

Nottingham Castle, Outer Bailey

NOTTINGHAM

We Dig The Castle! Training Excavation

Written Scheme of Investigation.

2018

TPA Project Code WDC4

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Nottingham Castle, Outer Bailey.

We Dig The Castle! Training Excavation

Written Scheme of Investigation (WSI)

1. BACKGROUND

Site Name: Nottingham Castle Outer Bailey, Nottingham.

NGR: SK 56985 39485

Scheduled Monument Number: 1006382.

Client: Nottingham City Council.

Brief: N/A.

Geology: Nottingham Castle Sandstone Formation with superficial Head deposits.

1.1. Context and opportunity

- 1.1.1. The historical site of Nottingham Castle currently consists of a walled area containing landscaped grounds and the "Ducal Palace", arguably the finest Palladian mansion of its type in the country, situated above a number of caves, on the site of the medieval castle.
- 1.1.2. The "Nottingham City Council Museums and Galleries Service Strategic Plan 2014–2018" establishes the context within which a community-based, research excavation of the Outer bailey would be situated (36):

The development of visitor infrastructure included within this Strategic Plan, especially the major project for Nottingham Castle, means that the City is ideally placed to achieve the same benefits as other towns and cities with a rich historical heritage. The benefits of such investment in the historic environment are identified in the English Heritage report The Impact of Historic Environment Regeneration.

The Castle redevelopment will also achieve wider social benefits in line with and the case studies included in the Social Impacts Heritage Led Regeneration Report published by the Architectural Heritage Fund and partners [Victoria Baths Manchester and Wilton's Music Hall, London]. These illustrate the benefits of an audited track record of supporting community involvement, engaging with hard to reach groups, building local pride and creating volunteering and job opportunities. These projects are both located in inner city locations and offer transferable learning opportunities for Nottingham and the Nottingham Castle project in particular.

- 1.1.3. In the context of the Nottingham City Council Museums and Galleries Service Strategic Plan, this project has been established as part of an initiative to better understand the Nottingham Castle Scheduled Monument and to enhance its role as a focus for Cultural Heritage within the City and the "Greater Nottingham" area.

1.2. Historical background of Nottingham Castle

- 1.2.1. Originally founded in 1068 on the orders of William the Conqueror, by the later Middle Ages Nottingham Castle was the most important royal castle outside of London. It was the scene of many historically important events including its recapture for the crown by Richard I following his return from the Third Crusade in 1194. Queen Isabella [the wife of Edward II] and her lover Roger, Earl Mortimer were captured and overthrown in 1330 by Edward III, and the Castle was the seat of government for most of the reign of Richard III, who left the Castle with his army of 12,000 troops to meet the challenge of Henry Tudor at Bosworth in 1485.
- 1.2.2. In 1642, King Charles I raised his Standard at Nottingham Castle, effectively starting the English Civil War as he sought to exert supreme authority of the Crown over Parliament. The Castle was then held

successfully throughout the War by a Parliamentary garrison under the command of Colonel Hutchinson, whose wife maintained a diary account of the siege.

- 1.2.3. Following the execution of King Charles, the Castle was still considered so formidable and the risk of its seizure by a hostile force or tyrant so problematic that Parliament, meeting at the Castle in 1652, decreed that it be completely destroyed and the mediaeval castle effectively disappeared.
- 1.2.4. Following the Restoration, the site was sold to William Cavendish, first Duke of Newcastle and exiled Royalist commander, who had the site remodelled. The Duke did not, however, live to see his palace completed in 1679 and his subsequent heirs left the site empty for much of its remaining history.
- 1.2.5. In the early 19th Century, the 4th Duke opposed popular cries for parliamentary reform and, following the Duke's reported opposition to the Reform Act in the House of Lords, the Castle was burned down by radicals during a night of riots on the 10th October 1831. The first Great Reform Act followed in the following year, the events at Nottingham persuading Parliament, and the House of Lords especially, of the strength of popular feeling for reform.
- 1.2.6. The building lay, a burned-out ruin, until the 1870s when the Director of Nottingham Art School, along with Henry Cole, the evangelical first Director of the Victoria & Albert Museum, supported the Corporation of Nottingham in their aim to restore the palace as a public museum. On 3rd July 1878, the Museum was formally opened by the Prince and Princess of Wales as the first municipal art gallery and museum outside London with a collection of art and design objects designed to mirror the Victoria and Albert Museum and inspire high quality design and production for the lace industry.

1.3. *Historical background of Brewhouse Yard*

- 1.3.1. Brewhouse Yard, a two acre stretch of land between Castle rock and the River Leen, was known as 'Rock Yard' up until c. 1610. The brew house of Nottingham castle was once situated here (Whatnall, 1928). At this time it was a constabulary free from the restrictions imposed upon the rest of the town, and became a 'very unsavoury district' (Gill, 1909)
- 1.3.2. The John Speede map of 1610 shows the chambers in the rock and one building standing at the corner of the road leading into "the yard." More buildings were added in the late 17th C, as depicted on Thoroton's map of 1677 showing a long row of tenements on the south side of the roadway; also four detached houses with gardens situate between the long row and the River Leen.
- 1.3.3. The row of red brick houses still visible today are of Stuart construction and were probably built when the first Duke of Newcastle erected the present Castle about the year 1679 and were used to accommodate some of the retainers of the ducal palace.
- 1.3.4. There is a reference dating to 1610, which states 'visited' people were held at the Brewhouse and under the castle. These are people who were suffering from the plague and other diseases. It is believed that two caves behind the brick houses would have held such people.
- 1.3.5. Badder and Peat's map of 1744 shows more buildings on the cliff, four tenements on the north side of the road and two inns near the entrance to the yard, "The Trip to Jerusalem," and "The Gate." During the 18th century a number of decaying buildings were cleared away. (Gill, 1909). The rock cut cellars of some of these buildings, are still visible today, most notable the cellars below Rock Cottage.
- 1.3.6. A pumping station was built in Brewhouse yard, and could still be seen on the 1880 first edition OS map.

1.4. *Previous Archaeological Evidence*

- 1.4.1. Prior to the first season of *We Dig the Castle!*, carried out by Trent & Peak Archaeology during the summer of 2015, the Outer Bailey of Nottingham Castle had been subject to a programme of geophysical survey undertaken by Trent & Peak. An extensive survey of the southeastern part of the Outer Bailey was undertaken in April 2014 and combined geo-magnetic, earth-resistance, and ground-penetrating radar survey to produce an image of buried archaeological features and provide some information about the location and depth of the interface between superficial deposits and the bedrock (Johnson & Richley 2014).

- 1.4.2. The initial season of *We Dig the Castle!* excavations revealed that c.1000mm of ground in the area had been deposited during the early part of the 20th century as part of remodelling and landscaping. The soils which formed this made ground contained a broad mix of finds ranging from the Saxo-Norman period through to the 19th century. Allotments of a 19th century date were also identified, with a series of deep cut features c.400m below the cultivation horizon. These features formed a regular pattern and possibly related to the ornamental gardens that were located in the area during the 17th and 18th century.
- 1.4.3. During the second season of *We Dig the Castle!*, the excavations concentrated on exposing more of these features below the cultivation horizon by extending the dig to the northeast of the 2015 season. Up to 34 features were exposed and a potential allotment building at a depth of .800mm. The structure was left in situ ready for the 2017 season.
- 1.4.4. During the third season of *We Dig the Castle!*, excavation work continued on the series of deep cut features, and the dig area was extended to attempt to reveal the full extent of what was now believed to be a 20th C. platform for a search light truck. 19th allotment building features below this platform were also investigated.
- 1.4.5. Prior to the geophysical survey of 2014, some restricted areas within the Outer Bailey were investigated through archaeological watching briefs on the installation of services and as part of archaeological mitigation works relating to the development of disabled toilet facilities adjacent to the gatehouse entrance to the Castle (Kinsley 2004).
- 1.4.6. In addition to these specific interventions within the Outer Bailey, an impact assessment detailing the known heritage assets and interventions within the bounds of the castle was undertaken as part of the City Council bid for a Heritage Lottery funded redevelopment of the site (Kinsley 2012a).
- 1.4.7. The original earthwork castle was constructed in 1067–8 under the instruction of William the Conqueror. The earth and timber defences may have covered the entire extent of the later stone replacements, but this is uncertain (Drage 1989, 36, 43). The earth and timber defences of the Upper Bailey were replaced by a stone curtain wall in 1171–3. A stone keep was in existence by 1188 and a gate tower was constructed in 1373–7. The Middle Bailey earthwork defences were replaced by a stone curtain wall in 1171–89. A great hall and chapel are recorded from the 1230's, and major rebuilding (Richards Tower and the State Apartments) occurred in 1476–80. The Outer Bailey was captured during a siege in 1194. A barbican may have been constructed at the Outer Gatehouse in 1212–13 (Drage 1989, 43) and from 1251 the Outer Gatehouse was rebuilt in stone. A stone curtain wall then replaced the Outer Bailey earthwork and palisade and interval towers possibly during the 1270's (Kinsley 2012a, Appendix B, 2.1). One of the numerous caves cut into the sandstone rock beneath the Castle, Mortimer's Hole, is first documented by Leland in 1540 (Drage, 1989, 138).

