

An Archaeological Watching Brief at Leicester Castle: Business School Brick Store, Leicester, Leicestershire NGR: SK 5824 0414

**Tim Higgins** 



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Site Name: Leicester Castle: Business School Brick Store, Leicester, Leicestershire

**Grid Ref:** SK 5823 0414

**Author:** Tim Higgins

**Client:** De Montfort University

**Scheduled Monument Consent:** S00130289

**ULAS Job No:** 19/065

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	Position in the Planning	Requirement				
	Process					
	Planning Ref.					
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PROJECT	Site radicss/i osteode	the south side of the Great Hall of Leicester Castle				
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Location	Site Coordinates	SK 58240 04140				
	Height OD	52m-55m aOD				
	Organisation	ULAS				
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	Project Design	ULAS				
	Originator					
	Project Manager	Gavin Speed				
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# An Archaeological Watching Brief at Leicester Castle Business School Brick Store, Leicester NGR: SK 58672 06058

### **Tim Higgins**

### **Summary**

This report details the results of an archaeological watching brief that was carried out by University of Leicester Archaeological Services (ULAS) at Leicester Castle Business School Store, Leicester (SK 5823 0414). The work was carried out in November 2021 on behalf of De Montfort University during groundworks in accordance with the Ancient Monuments and Archaeological Areas Act 1979. De Montfort University has appointed structural engineers to carry out a survey to investigate the cause of crackingto the external walls of the brick Ancillary Block which abuts the John of Gaunt's Yard on the south side of the Great Hall of Leicester Castle. The fieldwork was undertaken to ensure that the works will not have impact on the buried archaeological remains.

The site is located within Leicester Castle and the Magazine Gateway Scheduled Monument (List Entry Number 1012147) located within Leicester city centre on the eastern bank of the canalised River Soar. It includes the earthwork and buried remains of a motte and bailey castle, the 12th century northern extension to the bailey, and the northern part of the fortified enclosure known as The Newarke, including the Turret Gateway and the Magazine Gateway.

The work is required to provide information to inform a remedial strategy and include intrusive investigation work, including the excavation of a trial hole outside the south-east corner of the brick Ancillary Block, and two internal core hole surveys were bored into the floor of the block.

The outside trial pit was hand excavated to a depth 0.90m and encountered flat sandstone thought to be a potential remnants of a foundation, which was sealed under garden soils. Two core holes were excavated within the block encountered substantial resistance or obstruction at depth 1.45m sealed by potential brick floor. The reason for the obstruction below the brick floor was not determined but the approximate depth coincided with the level of the top of the John of Gaunt's cellar structure located directly to the west. The possible brick floor was sealed under demolition layers and is either associated with an earlier structure or is a buried earlier floor level within the existing ancillary block.

The site archive will be deposited with Leicestershire City Council Museums Service with the accession number A3.2022.

#### Introduction

In accordance with the Ancient Monuments and Archaeological Areas Act 1979, this document forms the report for a programme of archaeological mitigation carried out by University of Leicester Archaeological Services (ULAS) at De Montfort University Castle Business School Store, Leicester Castle and the Magazine Gateway Scheduled Monument (List Entry Number 1012147). The work was carried out by University of Leicester Archaeological Services (ULAS) on behalf of De Montfort University. The site lies located De Montfort University Castle Business School Store, Leicester Castle, Leicester, (SK 5823 0414; Fig. 1).

The Secretary of State for the Department of Digital, Culture Media and Sport has granted Scheduled Monument Consent for the work with the proviso that the applicant engages an archaeological contractor to supervise and monitor the works in accordance with a *Written Scheme of Investigation* which has been approved by Historic England (Scheduled Monument Consent: S00130289). The fieldwork specified within the WSI was intended to ensure that the works will not have an impact on buried archaeological remains as well as to ensure no unnecessary collateral damage to the monument occurs.

De Montfort University has appointed structural engineers (SMP Consulting Engineers) to carry out a survey to investigate the cause of cracking to the external walls of the brick Ancillary Block which abuts the John of Gaunt's Yard on the south side of the Great Hall of Leicester Castle. The work is required to provide information to inform a remedial strategy and will include intrusive investigation work, including the excavation of a trial hole (outside southeast corner to 1m depth), a core hole, and provision of a temporary tower scaffold.

