

External Signs and Viewing Platform, Cardiff Castle, Cardiff

Archaeological excavation and watching brief

August 2008

A report for the City and County of Cardiff
by Rob Dunning BSc

GGAT report no. 2008/040

Project no.P1254

National Grid Reference:
centered on ST 1807 7659



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Summary

Cadw have granted conditional Scheduled Monument Consent (A-CAM001-02-QA669613/1) for external signage works at Cardiff Castle, Cardiff (Gm 171). One of the conditions stated that an archaeologist will pre-excavate the required area for the base plates of ten lectern panels (see Figure 1). Such areas had minimum measurements of 620mm x 450mm, with a maximum excavated depth of 220mm below the current ground surface. They were then lined with terram before being backfilled. It is envisioned that Landcraft will re-excavate to the terram for the erection of the signage. A watching brief was also conducted during construction works associated with the viewing platform, the laying of electricity cables, the re-laying of tarmac and the construction of a ramp and retaining wall. All of the works are located within the confines of the castle and therefore in areas where it is possible that archaeological remains relating to the post-medieval, medieval and Roman settlement of the area may survive. Therefore, the City and County of Cardiff have commissioned an archaeological excavation and watching brief in advance of and during the construction works, the findings of which form the subject of this report.

Several archaeologically significant remains were encountered, including a Roman deposit, context 504, located in Trench 5 close to the North Gate; elements of the Inner Bailey wall (5003), dating to the medieval period were observed in Area D; a stone structure (702) located in Trench 7, and likely associated with the original path that ran along the inside of the Inner Bailey wall and a cobbled surface (1402, 1402a, 1504, 2003, 2006, 2009 and 2012) probably dating to the late 19th century ran from the southern entrance towards the Western Apartments. In several cases archaeologically significant surfaces were encountered at less than 150mm below the current ground surface and an alternative engineering solution was devised, in accordance with condition four of the Scheduled Monument Consent. Specifically, free-standing signs with weighted bases were used, thereby preserving the remains in situ.

The results of the archaeological works further demonstrate the presence of Roman and medieval activity within the confines of Cardiff Castle. The changes in some of the construction techniques ensured that the archaeologically significant structures were preserved in situ and were not damaged during the course of the signage and viewing platform projects.

Acknowledgements

The project was managed by Richard Lewis BA MIFA and the fieldwork was undertaken by Rob Dunning BSc, Alexandra Young BA, Richard Lewis and Steve Sell BA of GGAT Projects. The finds were processed and analysed by Andy Sherman BA. The report was written by Rob Dunning and the illustrations prepared by Rob Dunning and Paul Jones (Senior Illustrator).

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1. Introduction

1.1 Project background and commission

Cadw have granted conditional Scheduled Monument Consent (A-CAM001-02-QA669613/1) for external signage works at Cardiff Castle, Cardiff (Gm 171). One of the conditions stated that an archaeologist will pre-excavate the required area for the base plates of ten lectern panels (see Figure 1). Such areas had minimum measurements of 620mm x 450mm, with a maximum excavated depth of 220mm below the current ground surface. They were then lined with terram before being backfilled. It is envisioned that Landcraft will re-excavate to the terram for the erection of the signage. An archaeological specification relating to the archaeological excavation (Dunning 2008) was approved by Cadw and the fieldwork undertaken between 02/06/08 and 06/06/08.

A watching brief was also conducted during construction works associated with the viewing platform, the laying of electricity cables, the re-laying of tarmac and the construction of a ramp and retaining wall. All of the works are located within the confines of the castle and therefore in areas where it is possible that archaeological remains relating to the post-medieval, medieval and Roman settlement of the area may survive.

Therefore, the City and County of Cardiff have commissioned the archaeological excavation and watching brief in advance of and during the construction works, the findings of which form the subject of this report.

1.2 Location and geology

A total of ten areas were excavated, all located within the castle grounds, including one within the shell keep itself (see Figures 1-5), as well as several areas in the southern area of the castle (see Figure 6). The castle is listed as 'unsurveyed' on the Soil Survey of England and Wales (SSEW 1983), although the underlying geology is known to be Triassic mudstones (including Keuper Marl, Dolomitic Conglomerate and Rhaetic) (Blockley 2002).

1.3 Archaeological background

Excavations conducted at Cardiff Castle between 1974 and 1981 by Dr Peter Webster have suggested a sequence of four overlapping Roman forts. A large Neronian fort first occupied the fort in the mid 1st century AD, extending beyond the limits of the current castle. It has been suggested that on the basis of the presumed *principia* in the northeast quarter of the castle, the fort covered an area of 12ha. The second fort (occupied in the late 1st century AD) covered an area roughly one-fifth of this size, but retaining elements of its north-south axial road and northern defensive line. The third fort was aligned on very similar lines, although located slightly to the south. The late Roman stone fort is the last of the quartet with its lines dictating the alignment of the medieval castle (RCAHMW 1991, 163).

Despite suggestions of a Roman origin for the castle as early as 1862, it was not until 1889 that a Roman wall was identified within an earthen bank on the east side of the castle perimeter. Between 1889 and 1923, intermittent excavations eventually revealed the entire circuit of the Roman walls. Indeed, five separate observations noted that the medieval curtain wall followed and incorporated Roman fabric at lower levels (RCAHMW 1991, 163). A limited excavation by Dr Michael Jarrett in 1960 to the west of the south gate indicated that the Roman ditch had been completely removed by the larger medieval ditch (RCAHMW 1991, 210).

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A series of unpublished excavations were conducted in the late 19th century for the 3rd Marquis, details are scarce although the piles of a timber bridge were recorded in the motte ditch and fragments of a drawbridge were recovered from the adjacent Middle Gate. Excavations in the Outer Ward by Dr Peter Webster revealed late medieval buildings, with the most notable being the Shire Hall. Evidence of occupation dating to the early medieval period was limited to rubbish pits, suggesting that any buildings dating to this period were timber constructions (RCAHMW 1991, 211).

An archaeological desk-based assessment has been undertaken (Blockley 2002) which provided a detailed and site specific archaeological background in advance of an excavation conducted by GGAT Projects in 2006, prior to the construction of a new Interpretation Centre. Numerous features and structures were uncovered during the course of the investigation, including a lime mortar preparation area and post-medieval and medieval cess pits. Two Roman banks were excavated, as well as a Roman road and a large timber building. Prehistoric activity was also noted, in the form of small pits and post-holes. In addition, a line of stakeholes at least 15m long was discovered, and probably forms the remains of a prehistoric fenceline or boundary. This discovery provides some of the earliest evidence for the occupation of the area that is now Cardiff city centre.

2. Methodology

The archaeological specification (Dunning 2008) specified that nine trenches, with minimum measurements of 620mm by 450mm would be excavated to a depth of 200mm. Furthermore, one of the Scheduled Monument Consent conditions (number four) stated that should significant archaeological structures be identified at less than 150mm below the present ground surface, an alternative location for the signage would be found close by. Such a structure was located in Trench 14 and so an additional trench (Trench 14a) was excavated. It was determined that signs 1, 2a, 2b, 3, 6, 9, 10, 11, 13, 16 and 17 would require no intrusive groundworks and so no archaeological mitigation was required.

The ten trenches were manually excavated using appropriate hand tools, with the work being undertaken to the standard required by The Institute of Field Archaeologists' *Standard and Guidance for Archaeological Excavation* (1995, revised 1999).

A watching brief was also conducted during construction works associated with the viewing platform, the laying of electricity cables, the re-laying of tarmac and the construction of a ramp and retaining wall.