1.5. Community archaeology

- 1.5.1. Trent & Peak Archaeology have a strong record of involvement in community-based archaeological projects within the City of Nottingham and its surrounding boroughs, including recent projects at Lenton Priory, St Ann's Allotments, and Toton Manor Park.
- 1.5.2. In partnership with Nottingham City Council Museums and Galleries Service, and in accordance with the Strategic Plan for Heritage in the City we are aiming to provide an opportunity for local people to participate in the archaeological investigation of Nottingham Castle and thereby gain a closer connection to the history of the city in which they live.

1.6. Archaeology Live!

- 1.6.1. Archaeology in Britain has had a long tradition of public participation, often with local amateur groups assisting (if not driving) important fieldwork projects. However, the rise of a professional workforce over the past 30 years has reduced opportunities for amateur involvement in some contexts, notably urban areas. Since 2010 the conduct of development-led archaeology has been informed by *Planning Policy Statement 5: Planning for the Historic Environment* (PPS5) and subsequently the *National Planning Policy Framework* (NPPF) which favour the preservation of archaeological remains *in situ*, and, failing this, their preservation by record. The process of development-led archaeology has been criticised, not always fairly, for putting the needs of development first, at the expense of archaeological research and public education. However, fieldwork undertaken under the provision of a commercial contract is generally regarded as inappropriate for amateur involvement. Much development-led

fieldwork has not even been accessible to the public as visitors.

- 1.6.2. Fieldwork training is routinely provided for archaeology undergraduates and a limited number of people entering the profession, although opportunities to study with professional organisations on high quality training excavations are limited. As a result students often have insufficient practical understanding of fieldwork techniques. The archaeological profession is in danger of suffering as a result. In the opinion of many it has already started to see a decline in traditional field-based skills, primarily due to a lack of access to complicated archaeological deposits on which for advanced training to take place.
- 1.6.3. Most excavations in which members of the public can participate provide little in the way of intensive and structured training. One consequence of this situation is that excavation and recording carried out by amateur groups may be of variable quality, often not attaining modern high standards. At the same time public interest in archaeology is currently at a high level, as indicated in the audiences for such television series as *Time Team* and *Meet the Ancestors*.
- 1.6.4. The perceived shortage of opportunities for public involvement in archaeology has led English Heritage, for example in *Exploring Our Past* (1998), to stress the importance of providing frameworks and opportunities for education and public participation in archaeology. The *Implementation Plan for Exploring Our Past* (1998), Section 10.0 stresses the need to '*provide a more extensive educational service to the community*'.
- 1.6.5. Section 11.0 states:

'Archaeological excavation is extremely important in promoting public interest and enthusiasm, and we will ensure that projects undertaken by ourselves, and those commissioned from others, are planned to maximise the local and regional impact of the work, and opportunities for participation.'
- 1.6.6. In Section 14.0 the importance of communicating archaeological skills to all sectors of the community is discussed. Sub-section 14.4 stresses the value of training schools that '*engage the public with excitement and provide opportunities for participation and training, at both an amateur and professional level*'.
- 1.6.7. The importance of the historic environment as a matter of public interest is confirmed in more recent English Heritage documentation, *Power of Place* states(English Heritage 2000, 23):

'People are interested in the historic environment. They want to learn about it. They want to help define it. They want their children to be taught about it. They want to be involved in decisions affecting it. They want to take part'.
- 1.6.8. Recommendation 8 of *Power of Place* is to '*place the historic environment at the heart of education*', and Recommendation 9 is to '*remove barriers to access*'.
- 1.6.9. York Archaeological Trust takes the view that if the public are unable to participate actively in archaeology they will fail to be aware of the potential of archaeology to provide community benefit in respect of such areas as education, recreation, and tourism. Therefore, the education and engagement of the community is essential to support the conservation of heritage sites.

2. OBJECTIVES

2.1. *Archaeological objectives for the 2018 season*

- 2.1.1. To continue targeted excavations of the Outer Bailey and to investigate other structures within the Outer Bailey in order to further develop our understanding of the archaeological deposits and features present in the area adjacent to the curtain wall, south of previous excavations adjacent to the gatehouse and disabled WC.
- 2.1.2. To begin targeted excavations of Brewhouse Yard in order to expand our knowledge of its development and the stratigraphy of the Castle Rock area as a whole.
- 2.1.3. To engage local volunteers in the archaeology of Nottingham Castle and the surrounding area, to build relationships between the people of Nottingham and their cultural heritage.
- 2.1.4. To provide training to members of the local community in the processes and procedures of archaeological excavation and research.

To address the following specific research questions:

- 2.1.5. What further environmental evidence remains of the Medieval, post-medieval and pre-20th-century gardens or allotments? (EMH 8.1.4)

Based on TPA report number 079/2017 the provisional aims of We Dig the Castle! 2018 are as follows:

- 2.1.6. Determine the extent of brick structural remains [0100] and (0118) to the east, establish its function prior to demolition and when this demolition occurred (Figure 2).
- 2.1.7. Establish the relationship between potential brick step [0126] and brick floor (0118) and wall [0100] to the east of the site.

2.2. *East Midlands Heritage Research Agenda items*

The project relates to the following elements of the *East Midlands Heritage - Updated Research Agenda and Strategy (Knight, Vyner and Allen: 2012)*:

High Medieval (1066-1485):

7.1 Urbanism

1. How may we enhance our understanding of the chronology, functions and morphology of caves, and in particular the outstanding subterranean resource of medieval Nottingham?

Post Medieval (1485-1750):

8.1 Urbanism: morphology, functions and buildings

1. How were towns organised and planned, and how did population growth impact upon their internal spatial organisation?
2. What can studies of environmental data, artefacts and structural remains tell us about variations in diet, living conditions and status?
3. Can we recognise the emergence of the poorer classes in the developing suburbs?
4. How can we advance studies of building plans and standing remains, especially where hidden inside later buildings, and of caves and cellars?

8.2 Landscapes of display: country houses and gardens

1. Can we elucidate further the use of social space in buildings and across the landscape, the manipulation of vistas and the integration of gardens with the wider landscape?
2. How were garden designs influenced by changing fashions and by a familiarity with Continental garden styles?

Modern (1750 - Present):

9.5 Estates, Parks, Gardens and Woodland

1. What survives of country estates, parks and gardens, how are they distributed, and how should they be classified?
2. Can we establish a typology of buildings and other structures associated with country estates, parks and gardens?

2.3. Synergies

- 2.3.1. The project provides synergies with the Strategic objectives of the Nottingham City Council Museums and Galleries Service Strategic Plan 2014–2018, in particular:

Section 2.1. Nottingham Castle

Section 3.2. Community

Section 3.4. Collaboration

Research Priority 3.1. Heritage of Nottingham and the Urban Archaeology Data; Nottingham Castle Archaeological Research Programme.

2.4. Proposed archaeological work

- 2.4.1. All works proposed here may not be run for the full length of the season. Some of these tasks may be approached during the 2019 season.

