

# An excavation in the inner bailey of Shrewsbury Castle



Nigel Baker  
January 2020

# An excavation in the inner bailey of Shrewsbury Castle

Nigel Baker BA PhD FSA MCIfA

January 2020

*A report to the Castle Studies Trust*



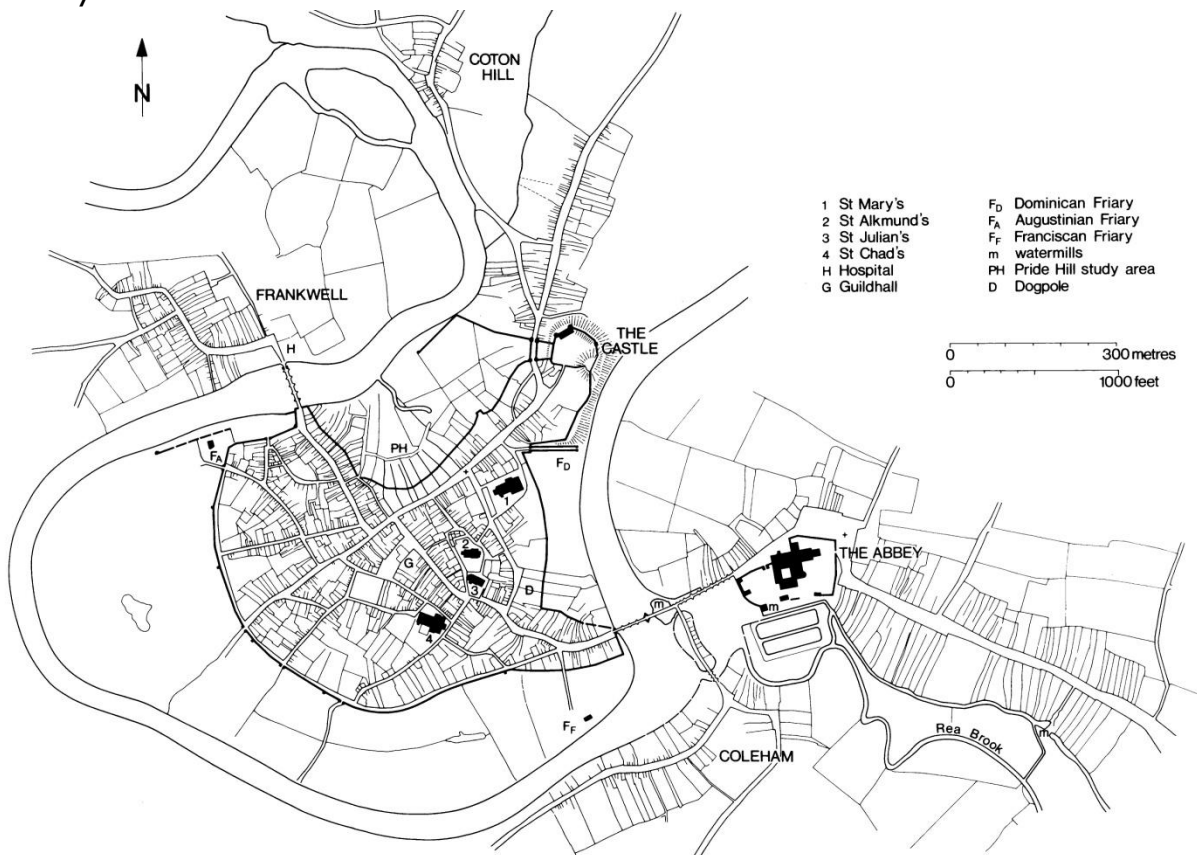
I. Shrewsbury Castle: the inner bailey excavation in progress, July 2019. North to top. (Shropshire Council)

## Summary

In May and July 2019 a two-phase archaeological investigation of the inner bailey of Shrewsbury Castle took place, supported by a grant from the Castle Studies Trust. A geophysical survey by Tiger Geo used resistivity and ground-penetrating radar to identify a hard surface under the north-west side of the inner bailey lawn and a number of features under the western rampart. A trench excavated across the lawn showed that the hard material was the flattened top of natural glacial deposits, the site having been levelled in the post-medieval period, possibly by Telford in the 1790s. The natural gravel was found to have been cut by a twelve-metre wide ditch around the base of the motte, together with pits and garden features. One pit was of late pre-Conquest date.

# Introduction

Shrewsbury Castle is situated on the isthmus, the neck, of the great loop of the river Severn containing the pre-Conquest borough of Shrewsbury, a situation akin to that of the castles at Durham and Bristol. It was in existence within three years of the Battle of Hastings and in 1069 withstood a siege mounted by local rebels against Norman rule under Edric ‘the Wild’ (*Sylvaticus*). It is one of the best-preserved Conquest-period shire-town earthwork castles in England, but is also one of the least well known, no excavation having previously taken place within the perimeter of the inner bailey. It now consists of a motte and a small inner bailey defined by well-preserved ramparts surmounted by later curtain walls, with a royal chamber block and twin circular towers cut into the north-west rampart in the first half of the 13<sup>th</sup> century.

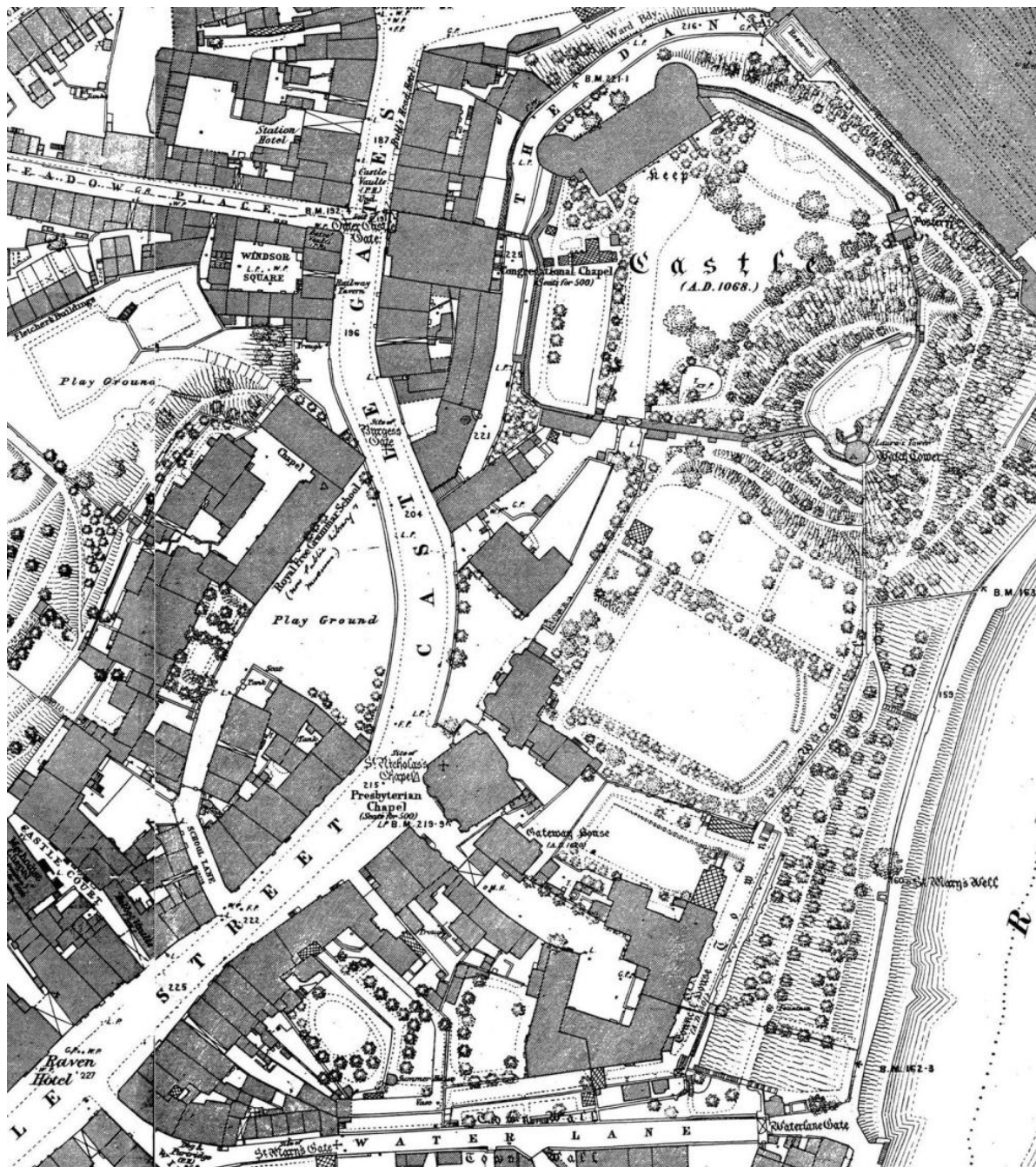


2. The location of Shrewsbury Castle within the medieval built-up area. The Castle Foregate suburb runs northwards from the castle along the road to Chester (Baker 2010)

The present public monument (a Scheduled Ancient Monument, SAM 1003706, and Listed Grade I building 1246877) represents less than half the medieval castle as it was founded, it having ‘lost’ its outer bailey to commercial colonisation in the course of the 13<sup>th</sup> century.

The limits of the outer bailey can be accurately reconstructed from historical, antiquarian and topographical sources; its earth rampart was encountered in a single excavation on the former Grammar School site (now Castle Gates Library) in 1978. Domesday Book (f. 252) records that 51 tax-paying tenements were lost when the castle was built, most likely along the main Castle Street – Castle Gates road through the outer bailey, a section of the strategic route through the Marches between Chester and Hereford. The outer bailey was subsequently divided into tenements held from the Crown by military service. These were being sold off or let to local people by the beginning of the 1230s; by 1279, 14 burgages in

the bailey were held by descendants of county knights; six had been let to locals by 'service at the house' most probably a continuing obligation to provide lodgings (VCH Shropshire 6, i, 77). The chapel of St Nicholas was built in the 12<sup>th</sup> century on the east side of the street to provide a place of worship for the bailey's inhabitants (fig.6). Traces of the tenurial distinctiveness of the bailey persisted into the 15<sup>th</sup> century, and traces of the defences survive to this day, with a narrowing of the present street on the site of the gate and the encapsulation of the standing rampart under later surfaces in its south-west corner, off School Gardens.



3. The complete castle: the former outer bailey is clearly evident on the 1<sup>st</sup> edition O. S. 1:500 plans of 1882; the narrowing of the main street marks the site of the gate

## A brief historical introduction to the castle

There is no direct documentary evidence for pre-Conquest activity on the castle site, other than the Domesday account of the loss of tax-paying tenements when it was built. There are however hints that what was to be the castle chapel of St Michael may have been a pre-Conquest foundation. It appears in Domesday Book, between the entries for St Mary's and St Chad's, holding two small manors (DB f.252v), and throughout the Middle Ages it was a royal free chapel, exempt of episcopal oversight, being known as the King's Free Chapel of St Michael within the Castle (Morris 1938, 101-102).

The castle is first referred to by Orderic Vitalis, writing in the early 12<sup>th</sup> century, with an account of its siege in the Marches rebellion of 1069 under Edric the Wild (*sylvaticus*, 'of the woods', implying a resistance fighter) describing it as the *praesidium regis*, usually translated as 'royal stronghold'. The castle withstood the siege, and the rebels left the scene having set fire to the town (Chibnall 1969, 228-9). The castle is referred to shortly after these events in the Domesday Survey, which records it as having been built at the expense of demolishing 51 households (DB f.252).

Control of the castle passed from Roger of Montgomery, Earl of Shrewsbury, to his son, Robert of Bellesme and, after the latter's unsuccessful rebellion in 1102, the king retook the castle and it remained in royal hands – short episodes excepted – until the 16<sup>th</sup> century. In 1138, in the course of the civil war, the castle was held for Matilda against King Stephen by William Fitz Alan, the county sheriff; successfully stormed by Stephen's forces after a four-week siege, many of the castle garrison were hung (Owen 1808, 8-9; Morris 1938, 99).