A written and photographic record was made of all archaeological features and deposits in accordance with the GGAT *Manual of Excavation Recording Techniques*. Contexts were recorded using a continuous numbering system, and are summarised in Appendix I. All significant contexts were photographed using a digital camera (with a minimum resolution of 8mp). The excavated area was located in relation to standing buildings and/or published boundaries and the site datum related to Ordnance Survey (OS) datum. Levels are related to the OS benchmark (BM 13.28m) located on the eastern wall of the Western Apartments. All context depths were measured from the present ground surface.

All classes of finds were retained, cleaned, and catalogued and remain in temporary store until arrangements for final deposition are agreed, in line with the requirements of the Institute of Field Archaeologists' *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2001).

The project archive will be deposited with an appropriate receiving organisation, in accordance with the UKIC and IFA Guidelines (*Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (2007)). A copy of the report and archive index will be deposited with the regional Historic Environment Record, curated by the Glamorgan-Gwent Archaeological Trust, Swansea and a further copy of the archive index will be deposited with the National Monuments Record, Royal Commission on the Archaeological and Historical Monuments of Wales (RCAHMW), Aberystwyth.

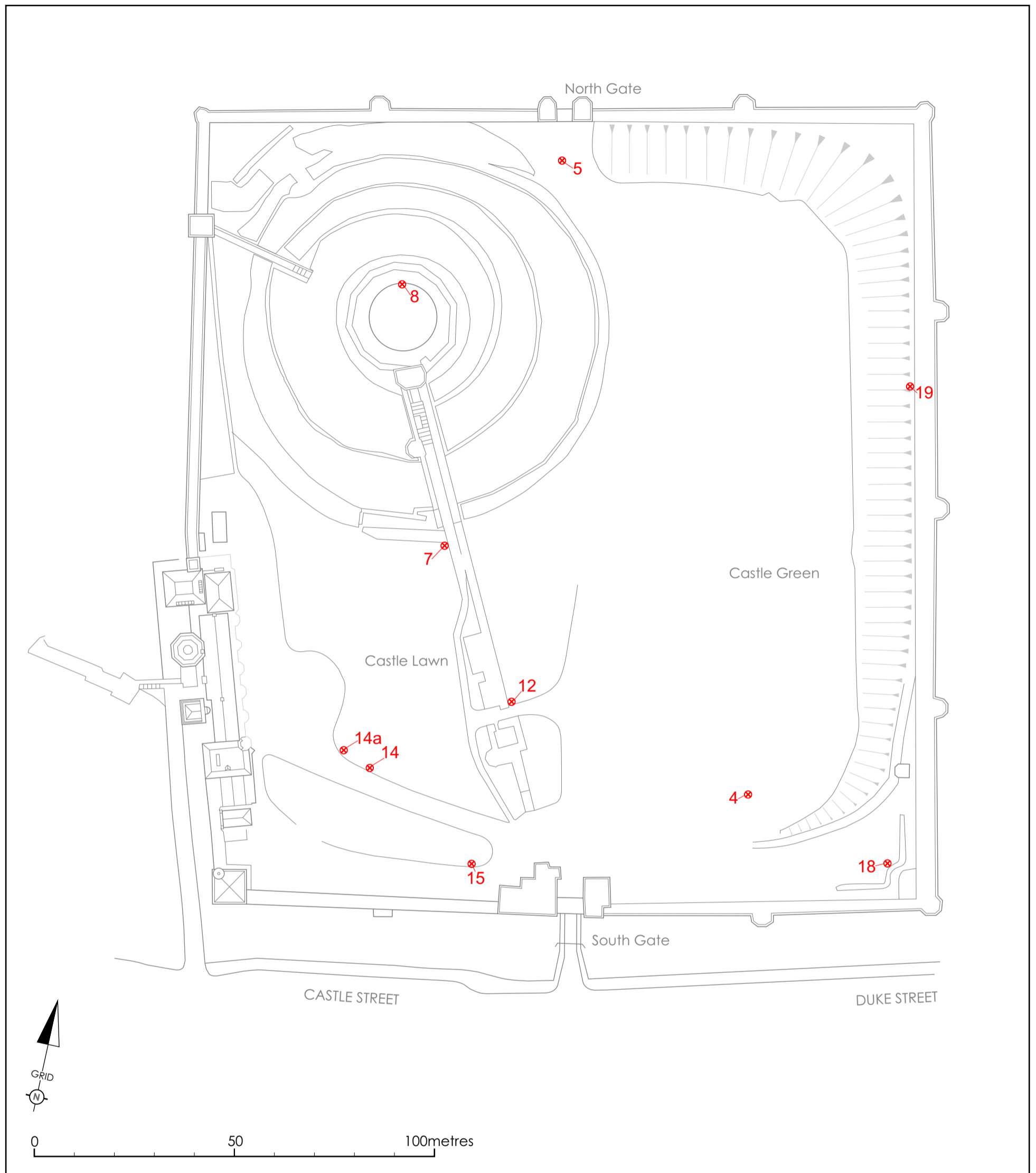


Figure 1. Location of trenches (red)

3. Excavation results

Trench 4

Trench 4 measured a maximum of 660mm by 580mm, and was excavated to a maximum depth of 240mm (see Plate 1). The basal excavated deposit was that of a hard orange sandy clay (**402**) with frequent rounded, sub-rounded and sub-angular stones (less than 0.2m in diameter) and a minimum depth of 0.05m. The deposit also contained isolated patches of dark orange-red clay (less than 0.05m in diameter), as well as isolated brick and charcoal fragments. This was overlain by a dark grey silty clay (**403**), with a minimum depth of 0.08m and which contained moderate sub-angular stones (less than 0.06m in diameter), as well as fragments of plastic, cement and concrete. It is likely to be modern landscaping material utilised to form a low sloping bank, linking the Interpretation Centre to the castle green and is separated from **402** by a layer of terram. Overlaying **403** was a light grey silt loam topsoil (**401**) with a minimum depth of 0.09m. The deposit also contained occasional sub-angular and sub-rounded stones (less than 0.06m in diameter).



Plate 1: View of Trench 4, looking southeast

Trench 5

Trench 5 measured a maximum of 620mm by 460mm, and was excavated to a maximum depth of 260mm (see Plate 2). The basal excavated deposit was that of a light brown silty clay (**504**) with moderate sub-rounded and sub-angular stones (less than 0.2m in diameter) and a minimum depth of 0.03m. The deposit also contained frequent charcoal flecking and fragments, brick and tile fragments, as well as isolated slag remnants. This was overlain by a mid brown silty clay (**503**), with a minimum depth of 0.09m and which contained frequent sub-rounded and rounded stones (less than 0.2m in diameter), as well as fragments of slag and brick. Overlaying **503** was an industrial dump consisting mainly of coal and coke fragments (**502**) with a minimum depth of 0.05m. The deposit also contained isolated slag fragments. The most recent excavated layer was a light grey-brown silt loam topsoil (**501**), containing isolated sub-rounded stones (less than 0.01m in diameter) and a minimum depth of 0.07m.

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Plate 2: View of Trench 5, looking northwest

Trench 7

Trench 7 measured a maximum of 660mm by 450mm, and was excavated to a maximum depth of 290mm (see Figure 2 and Plate 3). The basal excavated deposit was that of a mid brown sandy silt loam (**703**) with moderate sub-rounded and sub-angular stones (less than 0.01m in diameter) and a minimum depth of 0.15m. The deposit also contained isolated slag remnants. This was overlain by a dark brown sandy loam topsoil (**701**), with a minimum depth of 0.05m and which contained isolated sub-rounded and rounded stones (less than 0.06m in diameter). Deposit **703** also contained mortar bonded stone structure (**702**). The visible component appeared to be rectangular in shape, with a minimum depth of 0.06mm.



