remodelling of the castle was undertaken in the 1880s (Roberts 2002, 447) and was evident in the area of the gatehouse through the deposition of thick landscaping deposits and rebuilding of medieval structural remains. This remodelling of the gatehouse area also included the consolidation of ground prior to the creation of steps down through the gateway, most notably at the northern end of the drawbridge pit.

A large pit F102 was found in the northwest corner of the drawbridge pit cutting through the 17th century demolition and levelling layers (Figure 8: South drawbridge pit wall elevation

6.8.2 Figure 9). It had been cut down to bedrock and filled with large sandstone rubble to form a solid base upon which more regular, reused blocks had been cemented into the corner of the drawbridge pit with concrete. This concrete was also found bonding the large ashlar blocks immediately to the north forming the southern gatehouse tower F117.

6.8.3 The polygonal shape of the southern tower appeared to mirror that of the northern one; however, upon closer inspection the weathering and decay pattern on the masonry and bonding agents were very different. Whereas the northern tower had weathered consistently on the more elevated exposed edges, the opposite was true for the lower courses of the southern tower. In addition to this the bonding agent was more pronounced, demonstrating it had been repointed more recently using concrete. Not only this, but upon excavation the entire stonework structure was found to lie on top of the same sand levelling deposit upon which the steps had been built (Figure 12). As a result, it is probably best to view the visible remains of the southern gatehouse tower as Victorian cladding to help consolidate what remains of the original tower below and form an aesthetic border to the steps.

6.8.4 The Victorian steps lead from the inner bailey down, through the assumed location of the gateway, to the bases of the extant towers. Half of the bottom step was excavated in order to record any buried remains beneath and establish the stratigraphic sequence. Upon excavation it was revealed there were no structural remains below and it is likely that, if there had been masonry there, it was removed in the construction of the steps. Following this initial assumed clearing stage, clean sand was lain to form a bedding deposit upon which the crazy paving steps were set.

6.8.5 Following the remodelling work on the southern tower and steps, the area was landscaped extensively to raise the ground level over the location of the moat on the east and south sides of the trench. This landscaping layer (1009) covered almost the entire trench and was up to 1.5m thick in places. Hand excavation of this deposit resulted in the collection of a large finds assemblage which included many 19th century finds (see Section 7) along with a selection of earlier material. Noteworthy earlier artefacts included nine musket balls, SF7, SF19, SF20, SF23 and SF24, lead window came and a bone or antler knife handle.

7 ARTEFACTS

7.1 Summary

7.1.1 The following artefact assessments fulfil Stage 4 (Task 5.2) and addresses Aim 3 Questions 10, 11 and 13 of the Project Design (Casswell et al. 2019, see Section 12.1.1 and above) by providing an insight into the chronological framework represented, as well as providing a better understanding of the site's archaeological conditions. The excavations at Pontefract Castle yielded an assemblage of 873 sherds of pottery (Appendix B), 1,357 vertebrate remains and 139 mollusc fragments (Appendix C), 123 CBM fragments (Appendix D), 11 copper alloy objects, 84 iron objects, and 41 lead objects (Appendix F), 147 glass fragments (Appendix G), two worked bone objects, 22 worked stone objects (Appendix H), 220 clay tobacco pipe fragments (Appendix I), 40 charcoals (Appendix J), and 239 fragments of production waste, including clinker,

iron slag, and glass waste (Appendix K). Twenty-eight small finds were recorded during the excavation. The finds assemblage was assessed by the appropriate specialists, and the results are discussed below.

7.2 Pottery

Chris Cumberpatch

7.2.1 In total, 873 fragments of pottery weighing 11364.5g were recovered from 35 contexts during excavations at Pontefract Castle (Table 1). The earliest sherd in the assemblage came from the thick layer of 19th century landscaping (1009) and appeared to be of Roman date. It was associated with a later, mixed assemblage and was undoubtedly residual in a later context.

7.2.2 Medieval pottery was represented by a range of regional types with earlier medieval material (dating to the period between the mid 11th and late 13th centuries) being notable by its scarcity. An unstratified context produced a sherd of Beverley type ware while layers within the drawbridge pit produced three sherds of Gritty ware (Yorkshire Gritty ware type and Oxidised Gritty ware) and one sherd of Buff Sandy ware of probable 12th to 13th century date. One small sherd of Stamford-type ware was also identified. A single sherd of Shell Tempered ware from a later made ground layer (1048) may also belong to this period although a later date cannot be ruled out. In general, however, the earlier phases of the Castle's existence do not seem to be well represented in the assemblage.

7.2.3 Later medieval pottery (late 13th to mid 15th century) was represented by Humberware, Humberware type and Coal Measures Whiteware, all of them typical of sites of a later medieval date in the area and with numerous parallels from the castle itself (Cumberpatch 2002). Some of the later medieval Sandy and Gritty wares may also be of this date but could equally be slightly later.

7.2.4 Pottery of late medieval to early post-medieval date (early/mid 15th to late 16th century) was represented by both medieval style wares and early post-medieval wares. The former included Coal Measures Purple ware, Late Humberware, Purple-glazed Sandy ware, Purple Glazed Humberware and most of the sherds of Green Glazed Sandy ware while early post-medieval wares included Cistercian ware. This group also includes the Midlands Purple type ware although, as noted in the data tables, this type continued in production into the late 17th century. A small number of sherds from within the drawbridge pit were identified as of Surrey Whiteware or Border ware type. Sherds of the same type were identified amongst the pottery from earlier investigations (Cumberpatch 2002:186) although the quantities were small. It is possible that the sherds discussed here were from a single vessel although only two sherds joined; these were from two different contexts (1064 and 1068), indicating a close relationship between the two.

7.2.5 Later post-medieval pottery (17th century), dating to the period which saw the sieges and the demolition of the castle, was particularly abundant in some of the assemblages from earlier excavations, notably those associated with the Constable Tower. In the present case Blackware (and Blackware type), Midlands Purple ware, Redware and Redware type, Slipware Type 1 and Early Brown Glazed Coarseware were all well

represented together with smaller numbers of sherds of Green Glazed Sandy ware (a type which spans the whole of the post-medieval period) and two sherds of late Buff Sandy ware. Yellow ware is more difficult to date with any accuracy and spans the whole of the post-medieval period. Imported pottery of later medieval and post-medieval date consisted of sherds of Frechen-Koln type and Raeren stoneware, both of north German origin. The sherds of Tin Glazed Earthenware may be imports but this type of pottery was also made widely in Britain and distinguishing between Dutch and British types is virtually impossible unless distinctive painted designs are present, which was not the case here.

7.2.6 Early modern pottery, dating to the period between c.1720 and c.1840 was particularly well represented with examples of all the three major classes of pottery identified. A more detailed discussion, including the definition of these ware classes and their significance can be found elsewhere (Cumberpatch 2014). Utilitarian wares included some of the Brown and Yellow Glazed Coarsewares although both of these types are difficult to date with any accuracy and both remained in production into the mid 20th century. A small number of sherds with clear glaze of this date were classified as Late Redware. Vernacular tablewares included examples of all four of the major types; Late Blackware, Slip Coated ware, Mottled ware and Slipware. Such wares were made widely across South and West Yorkshire (and elsewhere) and their manufacture, although not organised on the scale of contemporary pottery factories, was a significant part of the 18th century economic landscape. Their distribution within the assemblage is summarised in the data table in Appendix AB. Formal tablewares were represented by White Salt Glazed Stoneware, Creamware and Mottled Creamware, Pearlware and Edged ware, all from much later contexts in the sequence of the site. Although normally associated with Staffordshire, all of these types were produced widely across Yorkshire (Griffin 2012). Brown Salt Glazed Stonewares included both 18th and 19th century types, as specified in Table 1.

7.2.7 The latter part of the early modern period and the recent period (c.1840 – c.1950) saw the end of vernacular tableware production and the proliferation of a wide variety of cheap and colourful refined earthenwares alongside later Pearlwares and Whitewares (plain and transfer printed). In the present case Whiteware (plain and transfer printed) was common, notably in the thick 19th century landscaping layer. Other types included Banded wares, Relief Banded ware, Sponged and Sponge-printed wares and Mocha wares while wares with coloured bodies included Colour Glazed ware (notably sherds from up to three teapots), Slip Banded Cane Coloured (CC) ware and Cane Coloured ware. Bone China and Porcelain (plain and decorated) were also present in significant quantities.

7.2.8 Stratigraphically later contexts contained a variety of sherds of Stoneware, including jam jars, bottles, flagons as well as domestic wares. Some of this pottery may be associated with the use of the site as a public park and 'romantic ruin' but it also includes two sherds of biscuit-fired ware and the two pieces of tripod stilts from the same context. The presence of these pieces of production waste might suggest that at least some of the later material was dumped on the site from elsewhere. The fact that the early modern and recent phases of the site were excluded from the analysis of the larger assemblages from earlier excavations makes any discussion of the details of dumping as opposed to accumulation related to the later use of the site difficult. A

substantial quantity of Unglazed Red Earthenware from flowerpots and other horticultural vessels were also present in the assemblage.

7.3 Animal bone

Hannah Russ

Summary

7.3.1 In total, 1,783 vertebrate remains (Table 2Table 5) and 159 mollusc remains (Table 6) were recovered via hand collection during archaeological excavation at Pontefract Castle. Each of the specimens is given according to genus and species where possible and unidentifiable remains categorised according body mass. A detailed breakdown of the vertebrate remains according to element (e.g. scapular, humerus, radius, etc) is given from the material recovered from the lower sequence of the drawbridge pit dating from 14th-16th, 17th and 18th centuries AD in Appendix C. A wide variety of species were identified including mammal, bird, fish, amphibian and both marine and terrestrial molluscs. A description of the assemblage is given below.

Results

7.3.2 The vertebrate remains (1,783 fragments weighing 15.63kg, Table 2Table 5) were dominated by those from mammals including equid (Equus sp. – horse/donkey/mule), domestic cattle (*Bos taurus*), red deer (*Cervus elaphus*), likely fallow deer (cf. *Dama dama*), domestic pig (*Sus domesticus*), sheep/goat (*Ovis aries/ Capra hircus*), domestic cat (*Felis catus*), European hare (*Lepus europaeus*) and European rabbit (*Oryctolagus cuniculus*). Other remains could be identified at family (Canidae – dog family, and Leporidae – rabbit/hare family), clade/order (ungulate) or class (mammal/bird/fish/amphibian) level within size categories where possible. Bird remains represented a diverse range of species including swan (*Cygnus* sp.), including mute swan (*Cygnus olor*), domestic goose (*Anser anser domesticus*), grey heron (*Ardea cinerea*), common crane (*Grus grus*), domestic fowl (*Gallus gallus domesticus*), possible common pheasant (cf. *Phasianus colchicus*), red grouse (*Lagopus lagopus scotica*), duck family (Anatidae), possible coot (cf. *Fulica atra*), Northern lapwing (*Vanellus vanellus*) and woodcock (*Scolopax rusticola*). Fish remains included Atlantic cod (*Gadus morhua*) and carp family (Cyprinidae), and remains of larger fish that could be identified only as 'fish' or Gadiformes (cod order). The amphibian remains, likely one individual, were recovered from a layer within the drawbridge pit and were identified only to the order Anura (frog/toad).

7.3.3 The mollusc assemblage (159 fragments weighing 537g, Table 6) contained remains of marine (n=139) and terrestrial (n=20) species. Marine taxa included edible oyster (*Ostrea edulis*), Common whelk (*Buccinum undatum*), edible/common cockle (*Cerastoderma edule*) and mussel (*Mytilus* sp.). The terrestrial molluscs remains included 19 specimens of garden snail (*Cornu aspersum*) and one of either a brown-lipped or white-lipped snail (*Cepaea* sp.). The terrestrial species identified at Pontefract Castle are common in England and live in a range of habitats, excluding them from providing any information regarding past conditions at the site. No further comment on the terrestrial molluscs will be made.

Taphonomic assessment

7.3.4 Bone surface preservation varied throughout the assemblage from 'excellent' to 'awful' (categories 1-5). Most of the specimens displayed 'good' or 'moderate' surface preservation (94.4% by count, n=1684). Fragmentation was moderate throughout the assemblage with some partial bones and teeth recovered and some re-fitting fragments of single specimens.

7.3.5 Evidence for butchery in the form of fine cut marks, more substantial chop marks and saw marks was recorded on 214 specimens throughout the assemblage, Table 7. Remains from later landscaping layers, and one bone from within the drawbridge pit, provided the only evidence for carcass processing using a saw, which indicates the use of 18th century or later animal butchery techniques (e.g. Albarella 2003, 74; Cameron et al. 2019). Sawn remains included cattle, pig and large mammal. The frequency of remains displaying evidence for butchery indicates that much of the material represents food waste. Ribs identified as large mammal, likely cattle and possibly some larger deer, were frequently observed having been chopped into lengths around 15cm.

7.3.6 Evidence for carnivore activity was limited, with only 15 specimens from nine contexts displaying evidence for gnawing. The gnawed remains included cattle, fallow deer and sheep/goat, some of which also had chop, cut and/or saw marks. Gnawing activity provides evidence for the presence of carnivores, likely domestic dogs and/or foxes, at the site and that material was accessible to these animals at some point after their deposition. Skeletal abnormalities possibly resulting from disease, injury or age were recorded in two instances: a large mammal rib and a fowl order first foot phalanx. Both elements displayed extra bone growth to the proximal articular surfaces. Burnt bone was only recovered from a 19th century landscaping layer, these included rib and unidentified fragments of bone from large- and medium-sized mammal.

7.4 Ceramic Building Material (CBM)

Phil Mills

7.4.1 In total, 123 fragments of CBM weighing 17,382g were recovered during the course of the excavation (Table 8). The majority of these were medieval or post-medieval to modern in character, but there were also three fragments of possible Roman material.

7.4.2 The earliest pottery noted was some possible Roman imbrex fragments occurring residually in the 19th century landscaping. The brick fragments from the 15th and 16th century phase were in a handmade fabric with abundant fine lime inclusion (TZ22) and wiped, with dimension 120 x 45-50mm (4 ¾ x 1 ¾ -2 inches) which is in line with 14th to 16th century brick sizes (Brunswick 1925, 89). A number of these bricks also occurred residually in the 17th century phase with fragments also recovered from the final phase. The roof tile cannot be precisely datable. Its earliest occurrence is from the late 14th century phase. There is also a wide range of late 19th century and later bricks, pan tiles and floor tiles in the 19th century and later phase.

7.4.3 Table 10 shows the proportion of the different fabrics recorded with fabric descriptions given in Table 10. The occurrence of each fabric by provisional phase is shown in Table

11. The earliest occurring fabrics are TZ13 and TZ12.3, with TZ22, the early brick fabric, occurring from the 15th and 16th century phase. Most of the fabrics are first seen in the 19th century and later phase, showing deposition of a wide range of later CBM at this time.

7.4.4 The proportion of the different forms in the stratified group is shown in Table 9. Bricks were the most common CBM form in the group. The only brick type with surviving dimensions was an early brick of perhaps late 15th or 16th century date which was hand formed in a lime fabric (TZ22) with distinctive wipe marks on the upper surface with rounded irregular arrises with dimension 138-140 x 43-50mm, with length over 250 mm. The last phasing had several fragments of modern bricks in a variety of fabrics.

7.4.5 Floor tile included a worn tile fragment from 19th century landscaping which had a maximum thickness of 25mm. The other examples were several modern brown tiles with two oblong tiles at 104-105x40-65x18mm and most of a probable square tile at 104x15mm. There were three fragments of probable Toman imbrex which was in a probable south Yorkshire industry fabric T14. Other fragments included a fragment with a tapered edge and a possible ornamental or finial fragment from topsoil. Pan tiles, of probable 18th century or later date were noted in later layers, and peg tiles were represented by three fragments with a central square peg. There was a single example with a complete width with dimension 200 x 17 mm with the square peg having dimension of 11x12mm. There was one possible fragment of a plain ridge tile from an 18th century context, and plain tile, probably from peg tile comprised 29% of the group with thickness ranging from 12 to 20 mm, with most around 15-17mm in thickness.

7.4.6 Overall, 5% of the bricks had evidence of burning, including an example with a vitrified face which may have come from a hearth or chimney. 9% of the bricks, 33% of the peg tile, the ridge tile and 49% of the plan tile and 20% of the floor tile had evidence of mortaring. This is a high level of mortaring for tiles and may indicate that they were reused for purposes other than roofing (e.g. for a wall). One fragment of floor tile and one fragment of plain tile had evidence of reuse, in the form of mortar over a beak.

7.5 Metal

Elizabeth Foulds

Copper alloy

7.5.1 In total there were 13 fragments of copper alloy objects (Table 14). There were two artefacts associated with dress. One was a fragment from an 18th century facet-decorated shoe buckle SF25 dating to c.1720-1790s (Whitehead 2016, 1-5, no.674) recovered from topsoil, the other a copper-alloy heel reinforcement plate of unknown date, but likely later post-medieval.

7.5.2 There were three objects classed as coins or jettons. A copper alloy coin SF10 from the Spanish Netherlands had Lombardic lettered legends on the reverse. It also featured a coat of arms with diagonal lines in the lower left quadrant, a fleur-de-lis in the upper right quadrant, and a central lion rampant; the remaining quadrants were

not visible. The exact type could not be identified due to corrosion and wear on the surface, but in general likely dates between 1506 and 1712. Also included in the assemblage was a pierced jetton SF27 with a sailing ship on the obverse and four fleur-de-lis in a double lozenge on the reverse. The inscriptions was written in Lombardic lettering, which Egan (2005, 174) suggests indicates an earlier date and gives a possible date of late 15th century to early 16th century. They record a similar example from London (no. 959), which has no precise parallels in Mitchiner (1988, cited in Egan 2005, 174). The other coin SF28 is a small example with many pellets on both faces, but unfortunately it was not possible to identify it further.

7.5.3 There were a small number of other identifiable copper-alloy artefacts including a flattened thimble. It was in fair condition with corrosion obscuring many of the dimples and breakage along the base edge. However, the flat crown and small regular dimples suggests it likely dates to the 19th century.

7.5.4 An unusual copper-alloy object SF32 was recovered. It was cuboid in shape with a negative half-cylinder cut away and is very heavy in weight at 873.4g. No initial parallels could be found but it is possible that, as it was very robust and heavy, that it is architectural and part of the drawbridge mechanism, perhaps as part of the pivot for the moving bridge itself. Other identifiable artefacts included a mouthpiece to a, most likely, 19th century smoking pipe and the head from a small tack SF6.

Iron

7.5.5 In total there were 130 iron objects and fragments. Most iron objects were not identifiable. Some objects had nails or rivets attached, but the fragments were often too small or too corroded to make an identification. Some of the iron objects had mineralised wood in the corrosion, suggesting they were found in an organic rich context or were deposited in close proximity to organic material.

7.5.6 One large fragment of iron SF34 may be a heavily corroded axe or other similar large tool. Much of the object is obscured by heavy corrosion, but one end has a possible edge. There was one large cast iron round shot SF19 measuring 26.3mm in diameter and weighing 76.6g. Cast iron shot replaced the earlier stone shot used for larger calibre guns and cannons.

7.5.7 There were 42 fragments related to nails. However, the minimum number of nails is 17 based on a count of nail heads. Table 15 gives a summary of the number of nail fragments and nail heads by context. Only eight were considered to be complete enough to give an approximate length; the smallest nail was 49.5mm and the largest measured 160.4mm long. Only one nail was clenched, which measured 29.1mm.

Lead

7.5.8 In total there were 41 lead artefacts, most of which consisted of musket balls and window came (Table 16). There were 13 pieces of lead that could only be identified as lead sheet, bar, strip, or other unidentifiable fragments.

7.5.9 Within the lead assemblage there were 12 small fragments of window came, which is more than what was published in the 1982-86 excavation report (Roberts 2002). It was

suggested that the cames were easily recycled into ammunition during the Civil War siege (Butler et al 2002, 160), which likely explains the small quantity found in the present assemblage.

7.5.10 There were 15 musket balls or other types of shot found. Six of the balls had clearly been fired, as they had flattened into a hemispherical shape, or were flattened and showed the characteristic striations and convex shape of a musket ball fired at high velocity and hitting a hard surface (e.g. a stone wall). The remaining musket balls had no specific evidence of being fired, but this does not necessarily mean that they had not been fired.

7.5.11 At the time of the Civil War, guns of many calibre were in use. Unfortunately, at this period bullet calibre does not correlate to a type of firearm and is a topic that is the subject of research (e.g. Foard 2012). Although there was a call to standardise gun calibre in 1630 by the Council of War, this was not very effective and older firearms would still have been in use. The smallest musket ball in this assemblage measured 10.4mm in diameter and weighed 5.07g, while the largest measured 21.1mm in diameter and weighed 32.63g SF7. Based on Foard's (2012) analysis of bullets from the Civil War battle site at Edgehill, Warwickshire, the assemblage here can be summarised as five pistol bullets, five carbine/pistol bullets, three bastard musket bullets, and two large bullets that do not fit into the size and weight categories for firearm types, but were for large calibre muskets.

7.6 Glass

Elizabeth Foulds and Stuart Noon

7.6.1 In total, 147 fragments of glass weighing 1,714g were recovered from three contexts (Table 17). There were 42 fragments from topsoil, among which were several fragments of marbles, one bead, a bottle stopper and a clear and brown fragment. There were 100 fragments from the 19th century landscaping layer including two blue bottles – one with writing – a clear glass bottle, a glazed bottle, green fragments of coloured glass, one piece of amber, one 1 piece of darker green glass, clear glass and one with possible enamel coating. There were also three fragments relating to a bottle with writing inscribed "…. *sole licensees*" from a levelling deposit under the Victorian steps.

7.6.2 One small fragment of heavily corroded window glass, measuring 1.5mm in thickness, with no distinguishing features was the only fragment to have been recovered from the drawbridge pit. Window glass from the previous excavations was also heavily corroded and was approximately 2mm in thickness (Lawrence et al 2002, 159).

7.7 Worked bone

Elizabeth Foulds

7.7.1 A turned bone pin (SF21) with traces of an inset iron pin at the small end was found in the drawbridge pit. Similar finds are termed 'parchment prickers' or styli and were thought to have been used for marking parchment as a part of the layout process. Medieval examples are shown in Margeson (1993, 69-70, fig. 38) and an undated

possible example is catalogued in Egan (2005, 122, no. 590). Further examples are catalogued on the Portable Antiquities Scheme website (e.g. LON-99BF1F, LON-FA01A5 and PUBLIC-5D9B16). They are generally considered to be used from the medieval period until the 16th century, as examples have been found in dated contexts in London (Egan 2010, 272). It is unclear when this example was in use but given the good condition it possibly dates to the 16th century.

7.7.2 A post-medieval antler or bone handled knife (or other handled implement) with partial blade remaining was recovered. The handle tapers from the end to the blade and is fluted creating a ribbed effect. The end is neatly finished with a simple raised button.

7.8 Worked stone

Elizabeth Foulds and Stuart Noon

7.8.1 In total, 25 fragments of stone weighing 3321g were retrieved from 8 contexts (Table 18). Three bottle stoppers were in the top soil (1001), six bottle stoppers with two fragments of stone one with mortar were related to 19th century dumping episodes in a post-demolition silty layer (1009), four fragments of stone including three fragments of roof tiles one with a peghole and a burnt worked stone were in the drawbridge pit (1052), and one fragment in a silty sandy lens layer (1068), representing silting in a probable pit.

7.8.2 Eight stone discs of varying shapes and sizes (SF17, SF18 and SF22) were recovered from contexts (1009), (1064), (1069) and (1084). Initial assessment of the stone identification suggests a mix of sandstone and limestone. One of the discs (SF17) had an 'X' scratched into the surface while one of the discs (SF22) from layer (1069) had parallel lines scratched into one of the faces. It is not clear what these were used for. Similarly sized large stone discs (70mm+ diameter) were recovered from excavations at York from contexts dated from the 11th–12th centuries, which were catalogued as 'counters or possible pot lids' but described as being too large to be counters and too small to be pot lids (Ottaway and Rogers 2002, 2951, cat nos 11042–11053). It is not clear what these were used for.

7.9 Clay tobacco pipe

Stuart Noon

7.9.1 In total, 220 fragments of clay tobacco pipes weighing 579g were recovered from nine contexts (Table 19). There were 13 fragments of pipe stems from topsoil dating to the 19th to 20th century and 180 fragments of 18th or 19th century bowls and stems relating to Victorian dumping episodes in a the 19th century landscaping layer.

7.10 Charcoal

Stuart Noon

7.10.1 In total, 40 fragments of charcoal were retrieved from eight contexts (Table 20). Nine fragments were discovered in the 19th century landscaping layers and 11 fragments from layers investigated within the drawbridge pit.

7.11 Production waste

Stuart Noon

7.11.1 In total, 239 waste fragments weighing 6495g and relating to various manufacturing processes were retrieved from contexts dating from the 19th century onwards (1001, 1009 and 1034; (Table 21). The finds included clinker, ferrous slag, glass slag, and miscellaneous burnt waste material. The vast majority of the material was recovered from 19th century dump layer (1009) and almost certainly produced off-site and possibly intentionally dumped to backfill and level the ground surface.

8 ECOFACTS

Ellen Simmons

8.1 Summary

8.1.1 The following environmental assessment fulfils Stage 4 (Task 5.2) and addresses Aim 3 Questions 10, 12 and 13 of the Project Design (Casswell et al. 2019, see Section 12.1.1 and above) by baseline data for the preservation and significance of palaeoenvironmental remains. A comprehensive archaeobotanical sampling strategy was implemented during excavation. In total, 17 60-litre general bulk samples were taken: six from 14th to 15th century deposits, three from late medieval 15th to 16th century layers and eight from 17th century layers within the drawbridge pit (Table 13). From this, 40 litres of each was processed for the recovery of plant macrofossils and wood charcoal. Overall, very low concentrations of plant macrofossils were present in the samples, providing some evidence of oat and barley crop production in the late medieval and early post-medieval periods. Wood charcoal was found in all samples.

8.2 Preservation

8.2.1 Preservation of plant macrofossils and wood was by charring. The preservation of charred plant material was relatively poor, with the low concentration of grain found in the samples being distorted and identifiable by gross morphology only. Preservation of wood charcoal was also somewhat poor, with frequent evidence for vitrification, whereby charcoal takes on a glassy appearance resulting in anatomical features becoming fused and difficult to identify.

8.3 Results

8.3.1 Very low concentrations of charred cereals, legumes and wild or weed plant seeds were present in the sampled contexts. A seed of vetch/vetchling (*Vicia/ Lathyrus* sp.) was present in Sample 58 from one of the layers towards the base of the drawbridge pit. A small seeded grass seed (<2mm Poaceae) was present in Sample 44 from a 15th to 16th century layer. One hulled barley grain (*Hordeum distichum / vulgare*) was present in Sample 3, which was a lens of coal within the drawbridge pit, and an oat grain (*Avena* sp.) was present in Sample 5 from a 17th century layer, although it is not possible to determine whether this is a cultivated crop or crop weed. An indeterminate large seeded legume was also present in Sample 2 and a fragment of parenchyma (undifferentiated plant storage tissue) was present in Sample 4. Two small seeded grass seeds (<2mm Poaceae) were present in Sample 6.

8.3.2 Uncharred wild or weed plant seeds were present in several layers within the drawbridge pit. The highest concentration of seeds and greatest diversity of taxa was present in samples from late 14th century layers as well as 15th to 16th century layers.

8.3.3 Elder (*Sambucus nigra*) was the most frequently occurring and most abundant taxa, followed by henbane (*Hyoscyamus niger*) and black mustard (*Brassica nigra*). Both elder and henbane are commonly associated with nutrient enriched soils and black mustard grows by rivers and stream banks, on waste ground and in arable fields. Other taxa present in the assemblage include nettle (*Urtica dioica*), knotgrass (*Polygonum aviculare* agg.) and thistles (*Carduus/Cirsium* spp.), which are also pants of nutrient rich disturbed soils. Dandelion (*Taraxacum* sp.) is commonly associated with grassland. Most of the species of willowherb (*Epilobium* sp.) potentially present are commonly associated with damp soils or disturbed and waste ground habitats. Most of the species of sedge potentially present are also associated with damp soils. A seed of fig (*Ficus carica*) was present in Sample 54 from a late 14th century layer.

8.3.4 Wood charcoal was present in all the sampled contexts, although none of the samples produced more than one hundred charcoal fragments greater than 2mm in size in cross section. Preliminary examination of the wood charcoal assemblages using low power microscopy indicates that a ring porous taxon which is morphologically similar to oak (cf. *Quercus* sp.) was predominant in the earliest sampled deposits. Closely spaced annual growth rings were present on the probable oak charcoal fragments from Sample 57, Sample 41 and Sample 54, indicating restricted growing conditions. Some diffuse porous taxa (such as hazel/birch/alder, hawthorn/apple/pear/whitebeams, willow/poplar, cherry/blackthorn and field maple) were present in Sample 54. Mixed assemblages of both ring porous taxa (such as oak, ash or elm) and diffuse porous taxa were present in the charcoal assemblages from a number of late 14th century layers, 15th to 16th century layers, and 17th century layers. Sample 2 and Sample 3 were composed primarily of a ring porous taxon which is morphologically similar to oak (cf. *Quercus* sp.). Identification using high power microscopy would however be necessary in order to confirm which taxa are present in these wood charcoal assemblages.

8.3.5 A relatively rich assemblage of over one hundred land snail shells (molluscs) was present in Sample 2 and smaller assemblages of between fifty and one hundred land snail shells were also present in Sample 5 and Sample 4.

9 PUBLIC IMPACT

Johanna Ungemach and Brendon Wilkins

Profiles for all project participants have been archived on the Digital Dig Team system and can be reviewed at https://digventures.com/dig-team/pontefract-castle/ and by clicking on each individual profile.

9.1 Introduction

9.1.1 This section details the social impact of the Gatehouse project public programming for visitors and project participants over the course of October 2019. DigVentures defines social impact as a measure of the positive and negative primary and secondary long-term effects produced by the programme, whether directly or indirectly, intended or unintended, over and above what would have happened in the absence of the project initiative. Results were analysed using a bespoke social impact methodology, drawing on DigVentures' Theory of Change and Standards of Evidence framework (Wilkins 2019, 77; Wilkins 2019, 30).

9.1.2 Public engagement was integral to the research aims of the Gatehouse project (Aim 5), designed to provide 'a range of opportunities for local community members, school children and visitors to the area to learn more about the archaeology of Pontefract Castle' (Casswell et al. 2019, 15). Pontefract Castle is situated within an area of significant deprivation, with 18% of residents falling within the top 10% of most deprived in England (Source: Index of Multiple Deprivation based on 2011 census data). The project therefore presented a major opportunity to help address the strong social and educational needs of the surrounding communities, based on the principle that archaeology can do so much more than answer a planning brief: it can transform lives and communities and provide the kind of public support that underpins positive, sustainable growth (Wilkins 2020: 33)

9.2 Public Programming

9.2.1 A carefully designed mix of professional excavation and public participation was programmed over the course of the five-week project (30th September until 3rd November), creating a breadth and depth of participation opportunities from informal site visits to structured field training. This blended model comprised the first three weeks dedicated primarily to servicing commercial imperative and research brief, with public events running alongside, and followed by two weeks of participation and training in the trenches to National Occupational Standards:

- Guided tours (5th October until 3rd November) – 438 participants
- Educational sessions for school classes (8th until 17th October) – 372 children from six schools

- Excavation and finds room training for YACs (12th and 13th October) – 81 YAC members
- DigCamp in the trench and the finds room for children and parents (19th, 20th and 26th October until 3rd November) – 163 participants
- Excavation and finds room training for adults (21st October until 3rd November) – 132 participants
- Two photogrammetry workshops (26th November and 2nd November) – 10 participants
- Two creative workshops (3rd November) – 10 participants

9.2.2 In response to this additional archaeological programming, a substantial 138% year-on-year increase in visits to the castle were recorded during October 2019 (14,810, up from 6,800). The project's digital content also achieved significant breakthrough during the same period, achieving 500,000 combined impressions across Facebook and Twitter, and 12,000 post engagements (likes, shares or comments). A 3D virtual tour of the dig attracted 2,500 views on Sketchfab, driving 7,000 unique page views of the more in-depth archaeological content published on the project microsite: https://digventures.com/pontefract-castle/ including background information, dig updates, and archival site records. Traditional TV and print media also covered the project with news stories published by BBC Look North and BBC Radio Leeds, and featured in articles by the Wakefield Express and the Pontefract and Castleford Express. Whilst these results demonstrate a significant public appetite for the Gateway Project, any evaluation of social impact needs to go beyond a list of output numbers of participants and visitors (Gould 2016). DigVentures has developed a bespoke evaluation methodology for measuring the social impact of public archaeology programmes and this is discussed in specific relation the Pontefract Castle further below.

9.3 Evaluation Methodology

9.3.1 The Gatehouse project audience was separated into two broad categories: project participants, who joined the project through a formal booking process, and site visitors, who attended site tours and events, with all opportunities delivered free of charge. DigVentures have developed a methodology for measuring the social impact of archaeology programmes for both participants and visitors, pictured as a Theory of Change detailing outputs, outcomes and impacts (see Appendix L). In this framework, social impact can be conceived as the difference that activities make to people's lives over and above what would have happened in the absence of that initiative. Outputs are a measurable unit of product or service, such as a community excavation; outcomes are an observable change for individuals or communities, such as acquiring skills or knowledge. Impact is therefore the effect on outcomes attributable to the output, measured against two metrics: scale, or breadth of people reached; and depth, or the importance of this impact on their lives.

9.3.2 The credibility of a Theory of Change rests on the level of certainty that organisational activities are the cause of this change. In order for this certainty to be achieved, the correct data must be collected to isolate the impact to the intervention. The DV Theory of Change is therefore linked to a Standards of Evidence framework designed to articulate and highlight the causal links between activity and change. These tools are

then used to create a bespoke, project specific evaluation table linking activities, outputs, outcomes and evidence base (Appendix L).

9.3.3 In support of this overarching methodology, two slightly different data collection strategies were undertaken for both project participants and site visitors; participants were interviewed pre and post dig experience (99% completion rate, or 347 in total), and visitors completed a questionnaire following their experience (24% completion rate, or 104 in total). The age, gender and professional background of participants was derived through digital analytics, with categories derived from the Office for National Statistics, followed by more in-depth analysis designed to reveal 'whether or not people will have learnt about heritage, developed skills, changed their attitudes and/or behaviour, and had an enjoyable experience'. Questionnaires combined closed-end questions easily convertible to statistical data (usually attitudinal questions using a four-point Likert scale to record responses) and open-ended questions designed to elicit extended responses which were then coded for statistical analysis or otherwise consolidated in order to address the observable implications. The social impact results for both groups are discussed in turn below, with evidence organised according to the specific social outcome that activities were designed to achieve (Appendix L, column 3).

9.4 Social Impact – Participants

9.4.1 A combination of activities for people to actively participate in the excavation was available during October 2019, designed to ensure the 'a wider range of people will be involved in archaeology and heritage'. To help decrease perceived barriers to participation, accessible half day sessions were offered including Finds Lab Workshops, Dig Experiences and DigCamps, all of which followed DigVentures' CIfA-endorsed Field School curriculum.

9.4.2 Gender profiles for participants were broadly balanced, with 54% female and 46% male, with the youngest aged 4 and the oldest 76. Participants represented a variety of full-time occupations (39%) and retirees (10%). The remainder were students, either of compulsory educational age or those attending university (48%), or people in long-term unemployment (3%). Those in full time employment were divided into categories based on the Office of National Statistics (ONS) classifications, the breakdown of which can be seen in Figure 13 illustrating that digging and finds lab opportunities were taken up by a significant number of people with low income, as well as young people. Examples of professions included photographer, vets practice manager, radiologist, translator, home-schooling mother, technician, local government officer, accountant, bar staff and librarian . The high number of 'under 16' and '35-44' age profiles and 'students' can be accounted for by the high take up for family-oriented Dig Camps providing activities for parents and children. Taking this into consideration, all age groups and socio-economic backgrounds were well represented in the data, with a marked improvement on existing community archaeology provision compared with the typically retired, over 65 local civic society groups (Wilkins 2020, 33).