# Site Location, Geology and Topography

The site lies close to Leicester city centre, on the east bank of the River Soar and close to the inner ring road and St Nicholas Circle, which connects the ring road to the western approach roads crossing the river at that point (Figs 1-3). To the east is the central retail area and to the south is the campus of the De Montfort University. The Ordnance Survey Geological Survey of Great Britain indicates that the underlying geology of the site is likely to be mudstone of the Branscombe Formation. No superficial geology is recorded.

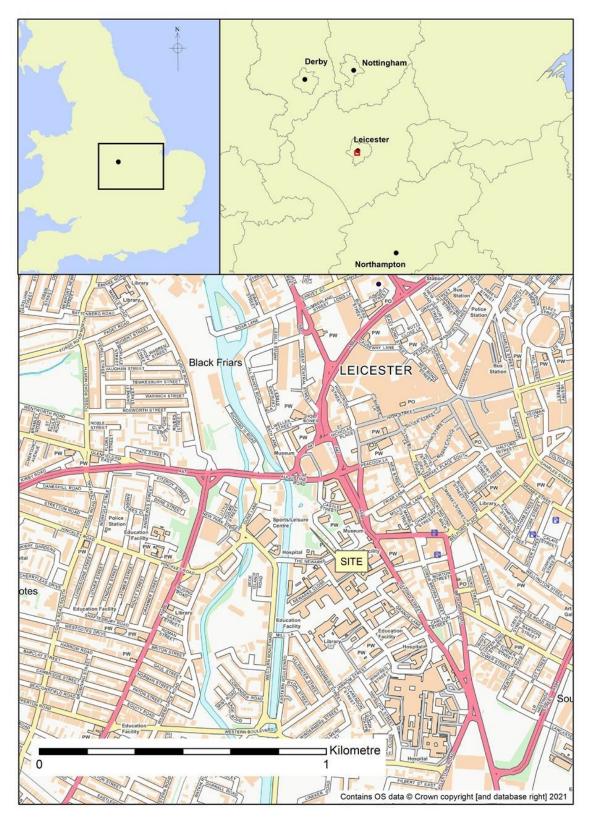


Figure 1: General site location

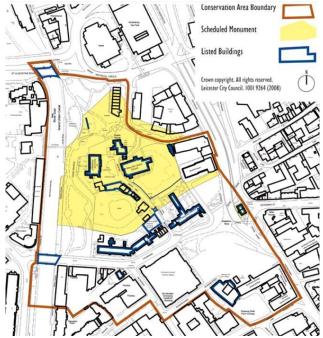
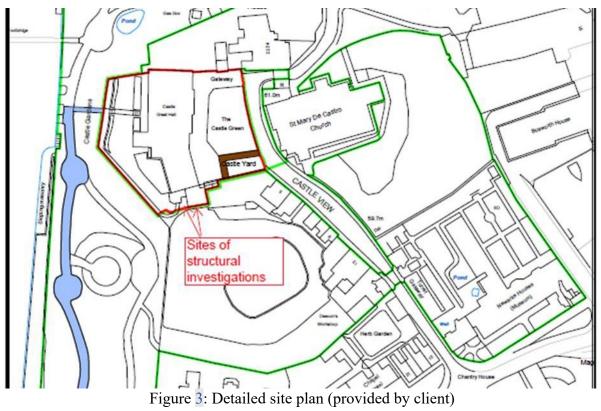


Figure 2: Detailed site plan (provided by client)



## Historical and Archaeological Background

The monument is located within Leicester city centre on the eastern bank of the canalised River Soar. It includes the earthwork and buried remains of a motte and bailey castle, the 12th century northern extension to the bailey, and the northern part of the fortified enclosure known as The Newarke, including the Turret Gateway and the Magazine Gateway. It is in two separate areas of protection.

Excavations in the vicinity of the castle have recovered evidence to indicate that Leicester Castle was originally inside the south west corner of the Roman town defences. The motte and bailey castle was constructed in c.1068 by order of William the Conqueror. It was handed over to Hugh de Grentmesnil and became headquarters of a feudal 'honor' of Leicester, a term applied to a group of estates which came under single administration. The motte is located in the south western part of the site. It is approximately 50m in diameter and 9m high. During the 19th century the motte was lowered and levelled and its summit used as a bowling green. The bailey lies to the north and north east of the motte and is approximately 6ha in area. Although no longervisible on the ground surface, the bailey ditch survives as a buried feature for much of its length and excavations have indicated that it was up to 12m wide and 5m deep. In the eastern part of the site, the ditch and the adjacent part of the bailey are intensively occupied by modern buildings. These structures are considered to have so modified the site in this area that this part is not included in the scheduling.