Plate 3: View of Trench 7, looking southwest

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Trench 8

Trench 8 measured a maximum of 700mm by 460mm, and was excavated to a maximum depth of 270mm (see Plate 4). The basal excavated deposit was that of a dark brown sandy silt loam (**803**) with frequent sub-rounded and sub-angular stones (less than 0.06m in diameter) and a minimum depth of 0.06m. The deposit also contained flecks and small fragments of mortar. This was overlain by a stone chipping hardcore (**802**), with a minimum depth of 0.08m. Overlaying **802** was a mid brown silt loam (**801**), containing occasional rounded and sub-rounded stones (less than 0.01m in diameter), fragments of plastic and an insulated copper wire. The deposit had a minimum depth of 0.14m.



Plate 4: View of Trench 8, looking south

Trench 12

Trench 12 measured a maximum of 660mm by 450mm, and was excavated to a maximum depth of 210mm (see Plate 5). The only excavated deposit was a dark grey-black silt loam (**1201**), containing occasional sub-rounded and sub-angular stones (less than 0.06m in diameter) and also isolated rounded stones (less than 0.12m in diameter). The deposit also contained isolated plastic, coal, coke, slate and slag fragments.

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Plate 5: View of Trench 12, looking southeast

Trench 14

Trench 14 measured a maximum of 670mm by 450mm, and was excavated to a maximum depth of 100mm (see Figure 3 and Plate 6). The trench was not excavated to the full depth of 200mm due to the presence of a cobbled stone surface (**1402**) at a depth of 100mm. The structure was very compact and had a matrix of yellow sandy mortar containing flecks of coal. This was overlain by a mid brown sandy loam (**1401**), containing occasional sub-rounded and sub-angular stones (less than 0.06m in diameter) and a minimum depth of 0.1m.



Plate 6: View of Trench 14, looking southeast

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Trench 14a

Trench 14a measured a maximum of 680mm by 450mm, and was excavated to a maximum depth of 110mm (see Figure 4 and Plate 7). The trench was not excavated to the full depth of 200mm due to the presence of a cobbled stone surface (**1402a**) at a depth of 110mm. The structure was very compact and had a matrix of yellow sandy mortar containing flecks of coal, and is likely to be equivalent to **1402**. The surface was overlain by a mid brown sandy loam (**1401a**), containing occasional sub-rounded and sub-angular stones (less than 0.06m in diameter) and a minimum depth of 0.11m.



Plate 7: View of Trench 14a, looking southeast

Trench 15

Trench 15 measured a maximum of 660mm by 460mm, and was excavated to a maximum depth of 210mm (see Figure 5 and Plate 8). A cobbled stone surface (**1504**) was uncovered at a depth of 210mm below the current ground surface, again bonded with a yellow sandy mortar. It is likely that the surface is equivalent to **1402** and **1402a**. The surface was overlain by a hardcore deposit (**1503**) composed of stone chippings set into a mid brown sandy clay matrix, with a minimum depth of 0.07m. Overlaying the hardcore was a light brown sand (**1502**), 0.02m in depth and likely to represent a levelling material. The most recent deposit excavated was a mid brown sandy silt loam topsoil (**1501**) with occasional rounded and sub-rounded stones (less than 0.01m in diameter) and with a minimum depth of 0.12m.

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Plate 8: View of Trench 15, looking east

Trench 18

Trench 18 measured a maximum of 640mm by 460mm, and was excavated to a maximum depth of 220mm (see Plate 9). The basal excavated deposit was that of a dark brown silty clay (**1802**) with frequent rounded and sub-rounded stones (less than 0.2m in diameter) and a minimum depth of 0.13m. The deposit also contained patches of mid orange sandy clay (less than 0.15m in diameter), as well as occasional slate and mortar remnants and isolated charcoal fragments (less than 0.01m in diameter). This was overlain by a dark grey-black silt loam topsoil (**1801**), containing occasional rounded and sub-rounded stones (less than 0.2m in diameter) and with a minimum depth of 0.08m. Deposit **1802** was cut by a modern drainage trench (**1803**) aligned northeast-southwest and with a minimum depth of 0.19m. Within **1802**, two fills were evident, the primary fill was composed of a stone chipping hardcore (**1805**) set in a loose red clay marl matrix. The secondary fill was formed of a dark grey silt loam (**1804**) with isolated sub-angular and sub-rounded stones (less than 0.06m in diameter). The deposit contained patches of non-degraded turf, high levels of bioturbation and remained relatively soft and moist. It is likely to represent previous turf layers and topsoil used as backfill material during recent drainage works.

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Plate 9: View of Trench 18, looking northwest

Trench 19

Trench 19 measured a maximum of 620mm by 540mm, and was excavated to a maximum depth of 270mm (see Plate 10). The basal excavated deposit was that of a dark brown silty clay (**1902**) with frequent rounded and sub-rounded stones (less than 0.2m in diameter) and a minimum depth of 0.12m. The deposit also contained patches of mid orange sandy clay (less than 0.08m in diameter). This was overlain by a dark grey-black silt loam topsoil (**1901**), containing occasional rounded and sub-rounded stones (less than 0.06m in diameter) and with a minimum depth of 0.14m. Deposit **1902** was cut by a modern drainage trench (**1903**) aligned east-west and with a minimum depth of 0.20m. Within **1902**, two fills were evident, the primary fill was composed of dark brown-black silt loam (**1904**) containing moderate sub-angular and sub-rounded stones (less than 0.06m in diameter), as well as isolated fragments of slate and plastic. The secondary fill was composed of a cement deposit (**1905**) with a minimum depth of 0.09m

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Plate 10: View of Trench 19, looking east

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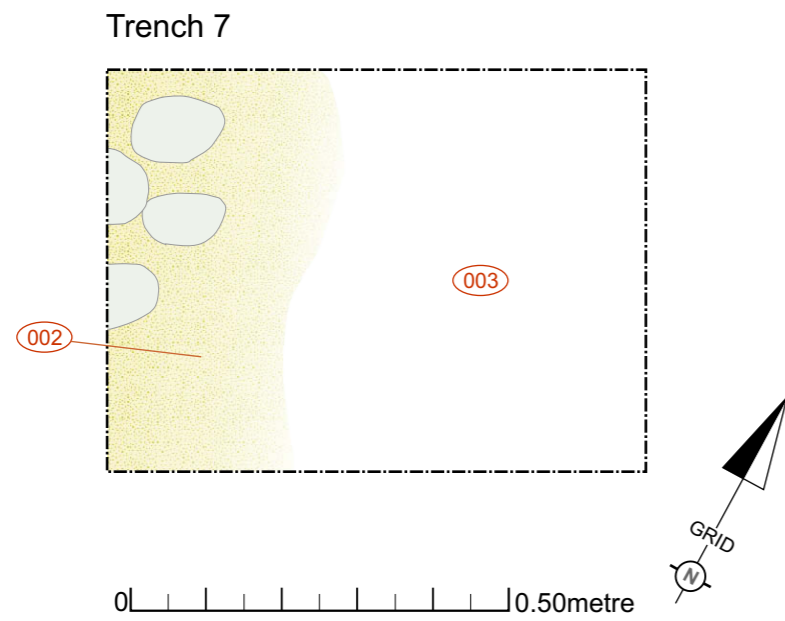


