

Fig. 1. Detail from 'A panoramic view of Windsor Castle' in 1658, by Wenceslaus Hollar. The view of the shell-keep or Round Tower is from the south-east. The series of Windsor Castle drawings made by Hollar were originally published by Elias Ashmole in his 'History and Institutions of the Order of the Garter' in 1672.

## Windsor

### 19. Windsor

The castle was established, as a motte with two large flanking baileys, by William the Conqueror and has remained a royal castle ever since. The present appearance of the shell-keep, usually referred to as the Round Tower, results from a major heightening (by 30ft, with new flag tower and machicolations instead of crenellations), internal remodelling and refacing carried out by Jeffry Wyattville in the early 19th century, which transformed what had been the Constable's residence into a suite of apartments for visitors. The access route, including its stairway,

enclosing walls and roofs were heavily rebuilt at the same time.

It is not wholly clear when the first shell-keep was built. The *Anglo-Saxon Chronicle*, in reference to Henry I's court held there in 1110, called that king the builder of New Windsor, suggesting he carried out significant works there as well as being the first king to make it a regular residence. The sole *Pipe Roll* surviving from his reign (1129-1130) referred to the king's house in the castle. Henry I also created the royal hunting park here, which Edward III later

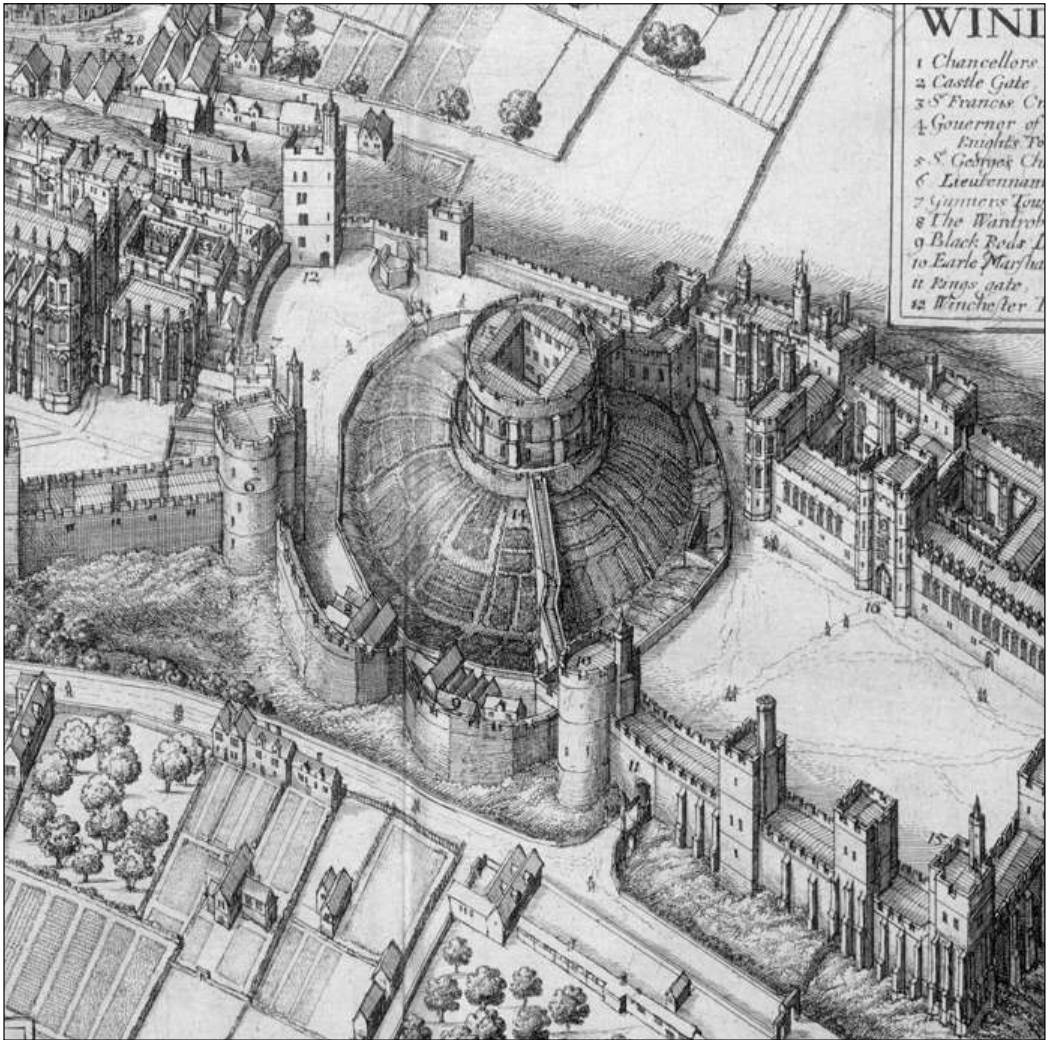


Fig. 2. A bird's-eye view of Windsor Castle in c. 1659, from the south-east, by Wenceslaus Hollar (detail). Within the shell-keep 14th century timber-framed domestic buildings range around a four-square courtyard. This image from the University of Toronto Wenceslaus Hollar Digital Collection. Reproduced with thanks.