Archaeological Excavations – Brewhouse Yard

- 2.4.2. The proposal for 2018 is to hand excavate two trenches in the localities of the excavations completed by C. Young in 1975. The first trench, measuring up to 5 x 5m would be located near to Trench I in order to establish an alluvial deposit model for this area of the medieval town, due to its close proximity to the course of the River Leen. There is also the potential to uncover late medieval features and deposits. The second trench, measuring up to 5 x 5m would be located close to Trench IV (Figures 1-4) in order to partly reveal the footprint of the 18th/19th c buildings that once stood there. The sizes of the trenches allow for the option of stepping the trench edges if there is reason to go deeper than 1m.
- 2.4.3. All works will be undertaken in accordance with the methodology defined in this Project Design/WSI and to standards defined by CIfA guidelines for recording of archaeological sites (2014a, 2014b).
- 2.4.4. The archaeological excavations will define the extent and nature of archaeological deposits and features. All archaeological features and deposits exposed during the excavation will be recorded, and excavated by hand where possible within the constraints of health/safety and time.
- 2.4.5. The above detailed elements will be reported upon in a single concise report, with recommendations for

further work as necessary (MoRPHE 2008).

- 2.4.6. The report produced after each season of fieldwork will suffice as a stand-alone document detailing the works undertaken and an outline assessment of materials/finds recovered.
- 2.4.7. The report will also be used to inform a comprehensive report on the findings of the project to be completed once fieldwork within the area of excavation has been finally completed.
- 2.4.8. The trench location will be agreed upon by the City Archaeologist and Historic England Regional Inspector.
- 2.4.9. The trench will be located within the Ordnance Survey grid to a precision of 0.1m in the field by GPS/Total Station prior to excavation and its final positioning will take account of surface topography, services/safety requirements and all existing site features (fences, walls, etc). It is proposed to retain some flexibility in the specific layout in order to respond to changing circumstances/conditions on the ground.
- 2.4.10. The location proposed for the trench will provide the best possible opportunity to answer the research questions outlined above, whilst minimising disruption to visitors/events within Brewhouse Yard.

Boreholes – Brewhouse Yard

- 2.4.11. After Trench 1 has been hand dug to a safe depth of up to 1m, boreholes will be taken in order to recover and retain samples of geoarchaeological/palaeoenvironmental interest if present, as these may contribute to an understanding of the nature of the landscape and the uses to which it was put.
- 2.4.12. Any groundworks necessary to permit the drilling of geotechnical boreholes, where expected to impact archaeological deposits, will be subject to excavation under archaeological conditions as detailed below
- 2.4.13. All works will be undertaken in accordance with the methodology defined in this Project Design/WSI and to standards defined by CIfA guidelines for recording of archaeological sites (2014a, 2014b).
- 2.4.14. All archaeological works will be undertaken by professional archaeologists employed by Trent & Peak Archaeology (RAO), the appointed Archaeological Contractor.

Archaeological Excavations – Wine Cellar Cave

- 2.4.15. Further hand excavations within the Wine Cellar cave may take place but is heavily dependent on the castle redevelopment scheduled.
- 2.4.16. All works will be undertaken in accordance with the methodology defined in this Project Design/WSI and to standards defined by CIfA guidelines for recording of archaeological sites (2014a, 2014b).
- 2.4.17. The archaeological excavations will define the extent and nature of archaeological deposits and features. All archaeological features and deposits exposed during the excavation will be recorded, and excavated by hand where possible within the constraints of health/safety and time.
- 2.4.18. The trench location will be agreed upon by the City Archaeologist and Historic England Regional Inspector.

Test pits – Outer Bailey

- 2.4.19. Test pits will be excavated within the area of the 2017 excavations in order to establish the extent and character of the 20th brick surface, which continued beyond the limit of excavation. Believed to be a trackway for a searchlight truck, it can be assumed that remains continue down to the main vehicle entrance to the castle near the gatehouse. Establishing the full extent of the remains towards the entrance will be determined by the commencement of the commercial works for the new visitors' centre.
- 2.4.20. An estimated projection of the route of the trackway will be created and agreed upon by the City Archaeologist and Historic England Regional Inspector.
- 2.4.21. All works will be undertaken in accordance with the methodology defined in this Project Design/WSI

and to standards defined by Cifa guidelines for recording of archaeological sites (2014a, 2014b).

Ground Penetrating Radar (GPR) survey – Robin Hood Statue

- 2.4.22. A GPR survey will be undertaken in order to establish the location of the Outer Bailey ditch that would have ran around the eastern curtain wall and below the gatehouse bridge. This will be subject to a S42 license)

Building recording survey – Outer Bailey

- 2.4.23. Two 19th century buildings currently used for storage and a Second World War pillbox will be subjected to a level 2 building survey, with elements of a level 3/4 survey described below.
- 2.4.24. There is scope for surveying Richard's Tower if the private owner grants access. It will be subjected to a level 2 building survey, with elements of a level 3/4 survey described below in order to record the graffiti within the tower in more detail
- 2.4.25. The Gatehouse will also be surveyed to the same level as Richard's Tower in order to again record the graffiti within the Gatehouse in more detail
- 2.4.26. King David's Dungeon will also be subjected to elements of a level 3 or 4 survey in order to record the graffiti. This would be heavily dependent on the castle redevelopment schedule.
- 2.4.27. The methodology employed also follows advice from the Chartered Institute for Archaeologists' (Cifa) *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings and Structures* (2014).

Post Excavation work

- 2.4.28. Post excavation work, such as wet sieving, finds processing and digitisation of plans and sections will take place on site and completed by the trainees under the guidance and supervision of TPA staff

Archaeology Present

Deep Colluvium/Subsoil/Made-ground present



Hand clean trench & record and excavate sufficient to characterise features and date deposits.

Hand excavate areas of subsoil to ascertain depth of deposits & identify the presence of potential features/ archaeological horizons/ sterile natural deposits

If subsoil/overburden deposits are less than 1200mm thick: expose rest of trench.
If not, in consultation with the City Archaeologist: consider partial exposure.

- 3.2.7. In the event that it is necessary, within the aims of the excavation, to investigate deposits deeper than 1m then stepping/shoring of trenches will be carried out as appropriate.
- 3.2.8. Topsoil, subsoil and deposits will be stacked separately at a safe distance from the trench.
- 3.2.9. The location of any artefacts recovered in the topsoil/subsoil will be recorded three-dimensionally or by context/spit if appropriate.
- 3.2.10. Archaeological features will be hand-cleaned and planned. Following scanning by a metal detector, all features present will be excavated sufficiently to determine their plan and form, their nature, their degree of survival, and to recover any datable artefacts. All features thus investigated will be recorded stratigraphically using a single-context system, in plan and section and all finds recovered shall be retained for analysis.
- 3.2.11. Individual complex features such as kilns or burials will be cleaned and recorded, but retained in situ until advice can be sought from the City Archaeologist and Historic England Regional Science Advisor.
- 3.2.12. On completion of the fieldwork the trenches will be backfilled by hand, but not fully reinstated, in consultation with requirements of Nottingham City Council.

Spoil-heaps

- 3.2.13. Where practical and safe to do so, all spoil heaps will be regularly examined for archaeological material, this will include the use of a metal-detector, for which a Section 42 licence will be obtained.

3.3. Test Pits

- 3.3.1. Test pits will be excavated at a distance of 5m apart
- 3.3.2. In accordance with the Scheduled Monument Consent, all test pits will be excavated using appropriate hand tools under the supervision of suitably qualified TPA staff members.
- 3.3.3. At depths greater than 1m the test pits will be stepped in order to provide safe working conditions.
- 3.3.4. The locations of artefacts will be located three-dimensionally and/or by Context/spit where appropriate.
- 3.3.5. Archaeological features will be hand-cleaned and planned. All features present will be excavated sufficiently to determine their plan, form, nature and degree of survival, and to recover any datable artefacts. All features will be recorded stratigraphically using a Single-Context system in plan and section and all finds recovered will be retained for analysis.
- 3.3.6. On completion of the fieldwork the test pits will be backfilled by hand.

3.4. Archaeological Monitoring of Window Samples and hand auger

- 3.4.1. Strategy: During continuous monitoring, an archaeologist will make attendance at all groundworks with sub-surface impacts. This is expected to be up to 3 window samples spread across 1 transect line through a 5x5m trench. This will give a maximum spacing of c.1m between any given window sample.

The window samples will be achieved with a 'Terrier' rig, which utilises a 100mm diameter core. Sampling will proceed on targeted transects unless site constraints preclude this (possible locations shown on Figure 1). Sampling will aim to achieve enough coverage to better reconstruct the sequence of deposits at the southern extent of the site.