Figure 2

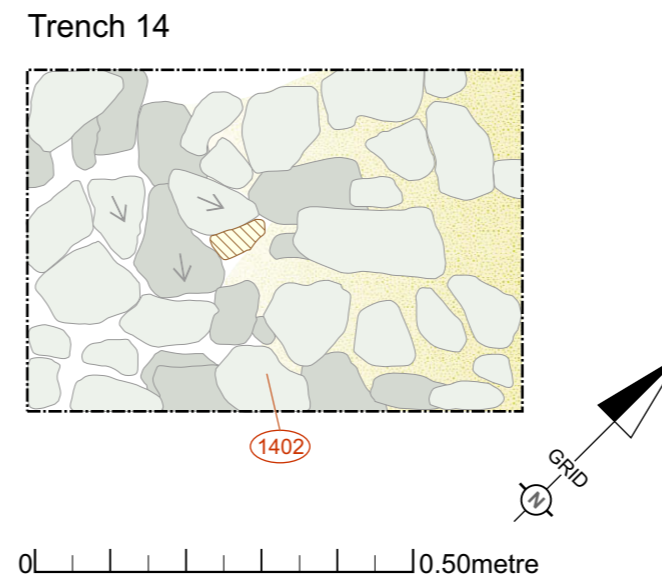


Figure 3

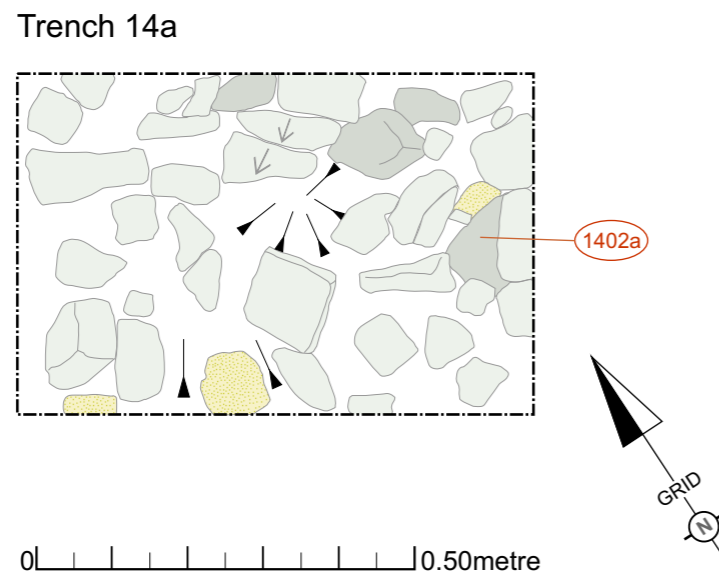


Figure 4

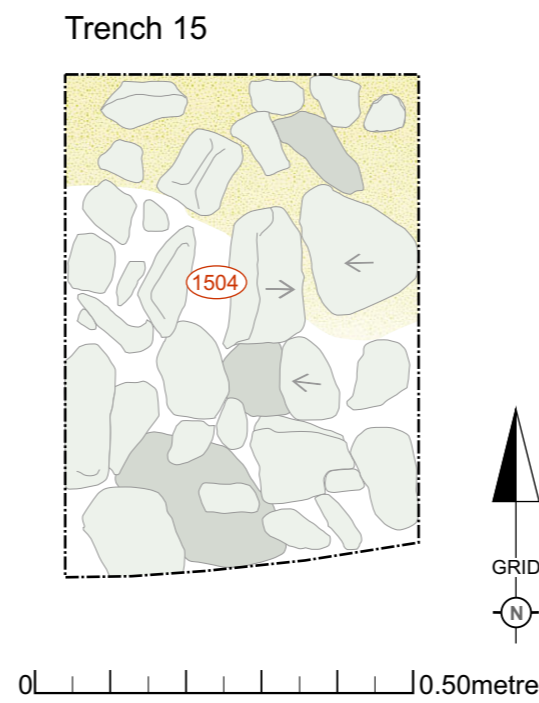










Figure 5

Key to Conventions

-  Limit of excavated area
-  Stone
-  Stone (underlying)
-  Mortar
-  Bone
-  Direction of slope of stone
-  Context number
-  Hachure (gradient)

Figures 2-5. Plans of Trenches 7, 14, 14a and 15 shown at a scale of 1:10

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Finds report by Andy Sherman BA

Introduction

A multi-period finds assemblage from thirteen contexts, recorded in nine trenches, along with two sherds of unstratified pottery, was recovered for analysis. The assemblage dates from between the 2nd and 20th centuries AD and all the contexts contained a broad date range of material, with the exception of context **504** which can be securely dated to the Roman period.

Acknowledgments

The author is grateful to Steve Sell BA (Early Post-medieval ceramics), Rowena Hart BSc MA (Glass) and Paul W Huckfield BA (Cartridges) for their assistance during this report.

Period range

Roman	AD55 – <i>c</i> AD410
Early Medieval	<i>c</i> AD410 – AD1080
Medieval	AD1080 – AD1485
Early Post-medieval	AD1485 - AD1650
Post-medieval	AD1650 – AD1901
Modern	AD1901 – Present

Analysis

Unstratified material

Two sherds of post-medieval pottery were recovered from unstratified contexts across the site. The unstratified assemblage consists of a fragment of grey stoneware handle from a large jar dating from between the late 17th century and the late 19th century, and a body sherd from a poorly fired local coarseware vessel with a yellow glaze.

Trench 4

Context **401** contained two fragments of ceramic building material, one a fragment of modern tile with a white glaze and the other a fragment of undiagnostic brick or tile. This context also produced a single sherd of transfer printed white earthenware dating to the late 19th century.

Trench 5

A single undated animal bone was recovered from context **501**, along with a lump of undated slag and a fragment of post-medieval bottle glass. Context **503** produced three lumps of undated slag and a fragment of modern house brick. Five fragments of pottery were also recovered from this context; a large fragment of local coarseware dating to either the 18th or

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19th centuries, a hand-made fragment of storage jar dating from between c1450 and 1650 and three small fragments of undecorated Samian vessels dating to the Roman period.

Context **504** produced three conjoining fragments of a Black burnished ware jar dating to the early 2nd century and a fragment from the body of a small Roman, redware vessel.

Trench 7

The upper context of this trench (Context **701**) contained six undated animal bones, an undiagnostic iron nail and an iron screw dating from the post-medieval period.

Trench 8

Undiagnostic objects composed of iron and copper were recovered from context **803** along with a fragment from the neck of a post-medieval bottle. Context **803** also produced a fragment from what would appear to be the rim and neck of a bottle in magnesium rich glass. Attached to the underside of the rim are the remnants of a screw fitting in copper, enabling the bottle to be sealed with a screw-threaded lid. This bottle probably dates to between the late 18th and 19th century.

Trench 12

Context **1201** contained two pieces of undated animal bone, two pieces of undated slag and a fragment of clay pipe stem dating to the post-medieval period; along with two sherds of post-medieval pottery. Specifically, a single sherd of local coarseware dating from between the 16th and 19th centuries and a sherd of North Devon gravel-tempered ware dating from between the 16th and 18th centuries. Sherds from two unglazed vessels dating from either the 13th or 14th century were also recovered from this context.

A live 5.56mm x 45mm blank cartridge with the headstamp RG 86 L1A1 was likewise recovered from context **1201**. The 5.56mm x 45mm cartridge was first introduced in the late 1960s for use in the M16A1 rifle by The Royal Marines; with the headstamped RG 86 L1A1 cartridge being produced for use in the British L1A1 SLR (self-loading rifle) during the 1970s and 80s. In the mid 1980s, the SLR was replaced by the 5.56mm Enfield SA80 L85A1.

Trench 14

Context **1402** contained a single fragment of undated animal skull.

Trench 14a

Context **1402a** produced two fragments of undated animal bone and undated oyster and winkle shells.

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Trench 15

A single fragment of modern ceramic with a white glaze was recovered from context **1501**. Context **1503** produced a single fragment of undiagnostic brick or tile dating from the post-medieval period.

