LAND TO EAST OF GRANTHAM ROAD, WADDINGTON, NORTH KESTEVEN, LINCOLNSHIRE

ARCHAEOLOGICAL MITIGATION

NGR: Planning refs: PCAS job no.: Site code: Archive acc. no.: SK 980 368 14/0893/OUT; 16/1682/RESM TBC GRWX 17 2017.169

Report prepared for

CgMs Ltd

December 2017



PCAS Archaeology Ltd 47, Manor Road Saxilby Lincoln LN1 2HX

Tel. 01522 703800 e-mail info@pcas-archaeology.co.uk

© PCAS Archaeology Ltd

Contents

Summ	ary	1
1.0	Introduction	2
2.0	Site location and description	2
3.0	Geology and topography	2
4.0	Planning background	2
5.0	Archaeological and historical background	3
6.0	Methodology	4
7.0	Results	5
8.0	Discussion and conclusion	6
9.0	Bibliography	6
10.0	Site Archive	7

Appendix 1: Context descriptions

Figures

- Fig. 1: Site location map
- Fig. 2: Plan detailing location of strip, map and record excavation area
- Fig. 3: Plan and section of the excavated features

Summary

Pre-Construct Archaeological Services Ltd (PCAS) was commissioned by CgMs to undertake a scheme of archaeological mitigation on land to the east of Grantham Road, in the village of Waddington in the North Kesteven district of Lincolnshire.

This work was undertaken as a condition of planning granted for the construction of new dwellings with associated open space and landscaping and follows on from a geophysical survey and trial trench evaluation of the site carried out in 2015. The previous archaeological works indicated that significant archaeological remains were only expected within the proposed development site in the immediate vicinity of evaluation Trenches 1 and 2 in the north-west corner of the site where a ring ditch was identified.

The excavations revealed the full extent of the ring ditch but did not retrieve any finds by which to date it. There was also no evidence of the entrance in the south-west section of the ring ditch recorded during the evaluation, or any internal or external features. The lack of other features suggests that the ring ditch represents the remains of a barrow, which on typological grounds is likely to date to the Bronze Age or Iron Age. A pit and a ditch on the western side of the ring ditch were also excavated but these did not produce any finds despite increased sampling to retrieve them.

1.0 Introduction

PCAS Ltd undertook a scheme of archaeological mitigation on land to the east of Grantham Road, in the village of Waddington in the North Kesteven district of Lincolnshire. This work was undertaken between the 10/10/17 and 24/10/17 in advance of the construction of a residential development on land shown by an earlier evaluation to contain significant archaeological remains. It follows current best practice and appropriate national guidance including:

- NPPF, National Planning Policy Framework, 2012;
- CIFA Code of Conduct (2014 as revised);
- CIFA Standard and Guidance for Archaeological Watching Briefs (2014);
- CIFA Standard and Guidance for Archaeological Excavation (2014);
- Management of Research Projects in the Historic Environment (MoRPHE ver. 1.1, 2009)
- Lincolnshire Archaeological Handbook (Lincolnshire County Council, 2016).

2.0 Site location and description (Fig. 1)

The village of Waddington is located in the North Kesteven district of Lincolnshire, on the A607 approximately 7km to the south of Lincoln city centre. RAF Waddington, an active military airfield first opened during the First World War, lies on the east side of Waddington village.

The proposed development site lies within two fields on the southern edge of the village, to the south-east of its historic core and the Waddington Conservation Area, occupying a little over half of a 15.6 hectare property (Thornton, 2014). It is bordered to the east by the A607; to the west, the fields within which the development site lies extend to the edge of the airfield. The course of the Roman road of Ermine Street runs through the western edge of the airfield and along the boundary of the northern field.

3.0 Geology and topography

Waddington parish lies on top of the Lincoln Edge limestone cliff, a situation which, during the Second World War, made it ideal for the siting of one of a string of military airfields along the cliff. The steep west-facing cliff edge is approximately 500m to the west of the site (fig. 1). The property including the development site slopes gently downwards from west to east, at an OD height varying from approximately 77m to 70m above sea level at either side (Thornton, 2014).