extended into the Great Park and the Little Park. Expenditure on the upper bailey, including the king's houses and their surrounding wall, is recorded for 1165-1171: this could be the context for the first shell-keep, though it is not picked out in the expenditure, and Hope (1913, I, 15ff; VCH 1923) favoured a date in Henry II's reign for the shell-keep's origin. Part of the motte ditch was levelled in 1194-95, perhaps to make access between the two baileys easier. The motte perimeter was given a stone breastwork in the 12th century. This was altered in various later periods, up until the late 17th-century (see below).

The shell-keep emerges specifically in the recorded expenditure from the 1220s onwards, first in 1223-25 when the houses *in mota* and "the tower" relating to them were repaired: perhaps damaged in the French siege of 1216-1217. In the view of Windsor's current experts (Brindle & Kerr, in preparation) this work actually represents the building of the shell-keep anew, replacing whatever structure had earlier existed, and creating the shell-keep later reworked by Edward III (below). In the excavation and fabric analysis carried out on the motte in the 1990s, a timber felled in the summer of 1225 - presumably a relic of





*Figs. 3, 4 (detail): 'Windsor from a drawing in possession of the Commissioners of His Majesty's [James I] Private Property. A bird's eye view from the North, based on Norden's [c. 1547-1625] 1607 Survey (B.M. Harl. 3749). Within margin'. Courtesy of the Royal Collection Trust/© Her Majesty Queen Elizabeth II 2015.*

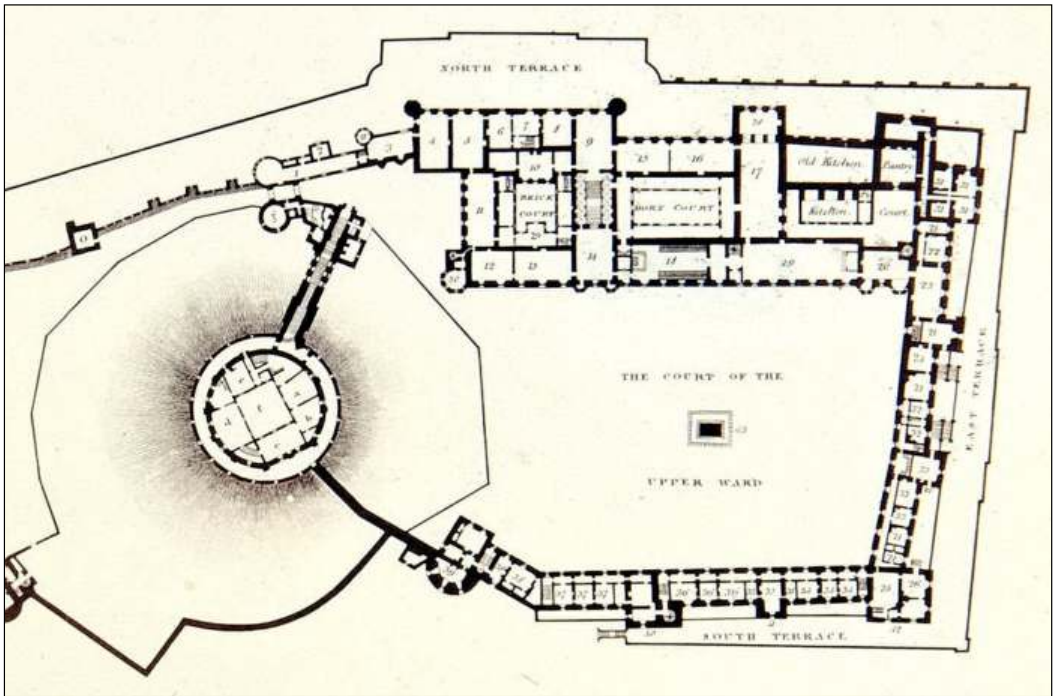


Fig. 5. Windsor Castle plan (detail - Upper Ward). Attributed to John Wesley Livingston (d. 1899). Completed in 1818 before Jeffry Wyattville's alterations. Key to (first floor) rooms in the Round Tower. a: Bed chamber; b: Drawing Room; c: Dining Room; e: Armoury; f: Open Court, according to the legend on the plan.

