

**An archaeological assessment of the masonry remains
of Lyonshall Castle, Herefordshire**

January 2019



**Report prepared by Dr. Nigel Baker and Tim Hoverd
Remote imaging by Adam Stanford**

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Herefordshire Archaeology
Environment, Planning and Waste
Economy, Communities & Places Directorate
Herefordshire Council



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Summary:

Historic England grant aided a programme of conservation work at Lyonshall Castle, Herefordshire. This included the re-pointing of areas of stonework and soft capping. In addition archaeological survey, recording and analysis Level 2 was required. This included Photographic / Photogrammetric Survey, production of 3D and Orthophotographic record.

The works and analysis have raised a number of questions concerning the original construction and layout of the castle as well as its development. The tower keep windows are too shaded by the existing curtain wall to have been of much use in the provision of natural light suggesting that the curtain wall is either a later addition or that it has been substantially re-built.

Doubt is now cast upon the “entrance” into the keep with the thesis that it is more likely that it is a gap broken through at a previous internal doorway position, most probably one giving access to the staircase in the wall thickness which was discovered during the conservation works.

It is now apparent that the curtain wall has undergone substantial rebuilding being both thickened and heightened suggesting that the corridor between the keep and the curtain wall was covered over in order to house the garderobe.

A small fragment of wall was noted on the southern side of the Keep. It seems probable that it was the end wall of a building attached to the tower keep, quite possibly the upper-end wall of a hall occupying the north-west side of the inner bailey and quite possibly linked to the tower, which may possibly have been more like a solar tower than a tower keep, at an upper level.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. National Grid References are accurate to approximately 5m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50 and 0.02m at 1:20m

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Introduction:

This report (HAR 384) describes works comprising the archaeological survey, recording and analysis of the scheduled area of Lyonshall Castle to Level 2 as contracted by Historic England. This included Photographic / Photogrammetric Survey, production of 3D and Orthophotographic record by Adam Stanford (AerialCam).

The recording and analysis described within this report were undertaken after conservation works had been completed which involved vegetation clearance, repointing and soft capping of particularly vulnerable sections of the upstanding masonry. These works were grant-aided by Historic England and were undertaken in order to remove it from the Heritage At Risk Register.

Site location, Description, Setting

Lyonshall Castle is located in North-western Herefordshire on a low ridge overlooking the Curl Brook to its south and the Arrow Valley to its north. It is located at the northern end of the village of Lyonshall.

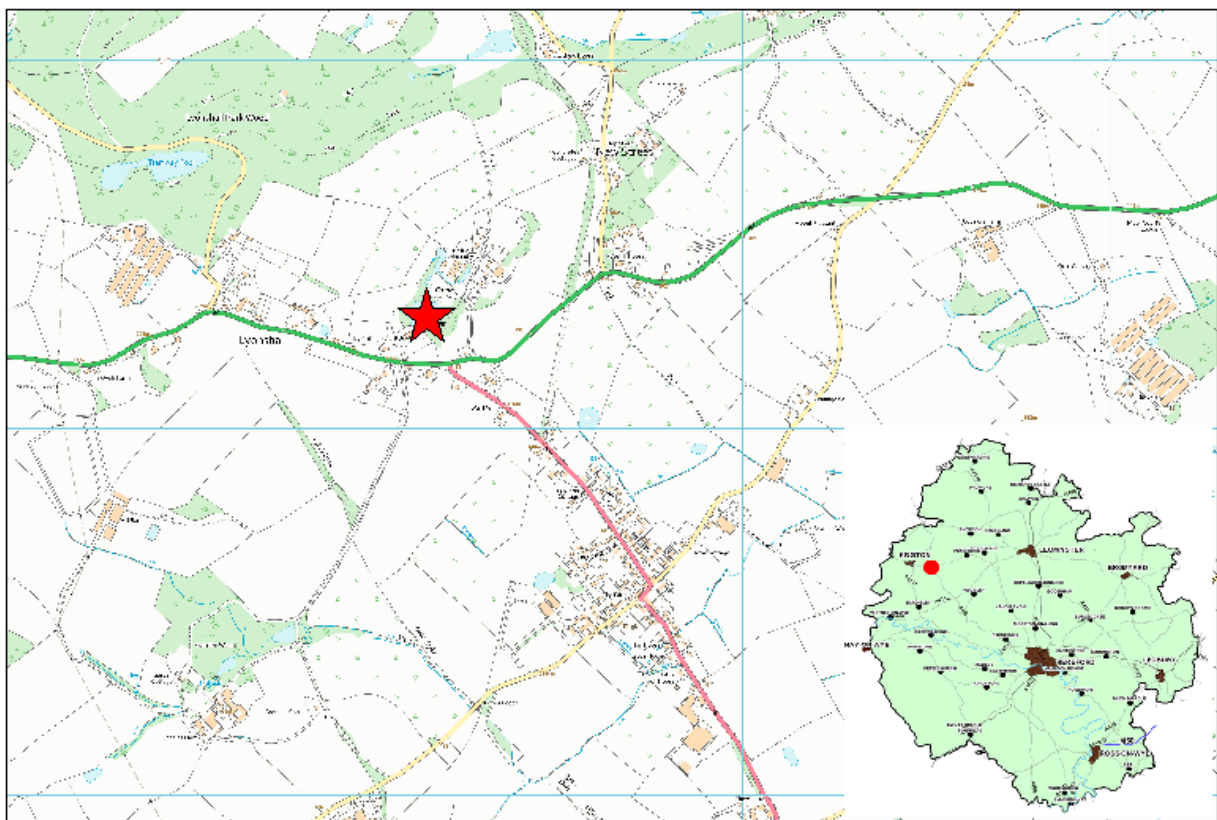


Figure 1: Site location with reference to the County (inset) and the village of Lyonshall.

