

Chequers Dredging Work, Buckinghamshire Interim Archaeological Watching Brief Report

December 2019

Client: The Chequers Estate

Issue No: 1

OA Reference No: CHEQWB NGR: SP 82820 06344





Client Name: **Chequers Estate**

Document Title: Chequers Dredging Work, Buckinghamshire

Document Type: Watching Brief Report

Grid Reference: SP 82820 06344

Planning Reference: N/A

Site Code: CHEQ19 Invoice Code: **CHEQWB**

Receiving Body: **Buckinghamshire County Museum**

Accession No.: **TBC**

OA Document File Location: X:\c\Chequres_Dredging_Works\Report

OA Graphics File Location: X:\c\Chequres_Dredging_Works\010Geomatics

Issue No:

Date: December 2019

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Chequers Dredging Work, Buckinghamshire

Archaeological Watching Brief Report

Written by Ashley Strutt

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Summary

Oxford Archaeology was commissioned by the Chequers Estate to undertake a watching brief during dredging works to enable the inspection of a 19th century dam. No archaeological deposits of features were recorded and no artefactual evidence was recovered during the works.



Acknowledgements

Oxford Archaeology would like to thank the Chequers Estate for commissioning this project.

The project was managed for Oxford Archaeology by John Boothroyd. The fieldwork was directed by Adam Fellingham and Ashley Strutt. Thanks is also extended to the teams of OA staff that prepared the archive under the management of Nicola Scott.



1 INTRODUCTION

1.1 Scope of work

- 1.1.1 Oxford Archaeology (OA) was commissioned by the Chequers Estate to undertake an archaeological watching brief during dredging works associated with proposed repairs to a 19th century dam.
- 1.1.2 The work was undertaken at the request of Historic England. The dam is one of several brick-built structures dating to the 19th century associated with a series of artificial ponds. The structures are located within a Scheduled Monument, lying with the curtilage of a Motte and Bailey castle and are included within the description of the monument (HE List entry number: 1018007).
- 1.1.3 An initial assessment of the ponds and associated structures was undertaken by Historic England in 2016 (HE 2016). The report concluded that the dam is in a precarious state and there is a real rick of collapse. A programme of works, including those covered by the archaeological watching brief, were proposed to assess the potential to stabilise or restore the dam.
- 1.1.4 The dam is located to the rear of a former water wheel house surviving only as a ground bearing slab and wall foundations.

1.2 Location, topography and geology

- 1.2.1 The site lies to the north-west of Great Kimble, Buckinghamshire and south-east of Little Kimble, Buckinghamshire, approximately 6km to the south of Aylesbury town centre (NGR: SP 82820 06344; Fig. 1). The site is bounded by the Aylesbury Road (A4010) to the west and Ellesborough to the north. The site is on the north-west slope of the Chilton hills stretching down into the Vale of Aylesbury from Coombe Hill.
- 1.2.2 The geology comprises of Lower Cretaceous rocks of the Gault Formation and Upper Greensand Formation, comprising undifferentiated beds of mudstone, siltstone and sandstone. The up-land area of the site consists of chalk which is part of the Chilton Hill escarpment formed 70-80 million years ago (BGS Online).

1.3 Archaeological and historical background

- 1.3.1 The following archaeological and historical background provids details of the archaeological remains known within the immediate vicinity of the area of works, and has been derived from consulting the following online resources:
 - Archaeological Data Service
 - Historic England Listings
 - Unlocking Buckinghamshire's Past
- 1.3.2 Roman occupation in the area of the site has been suggested by the recovery of artefacts from the area since the early 19th century. The discovery of wall foundations during the construction of the turnpike road from Little Kimble to Butlers Cross (now the B4010) roused further interest and led to small scale excavations in the vicinity of the All Saints Church. Trenches were laid out in the fields to either side of the new

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road, although no precise plans or records remain to locate these. The excavations exposed further evidence of structures including wall foundations, tesserae and wall plaster. Assemblages of pottery, glass and coins were also recovered. These results suggest the presence of a significant settlement with at least one substantial building; however, the full extent of the remains is unclear at present.