Under Henry II, royal expenditure on Shrewsbury Castle was more or less constant, and recent research on the church of St Mary suggests that the king took a close personal interest in the town (Alana Duggan, thesis, pers. comm.) In 1164-5 payment was made for munitioning 'the tower of Shrewsbury'. Further payments for building work and repairs were made in 1165-6, 1167-8; work on the 'king's houses' and further repairs were recorded in 1168-9, in 1172-3 there was work on the motte, and from 1181 to 1215 repairs to castle and buildings were made continually (Colvin, Brown and Taylor 1963, 835). Nevertheless, in 1215 the castle and the town put up no resistance against Welsh forces under Llewelyn the Great (Owen 1808, 10). When the English crown regained control, expenditure resumed. In 1222-23 payments were made for work on Shrewsbury Castle, including brushwood to fire limekilns. In 1228-29 there were payments for making a palisade round 'the tower of Shrewsbury' and in 1233-34 a new barbican and drawbridge were built at a cost of £10 (Colvin, Brown and Taylor 1963, 836).

In 1239 the County Sheriff was ordered by the king to build a new chamber and turret(s) (*turrella*); they were completed in 1241 at a cost of £653 13s (Colvin, Brown and Taylor 1963, 836). This was almost certainly the present main building, the so-called great hall, which had independently been identified as a royal chamber block on architectural grounds (Morris 2001) and which, dendrochronological dating on timbers embedded in the masonry over the stairs shows, was built using trees felled between 1234 and 1249 (Bridge and Miles 2005).

The hall itself (i.e. *not* the present standing building) had to have money spent on repairs in 1246 and 1249-51; the last record of repairs specifically to the 'king's hall' dates from 1287-9 (Colvin, Brown and Taylor 1963, 836).

It will be argued later that the king's hall probably stood on the motte, as there was almost certainly insufficient space for it in what is now known as the inner bailey. The motte, however, had its own problems. Built on the outside of a bend in the River Severn, it would always have been vulnerable to erosion at its base and indeed in 1255 an enquiry into the condition of the motte estimated that it had suffered damage from the river that would take 60 marks to put right; the damage was said to be of long standing, but aggravated by the Abbot of Shrewsbury's mill built on the opposite bank. In 1256-7 repairs to the motte were in progress, but in 1269-71 a 'great wooden tower' fell down and was said to be totally destroyed (Colvin, Brown and Taylor 1963, 836). This has usually been assumed to be an original Norman watch-tower on the motte summit: while totally plausible, this has never actually been established. In 1258 payments were recorded for a new gateway and bridge, these had to be ordered to be completed in 1260. The payments may well relate to the structures on the site of the present inner bailey entrance, but the bridge (which had to be repaired again in 1299-1300) could well have been that which crossed the motte ditch (see below). The great palisade around the motte (motte summit?) was also repaired at this time (ibid, 836).

#### *The royal castle in decline*

Only minor repairs are recorded in later years and the castle in the 14<sup>th</sup> century had clearly entered a long period of obsolescence and neglect. In 1336 the castle was reported 'very much out of repair'; it was 'ruinous' by the accession of Henry 4<sup>th</sup> in 1399, houses were being built in the ditch between the castle and the town, the prison was insecure and the chapel of St Michael had collapsed. In 1443 the king was told that all the housing within the castle had fallen down and only the walls remained – and unless these were repaired and covered they would fall down too. The donjon (*dongeon* – the motte) had been undermined by the river and a 'great parcel' of it had fallen into it. Some repairs at least seem to have been undertaken between 1451 and 1453 (Colvin, Brown and Taylor 1963, 837).

In 1564-5 Richard Onslow, the Queen's Solicitor General, was granted a 31-year lease of the 'late castle'. Nevertheless the town bailiffs exercised some authority over at least the gaol there, and in 1596 the bailiffs and burgesses took over the lease (Morris 1938, 104-5). At this juncture, the castle was illustrated for the first time, appearing on the Burghley Map of c.1575.

The curtain walls and mural towers were then intact; the present hall was roofless, so too was an unidentified building, possibly the chapel of St Michael, to its left/south; a roofed building stood just inside the gate in the area of the castle well; a large mural tower (presumably the 'watch tower' whose base remains under Laura's Tower) stood on what must have been the motte, and a small crenellated tower can be seen between this and the hall – presumably on the site of the present postern gate.



4. The inner bailey, c.1575: detail from the Burghley Map

A strangely schematic plan of Shrewsbury Castle was made by the architect and master mason John Smythson in August 1627. This shows the inner bailey entrance with a gatehouse over it within the walls. The curtain wall to its west is labelled 'renewed'; the western curtain is said to be 'part standing'. The hall building is shown with a partition two-thirds of the way along it towards its north end, with an entrance into the smaller room at that end; the towers on the corners are simply shown as stair turrets. The north curtain wall is labelled 'part standing' and towards its eastern end is a projecting rectangular building, presumably on the site of the postern gate. The motte top is shown with the circular 'watch tower' labelled 'this tower is renewed' (Girouard 1962).



5. The castle in c.1640, just before modernisation by the Royalists in 1643-44. Detail from the panorama of Shrewsbury from the east (SM&AG)

The castle was re-fortified during the English Civil War under the Royalists to serve as a 'citadel and magazine'. Recent research on the town's mayoral accounts has shown massive expenditure there in 1643 and 1644. The stone barbican in front of the main gate was built at this time and equipped with a roof, portcullis and drawbridge over the ditch outside. The present postern gate in the north wall was under way in June 1643, replacing an existing square tower with a sally-port. Within the castle interior new timber-framed buildings were erected: a porter's lodge, a guardroom or 'sentinel house' and a latrine block; the castle well was also refurbished; timber outworks and ditches were dug or re-dug (Worton 2012, 106). Despite all these precautions and expenditure, the castle fell with few casualties on either side to a surprise assault, aided by 'fifth columnists', by the Parliamentarians in early 1645 and shot-damage from musketry is evident on the main gate leaves, on the exterior of the postern gate and around the windows at the north end of the hall. The Parliamentarians evidently continued to spend money on the castle, dendrochronological dating of the king-post roof and gallery of the present hall recording a felling date in the winter of 1647 (Bridge & Miles 2005). The castle garrison was maintained briefly while the defences of the town were slighted, but, with a failed Royalist assault of 1648 the castle's military career was almost over (Worton 2012, 108-9). At the time of a plot against Charles II in 1683 it was said that the castle contained 38 barrels of gunpowder, 'great guns' and arms for 300 men; it was finally de-munitioned in 1686 (Morris 1938, 107). Surrendered to the crown at the Restoration, in the 1660s it was granted to Sir Francis Newport and began a new life as a private residence. In c.1730 it was leased to a Mr Gosnell of Rossall, who was said by Archdeacon Owen to have 'converted it into a gloomy inconvenient habitation' (Owen 1808, 68). At the end of the 18<sup>th</sup> century it became the property of Sir William Pulteney, for whom it was modernised by Thomas Telford in the 1790s. It was restored again in 1887; though few records of this episode are known, it probably accounted for the rebuilding of the battlements to the hall and towers and possibly to those of the inner bailey too (Morris 2001, 16). In the early 20<sup>th</sup> century it was sold to the Shropshire Horticultural Society, who presented it to the town of Shrewsbury. In the early 1920s it was modernised by Sir Charles Nicholson and from January 1926 the castle hall was used as the Council Chamber for the Borough Council. It remained thus until the Regimental Museum took over in the 1980s. The castle had a brief return to its more eventful origins when it was targeted by PIRA incendiary bombs in 1992.

## A brief architectural introduction to the castle

A full account of the surviving castle buildings would be well beyond the scope of this interim excavation report: for such an account, the reader is referred to the work of Richard K Morris (2001). Nevertheless, to properly contextualise the 2019 work it is necessary here to offer a brief summary of the main upstanding features of the inner bailey and its immediate environs.

### *The curtain walls*

Although they were comprehensively photographed c.2000 (in monochrome) by Ken Hoverd for the conservation management plan being put together at that time, the masonry walls comprising the inner bailey curtain walls, the wing walls up the slopes of the motte and



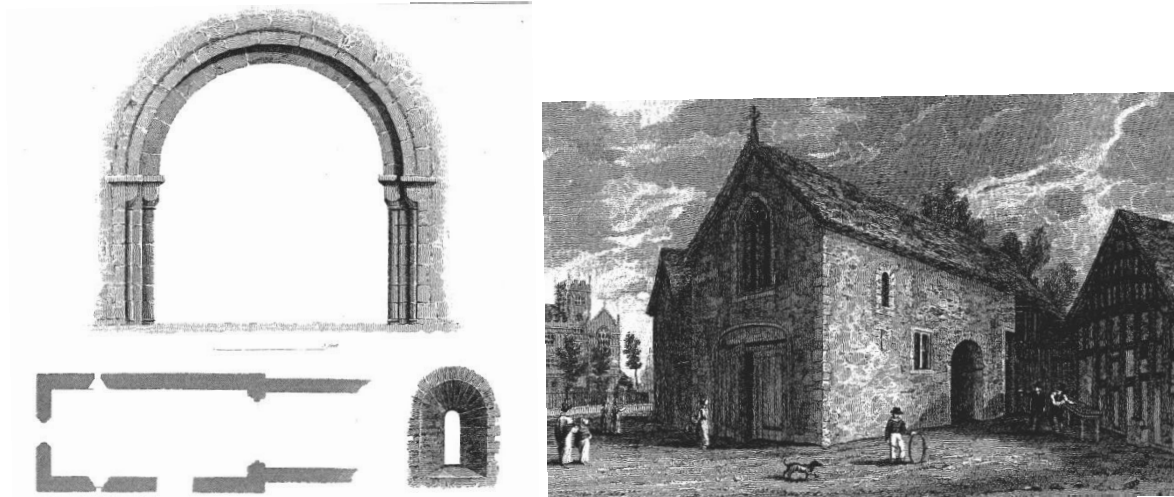
the retaining walls around the top of the motte, have never been properly studied. The inner bailey curtain walls were said by Raleigh Radford (1960, 17) to be 'laid out in short straight lengths, a feature characteristic of defences built in the middle of the 12<sup>th</sup> century', though this (while often quoted) seems more likely to be a characteristic of stone walls added to curving earthworks at almost any date. Regardless, the masonry now visible around the perimeter occurs in every conceivable permutation of uncoursed rubble to fine ashlar, from numerous quarry sources (local Keele Beds, Nesscliffe, Grinshill, local Coed-yr-Alt beds (coal measures) sandstone, stone from Myddle, Hollington and Runcorn, and others unidentified), and with and without distinct base-courses, plinths and footings. The meaning of these differentials is almost never clear. A brief account of some of the varied character of the walls was given by Richard Morriss (2001).

On the north side, the curtain wall close to the hall is of very mixed character and includes a repair dated 1987, following a local collapse, which was not archaeologically recorded. The base of the wall is coursed rubble with an offset to the foundations, and mixed re-used ashlar above; the parapet all along this section is of Nesscliffe-type stone, possibly by Thomas Telford. Much of the north wall exterior is coursed squared rubble of varying proportions, from almost square to thin and 'slabby', with two horizontal plinth courses large quoins mark the change in direction of the wall face. The coursing appears continuous either side of the quoins, though the plinth ends. Confidence that this section represents a length of unadulterated 12<sup>th</sup>- or 13<sup>th</sup>-century work is however reduced by a drawing of the castle from the north-east in a cartouche in the corner of John Rocque's 1746 map of Shrewsbury, which shows a multi-loop projecting bastion-like feature in this area, possibly a Civil War feature, of which there is now no obvious evidence. The internal face below wall-walk level is now largely obscured by shrubbery but appears mostly to be ashlar bearing little resemblance to the masonry of the outer face.

From the postern gate, the curtain wall climbs the slope of the motte and shows obvious evidence of two main phases, having been raised in height with ashlar walling added above slabby green sandstone rubble with some larger square blocks. The green material looks like the inferior Coed-yr-Alt beds sandstone, which was in use at Shrewsbury Abbey very briefly, at the beginning of the 13<sup>th</sup> century. The raising of the wall may (as Morriss suggested) have taken place when the postern gate was built on the site of an earlier structure in 1643.

The west curtain wall, above the Dana footpath, was considered by Richard Morriss to be of one main build of Keele Beds purple to grey sandstone ashlar, with rebuilt crenellation in a soft, orange, Nesscliffe-like sandstone, either by Telford or in 1887. However, on the inner face there are clear signs of post-medieval rebuilding with stones in some areas set on end.