The site lies on an exposed solid geology of Lower Lincolnshire Limestone, with no overlying drift geology. The 2015 evaluation recorded a topsoil some 0.30m to 0.40m deep, directly overlying the solid limestone with no subsoil (Moan, 2015).

4.0 Planning background

Outline planning permission for the construction of up to 142 dwellings with associated open space and landscaping, with all matters reserved except for access, was granted by North Kesteven District Council in November 2015 (planning

application ref. 14/0893/OUT); the reserved matters application for the construction of 139 dwellings was granted in June 2017 (application ref. 16/1682/RESM).

Condition 18 of the grant of planning permission required the implementation of an agreed written specification for a scheme of archaeological mitigation, to be submitted to and agreed in writing by the Local Planning Authority.

A written specification for archaeological mitigation (Savage 2017) was submitted and agreed with the Local Planning Authority in September 2017 and this report details the results of the archaeological mitigation works.

5.0 Archaeological and historical background

A detailed desk-based assessment was carried out by CgMs Consulting for the whole of the property containing the proposed development site in 2013, and revised in 2014 (Thornton, 2014).

Prehistoric occupation in the area of Waddington is attested to by an earthwork boundary and a possible cropmark round barrow on Harmston Heath, as well as by finds of worked flints recorded during archaeological work on the Harmston to Bracebridge Heath pipeline. However, the focus of occupation appears to have lain well to the south of the development site, as no findspots are recorded closer than 200m to it, and no monuments closer than 450m (*ibid.*).

The course of the major Roman road of Ermine Street runs through RAF Waddington. Ermine Street originally connected London and Lincoln, and was later continued northwards to the legionary fortress of York. Its route is followed by a track across Harmston Heath to the southern boundary of the airfield, from where it is traced across the runway by a short length of the Waddington parish boundary. Further to the north, the western boundary of the airfield also follows the projected line of the Roman road, which is picked up by a street running along the boundary. The southern end of this street forms the eastern boundary of one of the fields in which the development site lies. However, no works in the area have yet encountered the structure of Roman Ermine Street. A scheme of archaeological monitoring and recording carried out in 2015-16 during runway refurbishment at RAF Waddington observed no archaeological features and encountered no deposits pre-dating the construction of the airfield. The report concluded that ground levelling and consolidation works required to extend the runway in order to accommodate larger military aircraft in the 1960s and 1970s had extended over a wider area than the immediate footprint of the runway itself, and obliterated all trace of the Roman road (Savage, 2016). No other Roman activity has been recorded in the immediate vicinity of the site, although quantities of Roman finds have been retrieved from Harmston Heath, and building remains that may have been Roman have been documented to the north of Waddington (Thornton, 2014).

The place-name 'Waddington' is Old English – 'the farmstead or village belonging to or named after a man called *Wada*' (HER ref. 61214). The Anglo-Saxon origin of the settlement is attested to by the discovery, on the south side of the historic core of the village, of a cemetery containing eleven burials, one of which could be dated by its grave goods to the sixth century AD. The original discovery was made in 1947; archaeological monitoring carried out in 1999 a short distance to the east of the known cemetery site encountered four further burials. These were interpreted as being of 7th-century date and related to the cemetery previously discovered (HER ref. ELI1331). The cemetery is thought to occupy a strip of land no more than 12m wide. It does not appear to extend on to the site, as further archaeological monitoring

during groundworks for a water main, which runs along the western boundary of the development site in the vicinity of the cemetery, encountered no Saxon remains (HER ref. ELI1774; Thornton, 2014).

The village of Waddington is first documented in the Domesday Book, when it already had a church and two mills (HER ref. 61214). Evidence of the medieval settlement has been recorded in and around the modern village, chiefly in the form of the ridge-and-furrow earthworks left by the strip ploughing of medieval open fields. Small quantities of medieval pottery have also been retrieved from a number of locations around the parish. No such findspots are recorded within 200m of the site, although archaeological monitoring and a programme of fieldwalking have both taken place in the immediate area and on the site itself. The site is therefore believed to have lain within the agricultural hinterland of the village (Thornton, 2014).

