

**Lincs and Notts Air Ambulance Headquarters, RAF Waddington,
Sleaford Road, Bracebridge Heath. LN5 9FG**

Archaeological Evaluation Report

NGR: SK 9981 6489
NKDC Planning ref: 19/1083/FUL
PCAS Job No.: 2298
PCAS Site Code: WLAE 19
Accession No.: LCNCC 2019.249

Prepared for

Guy Taylor Associates

by

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January 2020



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Summary

PCAS Archaeology Ltd. was commissioned by Guy Taylor Associates to undertake a scheme of archaeological evaluation in advance of the relocation of the Lincs and Notts Air Ambulance Headquarters at RAF Waddington near the village of Waddington in the North Kesteven district of Lincolnshire (LN5 9FG).

The development site is situated close to two Roman roads, one represented by the A15 and the other being Ermine Street. Archaeological activity recorded nearby includes prehistoric remains, Roman occupation, Anglo Saxon activity within the village of Waddington and Medieval settlement represented by the East Mere Knights Templar manorial farm (HER no 61674)

The evaluation revealed a single modern archaeological feature, with most trenches proving to be archaeologically negative.

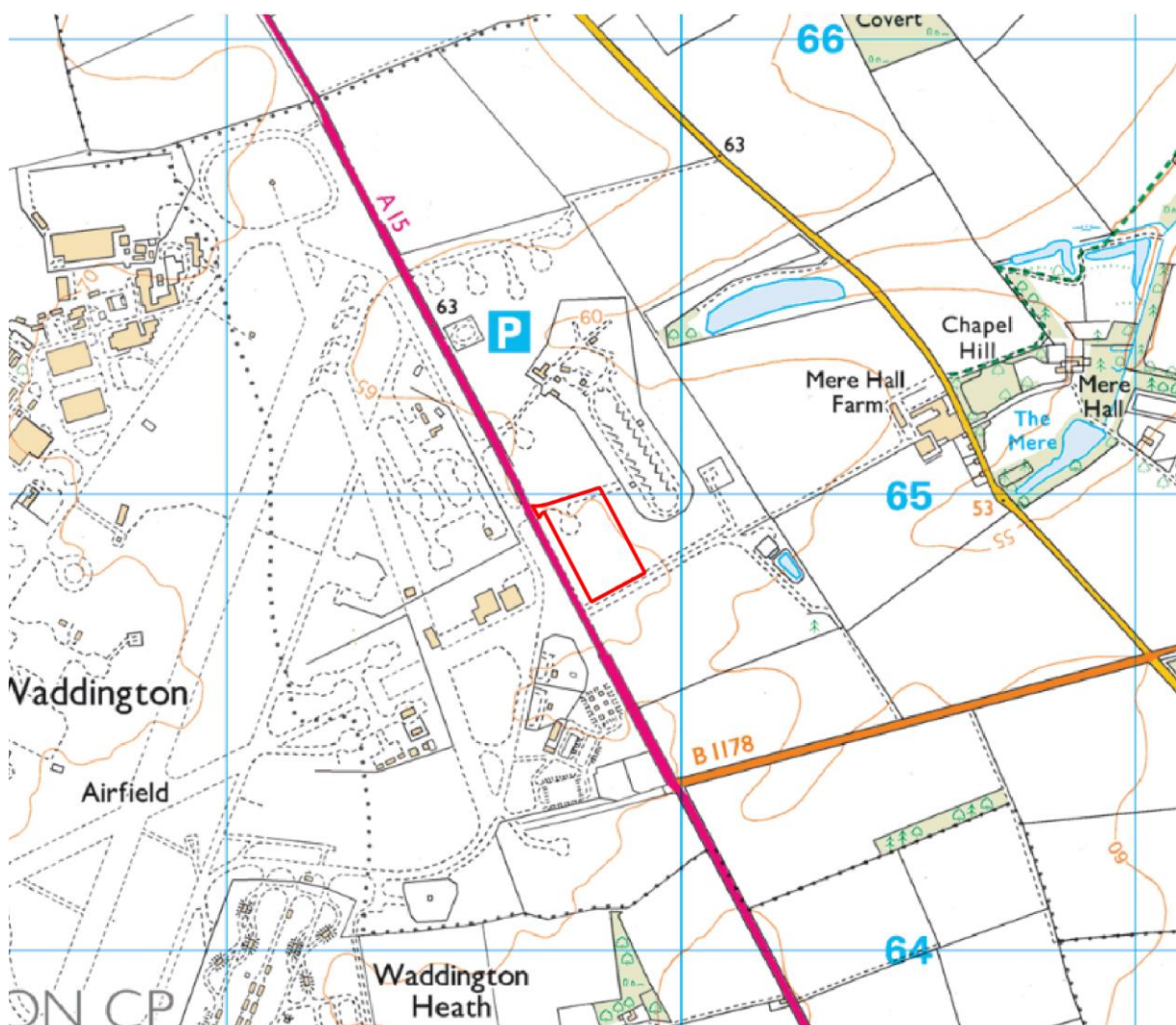


Figure 1: Location plan of the site (marked in red) at scale 1:20,000. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.

1.0 Introduction

PCAS Archaeology Ltd. was commissioned by Guy Taylor Associates to undertake a scheme of archaeological evaluation in advance of the relocation of the Lincs and Notts Air Ambulance Headquarters at RAF Waddington near the village of Waddington in the North Kesteven district of Lincolnshire.

This document and all preceding fieldwork follow current best practice and appropriate national guidance, including:

- NPPF, National Planning Policy Framework (2019)
- ClfA Code of Conduct (2014);
- ClfA Standards and Guidance for Archaeological Field Evaluation (2014)
- Management of Research Projects in the Historic Environment (MoRPHE)
- The Lincolnshire Archaeology Handbook
- Central Lincolnshire Local Plan (2017)

This strategy was subject to the approval of the Senior Historic Environment Officer to North Kesteven District Council.

2.0 Location and Description

The village of Waddington is 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 at the central NGR of SK 9981 6489. It occupies much of a triangle formed by the A607, the A15 and the B1178 and extending a short distance across the A15. It is currently the operational base for six flying squadrons operating five different aircraft types and is also home to a light aircraft flying club and the Lincolnshire and Nottinghamshire Air Ambulance, which is being relocated as part of this proposed development. (raf.mod.uk).

3.0 Topography and geology

RAF Waddington is one of a chain of military airfields built during the First and Second World Wars on the crest of the Lincoln Edge, near its steep west-facing drop into the clay vale; Waddington Airfield overlooks the confluence of the rivers Brant and Witham. Its runways are generally at a height of between 65m and 70m above sea level.