The soils are of the Escrick 1 Series that consists of deep well drained coarse loamy soils. The underlying geology consists of glacial deposits, undifferentiated, mainly sandy till. (Soil Survey of England and Wales 1983).

Historical Background:

Lyonsall Castle, ruins and earthworks, immediately N.E. of the churchyard, consists of an inner and nearly circular enclosure comprising the keep and bailey, a rectangular outer enclosure comprising the inner enclosure and land to the N. and E. and a further small enclosure on the N. side. Though not actually mentioned in Domesday the castle was probably established not long after the Conquest. It appears to have belonged in succession to the families of Lacy, Devereux and Vere, and again to that of Devereux. In 1404 Walter, 5th Lord Fitzwalter, had orders to fortify it against the Welsh. The inner enclosure of about acre is surrounded by a wet moat and approached by a modern bridge on the S.E. which may represent the original entrance. The enclosure was further defended by a curtain wall which is carried in semi-polygonal form round the keep on the N. side. This portion is still standing in places to a height of 8 ft., and at its W. end are remains of a blocked doorway; two small projections towards the N.E. probably supported a projecting garde-robe. There are fragmentary remains of the curtain on the E. side of the enclosure rising in places to a height of 19 ft. On the W. side the curtain is represented only by interrupted mounds, and even these are absent on the S. side. The cylindrical Keep (37 ft. in external diameter) stands on a low platform with remains of a retaining wall on the S.W. The keep-walls stand only to a height of about 5 ft. and have a splayed string-course and a battered plinth; there are remains of three windows towards the N. and a broad gap towards the S., probably representing the entrance. There is little evidence to date the masonry of either the keep or curtain, but both probably belong to the 13th century. Traces of a building exist on the W. side of the enclosure, no doubt built against the curtain on that side. There is a well towards the E. side of the enclosure. The outer enclosure or bailey is protected by a moat and outer bank on the N.W. and N.E. sides and by a scarp only on the S.E. The N.W. moat is continued on the side of a second and smaller enclosure to the N.E., now occupied by farm buildings and having remains of a moat also on the S.E. The line of the enclosure on the N.E. has been obliterated. (RCHME 1934)

Lyonsall Castle. Ring-work and bailey, with further square bailey beyond to the NE. Remains of a round keep stand on a slight mound on the N side of the ring-work and there are fragmentary remains of the curtain wall. Probably one of the two castles of John of Euraux named as Lenhaul in 1209. There is little evidence to date the masonry of either the keep or curtain, but both are probably 13th century. The outer bailey is protected by a moat and outer bank on the NW and NE sides and by a scarp only on the SE. The NW moat is continued on the side of a second and smaller enclosure to the NE now occupied by farm buildings and having remains of a

moat also on the SE. The line of the enclosure on the NE has been obliterated (RCHME; Renn).