that documented building period - was found to have been re-used in the floor of the 14th-century works. Further recorded maintenance, up the 1250s, referred to the houses in the tower, a hall in the tower, a chapel in the tower and a well in the *magna turris*. But the impression given is that the shell-keep was never the chief residence: the most lavish apartments seem always to have been in the baileys. From 1236, Windsor was a chief residence of Henry III and by 1256 he had spent over £10,000 on improvement to the buildings and defences.

The Round Tower - as it was later known - was rebuilt in the 1350s by Edward III: it was slightly oval in plan, with a battered wall-base, and chamfered pilaster buttresses creating twelve wall segments. Wing-walls, connecting with the bailey curtains, were inherited from the 13<sup>th</sup> century shell-keep. The shell-wall was unusually thin by the general standards of large shell-keeps: 4.6 ft (1.4m) thick at its battered base and 3.4ft (1.04m) above that. This lightness of construction may reflect concern with the stability of the motte-top (see below). The entrance was on the north side, accessed at the top of the stair through a forebuilding (it enclosed the foundation of the wing-

wall). This forebuilding appears to have been an addition to the rebuilt shell-keep: it was roofed between 1364 and 1370 (as indicated by dendrochronological dates from its roof timbers). This stairway ran beside the northern wing-wall to near the inner gatehouse of the upper bailey. This access route, inherited in open form from the earlier shell-keep, was later roofed: perhaps in the fourteenth century or perhaps in 1439-1440, when the "stair to the *Dongen*" was rebuilt. A narrowing of the stairway, half-way up, probably marks the location of an internal portcullis.

The shell-keep had external windows corresponding to the ground floor and first floor levels of the internal structures. The present lower windows (two tiers) are restored fourteenth-century features, but the upper ones are by Wyattville and the loops near the (now heightened) wall-top are sham. Externally, now, everything from about half way up the buttresses is by Wyattville, as is the round-headed entrance arch with sham portcullis grooves. In a small room to the right of the entrance is a well, whose depth Hope recorded as 60ft stone-lined followed by 100ft into solid chalk.



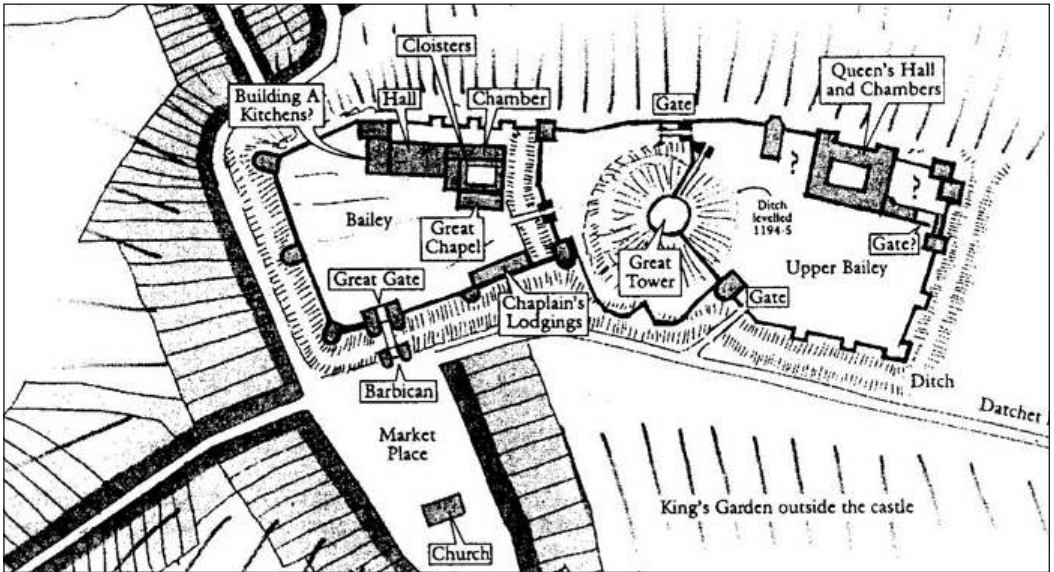


Fig. 6. A conjectural plan of Windsor Castle in the reign of Henry III, c. 1272 (detail). From Jansen, V., in Keen & Scarff (eds.), 2002. © English Heritage.