There is no surface evidence for the buildings which were located within the bailey during the earliest period in the castle's history but remains are thought to survive as buried features. St Mary de Castro Church, which stands within the bailey area, has 12th century masonry within its fabric. It is likely that the church originally served as the castle chapel and, when re-built in the mid-12th century, parts of the early Normanchapel were retained within its fabric. The church is Listed Grade I and is excluded from the scheduling. The churchyard, which is no longer used for burials, will retain important buried remains of the early buildings within the bailey and also underlying Roman archaeological deposits; it is therefore included in the scheduling.

In 1101 Ivo, son of Hugh de Grentmesnil, was involved in a rebellion against Henry I and Leicester Castle was subsequently severely damaged. During the mid-12th century the castle was rebuilt in stone by Robert de Beaumont, who was later to become the first Earl of Leicester. A masonry wall was added to the earthen defences and a barbican added to the northern side of the bailey. Two sections of the defensive wall remain visible, one 50m to the west of the motte and the second to the north; the northern section is Listed Grade II and both are included in the scheduling. A number of buildings were also constructed within the bailey during this period of reconstruction, including a great hall and domestic accommodation. The hall was built by Robert le Bossu, second Earl of Leicester, and is thought to be one of the earliest surviving timber aisled halls in Europe. Its outer walls were constructed of sandstone and the interior was originally divided into a nave and two aisles by enormous timber arcades. It has been in continuous use for over 800 years and has been much altered, particularly during its conversion to court rooms in the 19th century. The hall is Listed Grade I and is not included in the scheduling. Medieval service rooms were constructed between the hall and the motte, and one of these, known as John of Gaunt's cellar (added between 1400 and 1410) remains visible. It lies beneath the ground surface with entrances at either end and has a tunnel vaulted roof. The cellar, which is Listed Grade I, is included in the scheduling.

A large enclosure, known as The Newarke (New Work), was added to the south side of the motte and bailey castle by Henry, Duke of Lancaster in 1330. This enclosure was approximately rectangular in plan, extending some 200m southwards from the castle bailey, and some 300m westwards from the original line of Highcross Street, as far west as the river. This large enclosure was bounded by a major stone wall along its eastern and southern sides and supported by at least two towers along its south side.

The Newarke enclosure was not densely packed with buildings during the medieval period. The central part was occupied by the major collegiate Church of St Mary of the Annunciation, of which a small reconstructed arch within the basement of the De Montfort University is the only known surviving fragment. This masonry is ex situ and is not included in the scheduling. In addition to the collegiate buildings, The Newarke also contained the important Hospital of the Holy Trinity. This institution was sited along the northern side of the enclosure and part of its hall and chapel, along with the remains of other buildings incorporated into later houses, still survive. The most impressive of these domestic buildings is the Chantry House, which is thought to date from about 1511 (sited to the north east of Trinity Hospital). Several of the hospital buildings, including the hall and chapel, are still in use as almshouses. The area of The Newarke to the south and south east of the Turret Gateway with modern buildings, such as those of De Montfort University, factories and new road systems, is not included in the scheduling.

The enclosure was entered from the east via a large gatehouse situated at the bottom of Newarke Street, near the centre of the eastern wall. It is known as the magazine by virtue of its use as such during the Civil War. This gatehouse, Listed Grade I, survives intact and is a three-storeyed structure, built of sandstone ashlar, with the gate passage off set to the north side. The vaulted gate hall was entered through one of two arches, one for pedestrians, and a larger one for wheeled vehicles. There is, however, only a single archway towards the enclosure itself. A porter's lodge occupied the ground floor chamber south of the gate passage and above were two pairs of fine chambers reached from the porter's lodge by means of a spiral staircase near the centre of the west wall. The chamber on the second floor has a passage in the thickness of the south wall which originally gave access to The Newarke curtain wall. Small garderobe chambers survive in the thickness of the wall in the south west corner on both upper floors.