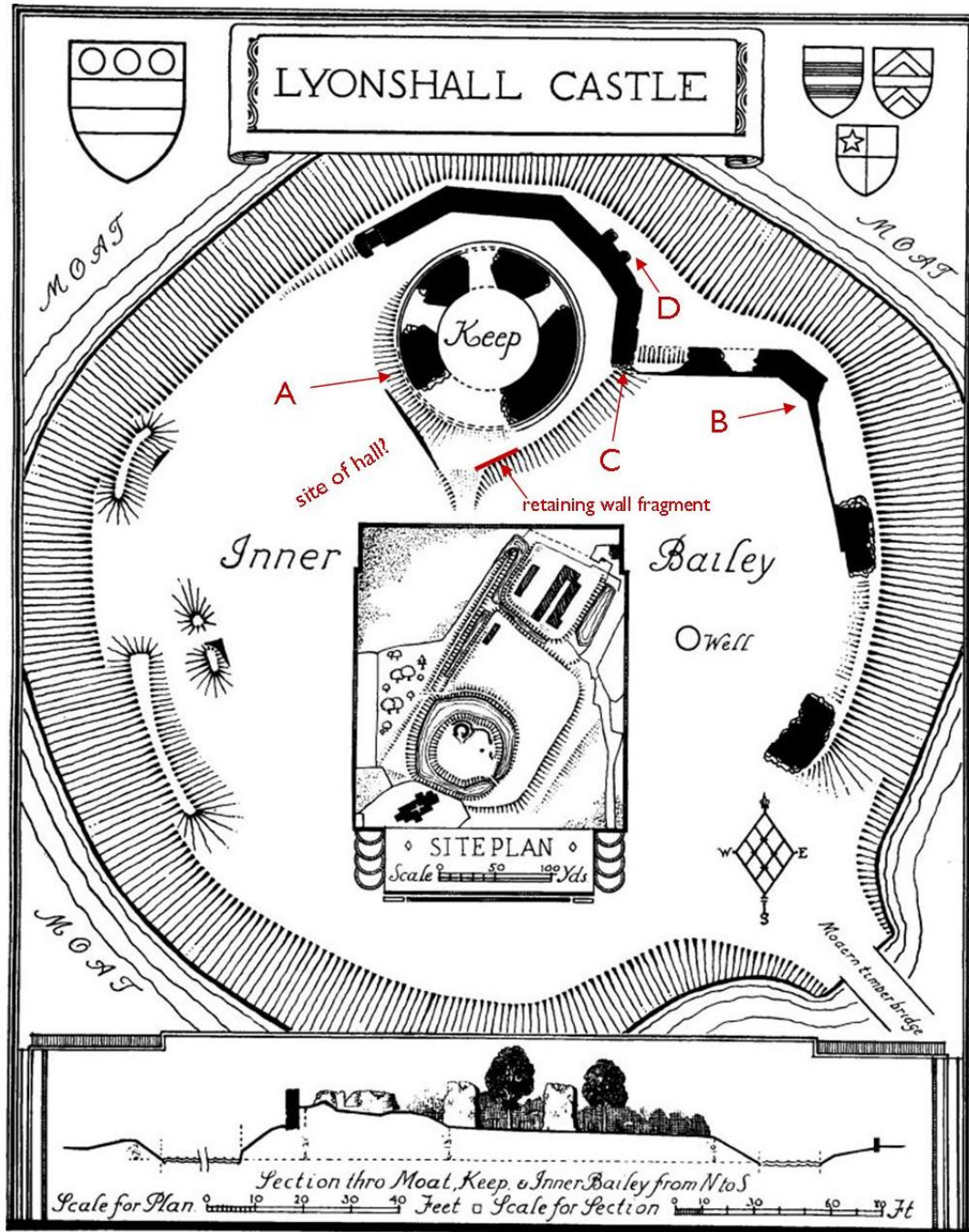
The ring is 60.0m in diameter and approximately 1.0m above the outside ground level. The mound for the keep is 20.0m in diameter and 2.0m high. The enclosing moat is from 16.0m in width on the SE side to 26.0m on the NW, and from 1.0 to 3.0m in depth. The inner bailey, 50.0m by 30.0m in size, has an inner bank on the NW side, 10.0m in width, 1.0m in height which is carried around the N outer side of the ringwork moat. The outer bank on the NW side is 12.0m in width and 1.5m in height and extends the full length of the site. The waterfilled medial ditch is 6.0m wide and 1.0m deep. The scarp on the SE side is up to 4.0m in height. The outer bailey, at a lower level, is separated from the inner by a waterfilled ditch, 6.0m in width, 1.5m deep. This is continued at lower levels on the NW and SE sides and there are traces of a ditch on the NE side, the area now being occupied by a farm road and cottages. A slight inner bank on the SW and NW sides is 4.0m wide and 1.0m high. The original entrance to the inner bailey is through the NE side, to the E of the outer bailey. A modern footbridge across the moat giving access to a short causeway, opposite the keep, is probably on the site of the original entrance to the ringwork and castle. The fragments of curtain walling, 2.0m in thickness, rise to approx 6.0m in height, the walling of the keep is 3.0m thick, but nowhere stands more than 2.0m high. All walling is overgrown and decayed. (Field Investigators Comments F1 ASP 12-SEP-72). (PastScape)

Interpretation of the site by W.R. Pye (Woolhope Club Archaeological Research Section) suggests that a motte of 11th-12th century date, with a wet ditch and entrance on the S.E., was augmented during the 12th century with the construction of the curtain wall, keep and outer bailey. The moat was enlarged, and extended at a different level along the N.W. side of the outer bailey, the outer bank constructed and the S.E. defences strengthened in response to an order of 1403 to hold the castle against the Welsh {Glendower}. It was felt that the site could have been heavily subject to 18th/19th century landscaping; the keep, in particular, appearing as "an unconvincing piece of architecture of uncertain date" with anachronistic ground floor openings. (PastScape ref. Pye, 1971)

Building Analysis by Dr. Nigel Baker

In December 2018 the writer was commissioned by Tim Hoverd of Herefordshire Archaeology to prepare this short assessment report on the masonry remains at Lyonshall Castle, Herefordshire (NGR SO 3315 5633; SAM Herefordshire 108; HER 355), following a programme of undergrowth clearance, masonry consolidation and soft-capping of the standing walls by Crispin Hack, grant-aided by Historic England. Some previously-unrecorded features were observed, measured and recorded by Crispin Hack on measured sketch-plans and sections, though by the time the site

was visited by the present writer, most of these had been re-buried under the turf of the newly-installed soft capping. The degree of exposure of standing masonry is therefore now once again similar to what it has been in the past, when the castle was visited by the RCAHM in the early 1930s, and the Woolhope Club in 1971. Features discussed below are located on the Royal Commission 1934 plan:



A-D Features referred to in text

1. The RCHM (1934) Inventory volume plan

Site description

The keep

The base of a cylindrical tower keep survives to a visible height of around two metres. It is characterised externally by a substantial battered base capped with a chamfered plinth. These features are present around the south, east and north sides of the circle. On the east side, the chamfered plinth capping the battered courses is about a metre above ground level in the passage between the keep and the curtain wall, which is in turn roughly 2.5m above ground level in the bailey. The batter and plinth is continuous around the back (north side) of the keep but on the west side disappears where the stonework has eroded back and where the base is concealed by a mass projecting south-west that terminates with the south-west facing wall. A small section of wall is visible here ('A' on plan) following the general curve of the keep batter but further out from the wall face than the line that the chamfered plinth might be taken to follow, and it is clear that the battered base was in some way different on this side. The south-west facing wall beyond it contains no readable features and no returns at either end are apparent.