The south curtain wall is similarly a complex multi-phase structure. There is no crenellation on this side. Most of the interior face is coursed ashlar but there is rubble work around and above the main gateway, generally reckoned to be primary to the wall of mid- to late 12<sup>th</sup>-century date (Morriss 2001, 42). To its immediate west is a second gateway, not dissimilar architecturally, 'clearly inserted along with its flanking masonry' said to have been salvaged from the nearby chapel of St Nicholas when the latter was demolished in the 1860s. However, an illustration of the chancel arch of St Nicholas's in Owen & Blakeway's *History of Shrewsbury* (1825) shows that to have been a lower, wider arch with cushion capitals to each of its two orders – which are not there now. There is therefore an unresolved problem here – unless the arch was extensively rebuilt when it is supposed to have been moved.



6. St Nicholas's chapel in the outer bailey, and its chancel arch. From Owen & Blakeway's History of Shrewsbury (1825)

### *The motte*

The level top of the motte stand 13m above the surface of the inner bailey. In plan, the motte top is now roughly triangular, widest on the south-west side, but the clear historical evidence of damage by landslips resulting from erosion by the river suggests that it may originally have been oval and perhaps up to twice its present area. The motte top is retained on its eastern/riverside/damaged side by a substantial retaining wall of pale, probably Grinshill, coursed sandstone ashlar with contrasting bands of red sandstone, identifying it with some certainty as work by Edward I's builders, in imitation of Caernarfon, late in the 13<sup>th</sup> century, making good after the collapse. At the southern end of the motte this wall is bonded into the semi-circular base of a tower: this was known in the 18<sup>th</sup> century as the 'watch tower' and illustrations suggest it stood until Thomas Telford built the Gothick 'Laura's Tower' on top of it, as a summerhouse, in the 1790s.

The lower walls retaining the south and west sides of the motte are of coursed squared rubble with a projecting rubble base course. These appear to be medieval. Geophysical survey (GPR) on the motte by Stratascan in 2000 showed that the motte-top retaining walls are of substantial thickness particularly at the north end and south side of the motte. This probably relates to buildings that formerly stood on the motte, and will be discussed further below.



7. Thomas Telford's Laura's Tower of c.1790 on the motte top

*The castle 'hall' – a royal chamber block*

The building was examined by buildings archaeologist Richard K Morriss in 2000. Externally, it is nearly all of the early 13<sup>th</sup> century, except for the tops of the walls, which are Thomas Telford's work of the 1790s, as are the 1<sup>st</sup> floor windows, which were inserted into original openings; the door at the east end was built during a restoration episode in 1925-6 by Sir Charles Nicholson when the site was acquired by the Borough but it was built where Telford had inserted a window into the original door position.



8. The castle hall: the inner bailey (south-east) elevation

Inside, the building has two principal spaces: the undercroft, which is at courtyard level, and the hall above, which is open to the roof. Richard Morriss reckoned that the gap evident between the windows in the outside or north wall, just east of the 1920s-reproduction

fireplace, probably represents an original timber-framed partition line between the principal, heated space to the west and a smaller unheated space to the east, at the low end of the building, where the external access came in. There's also a single vaulted chamber in the western turret which probably served as a private chapel. Overall, Morris thought the building was a better fit as a storeyed royal chamber block than as a great open hall.

The present flat-pitched hall roof and the screen at the east end of the building have very good dendro dates, with felling taking place in the winter of 1647. This was a big surprise, as the assumption was that the restoration of the building was a product of Royalist refurbishment in 1643-4, but all the carpentry is of the years 1647-8, suggesting that the building was restored by Parliament 2-3 years after their forces captured the castle from its royalist garrison.

### *The Postern Gate*

This is a very simple two-storey structure comprising a single chamber with crenellated parapets above a barrel vaulted passage running between the inner and outer door arches. The historical evidence shows that the 'arch stones' of the present building were laid in 1643 (Worton 2012, 106) and the general form of the building is of that date, but it is equally clear that this was a rebuilding of an earlier structure. The inner bailey (south) elevation shows a clear straight joint to the north/left of the archway and one historic illustration shows a projecting mass of masonry here (SA 6001/198/280) suggesting that the building was reduced in depth. The Shrewsbury panorama of c.1640 shows a postern gate in this location, the Burghley Map shows a small tower here (figs. 5 and 4). The outer archway has a slot for a portcullis above it, but no evidence of there ever having been one in the first-floor chamber (Morriss 2001, 46). Various kinds of sandstone are present, including large blocks of ashlar some of which, on the exterior, have Lewis holes in their faces. The door leaves are of 1643-44: the outer face (and the surrounding masonry) has musketry damage from the action in 1645.



9. The Postern Gate; the inner bailey elevation

## Previous archaeological research

Prior to 2019 there had been no known archaeological excavations within the perimeter of the inner bailey. The paper 'The medieval defences of Shrewsbury' in the county *Transactions* for 1960 by the late C. A. Raleigh Radford supplemented the historical record for the castle and the town walls with basic topographical observations and very brief architectural notes. The lineal descendant

Modern archaeological interventions began with an auger survey in 1990 (Historic Environment Record event ESA 3744) on the motte top and around the postern gate in advance of re-surfacing and drainage works; archaeological deposits were found at a depth of 300mm on the motte top and potentially significant archaeology at a depth of only 180mm within and just outside the postern gate. Watching-briefs on services within the inner bailey took place in December 1996, January 1997 and January 2005 but, while necessary observations, did not add substantially to knowledge of the archaeological resource. Trial trenches outside the inner bailey perimeter above the Dana footpath found post-medieval archaeological deposits but no medieval deposits or features (for details of these interventions, see HER 01097).

An evaluation trench in 2009 along the western side of the castle entrance found post-medieval deposits and an extensive post-medieval build up of levels; a cobbled post-medieval path was found running north-south 1.7m below the current ground surface just within the retaining wall along the Castle Gates frontage. Although medieval levels were not encountered, this intervention begins to make sense of the differential in ground level either side of the entrance drive approaching the inner bailey gate. On the east side is the flat area of lawn and garden known as the Bowling Green, at a level substantially – though not measured, being in private ownership – below that of the ground on the opposite (west) side. The processes at work here have never been clear and require further investigation,

but we may be looking at a situation of raised levels in the back yards of the two properties that used to stand here, fronting Castle Gates (see fig. 3). It is likely that, before the 17<sup>th</sup> century, approaching the castle as now, from the south, one would have perceived the inner bailey at a higher level, perhaps with a causewayed approach along the existing driveway up to this higher level.

## Geophysical survey

The first geophysical survey took place in 2000 by Stratascan Ltd, covering the inner bailey and the motte top with resistivity and selective use of ground-penetrating radar (Barker and Brookes 2000). The results of the motte-top survey are discussed below, but in brief, while the results from the centre of the motte top were generally indicative of buildings, but incoherent, the signals from the perimeter were clearly indicative of very thick walls around the north and south sides.

The results from the inner bailey were indicative of 'tenuous evidence' for a ditch around the base of the motte but there was also a suggestion of a large hollow or pit at the base of the motte that, at the time, drew comparison with a similar feature at Hen Domen (Stokes 2000) though its position was inconsistent with that of the presumed line of the ditch. The one respect in which the Stratascan results bear close comparison with those of the 2019 geophysical survey was in their definition of a 'ridge'-like anomaly with dipping strata either side just offset from the present driveway. The 2000 survey had clearly picked up the hard reflective target, catalogue features 21, 12 and 11 of Tiger Geo's far more accurate and nuanced survey, to be discussed at length below. Opinion at the time was that they had found 'a large and substantial-walled structure...some 30-50cms beneath the current surface. The arrangement of rooms/annexes suggests very strongly that this may be the location of the Chapel of St Michael recorded as lying within the inner bailey' (Stokes 2000). This interpretation, which also made sense of parch-marks in the grass seen in summer over many seasons by castle staff, was held – more or less – down to the present day and the inception of the 2019 project.

## The 2019 castle project and the scope of this report

In January 2019 the Castle Studies Trust awarded a grant for a project to undertake a programme of archaeological research at Shrewsbury Castle. A two-phase project was designed, and agreed with the landowners, Shropshire Council; Scheduled Monument Consent and licencing for a geophysical survey was obtained from Historic England.

Phase 1 of the project took place in May 2019 when specialist contractors Tiger Geo carried out a resistivity survey and ground-penetrating radar survey of the whole of the inner bailey: the flat lawn occupying most of the interior together with the grassed slopes of the ramparts and tarmac surfaces of the driveway, apron and paths. The results of the geophysical survey are presented in full in a separate report (Roseveare 2019) but are discussed below in the light of the excavation, which formed Phase 2 of the 2019 project.

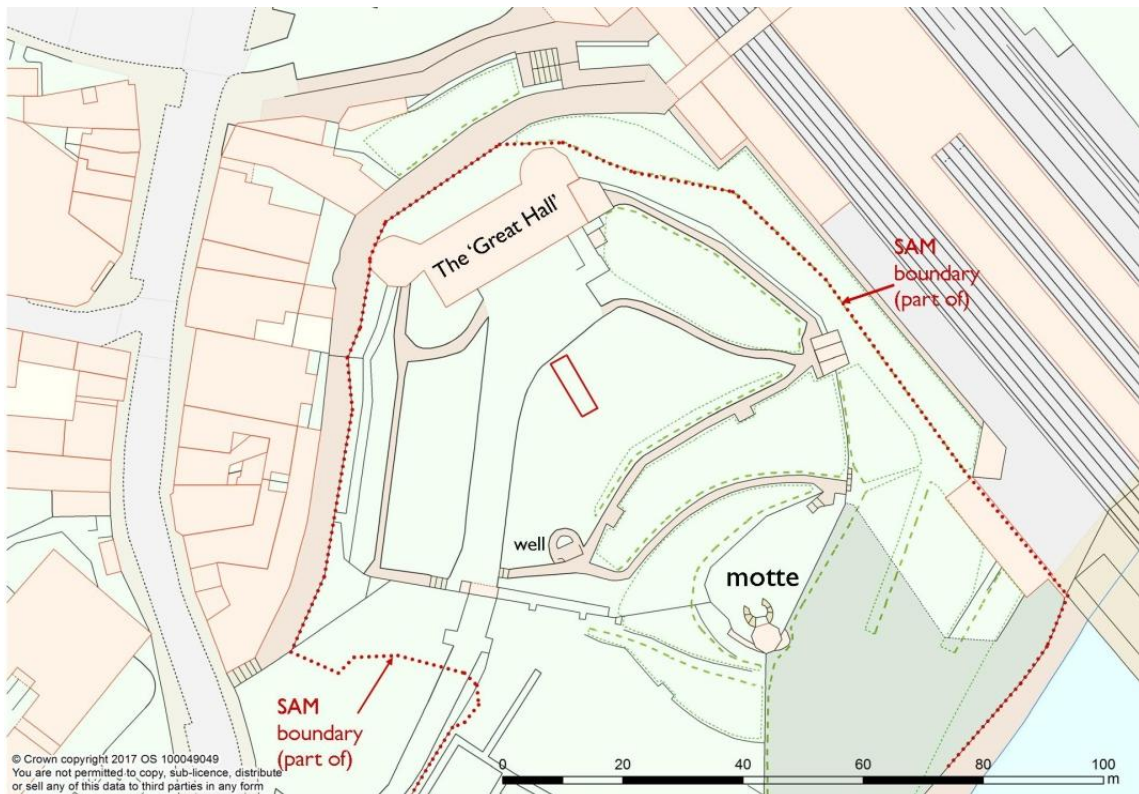
This report offers an initial presentation of the excavation results with a discussion of its implications for our understanding of the castle as a whole. A preliminary version of this report was given limited distribution in November 2019 without the pottery report. The present report (January 2020), including the pottery report, is the final contractor or 'grey literature' site report for the 2019 season's work. Specialist reports are also being sought for the clay pipe, animal bone and some metal objects, and these will be included in the formal publication at a later date.

The 2019 excavation has implications for the long-term management of the castle as a public historic monument and as a venue for open-air events. These implications are considered in a separate report, also currently in preparation. The extended presence of archaeological personnel in the castle in 2019 resulted in a number of new insights into the castle fabric, its condition, management and presentation, and the visitor experience of it; these topics too are explored in the management report.

Finally, in the course of the 2019 work the little-known Castle Well was accessed and recorded; the results of this are presented below as an appendix.

In the longer term it is intended to present the results of the castle project in final form as an article for the Transactions of the Shropshire Archaeological & Historical Society. A summary article is also to be published by the British Archaeological Association.