Edward I and Edward II simply maintained the castle, but from the 1340s Edward III financed massive improvements, which continued through his reign at a cost of more than £50,000. These transformed the whole site into the castle recognisable today. Works on the “High Tower” in the 1350s, absorbing some £500, produced the shell-keep which was later transformed by Wyattville (Hope 1913, I, 152-159).

The accounts of Robert of Burnham, surveyor of the King’s works, provide details of expenditure, materials and craftsmen (though sometimes inter-mixed with the record of works going on in other parts of the castle, so that isolating specifically Round Tower items of expenditure can be difficult). Structures occurring in the record include: divers lodgings in the great tower; the hall and chambers in the great tower; the walls in the tower; ovens for kitchen and bake-house. Materials recorded included: stone for foundations of the internal structures, timber for their superstructures, ironwork for their windows, lathing for their walls and leading for their roofs. The works included a great clock with bells: the earliest known mechanical, weight-driven, striking clock in England. Thus, between 1353 and 1357, the buildings within the shell-keep were rebuilt, in timber and on new stone foundations. They included a hall, chamber, kitchen (and probably a chapel) and provided royal lodgings for use while the rest of the castle was under-going extensive rebuilding (Hope 1913, II, 544-547) (fig. 6).

It is highly likely that an additional (and important) value of this particular location for the royal residence at this time was the view which the wall-walk of the shell-keep afforded of the Great Park. Any “view-shed interpretation” must, however, be judged by the two-storey medieval height of the Round Tower, supported by its pilaster buttresses, and not by its present height. The latter results from the works carried out from 1824-1840 by Wyattville, whose additional two storeys and parapet made the structure twice as tall as previously and completely altered its character. Earlier, the much lower shell-keep had risen no higher than the tops of the towers of the upper bailey.

In the 1990s, archaeological and architectural investigation of the motte and the Round Tower, following identification of substantial subsidence, illuminated two important themes. First, some indications of two previous phases of use of the motte-top were discovered. These comprised a few foundation features of a timber palisade around the perimeter, perhaps surrounding a timber *donjon* no trace of which has survived, with a deep well in the north-west part of the motte summit. These structures were apparently destroyed in a major episode of subsidence, in which the southern half of the motte sank by up to 2 metres. Following this, the motte was reconstructed with a thick dump of chalk rubble, stitched together with timber piles, and around the motte summit the foundations of a stone shell-keep, earlier than the present one, were built. This