2. The keep from the east: corner of curtain wall right foreground



3. The north side of the keep with battered base and plinth, looking west



4. Isolated length of wall (A) upstanding from the plane of the battered base, west side



5. South-west facing wall face

The Keep: interior

Entry through the 2.5 metre-thick walls is through a gap facing slightly east of south – either an original external entrance or an entrance to the staircase in the thickness of the wall broken through. The width of the opening is slightly less than the internal width of the three surviving splayed windows, so it is perhaps less likely that it is a fourth window broken through post-ruination to form a doorway. The ground level in the interior of the keep is just below the inside sill level of the windows facing west, north-west and north-east. The walls are truncated below the level of any springers to the rear arches over the window openings.



6. Keep interior: composite view from south

The curtain wall

The curtain wall survives best behind/north of the keep where it remains to a height of around 3m exposed on the inside and up to 5m above the base courses on the outside. A number of features are apparent, discussed here from east to west.

The curtain wall east of the keep is represented by a low (less than 1 metre high) wall, apparently of unmortared stone rubble, little of which appears at first sight to be in situ. However, the north-east angle ('B' on plan) of the polygonal inner bailey is composed of four to six visible courses of squared rubble or ashlar with, crucially, specifically cut, angled stones forming the corner: the masonry in this area appears to be original, as indeed the RCHM plan suggests.

At the right-angled junction of the curtain wall where it turns north to wrap around the keep, Crispin Hack identified a dressed stone face within the thickness of the wall fabric. This is still readily apparent (fig. 8; 'C' on plan); while it can be safely said to represent a thickening-up of this section of wall around the keep, its significance is not fully understood – though elsewhere, the curtain around the keep is demonstrably of more than one phase of medieval work (see discussion, below).

On the north-east facing section of the curtain wall exterior is a pair of projecting buttress-like stub walls ('D') that were interpreted by the RCHM as a probable footing to a projecting garderobe. This feature is discussed further below.

Close to the surviving western end of the curtain wall, a blocked doorway opening is apparent passing through the thickness of the wall. This has side-alternate quoining on the inside face and chamfered jambs on the outside. It has no internal lintel as such, as there appears to be a rebuild in the wall, such that the upper part of the wall – from the level of the existing door head upwards – is of a slightly different fabric, with more casual coursing, to that below. This rebuild was noted by Crispin Hack (2018 annotated section), the lower build characterised by hard red mortar. While the present top of the doorway is probably substantially lower than it was originally, it is also clear that its sill is below the level of the present ground level within the 'corridor' between the keep and the curtain, suggesting that the ground level here has risen.



7. The north-east angle of the inner bailey curtain wall showing probably original coursed masonry; the one-metre scale marks the angle



8. Thickening-up of the inside face of the curtain wall at its turn north around the keep



9. The pair of buttress-like features on the north-east face of the curtain wall, the footing of a possible overhanging garderobe





10 and 11: the north-east exterior face of the curtain wall with detail of ?drain



12. The interior face of the curtain wall on the north-west side of the keep. The one-metre scale marks the horizontal junction of two different builds, also noted by Crispin Hack



13. Detail of the blocked door in the interior face of the curtain wall, NW of the keep



14. Detail of the exterior face of the blocked door in the curtain wall



15. General view of the masonry remains from the south-west

Discussion

A number of questions arise from even this cursory inspection of the masonry remains of the core of Lyonshall Castle, though it is clear that, despite the potential insights to be derived from the examination of other, better-preserved, buildings, some issues will remain unresolved without excavation.

The first is the form of the 'corridor' around the north side of the keep and the relationship of the keep to the curtain wall surrounding it. The form of the three surviving splayed windows in the keep walls suggests strongly that, when it was built, the curtain wall did not wrap around the north side of the building in the way it does now. As seen today, the windows would have admitted little light to the keep basement storey and would instead have been a source of weakness in the design of the fortification. It seems most likely that the battered base was much more substantial than now appears, that the window sills would have been positioned well above the surrounding ground level and that there would have been either no curtain wall intervening between the base of the tower keep and the moat to its north, or that any curtain wall was much lower, perhaps at head height so that it did not interrupt views and lines-of-fire out from the keep windows. It seems probable that there has been a significant raising of the ground-level around the base of the keep, sufficient for there even to have been some discussion in the past of the possibility of an underlying motte.

Similarly, it seems unlikely that the present entrance through the south side of the keep is an original feature, more likely that it is a gap broken through at a previous internal doorway position, most probably one giving access to the staircase in the wall thickness identified by Crispin Hack (measured sketch plan 2018); this appears to be a new discovery, a feature that was invisible to the RCHM surveyors. If the tower keep was originally accessed via a first-floor doorway, all trace of that has disappeared with the rest of the superstructure. Ground level within the keep is presently more or less at the level of the internal window sills, suggesting that the original internal floor level lies well below the modern ground surface.

The battered base on the east side of the keep bears no scars of the curtain wall having ever run up to it, suggesting that when the tower keep was built it was linked-in to a timber perimeter defence, or was surrounded by a much lower version of the present curtain, as hypothesised above.

The curtain around the keep was evidently the subject of at least one design change in the Middle Ages. This is apparant from the thickening-up of the wall at the corner east of the keep, and from the taking down of the upper section of wall around the north-west side of the keep and its rebuilding. These events could be related, but whether or not they are, there must have been a stage at which the curtain around the keep was raised in height, rendering the surviving lowest tier of keep windows

redundant. This is implicit also in the presence of the probable garderobe footing on the north-east exterior. From what would the garderobe chute have discharged? The thickness of the curtain wall does not seem to allow for a passage and garderobe chamber contained within its thickness, therefore it seems a reasonable guess that the 'corridor' around the outside of the keep was floored over at a higher level, at least at a stage in the life of the castle when considerations of active defence were being supplanted by considerations of domestic convenience.