The British Geological Survey records no drift geology on any part of the airfield: it is situated on the exposed solid limestone of the Lincoln Edge, with portions of the airfield situated variously on the Upper, Lower or Crossi Bed Lincolnshire Limestone (BGS, 1973).

4.0 Planning Background

A planning application for the relocation of the Lincs and Notts Air Ambulance Headquarters including erection of hangar, office, vehicle parking areas, fuel store, helicopter landing pad/parking area and formation of access onto the A15, was granted permission in December 2019 by North Kesteven District Council (application no. 19/1083/FUL).

The planning permission was granted subject to the following archaeological conditions;

3. No development shall take place unless and until the applicant, or their agents or successors in title, has secured the implementation of an agreed Written Specification that sets out a programme of archaeological work to mitigate the impact of construction to archaeological remains.

Reason: To ensure that archaeological remains are preserved in situ or investigated and recorded as appropriate and to ensure that the information is made available in accordance with policy LP25 of the Central Lincolnshire Local Plan (Adopted 2017).

4. No development shall take place until a report setting out the findings of the archaeological investigations, and proposals for any further investigation or recording work required has been submitted to and agreed in writing by the Local Planning Authority.

Reason: To ensure that archaeological remains are preserved in situ or investigated and recorded as appropriate and to ensure that the information is made available in accordance with policy LP25 of the Central Lincolnshire Local Plan (Adopted 2017).

5. A final report of the outcomes of the programme of archaeological work required pursuant to condition 3 will be submitted to and approved in writing by the local planning authority within three months of the completion of the site work, or such longer period as may be agreed by the local planning authority.

Reason: To ensure that archaeological remains are preserved in situ or investigated and recorded as appropriate and to ensure that the information is made available in accordance with policy LP25 of the Central Lincolnshire Local Plan (Adopted 2017).

5.0 Archaeological and Historical Background

On the south side of the airfield, an earthwork in the shape of two parallel banks was seen from the air in 1930, and its presence subsequently confirmed by a visit. The feature ran north-eastwards from the north side of the B1178 near Harmston to the southern boundary of RAF Waddington and was interpreted as a double-ditched prehistoric boundary; it had been ploughed out by the 1960s (HER no 60339). The cropmark of a possible prehistoric enclosure has been identified directly to the east of the earthwork (HER no 61895).