9.4.3 Of the people who answered this question (n=219), 57% of project participants indicated that this was their first visit to the Pontefract Castle, indicating that the project raised the site profile in local, regional and national networks. This included

participants from the immediate locality (19% from WF, BD, DN and LS postcode areas), regionally (two thirds of participants living no further than 50 miles from Pontefract Castle) and nationally (a third of participants having travelled more than 50 miles to have the opportunity to take part in the project, from as far as Norwich, South Gloucestershire and West Sussex) (Figure 14).

9.4.4 In addition to widening the demographic and socioeconomic range of participation (when compared to existing community archaeology provision), the project attracted an overwhelmingly new audience for archaeology, with 80% of participants having never taken part in archaeology activities before. Pre-experience interviews were completed with all project participants to help understand why each had decided to get involved in something entirely new to them, and provide a baseline understanding against which the impact of the experience could be determined through post-experience interviews. Participants answered in their own words, and the response were coded into ten categories.

9.4.5 The results show that just over 50% of participants described themselves as 'passive consumers of archaeology' who embraced the opportunity to finally get hands-on with their interest (Figure 15). Contrarily, 20% of participants joined a friend or family member who was interested in the project, but they did not have pre-existing interest in archaeology themselves. Some 17% of participants also took part in the project because they are interested specifically in Pontefract Castle and/or the excavation was local to them.

9.4.6 Post-experience 'exit' interviews were also undertaken for all participants, indicating how initial perceptions of archaeology changed and providing evidence for wider social outcomes, such as learning, skills acquisition and well-being. Participants were asked to summarise their highlight of the project in their own words, with responses then codified into five categories in order to visualise the results (Figure 15). The most important consideration for 68% of participants was the experience of real archaeology, and the opportunity to get hands-on experience with finds and in the trenches. Closely related to this was the 'thrill of discovery' for 23% of participants, indicating an overwhelmingly positive experience for first time participations. A closer assessment of interviewees answers (often elicited through follow up questions) reveals that in addition to having a good time (such as "This was the best day ever!"), more subtle impacts could be clearly discerned.

9.4.7 Further analysis of participant responses indicates a positive change in their perception of archaeology, history and Pontefract Castle, meeting the 'learning about archaeology and heritage, leading to change in ideas and actions' outcome. Rachel, a 41-year old dinner lady, was surprised by how the experience had gripped her: "I'm not really much interested in history, but this made it really fun". Stephen, a 45-year old care manager, described how the experience had positively challenged his assumptions: "I found it different to what I thought it would be. I learnt that archaeology is more than just finding things". This broader understanding of the principles of archaeology was also supported by other participants, such as Joanne, a 35-year old events officer remarked on "learning so many things and honing my skills," indicating that the broader understanding of archaeology was also by the outcome that 'participants will have developed skills'.

9.4.8 The experience had cause for some individuals to become more reflective of their own behaviour in the present: "It really made me think about what people will find from us and how much unnecessary rubbish we leave behind for archaeologists to find" (Kristina a 38-year old PR consultant). Others similarly reflected on how excavating had made them feel: "digging and the thought of finding something that no one else has touched for ages" (Dianne, a 41-year old planning consultant).

9.4.9 Several participants described experiencing positive mental and physical health benefits, aligning with the outcome that 'participants will have greater wellbeing'. Jacqui, a 54-year old retiree described being "generally not a very patient person, but I find this very therapeutic". Similar positive effects were observed by Carole (65), a retired teacher: "Being […] with good company. It's a really good social exercise". Being part of a team and working towards a common goal also gave participants also a sense of achievement and ownership. Lynda (65), a retired teacher described feeling "like I've been very useful [cleaning finds] and hopefully someone will now be able to do some good analysis". This sense of achievement also resulted in strengthened self-confidence, as observed by Ian (62), retiree: "[I enjoyed] seeing how much I achieved at the end of the day". This effect was both visible in the finds room and the trench, as Ann (76), a retiree, described the positive feeling "Seeing the process [was fun] – standing back and looking at the area we cleaned and you can see what a difference we actually made". At the other end of the age spectrum, one parent remarked on the similar effect the experience had on her child: "Evie is very shy so to see her comfortable enough to answer questions was fantastic" (Beckie, a 36-year old Retail Buyer).

9.4.10 In addition to field skills training and finds room activities, an artistic programme was devised to run alongside the excavation as part of AHRC funded PhD scholarship by Jodie Harris. The goal of this experimental work was to further expand the range of people engaging with archaeological heritage through creative sketching workshops engaging aesthetically with the excavation. Every participant produced at least one drawing to take home, and all results were photographed to be included in the archaeological record (see Figure 16). Participating members of the Pontefract Art Club will also display selected pieces as part of their annual exhibition. Evaluation of this work is ongoing, with in-depth interviews of workshop participants, aiming to understand how similar creative interventions extend audience reach beyond typical consumers of archaeology, and how artistic activities might add value to the experience of those already interested in the subject.

9.5 Social Impact – Communities

9.5.1 Alongside structured activities for project participants, other lighter touch opportunities were provided for site visitors throughout the course of the project. Interpretation boards were placed alongside the trench-side fence, and observers were encourage to talk to and interact with the team, and drop into the adjacent finds room to see what had been discovered. These more informal audience activities were supplemented with structured, hour-long tours of the trench and finds room, detailing the history of the site, explaining the research process, and highlighting the day's latest finds. Visitors were encouraged to complete a short evaluation form after their

experience (24% of those visitors who took part), to understand the impact the project had on the wider community.

9.5.2 A similarly diverse demographic profile was also observed for site visitors, in terms of age, gender and socioeconomic background. A quarter of respondents were younger than 44, with 6% under 16 and 13% over 75. In terms of gender, 53% were female and 47% male, and all professional categories were represented (according to ONS classifications) including postman, project manager, clinical nurse specialist, spiritual medium, housewife, paramedic, judge, writer, gardener and accountant (Figure 17).

9.5.3 Over the course of October, 14,810 visitors were registered at Pontefract Castle a 137% year-on-year visitor increase based on the same month in 2018. Given that 58% of visitor survey respondents stated that the dig was their main reason for visiting Pontefract Castle, it is not unreasonable to assign a large part of this uplift to the archaeological programming, supporting the wider project outcome that a 'wider range of people will be involved in heritage.' This audience was predominantly local, with 62% of visitors living within 10 miles of the site, 14% within 50 miles, and the remained (including a small group of Australians) traveling from further (Figure 14).

9.5.4 Although the visitor experience was designed to be as accessible as possible, evaluation feedback indicated that the social outcomes contributed significantly towards 'learning about archaeology and heritage, leading to change in ideas and actions.' 80% of respondents had never taken part in a site tour or visited an archaeological site before. Several visitors were surprised to have stumbled upon "an actual dig in progress" in the first place, and by "the sheer scale of it all", "the depth of the drawbridge pit" and how "much more [there is] to discover". Many also put forward what they learnt on the tour, such as "that Cromwell hadn't destroyed the castle", "how far back the town existed" or "the amount of knowledge you can find from the dig" in general. Visitors described an improved perception impression of archaeology (38%), or strengthened in their pre-existing interest for the discipline (61%). A further 51% of respondents found archaeology to be more exciting as a consequence of their visit, and when asked whether they would like to get more involved with archaeology in their local area, 80% agreed, of which 33% showed a very strong interest in future involvement.

9.5.5 As well as changing opinions of archaeology more generally, visitors also described an improved perception of the immediate Pontefract locality, supporting the social outcome that 'the local area will be a better place to live, work or visit'. 73% of respondents who claimed that their impression of the local area had changed, with one respondent clearly stating: "Pontefract has more to offer than I thought". Another noted that they "hadn't been too impressed of [sic] Pontefract up till now", but now found it all very interesting. People from further away admitted, that they were "not aware of the area" before their visit. Locally, the positive impact of the project went even further and provided visitors with a better understanding of their local archaeology, with people saying that they gained "increased awareness of local history" as well as its former importance. Furthermore, Pontefract and its surrounding area has become a better place to live for visitors who now "feel privileged to live here".

10 DISCUSSION

10.1 Introduction

10.1.1 The overall aim of the project was to define and characterise the physical extent of the Castle through a programme of remote sensing and excavation. Specific aims and objectives for the Gatehouse Project are outlined in the Project Design (Casswell et al 2019) and are referenced, where appropriate, in the following discussion.

10.2 Remote sensing (Aim 1)

10.2.1 Remote sensing enabled the site to be mapped to a high degree of accuracy in a way which had not been achieved before (Aim 1 Q2; Figure 2; Figure 20). For centuries, much speculation has surrounded the development of Pontefract Castle's most enigmatic feature, its Great Tower. This feature survived 17th century demolition better than any other aspect of the Castle, but still perceptions of its developmental sequence differ greatly. It is argued here that its design may have focussed more on the utilitarian requirements of the castle dictated predominantly by the natural topography (Q3).

10.2.2 The results of the aerial survey show the extant remains of the five remaining towers constituting the Great Tower, and how these related to known and assumed positions of the curtain wall (Figure 21). The largest tower lies just to the north of the others, mostly within the inner bailey area, flanked by two smaller, equally sized towers situated on its intersection with the curtain wall. Another large tower extends to the south into the moat, entirely outside the inner and upper outer bailey. A curved fillet tower can then be found between the south and east towers bonded to the south wall of the upper bailey wall.

10.2.3 Writing in about 1530, antiquarian John Leland describes the Great Tower in 1643 as "…*being cast into 6 roundelles, 3 bigge and 3 smaull*…" (Robert 2002, 19), suggesting that one of the towers was lost during its demolition. It is speculated that this lost tower may have been a mirror of the small fillet tower on the opposite side of the eastern tower, thus creating symmetry across the entire structure (ibid, 25). However, this interpretation relies on the fact that the north tower mirrored the southern one, which clearly from the aerial survey it does not. An inspection of the c.1560 survey drawing of the Castle reveals that two towers were visible between the inner bailey wall and the curtain wall, with one in the inner bailey and one outside. This is corroborated by the remains currently exposed and do not account for another fillet tower. If indeed there was another tower, it can be conjected that had a sixth tower existed it may have been positioned between the north and east towers to evenly distribute the towers around the building.

10.2.4 It is widely accepted that the Great Tower was initially constructed in the late 11th century from timber, positioned on the motte of the early Norman castle. Diagnostic architectural remains of the 12th century stone castle defences are scarce but can be found in the southwest curtain wall near the sallyport, where limestone was the principal building material (Robert 2002, 405). It is difficult to imagine the defences of the castle being renovated to stone while the Great Tower remained timber, therefore it is fair to assume this too was built at a similar time. Limestone continued to be used

in the castle's construction into the 13th century, at which point local sandstone became the preferred option, demonstrated in the mixed use of materials during reconstruction of the Great Tower. External faces of the tower projections are made of sandstone, while limestone has been identified from internal features, indicating that almost the entire structure now visible was build, refaced or reconstructed to some degree in the 13th century or later. That being the case, the development of the tower from its inception to this point is relatively unknown; however, a reappraisal of the structure from the aerial survey provides new interpretation of its developmental sequence.

10.2.5 From the beginning of the 12th century masonry fortifications began to be added to a number of mottes previously surmounted by a timber tower. In almost all cases the stone walls encircling the summit of the mound took the form of a 'shell keep', such as at Arundel and Lincoln (Goodall 2011, 107). Due to its size and position a case can be made for the larger northern tower existing as such a structure, therefore representing the Great Tower's earliest phase of masonry construction. The curtain walls extended to the northeast and northwest from it, with additional towers added at a later date. The position of both the east and west towers – rather than conforming to any form of symmetry – served to fortify the points in the defences where the curtain wall met the original tower. The addition of the larger southern tower may well be contemporary with these flanking towers, all of which may have been built as late as the 14th century.

10.3 Chronology and phasing (Aim 2)

10.3.1 The site of the original main entrance into the Castle is unknown but likely to have been constructed in the 12th century in the location of the later gatehouse (Roberts 2002, 406). This was followed by addition of D-shaped towers flanking the main gate in the late 13th or 14th century. By the start of the 15th century the gatehouse had been transformed once again, this time incorporating a new circular extension to the eastern tower that realigned the approach to the Castle with Pontefract town to the west (Aim 2 Q5-7).

10.3.2 The earliest phase of the Gatehouse found during the excavation was the eastern polygonal tower base, which presumably would have been originally mirrored on the opposite side of the main gate, now masked by a late 19th century reconstruction. This structure was constructed entirely from sandstone marking a departure from the earlier use of limestone exhibited in 13th century remains of the castle. Although dating remains tentative at this stage, twin D-shaped gatehouse towers became a prominent feature from the mid 13th century onwards in the north of England (Hislop 2016). The Great Tower was built by the latter part of the 13th century, demonstrating a transition to the use of local sandstone in building works at the castle from this period onwards. A late 13th or 14th century construction date therefore seems likely for its construction soon after the rebuilding of the Great Tower in stone.

10.3.3 Significant improvements to the defences of the Castle were commissioned by John of Gaunt in the latter part of the 14th century. This was evident in the excavation through the addition of a circular structure to the front of the eastern gatehouse tower and the construction of a passage barbican with drawbridge across the moat. Just the

drawbridge pit of this much larger structure was found within the trench, but an appreciation of the complexity of this building may be gleaned from the 16th century survey drawing of the Castle. From this image the Gatehouse has traditionally been viewed as comprising a twin tower arrangement either side of the main gate; however, upon closer inspection, the side of what has been assumed to have been the eastern tower (to the right of the Gatehouse) can now confidently be interpreted as part of the original earlier structure. This not only demonstrates that the front of the Gatehouse contained not two but three towers, but that by the time this image was recorded all of them had circular facades.

10.3.4 The c.1560 drawing also shows the Gatehouse with a passage barbican bridge extending into the outer bailey turning towards the West Gate. This bridge was illustrated as having a series of arches leading down into what must be assumed is the moat. These were not found during the excavation, but immediately next to them another step-like feature rising up to the right could well be a depiction of the casing wall that was found inside the drawbridge pit. Excavation outside the pit did not go deep enough to confirm its presence but it seems likely this early strengthening of the cliff face extended some way between the Gatehouse and Constable Tower.

10.3.5 The late 14th remodelling of the Gatehouse was reflected in the buried remains uncovered during the excavation but is conspicuous in its omission from the Keirincx painting and various Civil War siege plans from the 1640s. It is conceivable that much of this structure had fallen into disrepair and was dismantled by the 17th century, or that it was deemed to be of little defensive purpose by the Civil War. What is evident from both the excavation and J.H Greaves's plan of the castle (Holmes 1887) is a redan constructed onto the outer face of the eastern tower. This additional defensive structure abutted the medieval building and is almost certainly of 17th century date because of its absence from the 16th century illustration and the fact that such structures were common additions to castles during this period, served to reinforce the Gatehouse by protecting it from cannon fire. The full extent of it was not seen within the excavation area but investigations in the 1880s indicate that it may have had a curved form and was matched by one on the western tower. There is a possibility that the high triangular pilasters illustrated on Alexander Keirincx's oil painting of c.1640 illustrate these features, however it is unlikely they would have been built so high and, as with much of this piece of artwork, a high degree of artist licence had been employed.

10.3.6 The focus of archaeological activity during the excavation was the drawbridge pit. Structurally, the sections that remained were in excellent condition having survived the demolition of the much of the rest of the Castle at the end of the Civil War, and careful excavation of the depositional sequence from within provided evidence for its gradual filling from as early as the 14th century (Q8).

10.3.7 Based on the excavated evidence, the most reasonable assessment of this feature is that it formed part of a turning bridge system and functioned as a pit into which the rear counterpoised section of a drawbridge was housed when the bridge was raised. The precise workings of the bridge are lost, but the sandstone corbels protruding from the south wall into the pit may have served some function in its operation, with the recesses lower down the wall demonstrating a repeated striking action from above.

Alternatively, the bridge may have been operated using lifting bridge technology; however, the lack of chain holes or counterbalance beam slots above the gate on the 16th century drawing suggest that the drawbridge was not mechanised from above.

10.3.8 The nature of much of the remains from within the pit indicates a gradual accumulation of sands from the original construction of the drawbridge pit to the 15th century. In the late 15th or 16th century the bridge superstructure overlying the pit appears to have been reinforced or rebuilt through the addition of vertical timber uprights. The nature of this superstructure could not be ascertained from the excavated remains, but the 16th century drawing suggests the bridge was had become somewhat more permanent by this time. Deposition of material continued throughout the 17th century with no evidence to suggest that the pit was redefined or maintained prior to the Civil War sieges. This is corroborated by the pictorial depictions of the castle from the 17th century where no moat or bridge was illustrated. It seems unreasonable to assume that either of these features had been completely removed by this time, but a lack of emphasis on their defensive nature indicates the limited role they played.

10.3.9 Demolition rubble from the slighting of the Castle in 1649 overlay naturally accumulated layers and contained numerous musket balls from the sieges. The depth at which this layer was found is interesting because it was below the top course of the surviving masonry, suggesting that the feature was either cleaned of material before demolition or the bridge still served some perfunctory purpose during the sieges. If the latter is true, then it can safely be assumed that any walled passage barbican aspect of the bridge had been lost by this point.

10.3.10 Dating the construction of the drawbridge pit and associated structures can be made not only through the cultural material recovered but also tentatively through an analysis of the mason's marks found in the structural remains (Q9). Caution should be used when attempting to draw comparisons between marks made on different parts of the Castle, however notable similarities can be drawn. In total, 22 unique mason's marks were found across the remains of the Gatehouse structure. Of these five have direct comparisons with those found on buildings known to have been erected as part of the late 14th and early 15th century work (Appendix M nos. 6, 7, 12, 14 and 22). This, together with known documentary evidence for its construction and cultural material recovered from the base of the drawbridge pit, strongly suggests this part of the Gatehouse was constructed towards the end of the 14th century.

10.4 Preservation (Aim 3)

10.4.1 The overall state of preservation of buried archaeological remains encountered was good (Aim 3 Q10). Structural remains found below the level of 19th century landscaping were sealed by 17th century demolition rubble and had been preserved in excellent condition. Artefacts were recovered throughout the entire excavated sequence and, with the exception of ferrous material, had survived well in the sandy conditions (Q11).

10.4.2 However, the recovery of palaeoenvironmental remains was poor on account of the slightly acidic nature of the soils. No evidence for the provision of consumable goods to a high-status residence or evidence for any specialised food processing was present in the charred plant macrofossil assemblage (Q12). The presence of coal in in one of

the 17th century samples may be evidence for some form of industrial activity or evidence for high status. Cereal crops were also evident from the 17th century. Identifiable crop types present were oat, hulled barley and legumes, which are typical crops of the medieval and post medieval period in England (Grieg 1996). The cereal grain and legume fragment are likely to have been charred accidentally during parching or food preparation and redeposited into the drawbridge pit. The small size of the charred plant macrofossil assemblage indicates that domestic hearth waste was not disposed of directly into the pit or that conditions for the preservation of charred plant macrofossils were generally poor. The presence of bone, ceramic and other artefacts in the samples does however suggest that some domestic refuse was deposited in the drawbridge pit. It is perhaps more likely therefore, that the low concentration of charred plant macrofossils is due to differential preservation. This is typical of medieval sites due to by-products from the free threshing cereals, which become the main crop types in the medieval period, being removed at an early crop processing stage and therefore less likely to be preserved in domestic fires (Van der Veen 2013, 172). Crop processing by-products were also often used as fodder and thatch rather than fuel in the medieval period (Carruthers and Huntley in Hall and Huntley 2007, 100).

10.4.3 It was not possible to ascertain whether the assemblages of uncharred seeds found in several of the drawbridge pit fills are modern intrusive material or contemporary with the deposition of the sampled contexts. Preservation of uncharred seeds may however occur at urban sites with deep stratigraphy, where anoxic conditions result in the preservation of uncharred material in the absence of full waterlogging (Van der Veen 2013, 164). The presence of fig provides evidence that at least some of the uncharred seed assemblage may be contemporary with the deposition of drawbridge pit fills. Fig is common in medieval and post medieval urban waterlogged plant macrofossil assemblages, particularly in garderobe pits and cess deposits (Grieg 1996). Fig is also unlikely to have been growing wild at the site. Other edible taxa present in the uncharred seed assemblage were black mustard and elder. Black mustard was widely cultivated as a condiment in the medieval period and elder berries were used as a substitute for raisins or made into a medicinal cordial (Philips 1983). Taxa with medicinal properties are henbane and black nightshade (Bevan-Jones 2009). Black mustard, elder, henbane and black nightshade, along with other taxa present in the assemblage of uncharred seeds, are also plants of nutrient rich disturbed soils and damp habitats which are typical of medieval occupation deposits.

10.4.4 Wood charcoal fragments were present in all samples from the drawbridge pit and provide evidence for the utilisation of local woodland and scrub for the collection of fuel. Offcuts from wood brought to the site for use as timber may also be present. Preliminary examination of the wood charcoal assemblage indicates that a ring porous taxon morphologically similar to oak was predominant in the earlier deposits with more mixed assemblages including some diffuse porous taxa found in subsequent layers. Many of the probable oak charcoal fragments from earlier layers had closely spaced annual growth rings, indicating restricted growing conditions. This may indicate the use of oak trees from well-established dense woodland in the medieval period. Closely spaced growth rings may also indicate management techniques such as coppicing, browsing or shredding, as well as poor growing conditions caused by the local environment or climate. The more mixed assemblages from later deposits

may indicate the use of a wider range of habitat types for the collection of fuel over time.

11 RECOMMENDATIONS

11.1 Pottery

11.1.1 The following recommendations are made with regard to further work on the pottery considered as part of this report. A full report on the assemblage should be made and include the following elements:

- Assessment of pottery recovered from environmental samples.
- The identification of the sherd of Shell Tempered ware to type.
- A full discussion of the ware types present with a comprehensive type series and discussion of parallels from elsewhere on the site.
- A full discussion of the characteristics of pottery groups from individual contexts and an interpretation of the relationship between the pottery and the contexts defined during excavation.

11.2 Animal bone

11.2.1 The animal remains from the drawbridge pit a Pontefract Castle provide a glimpse into the eating habits of those living in or in the vicinity of the castle during the medieval period. In order to understand the nature of people's diet and the economy further work is needed on the identification of bird and cervid remains from the site (Aim 3, Q12). The additional work required includes:

- Additional identification work on swan (whooper vs. mute), and distinction between goose and swan for some specimens.
- Additional identification work on smaller birds identified tentatively or only to family/order level during assessment – including the Galliformes, woodcock, coot and duck.
- Additional identification work on the fish parasphenoid.
- Additional identification work on cervid remains to distinguish/confirm assessment identifications of fallow and/or red deer.
- Analysis of body part representation (data already recorded) to identify high quality cuts of meat.
- Assessment of animal remains recovered from environmental samples, at least those from the earlier drawbridge pit deposits.
- Data considered in light of any additional dating information gathered during the assessment phase of work, especially for drawbridge pit fills.
- Comparison with data collected during earlier works at the site as published by Roberts (2002) and those conducted by Wessex Archaeology, if available at the time of analysis.
- Comparison with contemporary sites in the region and castle sites nationally.

11.3 Environmental

Plant macrofossils

11.3.1 No further work on the charred plant macrofossil assemblage is recommended as the charred plant remains present in the sampled contexts have been fully identified and quantified during assessment. The results of this assessment should however be included in any final report on the site.

11.3.2 Full sorting and identification of the assemblages of uncharred seeds present in Samples 54, 39 and 38 from late 14th century layers as well as those present in Samples 44 and 47 from 15th to 16th century layers would be expected to provide evidence for the local environment (Aim 3 Q13) during the deposition of these layers within the drawbridge pit. It is also possible that evidence for consumable goods in the form of food remains may be identified in addition to the fig. Direct dating of this material would however be necessary in order to proceed with analysis.

Wood charcoal

11.3.3 Analysis of the wood charcoal assemblage would be expected to provide evidence for the local environment (Aim 3 Q13) in terms of the availability of woodland trees and other types of woody taxa from underwood or scrub. It is therefore recommended that the assemblages of wood charcoal greater than 2mm in size in cross section present in Samples 2, 3, 5, 12, 14, 38, 57 and 58 be fully identified in order to investigate potential changes in wood use over time. It is also recommended that any additional sediment from these samples be processed and that the heavy residues be re-floated in order to recover additional charcoal and provide a more representative sample for analysis.

Molluscs

11.3.4 The relatively rich assemblage of land snail shells present in Sample 2, as well the smaller assemblages of land snails in Samples 4 and 5, may provide some palaeoenvironmental information on the immediate environment as well as the process by which the drawbridge pit was filled (Aim 3 Q13). It is recommended that any remaining sediment from these samples be processed using a 500µm residue mesh to recover additional snail shells and provide a more representative sample. It is then recommended that the flots and heavy residues be assessed by a molluscan specialist.

Coal

11.3.5 The presence of coal in Sample 3 may be evidence for some form of industrial activity or evidence for high status (Aim 3 Q12). It is recommended that this assemblage be assessed by a coal petrology specialist.

Scientific dating

11.3.6 Charred material suitable for scientific dating is present in Sample 3 in the form of a charred cereal grain. Charred material suitable scientific dating is also present in

Samples 38, 44, 22, 14 and 5 in the form of wood charcoal fragments with strong ring curvature which are indicative of short lived, small diameter roundwood (Aim 3 Q10). This material is associated with relatively rich assemblages of other charred material and low proportions of intrusive root material and is therefore less likely to be intrusive.

11.3.7 Uncharred material suitable for scientific dating is present in most of the uncharred seed assemblages in the form of high concentrations of elder seeds. Dating of the elder seeds in Samples 54, 39, 38 and 37 would be expected to provide confirmation of the date of the assemblages of uncharred plant macrofossils with the highest concentrations and greatest diversity of taxa.

11.4 CBM

11.4.1 Most of the material appears to have been brought onto the site and deposited during the modern period. The material definitely from the castle is too small in amount to potentially add much to the project although the descriptions the early brick and peg tile should be published as they add to our understanding of the development of CBM types in the region, as well as supplying information about the appearance of the castle.

11.5 Metal

11.5.1 Further work would be needed on a select group of artefacts to prepare the finds for an analysis report or publication. The additional work required includes:

- X-ray iron artefacts from non-modern contexts to aid in identification.
- X-ray the bone/antler handled knife to aid in illustration.
- Possible nail analysis: x-ray of iron from non-modern contexts may lead to the identification of additional nails. As corrosion obscures most of the nails, it is currently not possible to determine the types of nail head(s). X-ray may help to establish whether there were multiple types of nail heads and nail sizes present, which may indicate different uses.
- Coin specialist to identify the possible Spanish Netherlands coin (SF10), the coin from the flot residue (SF37), and the possible coin/token (SF28). They may also need these to be x-rayed and/or conserved.
- Further research on firearm activity at Pontefract castle and comparison with the Roberts (2002) publication data.
- Further research on the antler/bone knife handle to find parallels and narrow down date.
- Further research is needed on the copper-alloy 'pivot' (SF32) to determine if this is architectural and related to the drawbridge mechanism, although discussion might be better placed elsewhere in the report.
- Specific analysis and interpretation of the drawbridge pit assemblage.

11.6 Worked bone

11.6.1 Identification of the knife handle from the knife (initially assessed as a small find with the other metallic objects) to determine if it is bone or antler.

11.7 Worked stone

11.7.1 The stone discs would benefit from being identified by a geologist.

11.8 Illustrations

11.8.1 A small number of artefacts have been recommended for illustration:

- Parchment pricker/stylus (no. 36).
- Copper-alloy 'pivot' (SF 32).
- Copper-alloy strip (SF 35).
- Two cannon balls (SF 29, SF 30).
- Two of the stone discs (SF 17 and SF 22) at minimum should be illustrated because of the marks on the faces, but other discs can be included to show the range in shape and size.
- Illustration of up to five sherds of pottery, including Coal Measures Purple ware and Cistercian ware.

11.8.2 Depending on output report and audience, other artefacts from later contexts that could be illustrated/photographed include: the thimble (no. 5), the pipe mouthpiece (no. 13), the decorated copper-alloy sheet (SF 26), the buckle fragment (SF 25), examples of the lead came and examples of the musket balls. The coins/tokens should be photographed for the report.

12 CONCLUSIONS

12.1 Archaeological investigation

12.1.1 The community excavation has both greatly increased understanding of the development of Pontefract Castle gatehouse and raised awareness of Pontefract's greatest asset through a targeted programme of public engagement. However, in achieving the aims and objectives for this project, a number of other questions about the castle may now be posed.

12.1.2 The earliest remains encountered were that of a poorly preserved casing wall found within the drawbridge pit. It is believed this feature was illustrated in the 16th century drawing of the castle extending to the northeast of the gatehouse creating a front for the cliff face. This was constructed before the gatehouse but how much before is still unknown. Sandstone was quarried from the moat in the 14th century to facilitate the construction of the Great Tower and renovations in other parts of the castle, but the poor preservation of the wall suggests it had been exposed to the elements for a significantly longer period of time than these works. Further work to the east of the passage barbican may give an insight into the extent of the masonry and how it might have functioned in relation to the earliest phase of gatehouse structure.

12.1.3 Aerial survey of the castle provided information regarding the possible construction sequence of the Great Tower. Interpretation of this enigmatic feature remains tentative but further research into the nature of the northern tower base – and

comparisons between it and the external elevations of the better surviving parts of the structure – may reveal the origins of the earliest stone structure on the motte.

12.1.4 The centrepiece of the excavation was undoubtedly the drawbridge pit within a passage barbican bridge. Although work within the pit provided information about its date and use, many things remain unknown. The dimensions of the drawbridge pit are known but those of the larger bridging structure it was part of are not. Within the trench the side of the bridge appeared straight, however the 16th century drawing illustrates the structure turning towards the West Gate. This early survey of the castle proved to be remarkably accurate when compared to the remains encountered in the excavation. Therefore, it seems reasonable to assume that the bridge did indeed turn; but if so, how would this allow space enough to accommodate a drawbridge within the upper outer bailey?

12.1.5 Much of the visible above-ground masonry should now be considered reconstruction from the 19th century. As such, the true location of the 14th century western gatehouse tower is still not known, however its addition to Greaves's plan from the 1880s suggests the base of it had survived demolition. Also depicted on this archaeological plan of the castle were two semi-circular features in front of the two large gatehouse towers, interpreted as Civil War fortifications. The edge of the eastern one was found abutting the tower; however, no evidence was found for the eastern one. If one had exited its remains would have been expected within the excavated area overlying the western side of the passage barbican. It may be that within the feature lay outside the limits of the excavation, or possibly that it was removed as part of the Victorian landscaping of the castle.

12.2 Public engagement

12.2.1 Structured through a Theory of Change, the evidence presented here shows significant impact for both individual participants and community visitors as a consequence of the Gatehouse project. The project attracted a diverse community of people from an area of high deprivation to explore and investigate the heritage of Pontefract Castle in a new and different way. Evaluation shows that the project tackled the strong social and educational needs of the surrounding communities and was a success for public engagement. A high number of locals was engaged with archaeology and individuals gained pride for their heritage, as well as ownership of their involvement in the excavation. This project did not only change participants' perception of heritage and archaeology and improved their skills and understanding of the discipline, but also had an impact on visitors to the site. Their understanding of local history improved, while their interest and willingness to participate in local archaeology increased.

12.2.2 As described in Section 9.3 above, the credibility of a Theory of Change rests on the level of certainty that organisational activities are the cause of any impact observed. To address this DigVentures has developed a 'Standards of Evidence' framework drawing on evidential standards devised by Nesta. This framework determines the levels of certainty that project activities will have a positive impact on the intended outcome, ensuring that the correct data is collected to isolate the impact to the intervention, and that findings are validated externally.

12.2.3 This framework begins with Level 1, where practitioners are able to give an account of hypothesised impact, providing a logical reason why project activities could have an impact on outcomes, and how that would be an improvement on alternative provision. For a project to achieve Level 2 practitioners gather data that shows some change amongst participants, but this may not be sufficient to provide evidence of direct causality. At Level 3 practitioners will be able to demonstrate that they are causing the hypothesised impact, by showing less impact amongst those who don't participate in the project or receive the product/service. Progressing to Level 4 and practitioners can explain why and how the project is having the impact observed, with results potentially independently verified. Finally, at Level 5 the project methodology is robust and well-evidenced enough to be scaled up and operated by other teams or organisations, whilst continuing to have positive and direct impact on the outcome and remaining a financially viable proposition.

12.2.4 The Gatehouse Project offered different activity streams for participants and visitors, and as such, can be seen to have reached differing levels on the standards of evidence framework (level 2 for community and level 3 for participant impact). Evidence was collected for both visitors and project participants indicating a change as a consequence of project activities (level 2), however, impact for participants was additionally established through a pre-and post-experience survey showing a significant improvement on similar data for other local archaeological society groups (Wilkins 2020, 33). Training activities were also independently accredited through CIfA – an independent body – ensuring that impact evidence for participants can be assigned to level 3.

12.2.5 The insights gained from this evaluation have established a clear community need and demand for more archaeological work at Pontefract castle, and should assist with the impactful design and funding applications for any future activities.