Trench 18

A fragment of modern window glass was recovered from context **1801** along with a sherd from the body of a modern bottle. Context **1801** also produced a sherd of North Devon gravel-tempered ware dating from between the 16th and 18th centuries, two sherds of glazed buffwares dating to the first half of the 18th century and an undated clay pipe stem. Context **1802** produced a single body sherd from a vessel with a brownish-green glaze and a hard pale red fabric, dating to between the 16th and 17th century. Two undated animal bones, a fragment of glass from the base of a black bottle and a small fragment of window glass, both dating from the post-medieval period were also recovered from context **1802**.

Conclusions

The finds assemblage recovered by this excavation is typical for that recovered from a multi-period site which has been heavily truncated. All of the trenches contained a broad date range of material, along with fragments of initially undiagnostic artefacts such as slag and animal bone, making it extremely difficult to securely date any one context. The one exception to this trend is context **504**, which produced pottery dating it to the Roman period, most likely the first half of the 2nd century.

4. Watching brief results

Area A

Area A was located in the southwestern corner of the castle grounds (see Figure 6 and Plates 11-12). The construction works consisted of the removal of tarmac in order to expand a grassed area. In total four 1m by 1m test pits were cleaned and examined within the area of tarmac removed, each revealing a similar stratigraphy. At the base of the test pits was a cobbled stone surface (2003, 2006, 2009, 2012) found at a depth between 0.12m and 0.14m. The structure was very compact and had a matrix of yellow sandy mortar containing flecks of coal, and is likely to be the same feature encountered in Trench 14, 14a and 15 (1402, 1402a and 1504). This was overlain by a stone chipping hardcore (2002, 2005, 2008 and 2011) and associated black tarmac (2001, 2004, 2007 and 2010).



Plate 11: Overview of excavated area, looking east

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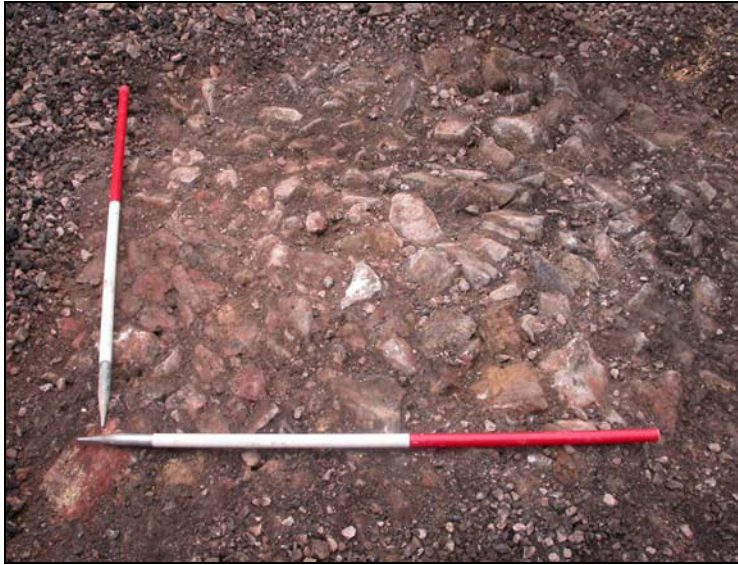


Plate 12: View of 2003, looking south

Area B

Construction works in this area again consisted of the removal of black tarmac (**3001**), with a depth of 0.08m, and associated hardcore chippings (**3002**) with a minimum depth of 0.04m (see Figure 6 and Plate 13). However, in this instance the hardcore deposit was not bottomed as the required level was reached whilst still in the deposit.



Plate 13: View of 3002, looking northwest

Area C

In this area, a trench was excavated for the laying of an electricity cable (see Figure 6 and Plates 14-17). The trench varied in width between 0.15m and 0.26m and had a maximum depth of 0.7m. The observed stratigraphy varied quite considerably across the length of the

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trench (points C1 to C6). From point C1 to C2 the trench was excavated entirely through concrete (4001), with no hardcore revealed (see Plate 14), from C2 to C3 the trench was cut through a grass mound with the only disturbed deposit being that of a mid brown silt loam topsoil (4002) (see Plate 15). Points C3 to C4 crossed the main path to the Western Apartments revealing a compact surface of small angular and sub-angular stones (4005) at a depth of 0.25m (see Plate 16), this underlay a stone chipping hardcore (4004) and associated black tarmac (4003). From points C4 to C5 the trench was excavated to an average depth of 0.3m and revealed a mid brown silt loam topsoil (4006), containing occasional rounded and sub-rounded stones (less than 0.06m in diameter) and with fragments of lime mortar, brick and slate (see Plate 17). Running from points C5 to C6 the trench cut through a grassed area, revealing a mid brown silt loam (4007) containing frequent sub-rounded and sub-angular stones (less than 0.08m in diameter), and fragments of plastic.



Plate 14: View of 4001, looking north



Plate 15: View of 4002, looking east

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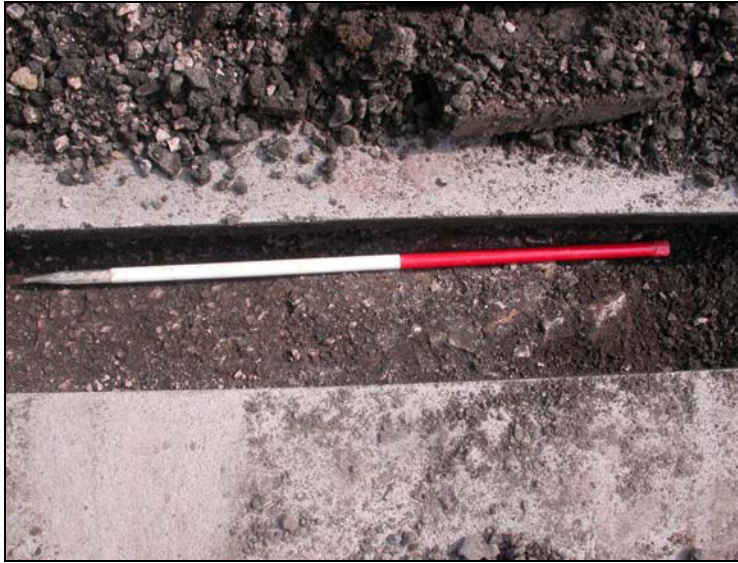


Plate 16: View of 4005, looking east



Plate 17: View of 4006, looking west

Area D

A further electricity cable was re-laid in Area D (see Figures 6-7 and Plate 18). The construction works involved the manual lifting of a small area of tarmac (**5001**) (with a maximum depth of 0.15m), which was set into a paved area (**5005**) dating to the early 20th century and running above the line of the inner bailey wall. Following the removal of hardcore (**5002**) along the previous electricity cable trench (**5004**), a structure (**5003**) was identified which may contain medieval elements due to its position on the line of the Inner Bailey wall.

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Plate 18: View of 5002, 5003 and 5004, looking north

Area E

An additional area of works was observed to the northwest of the Interpretation Centre (see Figure 6), where a ramp was constructed up to a terraced area. A retaining wall was also inserted on the southeast side of Area E. In the southern part of the area all observed material was modern in date (brick, stone cobbles, mortar, slate, plastic etc) in a sandy loam matrix (6001). An old ground surface (again sandy loam (6002)) was apparent in the central part of Area E beneath a modern membrane, sloping gently upwards towards the east. In the northern part of Area E, beyond a modern line of cobbles (6003) dividing the site from west to east, earlier destruction material underlay a thin layer of turf and topsoil. This appeared to consist of two layers, the upper rich in lime mortar (6004), the lower less mortary and more buff in colour, with a sandy matrix (6005). Both were rich in broken stone, gravel, pebbles, slate, also oyster shell, although no datable finds were recovered.