The course of the major Roman road, Ermine Street, runs through RAF Waddington. This road originally connected London and Lincoln and was later extended northwards to the legionary fortress of York. Its route is followed by modern minor roads and tracks past the east side of Navenby (where it is known as High Dyke) across Coleby Heath and Harmston Heath to the southern boundary of the airfield. From there it follows a short length of the Waddington parish boundary, which crosses the south end of the runway at an oblique angle. To the north, the western boundary of the airfield follows the projected line of the Roman road; but, apart from a short stretch running along the course of Grantham Road (A607), it can no longer be identified on modern mapping until it reappears as the High Street in Lincoln.

A Roman coin of Licinius I (AD 308-324) has been found within Waddington village a short distance to the west of the airfield (HER no 61221), and a scatter of Romano-British pottery was identified in the field behind the Officers' Mess of the airfield, between the course of Ermine Street and the modern A607 (HER no 61265), but no works in the immediate area have encountered the Roman road.

The village of Waddington is first documented in the Domesday Book, when it already had a church and two mills; the place-name is Old English – 'the farmstead or village belonging to or named after a man called Wada' (HER no 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 work carried out in 1999 a short distance to the east of the known cemetery site encountered four further burials, interpreted as being of 7th -century date and related to the cemetery previously discovered (Francis, 2013).

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, although some medieval pottery has also been retrieved (HER no 61214); a scatter of medieval pottery was also found in the field behind the Officers' Mess of the airfield, in association with a scatter of Romano-British pottery (HER no 61266).

Just under 1km to the west of the proposed development, East Mere's Knights Templar manorial farm (HER no 61674) and St. John the Baptist's Hospital (HE Pastscape 349369) are located. East Mere Knights Templar manorial farm was presumed to be large and may have been administered by Willoughton preceptory (HE Pastscape 327087). By 1185, the Templars farm consisted of a grange and a mill. No earthworks of the site are apparent now, but they were clear in the middle of the last century, as a local surveyor was able to indicate the location of site. St John the Baptist's Hospital was founded in 1243, as an alms house for lepers and the poor which ceased to be used by 1680. The deserted Medieval village of Mere located close by (HER no 61673), was of some importance with a church. It is mentioned in the Feudal Aids of 1316 and by 1428, unified with Branston yet had fewer than 10 householders. The earthworks of this small settlement appear within the park of Mere Hall (HER no 65457).

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). The inn names of The Horse and Jockey and The Three Horse Shoes recall a time when the racehorses and their riders came from a distance and lodged in the village. Racing probably ceased when Waddington Heath was enclosed in 1772 (HER no 61237). Archaeological monitoring of new development within Waddington village recorded numerous intercutting limestone quarry pits of late post-medieval date, indicating that limestone was being extracted here in the 19th century (HER no 61214).

The military airfield at Waddington was opened in 1916 for use as a Royal Flying Corps training airfield. It was briefly closed between 1920 and 1926 but was re-opened as part of a programme of RAF expansion, initially continuing to use the buildings and hangars from the First World War but was extensively redeveloped in 1936. Waddington served as a bomber airfield during the Second World War, and despite it only being equipped with grass runways, it was selected to pioneer the use of Lancaster bombers in 1941; concrete runways were eventually laid in 1943. Many damaged Lancasters were repaired at the Avro factory at Bracebridge Heath and were then brought by road to a hangar at RAF Waddington for reassembly and air testing before being reallocated to Lincolnshire squadrons. Both the RAF base and Waddington village were attacked by a German raider in 1941: six bombs hit the airfield, destroying several 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: during the 1980s, Vulcan bombers from this airfield served in the Falkland Islands conflict (Otter, 1996, pp. 239-48). The Lincolnshire HER notes that Second World War pillboxes may still be in situ on the airfield (HER no. 61249).

6.0 Aims and Objectives

To investigate the site seven 30m x 2m trenches were excavated and recorded; these were positioned to sample the areas where groundworks are likely to make the most impact, while avoiding services and the 20m marker corridor surrounding the MOD watching radar.

The aims of the evaluation were to record the location, extent, date, character, significance and quality of any surviving archaeological remains. Trenching was completed in accordance with the methodology detailed below.

An online record of the project data was initiated with the Archaeological Data Service (OASIS database) before fieldwork commenced and this will be completed at the end of the project, including an uploaded digital copy of the report.