- 1.3.3 A survey of artefacts brought to the surface by ploughing in 1957 revealed high concentrations of pottery and tile extending between the site of motte and the church, over a distance of 100m. This suggests the activity recorded in the vicinity of All Saints Church continues to the east and is indicative of a substantial villa complex.
- 1.3.4 Archaeological observation of a cable trench immediately south of Church Farm in 1993 demonstrated that a Roman occupation horizon is sealed beneath a considerable depth of colluvium derived from the slopes above, providing conditions eminently suitable for the preservation of buried structures and other remains.
- 1.3.5 The remains of the Motte and Bailey castle (Scheduled Monument 1018007) are located approximately 30m north of the dam proposed for repair. The monument includes the buried and visible remains of the castle, and an adjacent moated site is visible as a complex of well-preserved earthworks south-east of All Saints churchyard. The main stronghold of the castle is situated on the eastern side of this complex, bordered by a brook which was enlarged in the 19th century to form a series of artificial ponds. The motte occupies the northern half of an oval platform measuring some 50m in length and surrounded by a ditch averaging 12m in width and 1.5m deep. Two baileys extend across the area between the motte and the church yard. The date of castles construction and its period of use is uncertain. A second Motte and Baily castle (Cymbeline's Mount) is located *c* 450m to the east, and the relationship between the two sites is unknown. However, the castle near All Saints Church is suspected to have outlasted Cumbeline's Mount due to the development of the surrounding area during the medieval period and beyond, including the construction of the church.
- 1.3.6 The artificial ponds located on east and north sides of the Motte and Bailey castle are first recorded in 1885 and are believed to date to no earlier than the mid-19th century, after the demolition of the medieval manor house at Little Kimble. Three of the ponds (from a total of six) follow the stream course around the eastern side of the medieval earthworks, where the stream has been widened to channel some 30m wide, likely impacting on the earthworks associated with the castle. These three ponds are included within the scheduling, together with the 19th century structures which controlled the water levels.

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2 WATCHING BRIEF AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The general aims of the watching brief were to mitigate the impacts of the proposed dredging works through recording any archaeological features and deposits by written drawn and photographic record.
- 2.1.2 The specific aims and objects were:
 - Identify any archaeological remains or artefacts that may be revealed during the dredging of the pond;
 - ii. To identify any further evidence that might help to understand the development of the networks of ponds and the associated structures;
 - iii. Identify any pre-pond/dam archaeology, and
 - iv. To disseminate the results through the production of a site archive for deposition with an appropriate museum and to provide information for accession to the Buckinghamshire HER.

2.2 Methodology

- 2.2.1 At present two phases of works have been subject to archaeological monitoring. The first stage of work involved the excavation of a channel and sump to aid in the drainage of pond located to the southern side of the dam. Excavations works were undertaken by both mechanical excavator and by hand. All works were carried out under the supervision of an experienced archaeologist. The exposed ground was examined and recorded.
- 2.2.2 The second phase of the work involved the dredging of silt from the pond to rear of the dam using a mechanical excavator. Again, all works were monitored by an experience archaeologist.
- 2.2.3 Although uncertain at this time, it is likely a further phase of archaeological monitoring will be required should restoration works to the dam be undertaken.

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3 RESULTS

3.1 Reliability of field investigation

- 3.1.1 All works with the potential to either impact or expose archaeological remains were subject to archaeological monitoring. Therefore, the results of the watching brief can be considered to be reliable.
- 3.1.2 The excavation of the drainage channel was undertaken in a controlled manner to ensure the trench remain dry throughout the works and therefore archaeological remains would be easy to identify.
- 3.1.3 Archaeological monitoring of the dredging works was more challenging given the fluvial nature of the deposits. However, the nature of the deposits removed can be considered have limited archaeological potential. The underlying alluvial deposit was exposed but not impacted.