# THE EXCAVATION



10. The 2019 excavation trench: location

## Aims and methodology

The principal aim of the excavation trench was to investigate the long-standing belief, based on the 2000 Stratascan geophysical survey, the observation of summertime parching of the grass and the 2019 Tiger Geo geophysical survey, that building remains lay close to the surface of the inner bailey lawn. Identification of the standing castle hall as a royal chamber block of c.1230 (Morriss 2001; Bridge & Miles 2005) raised the prospect that such building remains could even represent a royal ground-floor hall. The trench was therefore positioned to investigate anomaly 21 of the Tiger Geo catalogue (see above) and to sample the ground beyond it to the east. In more general terms, the excavation offered the first opportunity to properly evaluate below-ground conditions in the inner bailey and to gain a first insight into the medieval planning of the interior.

The excavation took place over a twelve-day period in July 2019. It was entirely excavated by hand without the use of machinery, by a team composed of two professional archaeologists (the writer and David Williams B.A.), two members of staff of University Centre Shrewsbury (Professor Tim Jenkins and Dr Morn Capper) and volunteers, mostly U.C.S. students and National Trust volunteers with previous excavation experience. Weather conditions were less than ideal, with a few extremely hot days followed by episodes of torrential rain. A 10m by 3m trench was opened – a slightly smaller area than that permitted under the Scheduled Monument Consent granted by Historic England earlier in the year.



## The results

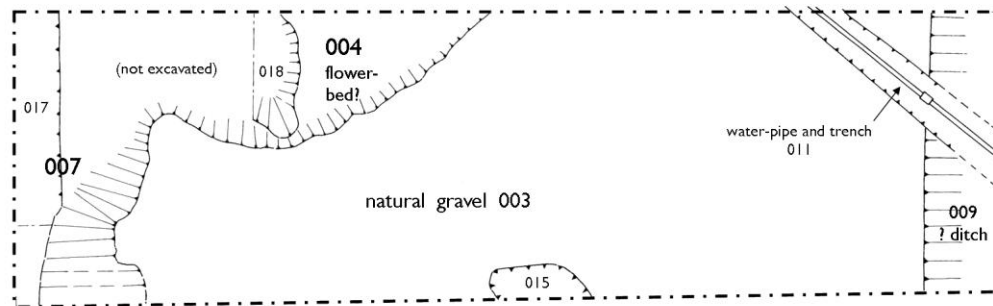
The excavation commenced with de-turfing, in the course of which it was noticeable that the turf (context 001) was extremely thick (up to 20cms), and was taken off in irregular lumps, rather than in slabs easily removed from an obvious topsoil. At the base of the turf was a thin layer of dark brown humic soil (context 002) with a very high gravel content, occasional larger pieces of sandstone, and fibrous root material present in quantity throughout giving the deposit a 'hairy' appearance on excavation that was easily distinguishable from the gravel found to immediately underlie it.

Below the turf and its thin subsoil, all but the easternmost three metres of the trench was found to be covered by a gently undulating deposit (context 3) of rounded glacial-derived gravel in a matrix of gritty khaki soil with some larger rounded cobbles up to c.10cms in size, with occasional small pieces of sandstone. This material was readily identifiable as feature 21 of the geophysical survey catalogue, characterised as 'extremely resistive and variable ground', which, prior to the excavation, had been thought to represent possible building debris. However, full exposure of its surface by excavation, followed by a thorough washing by a violent rainstorm within 24 hours of its exposure, showed that it was entirely composed of gravel and dirty sand, cut by later topsoil-filled features.

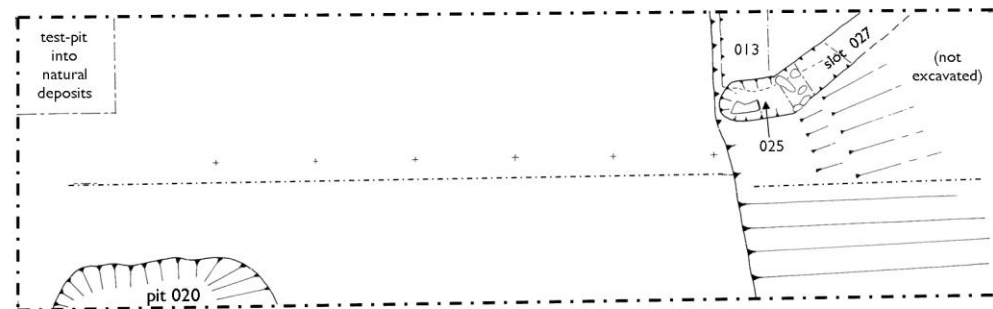
The gravel surface 003 was seen to slope slightly down to the west, appeared to slope more strongly down to the east, and, given the curved course – towards the main gate – shown by feature 21 on the geophysical survey, it was at first interpreted as a courtyard surface or, more probably, a road entering the inner bailey through the present gateway. It was reported thus in the media in the course of the first week of the excavation.

However, the excavation (see below) of the negative features cut into 003, particularly towards the western end of the trench, soon showed that the gravel immediately overlay a deposit of cleaner gravel, lighter in colour, which in turn overlay a deposit of bright orange sand, which in turn overlay a layer of larger rounded cobbles in a dense gritty matrix. This sequence left no doubt that 003 was the topmost surviving layer of a sequence of entirely natural glacial deposits *in situ*. The implication was that no archaeological deposits or structures survived above this horizon and that the site had in some way been 'planed-off', scraped to form a level surface, as if bulldozed, at some time in the past.

Given the radical nature of this interpretation and its implications, 003 and the deposits it overlay were thoroughly tested. A one-metre wide strip was excavated along the southern side of the trench through 003 to a depth of c.20cms, showing that the exposed dirty gravel gave way to a cleaner, unstained, gravel of precisely the same composition (see fig.25). Secondly, a one-metre square sondage was excavated in the north-west corner of the trench to a depth of 1.2m below present ground level (fig.14). No artefacts were recovered during this exercise; all the deposits thus tested were sterile and were fully consistent with a natural glacial origin.

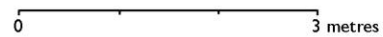


Post-medieval



Medieval

motte ditch



## II. Excavation plans



12 Gravel 003, as first defined and after heavy rain, cut by topsoil filled features, probably flowerbeds, 004/005 to left, 007/008, foreground, under the one-metre scale; looking east



13 Gravel 003 cut by features 004/005 left and 007/008, bottom, after excavation, revealing the orange sand underlying gravel 003. Looking east



14 Sondage in the north-west corner of the trench, looking east, revealing the sequence of natural sand and gravels with a sharp granular pea-grit at the base of the excavation. The edge of the uppermost gravel 003 can be seen top right

*Features cut into gravel 003: the west end and centre of the trench*

A number of separate features, and a cluster of intercut features, was found cut into the surface of gravel 003 concentrated towards the west end of the trench.

At the west end the surface of gravel 003 was cut by two intersecting features, both containing fills mainly of topsoil. On the north side of the trench was an irregular, lobe-shaped cut 004 measuring roughly 3m east-west by 1.5m north-south, with a stony topsoil fill (005) containing later post-medieval and 19<sup>th</sup>-century pottery. It was flat bottomed, about 25cms deep and was interpreted as an excavation for a probable flower bed. It had a clear southern edge where it was cut into the gravel 003 but an indistinct boundary with a similar cut 007 which occupied the western end of the trench, with an almost identical stony topsoil fill 008 containing 19<sup>th</sup>-century material. Excavation of this fill exposed a narrower trench-like cut, filled with similar material (017), along the western end section of the excavation. Excavation also showed that these were cut through a deposit of bright orange sand (see fig.13) which could be seen to be overlain by the dirty gravel 003. The relationship between the two cut features 004 and 007, each with similar topsoil fills, could not be determined and they appeared to be contemporaneous.

Removal of the fill 005 from cut 004 showed that it overlay an earlier cut feature 018 (fill 019) that appeared to be sub-circular, about a metre in width with sloping sides; this was half-sectioned but contained no dateable artefacts. Excavation in this area was not completed in the time available.



15, 16, Feature 004 (a probable flower bed) after excavation with pit 018 under it half-sectioned; both looking west

On the southern edge of the trench two cut features were excavated. Mid-way along the section a small pit 015, filled with dark stony soil (016), was excavated and produced 19<sup>th</sup>-century pottery, glass and clay pipe fragments.



17 Pit 015 in the centre of the south section. East to top

Towards the south-west corner of the excavation a rather larger pit, 020, was excavated. This was sealed by the fill (008) of the irregular negative feature 007 occupying the west end

of the trench, containing 19<sup>th</sup>-century material. Removal of this allowed the definition of feature 020 cutting through the gravel 003, which resolved into a sub-circular steep-sided cut feature, interpreted as a pit, filled with a largely stone-free soil (021) with a high clay content. This overlay a lower, darker, fill (022) of silty soil with small stones. These fills contained quantities of animal bone, a fragment of worked bone, and pottery identified as being of pre-Conquest date.



18 Pit 020, after excavation, looking south

#### *The east end of the trench*

The natural gravel 003 was not at first apparent over the easternmost three metres of the excavation trench. At the east end, removal of subsoil 002 disclosed a linear cut 009 along the east section. Its fill (010) of dark silty soil with abundant charcoal flecking contained pieces of coal and brick, ceramics of medieval to 18<sup>th</sup>-century date and quantities of animal bone. It was interpreted as a ditch or drain running in a north-south direction; it survived to a depth of just over 0.5m.



19 Pre-excavation shot (north to top) of linear feature 009 (fill 010)

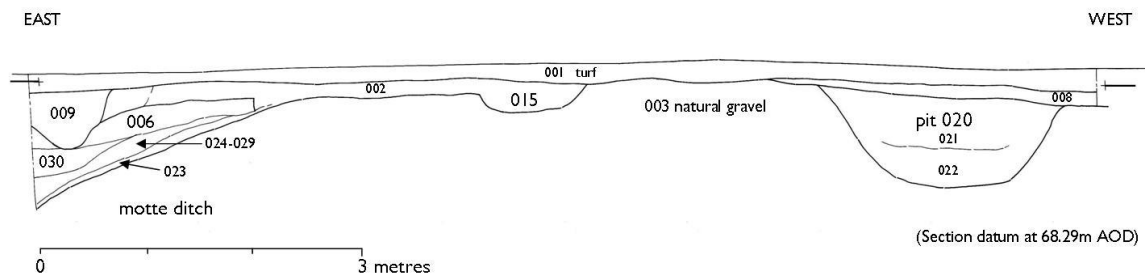
Excavation of 009 showed that it was not cut directly into the natural gravel 003 but into a mixed red-brown soil (006) with abundant degraded red sandstone pieces. It also revealed a linear cut (011) crossing the trench in a north-west to south-east direction consistent with geophysical evidence for a service trench on this alignment, heading from the toilet facilities under the castle hall steps towards the castle well. Removal of its fill (012) containing various post-medieval ceramics duly revealed a lead water pipe, probably installed c.1925 as an overflow from the castle facilities into the well.



20. Water-pipe trench 011 cutting linear feature 009 (top, along the east end section). The red-coloured soil at the near end of the pipe trench was resolved into a cut feature, 013

Removal of the pipe-trench fill highlighted an area of reddish soil against the north section, cut by the pipe trench. On excavation, this resolved into a cut feature (013) 0.44m deep, of irregular plan with a fill of gritty stony soil (014) with numerous small pieces and flecking of red sandstone. With such a limited exposure, its function was not understood.

The features described above were all cut into a general layer at this end of the trench of red-brown silty soil (006) with patches of degraded red sandstone pieces, some larger red sandstone pieces and some sub-angular cobbles. This material contained some post-medieval pottery together with medieval cooking pot and green-glazed wares, and a large quantity (2.9kg) of animal bone.



## 21. Site section (south side of trench)

Removal of 006 off the underlying natural gravel 003 revealed the latter to be cut to a roughly 45-degree slope, descending to the east, across the width of the trench, commencing about three metres from the east end of the trench. From its precise coincidence with the curving edge of anomaly 21 of the geophysical survey (resistivity), crossing the inner bailey, it was clear that this cut represented the edge of a very substantial ditch around the base of the motte.