The gatehouse is now completely isolated from its surroundings, being sited on a traffic island within the modern road layout. It is surrounded on all sides by pedestrian underpasses and all traces of associated structures have been removed. It has been quite heavily restored externally but internally it retains many of its medieval features and has not been extensively modernised. It is now used as a museum and storeroom and is included within the scheduling in a second protected area, detached from the remainder of the castle.

A third major period of construction at Leicester Castle occurred during the 15th century when the entire castle was remodelled. In 1399, Henry, Duke of Lancaster and Earl of Leicester became King of England and Leicester Castle assumed new importance. The line of the enclosure walls was altered, the new enclosure around the castle hall being much smaller in area than that preceding it. New gates were constructed to the north and south. The new northern gateway was constructed to the north west of St Mary de Castro Church, indicating that the northern bailey ditch had been abandoned by that time. This new northern gateway was burnt down in 1444-5 and was subsequently rebuilt as a timber-framed gatehouse. It is an inhabited Listed Building Grade II\*, and is excluded from the scheduling, however the ground beneath it is included. The southern gateway, built in 1422-3, known as the 'turret gateway' (a

Grade II Listed Building, included in the scheduling) is situated 35m east of the motte. It was erected as the main gate from the castle to The Newarke. The gateway survives as a two storey stone building with an arched gate passage and a portcullis chamber above. A third storey was destroyed in an election riot in 1832. Two lengths of 15th century wall run from the gate towards St Mary de Castro Church, and along the south side of the churchyard. The latter stands to a height of approximately 5m and contains many put-log holes, used in the construction of the wall which were later used as musket holes during the Civil War when this part of the town came under severe attack. The wall along Castle View is Listed Grade II and both sections of wall are included in the scheduling. A length of wall dividing the motte and Trinity Hospital dates from this period and is also included in the scheduling.

A number of features within the two areas are excluded from the scheduling; these are the castle hall (Listed Grade I), St Mary de Castro Church, which remains in ecclesiastical use, the inhabited northern gatehouse (Listed Grade II\*), the houses and associated buildings of Nos.5-12 Castle View, Castle House and its cellar (Listed Grade II), Nos. 5, 7, 9, 11, 13, 15, 20, 22, 24 and 45 Castle Street, that part of the 20th century warehouse building to the north of Castle Street which falls within protected area, the Iron Gates which are Listed Grade II\* and the Leicester High Cross, Listed Grade II, the buildings to the rear of the Newarke Houses which lie in the protected area, all garden furniture, display boards, street lights, modern walling, litter bins, the surfaces of all paths and driveways; the ground beneath all these features, however, is included.

The brick store lies partially over the south-eastern wall and south-east turret of John of Gaunt's cellar, believed to be a 2-phase structure of the 12th century and 15th century. The planned intrusive works have the potential to reveal or damage underlying archaeological deposits associated with the medieval service room, Leicester Castle, or other (currently unknown) archaeological structures or features.

## Aims and Objectives

The main objectives of the archaeological work are:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range and significance of any surviving archaeological deposits.
- To establish the ecofactual and environmental potential of any archaeological deposits and features encountered.
- To provide sufficient information on the archaeological potential of the site to assess
  the impact of the proposed development on cultural heritage and to help formulate a
  mitigation strategy
- To record any archaeological deposits and produce an archive and report of any results.

## Research Objectives

The site has the potential to add to research objectives mainly from the Medieval, and post-medieval/modern periods, identified within The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda, Leicester Archaeology Monograph 13, (ed. Cooper 2006), and East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (ed. Knight et al 2012), and updated here: <a href="https://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/">https://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/</a>:

### Methodology

All work followed the procedures set out in the approved *Written Scheme of Investigation* (WSI) for the project (Speed 2021), in summary the methodology was as follows:

A suitably qualified archaeologist monitored and supervised the groundworks (as detailed in SMP method statement, SMP 2019). This included the test pit and boreholes. The spoil from all excavation work was checked for finds. All finds would be retained except unstratified animal bone. Where large quantities of unstratified building material such as brick or tile are encountered, a sample will be retained (if viable) and the remainder discarded. Any archaeological deposits located will be hand cleaned and planned as appropriate, but not excavated. All below-ground stratigraphy would be recorded as appropriate on ULAS context sheets, including a description of colour, texture and stratigraphic relationship.

All work was carried out in accordance with the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Watching Briefs (2014b, updated 2020) and adhered to their Code of Conduct (2014a revised 2021). Fieldwork was carried out by ULAS on the 3/11/2021. An accession number was used to identify all records and artefacts (A32022).