7.0 Methodology

Trenches were positioned according to the approved layout, allowing for minor adjustment due to the presence of unforeseen obstacles such as services etc. Final trench positions were tied to the OS National Grid using full RTK GPS co-ordinates; accurate to 0.03m.

Evaluation trenches were opened under archaeological supervision, using a mechanical excavator fitted with a **toothless blade**, to the first archaeologically significant horizon, or the natural substrate, whichever was encountered first. Top and subsoils were removed and stored separately to allow for reinstatement at the end of the evaluation.

A full written, drawn and photographic record of each significant stratigraphic horizon and archaeological feature was made. A description of each context was made on standard PCAS context recording forms and all sections drawn at scales 1:10 or 1:20 and plotted on development ground plans. This recording was supplemented by a narrative account in the form of a site diary.

A digital photographic record was kept during the evaluation, with an identification board, scales and north arrow employed as appropriate. The photographic record includes:

- general site shots;
- specific stages of fieldwork;
- individual features and, where appropriate, their sections;
- groups of features, where relationships were important

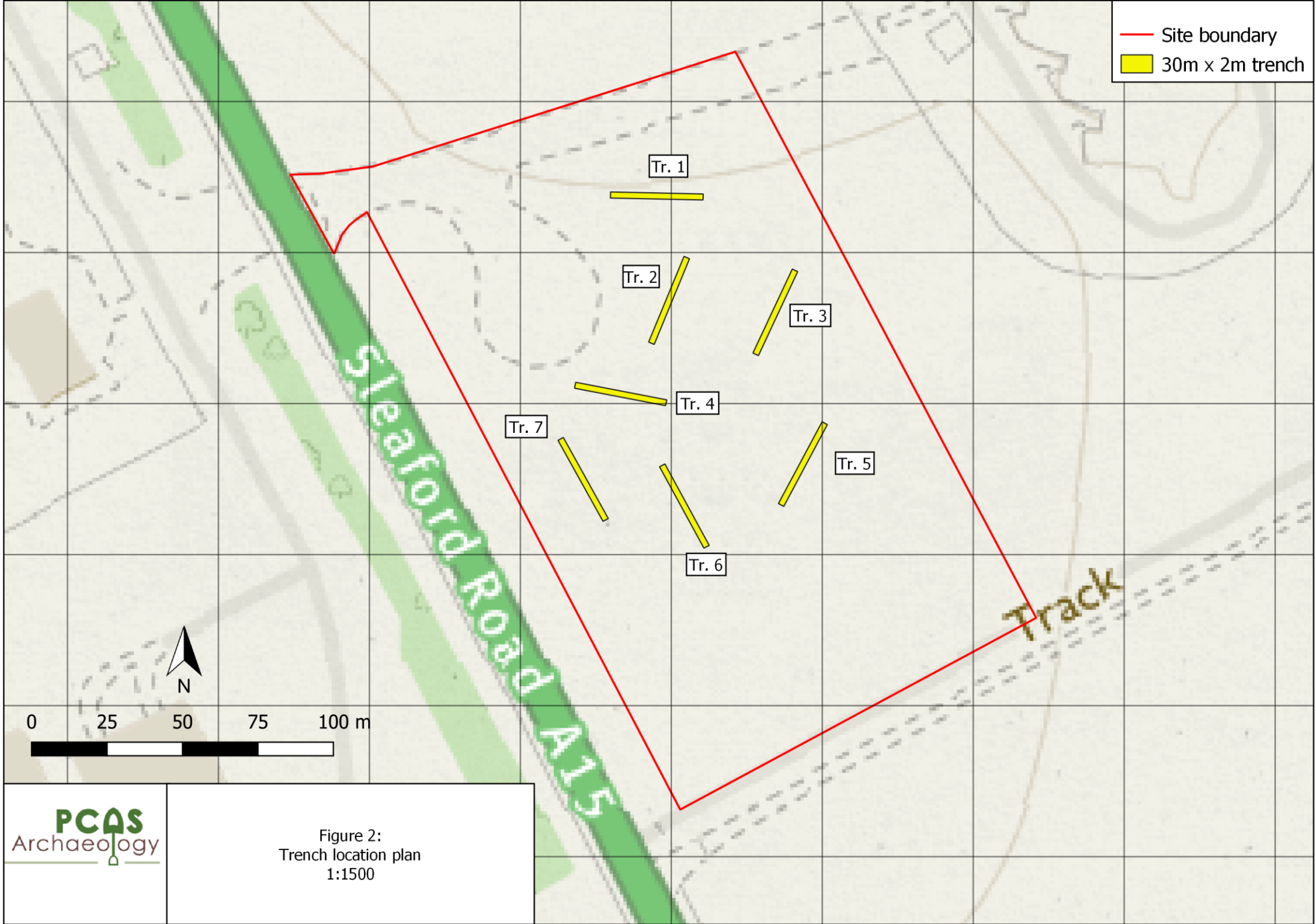
Copies of the evaluation report will be sent to the client, the Lincolnshire Historic Environment Record (HER) and the Senior Historic Environment Officer for North Kesteven District Council. Copies of the report will also be deposited with The Collection, Lincoln (Lincoln City and County Museum) as part of an ordered and indexed project archive. The data from the project, along with a digital copy of the report, will be uploaded to the Archaeology Data Service OASIS (Online Access to the Index of archaeological investigations) database for public consultation.