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DigVentures

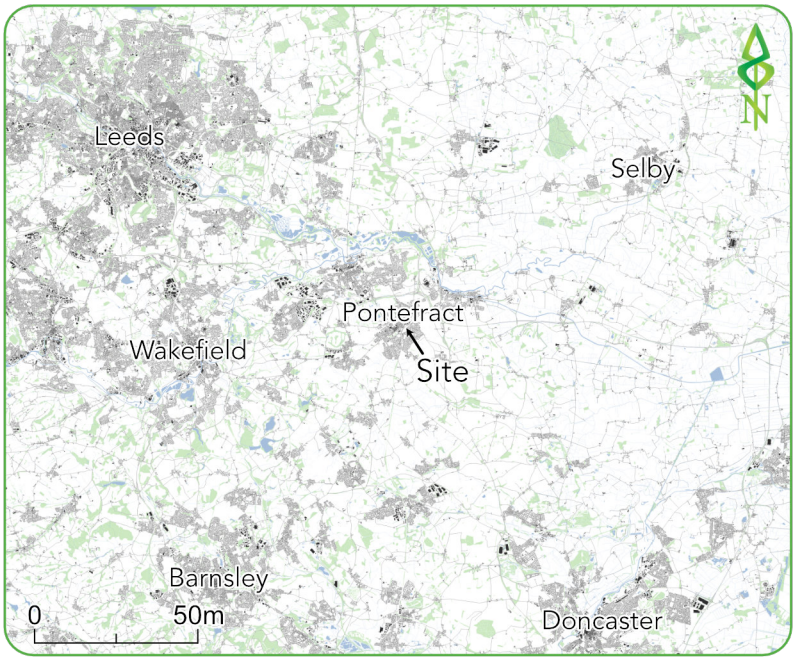
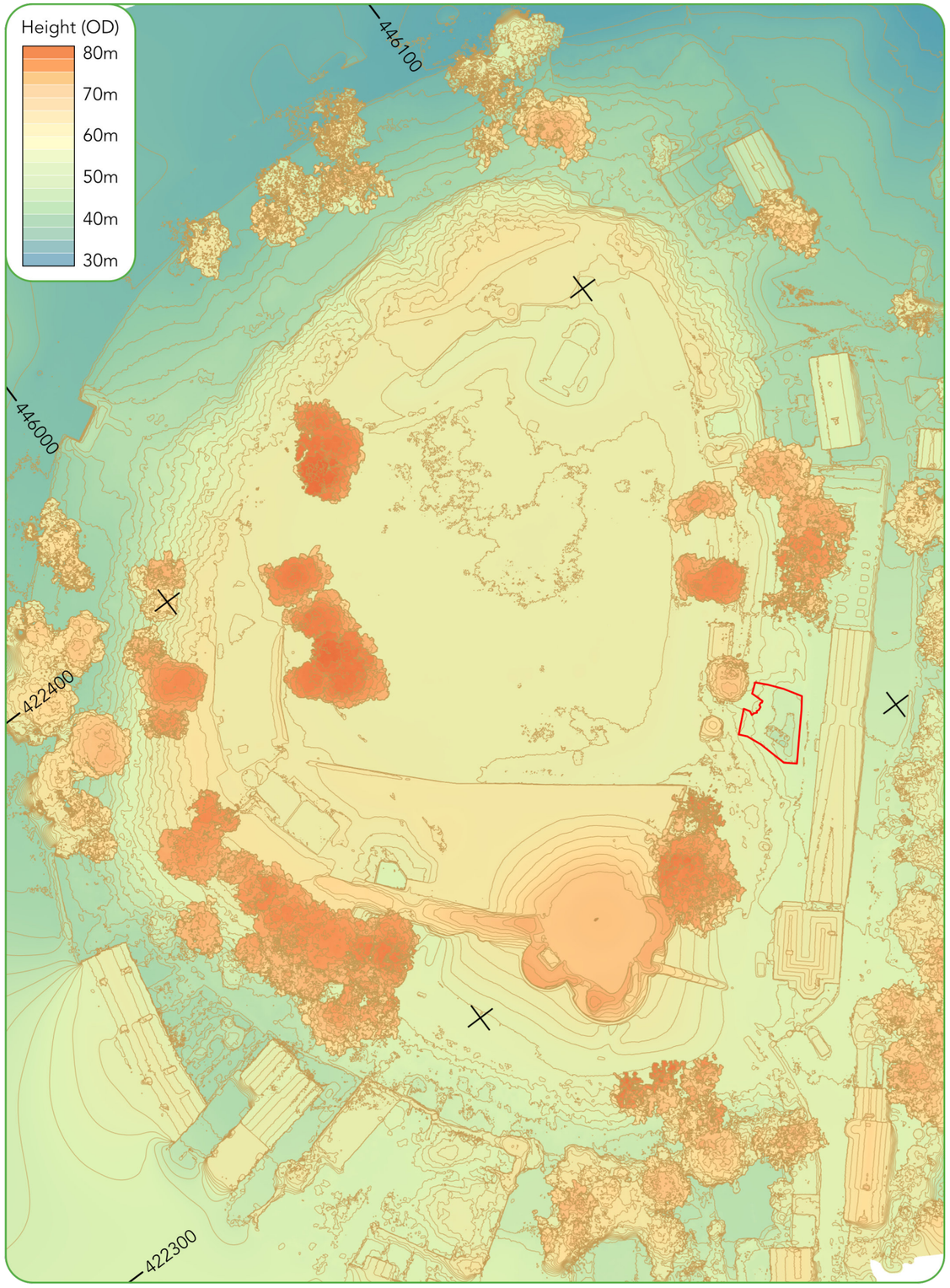


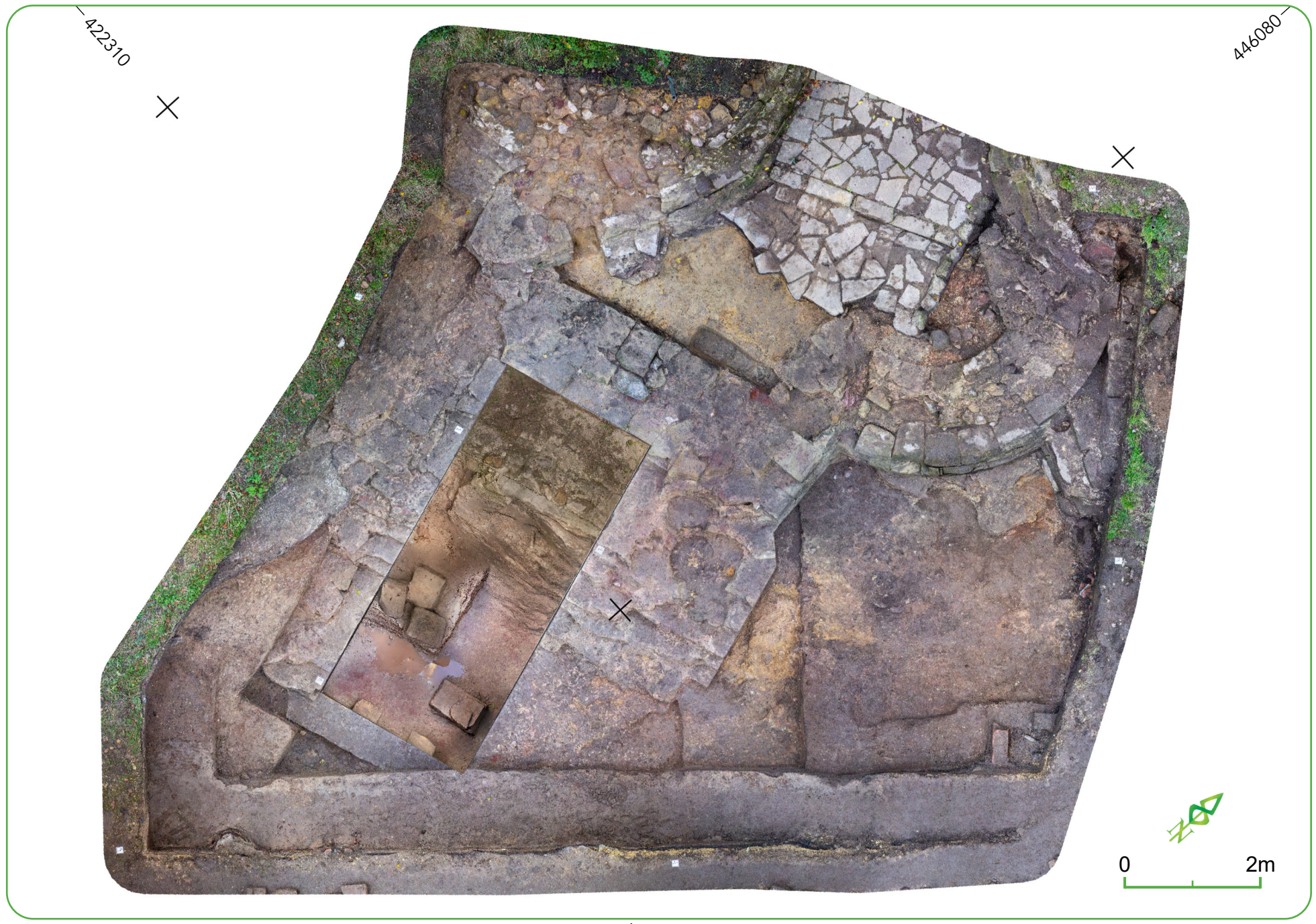
Figure 1: Site location

Aerial ortho-image



Digital Surface Model

Figure 2: Remote sensing results



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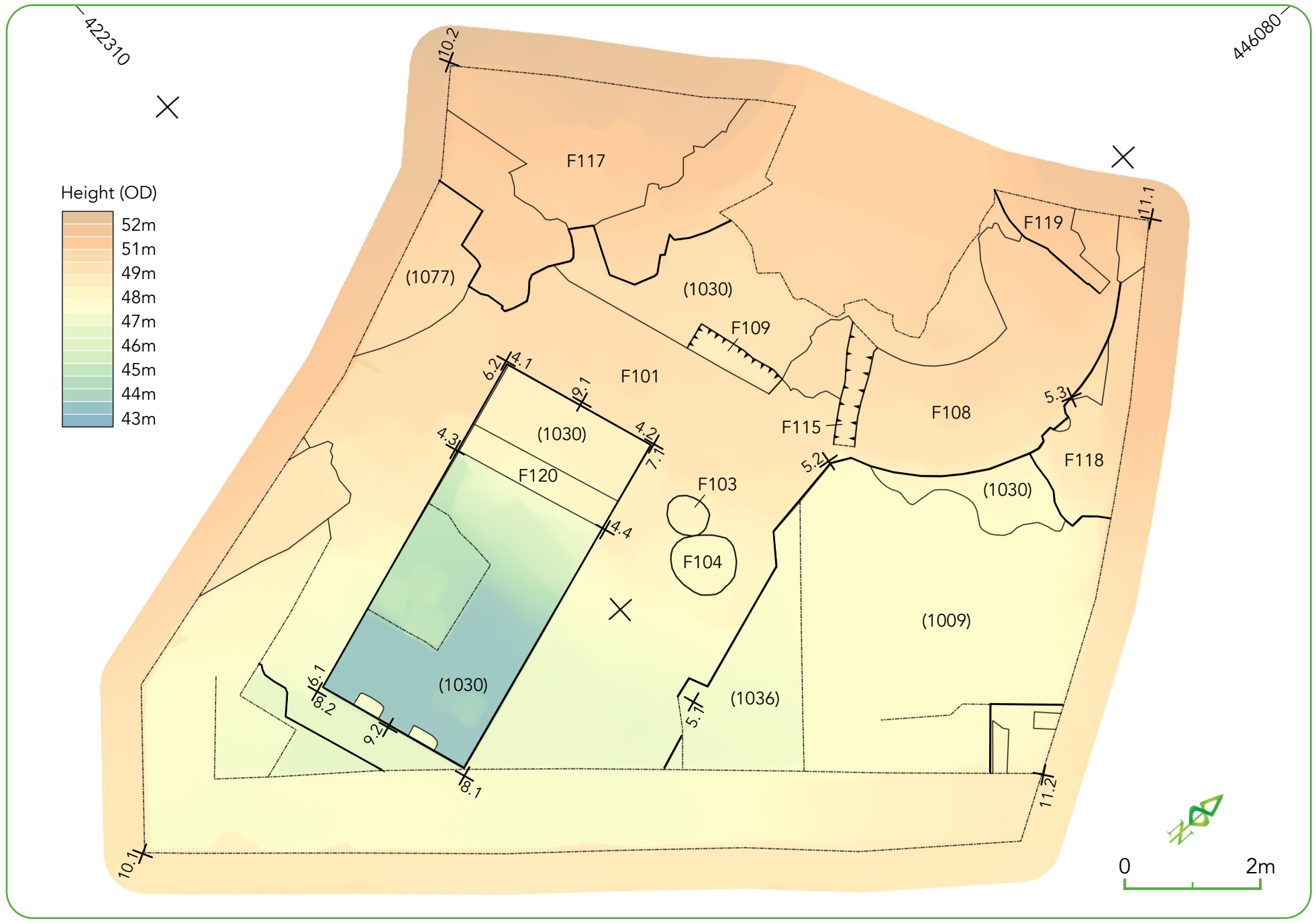


Plan

Figure 3: Post-excavation plan

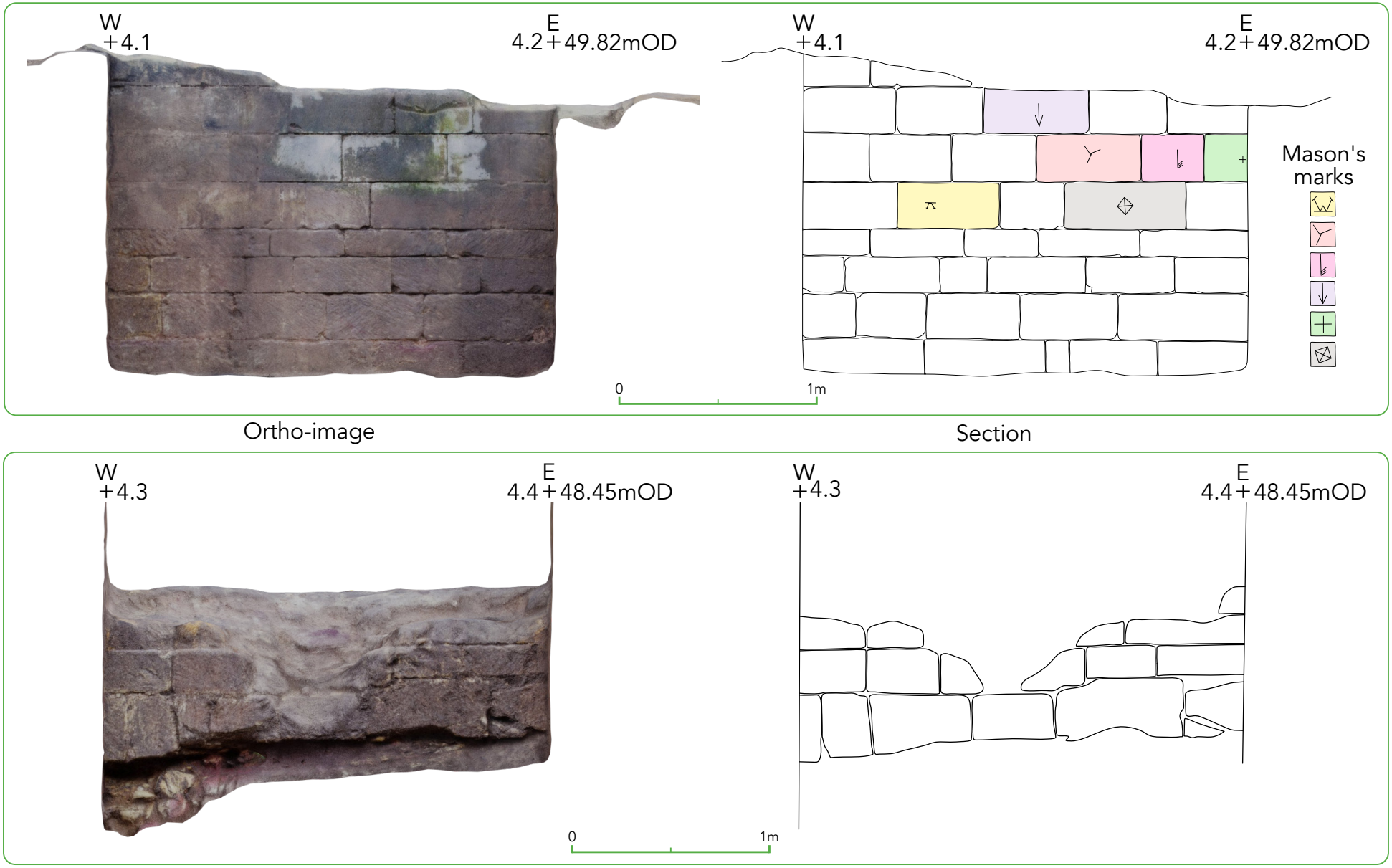
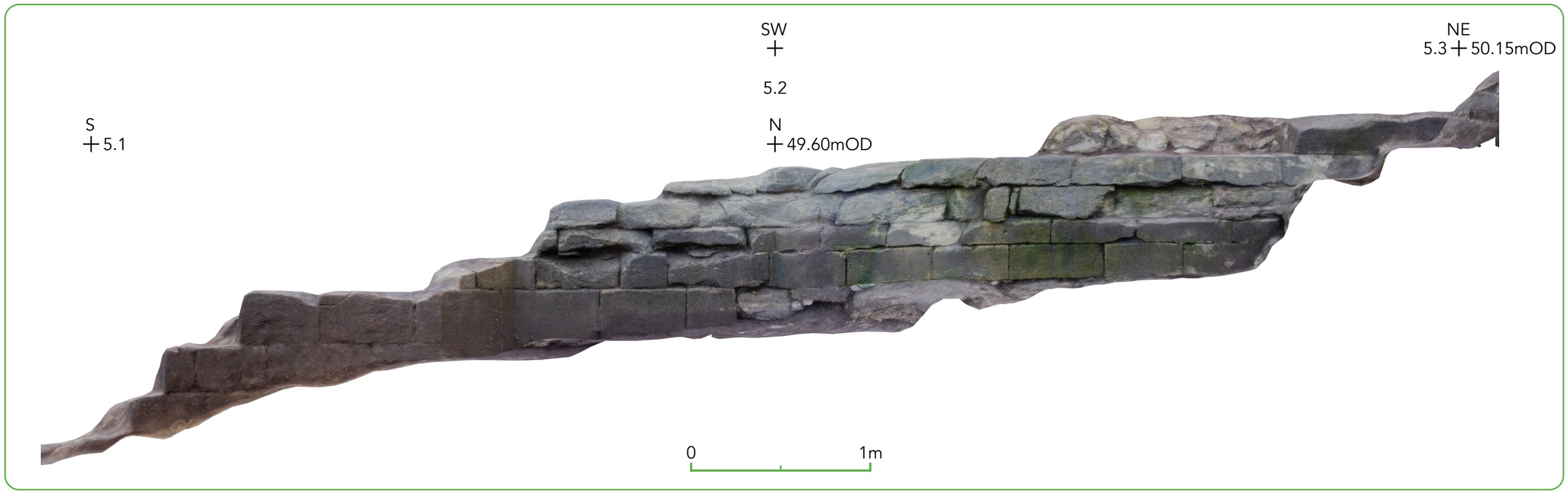


Figure 4: Casing wall and north drawbridge pit wall elevations



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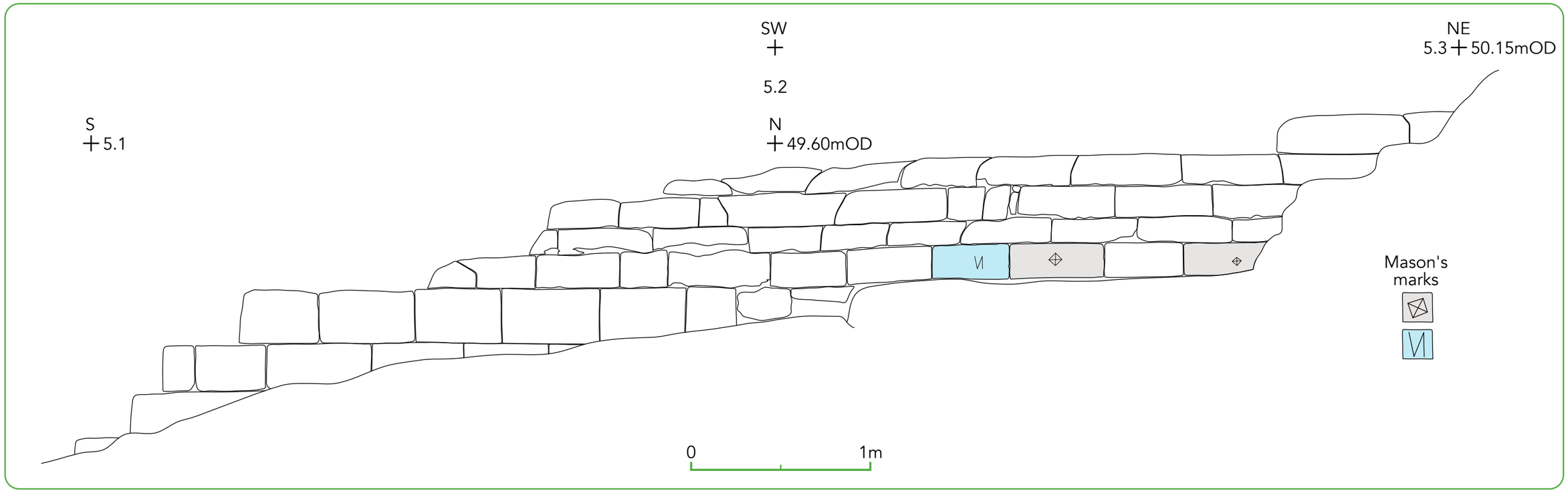
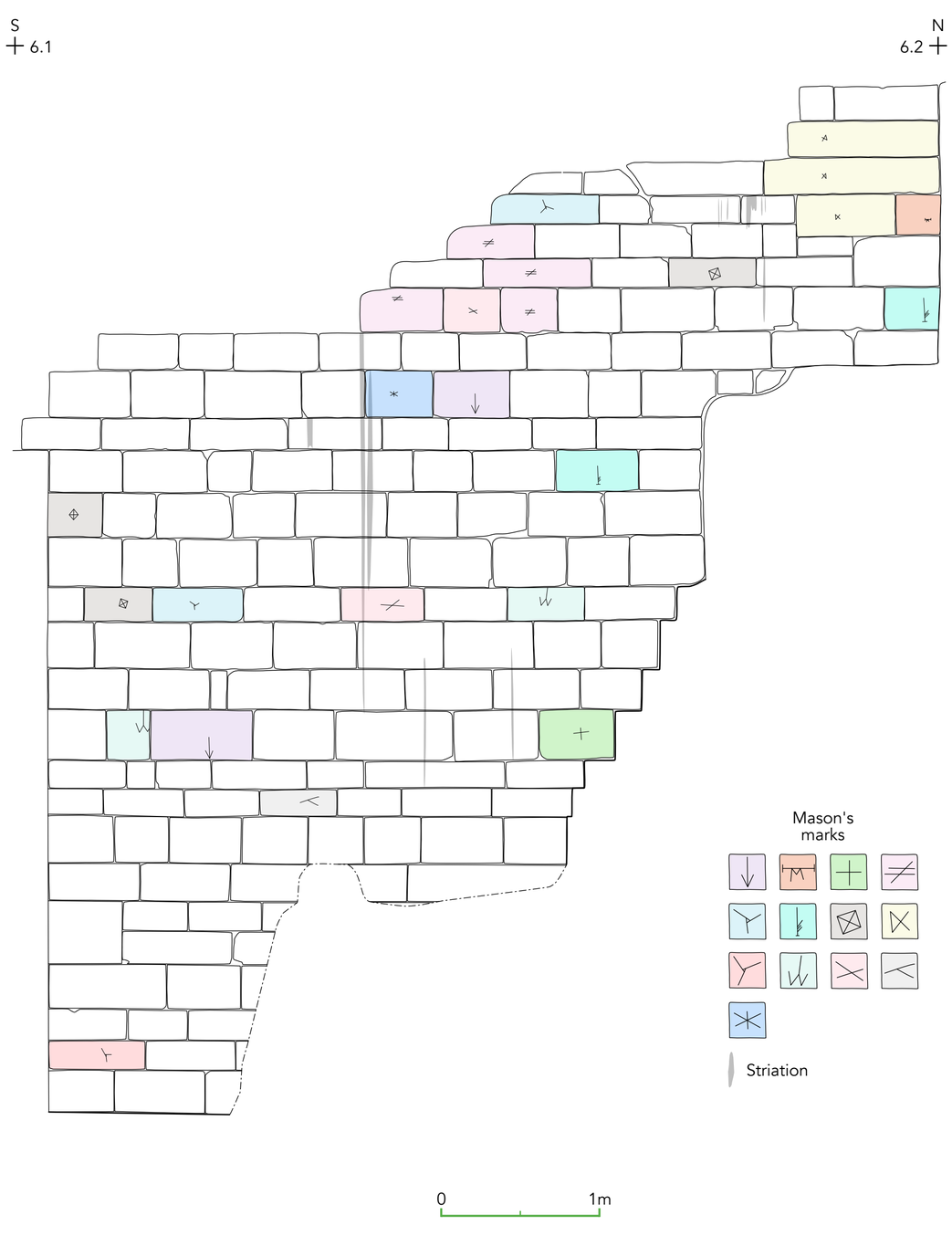


Section

Figure 5: External gatehouse wall elevation

Ortho-image



Section

Figure 6: West drawbridge pit wall elevation

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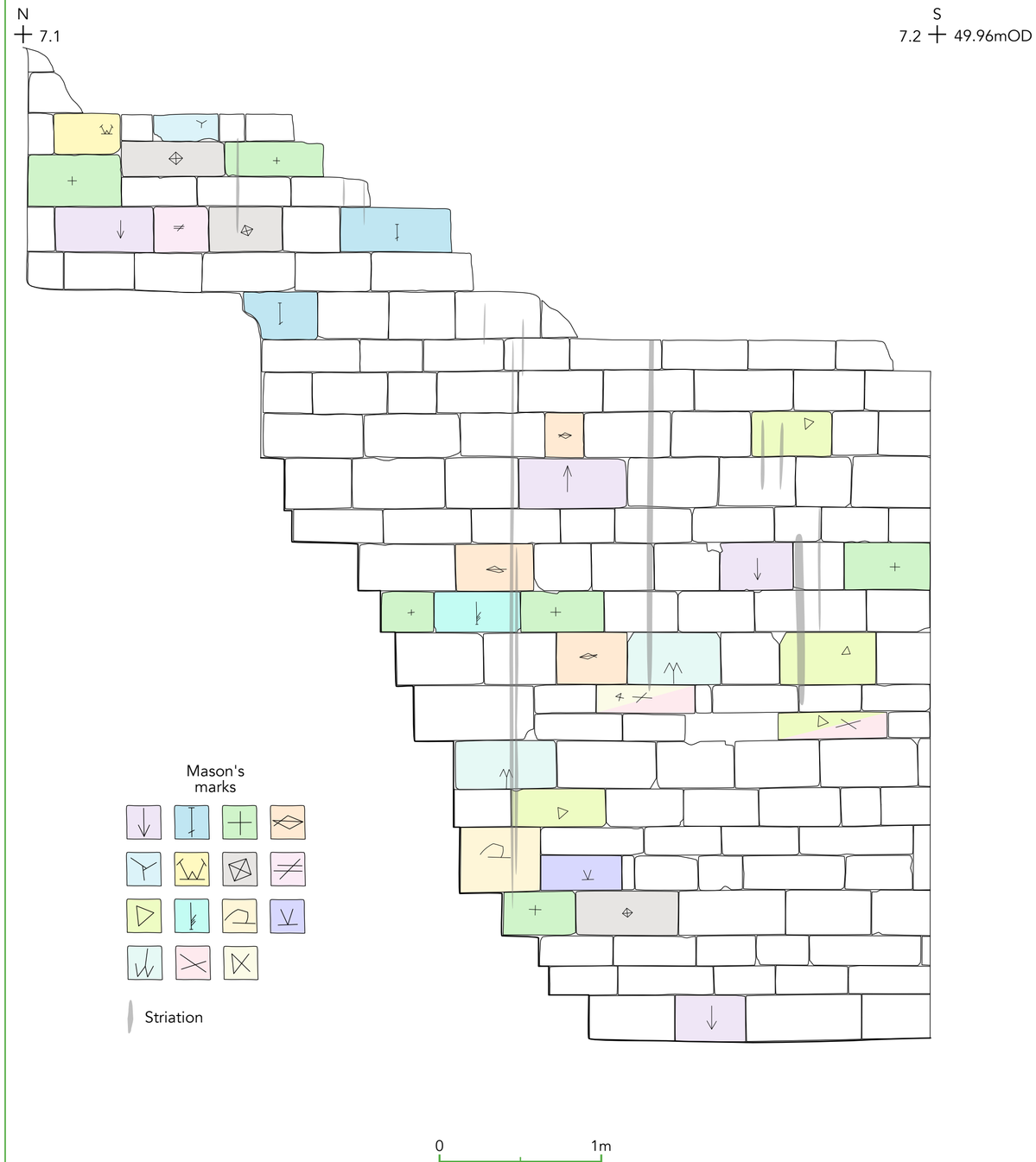

Section

Figure 7: East drawbridge pit wall elevation

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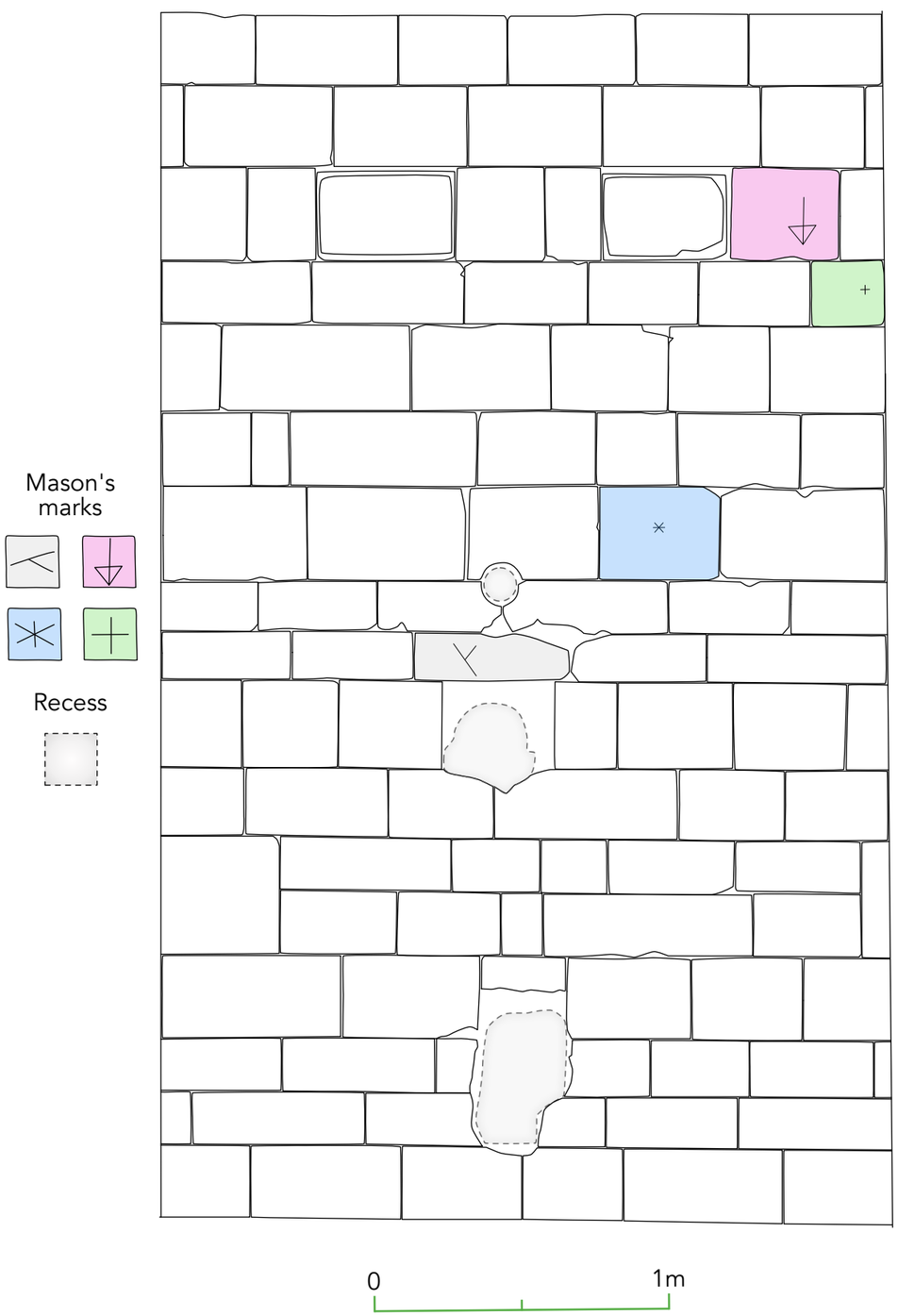
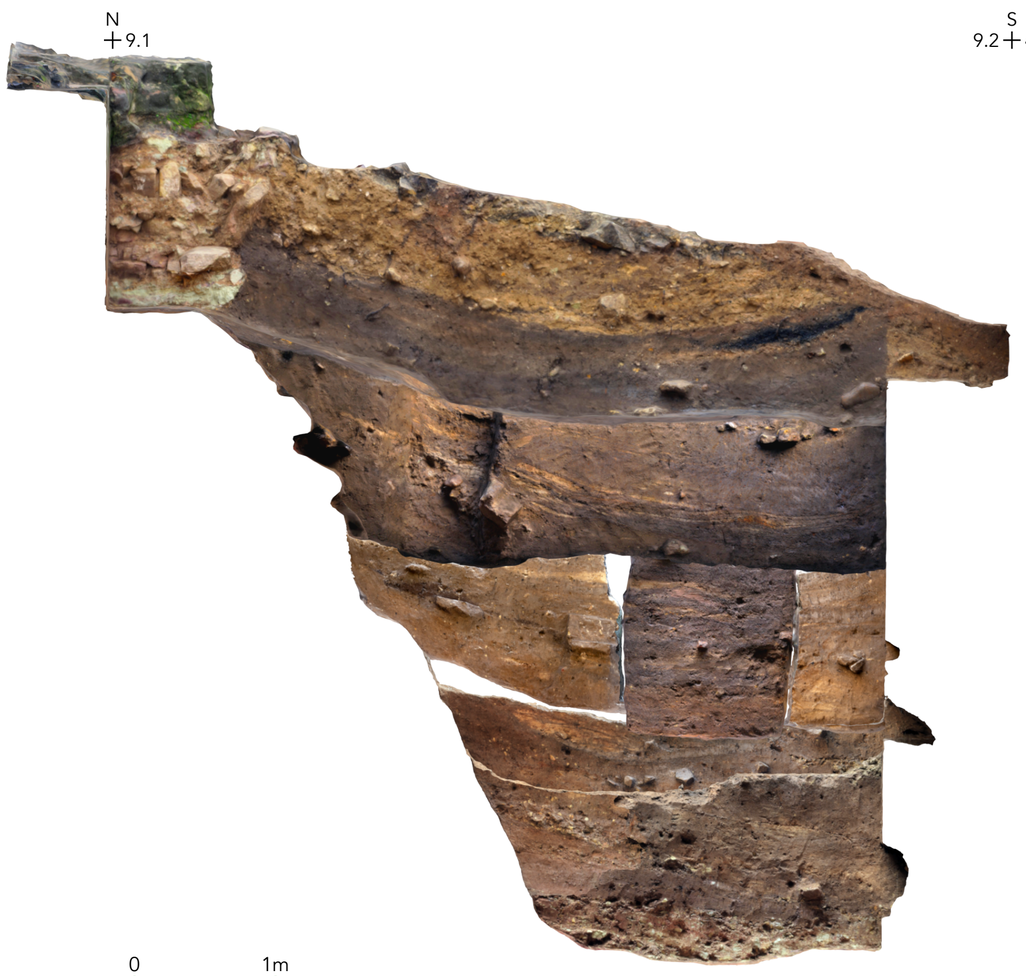