Early post-medieval Waddington had a racecourse, located on the Heath in the area where the RAF base is now situated: horse racing is known to have taken place here from at least the reign of James I (beginning of the 17th century), and probably ceased when Waddington Heath was enclosed in 1772 (HER ref. 61237). Metal-detecting on the site retrieved a scatter of musket balls near Grantham Road, which may have come from a skirmish during the Civil War, when three units of Parliamentarian cavalry resting in Waddington and Harmston in 1644 fought with Royalist cavalry from Newark (HER ref. 6301).

The military airfield at Waddington was opened in 1916 for use as a Royal Flying Corps training airfield, and was extensively redeveloped in 1936. Waddington served as a bomber airfield during the Second World War, and was selected to pioneer the use of Lancaster bombers in 1941; concrete runways were laid in 1943. Both the RAF base and Waddington village were attacked by a German raider in 1941: six bombs hit the airfield, destroying a number of buildings, and two parachute mines exploded in the village, destroying the village church and nineteen houses. RAF Waddington remains in service to the present day (Otter, 1996, pp. 239-48).

An archaeological evaluation consisting of 6 trenches, targeted on the results of a geophysical survey, was carried out on the western half of the site by Oxford Archaeology East in 2015. Trenches 1 and 2, sited together in the north-west corner of the site, encountered three segments of a ring-ditch, one of which was a terminal, indicating that Trench 2 lay partially across, a now disputed, entrance to a circular enclosure. Trench 1 also contained part of another ditch, and a single post-hole was recorded in Trench 2. Trench 3, in the north-east corner of the site, encountered two ditches, the larger of which was 1.25m wide, and a possible pit. Trenches 4, 5 and 6 were thought to contain only geological features but the overall geophysical survey suggest that the features identified in these trenches are likely part of an earlier, possibly Bronze Age field system, although they remain undated by finds. In fact no finds were retrieved from any of the features, although a single unstratified struck flint was found in the topsoil; environmental samples from the ring-ditch fill and the fill of the larger Trench 3 ditch proved to be completely sterile (Moan, 2015).

6.0 Methodology

The adopted methodology followed the scheme set out within the Specification (Savage 2017). The previous archaeological works – geophysical survey and evaluation trenching – indicated that significant archaeological remains were only expected within the proposed development site in the immediate vicinity of evaluation Trenches 1 and 2 in the north-west corner of the site (Fig. 2). An area measuring 30m x 30m, positioned to expose the whole of a possible ring-ditch located within

these trenches, was subject to strip, map and record excavation. The area was initially excavated by a 360° mechanical excavator fitted with a smooth ditching bucket down to the top of the natural substrate. All machining was carried out under supervision by the attendant archaeologist.

Where archaeological features and deposits were identified they were investigated by hand excavated sections to establish their character, date and survival condition and subsequently recorded. Context sheets were completed for each feature/deposit, and multi-context drawings were produced in both plan and section. Colour slide and digital photographs were taken to complement these accounts.

7.0 Results (Figs. 2 & 3)

The excavation area was located as indicated on Figure 2. A total of twenty-nine context numbers (100 - 129, Appendix 1) were issued to identified features within the excavation area. This recorded; the topsoil, natural substrate, a ring ditch, a pit, and a possible ditch/gulley, as well as the respective fills of the cut features.

The natural substrate (101), recorded as light brown limestone brash, was encountered *c*. 0.3m below the existing ground level. This was sealed by the topsoil soil (100). The archaeological features, a ring ditch [102], a pit [119] and a possible ditch/gulley [107/123/128] were observed cut into the natural substrate.

Ring Ditch (Fig. 3, Plates 1 – 10)

The ring ditch filled almost the entire excavation area with a diameter of c. 18m. Eight slots were excavated across the ditch ([103], [105], [109], [111], [113], [115], [118] and [126] – Sections 1 -8 Fig. 3) which revealed regularly sloping edges (approximately 45°) with a flat to concaved base. The ditch was between 1.2m and 1.9m wide and extended to between 0.21 and 0.48m deep. It contained a single fill of light brown sandy silt from which no finds were retrieved.