- 3.4.2. Recording will as a minimum include the location and extent of the monitored areas of excavation, their depth, and the deposits exposed, both by scale drawing (section and/or plan where applicable) and photograph (monochrome prints/digital). All recording & excavation will be carried out as set out below.
- 3.4.3. In the absence of features, at a minimum a record (both written & photographic, with scale drawing where necessary) will be made to reflect the stratigraphic sequence of deposits present, particularly alluvium and distinctions within made ground.
- 3.4.4. *Sediment sampling and recording*: Where suitable deposits are encountered, an appropriate level of geoarchaeological sampling and recording will occur. Suitable deposits comprise those that may address geoarchaeological, environmental, or landscape questions. Samples will only be retained with full approval of the client and the curators.

Recording Methodology

- 3.4.5. The investigation will be carried out in accordance with the guidelines of the IfA Institute for Archaeologists (Standard and Guidance: for an archaeological Evaluation (2014).
- 3.4.6. Within the confines of site safety, contexts (the smallest usefully-definable unit of stratification) will be cleaned by hand and recorded.
- 3.4.7. Investigation will be sufficient to securely establish the character and where possible date, and stratigraphic relationship of features.
- 3.4.8. In the event that important archaeological remains, for example burial or structural remains, are uncovered, the City Archaeologist will be informed immediately, with a proposal for the most effective measures for dealing with the remains
- 3.4.9. Recording will as a minimum include the location and extent of the monitored areas of excavation, their depth (above OD if possible), and the deposits exposed, both by scale drawing (section and/or plan where applicable) and photograph (monochrome prints/digital). For all monitored Boreholes, Trial Pits and Window Samples, a formal TPA log will be filled out. An example is provided below:

Geoarchaeological assessment data		tp Trent & Peak ARCHAEOLOGY	
Borehole Log			
Borehole number: BH 03		Date: 21.05.13	
Location: UBU		Co-ordinates:	
Drilling method: Van Walt percussion auger		Logged by: P. Watkin	
		Vertical scale: 1:20	
Description	Legend	Depth (thickness) m	Comments / Samples
10YR 3/2 Very dark grey brown firm slightly clay silt		0.10m (0.10m)	Topsoil
10YR 3/1 Very dark grey brown clay silt with clinker inclusions		0.27m (0.17m)	Redeposited levelling layer
7.5YR 7/6 Reddish yellow fine clay with dark grey fine clay (10YR 4/1)		0.42m (0.15m)	Alluvial clay layer
7.5YR 2.5/1 Black peat		0.76m (0.34m)	Peat deposit
10YR 5/1 Grey fine clay		0.88m (0.12m)	Alluvial clay layer
7.5YR 3/2 Dark brown fine clay		1.30m (0.42m)	Alluvial clay
10YR 5/6 Yellowish brown sand with medium sub-rounded stone		1.60m (0.30m)	Natural sand and gravel
End of borehole			

Ecofact and Artefact Recovery

- 3.4.10. **Artefact Recovery:** Any finds will be assigned an individual finds code. In-situ finds will be recorded three dimensionally, while finds from spoil will be noted in relation to their location within the trench/stripped area. All finds will be hand collected as recommended in First Aid for Finds (by the Archaeology section of the United Kingdom Institute for Conservation). Specialist advice to the project archaeologist will be provided by Alison Wilson (TPA).
- 3.4.11. **Sampling (Palaeoenvironmental & Industrial residues):** Appropriate sampling of deposits of palaeoenvironmental potential and residues and debris from industrial processes will be conducted in accordance with Table 1 (see below), with appropriate amendments following subsequent specialist advice. Specialist palaeoenvironmental advice will be provided by Alison Wilson (TPA). Samples (both palaeoenvironmental and industrial) will be assessed, followed by full analysis and reporting where appropriate following receipt of specialist advice.

Geoarchaeology Sampling and Scientific Dating:

- 3.4.12. Specialist geoarchaeological advice will be provided by Kristina Krawiec (TPA). Samples will only be taken if suitable deposits are encountered and there is potential to address the research agenda at this stage. If good quality deposits are identified they will generally be subject to controlled investigation at later stages of the scheme.

3.4.13. The following laboratory sampling/dating techniques may be employed if appropriate:

Sediment analysis: Sediment analysis includes a range of techniques, including particle size analysis, calcimetry, organic content analysis, magnetic susceptibility, and pH. These analyses can determine means of sediment deposition, mineral composition of sediments, post-depositional processes, and archaeological interferences with sediment properties. These samples are taken as loose, 'bulk', samples.

Pollen analysis: Palynology is the investigation of the vegetation history through the pollen record. Palynological investigation involves the counting of individual grains of pollen and spores of different types of plants in order to reconstruct local and regional vegetation, and is useful in determining changes in climate, landscape, land use, and human impact on the landscape over time (Moore et al., 1991, 9).

Micromorphology: Micromorphology is the analysis of soils and sediments in thin section. This method, especially when used on archaeological strata, can provide a wealth of information about the archaeology that is not visible when excavating. This includes: evidence of waste disposal, burning, trampling, intense manuring, identifying organic concentrations, and details about the post-depositional processes, to name only a few. (Courty et al., 1989; Goldberg and Macphai, 2006; descriptions as per Stoops, 2003).

Radiocarbon dating: Radiocarbon dating can be employed on samples with suitable organic remains, including macrofossils, charcoal, or fine-grained organic sediment. This method is particularly useful for dating palaeochannel deposits that include peat or peaty sediment. This method requires sending to a private lab, where AMS dating measures the isotopic ratio of carbon to get a date of death of the organic matter.

Table 1 – Preliminary Site Environmental Sampling Strategy*

Feature type	Sediment conditions	Overall scope of sampling	MM	CS	C14	OSL	Po/Dm	Ch	BP/BS	Bo	Wd
Sampling method:			Undisturbed block sample	Loose bulk sample, representative of particle size, and quantity for desired methods	A4x1cm (seal)	Light-tight canister, moisture/sediment sample; where available, gamma spec background radiation measurement.	Film caps or column in gutter + Clingfilm	Min.30L+ Tubs (specialists to advise as to appropriate level of sub-sampling of deposit)			Wrap each bit separately
Archaeological Feature/ buried soil	Waterlogged organic (looks 'peaty')	Each occurrence series of samples if thick (>150mm)		x			x	x	x	x	x
	Dry visible charred material	Each occurrence (C14 selected: best is twigs then layer then flecks)	x	x	X			x		x	
	Waterlogged organic	Each occurrence, at thickest point	x		X		x	x	x	x	x
	Dry visible charred material	Each occurrence, at thickest point, series of samples if thick (>150mm)	x		x		x	x		x	
	Buried horizon soil	Across soil profile	x			x	x	x			
Sediment change, reaction to environmental change	Laminated or changes in sediment profile	Sample of each in sediment in middle of sediment unit, or over equal interval		x	X	x	x				
Any	Wood structure	Retain all, keep damp, bag each timber separately			X						x

Industrial residues debris etc.		All process stages to be represented							x		
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Abbreviations **MM** Micromorphology **C14** Radiocarbon **Po/Dm** Pollen/diatoms **Ch** Charred material **BP** Waterlogged Beetles/Plant remains **Bo** small bone **Wd** wood. **BS** –Bulk Sample (industrial waste/residues/processing debris) **CS** Sediment sample

*Adjustments to be made following specialist advice and liaison with EA/development control archaeologist where appropriate.