Section

Figure 8: South drawbridge pit wall elevation



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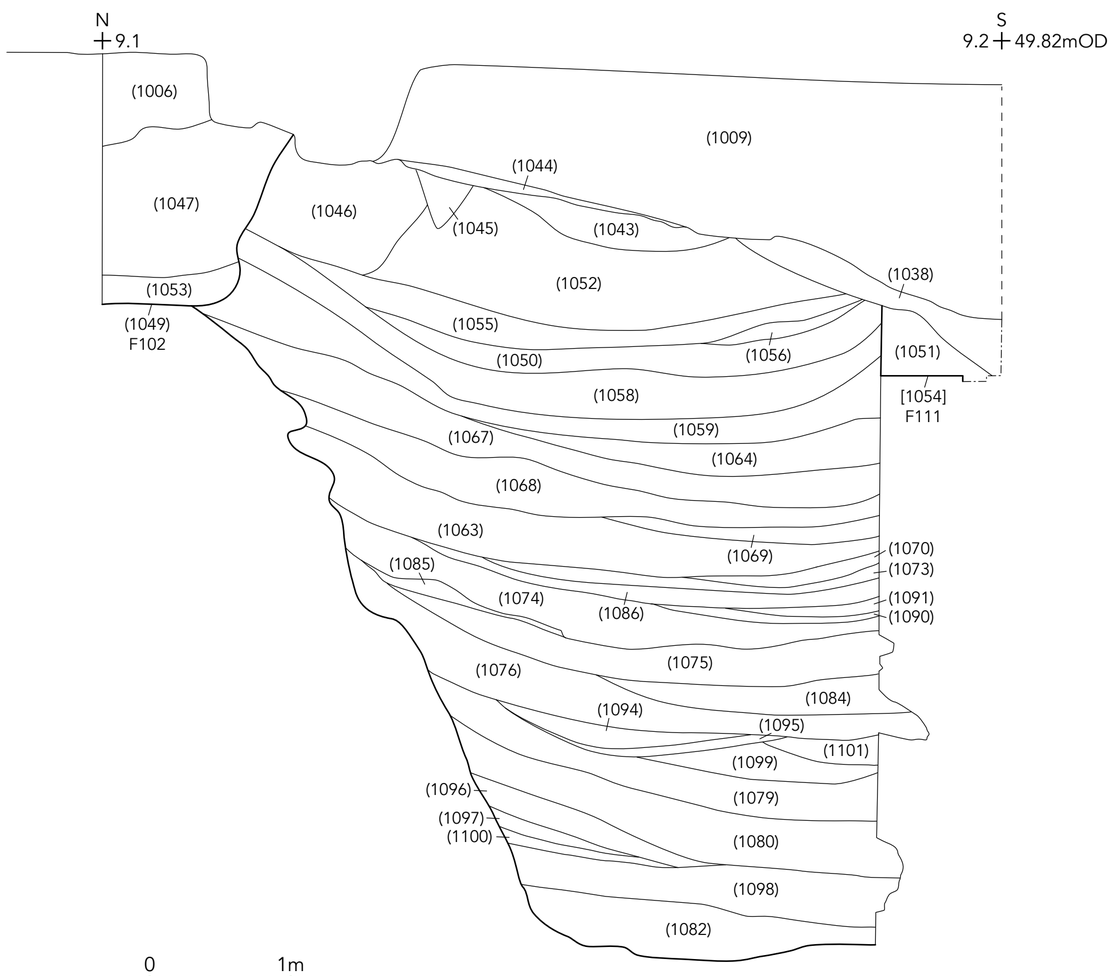
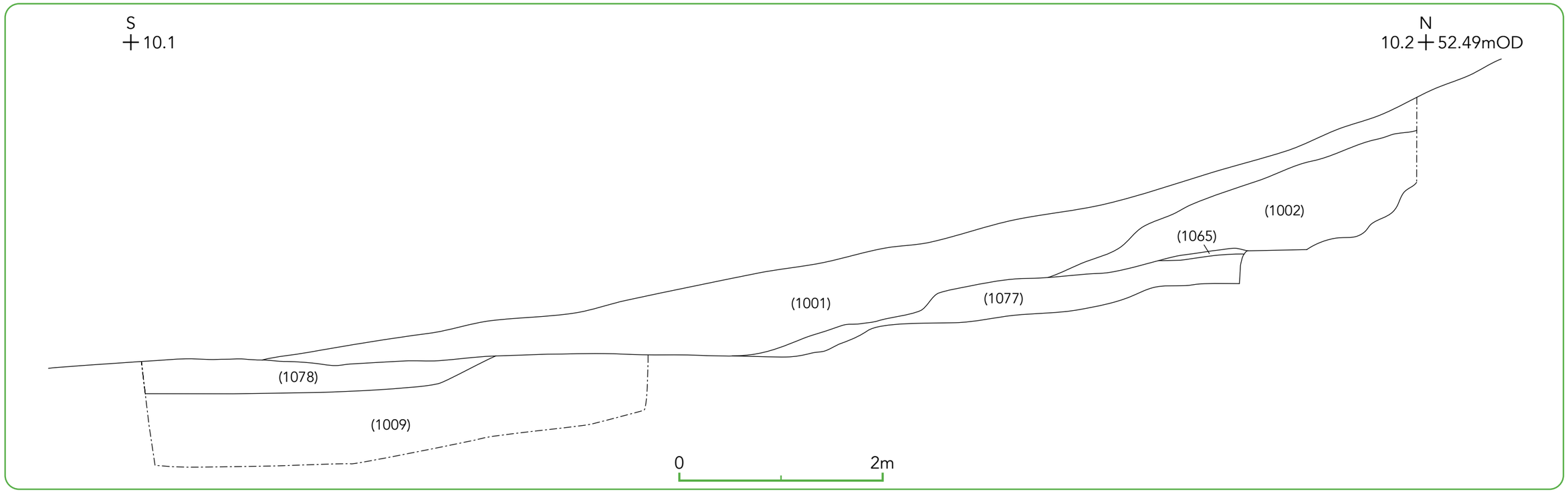


Section

Figure 9: Section through drawbridge pit fills

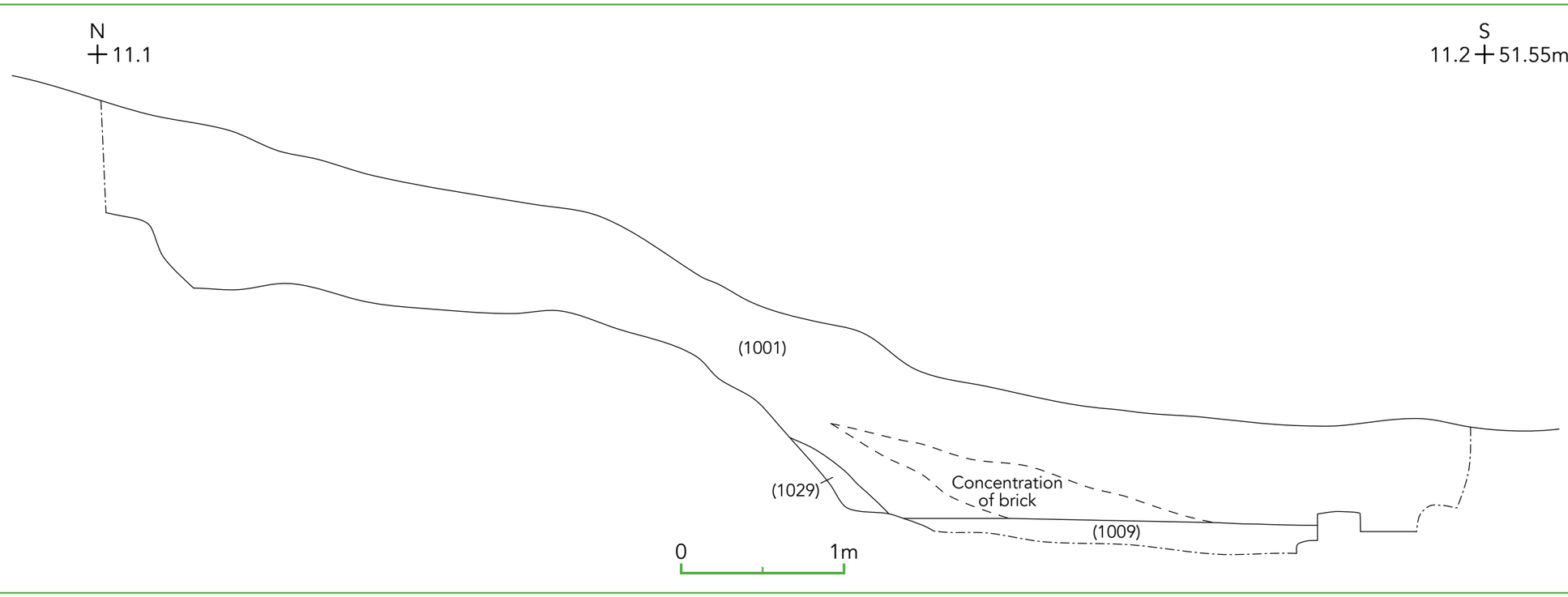
Ortho-image



Section

Figure 10: West trench baulk section

Ortho-image



Section

Figure 11: East trench baulk section

Mid-ex photo of south wall, showing large masonry blocks in the fill of the drawbridge pit

Recesses in the south wall

Post-ex photo of bedrock and casing wall

Post ex photo of south wall of the drawbridge pit

Post-ex photo of east wall of the drawbridge pit

Post-ex photo of west wall of the drawbridge pit

Figure 12: Excavation photographs

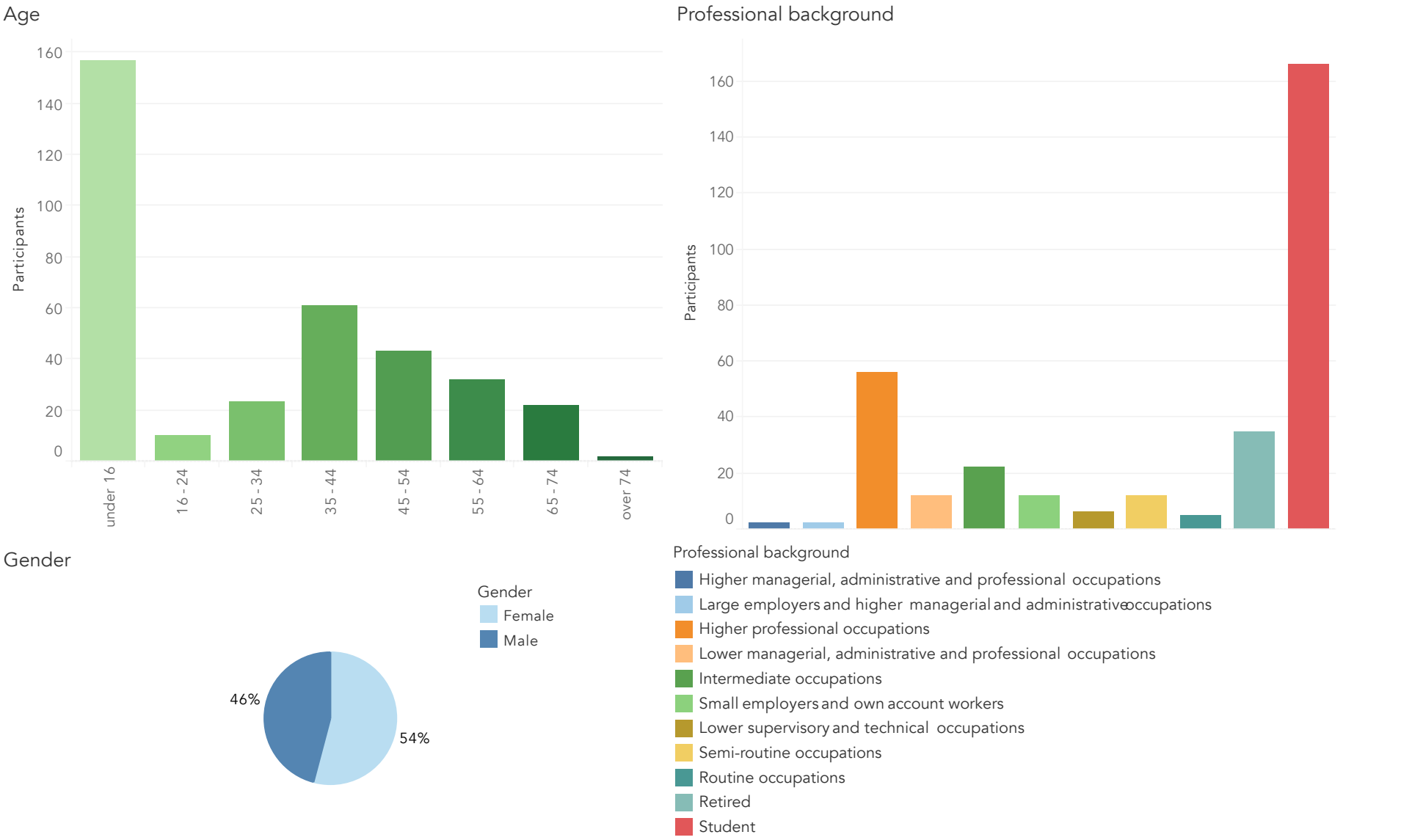


Figure 13: Age, gender and socio-economic background of participants

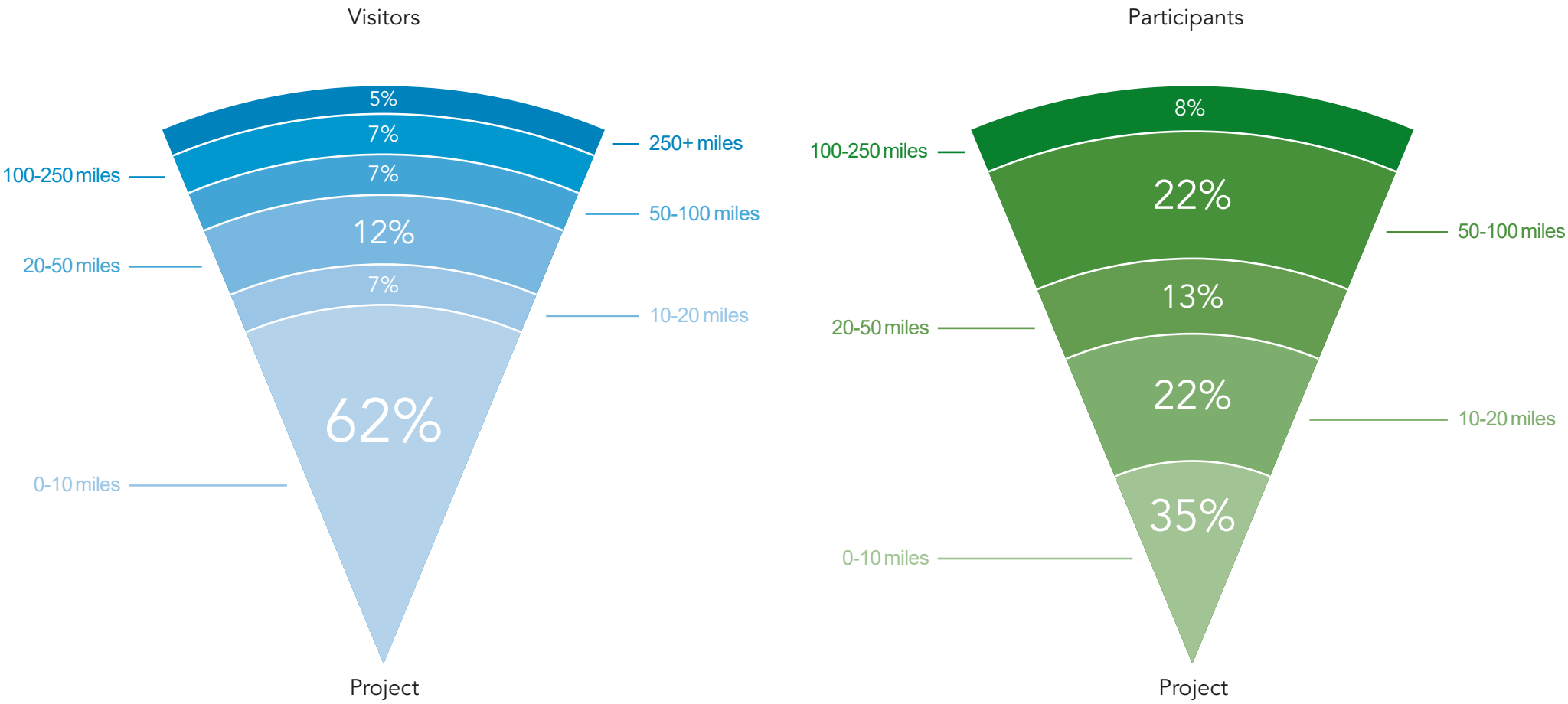
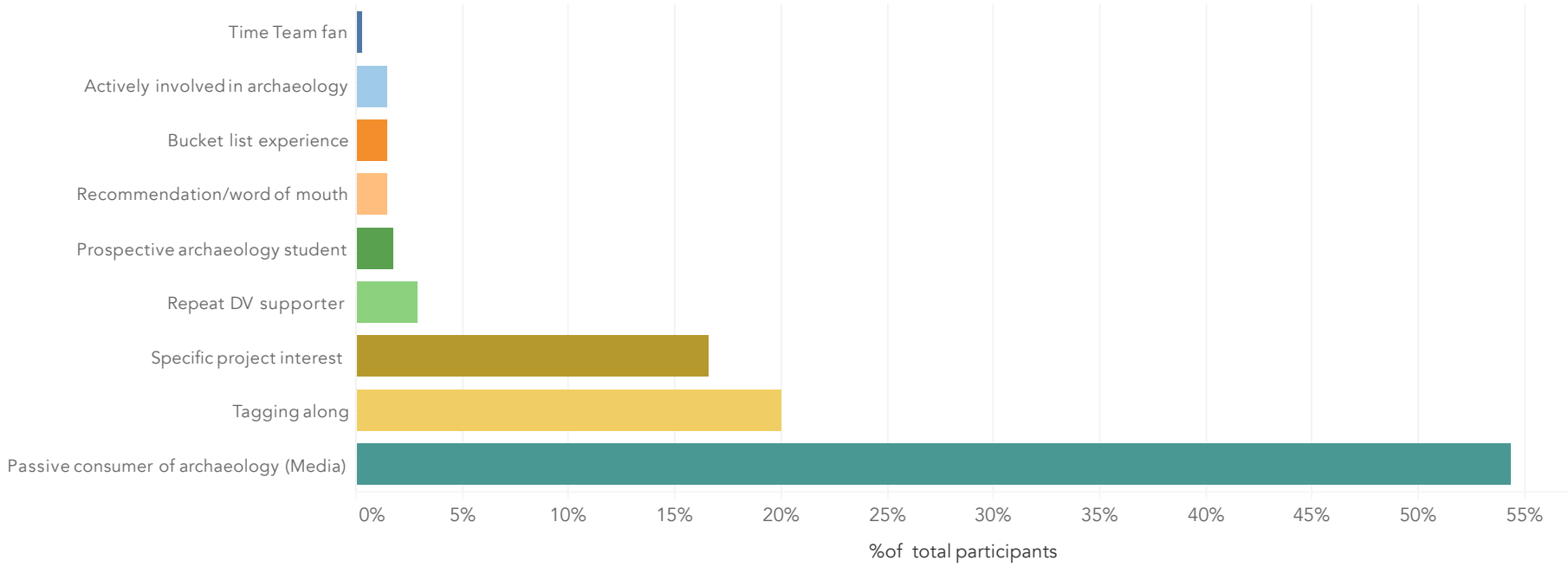


Figure 14: Average distance from site for visitors and participants of all visitors to the project

Motivation



Highlight

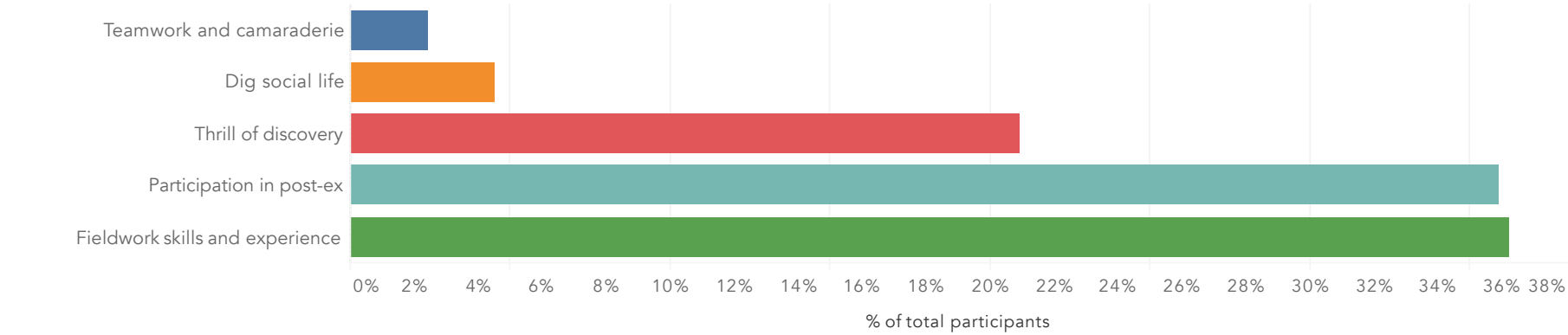
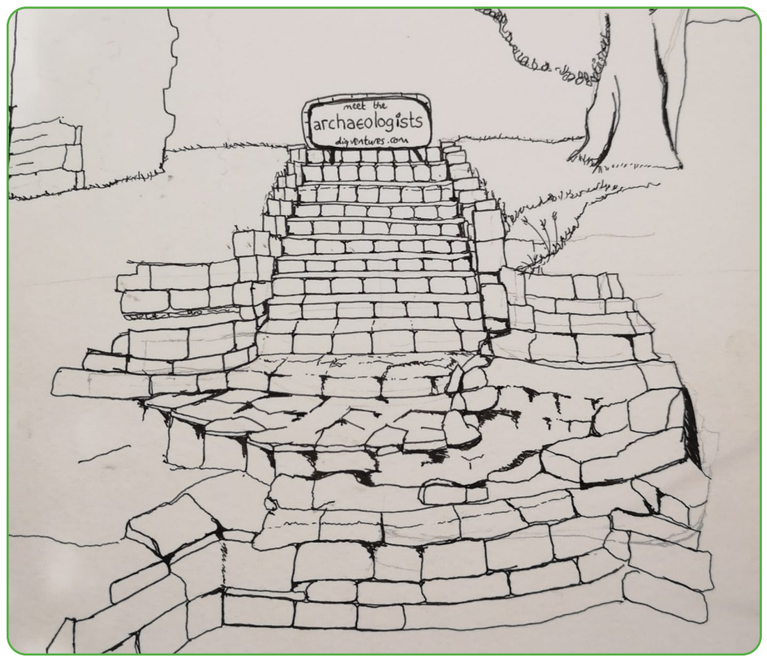


Figure 15: Motivations and highlights of participants



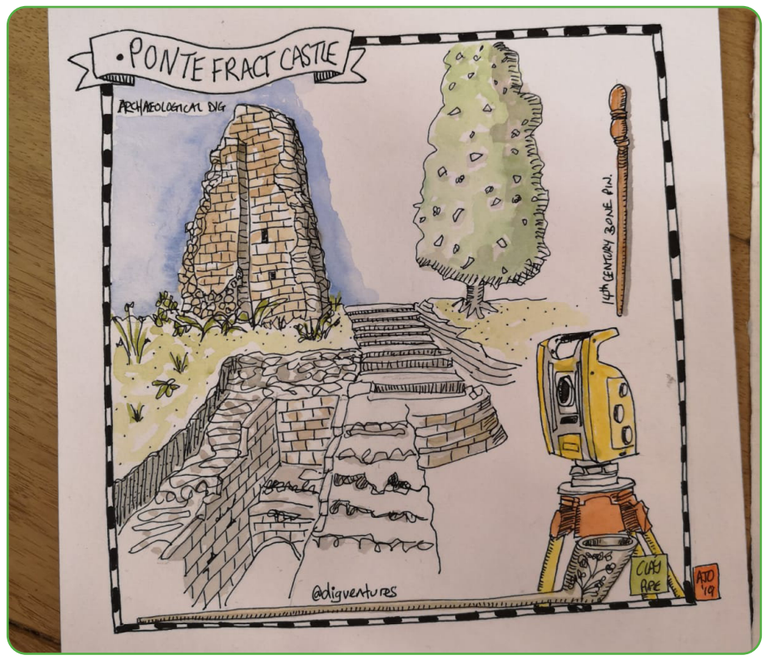
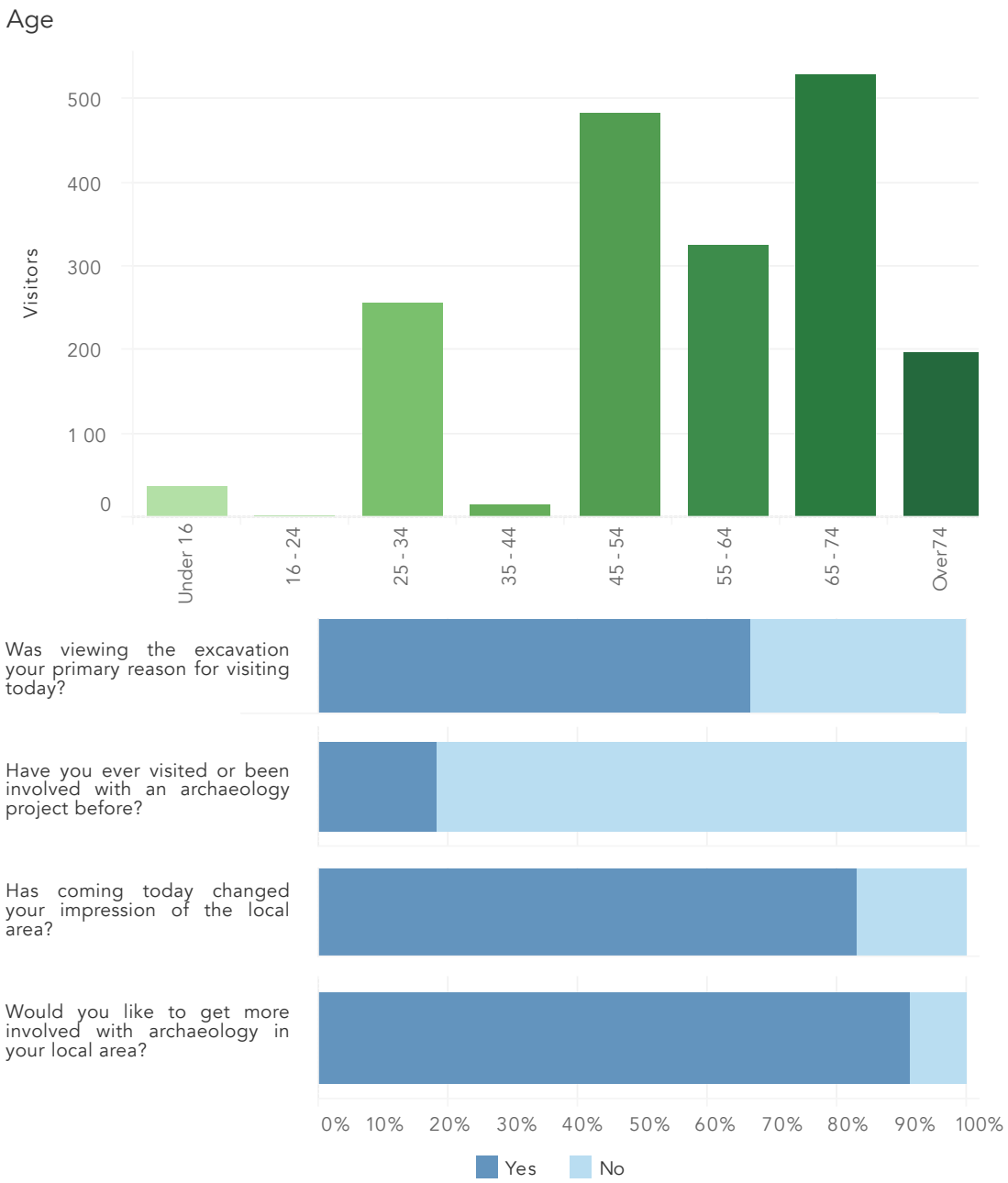


Figure 16: Drawings of the castle completed by public participants during creative sketching workshops



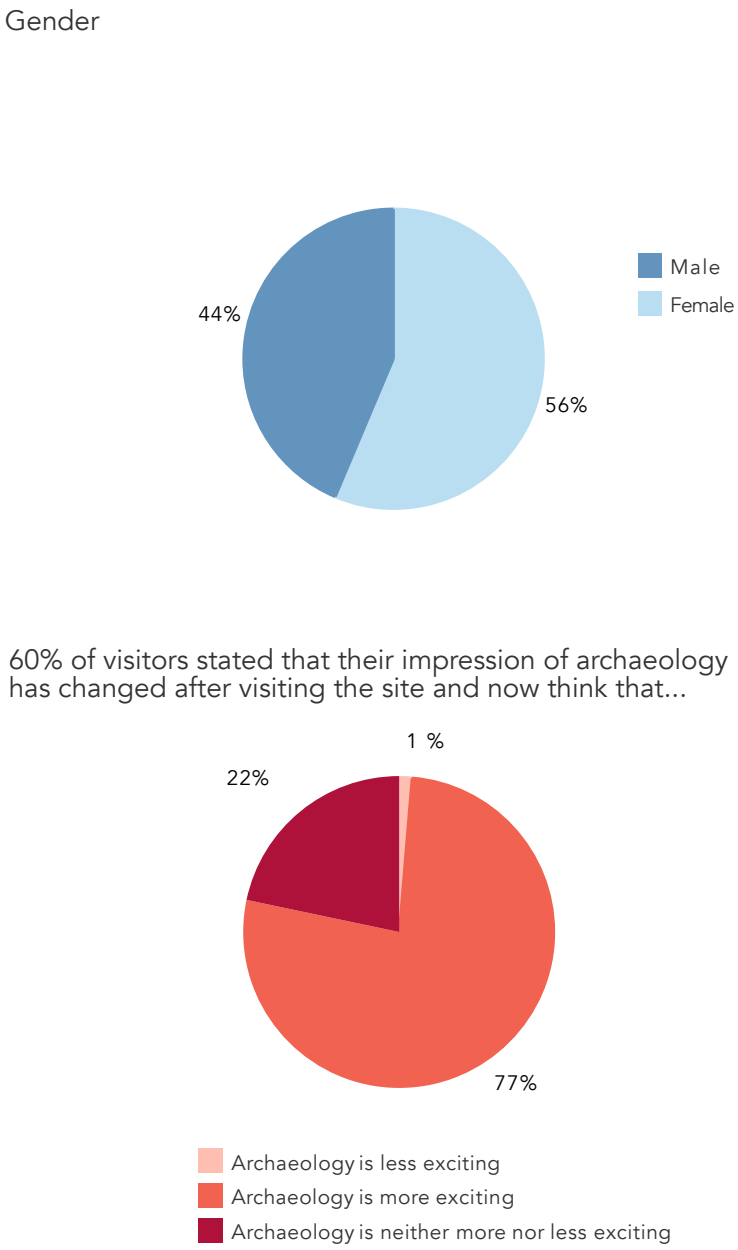


Figure 17: Age, gender and impressions of visitors

1) We were visited by 81 member of local Young Archaeologist Clubs who learnt about the history of Pontefract Castle...

2) ...and helped us dig through the Victorian layer. They were rewarded with many lovely sherds of pottery and even some musket balls.

3) 372 students from local schools visited us on site and received a special tour by site director Chris Casswell. He pointed out medieval mason's marks, Victorian reconstructions and illustrated the workings of the drawbridge.

4) Back inside, it was time to test the children's knowledge on medieval Pontefract, before they received hands-on learning experience on how archaeologists test the PH- value of soils. Finally, they got to do a mini- excavation at their tables and handled several finds fresh from the ground that day.

5) The excavation was a great opportunity for families (163 children and parents) to be active together. Side by side, children and parents learnt to excavate archaeological contexts and identify the finds they made …

6) … everybody had a good time and after digging, even the youngest of our venturers quickly put those toothbrushes and toothpicks to some good use and helped us whizz through many full finds trays.

Figure 18: Next generation archaeologists in action

1) The trench was a hub of activities with 93 venturers cleaning, digging, sampling, brushing and mattocking away, supervised and instructed by five community archaeologists.

3) Supported by two community archaeologists, 44 venturers in the finds room learnt how to properly clean, sort, count and weigh all the wonderful finds that came out of the trench.

2) The Gatehouse project was a great example of teamwork and community engagement, with 386 participants playing an important part in excavation as well as finds processing. 80% Had never taken part in an archaeological project before.

4) 10 participants of the creative workshops used the excavation as a live inspiration for archaeology art.

5) Getting down to the bottom of the drawbridge pit was no easy endeavour, but the venturers brought new enthusiasm and fresh muscle power to the trench every day

Figure 19: Community in the trench

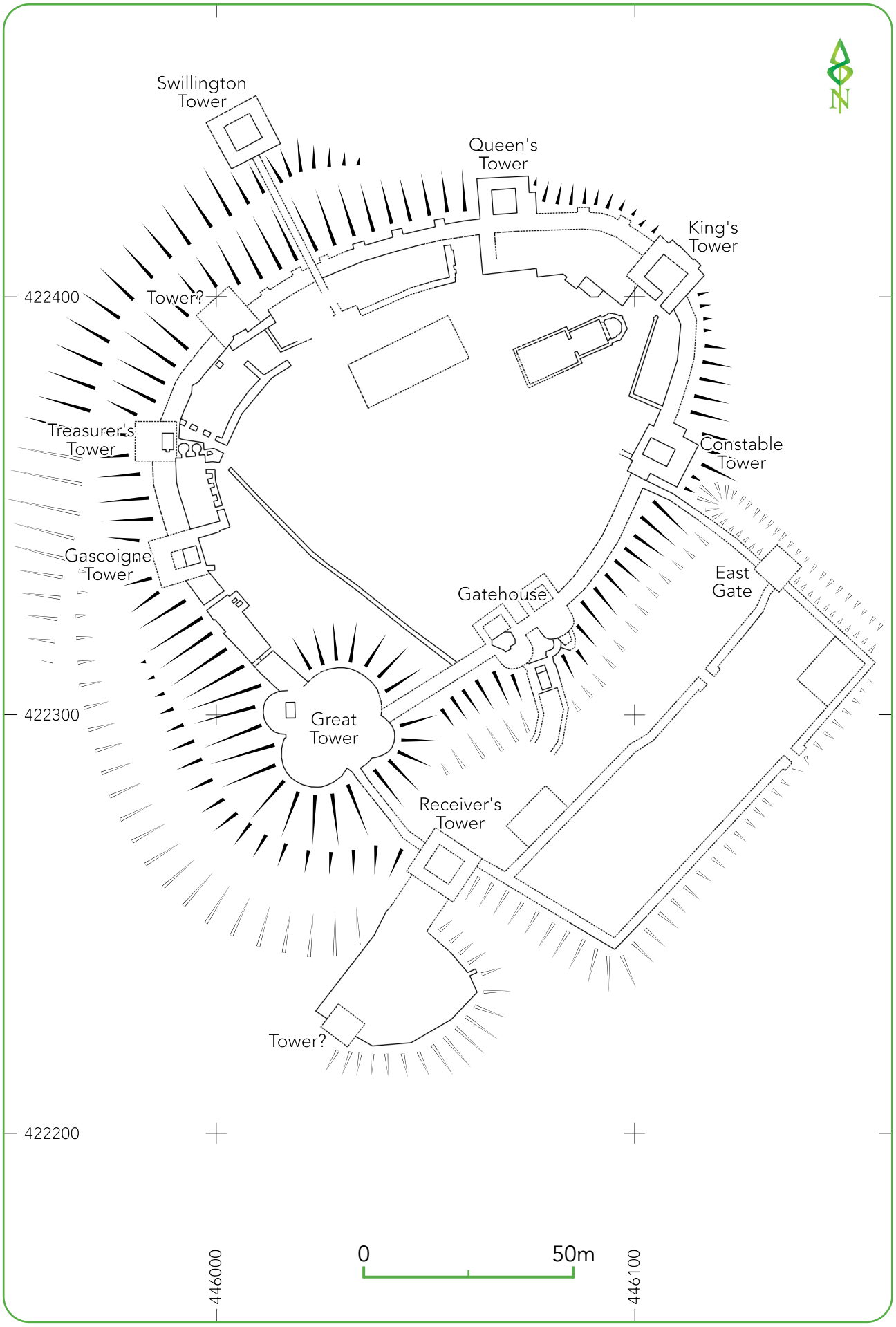
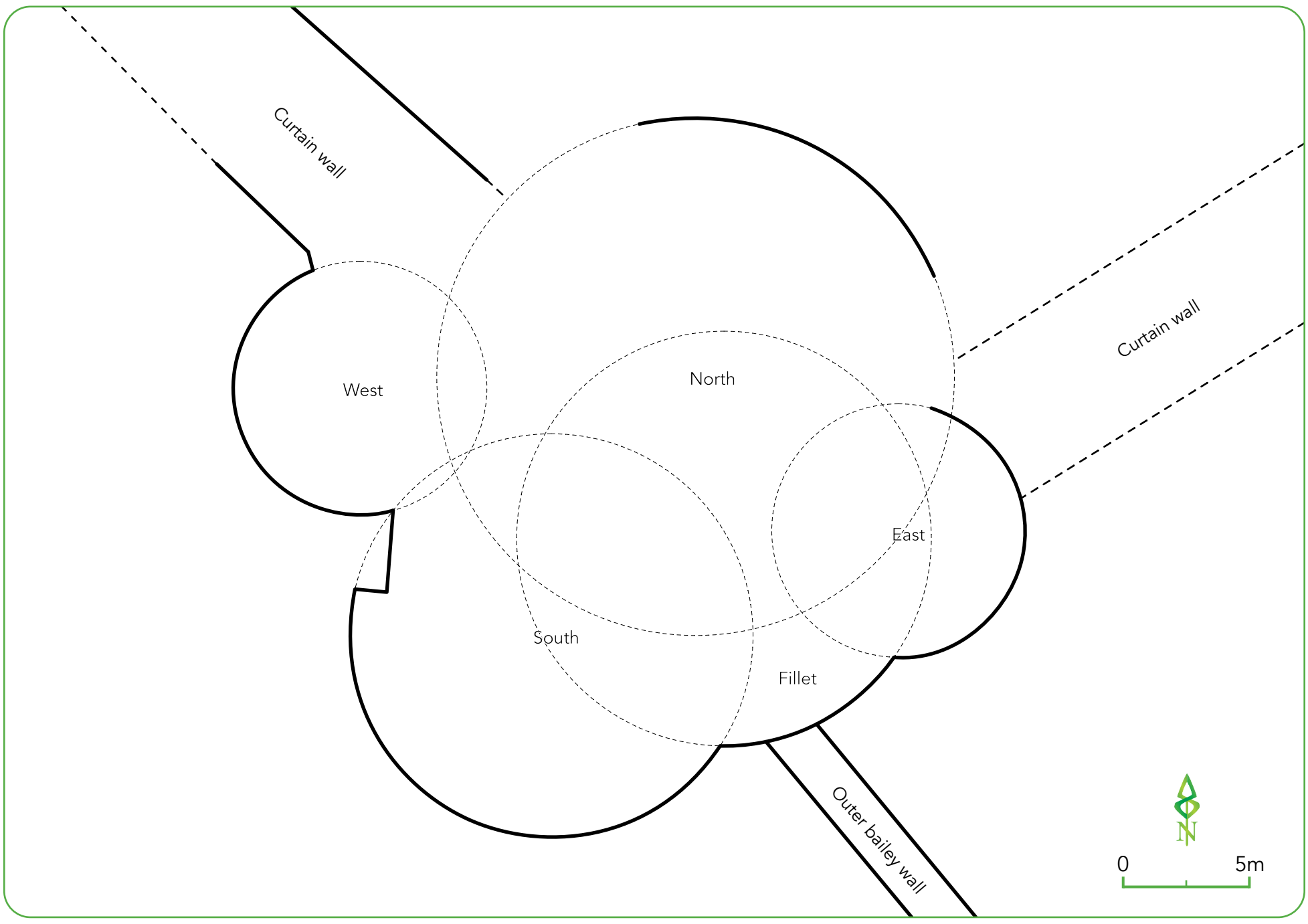