North-east/South-west ditch [107/123/128] (Fig. 3 – Plan and Sections 9, 11 & 12, Plates 10, 11, 13 & 14)

A narrow north-east/south-west aligned ditch was revealed on the western side of the excavation area. The ditch was 32m long, 0.7m wide with steep near vertical edges which extended for 0.3m to an uneven or flat base. Two of the excavated sections ([121] & [128]) contained a single fill of light to mid-grey silty sand while section [123] contained two fills, a primary fill of redeposited light brown natural substrate and a secondary fill of light to mid-grey silty sand. Section [123] was different in profile to the other two sections excavated across the ditch in that it had a flat base. The ditch was cut by the western side of the ring ditch (see Section 8 on Fig. 3, Plate. 10) meaning that it must predated the excavation of the ring ditch. No finds were retrieved from any of the excavated sections of the ditch.

Pit [119] (Fig. 3 – Plan and Section 10, Plate. 12)

A single possible pit was encountered in the south-west corner of the excavation area, c. 8m to the south-west of the ring ditch, c. 2m west of the north/south ditch. The pit was orientated north-east to south-west, was oval in plan and had steep jagged edges and an undulating base. It contained a single fill of light orange brown sandy silt from which no finds were retrieved.

8.0 Discussion and conclusion

The strip, map and record excavation revealed the entire ring ditch encountered in Trenches 1 and 2 of the earlier evaluation. Eight slots were excavated through the ring ditch but these did not reveal any finds to date the ditch. There was no sign of the entrance in the south-western section of the ring ditch reported during the trench evaluation and no internal or external features were recorded. This suggests that the ring ditch is more likely to be the remains of a barrow as opposed to a dwelling, and the lack of any internal cremation/burial suggests that this has probably been removed by centuries of ploughing, as identified during the earlier geophysical survey.

Although, no datable material was retrieved during the excavations it is, on typological grounds, likely to date to the Prehistoric period and be of Bronze Age or Iron Age date. This would make it the only known Prehistoric barrow site in the area of Waddington, apart from the possible cropmark round barrow recorded on Hamston Heath, and move the focus of Prehistoric activity north from its present known focus 200 – 450m south of the development area.

The ditch cut by the western side of the ring ditch did not produce any finds despite increased sampling to retrieve them. However, it is likely that the ditch forms part of an earlier, may be Bronze Age, field system as identified during the earlier geophysical survey (Fig. 2). Similarly, the undated pit excavated to the west of the ditch is likely to be contemporary with it.

9.0 Bibliography

English Heritage (EH), 2011, *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (second edition)*. English Heritage Publishing.

Gladman Townscape Solutions (GTS), 2015, *Grantham Road, Waddington Proposed Housing Development: Design and Access Statement Addendum*. Unpublished planning document.

Moan, P., 2015, Land off Grantham Road, Waddington, Lincs.: Archaeological Evaluation Report. Unpublished client report for Oxford Archaeology East.

Ordnance Survey, 2006, *Lincoln, Sleaford, Metheringham and Navenby: Explorer 1:25 000 Series*. Ordnance Survey, Southampton.

Otter, P., 1996, *Lincolnshire Airfields in the Second World War*. Countryside Books, Newbury.

Savage, R. D., 2016, *Runway Refurbishment, RAF Waddington, North Kesteven, Lincolnshire: Scheme of Archaeological Monitoring and Recording.* Unpublished client report for Pre-Construct Archaeological Services Ltd.

Savage, R. D., 2017, Land to the east of Grantham Road, Waddington, North Kesteven, Lincolnshire: Archaeological Mitigation Strategy.

Thornton, A., 2014 (revision), *Archaeological Desk-Based Assessment: Land off Grantham Road, Waddington, Lincolnshire*. Unpublished client report for CgMs Ltd.