If the polygonal form of the curtain wall running north around the keep has been modified, it seems likely that so to have the walls to its south, which collectively form a seven-sided polygon around the base of the keep. The exposed stretch of wall facing south-west could be interpreted as just one side of a polygonal plinth-like structure from which rose the battered base of the keep. This, however, is probably an over-simplification. At the top of the modern steps approaching the keep from the south-south-east a fragment of vertical wall face is visible (see plan) which could be interpreted in this way – as a low retaining wall around the base of the keep. However, the south-west facing wall section seems much more substantial and is positioned further out from the keep walls. It seems probable that it was the end wall of a building attached to the tower keep, quite possibly the upper-end wall of a hall occupying the north-west side of the inner bailey and quite possibly linked to the tower, which may possibly have been more like a solar tower than a tower keep, at an upper level.

Further work

With the consolidation and recording of the exposed masonry completed, substantial further information will only be derived from excavation. Crucial areas arising from the discussion above can be identified as follows:

1. Investigation of the relationship between the keep and the surrounding curtain wall, design changes in this relationship, and ground-level changes
2. Establishment of the interior keep floor level and whether the existing entrance is based on an original doorway, or is a post-ruination insertion
3. Investigation of the south-west facing wall: is it the end wall of an adjoining building?

AerialCam Ltd photographic and digital survey results:

Recording took place by AerialCam Ltd using a UAV and a pole mounted camera. The photographic record was subject to enhancement by Structure from Motion (SfM) which not only renders the masonry elements as 3 dimensional models, but also produced photogrammetric elevations. A selection of images have been made available within this section. For the full library and for the 3D models please follow the links below.

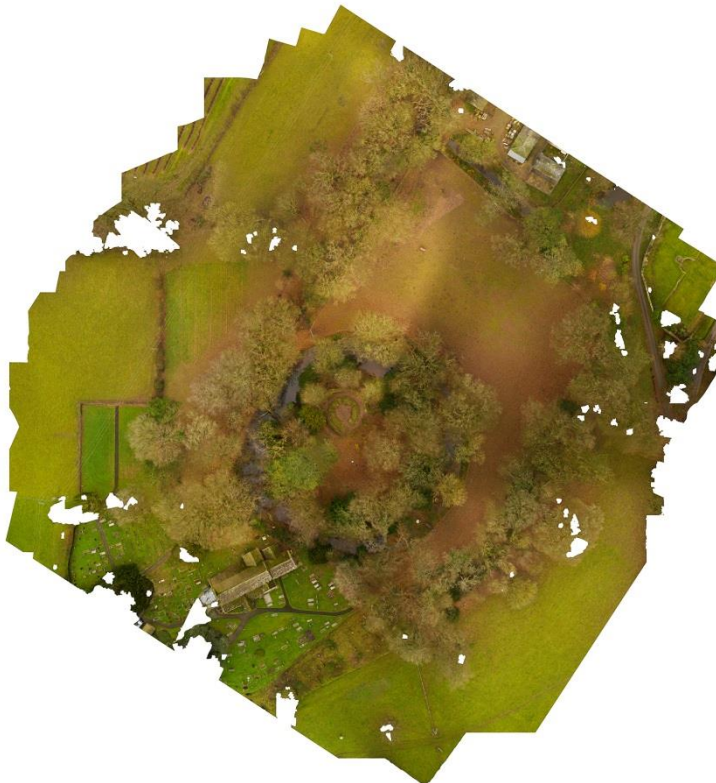
<https://skfb.ly/6GLyy> - Lyonshall-Castle-motte-landscape, textured.

<https://skfb.ly/6GLyG> - Lyonshall-Castle-motte and stone exposed, textured.

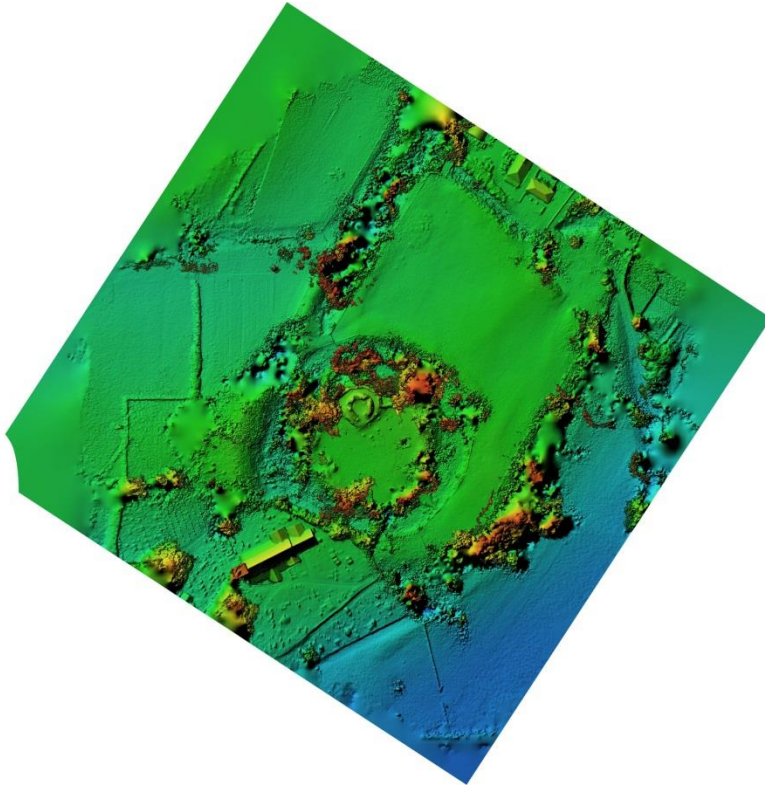
<https://skfb.ly/6GLyJ> - Lyonshall-Castle-Keep, stone exposed, textured.