## Monitoring

Internal monitoring procedures were undertaken with the project manager, to ensure that project targets were met and professional standards maintained. Provision was made for external monitoring meetings with the Planning Authority and the Client, if required.

#### **Results**

The work that was required to provide information to inform a remedial strategy included intrusive investigation work. This took the form of a hand excavation of a trial hole outside the south-east corner ancillary block/brick store. Inside the ancillary block two core boreholes were excavated (Figure 3)

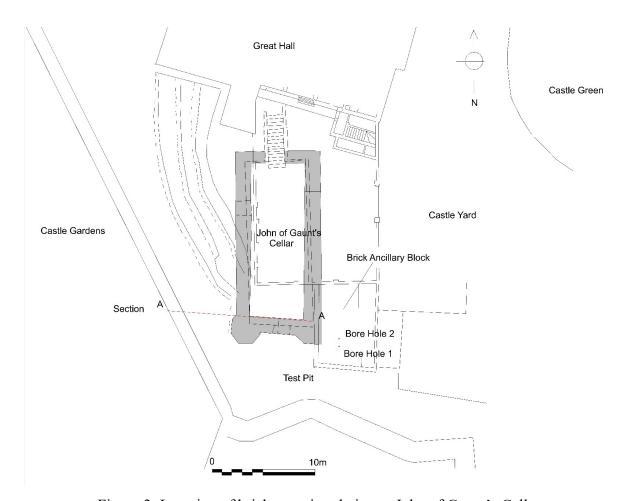


Figure 3: Location of brick store in relation to John of Gaunt's Cellar

### External Test Pit

A single test pit (Figures 4, 5 and 8) was excavated by hand located towards the south west corner of the ancillary block and was placed against the south wall of block structure. The test pit measured approximately c. 0.80m long and 0.40m wide and was excavated by hand to a depth of 0.90m. Within the test pit a turf layer was removed measuring 0.25m deep and comprised dark greyish brown silty clay loam. Underlying this, a dark greyish-brown silty clay garden soil layer mixed with frequent mortar flecks was found test pits and measured 0.65m deep. At the base of Test a depth of 0.90m at which point it hit a hard obstruction which was thought to be flat sand stone block (Figure 9). This was thought to be potential archaeological layer and could be a potential foundation. On top of sand stone a sloping brick foundation for ancillary block had been constructed and extended 0.50m outwards away from the wall. This might suggest that the brick wall foundations have possibly reused or are resting on an earlier structure. The full extent of the foundations and sandstone block are unknown due to the limitations of this excavation.



Figure 4: General view of external test pit

# **Internal Boreholes**

The original intention had been for single bore hole to be put down to a depth of approximately 6.00m with the provision to extend the depth of the borehole to 10.00m by dynamic probing (with sample recovery) if poor ground conditions were encountered.

However, refusal was achieved in the first borehole (BH1) at a depth of 1.45m and a second borehole (BH2) was therefore put down. The second borehole also encountered refusal at the same depth and the borehole element of the intrusive investigation was therefore terminated by the engineers.

Both boreholes were placed within the south west corner of the block and bore hole was located approximately 1.70m from the south wall and 2.00m from the west wall. The second bore hole was placed 2.50m from the south wall and 2.00m from the west wall.

The borehole cores were extracted and the samples were laid out in trays. Approximate measurements and descriptions of the deposits were taken from these samples (Figures 6 and 7)

In both boreholes a concrete surface was removed measuring 0.04mm deep. Below was a mixed concrete bed with an average thickness 0.10m. Underlying, was a dark greyish-brown ash and clinker deposit that measured 0.20m deep. This had sealed a slate and mortar layer measuring 0.10m deep. Underneath these deposits was a 0.35m thick layer of crushed brick rubble that in turn had sealed a mixed layer of sandstone rubble mixed mortar and slate fragments that measured 0.25m deep. Below was a layer of crushed brick or CBM rubble and brick dust which measured 0.30m deep. At a depth of 1.34m the bore drill hit a very hard obstruction that was believed to be a brick floor that comprised dense black reddish brown brick and mortar. In both holes the bore drill penetrated the possible brick floor to a depth 0.11m, but a substantial obstruction prevented further drilling. Both bore holes measured 0.15m in diameter and had total depth 1.45m deep. No finds were recovered from any of the core samples. All the CBM or brick visible within the trays was either fragments or crushed brick dust so no true dimensions or character could be determined.