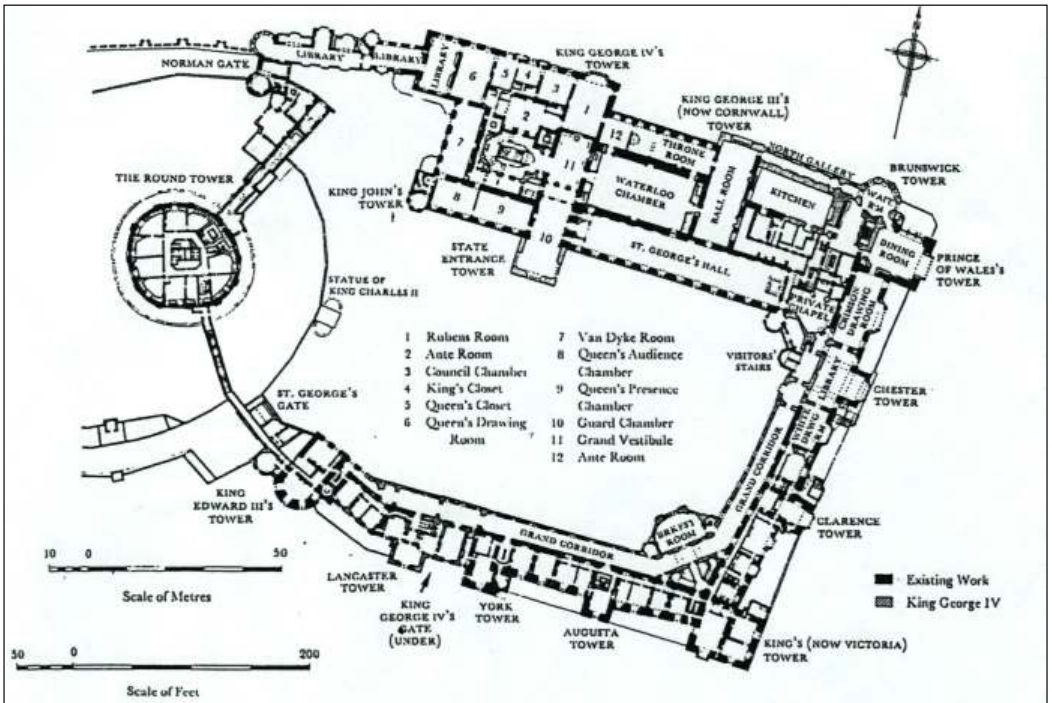


Fig. 7. The Upper Ward as remodelled by Wyattville for George IV and William IV. Crown Copyright. Reproduced with the permission of the Controller of HMSO. From Keen & Scarff (eds.) 2002.

comprised a battered flint plinth, with at least one shallow pilaster buttress in limestone, with some footings of timber structures which had stood against its inside face. The early well had been filled in, replaced with a new one to its east, and the flint plinth was provided with timber-lacing for additional strength where it crossed the line of the backfilled well.

In a subsequent operation at least three substantial pilaster buttresses were built on the south side of the motte, and following on from that the base of the first shell-keep was enclosed by another wall (a mantlet or chemise) part of which still survives in the present wall around the base of the tower, remodelled in 1670. These structures also appear to have suffered from subsidence to the south, possibly as a result of damage sustained in the siege of 1216, and the concern of the builders of the present shell-keep in the 1220s is shown in its foundations – the line of the wall of the vulnerable south side of the circuit was pulled back from the edge of the motte summit (partially explaining the squashed shape of the tower) and provided with a substantial foundation 4m wide and 2m deep, contrasting with the north side which had a much narrower and shallower foundation. Dating

evidence for the early phases is, unfortunately, scanty, and all that can be said with any certainty is that they pre-date the construction of the surviving shell-keep in the 1220s. If some excavated features belong to the primary castle, then Windsor's was not (as were some) a motte which was lowered and broadened to take the shell-keep. But certainty is impossible, since the earliest phase may have been destroyed by precisely such a lowering: Windsor does not have a very high motte and its summit is indeed broad.

Second, removal of the internal (early 19th-century and later) partition walls and inserted floors revealed substantial survivals of the timber apartments built for Edward III in the 1350s, their date confirmed by dendrochronology which indicated (for a hall roof timber) a felling date of 1355. Hope noted that some of this timber-work was visible in his day and he illustrated some of it (1913, II, 544-547) but the 1990s works revealed a lot more (fig. 8). The structures comprised four ranges around a central, rectangular courtyard and were of timber resting on rubble foundations. The west range was an open hall, the north range was a kitchen and the east and south ranges were two-storey chambers. The apartments had been finely fitted out, with floor-tiles, painted/varnished finishes



Fig. 8. A survey reconstruction drawing by John Pidgeon of the 14<sup>th</sup> century timber framed lodgings of the Windsor Round Tower; courtesy of J Pidgeon and English Heritage (Brindle & Kerr, 1997).

to the exposed timbers, and painted window glass. The whole structure had not only windows looking into the courtyard but also external ones at first-floor level, some of which may have occupied the splays of earlier ones. In this respect, that is the possession of some outward-looking windows, Windsor belonged to a small group of shell-keeps built and occupied by the richest in society. Structural analysis suggested that the 14th-century ranges survived much as built until their first major modification in the late 17th century. Part of the internal ranges were analysed, recorded and illustrated by John Pidgeon (see Brindle & Kerr 1997, 38-39, including reconstruction drawing; already published in simpler form, with kind permission, in Higham & Barker 1992, 175-177).

It is significant, to an assessment of the shell-keep's overall significance, that a king of England felt a refurbished shell-keep to be a suitable (if short-term) residence some two centuries after the form had first become popular. It has been noted (see Munby *et alii* 2007) that, to Edward III, who had already built his Round Table in the upper bailey at Windsor in the 1340s, the circular plan was perhaps quite natural: Queenborough castle, which he built in Kent in 1360, also took this form.