<https://skfb.ly/6GLyv> - Lyonshall-Castle - Keep-untextured

<https://skfb.ly/6GLyt> - Lyonshall-Castle - visible Earth Works-Untextured



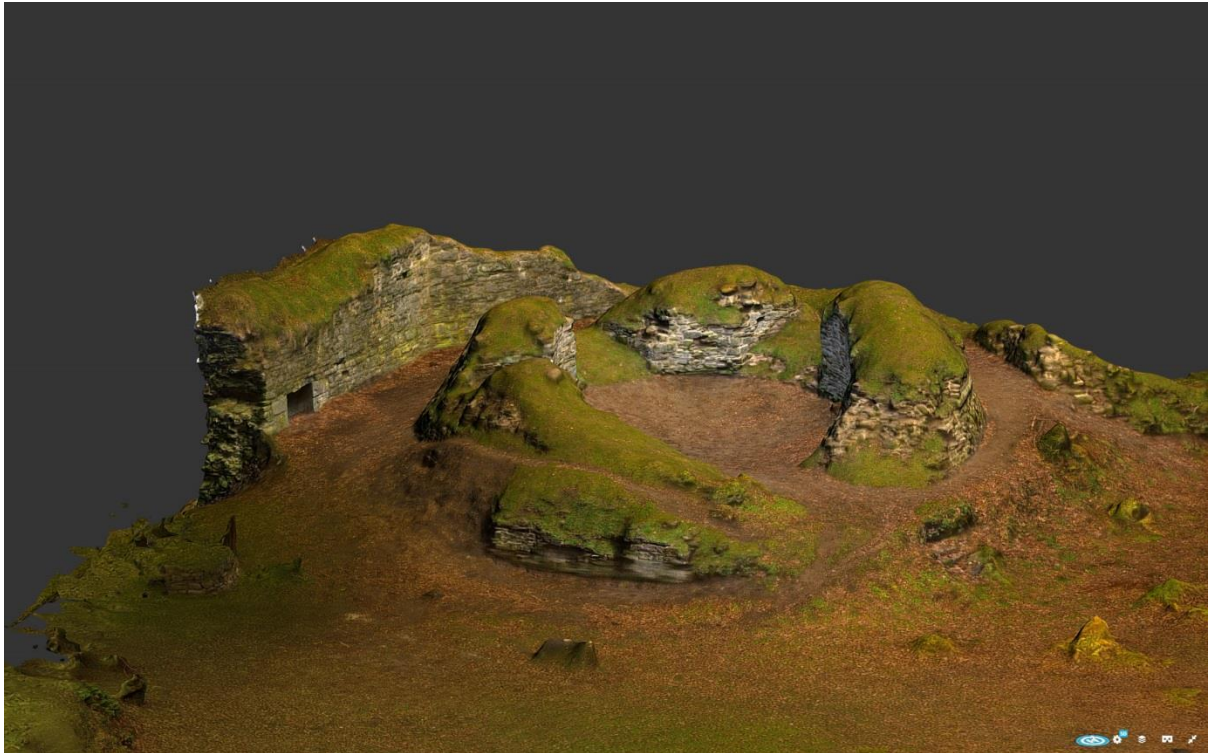
Orthophotograph (plan or map view) of the site