Figure 5: View of internal bore holes 1 (top) and 2 (bottom)



Figure 6 Core from Borehole 1 (0 top of the core)



Figure 7 Core from Borehole 2 (0 top of the core)

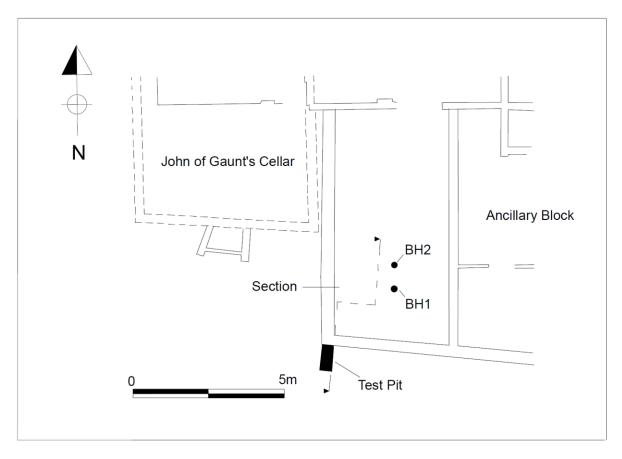


Figure 8: Location of the test pit and bore holes

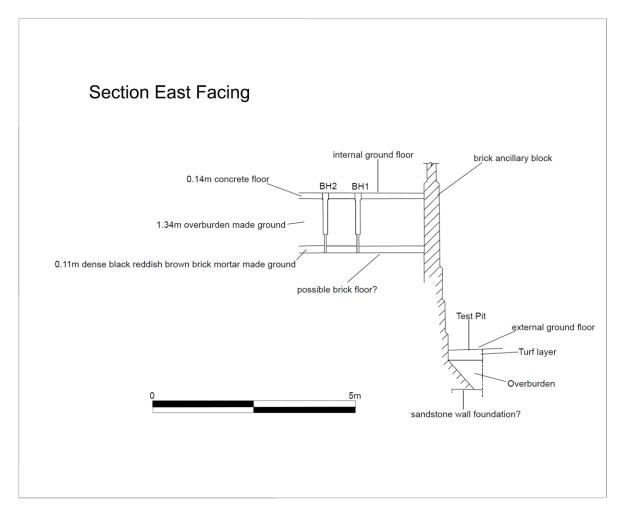


Figure 9: South-facing elevation of John of Gaunt's Cellar and Brick Ancillary Block

#### **Conclusions**

The external test pit located on the south west corner of the ancillary block was excavated to a maximum depth of 0.90m and as such probably only disturbed relatively modern overburden consisting of garden soils below present. However a flat potential sandstone block was reached at this depth and could be the continuation of the sandstone foundations seen underpinning the John of Gaunt's Cellar in the neighbouring block to the west. The ancillary block's brick foundations appear to resting on these potential earlier sandstone foundations. The internal bore holes excavated inside the ancillary block appear to suggest that the present floor is located 1.40m above an earlier floor level which sealed underlying layers of demolition rubble. The level of the potential earlier floor appears to coincide with the top of the vaulted roof of John of Gaunt's Cellar in the neighbouring block to the west. The substantial obstruction that was encountered below the earlier potential brick floor could perhaps indicate the presence of another potential structure relating to the castle. The potential brick floor was sealed under demolition layers and is either associated with an earlier structure or is a buried earlier floor level within the existing ancillary block. Any further geotechnical surveys within the ancillary block, may offer similar limited interpretations.

#### **Archive and Publication**

The archive for the project will be deposited with Leicester City Museums with accession number A3.2022 and consists of the following:

- 1 Unbound copy of this report
- 1 watching brief recording sheet
- 1 Photographic record
- 1 CD of digital photographs

A summary of this report will appear in due course in the Transactions the Leicestershire Archaeological and Historical Society. The University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS data entry has been completed detailing the results of the project and will be digitally accessible through The Archaeological Data Services (http://archaeologydataservice.ac.uk/).

### Acknowledgements

ULAS would like to thank the client De Montfort University, SMP Consulting Engineers, and GA Site Investigation, for the opportunity to observe the work. The watching brief was undertaken by Tim Higgins. The work was managed by Dr Gavin Speed.

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