Deposition of the report with the HER, where it will be incorporated into their database for public consultation and uploading the project data to OASIS will be considered as placing the results of the project in the public domain. Should significant discoveries be made, wider publication of the results will be considered, although the content and place of publication will be dependent on what is found and be subject to discussion with the archaeological advisor to the planning authority.

Excavation took place between the 8th – 9th January 2020.



Plate 1: Site prior to excavation (looking SW)



— Site boundary
■ 30m x 2m trench

Tr. 1

Tr. 2

Tr. 3

Tr. 4

Tr. 7

Tr. 5

Tr. 6

Track



0 25 50 75 100 m

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Archaeology

Figure 2:
Trench location plan
1:1500

8.0 Results

No remains of archaeological interest were exposed within any of the seven trenches excavated. Generally, excavations exposed a stratigraphy of topsoil and subsoil overlying the natural limestone brash. This was encountered at a depth of approximately 0.4m to 0.6m below original ground level. Subsoil was absent from Trenches 1 and 5, whilst an additional silt deposit was present in both Trenches 3 and 7.

A single modern pit was excavated in the centre of Tr. 4. This was square in plan with steep sides, and a flat base. It contained a loose topsoil backfill which contained fragments of tarmac.

9.0 Discussion and Conclusions

The evaluation revealed a single modern archaeological feature across the development site, with most trenches proving to be archaeologically negative.



Plate 2: Trench 3 (looking SW)



Plate 3: Trench 3 representative section (looking SE)



Plate 5: Trench 7 (looking NW)



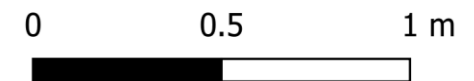
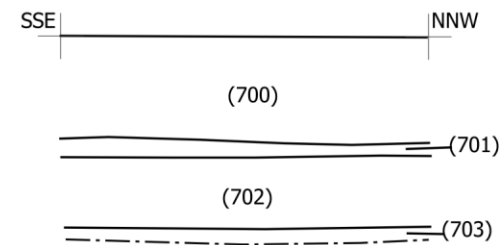
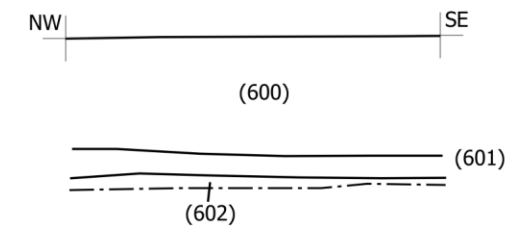
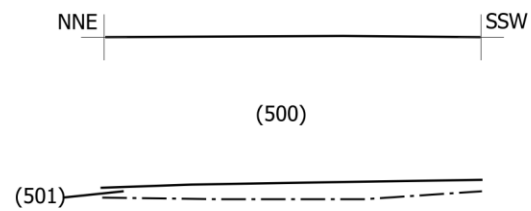
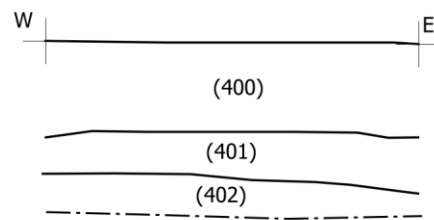
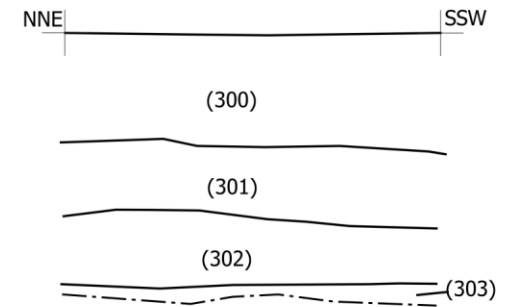
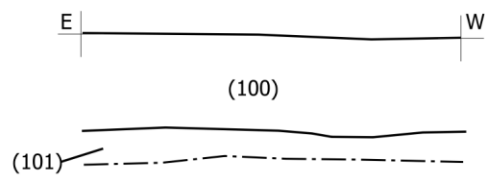
Plate 4: Trench 5 representative section
(looking ESE)