Area F

A further test trench and a total of five test pits were excavated in the southeast corner of the castle in advance of the construction of a viewing platform and associated path (see Figure 6 and Plate 19). The observed stratigraphy was identical across all the excavated areas, with the basal deposit being a brown sandy loam (7002) with a minimum depth of 0.18m and containing fragments of slate, mortar, brick and both post-medieval and modern pottery. This underlay a thin (0.02m) layer of very dark brown-black humic material (7001). Cutting 7002 was a service trench (7003), filled by an orange-grey sandy clay (7004), containing modern demolition material.

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Plate 19: View of test trench in Area F, looking northeast

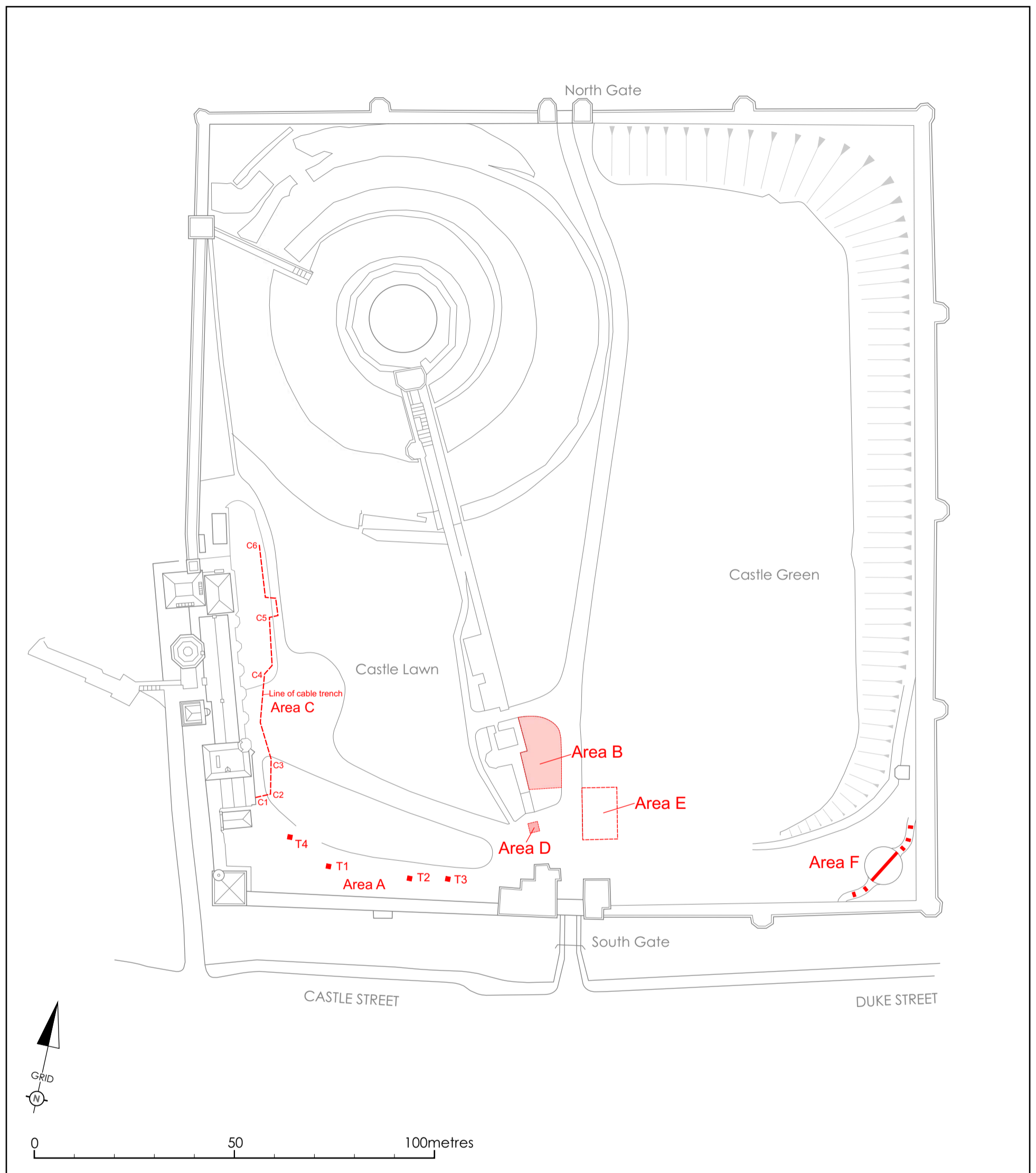


Figure 6. Location of Areas A-F

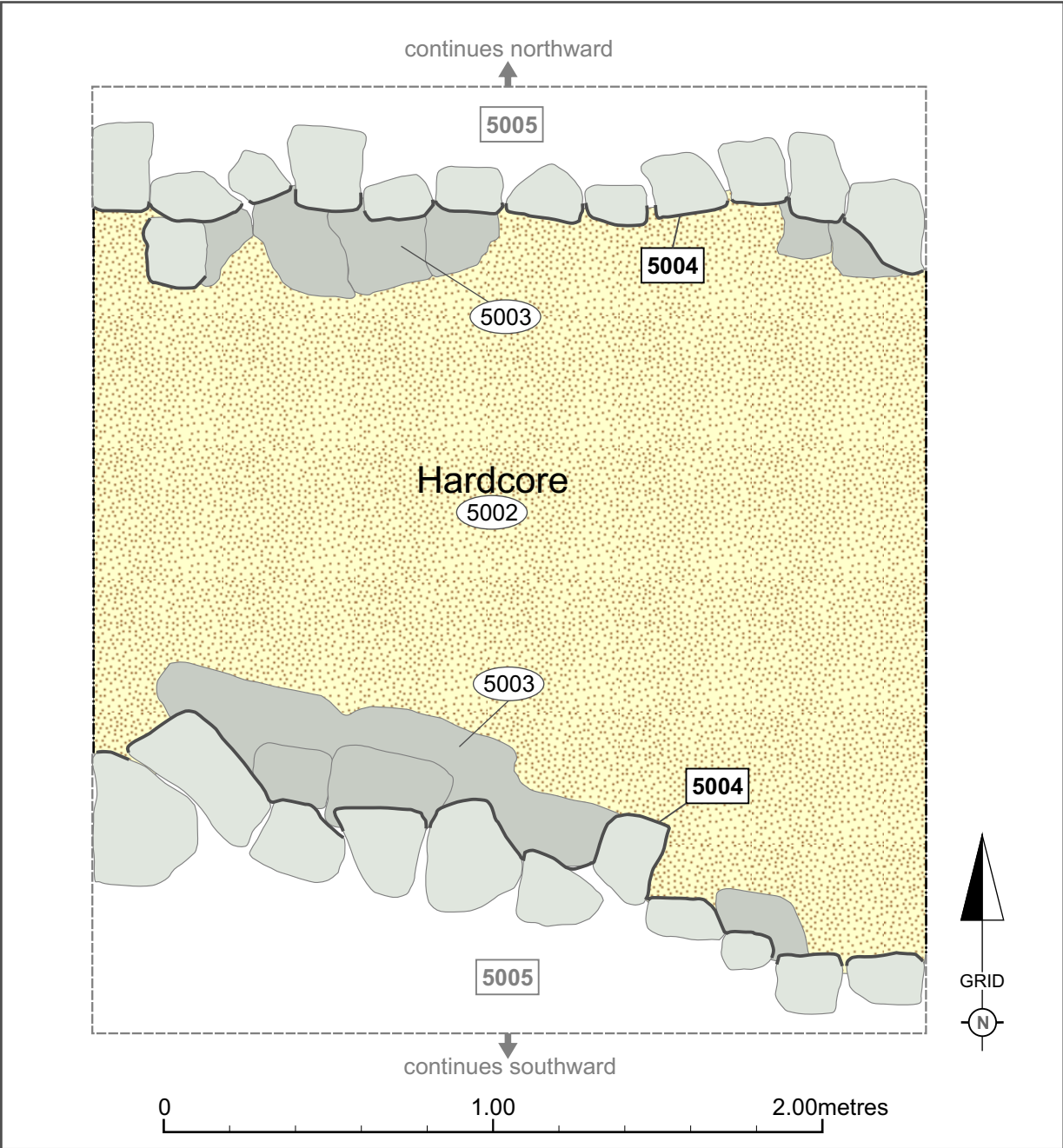


Figure 7. Plan of Area D

5. Conclusions

Several archaeologically significant remains were encountered during the excavation and watching brief, including context **504**, located in Trench 5 close to the North Gate. This deposit produced artefactual material dating only to the Roman period and so is likely to be Roman in date (probably early 2nd century AD), although no structural remains were encountered. The presence of mid/late Roman deposits near the North Gate is attested to in the desk-based assessment conducted prior to the Interpretation Centre excavation (Blockley 2002).

Furthermore, it is possible that elements of the Inner Bailey wall (**5003**) dating to the medieval period survived and were observed in Area D. However, the wall remained unaffected, with only modern deposits being manually re-excavated for the laying of an electricity cable.

The numerous cobbled surfaces present in Trench 14, 14a, 15 and Area A (**1402, 1402a, 1504, 2003, 2006, 2009** and **2012**) are likely to be equivalent to each other and part of the same structure. It is probable that it represents a wide path or road, dating to the late 19th century and running from the southern entrance towards the Western Apartments, thereby giving access to the main household. As the archaeologically significant surface was encountered at less than 150mm below the current ground surface, an alternative engineering solution was devised, in accordance with condition four of the Scheduled Monument Consent. In this case it was decided to use free-standing signs with weighted bases to ensure stability, thereby preserving the surface *in situ*. Similarly, the stone structure (**702**) present in Trench 7, which is likely to be associated to the original path that ran along the inside of the Inner Bailey wall was also preserved by using a free-standing sign.

Deposit **1804** contained patches of non-degraded turf with high levels of bioturbation and is likely to represent previous turf layers and topsoil used as backfill material during recent drainage works.

The results of the archaeological works further demonstrate the presence of Roman and medieval activity within the confines of Cardiff Castle at very shallow depths. The changes in some of the construction techniques ensured that the archaeologically significant structures were preserved *in situ* and were not damaged during the course of the signage and viewing platform projects.

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Appendix I

Inventory of contexts

Context	Location	Type	Average Depth (m)	Description	Period
401	Trench 4	D	0m-0.09m	Light grey silt loam topsoil, occasional sub-angular and sub-rounded stones (<0.06m in diameter)	Modern
402	Trench 4	D	0.17m-0.24m n.b.	Hard orange sandy clay, frequent rounded; sub-rounded and sub-angular stones (<0.2m in diameter), patches of dark orange-red clay (<0.05m in diameter), isolated brick and charcoal	Post-medieval
403	Trench 4	D	0.09m-0.17m	Dark grey silty clay, moderate sub-angular stones (<0.06m in diameter); fragments of plastic, cement and concrete	Modern
501	Trench 5	D	0m-0.07m	Light grey silt loam topsoil, isolated sub-rounded stones (<0.01m in diameter)	Modern