- 3.4.14. **Post-excavation Processing:** Any finds will be stored as recommended in *First Aid for Finds* (by the Archaeology section of the United Kingdom Institute for Conservation), and marked with the site and find codes, and relevant accession numbers. These will be deposited with the appropriate museum on completion of the report, subject to the provisions of the brief and the agreement of the client.
- 3.4.15. **Archive:** Any archive created will be compiled with the archive from Stage 2 (see section 4.5 below).
- 3.4.16. **Report:** A verbal report and where appropriate textual summary will be provided to the client on completion of fieldwork.
- 3.4.17. A report on the results, whether positive or negative, will be prepared in the appropriate format and presented to the client and the curator within 4 weeks of the completion of the fieldwork.
- 3.4.18. A final report on results will be completed and added to the final We Dig the Castle! 2018 report.
- 3.4.19. The report will include:
- Non-technical summary
 - Introductory statement
 - Aims and purpose of the project
 - Methodology
 - An objective summary statement of results
 - Conclusion
 - Illustrations at appropriate scales, all to include levels tied to Ordnance Datum.
 - Illustrative site photography, including key features and working shots
 - Supporting data - tabulated or in appendices, including as a minimum a basic quantification of all artefacts, ecofacts and structural data including recommendations for retention/discard and proposals for conservation.
 - Index to archive and details of archive location; confirmation of archive transfer arrangements including a provisional timetable for deposition.
 - References

3.5. **GPR**

- 3.5.1. Data will be collected on transects at 1m intervals using a GSSI SIR3000 unit with a 100MHz antennae giving an approximate maximum depth value of c. 3-5m (depending on ground conditions and attenuation of radar signal).
- 3.5.2. The antennae will be programmed for a mid-range viewing window (c. 100ns) collecting data at 512 samples per scan at 64 scans per second, with a vertical high pass filter of 50Mhz and a low pass filter of 600MHz. Five gain points will be used to amplify radar signal and with on-site calibration of the radar signal through identification of high magnitude responses.
- 3.5.3. All data will be processed within the Radan 6.0 software. The data will be treated using a standard processing procedure of cleaning with a background removal filter, correction of point zero position and a variable velocity migration. The transects will be welded into a solid cube and the data will be time sliced at 0.25m intervals (each slice being 0.2m thick) until continuous Sand and Gravel deposits were realised. Each of the time slices will be imported into ArcGIS and interpolated into surfaces for interpretation.

3.6. Building Recording

Level 2 Survey

3.6.1. Drawings –

- (1) Measured plans (to scale or fully dimensioned) as existing. These may extend to all floors, or they may be restricted to one or a selection. Plans should show the form and location of any structural features of historic significance, such as blocked doorways, windows and fireplaces, masonry joints, ceiling beams and other changes in floor and ceiling levels, and any evidence for fixtures of significance.
- (2) Measured drawings recording the form or location of other significant structural detail (for example timber or metal framing) and of any architectural decoration (for example the moulding profiles of door surrounds, beams, mullions and cornices) or small scale functional detail
- (3) Measured cross-sections or long-sections to illustrate the vertical relationships within a building (for example floor and ceiling heights, the form of roof trusses).
- (4) Measured elevations
- (5) A site plan relating the building to other structures and to any related topographical and landscape features.

3.6.2. Photos –

- (1) General views of the building in its wider setting and the building's external appearance. Typically a series of oblique views will show all external elevations of the building, and give an overall impression of its size and shape.
- (2) Further views to reflect the original design intentions of the builder or architect,
- (3) The overall appearance of the principal rooms and circulation areas.

Level 3 / 4 Survey elements

3.6.3. Drawings –

- (1) Copies of earlier drawings throwing light on the building's history.

3.6.4. Digital imagery –

- (1) Three-dimensional laser scanned image using a Leica HDS6100 phase-based terrestrial laser scanner, set to 'high' or 'highest' resolution. This produces a point cloud with a point spacing perpendicular to the scanner of 6.3mm or 3.1mm, measured at 10m from the scanner.
- (2) Photogrammetry

3.6.5. Photos –

- (1) Any external or internal detail, structural or decorative, which is relevant to the building's design, development and use, with scale where appropriate. Any machinery or other plant, or evidence for its former existence.
- (2) Any dates or other inscriptions; any signage, makers' plates or graffiti which contribute to an understanding of the building. A transcription should be made wherever characters are difficult to interpret.
- (3) Any building contents which have a significant bearing on the building's history (for example, a cheese press, a malt shovel).

3.7. Training under the Archaeology Live! model

Training

- 3.7.1. The basic structure of 1-2 day, 1-2 week training courses will follow the courses that were offered during the St Leonard's, St Mary's, St Saviour, Hungate and All Saint's North Street training excavations. In view of the technical nature of the archaeological work and the potential depth of the trenches, there will be a negotiable minimum age limit of 16.
- 3.7.2. The one-week course will include on the first day introductory talks about the site, excavation techniques and health and safety, and a site tour. Subsequent days will include hands-on experience of excavation work; time will be divided equally between three tasks:
- Basic digging techniques: trowelling, mattocking, shovelling etc.
 - Site recording: planning, levelling, section drawing and context description.
 - Finds processing: washing, sorting and environmental sample processing.
- 3.7.3. Seminars and workshops by specialist staff will also be offered during the working day.

Taster sessions (1-2 days)

- 3.7.4. To cater for individuals developing an interest in the subject who are unable or unwilling to commit to a module, taster sessions will be offered. These will introduce people to the conditions and working regime on an archaeological excavation. Basic excavation and finds processing techniques will be taught.
- 3.7.5. Tasters will be run throughout the season. Taster trainees will ideally not work in the deeper trenches due to the additional Health and Safety implications, or where the archaeological deposits require appropriate investigation by module trainees and placements. The maximum tutor to Taster trainee ratio will be 1:6.

Training courses (1-5 weeks)

- 3.7.6. A one week module in excavation will be provided for people wishing to develop a more detailed, practical understanding of archaeological fieldwork.
- 3.7.7. Young people over the age of 16, students and adults interested in archaeology (e.g. those who enrol for evening classes, join local archaeological or metal detecting societies) will be the prime target groups who will be invited to take part in the training excavation modules.
- 3.7.8. The excavation modules will deal with excavation, recording, stratigraphic analysis and finds processing. Additional skills will include photography, building recording, surveying, geoarchaeology and site interpretation. The trainees will follow the YAT single context recording system. There will be finds and environmental sample processing, digitising and analysis elements that will allow the relationship between the contexts and their finds to be considered.
- 3.7.9. The context of the work in each module in relation to the project aims and the wider history of Nottingham Castle will be explained. Visits, tours and lectures both during and outside site hours will form part of the modules.
- 3.7.10. The Cultural Heritage Management aspects of the project will be a very important element of the training. All of the trainees will be shown how the excavation contributes to the heritage management of the site.
- 3.7.11. The trainee to tutor ratio will generally be 7:1 for practical elements of the work.

3.8. *Explainer roles*

- 3.8.1. There will be some opportunity to invite volunteers to the works within Brewhouse yard to fill the explainer role, in which the volunteers will talk to the passing public and explain what we are doing and why.

3.9. *Project Staffing*

- 3.9.1. Archaeologists will be fully qualified, experienced, and in possession of valid CSCS cards (CVs can be supplied upon request). The team for We Dig the Castle! has been selected based on experience of working within the particular constraints of the model developed through Archaeology Live! and to ensure that appropriate emphasis is placed on both the training and engagement of volunteers, as well as

the recording of archaeological material/remains.

- 3.9.2. The excavation will be managed by Gareth Davies (Project Manager).
- 3.9.3. The project team will consist of Laura Binns (Community/Project Officer, TPA), Tristan Cousins (Project Archaeologist, TPA) and other additional personnel as dictated by the requirements of the training programme. These staff may be replaced with equivalently qualified personnel if circumstances dictate.
- 3.9.4. Trainees will participate, and receive training, in all elements of the archaeological works under the supervision of qualified members of YAT/TPA. The ratio of trainees to staff will number no more than 7:1 on any given day of site work.

3.10. General Provisions

Notice of commencement

- 3.10.1. Notice of the commencement of works to Nottingham City Council Museums and Galleries Service, the City Archaeologist, and Historic England Regional Inspector will be given at least 10 working days before onsite activities begin.

Human remains

- 3.10.2. Should human remains be present, they will not be removed, but preserved in situ.

Service checks

- 3.10.3. The client will make available all information relating to buried services prior to the commencement of intrusive groundworks.

Recording policy

- 3.10.4. Recording will, as a minimum, include the location and extent of deposits/features within areas of excavation, and their depth/elevation both by scale drawing (section and/or plan where applicable) and photograph (monochrome prints/digital). For further details of the recording methodology see **Section 4** below.