22 Detail of the cut for the motte ditch and its fills, looking south (scale = 1m). The dark fill (010) of the probable later ditch 009 extends down to c. 40cms from the top of the scale bar, the red-brown soils below representing the earlier ditch fills commencing with 006 (top). The contrast with gravel 003 forming the side of the ditch (right and bottom) is very clear

Removal of context 006 revealed a sequence of tip lines within the ditch and confined to the easternmost two metres of the trench. Of very similar character, their order was not completely certain, but under 006 was a medium brown clayey soil (030) containing large quantities of animal bone and medieval cooking-pot sherds; below, red-brown silty clay (024) over a light/medium brown clay soil (029), both containing animal bone and medieval cooking-pot sherds; and a red-brown silty soil (023) containing medieval cooking-pot and green-glazed wares, forming a thin tip line that appeared to extend up the cut slope of the natural gravel 003, its top sealed directly by context 006.



On the north side of the trench, in the area bisected by the water-pipe trench, cut into the slope of gravel 003 was a small sub-circular cut feature (025) up to 0.4m deep containing large stones and interpreted as a probable post-hole. Extending north-east from this feature and similarly cut into the gravel slope was a linear cut feature (027) containing a fill of medium-brown clayey soil (028) with gravel, and sherds of medieval cooking pot. This was interpreted as a probable beam-slot or gully, though little of it was visible as a consequence of disturbance by the later pipe-trench 011 and pit 013; the relationship between the probable post-hole and slot could not be determined with certainty but the filling of the post-hole appeared to be later than the filling of the slot or gully. The probable post-hole 025 was sealed only by the subsoil 002 but the slot or gully 027 appeared to be sealed by the sequence of fills within the ditch below 006. The slot/gully could, however, have been cut from a higher level and only detected by means of the contrast with the gravel 003.



23 Probable post-hole 025 (centre right), after excavation, and slot or gully 027, lower left, after definition: looking south-west



24 General view of the eastern end of the trench on completion and the large 45-degree cut interpreted as the motte ditch. Looking south



25 Final excavation view looking west, the slope of the motte ditch in the foreground, from the two-metre ranging pole. The ditch-fill deposits have been completely excavated only on the left side (south). Above the diagonal water-pipe are the probable post-hole 025 (excavated) and slot or gully 027 part-excavated in the foreground



26 Final excavation view, looking east. Gravel surface 003 has been sectioned, and tested with a 1m-square test-pit (bottom left corner). Late Saxon pit 20: right foreground

# The Pottery Assemblage, by Stephanie Ratkai

## Methodology

All the pottery from the excavation was examined and recorded. Priority was given to the pottery from medieval features. This was matched to the Shrewsbury pottery fabric type series used by the author for several sites in the city. The pottery was quantified by sherd count and weight and by rim count. Pottery from post-medieval or modern levels was divided into ware type and quantified by count and weight. Any residual medieval pottery (of which there was surprisingly little) was simply categorised as medieval (12th-14th century) or late medieval (14th-15th century). All data were entered onto an Excel worksheet. These data form part of the archive. Table 1 gives the quantification of the pottery fabrics and wares and their dates. Table 2 quantifies the pottery by context/feature, from earliest to latest

## The late Anglo-Saxon pottery

This pottery consisted of Stafford ware and an oolitic ware made in Gloucester where it is known as fabric TF1a. Stafford ware has been found previously in Shrewsbury at, for example, St Julian Friars and within the outer bailey on the Castle Gates Library site. Fabric TF1a has not been previously identified by the author but it presumably made its way north via the River Severn. All but one of these early sherds come from a single feature, pit 20. The sherds from the lower fill are comparatively large and consist of a sooted Stafford ware cooking pot/jar, a sooted TF1a cooking pot/jar and a second TF1a jar rim sherd. This latter is unsooted. Its form is identical to the one from the sooted jar and it is possible that both sherds come from the same vessel. Five further sherds, rather more fragmentary, were found in the upper fill of the pit. One possible Stafford ware sherd was found in an upper fill of the motte ditch (context 23). One more sherd that could date to this period is a Stamford ware rim sherd from a glazed pitcher or jar. The fabric is of the densely sandy type, one of the latest fabrics, and it could belong to the earliest post-Conquest period, rather than be pre-Conquest. The sherd was found in the turf/topsoil.

The late Anglo-Saxon sherds are important because they cannot possibly be 'stray' finds or part of a manuring scatter because of their size and lack of wear. The sherds from pit 20 indicate late Anglo-Saxon occupation on the site before the construction of the castle.

## The post-Conquest pottery

The post-Conquest medieval fabrics from the excavation match those previously found in Shrewsbury. There are only a small number of sherds and these are mainly from the motte ditch fills below the possible final fill (006), which contains an admixture of post-medieval pottery. A cross join between the uppermost fill (006) and one of the lowest (029), demonstrates that the pottery from the excavated ditch fills may be disturbed and is unlikely to form a reliable and coherent set of chronological ceramic horizons. The presence of Malvernian cooking pot sherds in the lowest ditch fill (30) may indicate that the ditch began to fill up in the early 13<sup>th</sup> century but the evidence is far from conclusive. Nevertheless the

pottery is informative. The medieval pottery is mainly a mix of cooking pot sherds and glazed pitcher and jug sherds (some of which are highly decorated) which date to the 12<sup>th</sup> and 13<sup>th</sup> centuries. Cooking pots were most common – about twice as common as glazed sherds – but this is fairly typical for the earlier medieval period even on a high status site.

Slot 27 also appears to be a medieval feature. The pottery from its fill – a Malvernian cooking pot and two pitcher sherds – suggests the slot was backfilled in the first half of the 13<sup>th</sup> century. The sherds are quite large, so are unlikely to be residual.

There do not appear to be significant amounts of late medieval fabrics. There is a small, glazed Malvernian sherd dating from the second half of the 14<sup>th</sup> century to the 16<sup>th</sup> century from context 006. There is no Tudor Green or Cistercian ware: it is a rare high-status site that does not contain these. More utilitarian late medieval wares like Midlands Purple ware are also absent. The lack of these fabrics might indicate some clearance of levels above the motte ditch or may reflect the loss of importance and neglect that afflicted the castle in the 15<sup>th</sup> century.

### The post-medieval pottery

The next ceramic horizon appears to start in the 17<sup>th</sup> century. It is possible that this is associated with the Civil War, although the castle played no great part in the conflict. Perhaps more likely, occupation of the castle after the Restoration contributed much more to this later assemblage. The paucity of ceramic building material (brick and tile: 17 pieces from three contexts, see below) is interesting and suggests that there has not been the typical deposition pattern seen in castles where roof tile is extremely common, occurring often as fill material and as hard-standing – or that such contexts have been previously removed. The CBM is usually testament to repeated acts of construction and demolition in castles.

A wide variety of post-medieval pottery was present. Very few of these sherds seem to date to the 19<sup>th</sup> century. Instead there is a mix of 17<sup>th</sup> and 18<sup>th</sup>-century material, although there is a perhaps a bias towards the 18<sup>th</sup> century. A not inconsiderable number of flowerpots were present but these were mostly confined to the topsoil or subsoil. The flowerpots were of the type that has drainage holes in the wall, a little above the base. These could therefore date from the 18<sup>th</sup> or early 19<sup>th</sup> century; in fact flowerpot sherds were found with what appears to be an 18<sup>th</sup>-century group of pottery in linear feature 09.

This later pottery group does contain utilitarian wares but ordinary domestic table wares and formal dining and tea wares are also present. Amongst these were sherds of Chinese export porcelain dating to the 18<sup>th</sup> century. A tea bowl base sherd from the subsoil was of Kangxi (1666-1722) type with blue painted decoration – a painted artemisia mark on the external base and a ruyi flower on the interior. This could date to the late 17<sup>th</sup> century but an early 18<sup>th</sup> -century date is perhaps more likely. It is exactly the sort of pottery one might expect from post Restoration aristocratic occupation at the castle.

### Overview of the pottery

Most of the medieval pottery was local to Shropshire. There were some regional imports such as Ham Green ware (from Bristol), and Malvernian cooking pots and later Malvernian ware and (possibly) Reduced Deritend ware (from Birmingham). Apart from the latter, these regional imports will have been transported via the River Severn. Continental imports were evidenced by small Rhenish stoneware sherds (coded GSTW in table 2) from either Cologne or Frechen. The sherds will have been from drinking jugs but insufficient survives to be certain of date or form. All of the sherds were residual. A tinglazed earthenware sherd from the fill of feature 09 is unusual in having a red fabric. It is therefore unlikely that this is an Anglo-Dutch vessel and could be from the Mediterranean area with Spain/Portugal as the probable source. A date in the 17<sup>th</sup> century is likely.

## Discussion

Despite several 'improvements' to the castle in the 18<sup>th</sup> and 19<sup>th</sup> centuries, the date range of the pottery ties in well with what is known of its history. Evidence of activity pre-dating the castle can be seen, but after this the pottery belongs mainly to the 12<sup>th</sup> and 13<sup>th</sup> centuries but extends into the 14<sup>th</sup> century. There is, however, little if anything that dates to the 15<sup>th</sup> and 16<sup>th</sup> centuries when documentary evidence suggests the castle was something of a backwater. The pottery indicates that the next phase is associated either with the Civil War or a little later, in the post-Restoration period, when the castle became a residence once more. It is quite remarkable that the chronology seems to match the known history of the castle. It is equally remarkable that so little clearly 19<sup>th</sup> -century or later pottery was noted. A blue printed mark on a flatware base sherd from the subsoil could be dated to c. 1850.

The average sherd weight for the entire assemblage and for the medieval sherds alone is around 11-12g. This is the sort of sherd size that would be expected in a normal domestic backplot. It is unusual that the pottery from the feature fills, including the motte ditch itself, does not contain evidence of primary deposition and much larger sherds. In this respect pit 20 is exceptional. However, it is difficult to understand the taphonomy when the average sherd weight suggests redeposition, perhaps multiple redepositions, but the dating of the pottery suggests clearly defined periods of activity. Perhaps further excavation could elucidate this.

Code/Name	Date range
Stafford ware	Late Saxon
Gloucester TF1a (oolitic limestone temper)	Late Saxon
Local Fabric Ab3? Glazed ware	mid 13th-mid 14th c
Local Fabric Ab4 early glazed ware	12th-early 13th c
Local Fabric Bb2 Glazed ware	12th-14th c
Local Fabric Bb3 cooking pot	12th-13th c?
Local Fabric Ca7.1 early glazed ware & cooking pot	12th-early 13th c
Local Fabric Cb1 glazed ware	15th-16th c
Local Fabric Cb2 early glazed ware	12th-?14th c
Local Fabric Cb3 glazed ware	mid 13th-mid 14th c
Local Fabric Cb9 early glazed ware & cooking pot	11th-early13th c
Local Fabric Cc2 cooking pot	12th-13th c

Local Fabric Cd2.1 cooking pot	12th-13th c?
Reduced Deritend ware (Birmingham)	late 12th-early 14th c
Ham Green ware (Bristol)	12th-13th c
Malvernian cooking pot	12th-13th (e14th) c
Malvernian wheel-thrown and oxidised	mid/late 14th-16th c

**Table 1a: Early medieval and medieval pottery – code/common name and date range**

\* residual medieval pottery is excluded from this list

Code	Name	Date range	Qty	Wght
BLW	(Midlands) Blackware	late 16th-18th c	48	289
YW	(Midlands) Yellow ware	late 16th-early 18th c	7	28
CW	Coarseware	late 16th-19th c	23	709
TGE	Tin-glazed earthenware	17th-18th c	15	74
SLPW lod	(Light-on-dark) Trailed slipware	mid 17th-early 18th c	19	138
SLPW feathered	Feathered slipware	later 17th-mid 18th c	4	19
SLPW joggled	Joggled slipware	later 17th-mid 18th c	1	8
SLPW?	Slipware not identified to type	mid 17th-18th c	2	33
SLIPCO	Slip-coated ware	later 17th-18th c	15	54
MOT	(Manganese) Mottled ware	later 17th-18th c	17	83
AGATEW	Agate ware	18th c	2	4
PORC	Porcelain	18th c +	1	2
PORC chex	Chinese export porcelain	18th c +	3	18
BSG	Brown salt-glazed stoneware	18th-19th c	2	10
WSG	White salt-glazed stoneware	c1720-1760/70	6	25
CRW	Creamware	c1750-1800	8	25
PLW	Pearlware	late 18th-19th c	1	3
BITrans	Blue transfer-printed ware	late 18th-19th c	3	7
INDSLP?	Industrial slipware	late 18th-19th c	1	1