11.0 Site Archive

The documentary and physical archive for this scheme is currently in the possession of Pre-Construct Archaeological Services Ltd. This will be deposited at The Collection, Lincoln within six months of completion of this report under the Lincolnshire Museums archive accession code LCNCC 2017.169

Appendix 1: Context descriptions

Context	Туре	Description	Finds/Dating
100	Topsoil	Dark grey brown sandy silt 0.3m thick	-
101	Natural	Limestone brash	-
102	Ring Ditch	Overall number for ring ditch – seems likely to be a barrow	-
103	Cut	SW section of ring ditch 102, 1.2m wide & 0.38m deep	-
104	Fill	Light brown sandy silt fill of 103	-
105	Cut	Western side of ring ditch 102, 1.2m wide & 0.36m deep	-
106	Fill	Light brown sandy silt fill of 105	-
107	Cut	NE-SW aligned ditch cut by ring ditch. Steep sides, flat base, 0.7m wide, 0.3m deep – further excavation suggests this is a natural feature.	-
108	Fill	Light to mid-grey brown silty sand fill of 107	-
109	Cut	SW section of ring ditch, 1.18m wide and 0.21m deep. Single fill 110	-
110	Fill	Light brown sandy silt fill of ring ditch section 109	-
111	Cut	Cut of NE section of ring ditch 1.5m wide and 0.47m deep. Single fill 112	-
112	Fill	Light brown sandy silt fill of ring ditch section 111	-
113	Cut	Cut of SE part of ring ditch 1.94m wide and 0.4m deep	-
114	Fill	Light brown sandy silt fill of ring ditch section 113	-
115	Cut	Cut of SE part of ring ditch 1.4m wide and 0.48m deep	-
116	Fill	Light brown sandy silt fill of ring ditch section 115	-
117	Cut	Cut of SW part of ring ditch 1.35m wide and 0.28m deep	-
118	Fill	Light brown sandy silt fill of ring ditch section 117	-
119	Cut	Cut of oval shaped pit to the wesr of the ring ditch. Steep edges and an uneven base, 1.1m x 0.5m with a single fill	-
120	Fill	Light orange brown sandy silt fill of 119 – most likely represents a tree throw	-
121	Cut	Cut of possible boundary ditch on western side of ring ditch. 0.5m wide x 0.3m deep. Steep sides with a narrow base – generally appears to be a natural feature	-
122	Fill	Light to mid-grey brown silty sand fill of 121	-
123	Cut	Cut of north end of possible boundary ditch on western side of ring ditch. 0.42m wide x 0.4m deep. Steep sides with a narrow base – generally appears to be a natural feature contains two fills	-
124	Fill	Primary fill of 123. Light brown sandy silt 0.4m thick	-
125	Fill	Secondary fill of 123. Light to mid-grey brown silty sand	-
126	Cut	Cut of S part of ring ditch. 1.3m x 0.4m	-
127	Fill	Light brown sandy silt fill of ring ditch section 126	-
128	Cut	Cut of possible boundary ditch on western side of ring ditch. 0.5m wide x 0.3m deep. Steep sides with a narrow base – generally appears to be a natural feature	-
129	Fill	Light to mid-grey brown silty sand fill of 128	-

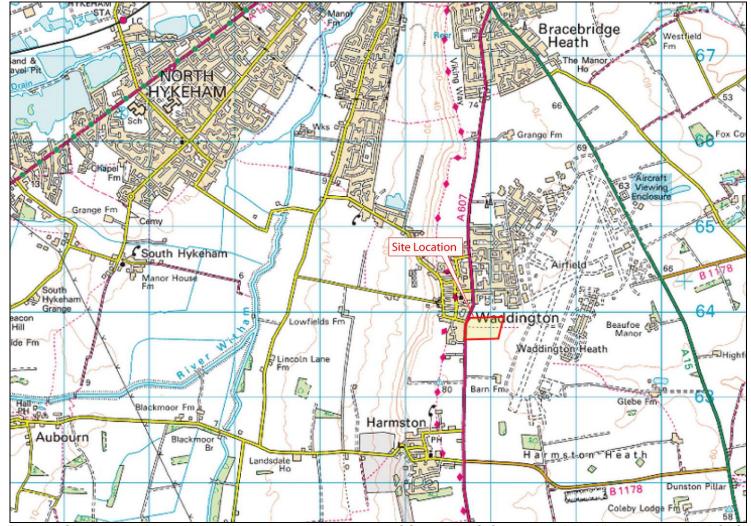


Figure 1: Site Location Plan with development area shown in red. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.