3.11. Reporting and Liaison

- 3.11.1. A report on the results, whether positive or not, will be prepared in the appropriate format and presented to the Nottingham City Council Museums and Galleries Service and the City Archaeologist within 12 weeks of the completion of the fieldwork. Should the results of the excavation warrant it then a detailed report will also be submitted for publication in the Transactions of the Thoroton Society. For further details of the contents of the report see **Section 4.7** below.
- 3.11.2. The City Archaeologist and Historic England Regional Inspector will be given notice of the commencement of the excavation (as above), and TPA will continue to liaise closely throughout the period of the works. The City Archaeologist and Historic England Regional Inspector will be free to visit the site to monitor fieldwork at all times.

3.12. Welfare, Access and Insurance

- 3.12.1. The Nottingham City Council Museums and Galleries Service will ensure safe access to the site and make toilet and hand-washing facilities available to archaeological staff and volunteers.

3.13. Insurance/compensation

- 3.13.1. As part of York Archaeological Trust, TPA carries the appropriate public, third party and employee insurances, copies of which are available for inspection if required.
- 3.13.2. Any disruption to the land should be resolved directly by NCC Museums and Galleries.

3.14. Health and Safety

- 3.14.1. TPA will adhere to all relevant health and safety regulations (copies of YAT/TPA Health and Safety policies are available on request).

- 3.14.2. No archaeological staff or trainees will be allowed to enter the site until they have undergone a health and safety induction organised by TPA and/or NCC site-staff.
- 3.14.3. TPA will complete a task-specific Risk Assessment safe-working Method Statement before the commencement of the excavation, and copies of this will be made available to the Nottingham City Council Museums and Galleries Service, and all site-staff/volunteers. This will be in compliance with the industry guidelines laid out in FAME Manual, *Health & Safety in Field Archaeology*.
- 3.14.4. TPA staff and volunteers will wear appropriate personal protective equipment at all times.

4. DETAILED SPECIFICATION OF ARCHAEOLOGICAL RECORDING

4.1. Procedure

4.1.1. Trent & Peak Archaeology will implement the following procedure:

- (1) Within the confines of site safety, contexts (the smallest usefully-definable unit of stratification) will be cleaned by hand and recorded.
- (2) All finds will be assigned an individual finds code. In-situ finds will be recorded three dimensionally, while finds from spoil will be noted in relation to their location within the trench/stripped area.
- (3) Excavation will be sufficient to securely establish the character, stratigraphic relationship and, where possible, date of features.

4.2. Recording

Plans

4.2.1. Plans of all contexts including features will be drawn on drafting film in pencil at a scale of 1:20 or 1:50, and will show at least:

- context numbers,
- all colour and textural changes,
- principal slopes represented as hachures,
- levels expressed as O.D. values, or levelled to permanent features if benchmark absent,
- sufficient details to locate the subject on a 1:500 plot of the area of ground-works and OS 1:2500 map (i.e the national grid).

Sections

4.2.2. Sections will show the same information, but levelling information will be given in the form of a datum line with O.D./arbitrary value; the locations of all sections will be shown on the plan.

Photographs

4.2.3. Photographs of each context will be taken as monochrome prints and digital images (as per Brown 2007), together with general views illustrating the principal features of the excavations.

4.2.4. Written records will be maintained as laid down in TPA recording manual (as accepted by all regional county archaeologists).

4.3. Sampling (*Palaeoenvironmental & Industrial residues*)

4.3.1. Appropriate sampling of deposits of palaeoenvironmental potential and residues and debris from industrial processes will be conducted in accordance with Table 1 (see below), with appropriate amendments following subsequent specialist advice. Specialist palaeoenvironmental advice will be provided by Dr Val Fryer and/or members of the Dickson Laboratory for Bio-Archaeology. Samples (both palaeoenvironmental and industrial) will be assessed, followed by full analysis and reporting where appropriate following receipt of specialist advice and liaison with the Historic England Assistant Science Adviser for the East Midlands (Historic England, 2011).

Table 1 – Preliminary Site Sampling Strategy*

Feature type	Sediment condition	Overall scope of sampling	MM	C14	Po/Dm	Ch	BP/BS	Bo	Wd
Sampling method:				A4x1cm (seal)	Film caps or column in gutter + Clingfilm	Min.30L+ Tubs (specialists to advise as to appropriate level of sub-sampling of deposit)			wrap each bit sep.
Man-made feature buried soil	Waterlogged organic (looks 'peaty')	each occurrence series of samples if thick (>150mm)			X	X	X	X	X
	Dry visible charred material	each occurrence (C14 selected: best is twigs then layer then flecks)		X		X		X	
	Waterlogged organic	each occurrence, at thickest point	X	X	X	X	X	X	X
	Dry visible charred material	each occurrence, at thickest point, series of samples if thick (>150mm)	X	X	X	X		X	
Any	Wood structure	retain all, keep damp, bag each timber		X					X
Industrial residues / debris etc.		All process stages to be represented					X		
*Adjustments to be made following specialist advice and liaison with SCC Principal Archaeologist where appropriate.									

4.4. Post excavation Processing

- 4.4.1. Finds processing, wet sieving and the digitisation of drawing will all take place on site for the length of the project. Once the project has finished, work on these three elements will continue at the TPA offices.
- 4.4.2. All finds will be stored as recommended in "*First aid for finds*" (by the Archaeology section of the United Kingdom Institute for Conservation), and marked with the site-, and find-codes, and relevant accession numbers. These will be deposited with Brewhouse Yard Museum under the assigned accession number on completion of the final report on excavations in the Outer Bailey of Nottingham Castle, subject to the agreement of the Nottingham City Council Museums and Galleries Service.
- 4.4.3. Where necessary the documentary archive will be sent to the UAD for copying.
- 4.4.4. Artefacts will be submitted to:
- **Prehistoric pottery** for assessment to Dr.D.Knight (TPA)
 - **Romano-British pottery** to Alex Beeby (APS)
 - **Anglo-Saxon/Mediaeval pottery/tile** to Vicky Naylor (Independent)
 - **Post Medieval Pottery** to A. Wilson and L. Elliot (TPA)
 - **Post Medieval CBM** to A. Wilson and L. Elliot (TPA)
 - **Flint** to P.Webb (University of Southampton)
 - **Palaeoenvironmental remains** to A.Wilson (TPA), Val Fryer (Independent)
 - **Zooarchaeological remains** to Dr K. Poole (YAT)
 - **Palaeopathology** to K. Smart (TPA)
 - **Wood artefacts/Conservation** to Ian Panter (YAT-York).
 - **Roman to Post Mediaeval metalwork** to N. Rogers (Independent)
 - **Coins** to G. Chamberlain (Independent)
 - **Industrial Residues** to Gerry McDonnell (Independent)

4.5. Archive

- 4.5.1. The archive will be prepared according to requirements of the Brewhouse Yard Museum:
- On project initiation notification will be given to the Brewhouse Yard Museum, using the appropriate notification form, with a copy to the City Archaeologist.
 - Decisions on the significance of finds archives will be supported by the recommendations/assessments of suitably qualified specialists and the guidance of the appropriate museum curator and City Archaeologist. Recommendations for retention or discard of elements of an archive will be set out explicitly in project reports with reference to regional and national research agendas as appropriate.
- 4.5.2. The archive will be fully indexed and contain where relevant:
- copies of correspondence relating to fieldwork
 - site notebooks/diaries
 - original photographic records
 - site drawings (plans, sections, elevations)
 - original context records, matrix diagrams showing stratigraphic sequence of all contexts. artefacts
 - original finds records
 - original sample records
 - original skeleton records
 - computer discs and printout

4.6. *Archive and Finds Deposition*

- 4.6.1. Notification to The Brewhouse Yard Museum, using the appropriate form will be made prior to commencement of fieldwork. Copies of the Report will be lodged with the HER and OASIS as well as Historic England and the Nottingham City Council Museums and Galleries Service as per the requirements of Scheduled Monument Consent.
- 4.6.2. Where discoveries are adjudged to be significant and meriting museum deposition the following will still apply:
- Finds will remain the property of the client with deposition at The Brewhouse Yard Museum Store subject to their approval.
 - The paper and digital archive generated by TPA will remain the property of the Unit until deposited within The Brewhouse Yard Museum Store:
 - All finds and archive will be deposited with Brewhouse Yard Museum with arrangements and accession number to be agreed in line with agreed procedures for the transfer of Archaeological Archives. Written notification of completion of fieldwork will be given to the museum curator and City Archaeologist.
 - Depositional arrangements will then proceed in line with agreed procedures for the transfer of Archaeological Archives (as supported by reference to specialist opinion, regional and national research agendas) whereby a *Transfer of Title* form will be completed and the archive accessioned. Written notification of final deposition of archive will be given to the City Archaeologist.