Figure 20: Reinterpretation of Pontefract Castle

Ortho-image



Plan

Figure 21: Projected elements of the Great Tower

Appendices

Appendix A: Context descriptions

Trench 1	Dimensions: Orientation:	15 x 10 m NE-SW						
	Reason for trench:	Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1001	Dark brown silty sand with sparse small stones	Layer	Topsoil	14	12	0.50	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1001
1002	Pink sand with small sandstone inclusions	Layer	Layer formed by wind/rain washed down from destruction layer	N/A	N/A	0.20	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1002
1003	Structural wall - finely tooled ashlar stone, with random core of sandstone and limestone	Masonry	West wall of drawbridge pit	<2.40	<1.20	0.70	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1003
1004	Structural wall- very fine sandstone ashlar	Masonry	North wall of drawbridge pit	<3.60	1.50	040 - 0.75	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1004
1005	Masonry block, or roughly worked sandstone	Masonry	Victorian block of stone potentially supporting a victorian path over drawbridge	0.70	0.50	0.40 - 0.60	F102	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1005
1006	Masonry, small sandstone blocks bound with cement	Masonry	Victorian support for path	0.55	0.50	0.20-<0.55	F102	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1006
1007	Structural wall - very fine sandstone ashlar	Masonry	East wall of drawbridge pit	<2.50	2.50	0.10-<0.46	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1007
1009	Brown, sandy loam with fragments of sandstone, charcoal and limestone.	Fill	Victorian landscaping	2.45	2.20	<0.50	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1009
1010	Loose dirty pale brown, sandy loam. Many fragments of small sandstone with some large pieces of sandstone	Fill	Material from destruction of tower (?), circa 1650's	2.45	2.20	0.40	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1010
1011	Structural wall - two courses of sandstone ashlar	Masonry	Defensive wall - may be foundation of drum tower	1.60	0.60	0.50 - 0.70	F108	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1011
1012	Circular posthole not excavated	Cut	Posthole possibly associated with postholes [1014] and [1022].	0.50	N/A	N/A	F105	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1012
1013	Mottled pale and mid brown, sandy loam, with sandstone fragments pebbles with mortar fragments	Fill	Fill of posthole [1012]	0.50	N/A	N/A	F105	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1013
1014	Sub circular post hole not excavated	Cut	Late 19th century post hole or later. Associated with post holes [1022] and [1012].	0.65	0.55	N/A	F103	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1014
1015	Mid brown, sandy loam with fragments and small pieces of sandstone	Fill	Fill of unexcavated posthole [1014]	0.65	0.55	N/A	F103	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1015
1016	Sub circular shallow pit with a shallow dish base	Cut	Shallow pit with a late feature cut into the top of the wall foundation	1	0.80	0.30	F104	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1016
1017	Light yellow grey/ red, silty sand with sandstone fragments and small pieces	Fill	Fill of late (post 1650's) posthole [1016]	1	0.80	0.30	F104	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1017
1018	Masonry wall - very rounded chambered sandstone	Masonry	Probable Civil War modification to gatehouse defences	<1.40	<0.90	0.90-1.10	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1018
1019	Mid-light reddish brown, sandy loam	Layer	Victorian landscaping	2.45	2.10	<0.50	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1019

Trench 1	Dimensions:	15 x 10 m						
	Orientation: Reason for trench:	NE-SW Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1020	Linear masonry wall	Masonry	Victorian reconstructed wall	<5.00	<2.50	0.70	F117	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1020
1021	Pale dirty yellow sand with some decayed mortar, stone pieces and fragments	Fill	Possible Victorian rubble fill around reconstructed walls	<3.80	<2.05	0.70	F117	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1021
1022	Sub circular/ irregular rectangle posthole not excavated	Cut	Posthole, may be associated with postholes [1012] and [1014]	0.50	0.45	N/A	F107	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1022
1023	Mid brown, sandy loam with fragments of small pieces of sandstone and flecks of charcoal	Fill	Fill of posthole [1022] not excavated	0.50	0.45	N/A	F107	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1023
1024	Straight linear gully not excavated	Cut	Drainage channel	1.50	0.25-0.35	0.16	F115	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1024
1025	Light-mid brown sandy loam with fragments and pieces of sandstone and flecks of charcoal	Fill	Silted filled of drainage channel	0.30	0.20	0.16	F115	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1025
1026	Small sub-oval posthole not excavated	Cut	Posthole	0.30	0.20	N/A	F106	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1026
1027	Mid-dark brown sandy loam, with infrequent fragments and small pieces of sandstone	Fill	Fill of posthole [1026] not excavated	0.30	0.20	N/A	F106	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1027
1028	Former ground level, mid greyish brown silty sand	Layer	Victorian landscaping	N/A	N/A	0.40	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1028
1029	Destruction layer next to round tower, pinkish brown, silty sand with building debris and sandstone fragments and mortar	Layer	Layer formed during destruction of former tower flanking the drawbridge	N/A	N/A	0.60	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1029
1030	Natural bedrock, pale dirty yellow sandstone and the base is a reddish purple sandstone.	Layer	Bedrock on where barbican walls stand. The south-east, although not excavated, is likely to be the barbican ditch cut into the natural rock	N/A	N/A	N/A	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1030
1031	Fill of tower chamber, mid pinkish brown sandy loam with fragments of sandstone, limestone and charcoal	Fill	Upper fill of inner chamber of circular tower 1011, unexcavated but defined in plan	1.80	0.40	N/A	F108	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1031
1032	Fill of beam slot, loose dark brown silty sand, coal with large sandstone fragments of small, medium, large stones coal and charcoal flecks	Fill	Beam slot dug into natural sandstone filled with Victorian deposit possibly to level off for steps	1.42	0.36	0.42	F109	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1032
1033	Rectangular cut of beam slot with rounded corners orientated east-west, with sharp breaks of slope, vertical sides and a flat base	Cut	Beam slot dug into natural sandstone filled with Victorian deposit possibly to level off for steps	1.42	0.36	0.42	F109	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1033
1034	Loose yellow sand	Layer	Victorian levelling deposit to support Victorian steps	N/A	N/A	0.32	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1034
1035	Sub-circular pit with vertical sides, sharp breaks of slope and a flat base	Cut	Modern pit	1.35	1.22	0.20	F114	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1035
1036	Loose, mixed dark brown and brownish yellow sandy silt with frequent degraded sandstone pieces and occasional charcoal fragments	Layer	Victorian made ground	N/A	N/A	0.25	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1036
1037	Irregular cut with sharp break of slope, steep sides, and a flat(ish) base	Cut	Modern pit	<1.80	1.65	0.40	F113	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1037

Trench 1	Dimensions:	15 x 10 m						
	Orientation: Reason for trench:	NE-SW Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1038	Soft brown sand with occasional charcoal flecks and small pieces of sandstone	Layer	19th Century landscaping layer below (1009)	N/A	N/A	0.30	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1038
1039	Fairly loose, dark greyish brown silty sand with fragments of small, medium and large stones, charcoal flacks and concrete fragments	Fill	Fill of modern pit [1035]	1.25	1.22	0.20	F114	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1039
1040	Moderately compact, yellowish brown, silty sand, moderate small and medium stones, sandstone fragments, and charcoal flecks	Layer	Victorian made ground	N/A	N/A	0.15	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1040
1041	Loose, mid brownish yellow silty sand with frequent degraded sandstone pieces not excavated	Layer	Upper rubble layer below Victorian made ground	N/A	N/A	0.10	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1041
1042	Loose, light greyish brown, silty sand, with brick modern masonry fragments, small - medium stones and charcoal flecks	Fill	Fill of modern pit [1037]	<1.80	<1.65	0.40	F113	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1042
1043	Moderately compact, dark brown, sandy silt with frequent large sub-angular stones	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.20	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1043
1044	Loose, light yellowish brown, silty sand, moderate small medium and large stones, sandstone fragments, and occasional charcoal flecks	Layer	Layer of sand in drawbridge pit	N/A	N/A	0.15	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1044
1045	Moderately loose, brown silty sand, with degraded pink sandstone, occasional sandstone fragments and charcoal flecks	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.46	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1045
1046	Moderately loose, yellowy brown silty sand, with occasional sandstone fragments and charcoal flecks	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.80	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1046
1047	Moderately compact, light yellow/light pink mottled fill of large degraded sandstone boulders in a matrix of silty sand with occasional roots and charcoal flecks	Layer	Victorian rubble fill to support masonry above [1005] and [1006]	N/A	N/A	1.05	F112	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1047
1048	Moderately compact, yellowish brown clayey sand with occasional sandstone pieces	Layer	Victorian made ground	N/A	N/A	0.15	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1048
1049	Rectangular with rounded corners in plan orientated east-west with vertical sides with sharp breaks of slope and a flat base	Cut	Cut of pit dug into drawbridge pit. Probably Victorian, maybe associated with the building of a path and plinth (1005) and (1006)	<1.25	1.00	1.20	F112	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1049
1050	Soft dark brown sandy silt with common charcoal inclusions and degraded sandstone	Layer	Silting layer in pit, 17th century	3.20	2.48	0.30	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1050
1051	Moderately compact, brownish yellow, silty sand, with small pieces of stone and occasional charcoal inclusions	Layer	Backfill of robber trench	4.65	0.45	0.62	F111	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1051
1052	Loose, pale yellowish brown, silty sand/ sand with large sandstone masonry fragments, small, medium and large stones, and occasional charcoal flecks	Layer	Rubble layer within drawbridge pit	5.60	2.48	1.10	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1052
1053	Compact, light yellow / buff, sand (probably very degraded sandstone)	Fill	Basal fill of Victorian pit, probably dug to support masonry 1005 and 1006.	<1.25	0.90	0.17	F112	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1053
1054	Straight linear cut with square corners, vertical sides and a flat base	Cut	Cut of Victorian robber trench, dug alongside the wall of the drawbridge pit	4.65	0.45	0.62	F111	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1054

Trench 1	Dimensions:	15 x 10 m						
	Orientation: Reason for trench:	NE-SW Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1055	Moderately compact, greyish brown, silty sand, with charcoal flecks, small, medium and large stones inclusions	Layer	Layer of silty sand within the drawbridge pit	4.55	2.48	0.30	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1055
1056	Moderately loose, black/very dark grey, coal	Layer	Lens of coal in between two silty sand deposits, possibly just a small dump	1.14	0.62	0.14	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1056
1058	Fairly compact friable, dark brown, silty clay, with occasional small stones and charcoal flecks	Fill	Silting layer within drawbridge pit, 17th century	4.21	2.48	0.44	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1058
1059	Soft, yellowy brown, sandy silt, with occasional small to medium stones and charcoal flecks	Fill	Silting layer in pit, 17th century	1.44	2.48	0.42	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1059
1060	Finley worked ashlar sandstone with mortar bonding, running east-west, bonded with 1003, 1007, 1072 and 1087	Masonry	South wall of drawbridge pit	2.92	0.55	<1.38	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1060
1061	Loose, dark brown, sandy silt, with occasional stone	Layer	Thin layer of made ground	N/A	N/A	0.05	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1061
1063	Loose, light brown, silty sand, with occasional small and medium sized stones, charcoal flecks, and roots	Layer	Late medieval silting layer in drawbridge pit	4.80	2.48	<0.55	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1063
1064	Moderately compact, bluey grey, silty clay, with occasional small medium and large stones, charcoal flecks, and roots	Layer	17th century silting layer in drawbridge pit	4.20	2.48	0.49	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1064
1065	Firm, dark reddish brown, sandy silt, with occasional degraded sandstone	Layer	Thin layer of made ground	2.00	1.30	0.05	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1065
1067	Compact friable, dark blueish grey, silty clay, with occasional small stones, and charcoal flecks	Fill	Clay deposit in the southern part of drawbridge pit	2.80	2.48	0.44	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1067
1068	Moderately compact, lenses of yellowy brown sand and blueish grey silty clay, with occasional charcoal flecks, and roots	Layer	Silting layer within drawbridge pit	3.88	2.48	0.31	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1068
1069	Compact friable, blueish grey, clay, with occasional small and medium stones and charcoal flecks	Layer	Silting layer within drawbridge pit	2.20	2.48	0.26	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1069
1070	Compact, blueish grey, silty clay	Layer	Silting layer within drawbridge pit	1.50	2.48	0.10	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1070
1071	Roughly worked ashlar sandstone	Masonry	Support natural bedrock	2.46	0.40	<0.58	F101	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1071
1072	Single sandstone block, bonded with wall 1060. Roughly worked, quite degraded. Flat on the top of the stone, the underside is worked into a curved shape	Masonry	Corbel/bracket supporting (presumably) a timber crossbeam or upright	0.40	0.24	0.28	F101 & F122	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1072
1073	Soft, light brown/ yellowish brown, silty sand with occasional degraded sandstone pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.25	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1073
1074	Soft, bluish grey sandy clay with occasional sandstone flecks	Layer	Silting layer within drawbridge pit	N/A	N/A	0.40	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1074
1075	Loose, brown clayey sand with rare large sub-rounded/ sub angular stone pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.30	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1075
1076	Loose, orange brown sand	Layer	Silting layer within drawbridge pit	N/A	N/A	0.46	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1076
1077	Moderately firm, dark brown, sandy silt, with occasional charcoal	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.05	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1077

Trench 1	Dimensions:	15 x 10 m						
	Orientation: Reason for trench:	NE-SW Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1078	Very compact, mixed deposit of modern building, levelling and backfill, mainly yellow gravel, with common plastic inclusions including hazard tape and other modern waste	Layer	Modern levelling from temporary bridge a building work completed in the last 10 years	N/A	N/A	0.05	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1078
1079	Firm mid greyish brown sandy clay with frequent sandstone inclusions	Layer	Silting layer within drawbridge pit	N/A	N/A	0.20	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1079
1080	Friable mid yellowish brown sand with occasional charcoal flecks and small pieces of degraded sandstone	Layer	Silting layer within drawbridge pit	N/A	N/A	0.19	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1080
1082	Compact layer of small and medium sub-angular yellow sandstone pieces supported in a sand matrix	Layer	Rubble layer within drawbridge pit / burnt bedrock	N/A	N/A	0.38	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1082
1084	Moderately compact, yellow sand	Layer	Silting layer within drawbridge pit	N/A	N/A	0.32	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1084
1085	Moderately compact, dark greyish brown, clayey sand with a high organic content and occasional sub-angular sandstone inclusions and charcoal pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.14	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1085
1086	Moderately compact, mid greyish brown, clayey sand, occasional charcoal pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.09	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1086
1087	Single sandstone block, bonded with wall 1060. Roughly worked to be flat on the top of the stone, and the underside is worked into a curved shape	Masonry	Corbel/bracket supporting (presumably) a timber crossbeam or upright	0.45	0.20	0.28	F101 & F122	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1087
1088	Single sandstone block. Not bonded with or bonded to any other stones. Well worked ashlar block.	Masonry	Not bonded with drawbridge pit and sat on silting layers, possibly supporting a later timber structure	0.81	0.48	0.26	121	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1088
1089	Single sandstone block. Not bonded with or bonded to any other stones. Well worked ashlar block.	Masonry	Not bonded with drawbridge pit and sat on silting layers, possibly supporting a later timber structure	0.72	0.4	0.32	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1089
1090	Soft, mid brownish grey, sandy clay	Layer	Silting layer within drawbridge pit	N/A	N/A	0.08	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1090
1091	Moderately compact, mid yellowish brown, clayey sand, with occasional charcoal flecks and sandstone	Layer	Silting layer within drawbridge pit	N/A	N/A	0.11	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1091
1092	Large square well worked sandstone block, not bonded with or bonded to any other stones	Masonry	Not bonded with drawbridge pit and sat on silting layers, possibly supporting a later timer structure	0.56	0.45	0.29	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1092
1094	Moderately compact, light yellow, sand, with rare charcoal flecks	Layer	Silting layer within drawbridge pit	N/A	N/A	0.22	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1094
1095	Compact, greyish brown, clay, with occasional charcoal flecks and small very flecks of sandstone	Layer	Silting layer within drawbridge pit	N/A	N/A	0.07	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1085
1096	Compact layer of small and medium sub-angular yellow sandstone pieces supported in a pinkish sand matrix	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.22	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1096
1097	Moderately compact, pinkish grey, clayey sand, with occasional sandstone and charcoal flecks	Layer	Silting layer within drawbridge pit	N/A	N/A	0.14	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1097
1098	Moderately loose, pinkish brown, clayey sand, with common charcoal flecks and very small sandstone pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.30	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1098

Trench 1	Dimensions:	15 x 10 m						
	Orientation: Reason for trench:	NE-SW Investigate gatehouse						
				Dimensions (m)				
Context	Description	Type	Interpretation	Length	Width	Depth	Feature	Link
1099	Moderately compact, greyish brown, clayey sand, with occasional sub-angular sandstone pieces	Layer	Silting layer within drawbridge pit	N/A	N/A	0.21	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1099
1100	Compact, pinkish clayey sand, with occasional sandstone pieces and charcoal flecks	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.08	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1100
1101	Moderately loose, small broken up pieces of yellow sandstone supported in a brown silty sand matrix	Layer	Rubble layer within drawbridge pit	N/A	N/A	0.15	N/A	https://www.digventures.com/pontefract-castle/ddt/cxt/PON_1101