**Table 1b: Post-Medieval and later pottery- quantification, common name and date range**

	PIT 20	MOTTE DITCH						SLOT27	F04	F07	F09	F11	F13	SUBSOIL	TOPSOIL	
<i>Fabric/Ware</i>	<b>22</b>	<b>21</b>	<b>30</b>	<b>29</b>	<b>24</b>	<b>23</b>	<b>6</b>	<b>28</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>Total</b>
LATE SAXON	135	18				7										<b>160</b>
Ab3?					6											<b>6</b>
Ab4								2								<b>2</b>
BB2			8	2		10	40						30			<b>90</b>
Bb3				52	15	69	88									<b>224</b>
Ca7.1				22	22		24									<b>68</b>
Cb1				4		5	5					14				<b>28</b>
Cb2			18	4		15	10	24								<b>71</b>
Cb3			5				6									<b>11</b>
Cb9				22			6									<b>28</b>
Cc2				46	10	99	52									<b>207</b>
Cd2.1			13	42			23									<b>78</b>
HAM GREEN						12										<b>12</b>
DERITR?							7									<b>7</b>
MALV CPJ			25			67		33								<b>125</b>
MEDIEVAL											30			170	12	<b>232</b>
LATE MED								3								<b>3</b>
MALV WM						2										<b>2</b>
GSTW								9				3			6	<b>18</b>
POST-MED							98	59	27	489	128			454	254	<b>1479</b>
FPOT						5				735				504		<b>1244</b>
FPOT/CW								7							127	<b>134</b>
MODERN								4							7	<b>11</b>
CBM					5			50			4				28	<b>87</b>
DRAIN PIPE														29		<b>29</b>
UNKNOWN															2	<b>2</b>
<b>Total</b>	<b>135</b>	<b>18</b>	<b>69</b>	<b>194</b>	<b>58</b>	<b>284</b>	<b>366</b>	<b>59</b>	<b>132</b>	<b>27</b>	<b>1254</b>	<b>149</b>	<b>30</b>	<b>1157</b>	<b>436</b>	<b>4358</b>

PIT 20	MOTTE DITCH						SLOT27	F04	F07	F09	F11	F13	SUBSOIL	TOPSOIL	
-----------	----------------	--	--	--	--	--	--------	-----	-----	-----	-----	-----	---------	---------	--



<i>Fabric/Ware</i>	22	21	30	29	24	23	6	28	5	8	10	12	14	2	1	Total
LATE SAXON	4	5				1										10
Ab3?					1											1
Ab4								1								1
BB2			1	1		1	6						3			12
Bb3				1	1	4	7									13
Ca7.1				2	1		4									7
Cb1				1		1	1					1				4
Cb2			1	1		1	1	1								5
Cb3			1				2									3
Cb9				1			3									4
Cc2				1	1	4	7									13
Cd2.1			1	2			2									5
HAM GREEN						1										1
DERITR?							1									1
MALV CPJ			3			2		1								6
MEDIEVAL											6			17	2	25
LATE MED									1		3					1
MALV WM							1									1
GSTW									1			1			1	3
POST-MED							7		11	2	41	2		65	45	169
FPOT							1				15			48		64
FPOT/CW									1						25	26
MODERN									2					1	3	5
CBM					1				1			1			1	4
DRAIN PIPE														1		1
UNKNOWN															1	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>10</b>	<b>5</b>	<b>15</b>	<b>43</b>	<b>3</b>	<b>17</b>	<b>2</b>	<b>65</b>	<b>5</b>	<b>3</b>	<b>132</b>	<b>78</b>	<b>386</b>

**Table 2: Quantification of pottery by context**

## Clay tobacco pipes

Pieces of clay pipe were recovered from contexts 001, 002, 005, 008, 010, 012, 016 of which 002, 010 and 012 (the water-pipe trench) produced identifiable bowls. The bowls appeared to the writer to all be of late 17<sup>th</sup>-century type. A further report on the clay pipes will appear in the formal publication.

## Ceramic building materials

Flat tile fragments 17mm to 24mm in thickness, in a bright red sandy fabric, were recovered from contexts 002, 010 and 017. One nearly complete roof tile from context 006 (the topmost surviving fill of the motte ditch) with a central raised nib on one edge is illustrated: it bears a hoof print, probably from a sheep, goat or possibly deer. Probably medieval.



27 Nibbed roof tile with hoof print: context 006

## Iron objects

Most of the iron artefacts recovered were iron nails of hand-made pre-modern type, found in contexts 001 (x3), 002 (x14), 005 (x5), 006 (x12), 010 (x2), 014 (x1), 016 (x2), 023 (x8), 029 (x2), 030 (x2). In addition context 022 (within the motte ditch) produced three corroded iron lumps that may represent rivets. Context 008 also produced an iron ring-headed object.



28. Iron arrowheads or crossbow bolt heads (motte ditch)

Two iron arrow-heads or cross-bow bolt (quarrel) heads were recovered from the motte ditch contexts 023 and 024. Both can be identified as bodkin-type heads, sharply pointed and square in section, designed for piercing armour rather than for (e.g.) hunting.

### Copper alloy objects

Context 002, at the bottom of the turf layer, produced a crushed brass thimble; context 008, part of one of the 'flowerbed' features produced a brass patent button bearing the legend 'warranted not to cut'. Both are probably 19<sup>th</sup>-century.

A decorative medallion from an item of horse harness, of medieval date, was recovered from context 006; this is being reported separately.

A quarter cut penny from context 006 is also being reported on separately.

### Glass

The vast majority of the glass recovered was bottle-glass of post-medieval date. The finest individual piece (from context 002) is illustrated: it bears the arms of the Corbett family.



29 Wine bottle glass seal bearing the arms of the Corbett family

Bottle-glass was also recovered from contexts 001, 002, 005, 010, and 016. The glass from context 010 may represent one smashed vessel, a heavily oxidised thick-walled bottle of 'onion bottle' type, of possible 17<sup>th</sup>-century date.

Ancient window glass did not seem to be present, though context 010 also produced c.10 small pieces of twisted lead strip, possibly derived from salvaging the lead comes of a window.

## Animal bone

Animal bone was recovered from most of the contexts excavated: 002, 006, 008, 009, 010, 012, 014, 023, 024, 026, 028, 029, 030. Additionally, context 022 (the lower fill of probable late Saxon pit 020) produced a worked bone object, described below. More than 7kg of animal bone was recovered, the bulk of it coming from the motte ditch layers 006 (2.9kg), 023 (1.7kg), 024 (0.35kg), 029 (1.1kg) and 030 (1.0kg). The uppermost ditch context 006 produced a very large assemblage dominated by long-bone fragments and end-joints, pieces of jaws and teeth. Context 023 was notable for large rib fragments (?cattle), 029 for rib and long-bone fragments and jaw fragments, 030 for large (?cattle) rib and long-bone fragments. Context 028 (fill of slot 027 covered by the ditch fills) produced large scapulae fragments ribs and large long-bone ends.

The assemblage represents a small random sample of the upper fills of the motte ditch but may nevertheless offer valuable data on the victualling of the castle over a date range that the pottery suggests may be mostly 12<sup>th</sup> to 13<sup>th</sup>-century. Specialist examination of the bone assemblage is being investigated.

### *The worked bone object*

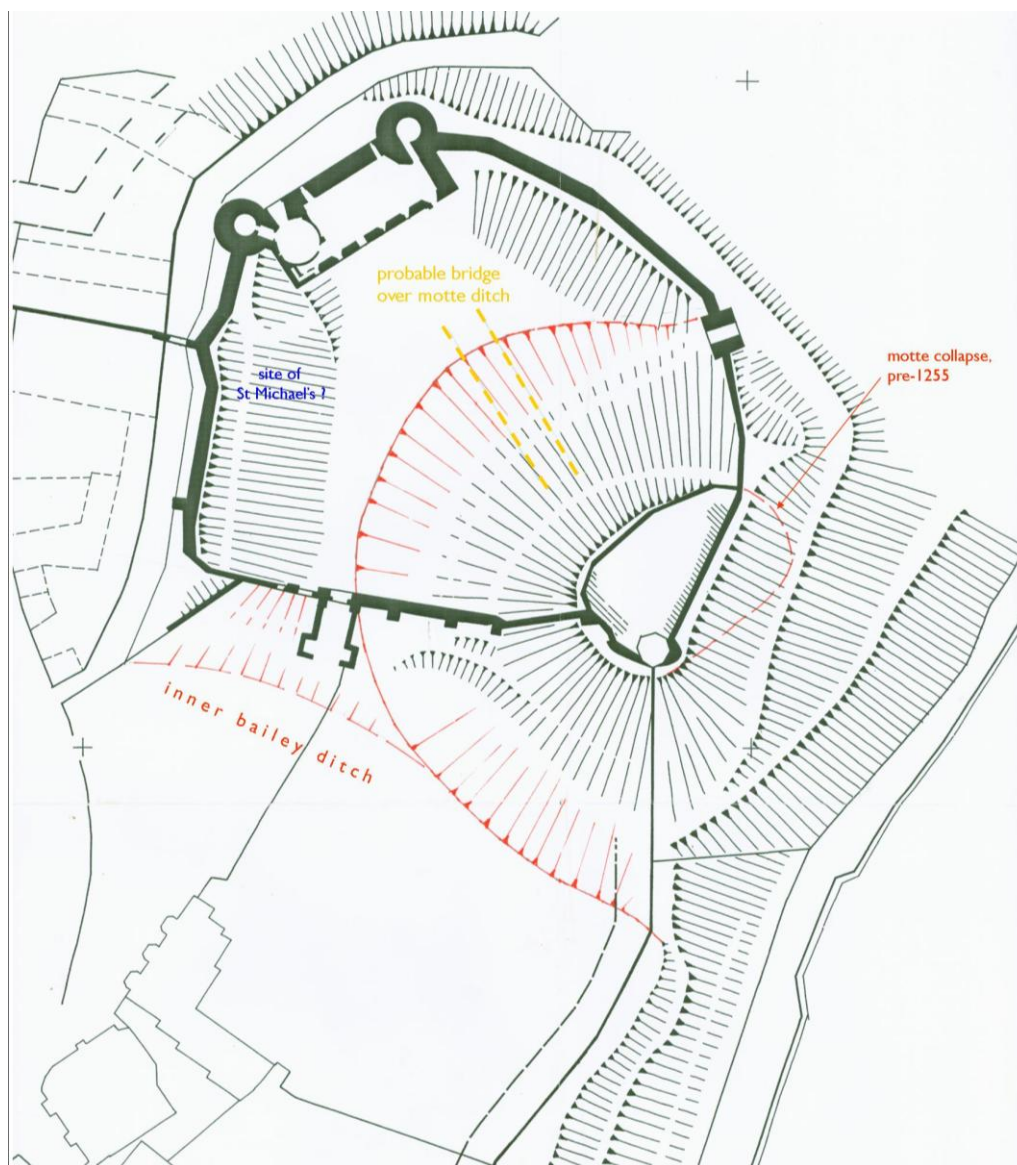
A piece of rib bone 3.5cms long with incised cross-hatched decoration. Probably a fragment of a knife handle or comb. Possible early medieval date (from context 022, the lower fill of pit 20).



30. Bone knife- or comb handle with incised decoration. ?Late pre-Conquest

## Discussion and conclusions

The 2019 Castle Studies Trust project has advanced knowledge of Shrewsbury Castle in four particular respects: establishing the original scale of the motte defences; identifying, by geophysical survey, a number of previously-unknown features within the inner bailey; identifying the presence of pre-Conquest activity on the site; and identifying a major, destructive, landscaping episode that took place in the early modern period. These are considered, below. The presence of an archaeological team on site in May and July also led to a number of observations and new insights. Some of these, such as condition issues around the monument and the visitor experience of the castle, are outside the scope of this document and will be discussed in a report (forthcoming) on the management implications of the 2019 project; some (such as the observation of Civil War shot damage) have been included here; and a photographic survey of the previously little-known castle well is included below as an appendix.