4.7. *Report*

- 4.7.1. A verbal report and where appropriate textual summary will be provided to the City Archaeologist, Historic England Regional Inspector and NCC Museums and Galleries Service representative on completion of fieldwork. Within 9 months of the end of all fieldwork, subject to completion of specialist reports, an interim report on results will be completed and copies provided to:
- Historic England (Hard and digital copy)
 - Nottingham City Council Museums and Galleries Service.
 - The City Archaeologist for accession to the HER. This will include a copy of the report in PDF/A format on CD along with indexed copies of all digital on-site photography.
- 4.7.2. The report will include:
- Non-technical summary
 - Introductory statement
 - Aims and purpose of the project
 - Methodology
 - An objective summary statement of results
 - Conclusion
 - Illustrations at appropriate scales, all to include levels tied to Ordnance Datum.
 - Illustrative site photography, including key features and working shots
 - Supporting data - tabulated or in appendices, including as a minimum a basic quantification of all artefacts, ecofacts and structural data including recommendations for retention/discard and proposals for conservation.
 - Index to archive and details of archive location; confirmation of archive transfer arrangements including a provisional timetable for deposition.
 - References
 - A copy of the OASIS form

Dissemination

- 4.7.3. The results will be submitted for publication within the annual summary, if applicable, in *Transactions of the Thoroton Society*. If significant results are discovered then an individual report of an appropriate level of detail, will also be submitted for publication to a suitable academic journal.

Copyright

- 4.7.4. Trent & Peak Archaeology shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved excepting that it hereby provides exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project, with no limitation on the number of times that the client may reproduce any report. The client's contribution will be acknowledged in any future use of the work by TPA.

4.8. OASIS

- 4.8.1. An OASIS online record has been initiated for the project, OASIS ID:trentpea1-286929 (<http://ads.ahds.ac.uk/project/oasis/>). A copy of this document will be included in the report.

4.9. East Midlands Heritage Framework

- 4.9.1. The project relates to a number of objectives (See **Section 2** above) stated within the *East Midlands Heritage - Updated Research Agenda and Strategy* (Knight, Vyner and Allen: 2012), the project will therefore be listed on the East Midlands Heritage Wiki page in order to contribute to the research framework. The Wiki page can be found here - archaeologydataservice.ac.uk/researchframeworks/eastmidlands

4.10. Monitoring

- 4.10.1. All phases of the investigation will be undertaken in line with the relevant '*Standard and Guidance*' documents prepared by the CIfA (Chartered Institute for Archaeologists).
- 4.10.2. TPA will keep the City Archaeologist regularly informed of progress during the project and facilitate the monitoring of the project at each stage, including post-excavation. The City Archaeologist and Historic England Regional Inspector will be informed at the earliest opportunity of any unexpected discoveries, especially where there may be a need to vary the project design.
- 4.10.3. TPA will maintain an ongoing dialogue with the City Archaeologist and Historic England Regional Inspector, to enable the need for modifications to the project to be independently considered and validated, and to maintain compliance with the terms of the Scheduled Monument Consent.
- 4.10.4. TPA will keep the Historic England Regional Inspector, Nottingham City Council Museums and Galleries Service, and City Archaeologist informed of all material facts of the archaeological investigations. This will include agreeing any changes to the approved methodology or programme of works, and invitations to inspect any uncovered remains at appropriate stages in the fieldwork programme. The Historic England Regional Inspector and City Archaeologist will be free to visit the site at any stage of the fieldwork to ensure that the project is being carried out in accordance with the approved project design/WSI.

5. PROVISIONAL TIMETABLE

- 5.1.1. A provisional timetable has been agreed for a five-week period beginning on the 16th July 2018. Once final confirmation of permissions has been received, the City Archaeologist and Historic England Regional Inspector will be informed of project commencement.

6. REFERENCES

- British Geological Survey 2015. *Geology of Britain Viewer*. [Online] Available from: mapapps.bgs.ac.uk/geologyofbritain/home
- Brown, D.H. 2007. *Archaeological Archives – A guide to best practice in creation, compilation, transfer and curation*. (IFA/AAF). CIfA; Reading.
- Chartered Institute for Archaeologists, 2014a. *Standard and Guidance: Archaeological Field Evaluation*. CIfA; Reading.
- Chartered Institute for Archaeologists, 2014b. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. CIfA; Reading.
- Chartered Institute for Archaeologists, 2014c. *Code of Conduct*. CIfA; Reading.
- Chartered Institute for Archaeologists, 2014d. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. CIfA; Reading.
- Drage, C. 1999. *Nottingham Castle: A Place Full Royal* (Second Edition) Nottingham: Thoroton Society of Nottinghamshire
- English Heritage, 2002. *Environmental Archaeology*. Centre of Archaeology Guidelines
- English Heritage, 2008. *Management of Research Projects in the Historic Environment, PPN3 Archaeological Excavation*. [Online] Available from: content.historicengland.org.uk
- Historic England 2011, *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* [2nd edition] [Online] Available from: content.historicengland.org.uk
- Gill, H. 1909. The Old Inns of Brewhouse Yard. *Transactions of the Thoroton Society, XIII*. [Online] Available from: www.nottshistory.org.uk/articles/tts/tts1909/brewhouseyard1.htm
- Kinsley, G. 2000. *An Archaeological Desk Top Assessment of the Outer Bailey at Nottingham Castle*. Trent & Peak Archaeological Unit: Unpublished Report.
- Kinsley, G. 2004. Nottingham Castle: Excavations Relating to Service Installations 1998-1999, Trent & Peak Archaeology: Unpublished Report
- Kinsley, G. 2012. *Nottingham Castle: Development options scoping study (July 2012): Archaeological Impact Assessment*. SLR Ref: 403.2929.00003. SLR: Unpublished Report
- Knight, D. Vyner, B. and Allen, C. 2012. *East Midlands Heritage An Updated Research Agenda for the Historic Environment in the East Midlands*. Buxton: Press.
- Lewis, C. 2006. The Medieval Period. In Cooper, N. *The Archaeology of the East Midlands*. Leicester University Press.
- Whatnall, P. (ed.) 2008. *Links with old Nottingham. Historical notes by J. Holland Walker, (1928)*. [Online] Available from: www.nottshistory.org.uk/whatnall1928/olde_trip.htm