3.2 Drainage channel and sump

- 3.2.1 A channel was excavated from the southern side of the dam around the eastern side to the north. Starting within the centre of the pond, the channel measured 1.8m wide and continued to the eastern bank, c 12m to the south of the dam. The channel then continued around the eastern side of the dam at a width of 0.6m for a distance of approximately 26m (Plate 1). The channel was designed to enable water to flow from the southern side of the dam to the north. Therefore, the depth varied from 0.6m below ground level (bgl) in the south to 1.4m bgl in the north.
- 3.2.2 Towards the northern end of the channel, a 1.8m by 1.8m sump was excavated. A pipe was than laid in the final section of the channel from sump back into the watercourse, this was done to reduce the flow of water.
- 3.2.3 During the works no archaeological features or deposits were identified.
- 3.2.4 The deposit sequence recorded along the length of the drainage channel was fairly uniform. A light yellowish-white clay silt chalk deposit was overlain by a mid greyish-white clay silt chalk which in turn was overlain by topsoil (Plate 2).
- 3.2.5 Given the limited visibility within the trench it is not possible to establish the origin of these deposits, however, they are not believed to be the bedrock geology and instead are derived from colluvial activity.

3.3 Dredging works

- 3.3.1 Once drained, silt deposits from the rear of the dam were removed to enable the structure to be inspected. The works comprised the removal of fluvially accumulated silts by mechanical means. An area 2m wide extending from the face of dam was reduced to the base of the structure.
- 3.3.2 The deposits removed comprised clay silts (Plate 3). The light blueish-yellow alluvial clays were exposed at the base of the structure and were overlain by a blue-grey silty clay which in turn was overlain by a dark grey-brown silty clay rich in organic material (predominately tree branches).



3.4 Conclusions

- 3.4.1 No archaeological deposits were recorded during works.
- 3.4.2 The exterior face of the dam was successfully exposed to enable further assessment.
- 3.4.3 An initial assessment made by the attending archaeologist concluded that the extent of root damage to the southern side of the structure could can clearly be seen, with the absence of mortar between many of the bricks, extensive warping of the dam wall at its eastern extent (Plate. 4), and complete loss of a section of the western wall (Plate 5). The lower part of the wall is considerably better preserved and has suffered less impacts from roots (Plate. 3). Less significant cracking of the rear dam wall appears to have occurred compared to the front, although cracks are clearly visible.

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APPENDIX A BIBLIOGRAPHY

Archaeological Data Service - https://archaeologydataservice.ac.uk

BGS Online, The British Geological Survey online viewer, www.bgs.ac.uk/geologyofbritain/home.html accessed December 2019

HE 2016, Motte and Baily Castle, Little Kimble: Structural appraisal of artificial ponds, Historic England (unpublished)

Historic England – Listings https://historicengland.org.uk/listing/the-list/results/?searchType=NHLE+Simple&search=1018007

Unlocking Buckinghamshire's Past -https://ubp.buckscc.gov.uk/



APPENDIX B SITE SUMMARY DETAILS

Site name: Chequers, Dredging Works, Buckinghamshire

Site code: CHEQ19

Grid Reference SP 82820 06344 **Type:** Watching Brief

Date and duration: On going **Area of Site** c 2,500m²

Location of archive: The archive is currently held at OA, Janus House, Oxford, and will

be deposited with Buckinghamshire County Museum in due

course.

Summary of Results: Oxford Archaeology was commissioned by the Chequers

Estate to undertake a watching brief during dredging works to enable the inspection of a 19th century dam. No archaeological deposits of features were recorded and no artefactual evidence was recovered during the works.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 1: Site location



Plate 1: Channel



Plate 2: Channel deposit sequence



Plate 3: Deposit removed during dredging works



Plate 4: Root disturbance at eastern end of dam wall



Plate 5: Missing section at western end of dam wall





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