Various sources of pictorial evidence assist our understanding of the pre-19th-century shell-keep which preceded Wyattville's rebuilding of the Round Tower and Upper Ward (for a plan of the Wyattville work, see Keen & Scarff 2002, 111 and Brindle & Kerr 1997, 63; for depictions ranging from the 16th to early 19th century, see Hope 1913, I, Plates XIX, XXIV, XXXI, XXXII, XXXV, XLIII). Hope noted

(1913, I, 364) that all who had depicted the old Round Tower had tended to make it look higher than it actually had been, presumably because they felt it should have been more important. In fact, the medieval structure had been rather squat.

Crucial depictions include (in reverse chronological order) first, a survey made around 1790 (see end-paper in Keen & Scarff 2002) which shows the Round Tower's apartments in the form arising from their 17th-century modifications (when Prince Rupert was Constable). Second, a bird's-eye view drawn between 1659 and 1663 by Wenceslaus Hollar (published in 1672 by Elias Ashmole) shows the buttressed and crenellated shell-keep at its original (lower) height with its ascending wing-walls, external windows and four domestic ranges (also with internal windows) arranged around a sub-rectangular courtyard (reproduced in Keen & Scarff 2002, 24; Brindle & Kerr 1997, 38), (fig. 2). Third, dating from 1607, is the survey of Windsor by John Norden (Brindle & Kerr 1997, 47) in which the shell-keep interior is depicted in very similar form, but with an exterior that shows a greater profusion of buttresses, no external windows and a wall around the motte base (figs. 3, 4).

Fourth, there is the earliest depiction of Windsor castle, a drawing added to a 15th-century manuscript of the *Polychronicon* of Ranulph Higden, a 14th-century monk of St Werburgh's Abbey, Chester, in the possession of Eton College since 1913 (Ker 1977, 782-784; Hope 1913, I, 233-234 and Plate XIX), (fig. 10).

The drawing is probably the work of John Blacman, Fellow of Eton 1443-1453, who possessed a manuscript of Higden's work. In the foreground of the picture, Henry VI and Queen Margaret attend a ceremony in the chapel of Eton College (in the lower register, not illustrated). Hope noted that the chapel is referred to in the College's accounts 1446-1447, that the king married Margaret of Anjou in 1445 and that the drawing is thus likely to date from the late 1440s. Ker, in contrast, identifies it as a depiction of the consecration of Thomas Bekyngton in 1443. In the background of the picture, and above a horizontal line which suggests the two components were not intended to be part of the same "view", is a depiction of Windsor castle as seen from the north, with its two wards flanking the central motte. Hope thought it a remarkably accurate rendition of the castle at this time, and in broad outline it is compatible with the survey of around 1790 (above). Depiction of the shell-keep is, however, very simple: a tower with blank-wall faces (no buttresses or windows) and a battlemented wall-top; a prominent stair-way (accurately placed)



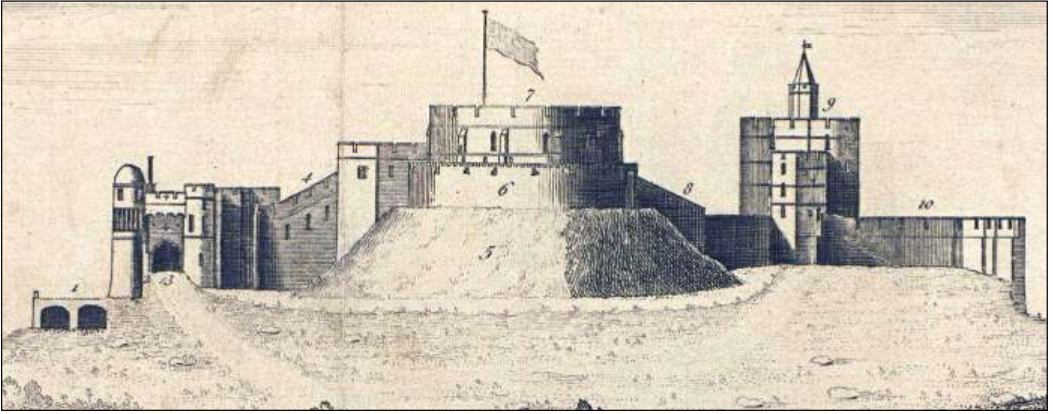


Fig. 9. The west elevation of the keep or Round Tower, c. 1743 by or after Batty Langley (1696-1751). Key: 3: The Norman Gate; 4: The Staircase; 5: The Mount or motte; 6: The Courtine (or chemise); 7: The Keep; 8: An Ancient Gang Way from the Keep to: 9: The Maids of Honour or Devil's Tower; 10: Rampart Wall. From the Royal Collection Trust/© Her Majesty Queen Elizabeth II 2015. This view (and fig. 11) illustrate the squat appearance of the shell keep in relation to the equally low-rise motte.