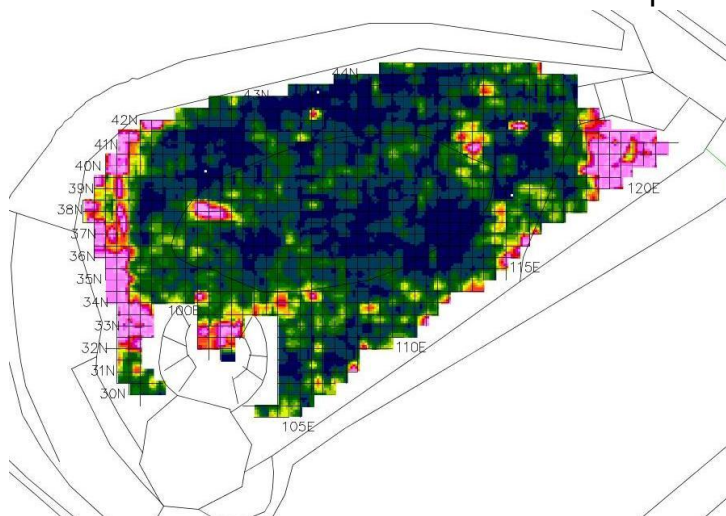
31 Interim reconstruction plan of the inner bailey area showing the motte ditch, from excavation and geophysics, and the probable bridge position. A speculative estimate is given for the pre-13<sup>th</sup>-century extent of the motte top. Base map: O.S. 1:500 plan (1882)

## The motte ditch and the significance of the motte

The presence of the 45-degree cut into the natural gravel (003) three metres from the eastern end of the excavation trench would have to have been interpreted with considerable caution were it not for the complementary results of the geophysical survey. The excavated evidence alone would not have been sufficient to rule out other explanations for the cut – for example, a large quarry pit or other localised intrusion – but seen in the light of the resistivity results, there is now absolutely no doubt that the base of the motte, certainly on its western side, was surrounded by a ditch roughly 12 metres wide, of unknown depth. The presence of a ditch here had been suspected since c.2000 when the Stratascan survey (Barker & Brookes 2000) suggested one might be present, but its size was unanticipated. It occupies roughly half of the flat area within the inner bailey ramparts and shows that, as originally conceived, what we now refer to as the inner bailey was a much smaller, crescent-shaped adjunct to the motte that was about 15 metres wide at its widest point, in other words it was more like a barbican than a bailey. If this conclusion is accepted, it raises the question of the location of the access up onto the motte that this barbican was designed to protect. The answer is probably to be found in the geophysical survey (GPR) results, which shows a series of anomalies (Tiger Geo catalogue entries 23-25) running in a straight line, perpendicular to the motte ditch, from a point opposite the ‘low’ end of the standing castle hall, in a way that is suggestive of bridge foundations.

Architectural identification of the standing castle ‘hall’ building as a chamber block and the dendro-dating of its construction to the years between 1234 and 1249, allows a very secure correlation to be made with the documented, expensive, *camera regis* built in 1239-41. This then raises the question of the location of the actual king’s hall, as documented between 1246 and 1287-9, but presumably, in origin, a much older building. As the width of the motte ditch can now be seen to make a courtyard arrangement, with the king’s hall standing across a courtyard from the chamber block, much less likely, attention is inevitably now focussed on the top of the large motte.

Despite there having been no excavation on the motte top, there is nevertheless sound evidence of buildings up there. The Stratascan GPR survey of 2000, though largely inconclusive, did succeed in identifying an increased thickness to the perimeter retaining walls at the north and south ends of the motte top. Both these locations can be identified as



32 Stratascan’s 2000 GPR plot of the motte top: timeslice at 0.95-1.40m showing solid reflective targets (buried foundations) in pink/red

the sites of former buildings from historic illustrations evidence showing former window openings in these two areas. At the north end, this can be seen on the Shrewsbury panorama of c.1640 (fig. 33) which shows not just a ruined window opening in a stretch of masonry, but the overhanging, presumably timber-framed, gable of a building. At the south end, the earliest surviving illustration identified so far – one of 1663 by Sandford in the College of Arms (copy in Shropshire Archives PR/2/655) – shows a roofed building west of Laura’s Tower, and a view of c.1778 by Thomas Pennant (fig.34) shows three ruined window openings on the motte top where now there is just the low parapet wall.



33 Detail from the panorama of Shrewsbury c.1640 from the east showing the remains of motte-top buildings and the late 13<sup>th</sup>-century ‘watch tower’, demolished c.1790



34 View from the south by Thomas Pennant c.1778 from his ‘A Tour in Wales’ (National Library of Wales via Wikipedia)



In short, the results of the 2019 project reassert the primacy of the motte as the dominant feature of the early medieval castle – the ‘tower of Shrewsbury’. Further investigation is of course required to amplify this. While the present cobble floorscaping of the motte top effectively excludes any possibility of excavating in the foreseeable future, the fabric of the perimeter retaining walls awaits careful inspection and analysis.

The southern side of the motte, in private ownership, has remained inaccessible, an archaeological no-go area, throughout the 2019 project. This has inhibited understanding of the fabric of the exterior faces of the walls there, and of ground-level differentials that might reflect the presence of the ditch around the base of the motte. The east side of the motte too, above the river, has been inaccessible, by virtue of dense, unmanaged, woodland and undergrowth.

## The results of the 2019 geophysical survey

For a full account of the geophysical survey, the reader is referred to the Tiger Geo report (Roseveare 2019); what follows is a brief summary of the archaeological implications, or possibilities, of some of the more unambiguous results arising from the resistivity and GPR surveys. These are discussed individually as numbered in the Tiger Geo catalogue.

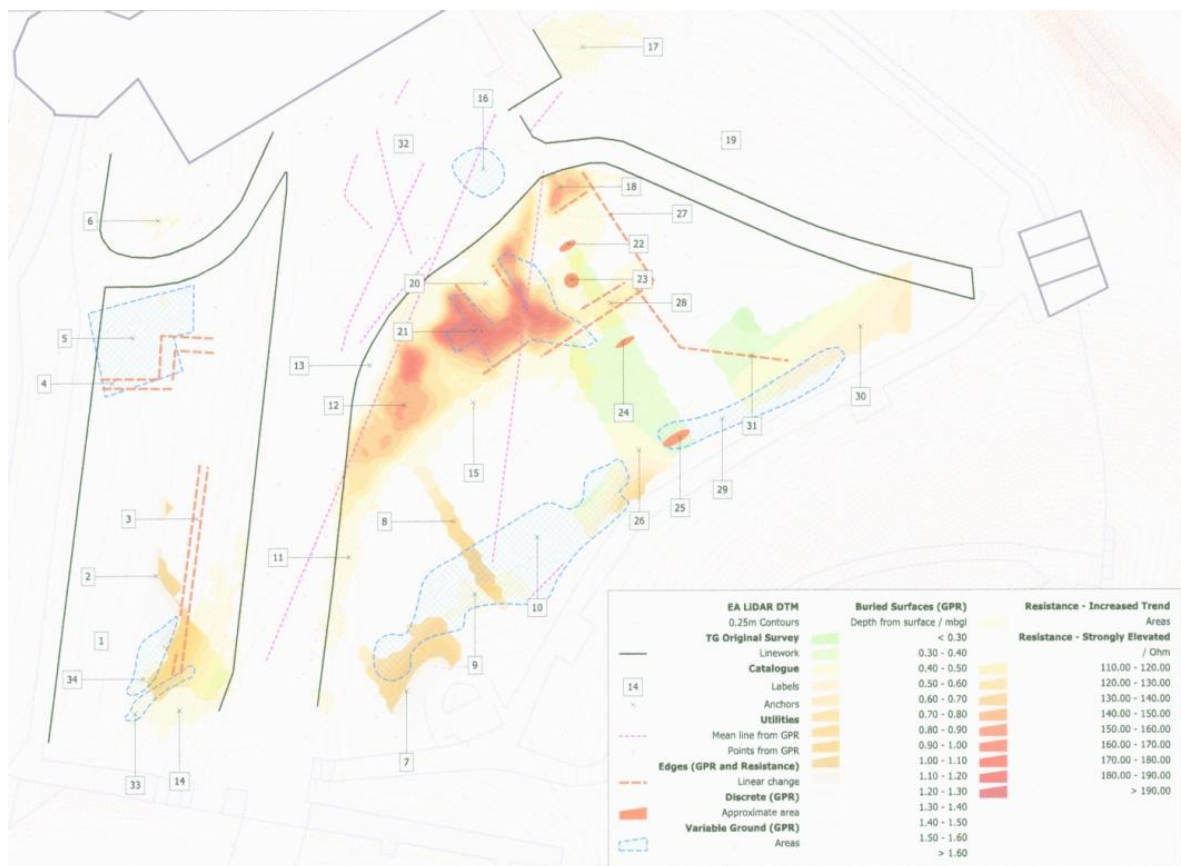
The single most outstanding feature of the geophysical survey (particularly the resistivity) and the excavation, is the division of the bailey between the infilled motte ditch and the harder natural sands and gravels into which it was cut. The curve of the ditch is apparent from the southern and western edges of the geophysical survey features (from north to south) 28, 21, 12, 15 and 11. Distinctions within this material, such as geophysical feature 20, have been read in the past as evidence of structures, though feature 20 is readily identifiable as excavation feature 004, intercut with feature 007, both interpreted as flowerbeds or other garden plantings cut into the natural gravel 003.

One of the questions arising from the presence of a substantial ditch around the motte is access over it. GPR features 22, 23, 24 and 25 seem to form a consistent line perpendicular to the ditch (also seen very clearly in the GPR timeslice at 0.55m depth, fig. below) that could very well indicate bridge footings. Concerns are expressed in the Tiger Geo report concerning the relationship of the well to the motte ditch (Roseveare 2019, 7). These however are easily resolved if, as seems likely, the present well is a late medieval feature dug into the already-backfilled ditch. One possible explanation offered for geophysical survey feature 7 was that it results from a buried reflective surface, ‘a depression where the well now is’, but this would not account for anomalies at 2m depth because the present well masonry lining rises without a phase change to more or less the present ground surface-level around the slight platform built up in front of the present well head.

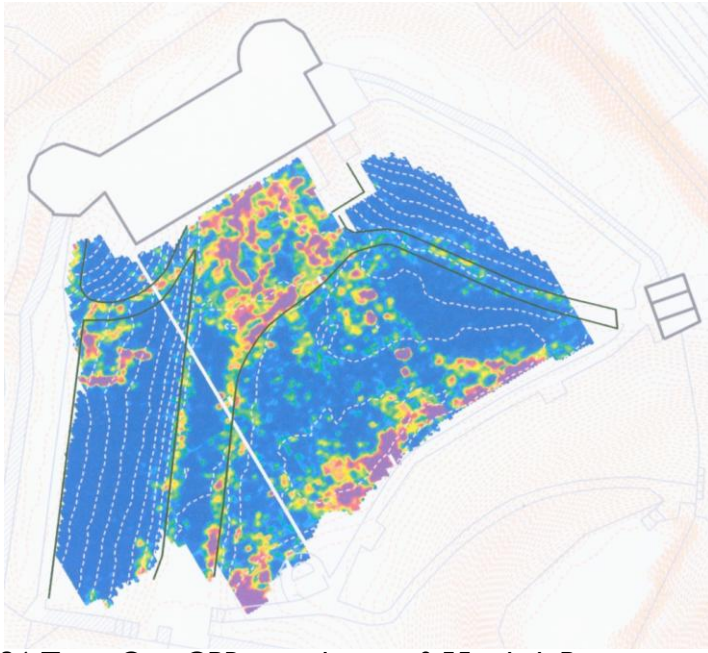
One remark in particular made by the geophysicist stands out rather starkly, particularly in the light of the excavation results: ‘There is no reason to believe that the ramparts retain their present shape’, and that they could have been augmented by soil removed from the bailey interior by landscaping (Roseveare 2019, 7). This was said in the light, not only of the excavation, but of the GPR results on the western rampart which indicate that it was originally five metres narrower than the present landscaped bank, geophysical feature 3

referring to a probable wall running along the rear of the rampart and forming one side of the long building range shown on the 1746 map (below, fig.37). This is of course, a fundamental question for our interpretation, and to an extent management, of the site: to what extent is the earthwork monument we see today a product of the Norman Conquest, or a later creation?

One area of interest stands out within the western rampart: the greenhouse site (geophysical survey feature 5, with wall 4). This is of interest because of the geophysical evidence of a deeply-founded wall with a level top buried up to one metre below the rampart surface, with disturbance around it. This is consistent with the position of the greenhouses shown on the 1882 map (see fig. 4) – but it is also broadly consistent with the position of the unroofed building shown on the Burghley Map, thought by J A Morris to possibly be a representation of the chapel of St Michael. It is also the case that the kink in the line of the western curtain wall above this point marks the junction of the curtain with the outer town wall; the medieval Lower Castle Gate is situated immediately at the bottom of the slope below. St Michael’s was a Domesday church and its later status as a royal free chapel must excite at least the suspicion that it may have had pre-Conquest origins. The excavation demonstrates that activity was taking place in the immediate vicinity in the late pre-Conquest period (pit 20).