7. FIGURES

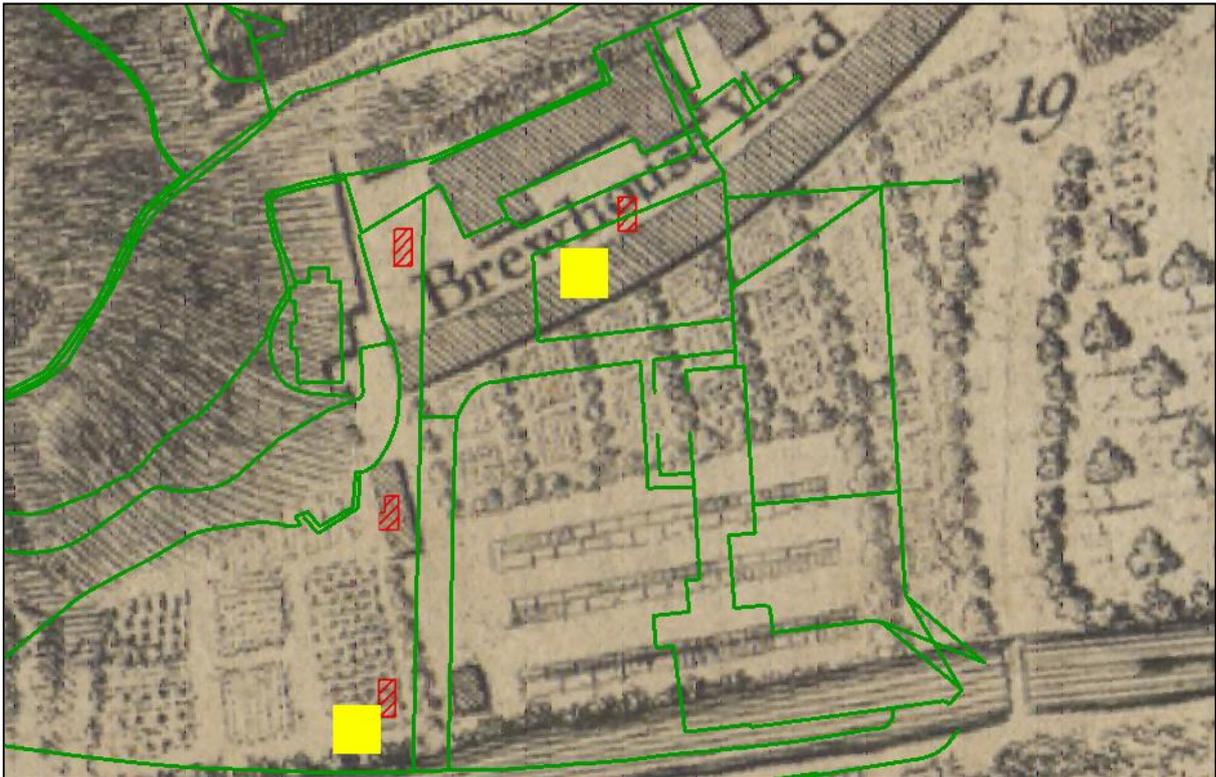


Figure 1: Potential locations of trenches in relation to the 1744 Badder and Peat's Map. Not to regular scale.

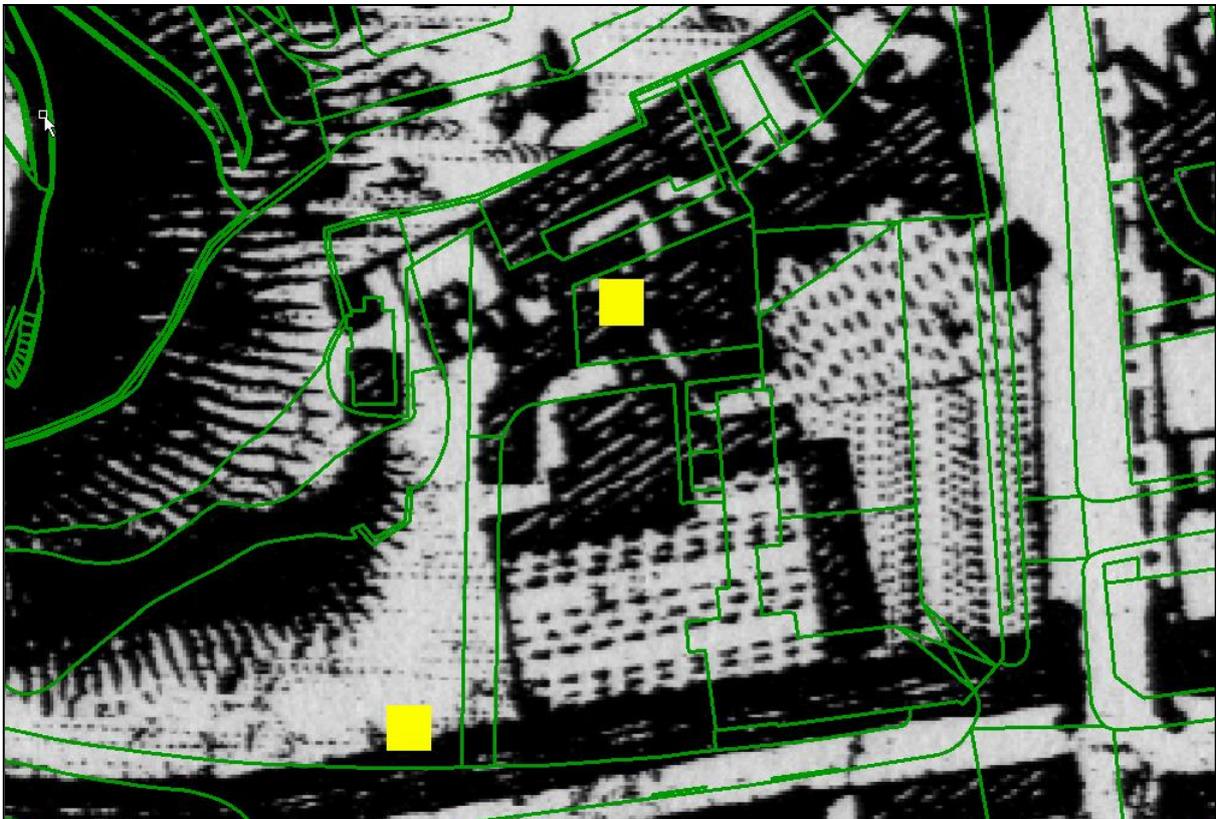
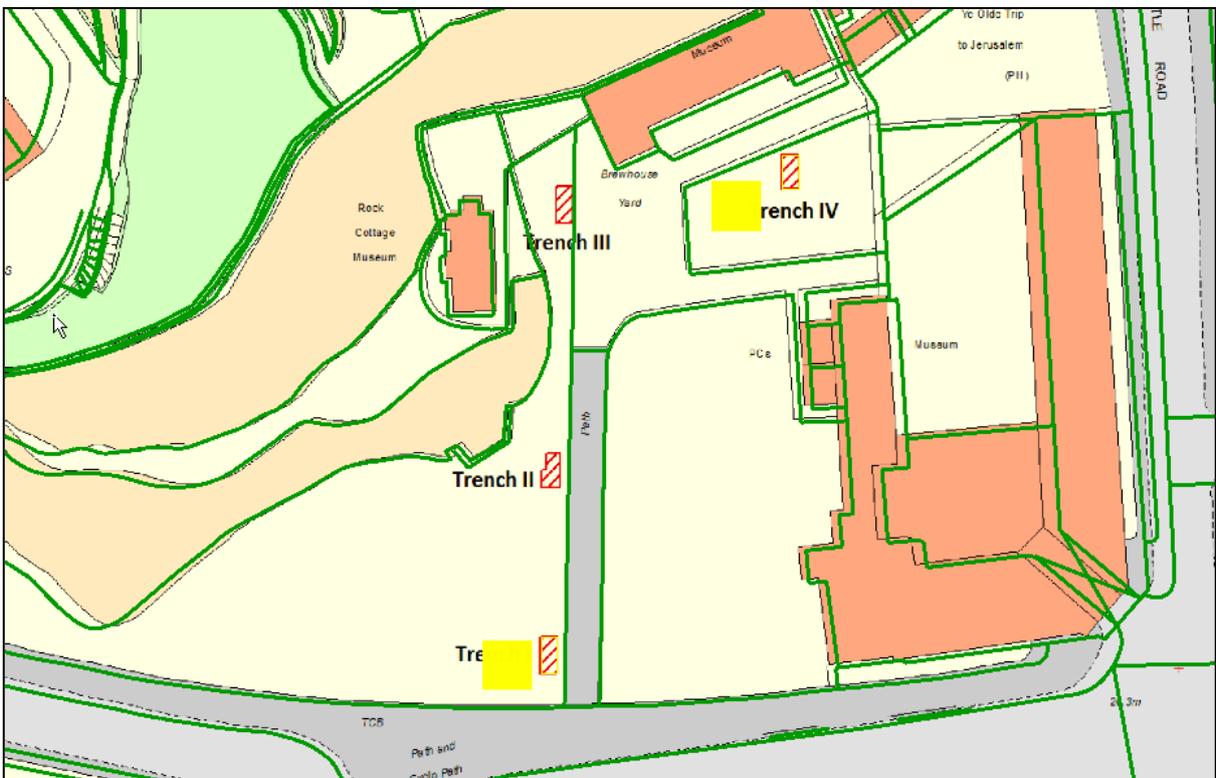


Figure 2: Potential locations of trenches in relation to the 1831 Staveley and Wood map of Nottingham. Not to regular scale.



Figure 3: Potential locations of trenches in relation to the 1881 First Edition OS map. Not to regular scale.
 Figure 4: Potential locations of trenches in relation to a modern OS map of Nottingham. Not to regular scale.



APPENDIX 1