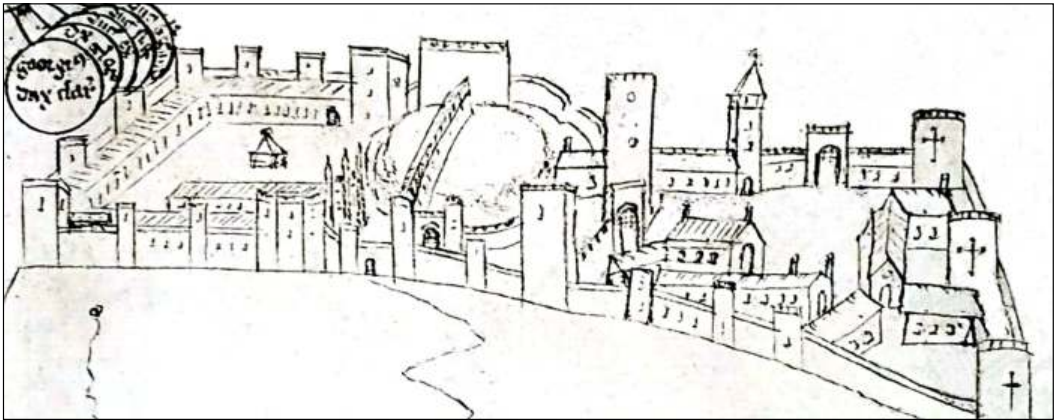


Fig. 10. Pen drawing of Windsor Castle from the north (detail) c. 1440. The earliest known depiction of Windsor, a drawing added to a 15th-century manuscript of the Polychronicon of Ranulph Higden, probably by John Blacman, Fellow of Eton 1443-1453, who possessed a manuscript of Higden's work. Ref: Eton College Library, MS 213, fol. Xv to whom thanks are due for access to the original. Reproduced here from Hope 1913.

descends the motte slope. As a source for the castle as a whole, this is an important drawing. As a source for the shell-keep in particular, it is remarkable for its early date rather than for what it tells us in detail.

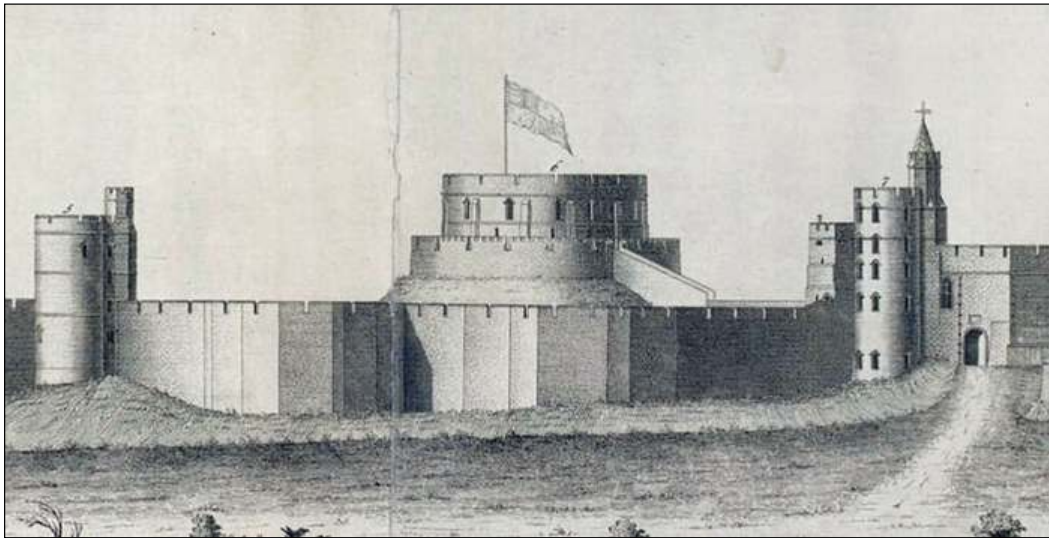
Since completion of the renovations carried out in the 1990s, the Round Tower has housed the Windsor Castle Library.