Colour version of the DEM (digital elevation model) of the site



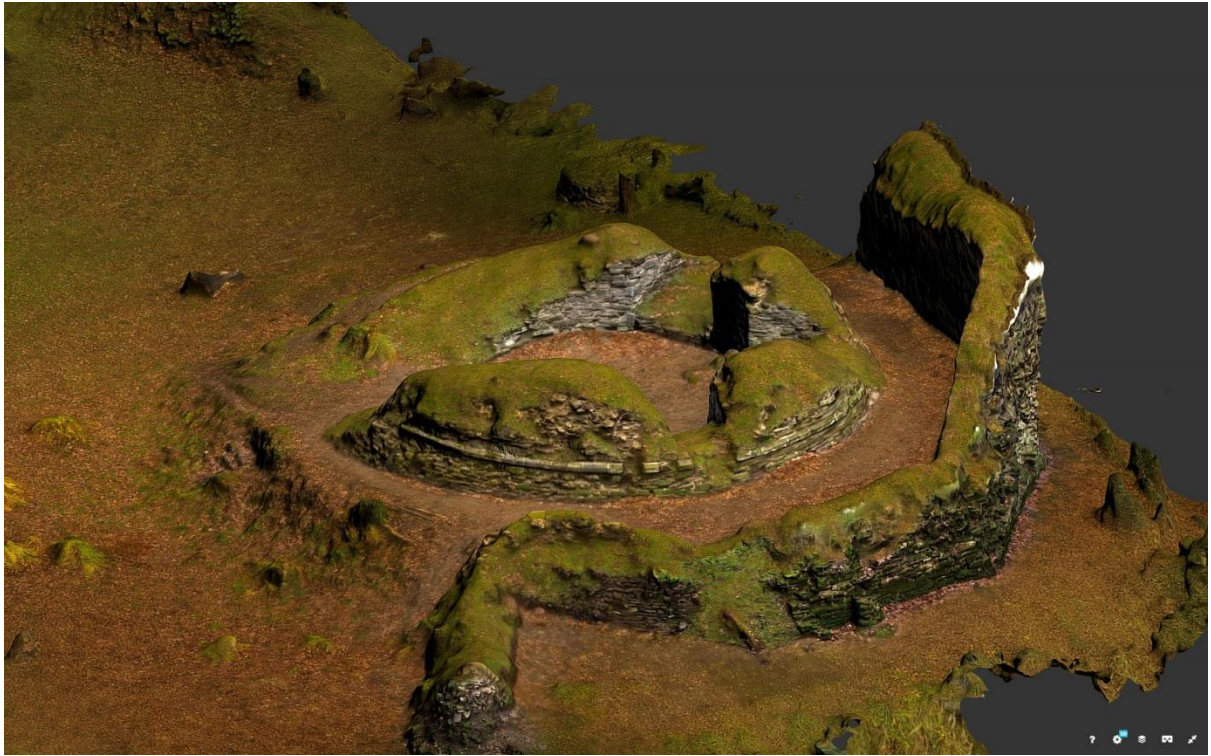
Site plan



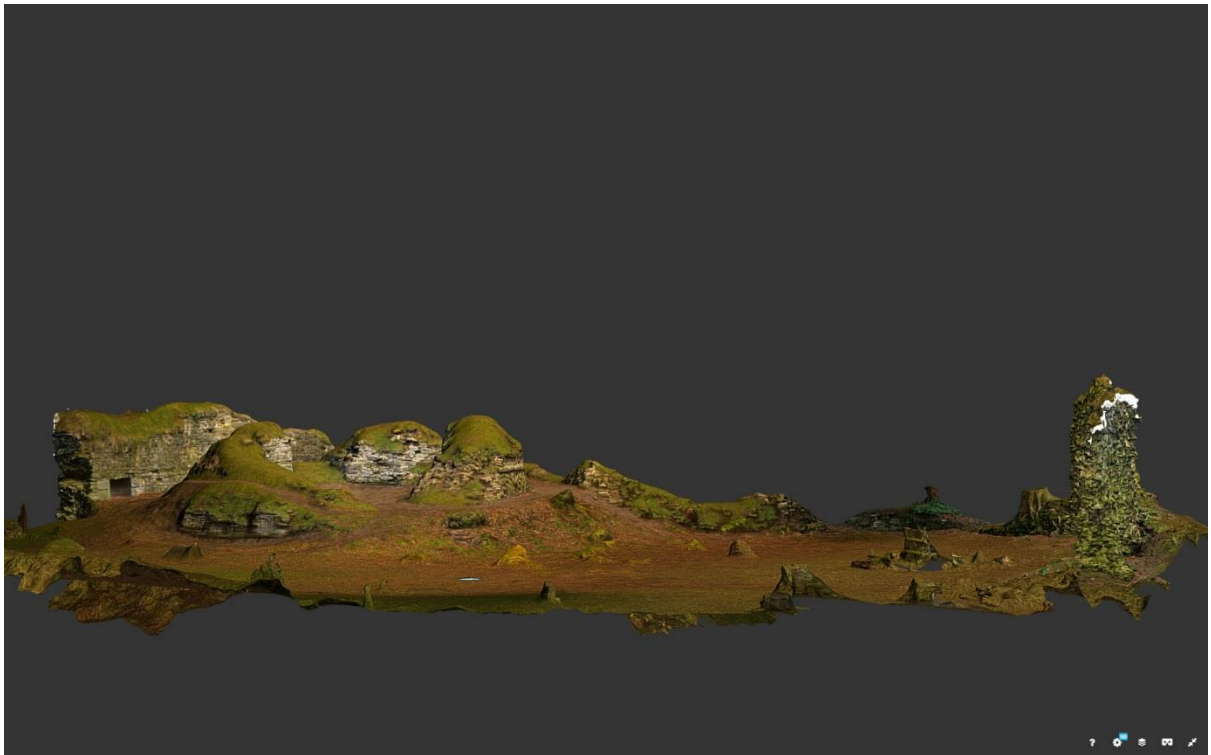
Oblique south west



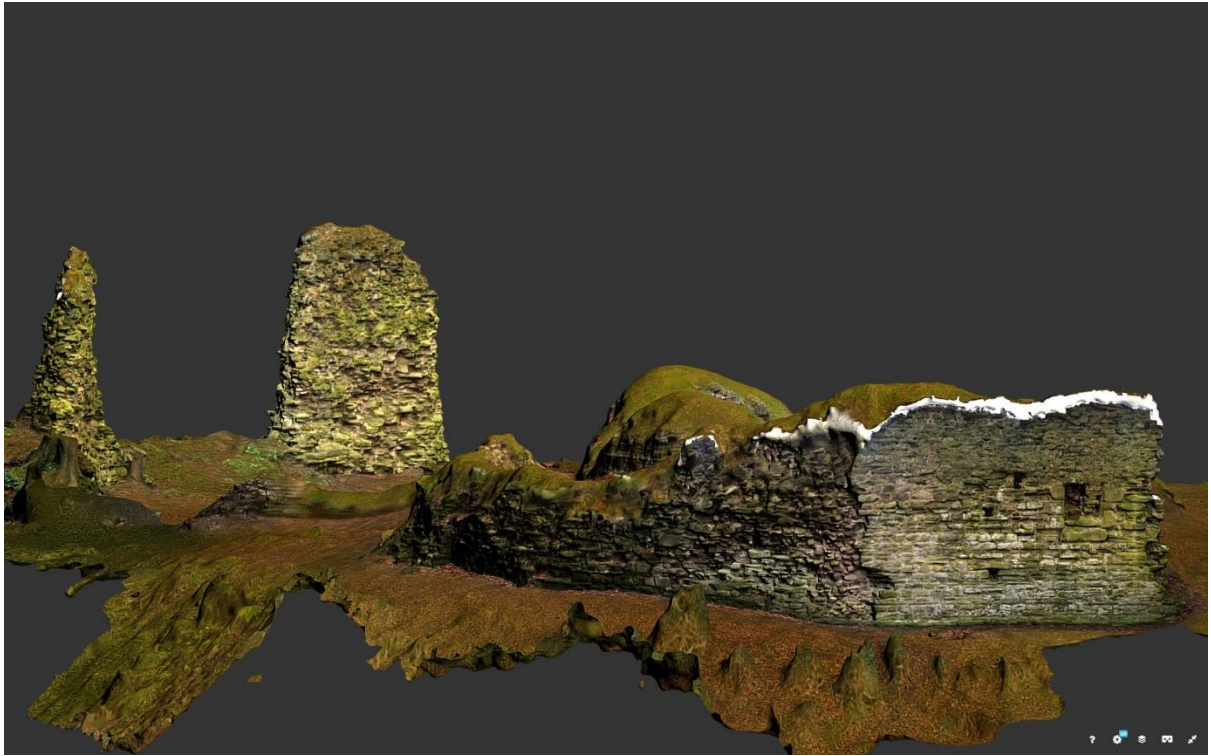
Oblique south east



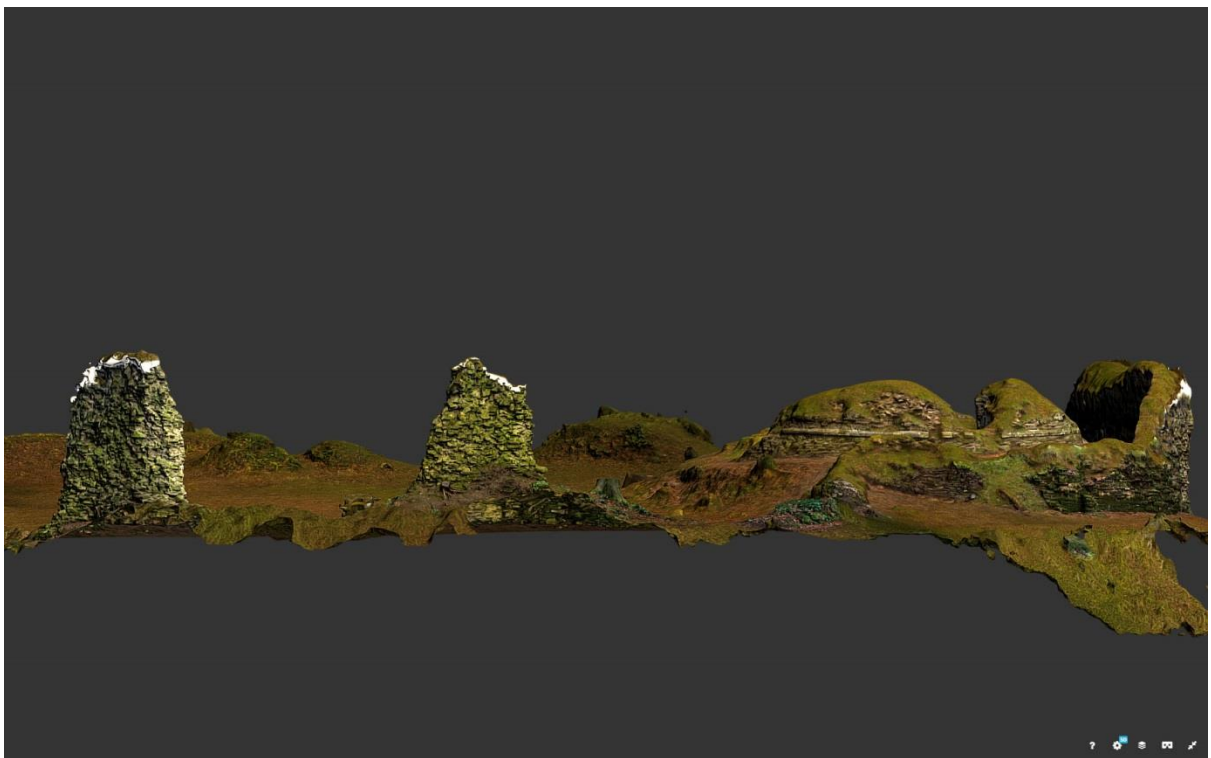
Oblique North East



South Elevation



North Elevation



East Elevation

Bibliography

Data sources:

The following sources of information were referred to:

- Digital data for nationally designated heritage assets, from the National Heritage List for England (held by English Heritage)
- Archaeological records held by Herefordshire HER
- Historic maps and plans held in the Herefordshire Archives;
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