Appendix A: Pottery catalogue

Table 1: Pottery catalogue

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	Blackware	4	19	4	BS	Hollow ware	Black glaze int & ext	C17th	Hard, fine dark red fabric	
1001	Bone China	1	10	1	Profile	Plate	Blue sprigged floral motif around the rim	C19th	Burnt & abraded	
1001	Bone China	1	9	1	Handle	Mug/jug	Lobate handle w/ a blue line on spine	M – LC19th		
1001	Bone China	1	4	1	Rim	U/ID	Relief moulded decoration ext	M – LC19th		
1001	Bone China	1	2	1	Rim	Cup/bowl	U/Dec	M – LC19th		
1001	Bone China	1	12	1	BS	Hollow ware	U/Dec	M – LC19th		
1001	Bone China	1	1	1	Footring base	Flatware	U/Dec	M – LC19th		
1001	Bone China	2	3	2	BS	Flatware	U/Dec	MC19th – EC20th		
1001	Bone China	1	2	1	Footring base	Flatware	U/Dec	MC19th – EC20th		
1001	Bone China	1	2	1	Fragment	U/ID	U/Dec	MC19th – EC20th	Moulded fragment	
1001	Brown Glazed Coarseware	1	15	1	BS	Hollow ware	Mottled brown glaze int & ext; rilled ext	C18th – EC19th		
1001	Brown Glazed Coarseware	1	7	1	BS	Bowl/pancheon	Black glaze int only	C18th – EC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	Brown Salt Glazed Stoneware	1	1	1	BS	Hollow ware	Rouletted design ext	C19th		
1001	Cane Coloured ware	1	7	1	Footed base	Hollow ware	U/Dec	C19th		
1001	Colour Glazed ware	1	0.5	1	BS	Hollow ware	Dark brown glaze int & ext	C19th		
1001	Creamware	1	1	1	BS	Flatware	U/Dec	c.1740 – c.1820		
1001	Late Redware	1	2	1	BS	Dish/bowl	Clear glaze int	C18th		
1001	Porcelain	1	4	1	Rim?	Hollow ware	Black glaze on a dark porcelain body	MC19th – EC20th		
1001	Porcelain	1	2	1	BS	Hollow ware	Moulded fragment	MC19th – EC20th		
1001	Slip Banded CC ware	1	4	1	BS	Hollow ware	White slip lines ext	C19th		
1001	Sponged ware	1	8	1	BS	Hollow ware	Dark blue sponging ext	c.1830+		
1001	Stoneware	1	18	1	BS	Bottle	Pale green lead glaze	M – LC19th		
1001	Stoneware	3	15	3	BS	Hollow ware	Green lead glaze int & ext	M – LC19th		
1001	Stoneware	1	10	1	BS	Hollow ware	Brown salt glaze ext; grey glaze int	M – LC19th		
1001	Stoneware	1	70	1	Base	Flagon	Green glaze int	C19th		
1001	Stoneware	1	3	1	Rim	Bottle	Brown glaze band on rim	MC19th – EC20th		
1001	TP Pearlware	3	2	1	Rim/flake	Willow border	Willow border	c.1780 – c.1840	Internal flake	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	TP Whiteware	1	41	1	Footring base	Flatware	Asiatic Pheasants	M – LC19th		
1001	TP Whiteware	2	4	2	Rim	Plate	Willow border	M – LC19th		
1001	TP Whiteware	1	11	1	Footring base	Bowl	Black-printed design & illegible caption	M – LC19th		
1001	TP Whiteware	1	2	1	BS	Flatware?	U/ID flaked decoration	M – LC19th		
1001	TP Whiteware	1	10	1	Footed base	Mug	Multi-coloured lithograph; commemorative design	C20th	Text reads; '...ATE THE CORONATION OF …'	
1001	TP Whiteware	1	19	1	Rim	Mug/jug	Sepia printed scroll around ext; oak leaves, acorns & laths	M – LC19th		
1001	TP Whiteware	1	4	1	Footring base	Flatware	Albion?	M – LC19th		
1001	TP Whiteware	2	13	2	BS	Flatware	Asiatic Pheasants	M – LC19th		
1001	TP Whiteware	1	7	1	Rim	Plate	Willow border	M – LC19th		
1001	TP Whiteware	2	1	1	Rim/flake	Plate	Wild Rose?	M – LC19th		
1001	TP Whiteware	2	1	1	Flake	Flatware	U/ID TP design int	M – LC19th		
1001	TP Whiteware	1	1	1	Rim	Dish?	Geometric border int	M – LC19th		
1001	TP Whiteware	2	1	2	BS	Flatware	U/ID TP design int	M – LC19th		
1001	TP Whiteware	1	3	1	Footring base	Flatware	U/ID TP design int	M – LC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	TP Whiteware	1	2	1	BS	Flatware	U/ID black printed design int	M – LC19th		
1001	TP Whiteware	2	0.5	2	Chip & flake	U/ID	U/ID TP design ext	M – LC19th		
1001	TP Whiteware	1	0.5	1	BS	Flatware	U/ID TP design int	M – LC19th		
1001	TP Whiteware	1	2	1	Footring base	Plate	Blue printed floral design int; odd mark on underside	M – LC19th		
1001	Unglazed Red Earthenware	1	1	1	BS	Hollow ware	U/Dec	MC19th – C20th		
1001	Unglazed Red Earthenware	1	105	1	Rim	Horticultural vessel	U/Dec	MC19th – EC20th	Rounded clubbed rim	
1001	Unglazed Red Earthenware	1	19	1	Rim	Horticultural vessel	U/Dec	MC19th – EC20th		
1001	Unglazed Red Earthenware	1	20	1	Rim	Horticultural vessel	U/Dec	MC19th – EC20th	Collared rim	
1001	Unglazed Red Earthenware	1	3	1	Base	Flowerpot	U/Dec	MC19th – EC20th	Perforated base	
1001	Unglazed Red Earthenware	2	52	2	Base	Flowerpot	U/Dec	MC19th – EC20th		
1001	Unglazed Red Earthenware	17	93	17	BS	Horticultural vessel	U/Dec	MC19th – EC20th		
1001	Unglazed Red Earthenware	1	70	1	Base	Horticultural vessel	U/Dec	MC19th – EC20th	Large, thick base in a coarse URE	
1001	Unglazed Red Earthenware	1	4	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Plain rim	
1001	Unglazed Red Earthenware	1	4	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Collared rim	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	Unglazed Red Earthenware	1	3	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Plain rim	
1001	Unglazed Red Earthenware	1	3	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Clubbed rim	
1001	Unglazed Red Earthenware	1	3	1	Rim/flake	Flowerpot	U/Dec	MC19th – EC20th		
1001	Unglazed Red Earthenware	1	1	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Plain rim	
1001	Unglazed Red Earthenware	1	9	1	Base?	Horticultural vessel	U/Dec	MC19th – EC20th		
1001	Whiteware	1	3	1	BS	Flatware	U/Dec	M – LC19th		
1001	Whiteware	1	4	1	BS & handle	Mug/jug	U/Dec	M – LC19th		
1001	Whiteware	3	24	3	BS	Flatware	U/Dec	M – LC19th		
1001	Whiteware	3	2	3	BS	Hollow ware	U/Dec	M – LC19th		
1001	Whiteware	1	2	1	Recessed base	Hollow ware	U/Dec	M – LC19th		
1001	Whiteware?	2	55	2	Rim	Tureen lid	U/ID	MC19th – C20th	Very heavily burnt w/ clinker attached	
1001	Whiteware?	1	30	1	Rim	Bowl	U/ID	MC19th – C20th	Very heavily burnt w/ clinker attached	
1001	Whiteware?	1	24	1	BS	Hollow ware	U/ID	MC19th – C20th	Very heavily burnt w/ clinker attached	
1001	Yellow Glazed Coarseware	1	4	1	BS	Pancheon	White slip int under clear glaze int	LC18th – C19th	Fine red fabric	
1001	Yellow Glazed Coarseware type	1	12	1	BS	Dish	White slip int w/ dark streaky mottling	LC18th – C19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1001	Yellow ware	1	9	1	Rim	Bowl	Clear glaze on a white body	C16th – C17th	Everted rim w/ a shallow groove around the top of the rim	
1009	Banded sponged ware	1	2	1	BS	Mug/jug	Pale blue sponging w/ incised lines ext	M – LC19th		
1009	Banded ware	1	5	1	BS/spout	Jug	Blue line on body	C19th		
1009	Banded ware	1	1	1	BS	Hollow ware	Red band ext	LC19th – EC20th		
1009	Banded ware	1	1	1	BS	Hollow ware	Thin overglaze green line ext	LC19th – EC20th		
1009	Biscuit-fired ware	1	5	1	Rim	Hollow ware	U/Dec	C19th	Unglazed biscuit-fired ware	
1009	Biscuit-fired ware	1	2	1	Footed base	Hollow ware	U/Dec	C19th	Production waste	
1009	Blackware	1	64	1	Rim & handle	Handled jar	Black glaze int & partially ext	C17th	Handle springs from everted rim; fine, dense dark red fabric	
1009	Blackware	1	75	1	BS	Hollow ware	Black glaze int & ext; rilled int & ext	C17th	Hard, fine dark red fabric	
1009	Blackware	1	20	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard, fine dark red fabric	
1009	Blackware	15	28	15	BS	Hollow ware	Black glaze int & ext	C17th		
1009	Blackware	1	4	1	Rim/spout	Jug	Black glaze int & ext	C17th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Blackware	1	14	1	BS	Hollow ware	Black glaze int & ext	C17th	Hard, fine dark red fabric; narrow diameter vessel; form uncertain	
1009	Blackware	1	12	1	BS	Bottle/flagon	Dark brown glaze ext w/ fine yellow mottling	C17th	Hard, fine dark red fabric	
1009	Blackware	1	1	1	BS	Hollow ware	Black glaze int & ext; rilled profile	C17th	Hard, fine dark red fabric	
1009	Blackware type	1	21	1	Rim	Bowl	Dark brown glaze int & ext w/ darker mottling	C17th	Everted rim; fine dark red fabric	
1009	Blackware type	1	10	1	Rim	Bowl	Black glaze int & ext	LC17th – EC18th	Hard, fine dark red fabric w/ fine white rock frags up to 0.3mm	
1009	Blackware type	1	5	1	Rim	Bowl	Black glaze int & ext	LC17th – EC18th	Hard, fine dark red fabric w/ sparse white rock frags <0.3mm	
1009	Blackware type	1	1	1	Rim	Hollow ware	Black glaze int & ext	C17th	Hard, fine dark red fabric	
1009	Blackware type	1	12	1	BS	Hollow ware	Shiny black glaze int & ext	C17th	Hard, fine red fabric; not as dark as is typical	
1009	Blue Banded ware	1	64	1	Profile	Bowl	Broad blue band ext	C19th	Round bowl; ring foot base; crazed & discoloured	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Blue Banded ware	1	47	1	Base & body	Tazza	Blue band around body	M – LC19th	Splayed base w/ tazza-style body	
1009	Blue Banded ware	1	2	1	BS	Hollow ware	Blue band ext	C19th		
1009	Bone China	2	19	2	Rim & handle	Cup	Overglaze painted floral band below rim	LC19th – EC20th	Probably the same vessel	
1009	Bone China	5	30	1	Rim	Plate	Low relief moulded design around rim	MC19th – EC20th		
1009	Bone China	1	14	1	Ring foot base	Cup	U/Dec	LC19th – EC20th		
1009	Bone China	1	26	1	Ring foot base	Bowl	U/Dec	LC19th – EC20th		
1009	Bone China	1	12	1	Ring foot base	Bowl	U/Dec	LC19th – EC20th		
1009	Bone China	4	18	4	Rim	Saucer	Blue sprigged flower & vine motifs int	MC19th – EC20th		
1009	Bone China	1	12	1	Rim	Lid	U/Dec	LC19th – EC20th		
1009	Bone China	3	13	3	BS	Hollow ware	U/Dec	LC19th – EC20th		
1009	Bone China	1	2	1	Footring base	Plate	U/Dec	LC19th – EC20th		
1009	Bone China	1	6	1	Rim	Mug	Thin dark line around rim	LC19th – EC20th		
1009	Bone China	8	5	8	BS	U/ID	U/Dec	MC19th – EC20th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Bone China	1	1	1	Rim	Cup/mug	U/Dec	MC19th – EC20th		
1009	Bone China	1	0.5	1	BS	U/ID	Dark blue on one side	C19th		
1009	Bone China	1	8	1	BS	Flatware	Cream finish int & ext	M – LC19th		
1009	Bone China	9	40	9	Fragments	U/ID	U/Dec	C19th	Very heavily burnt w/ clinker/burnt waste attached	
1009	Brown Glazed Coarseware type	1	15	1	Rim	Dish	Black glaze int only	C18th		
1009	Brown Glazed Coarseware type	1	55	1	Rim	Bowl/pancheon	Black glaze int & over rim	C18th – EC19th	Hard fine red fabric	
1009	Brown Glazed Coarseware type	1	43	1	Base	Bowl	Black glaze int only	C18th – EC19th	Hard, dense dark red fabric	
1009	Brown Glazed Coarseware type	1	29	1	Handle	Jug/jar	Black glaze all over	C18th – EC19th	Pale buff-orange fabric w/ occ red grit	
1009	Brown Glazed Coarseware type	10	189	10	BS	Bowl/pancheon	Black glaze int only	C18th – C19th	Hard, fine red fabric	
1009	Brown Glazed Coarseware type	1	49	1	BS	Hollow ware	Thin, hard, matte brown glaze ext	C18th – C19th	A hard, fine, dense orange fabric w/ fine quartz & rock frags <0.3mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Brown Glazed Coarseware type	9	208	9	BS	Hollow ware	Dark brown glaze int & ext; mottling on some sherds	C18th – C19th	Some variation between fabrics; orange to red w/ varying quantities of quartz; may include Coarse Blackware	
1009	Brown Glazed Coarseware type	1	32	1	BS	Hollow ware	Thin, hard black glaze	C18th	Hard orange fabric w/ common fine quartz <0.4mm	
1009	Brown Glazed Coarseware type	1	15	1	BS	Hollow ware	Brown glaze int & ext; heavily flaked ext	C18th – C19th	Hard, fine dense orange fabric w/ a blocky fracture	
1009	Brown Glazed Coarseware type	1	11	1	BS	Hollow ware	Patchy brown glaze int; flaky brown glaze ext	C18th – EC19th	Fine orange fabric	
1009	Brown Glazed Coarseware type	2	5	2	BS	Hollow ware	Brown glaze ext	C18th	Fine orange fabrics	
1009	Brown Salt Glazed Stoneware	2	33	1	Base	Hollow ware	U/Dec	C19th		
1009	Brown Salt Glazed Stoneware	1	11	1	Footed base	Hollow ware	Pale brown salt glaze int & ext	C18th – EC19th	Recessed base w/ a rounded foot	
1009	Brown Salt Glazed Stoneware	1	4	1	BS	Hollow ware	Moulded ext surface	C19th		
1009	Brown Salt Glazed Stoneware	1	1	1	Rim	Hollow ware	Pale brown salt glaze int & ext	C18th – C19th	Small rounded rim w/ slight overhang	
1009	Brown Salt Glazed Stoneware	1	7	1	BS	Hollow ware	Pale brown salt glaze int & ext	C18th	Could be earlier; ?German	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Brown Salt Glazed Stoneware	2	4	2	BS	Hollow ware	U/Dec	MC19th – EC20th		
1009	Brown Salt Glazed Stoneware	1	0.5	1	BS	Hollow ware	U/Dec	C18th		
1009	Buff Sandy ware	1	6	1	Rim	Bowl?	Yellow to yellow green int & ext; ?splashed	C13th?	Clubbed everted rim w/a flat top; common quartz & sparse round red grit up to 0.3mm	
1009	Cane Coloured ware	1	18	1	Rim	Pie dish	U/Dec	C19th		
1009	Cane Coloured ware	1	60	1	Ring foot base	Bowl	U/Dec	C19th		
1009	Cane Coloured ware	1	5	1	Flat base	Dish	U/Dec	C19th		
1009	Cane Coloured ware	9	37	9	BS & flakes	Hollow ware	U/Dec	C19th		
1009	Cistercian type ware	9	80	9	BS	Hollow ware	Black glaze int & ext	c.1450 – c.1600	Could be Blackware (C17th)	
1009	Cistercian ware	2	7	2	Handle	Cup/tyg	Black glaze all over	c.1450 – c.1600	Small rod handles; black glaze all over	
1009	Cistercian ware	1	13	1	BS & handle	Hollow ware	Black glaze int & ext	c.1450 – c.1600	Patchy black glaze int & ext; handle stump; fine red fabric	
1009	Coal Measures Purple ware	1	105	1	Rim & handle	Jug/cistern	Patchy brown mottled glaze ext	C15th – C16th	Strap handle; contact scar on rim	
1009	Coal Measures Purple ware	1	175	1	Neck & handle	Jug/cistern	Patchy purple glaze ext	C15th – C16th	Strap handle	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Coal Measures Purple ware	1	27	1	BS	Hollow ware	Purple glaze ext	C15th – C16th		
1009	Coal Measures Purple ware type	1	50	1	Rod handle	Jug	Patchy dark green mottled glaze ext	C15th – C16th		
1009	Coal Measures type ware	1	8	1	BS	Hollow ware	Mottled brown glaze ext; dark green glaze int	C15th – C16th?	Streaky grey fabric w/ an orange ext margin; common quartz & black grit up to 1mm	
1009	Coal Measures Whiteware	1	16	1	BS	Hollow ware	Patchy green-brown mottled glaze int & ext	C14th – EC15th		
1009	Colour Glazed ware	13	458	1	Profile	Teapot	Brown int & ext w/ wide cream band around upper body	MC19th – EC20th	Lid fits this teapot	
1009	Colour Glazed ware	23	564	1	Profile	Teapot	Mottled brown glaze w/ three cream bands ext	MC19th – EC20th		
1009	Colour Glazed ware	1	145	1	Complete	Teapot lid	Brown glaze	MC19th – EC20th		
1009	Colour Glazed ware	1	52	1	Spout	Teapot	Black glazed int & ext	MC19th – EC20th	Not part of the two teapot bodies	
1009	Creamware	1	11	1	Rim	Plate	Relief moulded border	c.1740 – c.1820	Flaked int & ext	
1009	Creamware	1	6	1	Footring base	Plate	U/Dec	c.1740 – c.1820		
1009	Creamware	1	4	1	Footring base	Plate	U/Dec	c.1740 – c.1820		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Creamware	1	2	1	BS	Hollow ware	Rilled body	c.1740 – c.1820		
1009	Creamware	4	4	4	BS	Flatware	U/Dec	c.1740 – c.1820		
1009	Creamware	3	17	3	BS	Hollow ware	U/Dec	c.1740 – c.1820		
1009	Creamware?	1	2	1	U/ID	U/ID	Moulded w/ an orange line on rim	c.1740 – c.1820?		
1009	Edged ware	2	50	1	Rim	Bowl	Plain rim w/ blue feather-edge paint	C19th		
1009	Edged ware	1	14	1	Rim	Plate	Plain rim w/ blue feather-edge paint	C19th		
1009	Edged ware	2	15	2	Rim	Plate	Wavy rim w/ blue feather-edge paint	C19th		
1009	Edged ware	2	23	2	Rim	Plate	Wavy rim w/ low-relief moulding & blue feather-edge paint	E – MC19th		
1009	Edged ware	1	14	1	Rim	Plate	Wavy rim w/ sharply moulded edge & blue feather-edge paint	LC18th - EC19th		
1009	Edged ware	1	10	1	Rim	Plate	Wavy rim w/ moulded 'grass' pattern & dark blue feather-edge paint	E – MC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Edged ware	1	13	1	Rim	Dish	Wavy edge w/ low relief moulding & blue feather-edge paint	LC18th – EC19th		
1009	Edged ware	1	8	1	Rim	Plate	Wavy rim w/ low relief moulding & blue feather-edge paint	E – MC19th		
1009	Edged ware	1	3	1	Rim	Plate	Wavy rim w/ dark blue feather-edge paint	C19th	Contact scar on rim	
1009	Frechen-Koln stoneware	1	2	1	BS	Hollow ware	Mottled brown salt glaze ext	LC14th – C16th		
1009	Green Glazed Sandy ware	1	22	1	Rim	Bowl	Pale green glaze int only	C`16th – C17th	A fine, even pale orange sandy fabric	
1009	Green Glazed Sandy ware	1	51	1	Rim	Pancheon	Finely mottled greenish glaze int	C15th – C16th	Heavy round clubbed rim	
1009	Green Glazed Sandy ware type	1	5	1	BS	Hollow ware	Green glaze int & ext	C15th – C16th	Hard, fine red sandy fabric	
1009	Greyware	1	8	1	BS	Hollow ware	U/Dec	Roman?	A fine even sandy fabric	
1009	Humberware	1	89	1	Strap handle	Jug/cistern	Patchy green glaze ext & upper surface of handle	LC13th – C15th	Finger impression internally	
1009	Humberware	1	46	1	Strap handle	Jug	Patchy green glaze on upper surface	LC13th – C15th	Fine Humberware	
1009	Humberware	1	8	1	Base	Hollow ware	Patch of glaze on underside	LC13th – EC15th	Reduced throughout	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Humberware	1	11	1	Rim	Jug	U/Dec	LC13th – EC15th	Small clubbed, slightly inturned rim	
1009	Humberware	6	35	6	BS	Hollow ware	Spots of glaze on one sherd	LC13th – EC15th		
1009	Humberware type	1	31	1	BS	Hollow ware	Thin streaky overfired purple glaze ext	C14th – C15th	Slightly sandier than typical Humberware	
1009	Humberware type	1	5	1	BS	Hollow ware	U/Dec	LC13th – C15th	A fine Humberware fabric	
1009	Late Blackware	1	21	1	Footed base	Cup/bowl	Black glaze int	C18th	Hard, fine, dense red fabric	
1009	Late Blackware	1	47	1	Flat base	Hollow ware	Black glaze int & ext above base	C18th	Trickles of glaze indicate that the vessel was fired right-way up	
1009	Late Blackware	2	36	2	BS	Hollow ware	Black glaze int & partially ext	C18th	Fine hard, dense red fabric	
1009	Late Blackware	3	27	3	Footed base	Mug/tyg	Black glaze int	C18th	Hard, fine red fabric	
1009	Late Blackware type	7	14	7	BS	Hollow ware	Black glaze int & ext	C18th	Some variation in fabrics; pale orange to dark red	
1009	Late Blackware type	1	3	1	BS	Hollow ware	Dark brown glaze ext, thin patchy brown glaze int	C18th	Could be Blackware	
1009	Late Blackware type	2	5	2	BS	Hollow ware	Black glaze int & ext	C18th	Fine red fabric	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Late Blackware type	1	0.5	1	BS	Hollow ware	Black glaze ext only	C18th	Fine buff fabric	
1009	Late Medieval Gritty ware	1	34	1	BS	Hollow ware	U/Dec	Late Medieval	Hard, dense reduced fabric	
1009	Late Medieval Sandy ware	1	2	1	BS	Hollow ware	Mottled yellow-brown glaze ext	Late Medieval	Hard, pale grey sandy fabric w/ abundant sub-angular quartz up to 1mm	
1009	Late Medieval Sandy ware	1	31	1	BS	Hollow ware	Thin discoloured & flaky glaze int & ext	C14th – C15th	Hard, dense pale grey to orange fabric w/ common, poorly sorted quartz up to 1mm, mainly finer	
1009	Late Redware	1	84	1	BS	Dish/pancheon	Clear glaze int only	C18th – C19th	Orange fabric w/ fine red & white grit	
1009	Late Redware	1	42	1	BS	Dish/pancheon	Clear glaze int only	C18th – C19th	Dark orange fabric w/ abundant fine quartz & red grit	
1009	Late Redware	1	19	1	Rim	Hollow ware	Partial clear glaze int & on rim; red slip int & ext	C18th – EC19th	Sub-triangular clubbed rim	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Midlands Purple type ware	1	2	1	BS	Hollow ware	Purple-brown glaze ext	C17th	Dark red to grey fabric w/ common fine quartz up to 0.5mm; not as dense as typical Midlands Purple ware	
1009	Midlands Purple type ware	1	16	1	BS	Hollow ware	Patchy, streaky purple glaze int & ext	C15th – C16th	Hard, dense, semi-vitrified fabric w/ abundant quartz <0.5mm	
1009	Mocha ware	1	8	1	BS	Hollow ware	Blue Mocha tree on a white band above a blue line	C19th	Cane coloured body	
1009	Mocha ware	2	7	2	Rim	Bowl	Two black lines below rim above a very dark Mocha pattern	C19th	White body	
1009	Mottled Creamware	1	8	1	Lid	Teapot	Green-purple mottling on top of lid	c.1740 – c.1820		
1009	Mottled Creamware	1	2	1	BS	U/ID	Yellow-brown and green mottling on one side	c.1740 – c.1820		
1009	Mottled ware	2	9	2	BS	Mug/tankard	Rilled band ext; mottled glaze int & ext	C18th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Mottled ware	1	5	1	Base	Mug/tankard	Unglazed rilled band around rim	C18th		
1009	Mottled ware	1	7	1	Footed base	Bowl	Mottled glaze int & ext	C18th		
1009	Mottled ware	2	10	2	BS	Hollow ware	Mottled glaze int & ext	C18th		
1009	Mottled ware	1	10	1	BS & handle	Mug/tankard	Mottled glaze int & ext	C18th		
1009	Mottled ware	1	1	1	BS	Hollow ware	Dark mottled glaze int & ex6t	C18th	Fine red fabric; may be part of a small pot disc; diameter 16.8mm	
1009	Mottled ware?	1	5	1	Base	Hollow ware	Dark brown mottled glaze int	C18th	Hard, fine buff-white fabric	
1009	Oxidised Gritty ware	2	5	2	BS	Hollow ware	U/Dec	C12th – C13th	A hard orange fabric w/ common, poorly sorted quartz up to 1mm	
1009	Pearlware	1	4	1	Recessed base	Plate	U/Dec	c.1780 – c.1840		
1009	Redware	6	60	6	BS	Bowl	Flaky clear glaze on an orange body; red slip ext	C17th – EC19th		
1009	Redware	1	15	1	BS	Hollow ware	Clear glaze ext on a red fabric	C17th – EC18th	Fine bright orange sandy fabric w/ fine quartz	
1009	Redware	1	46	1	BS	Dish	Clear glaze int; red slip ext	C17th – EC18th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Redware	1	6	1	Rim	Bowl	Clear glaze int only	C17th – EC18th	Fine soft orange fabric	
1009	Relief Banded ware	1	10	1	BS	Hollow ware	Raised bands ext	M – LC19th		
1009	Slip Banded CC ware	1	15	1	BS	Hollow ware	Multiple thin white slip lines ext	C19th		
1009	Slip Banded CC ware	1	5	1	Rim	Hollow ware	Multiple thin white slip lines ext	C19th	Slightly everted rim	
1009	Slip Banded CC ware	1	7	1	BS	Hollow ware	Multiple thin white slip lines ext	C19th	Very pale cane coloured body	
1009	Slip Banded CC ware	1	1	1	Handle	Mug	U/Dec	C19th		
1009	Slip Banded CC ware	2	3	2	BS	Hollow ware	Pale blue painted line ext	C19th		
1009	Slip Banded CC ware	1	9	1	BS	Hollow ware	Pale blue painted line w/ a thin white slip line ext	C19th		
1009	Slip Banded CC ware	1	9	1	Rim	Bowl	Brown and white slip lines ext	C19th	Plain rim	
1009	Slip Banded CC ware	1	1	1	BS	Hollow ware	White slip lines ext	C19th		
1009	Slip Banded CC ware	2	19	1	Rim	Bowl	Pale blue painted band above multiple white slip lines ext	C19th	Plain rim	
1009	Slip Banded CC ware	1	16	1	BS	Hollow ware	Two brown slip lines above a white band ext	C19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Slip Banded CC ware	1	2	1	Rim	Bowl	Irregular brown line above white slip lines ext	C19th	Plain rim	
1009	Slip Banded CC ware	1	1	1	Base	Hollow ware	Brown slip line ext	C19th		
1009	Slip Banded CC ware	1	0.5	1	BS	Hollow ware	White slip line ext	C19th		
1009	Slip Coated ware	1	14	1	BS	Hollow ware	Red slip ext; clear glaze int & ext	C18th	Fine light buff fabric	
1009	Slip Coated ware	1	12	1	BS	Hollow ware	Red slip int under glaze; unglazed ext w/ traces of red slip	C18th	Fine light buff fabric	
1009	Slip Coated ware	1	31	1	Flat base	Dish/bowl	Partial white slip int under clear glaze; mottled effect	C18th	Fine red fabric w/ sparse quartz & red grit	
1009	Slip Coated ware	1	1	1	BS	Hollow ware	Thin red slip under dark glaze int & ext	C18th	Fine buff-white fabric	
1009	Slipware	1	37	1	Rim	Dish	Pie crust rim; white slip int w/ lobate orange slip design int	C18th	Press-moulded dish; fine buff sandy fabric w/ fine red grit	
1009	Slipware	2	5	1	BS	Hollow ware	White slip band ext w/ incised 'S' motifs; glazed int & ext	C18th	Fine bright orange fabric	
1009	Slipware	1	9	1	BS	Dish	Black, red-brown & white linear feathered slip int	C18th	Press-moulded dish; fine red fabric w/ white streaks	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Slipware	1	6	1	BS	Dish	White slip int w/ thin brown lines int	C18th	Fine red fabric	
1009	Slipware	1	6	1	BS	Dish	Red & white slip int under clear glaze	C18th	Press-moulded dish; fine red fabric	
1009	Slipware	1	5	1	BS	Hollow ware	Thin white slip line ext	C18th	Fine red fabric	
1009	Slipware	1	3	1	BS	Dish?	White on red-brown slip int; diffuse brown lines; glaze int & ext	C18th	Fine, hard dense white fabric w/ fine red & white grit	
1009	Slipware	1	2	1	Rim	Hollow ware	Thin red slip ext w/ white blobs	C18th	Fine buff fabric w/ fine red grit	
1009	Slipware	1	0.5	1	BS	Hollow ware	Thin red slip lines on one side	C18th		
1009	Slipware type	1	30	1	Dish/bowl	Dish	Partial white slip int; heavily chipped & flaked	C18th?	Very fine buff fabric; odd sherd	
1009	Slipware type 1	1	18	1	Rim	Bowl	Wavy white slip line int; spots of white glaze on rim	C17th – EC18th	Deep bowl; narrow everted rim	
1009	Slipware type 1	1	17	1	Rim	Dish	Zig-zag white slip line inside rim; thin red slip ext	C17th – EC18th	Wide shallow rim w/ clubbed lip	
1009	Slipware type 1	1	35	1	Rim	Dish	Trailed white slip zig-zag line inside rim; thin red slip	C17th – EC18th	Wide, dished rim w/ prominent ridge int; harder fabric than typical	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Slipware type 1	3	11	3	BS	Dish	Traces of white slip lines int	C17th – EC18th	Chipped & flaked	
1009	Sponge-printed ware	1	7	1	BS	Plate	Blue printed floral design int	c.1840+		
1009	Sponged ware	1	4	1	Rim	Saucer	Dark blue sponging int	c.1830+		
1009	Sponged ware	1	5	1	BS	Hollow ware	Blue sponging ext	c.1830+		
1009	Sponged ware	2	4	2	BS	Flatware?	Blue sponging int	c.1830+		
1009	Sponged ware	1	0.5	1	BS	Flatware	Blue sponging int	c.1830+		
1009	Stamford type ware	1	2	1	BS	Hollow ware	Bright green mottled splashed glaze ext	C11th – C12th	Fine white fabric	
1009	Stoneware	1	165	1	Base	Bottle	Green glaze int & ext; iron mottling around base	MC19th – EC20th		
1009	Stoneware	1	63	1	Base	Bottle	Green glaze int & ext; iron mottling around base	MC19th – EC20th	A very thick base	
1009	Stoneware	1	14	1	Rim	Jam jar	Pale green glaze int & ext; wide-spaced fluting	MC19th – EC20th		
1009	Stoneware	1	19	1	BS	Jam jar	Pale green glaze int & ext; wide-spaced fluting	MC19th – EC20th		
1009	Stoneware	2	56	2	BS	Bottle	Green glaze int & ext	MC19th – EC20th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Stoneware	1	28	1	BS	Bottle	Green glaze int & ext; part of an iron-wash band ext	MC19th – EC20th		
1009	Stoneware	1	30	1	BS	Bottle/flagon	Green glaze ext w/ an iron-wash band on shoulder	MC19th – EC20th		
1009	Stoneware	1	33	1	BS/Shoulder	Bottle/flagon	Pale grey glaze int & ext	MC19th – EC20th		
1009	Stoneware	1	15	1	BS/shoulder	Bottle/flagon	Pale brown iron-wash band w/ a deep groove	MC19th – EC20th		
1009	Stoneware	1	29	1	Rim & shoulder	Bottle	Matte green salt glaze ext	MC19th – EC20th		
1009	Stoneware	5	15	5	BS	Hollow ware	Green glazed stoneware	MC19th – EC20th		
1009	Stoneware	1	32	1	BS/Shoulder	Hollow ware	Pale brown salt glaze int & ext; groove on shoulder	C19th – EC20th		
1009	Stoneware	2	10	2	BS	Hollow ware	Off-white stoneware	MC19th – EC20th		
1009	Stoneware	1	7	1	BS	Hollow ware	Iron-wash band ext	MC19th – EC20th		
1009	Stoneware	1	6	1	BS	Jam jar	Widely spaced fluting ext	MC19th – EC20th		
1009	Stoneware	1	3	1	BS	Jam jar	Fluted ext	MC19th – EC20th		
1009	Stoneware	1	1	1	BS	Hollow ware	Pale green glaze	MC19th – EC20th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Stoneware	1	5	1	BS & handle	Hollow ware	Pale green lead glaze int & ext	Post-medieval	A small rod handle; unusual form and unidentified fabric	
1009	Stoneware	1	18	1	Handle	Jug	Relief moulded oval handle	C19th		
1009	Stoneware	3	3	2	BS	Flatware	U/Dec	M – LC19th	Fresh break; buff stoneware	
1009	Tin Glazed Earthenware	2	2	2	BS	Flatware	U/ID pale blue design int	MC16th – MC18th		
1009	Tin Glazed Earthenware	2	9	2	BS	Flatware	White tin glaze int & ext	MC16th – MC18th	Severely flaked	
1009	TP Bone China	2	4	2	Rim	Saucer	Chinese style border	LC19th – EC20th		
1009	TP Bone China	1	9	1	Ring foot base	Cup	Diffuse blue pattern ext; floral pattern int	M – LC19th		
1009	TP Bone China	1	1	1	BS	Hollow ware	Grey printed design ext	M – LC19th		
1009	TP Bone China	1	5	1	BS	Plate	Chinese style border	M – LC19th		
1009	TP Pearlware	1	18	1	Recessed base	Mug	U/ID TP design ext	c.1780 – c.1840	Angular recessed base; cylindrical mug	
1009	TP Porcelain	1	8	1	Recessed base	Mug/jar	Chinese landscape ext	MC19th – EC20th		
1009	TP Whiteware	1	12	1	Rim	Plate	Albion	M – LC19th	Large plate or possibly a carver/server	
1009	TP Whiteware	1	15	1	Flat base	Dish	Albion	M – LC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	TP Whiteware	1	19	1	Base	Carver/server	Asiatic Pheasants	M – LC19th		
1009	TP Whiteware	1	54	1	Handle	Jug	Floral design on spine	M – LC19th		
1009	TP Whiteware	1	43	1	Rim	Chamber pot	Floral/geometric pattern around rim; rural scene ext	M – LC19th		
1009	TP Whiteware	1	16	1	Double footring base	Plate	Stylised scroll around rim; floral/landscape int	MC19th – EC20th		
1009	TP Whiteware	1	43	1	Rim & handle	Mug	Stylised Chinese landscape ext; geometric border inside rim	MC19th – EC20th		
1009	TP Whiteware	1	7	1	BS	Hollow ware	Wavy rim; stylised landscape w/ 'banana trees'	M – LC19th		
1009	TP Whiteware	1	8	1	Rim	Bowl	Two Temples	M – LC19th		
1009	TP Whiteware	1	4	1	Rim	Cup	Stylised geometric/curvilinear border int & ext; blurred	M – LC19th	Small angular handle	
1009	TP Whiteware	1	3	1	BS	Carinated bowl	Two Temples	M – LC19th		
1009	TP Whiteware	1	9	1	Beaded base	Hollow ware	U/ID TP design ext	M – LC19th	Some bleeding of blue into white glaze	
1009	TP Whiteware	1	5	1	BS/spout	Jug	Floral designs int & ext	M – LC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	TP Whiteware	1	3	1	BS	Hollow ware	Parallel blue lines (?chevrons) ext	M – LC19th	Crazed & discoloured	
1009	TP Whiteware	1	5	1	Rim	Plate	Geometric border	M – LC19th	Contact scar on rim	
1009	TP Whiteware	1	4	1	Rim	Hollow ware	Diffuse blue geometric / floral design inside rim	M – LC19th		
1009	TP Whiteware	1	3	1	Rim	Cup/bowl	Stylised floral pattern on pointillist background int & ext	M – LC19th		
1009	TP Whiteware	1	3	1	BS	Hollow ware	Red printed designs int & ext	M – LC19th		
1009	TP Whiteware	1	5	1	BS	Plate	U/ID diffuse printed design int	M – LC19th		
1009	TP Whiteware	1	3	1	Rim	Bowl	U/ID geometric border design; flaked	M – LC19th		
1009	TP Whiteware	1	1	1	Rim	Hollow ware	U/ID TP design int	M – LC19th		
1009	TP Whiteware	1	2	1	BS	Hollow ware	U/ID TP design ext; heavily flaked	M – LC19th		
1009	TP Whiteware	1	4	1	BS	Plate	U/ID TP border	M – LC19th		
1009	TP Whiteware	1	4	1	BS	Flatware	Stylised dendritic/snowflake design int & ext	M – LC19th		
1009	TP Whiteware	1	4	1	Rim	Flatware	Stylised geometric design int & ext	M – LC19th		
1009	TP Whiteware	1	3	1	BS & handle stump	Cup	U/ID scroll pattern int & ext	M – LC19th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	TP Whiteware	1	2	1	BS	Hollow ware	Stylised building design ext	M – LC19th		
1009	TP Whiteware	1	1	1	BS	Hollow ware	Thin intersecting blue lines ext	M – LC19th		
1009	TP Whiteware	2	2	2	BS	Flatware	U/ID TP design int	M – LC19th		
1009	TP Whiteware	1	13	1	BS	Flatware	U/Dec	M – LC19th		
1009	TP Whiteware	1	16	1	Flat base	Carver/server	Willow int & ext	M – LC19th		
1009	TP Whiteware	4	38	4	Rim	Plate	Willow	M – LC19th		
1009	TP Whiteware	1	6	1	Footring base	Plate	Willow (flaked int)	M – LC19th	Part of maker's mark on underside; 'IRON ST[ONE CHINA]	
1009	TP Whiteware	4	3	4	BS/Flakes	Flatware	Willow	M – LC19th		
1009	TP Whiteware	3	1	3	BS	Flatware	U/ID TP design int	M – LC19th		
1009	TP Whiteware	1	2	1	BS	Flatware	Willow?	M – LC19th		
1009	TP Whiteware	1	1	1	BS	Flatware	U/ID TP design int	M – LC19th	Heavily burnt fragment	
1009	Unglazed Red Earthenware	2	112	2	Base	Flowerpot	U/Dec	MC19th – EC20th	Perforated bases	
1009	Unglazed Red Earthenware	2	48	2	Base	Flowerpot	U/Dec	MC19th – EC20th		
1009	Unglazed Red Earthenware	1	28	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Deep collared rim	
1009	Unglazed Red Earthenware	10	72	10	BS	Flowerpot	U/Dec	MC19th – EC20th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Unglazed Red Earthenware	4	28	2	BS	Flowerpot	U/Dec	MC19th – EC20th		
1009	Unglazed Red Earthenware	1	13	1	BS/Rim	Flowerpot	U/Dec	MC19th – EC20th	Part of deep collared rim; rim missing	
1009	Unglazed Red Earthenware	1	14	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Narrow collared rim	
1009	Unglazed Red Earthenware	1	4	1	Rim	Flowerpot	U/Dec	MC19th – EC20th	Plain rim	
1009	Unglazed Red Earthenware	1	9	1	Rim	Dish	U/Dec	MC19th – EC20th	Shallow dish or tray	
1009	Unglazed Red Earthenware	1	4	1	Rim	Flowerpot	U/Dec	MC19th – EC20th		
1009	Unidentified	2	3	2	Fragments	U/ID	U/Dec	Undated	Very heavily burnt w/ clinker attached	
1009	White Salt Glazed Stoneware	5	5	5	BS	Flatware	U/Dec	c.1720 – c.1780		
1009	Whiteware	1	44	1	Profile	Small jar	U/Dec	M – LC19th	Small jar w/ a footed base & lid-seated rim	
1009	Whiteware	3	23	2	Rim & BS	Mug	Hand-painted 'Samu …' w/ red & green stylised floral motifs	MC19th – EC20th		
1009	Whiteware	19	11	19	Flakes	Flatware	U/Dec	M – LC19th	May include Pearlware	
1009	Whiteware	1	14	1	Rim	Plate	U/Dec	M – LC19th		
1009	Whiteware	1	7	1	Handle	Jug	U/Dec	M – LC19th	Heavily flaked ext	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Whiteware	1	13	1	Rim	Cup	Curved fluting ext; three gold lines around rim	LC19th – EC20th		
1009	Whiteware	1	18	1	Recessed base	Hollow ware	U/Dec	M – LC19th	Crazed surfaces	
1009	Whiteware	1	11	1	Footring base	Plate	U/Dec	M – LC19th		
1009	Whiteware	1	4	1	Footring base	Flatware	U/Dec	M – LC19th		
1009	Whiteware	4	15	4	BS	Flatware	U/Dec	M – LC19th		
1009	Whiteware	6	13	6	BS	Hollow ware	U/Dec	M – LC19th	Sherds from various vessels	
1009	Whiteware	11	19	11	BS	U/ID	U/Dec	M – LC19th		
1009	Whiteware	2	1	1	Rim	Flatware	Odd silver band int	M – LC19th		
1009	Whiteware	2	1	2	Rim	Hollow ware	U/Dec	M – LC19th		
1009	Whiteware	2	1	2	BS	Hollow ware	U/Dec	M – LC19th		
1009	Whiteware	1	9	1	Footed base	Hollow ware	Profiled splayed foot	M – LC19th		
1009	Whiteware	2	9	2	BS	Flatware	U/Dec	M – LC19th	Heavily burnt & discoloured	
1009	Whiteware	1	6	1	Footring base	Flatware	U/Dec	M – LC19th	Heavily burnt & discoloured	
1009	Whiteware	1	2	1	Fragment	U/ID	U/Dec	M – LC19th	Spherical object?	
1009	Whiteware	3	35	3	Fragments	U/ID	U/Dec	C19th	Very heavily burnt w/ clinker/burnt waste attached	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Whiteware?	5	34	4	Fragments	U/ID	U/Dec	C19th	Very heavily burnt w/ clinker/burnt waste attached	
1009	Yellow Glazed Coarseware	1	62	1	BS	Bowl/pancheon	White slip int	LC18th – C19th	Knife-trimmed ext	
1009	Yellow Glazed Coarseware	2	27	1	BS	Hollow ware	White slip int under clear glaze; patchy clear glaze ext	LC18th – C19th	Dark red fabric	
1009	Yellow Glazed Coarseware	1	26	1	BS	Hollow ware	White slip int under clear glaze; trickles of white slip ext	C19th	Hard fine red fabric	
1009	Yellow Glazed Coarseware	1	2	1	BS	Pancheon	White slip int under clear glaze	LC18th – C19th		
1009	Yellow Glazed Coarseware	1	3	1	BS	Dish	White slip int under clear glaze int; red slip ext	C18th – C19th		
1009	Yellow Glazed Coarseware	1	1	1	BS/Flake	U/ID	White slip int under clear glaze	C18th – C19th		
1009	Yellow Glazed Coarseware	1	51	1	Rim	Dish	Red slip ext; white slip int	C18th – EC19th	Distinctive wide, dished rim w/ clubbed lip; laminated fracture	
1009	Yellow Glazed Coarseware	1	12	1	BS	Dish	Streaky mottled white slip int	LC18th – C19th	Fine red fabric	
1009	Yellow ware	1	19	1	Flat base	Hollow ware	Thin clear glaze int & ext	LC15th – C17th	Hard, fine, dense white fabric w/ sparse white grit	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1009	Yellow ware	4	21	4	BS	Hollow ware	Thin clear glaze int & ext	LC15th – C17th	Hard, fine dense white fabric	
1009	Yorkshire Gritty ware type	1	8	1	BS	Hollow ware	U/Dec	LC11th – C13th	A buff gritty fabric w/ moderate quartz up to 1mm; sooted ext	
1009	Green Glazed Sandy ware	1	15	1	BS	Hollow ware	Dull green glaze ext	C15th – C16th	Sandier than Humberware	
1009	Humberware	2	8	2	BS	Hollow ware	Green glaze ext	C14th – C15th	Fine reduced fabric	
1009	Late Medieval Gritty ware	1	25	1	BS	Hollow ware	Thin patchy, partial green glaze ext	C14th – C15th	Hard, dense reduced fabric w/ a thin buff int margin; moderate quartz & vesicular black grit up to 1mm	
1009	Late Medieval Gritty ware	1	9	1	BS	Hollow ware	Pale green glaze ext over shallow grooves ext	C14th – C15th	Hard, grey fabric w/ common sub-angular quartz up to 1mm	
1034	Porcelain	1	2	1	Rim	Cup/bowl	Blue Chinese landscape style TP design ext	C19th – EC20th	Blue-white porcelain	
1034	Relief Banded ware	1	4	1	BS	Hollow ware	Raised band ext	MC19th – EC20th		
1034	Sponge-printed ware	1	7	1	BS	Hollow ware	Green line & blue sponge-stamped floral pattern ext	c.1840+		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1034	Sponged ware	1	0.5	1	BS	Hollow ware	Blue sponging ext	c.1830+		
1034	Stoneware	1	22	1	Rim	Jam jar	Wide grooves ext; groove below rim	MC19th – EC20th		
1034	Stoneware	1	7	1	Rim	Jam jar	Narrow fluting ext; groove below rim	MC19th – EC20th		
1034	Stoneware	1	12	1	BS	Jar	U/Dec	MC19th – EC20th		
1034	Stoneware	1	12	1	BS	Hollow ware	U/Dec	MC19th – EC20th	Buff stoneware	
1034	TP Whiteware	1	2	1	BS	Flatware	Blue floral design int	MC19th – EC20th		
1034	Whiteware	1	10	1	Footring base	Hollow ware	U/Dec	MC19th – EC20th	Heavily burnt w/ industrial residue on surfaces	
1034	Whiteware	1	17	1	Splayed base	Mug/jug	U/Dec	MC19th – EC20th	Splayed, round foot	
1034	Whiteware	1	12	1	BS	Hollow ware	U/Dec	MC19th – EC20th		
1034	Whiteware	1	5	1	BS	Hollow ware	U/Dec	MC19th – EC20th		
1034	Whiteware	2	6	2	Footring base & BS	Plate	U/Dec	MC19th – EC20th	Heavily burnt & discoloured	
1034	Whiteware	1	2	1	Rim	Hollow ware	U/Dec	MC19th – EC20th		
1034	Whiteware	4	10	4	BS	Hollow ware	U/Dec	MC19th – EC20th		
1034	Whiteware	1	1	1	BS	Hollow ware	Thin red line ext	MC19th – EC20th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1034	Yellow Glazed Coarseware	1	4	1	BS	Bowl/pancheon	White slip under clear glaze int	MC19th – EC20th	Fine pale orange fabric w/ fine quartz & sparse red grit	
1036	Cistercian ware	1	5	1	Handle	Cup/tyg	Black glaze all over	c.1450 – c.1600	Small rod handle	
1036	Coal Measures Whiteware type	1	46	1	BS	Hollow ware	Thin yellow-green glaze int & ext	C14th – C15th	White to pale grey fabric w/ abundant quartz & round red grit up to 1mm, mainly 0.5 – 1mm	
1038	Cistercian ware	1	15	1	Footed base	Cup/tyg	Applied linear white pipeclay pattern ext	c.1450 – MC16th	Hard fine red fabric; prominent square foot	
1038	Coal Measures Whiteware type	1	24	1	BS	Hollow ware	U/Dec	C14th – C15th	Buff to orange fabric w/ quartz & black grit up to 0.6mm	
1038	Early Brown Glazed Coarseware	1	67	1	Rim	Jar	App & thumbed band below round clubbed rim	LC17th – C18th	Hard fine red fabric w/ sparse red grit	
1038	Early Brown Glazed Coarseware	1	46	1	BS	Hollow ware	Mottled brown glaze int & ext w/ part of a thumb-impression	LC17th – C18th	Fine red fabric w/ sparse fine quartz grit	
1038	Humberware	1	21	1	BS	Hollow ware	Dark green glaze ext w/ shallow grooves ext	LC13th – C15th	Fine Humberware	
1038	Late Blackware	1	0.5	1	BS	Hollow ware	Black glaze int & ext	C18th	Fine red fabric	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1038	Late Humberware type	1	11	1	BS	Dr Jug?	Knife-trimmed ext	C14th – C15th	Hard, dense red fabric w/ fine muscovite	
1038	Midlands Purple type ware	1	7	1	Rim	Hollow ware	Black glaze int & ext; finger-impressed rim	MC15th – C17th		
1038	Redware	2	128	2	BS	Dish	Clear glaze int; thin buff-orange slip ext	C17th – EC18th	Fine pale buff-orange fabric	
1038	Redware	1	12	1	BS	Dish	Clear glaze int; thin red slip ext	C17th – EC18th	Fine orange fabric	
1038	Redware	1	32	1	BS	Dish	Red slip ext; buff slip int under clear glaze int	C17th – EC18th	Hard, fine bright orange fabric	
1038	Redware type	1	21	1	BS	Dish/bowl	Buff slip int under clear glaze; red slip ext	C17th – EC18th	Hard, dense red fabric	
1038	Slip Coated ware	1	8	1	BS	Hollow ware	Thin buff slip int & ext under clear glaze	C18th	A very hard, dense, semi-vitrified buff fabric, close to stoneware	
1038	Slipware	2	15	1	BS	Hollow ware	Brown on white feathered slip all-over ext; clear glaze int	C18th	Fine buff fabric	
1039	TP Bone China	1	3	1	BS	Saucer	Two Temples?	C19th		
1039	TP Whiteware	1	1	1	BS	Hollow ware	U/ID TP design ext	M – LC19th		
1039	Whiteware	1	4	1	BS	Flatware	U/Dec	M – LC19th	Burnt & discoloured	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1039	Yellow Glazed Coarseware	1	48	1	Base	Pancheon	White slip under clear glaze int; red slip ext	C18th – C19th	Use-wear on underside of base	
1039	Yellow Glazed Coarseware	1	6	1	Rim	Bowl	White slip int w/ red unslipped band inside rim	LC18th – C19th		
1040	Humberware	1	22	1	BS	Hollow ware	U/Dec	LC13th – C15th	Reduced int w/ oxidised ext margin	
1042	Blackware	1	12	1	BS	Hollow ware	Metallic black glaze ext & partially int	C17th	Hard fine dark red fabric	
1042	Brown Salt Glazed Stoneware	1	5	1	BS	Mug/tankard	Wide rilled band ext	C18th		
1042	Midlands Purple type ware	1	17	1	BS	Hollow ware	Black glaze int & ext; shallow grooves ext	C16th – C17th	Hard dark red fabric	
1043	Late Medieval Oxidised Sandy ware	1	9	1	BS	Hollow ware	U/Dec	C14th – C15th	A hard orange fabric w/ moderate quartz up to 1mm; coarser texture than Humberware	
1047	Early Brown Glazed Coarseware	2	12	2	BS	Hollow ware	Hard, thick purple-brown glaze int & ext	C17th – EC18th	A hard red fabric w/ thin white streaks & fine quartz <0.5mm	
1047	Late Blackware type	3	21	3	BS	Hollow ware	Black glaze int & ext	C18th	Slightly sandier than typical	
1048	Cistercian ware	1	5	1	BS	Cup/tyg	Black glaze int & ext	c.1450 – c.1600	Fine dark red fabric	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1048	Coal Measures Whiteware type	1	35	1	BS/spigot hole	Cistern	Patchy mottled green glaze int & ext	C14th – C15th	Pale grey w/ thin buff int & ext margins; common quartz & rock frags up 1mm, occ up to 2.5mm	
1048	Humberware	1	5	1	BS	Hollow ware	Streaks of green glaze ext	LC13th – C15th		
1048	Humberware type	1	11	1	BS	U/ID	Green glaze int; patchy green glaze ext	C14th – C15th		
1048	Shell Tempered ware	1	13	1	BS	Hollow ware	Smoothed int & ext	Medieval	Hand-made sherd; grey ext, oxidised int	
1048	Slipware	1	3	1	Rim	Dish	Thin white slip int; groove inside rim	C18th	Abundant fine quartz w/ occ red grit	
1050	Blackware	1	115	1	Footed base	Cup/tyg	Shiny black glaze int & ext	C17th	Hard fine red fabric; curved parallel wire marks underside of base	
1050	Blackware	2	26	1	Footed base	Cup/tyg	Shiny black glaze int & ext	C17th	Hard fine dark red fabric	
1050	Blackware	1	5	1	Handle	Cup/tyg	Shiny black glaze	C17th	Fine hard dark red fabric	
1050	Blackware	3	3	2	BS	Hollow ware	Shiny black glaze int & ext	C17th	Fine hard dark red fabric	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1050	Blackware type	1	1	1	BS	Hollow ware	Mottled brown glaze int & ext	LC16th – C17th	Fine red sandy fabric	
1050	Brown Glazed Coarseware	1	16	1	Base	Pancheon	Flaky brown glaze int	C18th	Thick base; dense red fabric w/ sparse white rock fragments	
1050	Humberware	1	9	1	BS	Hollow ware	Mottled shiny green glaze ext	LC14th – EC16th	Late Humberware	
1050	Midlands Purple type ware	1	6	1	BS	Hollow ware	Patchy purple glaze ext; glaze fuming int	MC15th – C17th	Hard, dense, semi-vitrified fabric; MPW / CMP type fabric	
1050	Midlands Purple type ware	1	3	1	BS	Hollow ware	Mottled brown glaze ext	MC15th – 17th	Hard, fine dense dark grey fabric	
1051	Blackware type	1	4	1	BS	Hollow ware	Black glaze int & ext	C17th	Fine dark red fabric	
1051	Brown Glazed Coarseware type	1	25	1	Base	Hollow ware	Hard brown glaze int & ext	LC17th – C18th	Bright orange fabric w/ sparse fine red grit	
1051	Late Humberware	2	15	2	BS	Hollow ware	Spots of clear glaze ext	C15th – EC16th	Fine red sandy fabric	
1051	Midlands Purple type ware	2	39	1	BS	Hollow ware	Thick purple-brown glaze ext & patchy glaze int	LC15th – C17th	Hard red fabric but not semi-vitrified	
1051	Midlands Purple ware	1	12	1	BS	Hollow ware	Thick purple glaze ext only	LC15th – C17th	Rilled int; could be a flagon	
1052	Humberware type	1	7	1	BS	Dr Jug?	U/Dec	C14th – C15th	Fine even orange fabric w/ common fine grit <0.2mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1052	Humberware type	2	4	1	BS	Hollow ware	U/Dec	C14th – C15th	Fine even orange fabric w/ fine quartz grains	
1052	Oxidised Sandy ware	1	5	1	BS	U/ID	U/Dec	Late Medieval	Oxidised sandy fabric w/ common round quartz & red grit up to 0.8mm	
1055	Blackware	3	10	3	BS	Hollow ware	Black glaze int & ext	C17th	Hard, fine dark red fabric	
1055	Blackware type	1	5	1	BS & handle	Mug/tyg	Black glaze int & ext	C17th	Fine bright red fabric; not typical of Blackware	
1055	Cistercian ware	1	2	1	BS	Cup/tyg	Black glaze int & ext	c.1450 – c.1600	Thin hard, dark red fabric	
1055	Early Brown Glazed Coarseware	1	5	1	BS	Hollow ware	Dark brown glaze int & ext	C17th – EC18th	A hard, fine red fabric w/ abundant round quartz up to 0.5mm	
1055	Midlands Purple type ware	1	10	1	BS	Hollow ware	Overfired purple glaze ext	C15th – C17th	Hard, dense semi-vitrified fabric w/ quartz & sparse black grit	
1055	Midlands Purple type ware	1	25	1	BS	Hollow ware	Purple glaze int & partially ext	C15th – C17th	Hard, dense semi-vitrified dark grey to dull red fabric	
1055	Raeren Stoneware	1	8	1	BS	Hollow ware	Shiny brown salt glaze int & ext	C15th – C16th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1055	Raeren Stoneware	1	3	1	BS	Hollow ware	Mottled brown salt glaze ext; glaze fumed int	C15th – C16th		
1056	Brown Salt Glazed Stoneware	1	6	1	BS	Hollow ware	Shiny brown salt glaze int & ext; thin incised lines ext	C18th		
1056	Yellow ware	1	20	1	Base	Candlestick	Clear glaze ext	LC15th – C17th	Splayed foot cut-outs around foot w/ knife-trimming int	
1058	Blackware	1	2	1	BS	Hollow ware	Black glaze int & ext	C17th		
1058	Cistercian ware	1	5	1	BS	Cup/tyg	Black glaze int & ext	c.1450 – c.1600	Could be Blackware	
1058	Coal Measures Whiteware type	1	102	1	BS	Hollow ware	Yellow-green glaze w/ dark mottling int & spots & splashes ext	C14th – EC15th	White fabric w/ moderate quartz & black grit up to 0.5mm, occ larger & sparse rock frags	
1058	Late Humberware	1	11	1	BS	Hollow ware	U/Dec	LC14th – C15th		
1058	Midlands Purple ware	1	23	1	Handle	Jug/jar	Glaze fumed ext	LC15th - C17th	Very hard, dense semi-vitrified dark red fabric w/ abundant quartz	
1058	Midlands Purple ware	1	19	1	Handle	Jug/jar	Purple glaze on top of handle	LC15th - C17th	Very hard, dense semi-vitrified grey fabric w/ abundant quartz & vesicular black grit	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1059	Blackware	1	173	1	Footed base	Cup/tyg	Black glaze int & ext	C17th	Two handles	16
1059	Buff Sandy ware	1	9	1	BS	Hollow ware	Thick brown glaze ext	C15th – C16th	Buff fabric w/ common quartz & sparse black grit up to 0.7mm	
1059	Late Humberware	1	77	1	BS/spigot hole	Cistern	Patchy mottled yellow-brown glaze int	C14th – C15th		
1059	Midlands Purple type ware	1	3	1	BS	Hollow ware	Thin hard purple-brown glaze int & ext	LC15th – C16th	Hard, dense dark grey semi-vitrified fabric	
1059	Purple-glazed Humberware	1	2	1	BS	Hollow ware	Shiny purple glaze ext	LC15th – C16th	Fine reduced fabric w/ fine quartz grains	
1061	Blackware	1	55	1	Handle	Jug/jar	Black glaze on upper surface, patchy on sides	C17th	Narrow strap handle w/ central ridge; hard dense red fabric	
1061	Blackware	1	45	1	BS & handle	Jug/jar	Black glaze int & ext	C17th	Hard dark red fabric; strap handle stump	
1061	Blackware	1	8	1	BS	Hollow ware	Rilled ext; black glaze int & ext	C17th	Hard, dense dark red fabric	
1063	Buff Gritty ware	1	3	1	BS	Hollow ware	Patchy yellow glaze ext	C12th – C13th	Buff fabric w/ common quartz up to 0.5mm, occ up to 1mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1063	Humberware	1	33	1	BS	Hollow ware	U/Dec	C14th – C15th		
1063	Humberware	1	10	1	BS/handle scar	Hollow ware	Mottled green glaze ext	C14th – C15th		
1063	Humberware	1	19	1	Base	Jug/jar	U/Dec	LC13th – C15th		
1063	Humberware	1	2	1	BS	Hollow ware	Green glaze ext	LC13th – C15th	Reduced throughout	
1063	Humberware	1	3	1	BS	Hollow ware	U/Dec	LC13th – C15th	Oxidised throughout; slightly sandy	
1063	Late Humberware	1	10	1	BS	Hollow ware	Mottled brown glaze ext	C15th – C16th		
1063	Late Humberware	1	19	1	BS	Dish/bowl	Mottled yellow-brown glaze int; spots ext	C15th – C16th		
1063	Late Humberware	1	1	1	BS	Hollow ware	Patchy brown glaze ext	C15th – C16th		
1063	Midlands Purple type ware	1	16	1	Strap handle	Jug/cistern	Thick purple glaze on upper surface	LC15th – C17th	Hard, dense red fabric w/ common quartz up to 0.5mm, occ 1mm	
1063	Midlands Purple type ware	1	12	1	BS	Hollow ware	Thick purple-brown glaze ext	LC15th – C17th	Hard, dense red fabric w/ common quartz up to 0.5mm, occ larger; sparse round red grit up to 1mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1063	Redware type	1	2	1	BS	Hollow ware	Clear glaze ext	C17th	Harder than typical Redware	
1063	Surrey Whiteware type	1	1	1	BS	Cup/bowl	Dark green glaze int; mottled green glaze ext	LC15th – C16th	Fine white fabric; probably part of the joining sherds 1064&1068	
1064	Blackware	1	36	1	Footed base	Hollow ware	Black glaze int & ext	C17th	Curved parallel wire marks on underside	14
1064	Blackware	1	1	1	Rim	Hollow ware	Black glaze int & ext	C17th	Short vertical rim on a shouldered body	
1064	Blackware	1	2	1	BS	Hollow ware	Black glaze int & ext	C17th	Fine red fabric	
1064	Blackware	2	4	2	BS	Hollow ware	Black glaze int & ext	C17th	Fine dark orange fabric	
1064	Blackware type	1	21	1	Footed base	Hollow ware	Black glaze int & ext	C17th	Fine dark orange fabric	
1064	Coarse Oxidised Sandy ware	1	76	1	Strap handle	Jug/cistern	Brown glaze w/ yellow mottling	Late Medieval	A hard dark orange fabric w/ abundant rounded quartz up to 0.5mm	
1064	Humberware	1	61	1	Strap handle	Jug/cistern	Patchy green to yellow-green glaze; grooves on top of handle	C14th – C15th	A sandy Humberware fabric	
1064	Late Humberware	1	25	1	Base	Bowl	Dark green glaze int; spots of glaze ext	C15th – EC16th		