Figure 2: Plan detailing previous archaeological works and excavation area (outlined in red)

Land to east of Grantham Road, Waddington

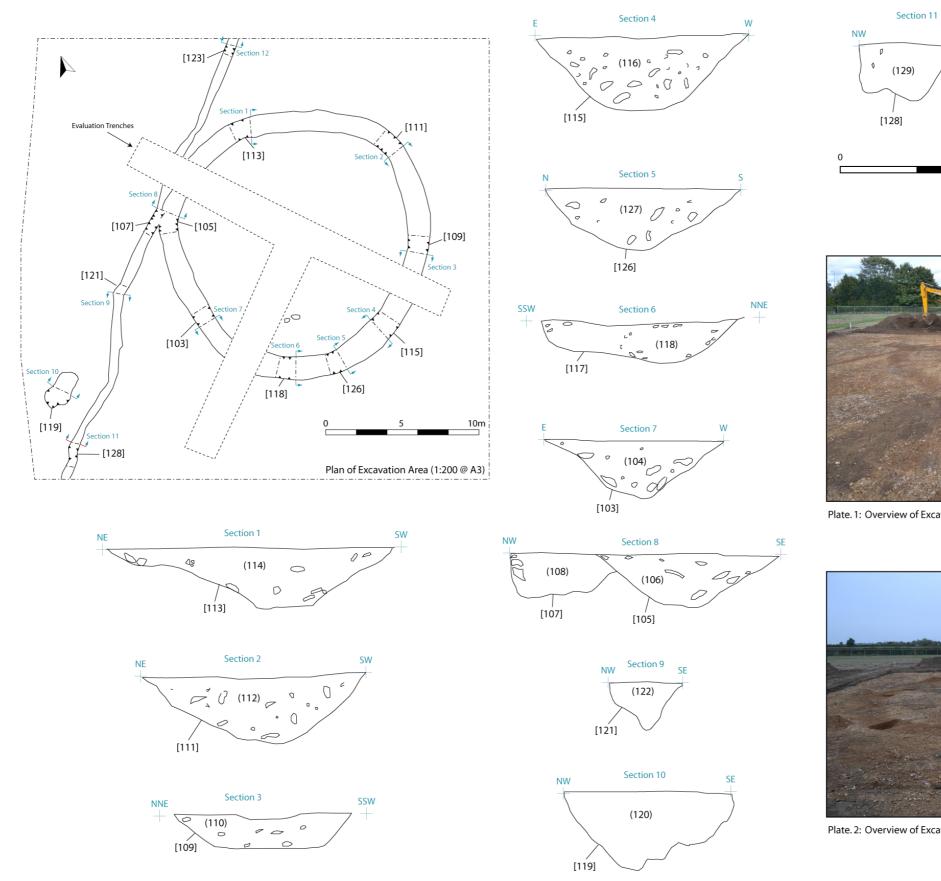
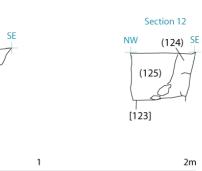


Figure 3: Plan and Sections of archaeological features



Sections 1:20 @ A3



Plate. 1: Overview of Excavation Area after initial site strip



Plate. 2: Overview of Excavation Area following excavation of features



Plate 3: Section 1 of Ring Ditch



Plate 4: Section 2 of Ring Ditch



Plate. 5: Section 3 of Ring Ditch



Plate. 6: Section 4 of Ring Ditch



Plate 7: Section 5 of Ring Ditch



Plate 8: Section 6 of Ring Ditch



Plate. 9: Section 7 of Ring Ditch



Plate. 10 Section 8 of Ring Ditch



Plate 11: Section 9 north-east/south-west ditch



Plate 12: Section 10, Pit 119



Plate. 13: Section 11, north-east/south -west ditch



Plate. 14 Section 12, north-east/south-west ditch