502	Trench 5	D	0.07m-0.12m	Industrial dump consisting of coal, coke, slag fragments.	Unknown
503	Trench 5	D	0.12m-0.21m	Mid brown silty clay, frequent sub-rounded and rounded stones (<0.2m in diameter); fragments of slag and brick	Unknown
504	Trench 5	D	0.21-0.26m n.b.	Light brown silty clay, moderate sub-rounded and sub-angular stones (<0.2m in diameter); frequent charcoal flecking and fragments, brick, tile, isolated slag	Roman
701	Trench 7	D	0m-0.05m	Dark brown sandy loam topsoil, isolated sub-rounded and sub-angular stones (<0.06m in diameter)	Modern
702	Trench 7	S		Mortar-bonded stone structure with a minimum depth of 0.06m	Post-medieval
703	Trench 7	D	0.05m-0.29m	Mid brown sandy silt loam, moderate sub-rounded and sub-angular stones (<0.01m in diameter); fragments of slag	Post-medieval
801	Trench 8	D	0m-0.14m	Mid brown silt loam topsoil, occasional rounded and sub-rounded stones (<0.01m in diameter); fragments of plastic, copper wire	Modern
802	Trench 8	D	0.14m-0.22m	Stone chipping hardcore	Modern
803	Trench 8	D	0.22-0.27m n.b.	Dark brown sandy silt loam, frequent sub-rounded and sub-angular stones (<0.06m in diameter); flecks and fragments of mortar	Post-medieval
1201	Trench 12	D	0m-0.21m n.b.	Dark grey-black silt loam, occasional sub-rounded and sub-angular stones (<0.06m in diameter), isolated rounded stones (<0.12m in diameter); fragments of plastic, coal, coke, slate and slag	Modern
1401	Trench 14	D	0m-0.1m	Mid brown sandy loam, occasional sub-rounded and sub-angular stones (<0.06m in diameter)	Modern
1402	Trench 14	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval
1401a	Trench 14a	D	0m-0.11m	Mid brown sandy loam, occasional sub-angular and sub-rounded stones (<0.06m in diameter)	Modern
1402a	Trench 14a	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval

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1501	Trench 15	D	0m-0.12m	Mid brown sandy silt loam topsoil, occasional rounded and sub-rounded stones (<0.01m in diameter)	Modern
1502	Trench 15	D	0.12-0.14m	Light brown sand	Modern
1503	Trench 15	D	0.14m-0.21m	Stone chipping hardcore, set into a mid brown sandy clay matrix	Modern
1504	Trench 15	S		Cobbled stone surface, bonded with a yellow sandy mortar	Post-medieval
1801	Trench 18	D	0m-0.08m	Dark grey-black silt loam topsoil, occasional rounded and sub-rounded stones (<0.2m in diameter)	Post-medieval
1802	Trench 18	D	0.08m-0.21m n.b.	Dark brown silty clay, frequent rounded and sub-rounded stones (<0.2m in diameter); patches of mid orange sandy clay (<0.15m in diameter)	Post-medieval
1803	Trench 18	C		Drainage trench, aligned northeast-southwest	Modern
1804	Trench 18	D		Secondary fill of 1803, dark grey silt loam, isolated sub-angular and sub-rounded stones (<0.06m in diameter); also patches of non-degraded turf	Modern
1805	Trench 18	D		Primary fill of 1803, Stone chipping hardcore, set in a loose red clay marl matrix	Modern
1901	Trench 19	D	0m-0.14m	Dark grey-black silt loam topsoil, occasional rounded and sub-rounded stones (<0.06m in diameter)	Post-medieval
1902	Trench 19	D	0.14m-0.26m n.b.	Dark brown silty clay, frequent rounded and sub-rounded stones (<0.2m in diameter); patches of patches of mid orange sandy clay (<0.08m in diameter)	Post-medieval
1903	Trench 19	C		Drainage trench, aligned east-west	Modern
1904	Trench 19	D		Primary fill of 1903, dark brown-black silt loam, moderate sub-angular and sub-rounded stones (<0.06m in diameter); isolated slate and plastic	Modern
1905	Trench 19	D		Secondary fill of 1903, cement deposit	Modern
2001	Area A Test Trench 1	D	0m-0.1m	Black tarmac	Modern
2002	Area A Test Trench 1	D	0.1m-0.12m	Hardcore chippings	Modern
2003	Area A Test Trench 1	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval
2004	Area A Test Trench 2	D	0m-0.11m	Black tarmac	Modern
2005	Area A Test Trench 2	D	0.11m-0.13m	Hardcore chippings	Modern
2006	Area A Test Trench 2	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval
2007	Area A Test Trench 3	D	0m-0.1m	Black tarmac	Modern
2008	Area A Test Trench 3	D	0.1m-0.12m	Hardcore chippings	Modern
2009	Area A Test Trench 3	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval
2010	Area A Test Trench 4	D	0m-0.12m	Black tarmac	Modern