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1064	Late Humberware	1	11	1	BS / ?handle	Hollow ware	Clear glaze ext; deep impression, ?fingernail	C15th – EC16th	Bright orange sandy fabric w/ common sandy fabric w/ fine quartz & sparse large red grit	
1064	Oxidised Sandy ware	1	8	1	Rim?	Hollow ware	U/Dec	Late Medieval	Odd rim sherd; fine oxidised sandy fabric w/ fine quartz & white rock frags <0.2mm	
1064	Oxidised Sandy ware	1	2	1	BS	Hollow ware	Patch of glaze ext	Late Medieval	Fine orange fabric w/ common fine quartz up to 0.3mm	
1064	Oxidised Sandy ware	1	7	1	BS	Hollow ware	U/Dec	Late Medieval	Fine sandy fabric w/ common fine quartz up to 0.3mm	
1064	Purple Glazed Sandy ware	1	31	1	BS	Hollow ware	Thick purple-brown glaze ext; spots of glaze int	C15th – C16th	A hard, fine brown sandy fabric w/ moderate, poorly sorted quartz <0.5mm	
1064	Purple Glazed Sandy ware	1	26	1	BS	Hollow ware	Patchy purple glaze ext; mottled greenish glaze int	C15th – C16th	Probably a Late Humberware vessel	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1064	Stoneware	1	3	1	BS	Hollow ware	Mottled brown salt glaze ext; grey lead glaze int	C19th ?	Odd stoneware; resembles German stoneware but lead glazed internally	
1064	Surrey Whiteware type	1	1	1	Rim	Cup/bowl	Dark green glaze int & ext	LC15th – C16th	Fine white fabric	
1067	Cistercian/Blackware type	1	15	1	Footed base	Cup/tyg	Patchy brown glaze int & ext	MC15th – C17th	An orange sandy fabric w/ common fine quartz; possibly underfired Cistercian ware; cf cxt 1074	
1067	Humberware type	1	3	1	BS	Hollow ware	Thin patchy brown glaze ext	C14th – C15th		
1068	Buff Sandy ware	1	19	1	BS	Hollow ware	Thin clear glaze ext w/ fine dark mottling	Late Medieval	Hard buff sandy fabric w/ common round quartz w/ red platey grit up to 0.5mm	
1068	Coal Measures Whiteware	1	2	1	BS	Hollow ware	Mottled brown glaze ext	LC13th – C14th	Contains quartz & black grit; cf South Yorkshire CM wares	
1068	Humberware	2	26	2	BS	Hollow ware	Patchy mottled green glaze ext	C14th – EC16th	Late Humberware; contact scar ext	
1068	Late Humberware type	1	5	1	Handle	Jug?	Small spots of dark glaze	C14th – C16th	Small D-shaped handle w/ common fine quartz <0.4mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1068	Late Humberware type	1	1	1	BS	Hollow ware	U/Dec	C14th – C16th	Small chip; fabric as handle	
1068	Midlands Purple ware	1	4	1	BS	Hollow ware	Mottled green-brown glaze int & ext	MC15th – C17th	Hard, dense, semi-vitrified fabric w/ common fine quartz	
1069	Humberware	1	22	1	Base	Hollow ware	Patchy mottled green-brown glaze ext	LC13th – C15th		
1069	Midlands Purple ware	1	8	1	BS	Hollow ware	Dark green-brown glaze int & ext	MC15th – C17th	Hard, dense, semi-vitrified fabric w/ abundant quartz <0.5mm	
1069	Midlands Purple ware	1	10	1	BS	Hollow ware	Traces of overfired glaze ext	MC15th – C17th	Hard, fine, dense semi-vitrified fabric w/ moderate quartz up to 0.5mm, occ larger	
1073	Buff Gritty ware	1	9	1	BS	Hollow ware	Thin, patchy pale green glaze ext	C12th – C13th	Buff body w/ a grey core; common quartz & sparse rock fags	
1073	Humberware	1	8	1	BS	Hollow ware	U/Dec	LC13th – C15th	Fine Humberware	
1073	Humberware	1	3	1	BS	Hollow ware	U/Dec	LC13th – C15th	Sandy Humberware; oxidised throughout	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1074	Cistercian/Blackware type	1	13	1	BS	Hollow ware	Clear brown glaze w/ dark mottling	MC15th – C17th	An orange sandy fabric w/ common fine quartz; possibly underfired Cistercian ware; cf cxt 1067	
1074	Coal Measures Whiteware	2	74	2	BS	Hollow ware	Patchy green glaze ext	LC13th – LC14th	Grey core w/ dull buff margins	
1074	Coal Measures Whiteware	1	16	1	Rim	Jug	Thin, patchy brown glaze ext & spots int	LC13th – LC14th	Plain rounded rim	
1074	Coal Measures Whiteware	1	2	1	BS	Hollow ware	U/Dec	C14th – C15th		
1074	Coal Measures Whiteware type	1	11	1	BS/handle stump	Jug/cistern	Brown glaze ext	LC13th – LC14th		
1074	Humberware	1	3	1	BS	Hollow ware	U/Dec	LC13th – C15th	Reduced w/ a thin red ext margin	
1074	Late Medieval Gritty ware	1	8	1	BS	Hollow ware	U/Dec	C14th – C15th	A hard buff to orange fabric w/ common quartz & sparse red grit up to 1mm	
1074	Late Medieval Gritty ware	1	10	1	BS	Hollow ware	Spots of clear glaze ext	C14th – C15th	Pale grey fabric w/ an orange ext margin; common quartz & red grit up to 1mm, mainly finer	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1074	Late Medieval Gritty ware	1	23	1	BS	Hollow ware	Yellow-brown mottled glaze ext; pitted & flaked	C14th – C15th	Pale buff fabric w/ common quartz grains	
1074	Late Medieval Gritty ware	1	2	1	BS	Hollow ware	Brown glaze int & ext	C14th – C15th	Yellow-buff fabric w/ quartz & round rock frags; Coal Measures ware?	
1074	Late Medieval Gritty ware	12	95	12	BS	Hollow ware	Patchy brown glaze ext; occ int	C14th – C15th	Hard, dense buff-orange fabric w/ common quartz & sparse red grit up to 0.5mm, occ 1mm	
1074	Midlands Purple type ware	1	20	1	BS	Hollow ware	Thick purple glaze int & ext	LC15th – C17th	Hard, dense semi-vitrified fabric w/ quartz up, to 0.5mm, occ larger	
1074	Surrey Whiteware type	2	43	1	Flat base	Hollow ware	Bright green glaze int & partially ext	LC15th – C16th	A fine white fabric; large diameter base; see also cxt 1075	
1075	Buff Gritty ware	1	9	1	BS	Hollow ware	Spots of very pale green glaze ext	LC12th – C13th	Pale grey core w/ buff int & ext margins; quartz w/ sparse red grit	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1075	Coal Measures Whiteware type	2	40	1	BS	Hollow ware	Mottled brown glaze ext	LC13th – C14th	Hard buff to pale grey fabric w/ abundant quartz up to 0.6mm w/ platey red grit	
1075	Coal Measures Whiteware type	1	34	1	BS	Hollow ware	Thin patchy green to brown mottled glaze ext	LC13th – C14th	Buff to pale grey fabric w/ abundant quartz & black grit up to 0.5mm	
1075	Humberware	1	2	1	BS	Hollow ware	Dark green glaze ext	LC13th – C15th		
1075	Humberware	1	5	1	BS	Hollow ware	Spots of dark glaze ext	LC13th – C15th		
1075	Humberware type	1	90	1	Strap handle	Jug	Patchy green glaze ext & on top of rim	LC13th – LC14th	Reduced fabric w/ a pale grey ext margin; common quartz up to 0.5mm, occ larger	
1075	Late Medieval Gritty ware	3	68	3	BS	Hollow ware	Patchy brown glaze ext	LC14th – C15th	Hard buff fabric w/ abundant quartz up to 0.5mm, occ up to 1mm	
1075	Midlands Purple type ware	1	12	1	BS	Hollow ware	Thick purple glaze ext & partially int	LC15th – C17th	Hard, dense purple fabric w/ common quartz up to 0.5mm	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1075	Midlands Purple type ware	1	11	1	BS	Hollow ware	Thick purple glaze ext; glaze fuming int	LC15th – C17th	Hard, dense reduced fabric w/ common quartz up to 1mm, sparse round rock frags 1mm+	
1075	Surrey Whiteware type	1	1	1	BS	Cup/bowl	Dark green glaze int; mottled green glaze ext	LC15th – C16th	Fine white fabric; probably part of the joining sherds 1064&1068	
1075	Surrey Whiteware type	1	4	1	Flat base	Hollow ware	Bright green glaze int & partially ext	LC15th – C16th	A fine white fabric; large diameter base; see also cxt 1074	
1076	Coal Measures Whiteware type	1	17	1	BS	Hollow ware	Thin red slip ext	LC13th – C14th	Buff int to pale orange ext; abundant sub-round quartz & sparse red grit up to 0.5mm, occ larger	
1076	Humberware	1	148	1	Base	Jug/jar	U/Dec	LC13th – C15th	Slightly unusual footed base; stacking scar on underside of base	
1076	Humberware	1	46	1	BS	Jug	Green glaze ext; small ring-stamps ext	LC13th – C15th	Reduced throughout; fine fabric	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1076	Humberware	1	35	1	Rim	Urinal?	Thin yellow-green glaze ext	LC13th – C15th	Small beaded rim	
1076	Humberware	1	4	1	BS	Hollow ware	U/Dec	LC13th – C15th	Odd sherd	
1076	Humberware type	1	16	1	BS	Dr Jug?	Groove ext	C14th – C15th		
1076	Late Humberware	1	25	1	Rod handle	Jug	Patchy green-brown glaze ext	C15th – EC16th	Orange sandy fabric	
1076	Late Medieval Gritty ware	5	252	2	BS	Hollow ware	Thin, patchy green to brown glaze ext; rilled ext	C14th – C15th	Grey core w/ buff int & ext margins; common quartz up to 1mm	
1076	Midlands Purple type ware	1	2	1	BS	Hollow ware	Thick purple glaze ext	LC15th – C17th		
1079	Humberware	2	90	1	Base	Jug/jar	Patchy green glaze on sagging base; pinched feet	LC13th – C15th		
1079	Humberware	1	15	1	BS	Drinking jug	U/Dec	C14th – C15th		
1079	Humberware	1	1	1	BS	Hollow ware	U/Dec	C14th – C15th		
1079	Humberware	1	24	1	BS/handle	Drinking jug	U/Dec	C14th – C15th	Rod handle	
1079	Humberware	2	13	2	BS	Hollow ware	Streak of glaze on one sherd	LC13th – C15th	Reduced int surface	
1080	Humberware	1	7	1	BS	Hollow ware	Spots of glaze ext	LC13th – C15th	Dark grey w/ oxidised ext margin	
1080	Humberware	1	4	1	BS	Hollow ware	Mottled green glaze ext	LC13th – C15th		
1080	Humberware	1	3	1	BS	Hollow ware	Thin, yellow-green glaze ext	LC13th – C15th	Unusual glaze	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1084	Midlands Purple type ware	1	7	1	BS	Hollow ware	Thick purple glaze ext	LC15th – C17th	Hard, dense grey fabric w/ quartz & round rock frags up to 1mm, occ larger	
1086	Humberware	1	8	1	BS	Hollow ware	U/Dec	LC13th – C15th		
1096	Humberware	3	25	3	BS	Hollow ware	Green glaze ext	LC13th – C15th		
1096	Humberware	3	13	3	BS	Hollow ware	U/Dec	LC13th – C15th		
1096	Humberware	1	7	1	Rim	Jug?	U/Dec	LC13th – C15th	Rounded collared rim	
1096	Yorkshire Gritty ware type	1	4	1	BS	Hollow ware	U/Dec	LC11th – C13th	Thicker than typical early YG ware	
1098	Beverley type ware	1	7	1	BS	Hollow ware	Thin mottled green glaze ext; app & imp strip ext	C13th – EC14th	Sandy orange fabric	
1098	Humberware	5	89	1	BS	Jug?	Green glaze & combed wavy lines ext	LC13th – C15th	Fine fabric, reduced w/ dull orange int margin	
1098	Humberware	1	92	1	BS & rod handle	Jug	Green glaze ext; deep grooves on upper surface of handle	LC13th – C15th	Double handle thumbing (lower attachment)	
1098	Humberware	1	10	1	BS	Hollow ware	Green glaze ext	LC13th – C15th	Fine body	

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes	SFN
1099	Humberware	1	24	1	Rim	Jar	Small spots of glaze ext & on inside of rim	C14th – C15th	Distinctive wedge-shaped rim	
1064&1068	Surrey Whiteware type	2	3	1	BS	Cup/bowl	Dark green glaze int; mottled green glaze ext	LC15th – C16th	Fine white fabric	15
U/S	Beverley type ware	1	15	1	BS	Hollow ware	Patchy clear (?splashed) glaze ext	LC12th – C13th		
U/S	Humberware	1	19	1	BS	Hollow ware	Thin patchy greenish glaze ext	LC13th – C15th		

Appendix B: Animal bone catalogue

Table 2: Summary of identifiable mammal remains

Context	*Equus*	*Bos*	*Bos/ Cervus*	*Cervus elpahus*	*cf. Cervus elaphus*	*Dama dama*	*cf. Dama dama*	*Cervidae*	*Sus*	Ovis/ Capra	Canidae	*Felis catus*	*Lepus europeus*	*Oryctolagus cuniculus*	Leporidae
1001		3							1						
1009		17		1					7	17		2		4	
1036		1													
1038		3							7	3					
1040															
1043				1											
1044															
1045		1													
1046		1								2					
1047		1													
1048									1						
1050		8			1		1			2	1	1			1
1051		3								1					
1052		6								1					
1055		3								1					
1056										1					
1058		13								1		1			
1059		5								9			2		
1062															
1063		7				1			1	4					
1064		8						1	1	15					

Context	*Equus*	*Bos*	*Bos/ Cervus*	*Cervus elpahus*	*cf. Cervus elaphus*	*Dama dama*	*cf. Dama dama*	*Cervidae*	*Sus*	Ovis/ Capra	Canidae	*Felis catus*	*Lepus europeus*	*Oryctolagus cuniculus*	Leporidae
1067		1	1							2					
1068	1	7		1			1	5	3	11					
1069		2													
1073						1				2					
1074		5					4		2	7				1	
1075		1								3					
1076		5						1	5	2					
1079															
1084										3					
1091															
1096		1								2					
1099										1					
1070															
1080															
1086															
1090															
1097															
1098															
Total	**1**	**102**	**1**	**3**	**1**	**2**	**6**	**7**	**28**	**90**	**1**	**4**	**2**	**5**	**1**

Table 3: Summary of unidentifiable mammal remains

	Ungulate			Mammal				
Context	Large	Small	Unsized	Large	Medium /large	Medium	Small/ medium	Small
1001		1		3				
1009	2	14	1	86	71	84		1
1036		1		2		6		
1038		3		5	2	3		
1040				2	1			
1043				2				
1044		1		1				
1045		1		1		2		
1046				1		4		
1047				2	1			
1048							1	
1050	12	5		48	4	30		7
1051				5	3	1		
1052		4		15	4	2		
1055	1			31	1	40		1
1056				1		7		
1058		1		11		17		2
1059	6	2		36	6	6		2
1062				4				1
1063	6	3	2	73	3	25		
1064	4	5		72	14	63		1
1067		1		5	7	6		
1068	3	7	1	108	10	55		2
1069				5		1		
1073		2		11		14	1	
1074	2	5		54		38		
1075	1	1		24		8		
1076	1	3		19	1	26		
1079				2		8		
1084				1		1		
1091				1				
1096				5		5		
1099		1		4	1	4		
1070				1				
1080	1			1		2		
1086		1				1		
1090					1			
1097				1		1		
1098				13				
Total	**39**	**62**	**4**	**656**	**130**	**460**	**2**	**17**

Table 4: Summary of bird remains

Context	*Cygnus olor*	*Cygnus* sp.	*Cygnus* sp./ *A. a. domesticus*	*Anser anser domesticus*	*Grus grus*	*Ardea cinerea*	*Gallus gallus domesticus*	cf. *Phasianus colchicus*	Galliformes	Anatidae	*Lagopus lagopus scotica*	*Scolopax rusticola*	*Vanellus vanellus*	cf. *Fulica atra*	Large	Medium /large	Medium	Small
1009				1			2			2	1	1		1			1	
1036							1											
1039																1		
1046				1														
1050		1					4		2							5		
1051							1											
1055							3										4	
1056																		2
1058																4		
1059			1				4										9	
1063				1			1		4									
1064							2		1								4	2
1067									4									
1068				3			3		2			1				1		
1069								1										
1073				3												1		
1074				1	2	1	3		1				1		1			
1075						2	1											

Context	*Cygnus olor*	*Cygnus* sp.	*Cygnus* sp./ *A. a. domesticus*	*Anser anser domesticus*	*Grus grus*	*Ardea cinerea*	*Gallus gallus domesticus*	cf. *Phasianus colchicus*	Galliformes	Anatidae	*Lagopus lagopus scotica*	*Scolopax rusticola*	*Vanellus vanellus*	cf. *Fulica atra*	Large	Medium /large	Medium	Small
1076							3		1									
1079				1		1	2											
1082							1											
1091							1											
1096	1								3									
1099		1		1														
Total	1	2	1	12	2	4	32	1	18	2	1	2	1	1	1	12	18	4

Table 5: Summary of fish and amphibian remains

	Fishes			Fish	Amphibians
Context	*Gadus morhua*	Gadiformes	Cyprinidae	Unidentified	Anura
1009	1			1	
1043	1				
1047				1	
1050		2		3	5
1055	2	2		4	
1059				2	
1063	3	1			
1064	2			5	
1068				1	
1074	3			1	
1076			3		
1084				1	
Total	**12**	**5**	**3**	**19**	**5**

Table 6: Summary of marine and terrestrial molluscs

	Marine				Terrestrial		
	Ostrea edulis	*Buccinum undatum*	*Cerastoderma edule*	*Mytilus* sp.	*Cornu aspersum*	*Cepaea* sp.	**Total**
Context	Edible oyster	Common whelk	Edible cockle	Mussel			
1001			1				**1**
1009	39	1	8	15	11		**74**
1038					1	1	**2**
1042	3						**3**
1047	1				2		**3**
1050	5						**5**
1051	2						**2**
1055	7				5		**12**
1056	1						**1**
1058	4						**4**
1061	1						**1**
1063	2						**2**
1064	5						**5**
1068	14						**14**
1073	8			2			**10**
1075	3						**3**
1076	5			5			**10**
1080	1						**1**
Total	**93**	**2**	**9**	**15**	**19**	**1**	**139**

Table 7: Summary of vertebrate remains with butchery evidence, count

Context	Taxa	Chop	Cut	Saw	Total
1001	Cattle	2			2
	Pig			1	1
	Large mammal			1	1
1009	Cattle	7	1	1	9
	Sheep/goat		4		4
	Small ungulate	3			3
	Large mammal	6	3	2	11
	Medium mammal		1		1
1036	Cattle	1			1
	Chicken		1		1
1038	Cattle	2			2
	Pig	1	1		2
	Small ungulate	1			1
	Large mammal		1		1
	Medium/large mammal		1		1
	Medium mammal	1			1
1040	Large mammal	2			2
1043	Red deer	1			1
1044	Large mammal	1			1
1046	Sheep/goat	1			1
1050	Cattle	1			1
	Sheep/goat		1		1
	Small ungulate	2			2
	Large mammal	9	2		11
	Fowl order	1			1
	Cod order		1		1
1052	Medium/large mammal	1	1		2
1055	Large mammal	8			8
1058	Cattle	2	1		3
	Medium mammal		2		2
1059	Cattle	1			1
	Small ungulate		1		1
	Large mammal	3			3
	Swan/goose		1		1
1063	Cattle	3			3
	Sheep/goat	1			1
	Large ungulate	1			1
	Small ungulate	2			2
	Large mammal	13			13
	Medium mammal	3			3

Context	Taxa	Chop	Cut	Saw	Total
1064	Cattle	2			2
	Pig		1		1
	Sheep/goat	1			1
	Large ungulate	1			1
	Large mammal	7			7
	Medium mammal	2			2
1067	Cattle	1			1
	Sheep/goat		1		1
	Large mammal	1			1
1068	Red deer	1			1
	Red/fallow deer	1			1
	Sheep/goat	1			1
	Large mammal	11	3		14
	Medium mammal		2		2
1070	Large mammal	1			1
1073	Fallow deer	1			1
	Sheep/goat	1	1		2
	Small ungulate	2			2
	Large mammal	3			3
	Medium mammal	2			2
1074	Cattle	3	1	1	5
	Pig	1			1
	Sheep/goat		1		1
	Large ungulate	1			1
	Small ungulate	1			1
	Large mammal	17	3		20
	Medium mammal	2	1		3
1075	Cattle	1			1
	Large mammal	4			4
	Small ungulate	1			1
1076	Cattle	1			1
	Large mammal	3			3
	Fowl order		1		1
1079	Large mammal	2			2
	Medium mammal	3	1		4
1084	Large mammal	1			1
1096	Mute swan		1		1
	Large mammal	3			3
1098	Large mammal	3			3
1099	Large mammal	2			2
	Total	**168**	**40**	**6**	**214**

Appendix C: CBM catalogue

Table 8: CBM catalogue

Context	SF No	Fabric Code	Function	Confidence	No Sh	Wt	Corner	Length	Width	Thickness	Mortaring	Soot	Reuse	Comments
1001		TZ01	Other		1	31	0	0	0	0				ornamental garden furniture or roof furniture
1001		TZ11.8	B/T		1	5	0	0	0	0				
1001		TZ12.3	Brick		1	84	0	0	0	0				
1001		TZ12.3	Brick		1	78	0	0	0	0				
1001		TZ12.3	Brick		4	56	0	0	0	0				
1001		TZ21	B/T		1	7	0	0	0	0				
1009		T14	Imbrex		3	81	0	0	0	0				
1009		TZ12.3	B/T		1	13	0	0	0	0				
1009		TZ12.3	Brick		1	44	0	0	0	0		1		chimney lining? Vitrified surface
1009		TZ12.3	Brick		2	69	0	0	0	0				
1009		TZ12.3	Floor Tile		1	194	0	0	0	25	1		1	worn
1009		TZ12.3	Other		1	53	0	0	0	0				tapered edge
1009		TZ12.3	Tile		1	80	0	0	0	17				
1009		TZ12.3	Tile		1	176	0	0	0	18				
1009		TZ120	Floor Tile		1	341	4		104	15				brown floor tile with frooved under originally square tile
1009		TZ120	Floor Tile		1	267	8	104	65	18				brown floor tile with frooved under
1009		TZ120	Floor Tile		1	266	8	106	60	18				brown floor tile with frooved under

Context	SF No	Fabric Code	Function	Confidence	No Sh	Wt	Corner	Length	Width	Thickness	Mortaring	Soot	Reuse	Comments
1009		TZ120	Floor Tile		5	385	0	0	0	15				brown floor tile with frooved under
1009		TZ120	floor tile		1	103	0	0	0	15	1			brown floor tile with frooved under
1009		TZ13	B/T		2	30	0	0	0	0				
1009		TZ13	Tile		1	127	0	0	0	17				
1009		TZ21	Brick		1	296	0	0	0	0		1		
1009		TZ21	Pan Tile		1	265	0	0	0	0				
1009		TZ21	Tile		1	45	0	0	0	21				
1009		TZ22	Brick		1	408	1	0	0	50	1			irregular rounded arrises
1009		TZ31	Brick		1	810	4	0	100	65	1			wiped surfaces rounded reg arrises
1009		TZ31	Brick		2	129	0	0	0	0	1			
1009		TZ31	Brick		4	43	0	0	0	0				
1009		TZ31	Brick		4	183	0	0	0	0				
1009		TZ31	Brick		1	60	0	0	0	0				
1009		TZ31	Brick		7	209	0	0	0	0				
1009		TZ31	Tile		4	221	0	0	0	15				
1009		TZ41.8	Brick		18	1082	3	0	0	0				smoothed surfaces modern
1034		TZ13	Brick		1	6	0	0	0	0				
1036		TZ01	Tile		1	30	0	0	0	14				
1038		TZ12.3	Ridge Tile	3	1	109	0	0	0	16	1			
1038		TZ13	Tile		1	77	0	0	0	0	1		1	
1039		TZ13	Brick		3	29	0	0	0	0				modern - smoothed surface
1042		TZ13	Pan Tile		2	726	0	0	0	0				

Context	SF No	Fabric Code	Function	Confidence	No Sh	Wt	Corner	Length	Width	Thickness	Mortaring	Soot	Reuse	Comments
1045		TZ13	Tile		1	96	0	0	0	17	1	of		
1048		TZ13	Peg Tile		1	184	1	0	0	17				sunken margins was TZ32
1050		TZ13	Tile		2	249	0	0	0	0	1			
1051		TZ13	Tile		5	275	0	0	0	16				
1051		TZ13	Tile		3	526	1	0	0	16	1			
1051		TZ13	Tile		1	38	0	0	0	16	1			small fingertip impression
1052		TZ13	Peg Tile		1	161	1	0	0	16	1			
1052		TZ13	Tile		5	471	0	0	0	16	1			
1052		TZ13	Tile		2	622	1	0	0	16	1			sunken margins shallow
1055		TZ13	Tile		1	53	0	0	0	15	12			
1055		TZ13	Tile		1	173	0	0	0	17				
1055		TZ22	Brick		1	183	2	0	0	48	1			irregular rounded arrises sande base
1058		TZ13	Tile		1	34	0	0	0	16	1			
1058		TZ22	Brick		1	23	0	0	0	0				
1063		TZ13	Tile		1	9	0	0	0	0				was tz22
1063		TZ13	Tile		1	102	0	0	0	22				was tz22
1063		TZ22	Brick		1	145	0	0	0	50				wipe mark upper
1068		TZ22	Brick		1	2102	4	0	140	45				len 250+ finger smoothing on to p irregular rounded arrrises straw marks on base
1068		TZ22	Brick		1	1098	4	0	138	45				
1068		TZ22	Brick		1	803	4	0	136	40				
1068		TZ22	Brick		4	167	0	0	0	0				