*Generous help from Brian Kerr and Steven Brindle, in refining the above description and allowing quotation of unpublished data from their report in preparation, is acknowledged.*

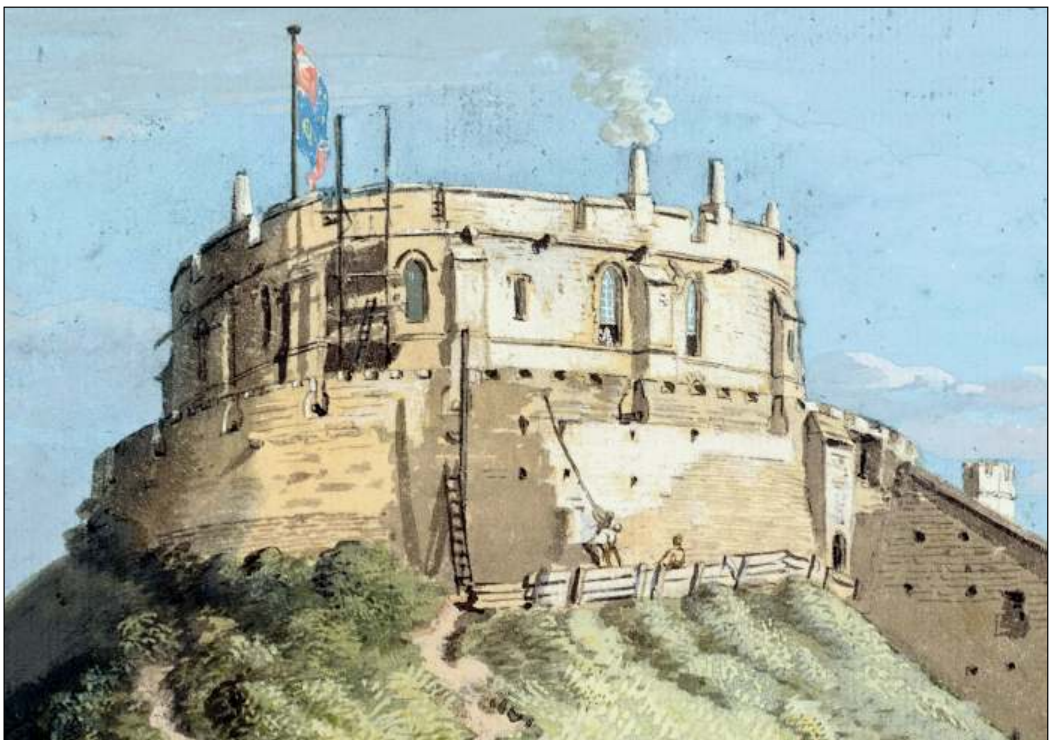
*Internal Diameter:* 100ft x 90ft (30.5m x 27.5m).  
*Original height* (Wyatville's records): 27ft (8.3m)  
*Motte height:* 50ft (15m)

*Published refs:* King 1782, 327-329; Hope 1913; VCH 1923; Brown *et alii* 1963, II, 864-888; Renn 1968, 348; Ker 1977, 782-784; King 1983, I, 12; Kerr 1990; Brindle & Kerr 1997; Jansen 2002; Keen & Scarff 2002; Emery 2006, 192-208; Munby *et alii* 2007; Brindle (ed.) forthcoming.





*Fig. 11. The north elevation of Windsor Castle, Batty Langley, c. 1743, (detail). From the Royal Collection Trust/© Her Majesty Queen Elizabeth II 2015.*



*Fig. 12. Windsor Castle (detail), from the north. Paul Sandby, c. 1790. 'Windsor Castle The Round Tower, Royal Court and Devil's Tower from the Black Rod. © National Gallery of Victoria, Australia' Watercolour and gouache over traces of pencil. Reproduced with thanks. The painting represents pre-Wyatville changes.*



ABOVE: Fig. 13. The shell-keep from the east. The original height of the shell wall to the wall-walk was (27.ft) approximately to the level of the string-course above the larger windows. (Compare the height in figs. 11 & 12 which are pre-Wyatville). Wyattville almost doubled the height.

LEFT: Fig. 14. The covered 'wing-wall' stairs that lead from the 'Norman Gate' to the shell-keep on the north side. 'Windsor Castle, Round Tower Staircase', by James Stephanoff, 1818. The aquatint engraving of



this picture was published as plate 24 of W. H. Pyne (1819) 'The History of the Royal Residences'. Royal Collection Trust/© Her Majesty Queen Elizabeth II 2015. Reference RCIN 922116. Compare with an early photograph of the post-Wyatville stairs (left).