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2011	Area A Test Trench 4	D	0.12m-0.14m	Hardcore chippings	Modern
2012	Area A Test Trench 4	S		Cobbled stone surface, very compact with a matrix of yellow sandy mortar (containing flecks of coal)	Post-medieval
3001	Area B	D	0m-0.08m	Black tarmac	Modern
3002	Area B	D	0.08m-0.12m n.b.	Hardcore chippings	Modern
4001	Area C	D	0m-0.08m n.b.	Concrete	Modern
4002	Area C	D	0m-0.48m n.b.	Mid brown silt loam topsoil	Modern
4003	Area C	D	0m-0.08m	Black tarmac	Modern
4004	Area C	D	0.08m-0.25m	Stone chippings hardcore	Modern
4005	Area C	S		Compact surface of small angular and sub-angular stones	Unknown
4006	Area C	D	0m-0.3m n.b.	Mid brown silt loam topsoil, containing occasional rounded and sub-rounded stones (less than 0.06m in diameter) and with fragments of lime mortar, brick and slate.	Modern
4007	Area C	D	0m-0.12m n.b.	Mid brown silt loam, containing frequent sub-rounded and sub-angular stones (less than 0.08m in diameter), and fragments of plastic	Modern
5001	Area D	S	0m-0.15m	Tarmac	Modern
5002	Area D	D	0.15m-0.18m	Hardcore	Modern
5003	Area D	S		Possible Medieval wall	Medieval ?
5004	Area D	C		Cut of electricity cable trench	Modern
5005	Area D	S		Paved area, dating to the early 20th century	Post-medieval
6001	Area E	D		Sandy loam containing brick, stone cobbles, mortar, slate and plastic	Modern
6002	Area E	D		Sandy loam	Unknown
6003	Area E	S		Cobbled surface	Modern
6004	Area E	D		Destruction material, rich in lime mortar, containing broken stone, gravel, pebbles, slate and oyster shell	Unknown
6005	Area E	D		Destruction material with sandy matrix, containing broken stone, gravel, pebbles, slate and oyster shell	Unknown
7001	Area F	D	0m-0.02m	Very dark brown-black humic material	Modern
7002	Area F	D	0.02m-0.2m n.b.	Brown sandy loam, containing fragments of slate, mortar, brick and both post-medieval and modern pottery	Modern
7003	Area F	C	-	Cut of service trench	Modern
7004	Area F	D	-	Fill of 7003, orange-grey sandy clay, containing modern demolition material	Modern

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Note:

D = Deposit

S = Structure

C = Cut

nb = context not bottomed.

Appendix II

Finds Index

Unstratified material

Context	Material type	Description	Quantity	Weight (kg)	Period
^U /s	Pottery	Grey stoneware	1	0.226	Post-medieval
^U /s	Pottery	Local coarseware	1	0.032	Post-medieval

Trench 4

Context	Material type	Description	Quantity	Weight (kg)	Period
401	CBM	-	1	0.004	^U /d
401	CBM	Fragment of tile with white glaze	1	0.002	Modern
401	Pottery	Body sherd from a white earthenware transfer printed vessel	1	0.002	Post-medieval

Trench 5

Context	Material type	Description	Quantity	Weight (kg)	Period
501	Animal bone	-	1	0.018	^U /d
501	Slag	-	3	0.030	^U /d
501	Glass	Fragment of clear glass bottle	1	0.004	Post-medieval
503	Slag	-	3	0.044	^U /d
503	CBM	Fragment of pale orange coloured house brick	1	0.042	Modern
503	Pottery	Local coarseware	1	0.094	Post-medieval
503	Pottery	Shoulder fragment of storage jar	1	0.074	Early post-medieval
503	Pottery	One rim fragment and two body fragments from Samian vessels	3	0.002	Roman

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504	Pottery	Rim from an early second century Black burnished ware jar	3(=1)	0.024	Roman
504	Pottery	Body sherd from a small redware vessel	1	0.004	Roman

Trench 7

Context	Material type	Description	Quantity	Weight (kg)	Period
701	Animal bone	-	6	0.018	U/d
701	Fe	Nail	1	0.008	U/d
701	Fe	Slot-headed screw	1	0.010	Post-medieval

Trench 8

Context	Material type	Description	Quantity	Weight (kg)	Period
803	Fe	Unidentified object	1	0.022	U/d
803	Cu	Unidentified object	2 (=1)	0.002	U/d
803	Glass	Fragment from the neck of a green coloured glass bottle	1	0.020	Post-medieval
803	Glass/Cu object	Fragment from the rim and neck of bottle in a magnesium rich glass (creating a deep purple colour). Attached to the glass fragment are the remains of a screw fitting in copper.	3(=1)	0.006	?Post-medieval

Trench 12

Context	Material type	Description	Quantity	Weight (kg)	Period
1201	Animal bone	-	2	0.010	U/d
1201	Slag	-	2	0.024	U/d
1201	Cartridge	5.56mm x 45mm blank rifle cartridge	1	-	Modern
1201	Clay pipe	Stem	1	0.004	Post-medieval
1201	Pottery	North Devon gravel-tempered ware body fragment	1	0.002	Post-medieval
1201	Pottery	Local coarseware body fragment	1	0.004	Post-medieval
1201	Pottery	Body sherds from two unglazed vessel	2	0.014	Medieval

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Trench 14

Context	Material type	Description	Quantity	Weight (kg)	Period
1402	Animal bone	Skull fragment	1	0.001	U/d

Trench 14a

Context	Material type	Description	Quantity	Weight (kg)	Period
1402a	Animal bone	-	2	0.006	U/d
1402a	Shell	Oyster and winkle	2	0.016	U/d

Trench 15

Context	Material type	Description	Quantity	Weight (kg)	Period
1501	Pottery	Body fragment of white glazed modern ceramics	1	0.002	Modern
1503	CBM	U/d fragment of brick or tile	1	0.008	Post-medieval

Trench 18

Context	Material type	Description	Quantity	Weight (kg)	Period
1801	Glass	One body fragment of green bottle glass and one fragment of window glass	2	0.004	Modern
1801	Clay pipe	Stem	1	0.001	Post-medieval
1801	Pottery	North Devon gravel-tempered ware body sherd	1	0.008	Post-medieval
1801	Pottery	Yellow-glazed buffware body sherd	1	0.001	Post-medieval
1801	Pottery	Brown-glazed buffware body sherd	1	0.002	Post-medieval
1802	Animal bone	-	2	0.012	U/d
1802	Glass	Fragment from the base of a black coloured glass bottle, fragment from window	2	0.010	Post-medieval
1802	Pottery	Body sherd from a vessel with brownish-green glaze and a hard pale red fabric	1	0.010	16th – 17th century

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Note:

CBM: Ceramic building material

Cu: Copper

Fe: Iron

^U/_D: Undiagnostic

^U/_S: Unstratified

X=1: Fragments join

?X: Probable date