Context	SF No	Fabric Code	Function	Confidence	No Sh	Wt	Corner	Length	Width	Thickness	Mortaring	Soot	Reuse	Comments
1073		TZ22	Brick		1	749	2	0	120	45				
1073		TZ22	Brick		1	653	2	0	0	43		1		
1074		TZ22	B/T		2	12	0	0	0	0				
1074		TZ22	Brick		1	504	0	0	0	50				wiped upper
1076	36	TZ12.3	Peg Tile		1	665	2	0	200	17				square peg hole drilled from top 1 central location 11x12mm
1098		TZ13	Tile		1	67	0	0	0	15				

Table 9: CBM by phase

Phase	No	Wt	Cnr
C14/15	2	732	2
C15/16	15	6344	16
C17	7	715	2
C18	23	3285	4
C19+	73	6045	28
N	***120***	***17121***	***52***

Table 10: Fabric proportion

Fabric Code	No%	Wt%	CNR%
T14	2.5%	0.5%	
TZ01	0.8%	0.2%	
TZ12.3	8.3%	8.2%	3.8%
TZ120	7.5%	8.0%	38.5%
TZ13	30.8%	23.7%	7.7%
TZ21	2.5%	3.5%	
TZ22	13.3%	40.0%	36.5%
TZ31	19.2%	9.7%	7.7%
TZ41.8	15.0%	6.3%	5.8%
N	***120***	***17121***	***52***

Table 11: Fabric occurrence by phase

Fabric/Phase	C14/15	C15/16	C17	C18	C19+
T14					3
TZ01					2
TZ11.8					1
TZ12.3	1			1	14
TZ120					9
TZ13	1	4	3	22	7
TZ21					4
TZ22		2	13		1
TZ31					23
TZ41.8					18
N	***2***	***6***	***16***	***23***	***82***

Table 12: CBM form quantities

Function	No%	Wt%	Cnr%
B/T	4.2%	0.3%	0.0%
Brick	49.2%	57.2%	50.0%
Floor Tile	8.3%	9.1%	38.5%
Imbrex	2.5%	0.5%	0.0%
Other	0.8%	0.3%	0.0%
Pan Tile	2.5%	5.8%	0.0%
Peg Tile	2.5%	5.9%	7.7%
Ridge Tile	0.8%	0.6%	0.0%
Tile	29.2%	20.3%	3.8%
N	***120***	***17121***	***52***

Appendix D: Environmental catalogue

Table 13: Palaeoenvironmental sample assessment

Context number	1098	1097	1080	1079	1076	1075	1085	1074	1063
Feature number	101	101	101	101	101	101	101	101	101
Sample number	58	57	41	54	39	38	44	37	12
Feature type	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit
Archaeological period	Late 14th C	Late 14th C	Late 14th C	Late 14th C	Late 14th C	Late 14th C	15th – 16th C	15th – 16th C	15th – 16th C
Sample volume (litres)	50	40	40	40	40	40	40	40	40
Volume of intrusive root material (ml)	10	0.4	2	10	3	3	5	20	40
Flot volume excluding intrusive root material (ml)	10	30	3	10	17	50	30	20	60
Other plant material									
Ficus carica (fig)				1 (uc)					

Context number	1098	1097	1080	1079	1076	1075	1085	1074	1063
Urtica dioica (nettle)								1 (uc)	
Vicia/Lathyrus spp. (vetch/vetchling)	1								
Epilobium sp. (willowherb)						1 (uc)	1 (uc)		
Malva sp. (mallow)						1 (uc)			
Brassica nigra (black mustard)			1 (uc)	41 (uc)	62 (uc)	13 (uc)		6 (uc)	3 (uc)
Polygonum aviculare agg. (knotgrass)								1 (uc)	
Hyoscyamus niger (henbane)			1 (uc)	1 (uc)		1 (uc)	2 (uc)	2 (uc)	
Solanum nigrum (black nightshade)					1 (uc)				

Context number	1098	1097	1080	1079	1076	1075	1085	1074	1063
Carduus/Cirsium spp. (thistles)					1 (uc)		1 (uc)		
Taraxacum sp. (dandelion)					1 (uc)		1 (uc)	2 (uc)	
Sambucus nigra (elder)			1 (uc)	12 (uc)	12 (uc)	20 (uc)	30 (uc)	42 (uc)	20 (uc)
Carex spp. (sedges)			1 (uc)			3 (uc)		3 (uc)	
<2mm Poaceae (small seeded grasses)							1		
Wood charcoal									
>4mm^3 round wood charcoal fragments						1			
> 4mm^3 wood charcoal fragments	19	15	2	11		12	4	3	16

Context number	1098	1097	1080	1079	1076	1075	1085	1074	1063
2-4mm^3 wood charcoal fragments	58	18	8	17	2	23	12	15	52
<2mm^3 charcoal fragments	++++	+++	++	++	+	+++	+++	++++	+++++
Charcoal notes	Ring porous (cf. *Quercus* sp.)	Ring porous with narrow rings, some diffuse porous (cf. *Quercus* sp.)	Ring porous with narrow rings (cf. *Quercus* sp.)	Ring porous with narrow rings some diffuse porous (cf. *Quercus* sp.)	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous
Other remains									
Coal / vitrified charcoal	++++	+++		+		++		-	++++
Cinders				-	++	+++	+++	++++	+++++
Finds from heavy residues (>4mm)									
Round wood charcoal							1		
Charcoal	9	23	3	4	4	3	5	12	8
Shell		-	-	-		-		-	-

Context number	1098	1097	1080	1079	1076	1075	1085	1074	1063
Bone	+	+	+	+	+	+	++	+++	+++
Fish bone		-		-		-	-	-	-
Ceramic	-	-		-	-	-	-	-	-
CBM	-	+	-	-	-	-	-	-	-
Worked stone				-					
Metal	-		-	-	-	-	-		
Coin					-				

Context number	1068	1067	1064	1059	1058	1050	1056	1055
Feature number	101	101	101	101	101	101	101	101
Sample number	22	14	13	6	5	4	3	2
Feature type	Layer within pit	Clay deposit in pit	Layer within pit	Layer within pit	Layer within pit	Layer within pit	Lens of coal within pit	Layer within pit
Archaeological period	17th C	17th C	17th C	17th C	17th C	17th C	17th C	17th C
Sample volume (litres)	40	40	40	40	50	40	10	40
Volume of intrusive root material (ml)	10	20	40	40	20	50	0	5

Context number	1068	1067	1064	1059	1058	1050	1056	1055
Flot volume excluding intrusive root material (ml)	100	60	100	60	80	150	40	30
Cereal grain								
Hordeum sp. (barley) hulled							1	
Avena sp. (Oat)					1			
Legumes								
Large seeded legume								1
Other plant material								
Rubus fruticosus agg. (bramble)		1 (uc)						
Hyoscyamus niger (henbane)	1 (uc)	3 (uc)		1 (uc)				
Sambucus nigra (elder)	15 (uc)	39 (uc)	23 (uc)	50 (uc)	7 (uc)	22 (uc)		
Carex sp. (sedges)		1 (uc)						

Context number	1068	1067	1064	1059	1058	1050	1056	1055
<2mm Poaceae (small seeded grasses)				2				
Parenchyma fragment (undifferentiated plant storage tissue)						1		
Wood charcoal								
>4mm^3 round wood charcoal fragments					1			
>4mm^3 wood charcoal fragments	22	6	3	9	17	7	3	6
2-4mm^3 wood charcoal fragments	70	40	45	48	50	45	16	23
<2mm^3 charcoal fragments	+++++	+++++	+++++	+++++	+++++	+++++	++++	++++

Context number	1068	1067	1064	1059	1058	1050	1056	1055
Charcoal notes	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous and diffuse porous	Ring porous (some cf. *Quercus* sp.) some diffuse porous	Mostly cf. *Quercus* sp.	Mostly cf. *Quercus* sp.
Other paleo-environmental remains								
Molluscs					++	++		+++
Other remains								
Coal / vitrified charcoal	++++	+++++	++++	+++	+++++	++++	+++++	++
Cinders	+++++	++++	+++++	+++++	+++++	+++++		+++
Finds from heavy residues (>4mm)								
Round wood charcoal	2	2						
Charcoal	56	20					4	15
Shell	-	-	-				-	+
Bone	+++	++	++	++	++	+	+	++
Fish bone	-		-	-	-			-
Ceramic		-	-	-	-		-	-
CBM	+	+	+	+	+		+	++
Glass				-				-
Metal			-	-		-	-	-

Appendix E: Metal catalogue

Table 14: Copper alloy catalogue

ID	Context	SF	Quantity	Weight(g)	Object type	Condition	Description	Period	Date from	Date to	Comment
38	1001	26	1	2	Sheet	Good	Rectangular copper-alloy sheet with decoration on one face. There are five parallel lines places along one face forming three decorated registers. The two outer registers are decorated with chased zig-zag decoration and the middle register has a motiff th	Uncertain			
40	1001	27	1	2	Jetton	Good	Pierced token.	Medieval	1475	1525	
42	1001	28	1	1	Coin?	Poor	Possible copper alloy coin or token with possible pellets, but very heavily worn and abraded edges.	Uncertain			A coin specialist may be able to identify this further
43	1001	25	1	6	Buckle	Good	Fragment from a rectangular shoe buckle with drilled frame for separate spindle. The surface is decorated with a facetted motif.	Post medieval	1720	1790	

ID	Context	SF	Quantity	Weight(g)	Object type	Condition	Description	Period	Date from	Date to	Comment
1	1009		1		Heel reinforcement	Good	Fragment of shoe reinforcement plate made from a curved bar of rectangular cross-section copper-alloy forming a horse shoe shape. The bar has two intact perforations and a partial third where the bar broke.	Post medieval	1800	1900	Date is possible only.
5	1009		1	3	Thimble	Fair	Flattened copper-alloy thimble. It is conical with a flat crown. The dimples are regularly placed and machine made. Base obscured by corrosion and breakage.	Post medieval	1800	1900	
10	1009		3	4	Pendant /tag	Poor	Three fragments from a copper-alloy sheet backed pendant or tag with a white enamel fill on the front. The existing shape is plano-convex with a perforation at the apex, but the lower half is broken, so the original shape is unclear. The white enamel has	Post medieval			Unclear what this was from. Might be from jewellery? Or a tag from something?
11	1009		1		Drill bit?	Poor	Short section of twisted copper-alloy, possibly from a drill bit but in poor condition and corrodded. Diameter is approximately equal to 0.25 inches.	Post medieval?			

ID	Context	SF	Quantity	Weight(g)	Object type	Condition	Description	Period	Date from	Date to	Comment
12	1009		1	4	Sheet	Good	Fragment of copper-alloy sheet.	Uncertain			
6	1042		1	3	Sheet	Fair	Fragment of copper-alloy sheet with original square corner.	Uncertain			
37	1047	6	1	1	Nail	Good	Copper-alloy nail or tack head missing most of shank.	Uncertain			
41	1064	10	1	4	Coin	Fair	Coin	Post medieval	1506	1712	More work needed to identify the coin more accurately. Photo for report?
113	1079	32	1	873	Pivot?	Good	Rectangular copper-alloy block with half cylinder cut-away. Inner diameter of cylinder cut-away approximately 50mm.	Uncertain			Needs further research for identification.
112	1098	35	1	1	Strip	Good	Strip of copper alloy with two cut ends.	Uncertain			No diagnostic features

Table 15: Iron catalogue

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
61	1001		Nail?	Poor	Possible nail shaft.	Uncertain			

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
3	1009		Vessel	Fair	Two fragments of iron from a vessel or container, such as a paint can or preserved food can.	Uncertain			Weight is for both fragments.
4	1009		Uncertain	Fair	Unidentifiable iron fragment.	Uncertain			
49	1009	19	Shot	Good	Large calibre shot in good condition, but with some stones stuck to iron corrosion adhering to the surface. Casting lines visible.	Post medieval			Bag marked as 'grape shot'
63	1009		Nail	Fair	Complete nail, highly corroded, square cross-section.	Uncertain			From bag marked 12 pcs, 119g
64	1009		Nail	Fair	Two nail heads, missing shaft, highly corroded.	Uncertain			From bag marked 12 pcs, 119g
65	1009		Nail	Fair	Two nail shafts, missing head, highly corroded.	Uncertain			From bag marked 12 pcs, 119g
66	1009		Uncertain	Fair	Seven fragments of unidentifiable iron.	Uncertain			From bag marked 12 pcs, 119g
67	1009		Nail	Fair	Possibly complete nail, highly corroded and distorting shape.	Uncertain			
68	1009		Nail?	Fair	Three possible nail shafts, highly corroded, missing heads.	Uncertain			
69	1009		Uncertain	Fair	Two fragments of iron.	Uncertain			
70	1009		Uncertain	Fair	Unidentifiable object.	Uncertain			In bag marked 'ferrous object, Qty 1, 39g'. X-ray may aid in identification, but it could be a nail.

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
71	1009		Nail	Fair	Complete nail, laminating, square cross-section, assumed to be a circular head.	Uncertain			In bag with green writing
72	1009		Nail?	Poor	Likely to be a complete nail, but twisted and heavily corroded.	Uncertain			In bag with green writing
73	1009		Nail	Poor	Two incomplete nails with heads, heavily corroded.	Uncertain			In bag with green writing
74	1009		Nail?	Fair	Probable nail shaft, missing head, heavily corroded.	Uncertain			In bag with green writing
75	1009		Sheet	Poor	Two fragments of iron sheet, heavily corroded, not further identifiable.	Uncertain			In bag with green writing. Active corrosion in this bag.
76	1009		Nail	Poor	Possibly complete iron nail, with head, but very corroded. No length give, because it's not clear if it is complete.	Uncertain			Bag marked 'ferrous 4 pcs'.
77	1009		Uncertain	Poor	Three fragments of iron of uncertain identification. Two are possible bars, but very heavily corroded.	Uncertain			Bag marked 'ferrous 4 pcs'. X-ray may aid identification.
78	1009		Uncertain	Poor	Unidentifiable iron fragment.	Uncertain			Bag marked 'ferrous objects, 155gms, 12 pcs'
79	1009		Nail?	Poor	Three nail shafts, missing heads.	Uncertain			Bag marked 'ferrous objects, 155gms, 12 pcs'
80	1009		Nail	Good	Complete nail with head, wire nail (circular cross-section).	Post medieval			Bag marked 'ferrous objects, 155gms, 12 pcs'
81	1009		Nail	Good	Complete nail with head, wire nail (circular cross-section). Clenched.	Post medieval			Bag marked 'ferrous objects, 155gms, 12 pcs'

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
82	1009		Nail	Poor	Nail fragment with head, heavily corroded, indeterminate cross-section	Uncertain			Bag marked 'ferrous objects, 155gms, 12 pcs'
83	1009		Uncertain	Poor	Roughly rectangular fragment of iron with organic material in the heavy corrosion. One of the faces has copper-alloy material sheet adhering.	Uncertain			Bag marked 'poss ferrous, 11g'. Active corrosion. X-ray may help in identification, but probably too small of a fragment to be identified. Would not be a priority.
84	1009		Handle	Good	Iron handle covered in white paint. The end terminals have three broken attachment nails or screws.	Modern			
85	1009		Vessel	Poor	Fragments from a modern can with white material on the interior.	Modern			
87	1009		Bolt/nail	Fair	Large highly corroded bolt or large nail with square head with several stones adhering to the surface	Modern?			
88	1009		Nail	Fair	Very long rectangular nail with rectangular head. Highly corroded.	Modern?			
89	1034		Uncertain	Poor	Fragment of unidentifiable iron.	Uncertain			
90	1034		Nail	Fair	Possible complete nail with rectangular cross-section. Large corrosion lumps adhering to surface.	Uncertain			Active corrosion
93	1051		Uncertain	Poor	Highly corroded unidentifiable iron object with possible adhering plaster	Uncertain			

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
91	1056		Uncertain	Poor	Unidentifiable iron object with possible nails or rivet shanks attached.	Uncertain			
94	1059		Nail	Poor	Highly corroded iron nail.	Uncertain			In bag marked 'ferrous objects, 3xpieces, 31g'
95	1059		Nail?	Poor	Possible nail shaft	Uncertain			In bag marked 'ferrous objects, 3xpieces, 31g'
96	1059		Uncertain	Fair	Unidentifiable object made from iron, copper-alloy and possibly bone.	Uncertain			In bag marked 'ferrous objects, 3xpieces, 31g'
97	1059		Uncertain	Poor	Highly corroded unidentifiable object.	Uncertain			
114	1063		Nail?	Poor	Three possible nails, heavily corroded and with stones adhering to the corrosion. Organic material has been preserved in the corrosion product.	Uncertain			Bag marked 'x3'
60	1064	8	Uncertain	Poor	At least one iron object in 11 fragments. One of the fragments has the shaft of a rivet protruding from the back of the surface. All fragments are covered with active orange corrosion. There is evidence of organic material in the corrosion.	Post medieval			The bag was full of condensation when initially opened. I allowed the bag to breath a little more. There was no silica gel in the bag.
100	1064		Uncertain	Poor	Highly corroded unidentifiable object with adhering mineralised wood.	Uncertain			Bag marked 'ferrous objects, 4pcs, 173g'
101	1064		Uncertain	Poor	Two highly corroded unidentifiable iron fragments.	Uncertain			Bag marked 'ferrous objects, 4pcs, 173g'
102	1064		Uncertain	Poor	Iron strip fragment with two nails or rivet shafts protruding from back.	Uncertain			Bag marked 'ferrous objects, 4pcs, 173g'

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
105	1064		Nail?	Poor	Possible nail fragment highly corroded.	Uncertain			Bag marked 'ferrous object, 7g, 1 x piece'
106	1064		Uncertain	Poor	Two possibly adjoining fragments of unidentifiable highly corroded iron.	Uncertain			Bag marked 'ferrous obj, qty 2, 137g'. X-ray may aid identification.
92	1068		Uncertain	Poor	Highly corroded unidentifiable iron object.	Uncertain			Active corrosion.
98	1068		Uncertain	Poor	Highly corroded unidentifiable object. Possible organic material in corrosion.	Uncertain			Bag marked 'ferrous objects, 2xpcs, 62g'. Active corrosion.
103	1068		Nail?	Poor	Possible nail fragment.	Uncertain			Bag marked 'ferrous, 4g, 1pc'
104	1068		Nail?	Poor	Possible nail fragment highly corroded.	Uncertain			Bag marked 'ferrous, 1piece, 16g'
99	1069		Uncertain	Poor	Highly corroded unidentifiable object	Uncertain			Bag marked 'ferrous, 1pcs, 127g'
115	1073		Nail?		Possible nail fragment, no head. Heavy corrosion and possible organic material preserved.	Uncertain			Bag marked 'x8'
116	1073		Implement? / Strip?		Strip of thin iron, heavily corroded, possibly from a tool or other implement.	Uncertain			Bag marked 'x8'
117	1073		Uncertain		Fragment of iron, heavily corroded and laminating.	Uncertain			Bag marked 'x8'
118	1073		Uncertain		Three fragments of heavily corroded iron with copper-alloy adhering. Organic material preserved in the corrosion product.	Uncertain			Bag marked 'x8'

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
107	1074		Uncertain	Poor	Large fragment of iron bar, highly corroded and laminating.	Uncertain			
119	1074		Uncertain	Poor	Two fragments of iron	Uncertain			Bag marked 'x2'
120	1074		Uncertain	Poor	One fragment of iron.	Uncertain			Bag marked 'x1'
121	1075		Uncertain	Poor	Two fragments of iron. One is organic material (wood) replaced by iron corrosion product.	Uncertain			Bag marked 'x4' although the bag only contained 3 items.
123	1075		Nail?	Poor	Two possible nails, heavily corroded.	Uncertain			Bag marked 'x4' but contained 5 items
124	1075		Uncertain	Poor	Three fragments of corroded iron.	Uncertain			Bag marked 'x4' but contained 5 items
125	1076		Nail	Poor	Nail, with head. Possibly clenched but obscured by corrosion. Clench length is approximate.	Uncertain			Bag marked 'x10'
126	1076		Nail	Poor	Four possible nails all obscured by heavy corrosion and none with heads.	Uncertain			Bag marked 'x10'
127	1076		Uncertain	Poor	Six fragments of iron, one very large. Unable to identify. Sime with mineralised deposits.	Uncertain			Bag marked 'x10'
128	1079		Uncertain	Poor	Two fragments of iron. One is possibly a terminal to something.	Uncertain			Bag marked 'x2'
133	1079	33	Uncertain	Good	Two large refitting fragments of iron. Unidentifiable.	Uncertain			X-ray may aid identification.
129	1080		Uncertain	Poor	Five fragments of unidentifiable iron	Uncertain			Bag marked 'x5'
130	1080		Uncertain	Poor	Two fragments of unidentifiable iron.	Uncertain			Bag marked 'x2'

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
135	1094	31	Chain?	Good	Very corroded large unidentifiable object. Possibly a length of chain.	Uncertain			"Has active corrossion.
131	1097		Uncertain	Poor	One fragment of unidentifiable iron with possible mineralised deposits.				
134	1097	34	Axe?	Good	Very corroded, but possible axe head? Or architectural iron bar? One of the ends has less corrossion and may be the edge of the axe.				
132	1098		Uncertain	Poor	One fragment of unidentifiable iron with possible mineralised deposits.				

Table 16: Lead catalogue

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
2	1009		Came	Fair	Small fragment of window came, H-profile	Uncertain			
14	1009		Musket ball	Good	Unusued hemispherical musket ball with sprue on flat face.	Post medieval			
15	1009		Musket ball?	Good	Irregularly formed lead with hemispherical dome.	Post medieval			
16	1009		Uncertain	Good	Vesica shaped piece of lead with no defining features.	Post medieval			
17	1009		Came	Good		Post medieval			

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
18	1009		Uncertain	Good	L-shaped lead strip with one rectangular perforation.	Post medieval			
19	1009		Uncertain	Good	Coil of thin lead bar made from 3.5 coils. The majority of the strip is rectangular in cross-section, except for the end, which has been twisted.	Uncertain			
20	1009		Came	Good	Twisted strip of lead with a slight vesica shaped cross-section.	Post medieval			
21	1009		Came	Good	U-shaped strip of lead with a slight vesica shaped cross-section.	Post medieval			
22	1009		Came	Good	U-shaped strip of lead with a slight vesica shaped cross-section.	Post medieval			
23	1009		Came	Good	Twisted strip of lead with a roughly rectangular cross-section with exaggerated edges.	Post medieval			
24	1009		Uncertain	Good	Flattened fragment of lead with no defining features.	Uncertain			
25	1009		Sheet	Good	Fragment of lead sheet with one cut straight edge.	Uncertain			
26	1009		Sheet	Good	Twisted fragment of lead sheet with two knife marks along one edge.	Uncertain			
27	1009		Came?	Good	Two possible fragments of lead window came that were subsequently heated and slightly distorted.	Uncertain			
28	1009		Came?	Good	Two possible fragments of lead window came that were subsequently heated and slightly distorted.	Uncertain			

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
29	1009		Came	Good	Fragment of lead window came.	Uncertain			
30	1009		Came	Good	Fragment of distorted lead window came.	Uncertain			
31	1009		Fragment	Good	Five fragments of non-descript lead.	Uncertain			
32	1009		Fragment	Good	One large fragment of roughly shaped lead sheet with possible tool marks.	Uncertain			
50	1009	20	Musket ball	Good	Musket ball in good condition.	Post medieval			
52	1009	7	Musket ball	Good	Musket ball, slightly squashed.	Post medieval			
56	1009	24	Musket ball	Good	Musket ball that has been fired.	Post medieval			
57	1009	23	Musket ball	Good	Musket ball in good condition.	Post medieval			Bag with three musket balls.
58	1009	23	Musket ball	Good	Musket ball in good condition. Flat area where the casting sprue was trimmed.	Post medieval			Bag with three musket balls.
59	1009	23	Musket ball	Good	Musket ball that had been fired.	Post medieval			Bag with three musket balls.
53	1041	5	Musket ball	Good	Musket ball in good condition. Flat surface where the casting sprue was neatly trimmed.	Post medieval			
51	1043	1	Musket ball	Good	Musket ball in good condition with flat surface where the casting sprue was neatly trimmed.	Post medieval			

ID	Context	SF	Object type	Condition	Description	Period	Date from	Date to	Comment
54	1044	2	Musket ball	Good	Musket ball with visible mould seam and all over 'crazed' pattern.	Post medieval			Further research could be done to see if the pattern on the surface relates to any known firearm activity.
33	1048		Musket ball?	Good	Fragment of convex lead with striations on the outer face.	Post medieval			
34	1048		Musket ball?	Good	Fragment of plano-convex lead with striations on the outer face.	Post medieval			
48	1048	4	Musket ball	Good	Musket ball in good condition. Casting lines and sprue marks visible	Post medieval			
55	1048	3	Musket ball	Good	Musket ball in good condition.	Post medieval			
35	1056		Sheet	Good	Thin lead sheet with two sides folded over to face.	Uncertain			

Appendix F: Glass catalogue

Table 17: Glass catalogue

Context	Quantity	Weight (g)	Notes
1001	40	273	1 marble, one with writing, several with layer on them
1001	1	2	Bead
1001	1	9	Bottle stopper
1001	3	15	Clear and brown
1001	1	2	Bottle rim
1009	1	37	Glass bottle - blue
1009	10	44	Clear
1009	1	11	Blue - with writing
1009	6	57	Glazed
1009	6	10	Green
1009	6	2	Fragments - coloured
1009	3	5	
1009	3	11	
1009	3	11	
1009	1	16	
1009	8	22	
1009	1	1	
1009	22	719	
1009	9	8	1-piece amber, 1 piece darker green
1009	5	73	Clear
1009	4	19	
1009	1	13	Possible enamel coating
1009	4	46	Slag
1009	3	2	
1034	3	303	1 bottle with writing "…. sole licensees"
1064	1	3	SF9. Small fragment of window glass. The surfaces are highly weathered, iridescent, and flaking. The original colour is unclear and may have been colourless or a semi-translucent white.

Appendix G: Worked stone catalogue

Table 18: Worked stone catalogue

ID	Context	SF	Quantity	Weight (g)	Object type	Condition	Description	Period	Date from	Date to	Comment
	1001		3	34	Bottle stopper	Good		Post medieval			
	1009		1	4	Bottle stopper	Good		Post medieval			
	1009		2	10	Bottle stopper	Good		Post medieval			
	1009		2	10	Bottle stopper	Good		Post medieval			
	1009		1	114	Fragment	Good	Architectural fragment with mortar	Post medieval			
7	1009		1	234	Disc	Good	Stone disc with one smooth face and one rough face. Roughly chipped around circumference.	Uncertain			
	1052		4	1176	Roof tile	Good	Peghole, with signs of burning	Post-medieval			
44	1064	17	1	43	Disc	Good	Cylindrical sandstone disc with faint 'X' scratched onto one face.	Uncertain			
45	1064	18	1	60	Disc	Good	Sandstone disc with one smooth face and one rough face.	Uncertain			

ID	Context	SF	Quantity	Weight (g)	Object type	Condition	Description	Period	Date from	Date to	Comment
46	1064	18	1	55	Disc	Good	Sandstone disc with one smooth face and one rough face. Possibly burnt.	Uncertain			
47	1064	18	1	86	Disc	Good	Sandstone disc with one smooth face and one rough face. Possibly burnt.	Uncertain			
	1068		2	577	Fragment	Good	Architectural?	Uncertain			
8	1069	22	1	186	Disc	Good	Roughly made ?limestone disc. One face has a series of parallel scratch marks on the surface.	Uncertain			In bag with another stone disc with same SF no. Recommendation: a geologist should confirm the material ID
9	1069	22	1	141	Disc	Good	Roughly shaped sandstone disc.	Uncertain			
109	1074	29	1	325	Cannon ball	Excellent	Carved sandstone sphere, usually identified as cannon ball. Surface has two possible impact craters.	late medieval-early post-medieval			
110	1074	30	1	285	Cannon ball	Fair	Carved sandstone sphere, missing about a third of the sphere. Usually identified as cannon ball. Possible tool marks on surface.	late medieval-early post-medieval			

ID	Context	SF	Quantity	Weight (g)	Object type	Condition	Description	Period	Date from	Date to	Comment
122	1075		1		Natural	Poor	Natural stone with iron staining.				Bag marked 'x4' although the bag only contained 3 items.
111	1084		1	71	Disc	Good	Stone disc.				

Appendix H: Clay tobacco pipe catalogue

Table 19: Clay tobacco pipe catalogue

Context	Quantity	Weight (g)	Notes
1001	13	21	Stem fragments 19th/20th century
1001	1	1	Bowl fragment. Rilled line exterior.
1009	1	2	Stem fragments 18th century
1009	33	73	Bowls and stems fragments 19th century
1009	1	4	Stem fragment 19th century with slip
1009	30	63	Stem fragments 18th /19th century
1009	3	4	Bowl fragments 18th /19th century
1009	82	305	69 stem fragments and 13 bowl fragments some with decoration 18th/19th century
1009	3	20	2 bowl fragments and a stem fragment 18th /19th century
1009	11	27	Stems and a bowl fragments 18th /19th century
1009	9	20	Stems and possible bowl fragments 19th century
1009	7	37	Stems and 2 bowls fragments one with floral decoration 19th century
1037	1	9	Bowl fragment decorated 19th century
1038	1	6	Bowl fragment 18th/19th century
1038	7	24	Stems fragments 18th /19th century
1039	4	7	Stems fragments 19th century
1040	1	4	Stem fragment 18th/19th century?
1042	1	5	Bowl fragment 19th century
1042	1	4	Stem fragment 18th /19th century
1051	1	3	Stem fragment 18th century
1056	4	7	Stems fragments one with slip 18th/19th century
Total	220	579	

Appendix I: Charcoal catalogue

Table 20: Charcoal catalogue

Context	Quantity	Weight (g)	Notes
1009	3	42	Charcoal
1038	6	5	Charcoal
1047	2	2	Charcoal
1050	1	5	Charcoal
1056	2	69	Black/burnt
1058	3	26	Charcoal
1062	6	10	Charcoal
1064	16	8	Charcoal
1064	1	6	Charcoal
Total	**40**	**173**	

Appendix J: Production waste catalogue

Table 21: Production waste catalogue

Context	Quantity	Weight (g)	Notes
1001	4	115	Slag
1001	4	5	Clinker. Associated with burnt potsherds
1009	3	24	Clinker
1009	6	5	Clinker
1009	1	4	Glass slag
1009	10	88	1 x ferrous, clinker
1009	88	1128	
1009	37	854	
1009	1	18	Clinker
1009	2	59	1 possible mortar, 1 ferrous slag
1009	3	36	Embedded ceramic in two pieces
1009	2	7	Slag
1009	5	7	Glass slag
1009	9	55	Pottery encrusted with slag
1009	1	59	Pottery encrusted with slag
1009	2	2	Glass slag
1009	1	13	Glass slag
1009	28	169	
1009	21	3775	
1009	2	27	Burnt waste
1034	1	0	Slag
1034	8	45	
Total	**239**	**6495**	

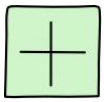
Appendix K: Social impact methodology

Table 22: Social impact methodology

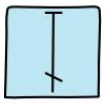
	Activities	Outputs	Outcomes	Standards of Evidence
	the processes and tasks undertaken by the organisation	*a quantifiable unit of 'product' or 'service' measurable once completed*	*observable change for heritage, individuals or communities*	*data collection and confidence rating demonstrating the positive difference made by an intervention*
For archaeology and heritage	1. Stakeholder consultation with national and local heritage bodies, societies and local authorities 2. Archaeological investigation of nationally significant site 3. Accessible archaeological archive	✓ Scheduled Monument Consent ✓ Archaeological Project Design ✓ Archaeological Assessment Report with recommendations ✓ Archaeological Archive	Through our work, heritage will be: ➲ identified, interpreted and better explained ➲ better managed and in an improved condition	Level 3 – Analytical report, synthesising specialist reports with previous regional, national and international work to determine significance, importance and potential of the site.
For people	4. Half-day familiy friendly DigCamp sessions 5. CIfA endorsed half-day Finds Lab workshops 6. CIfA endorsed half-day excavation skills training 7. Heritage skills workshops	✓ Excavation and finds room skills training for 81 YAC members ✓ 163 DigCamp participants (children under 12 and their parents) ✓ Excavation and finds room skills training for 132 participants ✓ 20 Participants in photogrammetry and creative skills workshops	By taking part in our work: ➲ a wider range of people will be involved in archaeology and heritage ➲ people will have greater wellbeing ➲ people will have learnt about the archaeology and heritage of Pontefract Castle, leading to changes in ideas and actions ➲ people will have more skills in excavation and finds processing, giving greater confidence to get involved	Level 3 – Field school training programme quality assured and endorsed by CIfA. Level 2 – Project evaluation report including survey data for users of DigLab and project participants to determine changes for individuals as a consequence of taking part, and highlighting scalability, implementation and ability to meet national needs.

	Activities	Outputs	Outcomes	Standards of Evidence
For communities and society	8. Education programme for primary schools 9. Daily site tours during archaeological investigation 10. Published web content and native social posts 11. Traditional broadcast and print media	✓ 372 school pupils from six local schools benefit from tailored education content ✓ Daily site tours reach new and more diverse audiences (438 people) ✓ Visitor numbers of Pontefract Castle increase by 138% to 14,810 ✓ 500,000 combined impression across Facebook & Twitter ✓ 7,000 unique microsite views ✓ Coverage by BBC Look North, BBC Radio Leeds, Wakefield Express, Pontefract and Castleford Express	As a consequence of our work: ➲ more and a wider range of people will be involved in heritage ➲ people have learned about archaeology and heritage, leading to change in ideas and actions ➲ the local area will be a better place to live, work or visit	Level 2 – Collection of evaluation survey data for participating schools, visitors to the archaeological site, temporary exhibitions and Trimontium Museum, to quantify audience demographics and determine any changes which took place as a consequence of the visit

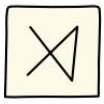
Appendix L: Mason's marks



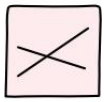
1. Right-angled cross-form; six from east wall and one each from north, south and west walls of drawbridge pit.



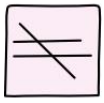
2. I-form, mitred at one end and angled differencing line; two from east wall of drawbridge pit.



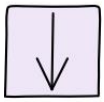
3. Incomplete hourglass form; three from west wall and one from east wall of drawbridge pit.



4. Acute X-form; two each from east and west walls of drawbridge pit.



5. Slashed equals sign; four from west wall and one from east wall of drawbridge pit.



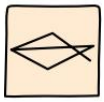
6. Simple three-line arrow form; four from east and two from west walls of drawbridge pit.

7. Three-armed triskele, conjoined at centre to form a small equilateral triangle; two from west and one from east walls of drawbridge pit.

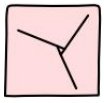
8. W-form with line extending from apex; two each from east and west walls of drawbridge pit.

9. Diamond cross form; three each from east and west walls of drawbridge pit, and two from external gatehouse wall.

10. Mitred W-form with baseline; one each from north and east walls of drawbridge pit.

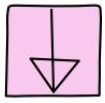


11. Flat diamond bisected by horizontal; three from west wall of drawbridge pit



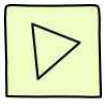
12. Three-armed triskele, conjoined at centre to form a small equilateral triangle; one each from north and west walls of drawbridge pit.

13. Angled banner form with three parallel lines; one from north wall of drawbridge pit



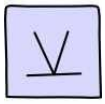
14. Small equilateral triangle bisected by extended line to give arrow form; one from south wall of drawbridge pit

15. Z/N-form; one from external gatehouse wall

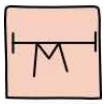


16. Equilateral triangle; four from east wall of drawbridge pit.

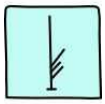
17. P-form with incomplete counter; one from east wall of drawbridge pit.



18. V-form with baseline; one from east wall of drawbridge pit.

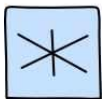


19. W-form with mitred baseline; one from west wall of drawbridge pit.



20. Angled banner-form with three parallel lines at mitred end; two from west wall and one east wall of drawbridge pit.

21. Reverse Y-form; one each from west and south walls of drawbridge pit.



22. Three-line asterisk; one from south wall of drawbridge pit.