35 Tiger Geo (Roseveare 2019) catalogue of geophysical survey features



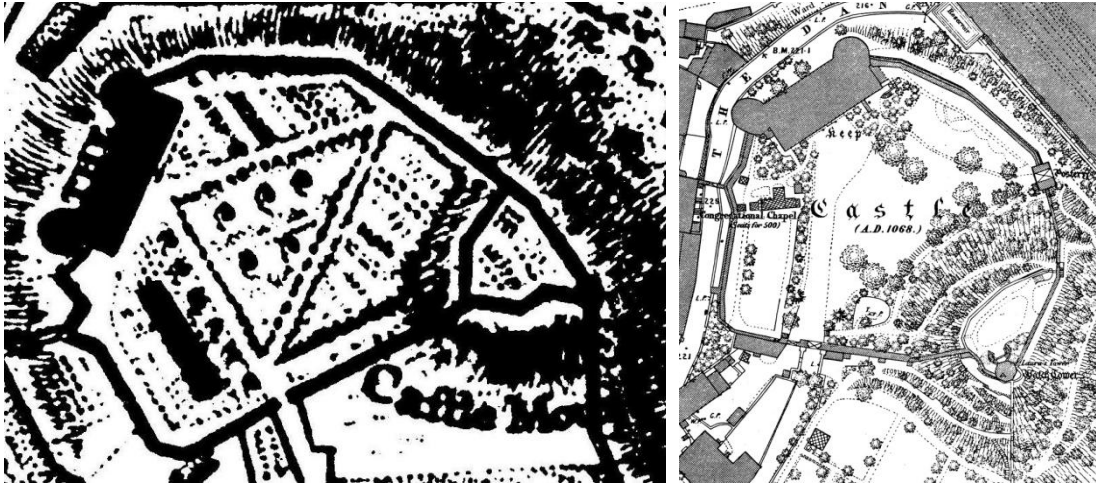
36 Tiger Geo GPR timeslice at -0.55m bgl. Prominent reflective signals include the L-shaped building footings south of the west end of the hall (geo. feature 4); the line of anomalies running SE from the hall steps; reflective surface around the motte base. The complexity under the tarmac apron probably represents buried deposits and hard surfaces cut about by services

### Landscaping within the inner bailey

The realisation that the present flat interior of the inner bailey is a consequence of an extensive levelling-down episode – that it has, in a manner of speaking, been bulldozed – was every bit as startling as the revelation of the size of the motte ditch. Examination of historic photographs, many of them picture postcards, from the 1880s to the recent past, shows that the general appearance of the inner bailey and its gardens has changed little in that time – that there is no evidence of any drastic re-landscaping within the last c.140 years; there is no evidence yet that the restoration of the castle for the Borough Council in the mid-1920s was followed by destructive landscaping. This impression is supported by the 1882 Ordnance Survey 1:500 plan which shows the bailey interior much as it is today, save for a scattering of mature trees on the lawn and, on the western rampart, the re-location of the shrubbery along it from the bottom to the top.

The detail, to the extent that it can be trusted, on John Rocque's map of 1746 gives a rather different impression, showing more or less the present paths between the main gate, the centre of the hall and the postern gate (which is not itself shown), but the area of the lawn was crossed by a diagonal walk between conventionally-drawn plantings, and the western rampart was occupied by a long building range behind a row of trees along the drive. The scene is generally very different to that in the late Victorian period and suggests that the garden had been re-planned and a building demolished sometime between the 1740s and the 1880s. The evidence is thus slight, but nevertheless points in the direction of the restoration campaign in the 1790s by Thomas Telford – and an engineer's approach to garden design. This, however, prompts the question (asked by Martin Roseveare): where did the soil go? Are the ramparts that give the castle the appearance of a well preserved Norman earthwork castle, actually a Georgian invention?

At the time of writing (January 2020) a second season of excavation is being organised, with the intention of investigating the Victorian greenhouse site under the western rampart. This, it is hoped, will answer the question of the degree to which the rampart has been reconstructed or re-profiled in the 18<sup>th</sup> century. It may also, as it coincides with the possible location of the chapel of St Michael, shed further light on the pre-Conquest presence on the castle site implied by pit 20 in the 2019 excavation trench.



37 Comparative maps of the inner bailey: left, 1746, detail from Rocque's map; right, 1882 detail from the Ordnance Survey 1:500 plan

## Bibliography

Baker, N, 2010, *Shrewsbury, an archaeological assessment*. Oxbow Books & English Heritage

Barker, P P and Brookes, C F, 2001, *A report for Shrewsbury & Atcham Borough Council on a geophysical survey carried out at Shrewsbury Castle*. Stratascan Ltd

Bridge, M and Miles, D, 2005, 'Tree-ring analysis of timbers from Shrewsbury Castle, Shropshire'. English Heritage, *Centre for Archaeology report 57*

Chibnall, M, (ed.), 1969, *The Ecclesiastical History of Orderic Vitalis*, Oxford Medieval Texts, vol. 2, books 3 and 4, Oxford: Clarendon Press

Colvin, H M, Brown, R A and Taylor, A J, 1963, *The History of the King's Works*, HMSO

Morris, J A, 1938, 'Shrewsbury Castle, an historical sketch', *Transactions of the Shropshire Archaeological Society*, 49 (1937-8), 97-118

Morriss, R K, 2001 'Shrewsbury Castle, Shropshire, an archaeological & architectural analysis', *Mercian Heritage Series*, 30

Owen, H, 1808, *Some account of the ancient and present state of Shrewsbury*, Shrewsbury, P Sandford

Radford, C A R, 1960, 'The medieval defences of Shrewsbury', *Transactions of the Shropshire Archaeological Society*, 56, (1957-60), 15-20

Roseveare, M, 2019,

Stokes, M, 2000, 'Geophysical surveys at Shrewsbury Castle', unpublished typescript, Shrewsbury Museums

Worton, J, 2012, 'The strongest works in England'? The defences of Shrewsbury during the Civil Wars, 1642-1651, *Transactions of the Shropshire Archaeological & Historical Society* 87, 95-112

## Acknowledgements

First and foremost, thanks are due to the Castle Studies Trust for funding the project. At the time of writing they have also agreed to grant-aid a second season of work in the summer of 2020.

Thanks are also due to the partner organisations that assisted with the project in a variety of essential respects – enabling, advising, organising and contributing labour, time and expertise: Shropshire Council (the landowner), University Centre Shrewsbury, Shrewsbury Town Council, Historic England, and the National Trust. The work and planning of the informal castle project advisory committee is also much appreciated: Dr Andy Wigley, Mary McKenzie, Ian Pritchard, Adrian Perks and Adam Spreckley (all of Shropshire Council); and to Professor Tim Jenkins and Dr Morn Capper of UCS who also took part in the excavation.

Thanks are particularly due to the many volunteers who contributed labour, ideas, and a cheerful and informative public face to the excavation, under the expert supervision of David (Dai) Williams. These include: Kathryn Bailey, Julie Bridges, Sue Collins, Mervyn Eyles, Mary Freeman, Gill Gilmore, Norman Goalby, Lawrence Leaman, Jono Lightfoot, David Martin, William Mitchell, Avis Patience, Alan and Thelma Smith, Annette Summers, Laura Turner, Alan Tyler and Simon Walker.

Apologies are given for not individually listing all the students of University Centre Shrewsbury, who collectively formed the hard core of the excavation team and did fantastic work under all sorts of weather conditions.

## APPENDIX: The Castle Well

In May 2019, while the geophysical survey was in progress, the opportunity was taken to access, inspect and photograph the castle well. As far as is known, the last visits for conservation management purposes were made in c.2000, by the writer while compiling the archaeological section of the conservation plan, and by the photographer Ken Hoverd, whose black & white photographs form part of the castle archive.



38 The present well head: front

The present castle well above ground is an undistinguished and rather overlooked, not to say dull, garden feature, with a masonry well head with a central niche from which a pipe protrudes to supply water to the semi-circular basin at its foot: this has not contained water for at least the last twenty years. The well sits within a small hedged enclosure, open on the NW side to face into the bailey interior.



39 The well head, rear: the hand pump flywheel

Behind it is a paved area supporting a large cast-iron hand pump with the remains of a handle on its flywheel. Close by, an inspection cover in the paving gives access to an underground inspection chamber reached by iron rungs embedded in the brickwork of early/mid 20<sup>th</sup>-century character. The chamber floor is 2.15m below ground level; at 0.99m by 0.66m, it is not roomy. Its NW side is open to the well shaft.



Left: 40 The pump in relation to the inspection chamber (the concrete block has just been moved off the inspection chamber cover); right: 41 The inspection chamber and well shaft

The well shaft was measured; it has a diameter of 1.17m (just under 4 feet) and at the time of the survey, the surface of the water in it lay 21m (70 ft 6 ins) below present ground level – approximately river-level. The masonry lining of the shaft is of quite large, carefully-cut curved blocks of sandstone ashlar, each c.30cm high by c. 50cm long. The material is brown sandstone, not certainly Keele Beds, possibly one of the local Triassic sandstones, but probably not the soft, orange Nesscliffe stone characteristic of the improvements made at the castle in the 18<sup>th</sup> and 19<sup>th</sup> centuries. The well is capped by York stone slabs laid over a bed of concrete with RSJs for reinforcing; the very top of the shaft is lined by four courses of 20<sup>th</sup>-century brickwork.

A pipe and an unidentified iron rod descend the shaft from the pump at ground level, retained in place by wooden beams inserted across the shaft at intervals.



42 The well shaft. The light is reflecting off the surface of the water 21 metres down





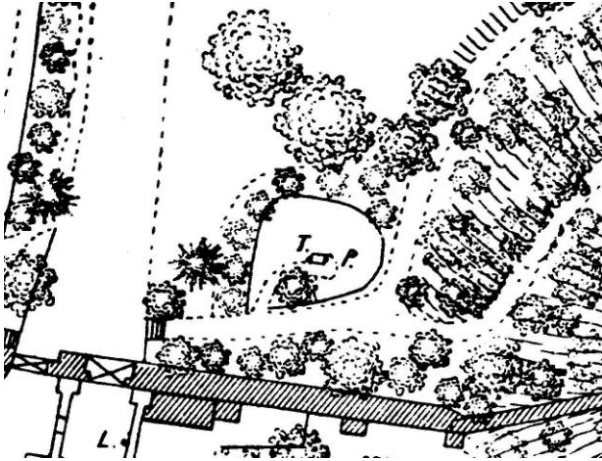
43 The shaft at inspection-chamber level showing the top brick courses and the pipe and unidentified iron rod retained by the uppermost wooden beam inserted into the stonework

*Historical evidence*

The earliest reference (from secondary sources) found to a well at the castle is to its refurbishment, with a new pitch-covered rope, by Royalist forces in July 1643 (Worton 2012, 106). The existing well is not shown on a map until as late as 1882 (see fig.45), but it is interesting that the only roofed building within the bailey on the Burghley Map is in this area. It is not shown at all on John Rocque's map of Shrewsbury of 1746 (fig.37).



44 Extract from the Burghley Map, c.1575 showing a single building still roofed, in the area of the present well



45 Enlarged detail from the O.S. 1:500 plan showing the well as it was in 1882. The little enclosure is close to the footprint of the present one, though here it opens on to the path to the south. The well itself is not visible; the 'T' for tank and 'P' for pump suggests it was a working feature, perhaps mainly for garden use

## Discussion

The character of the sandstone masonry lining of the well shaft suggests that it is likely to be of late medieval or early modern date, but fairly certainly built when the castle was still in its military phase, before it became a private residence. The location of the well – within the infilled motte ditch – confirms that it was not built during the earliest life of the castle. The condition of the stonework suggests the shaft has never been open to the elements but has always been under cover, whether within a building (maybe that on the Burghley Map), under a well-head roof, or just slabbed over. This issue needs (like so much in Shrewsbury Castle) further research on primary source materials. J A Morris, a local man, writing his paper on Shrewsbury Castle published in 1938, described the well as being 'in the centre of the inner ward', which makes one wonder whether he had actually seen it, though he accurately recorded its depth as 74 feet.