Plate 6: Trench 7 representative section
(looking WSW)



Plate 7: Modern pit seen in Trench 4 (looking N)



10.0 Effectiveness of Methodology

The archaeological evaluation proved an effective means of identifying that the development site does not contain a high density of archaeological remains.

11.0 Acknowledgements

PCAS Archaeology would like to thank Guy Taylor Associates for this commission.

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Appendix 1: Context Summary

Context No.	Type	Description	Finds
Trench 1			
100	Layer	Topsoil. Dark grey brown sandy silt. Moderately firm. Small angular stones throughout. 0.22m thick.	
101	Layer	Natural substrate. Mid orange sandy silt with frequent small to medium angular limestone fragments throughout.	
Trench 2			
200	Layer	Topsoil. Same as (100). 0.28m thick.	
201	Layer	Subsoil. Light brown sandy silt. Loose. Some sub-angular limestone fragments throughout. 0.12m thick.	
202	Layer	Natural substrate. Same as (101).	
Trench 3			
300	Layer	Topsoil. Same as (100). 0.3m thick.	
301	Layer	Subsoil. Same as (201). 0.2m thick.	
302	Layer	Mid grey brown sandy silt. Firm. Frequent small limestone fragments. Possible colluvium. 0.2m thick.	
303	Layer	Natural substrate. Same as (101).	
Trench 4			
400	Layer	Topsoil. Same as (100). 0.25m thick.	
401	Layer	Subsoil Same as (201). 0.14m thick.	
402	Layer	Natural substrate. Same as (101).	
403	Cut	Square, shallow, modern pit with a flat base. 1.4m x 1.1m x 0.2m.	
404	Fill	of modern pit [403]. Dark grey brown sandy silt. Loose. Contained tarmac fragments.	
Trench 5			
500	Layer	Topsoil. Same as (100). 0.4m thick.	
501	Layer	Natural substrate. Same as (101).	
Trench 6			
600	Layer	Topsoil. Same as (100). 0.28m thick.	
601	Layer	Subsoil. Same as (201). 0.08m thick.	
602	Layer	Natural substrate. Same as (101).	

Trench 7

700	Layer	Topsoil. Same as (100). 0.3m thick.
701	Layer	Thin lens of mid brown orange silt sand between (700) and (702). Moderately compact. Less than 0.05m thick.
702	Layer	Subsoil. Same as (201). 0.19m thick.
703	Layer	Natural substrate. Limestone brash mixed with mid brown orange silt sand solution.

Appendix 2: OASIS summary

OASIS ID: preconst3-380161

Project details

Project name	Lincs and Notts Air Ambulance Headquarters, RAF Waddington, Sleaford Road, Bracebridge Heath, Lincs. LN5 9FG
Short description of the project	PCAS Archaeology Ltd. was commissioned by Guy Taylor Associates to undertake a scheme of archaeological evaluation in advance of a proposed development of the relocation of the Lincs and Notts Air Ambulance Headquarters at RAF Waddington near the village of Waddington in the North Kesteven district of Lincolnshire (post code LN5 9FG). The development site is situated close to two Roman roads, one represented by the A15 and the other being Ermine Street. Other archaeological sites and finds recorded nearby include prehistoric remains, Roman occupation, Anglo Saxon activity within the village of Waddington and Medieval settlement represented by the East Mere Knights Templar manorial farm (HER no 61674) The evaluation revealed a single modern archaeological feature across the development site, with most trenches proving to be archaeologically negative.
Project dates	Start: 07-01-2020 End: 09-01-2020
Previous/future work	No / Not known
Any associated project reference codes	WLAE 19 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	PIT Modern
Significant Finds	NONE None
Methods techniques	& "Sample Trenches"
Development type	Rural commercial
Prompt	Planning condition

Position in the After full determination (eg. As a condition)
planning process

Project location

Country England

Site location LINCOLNSHIRE NORTH KESTEVEN WADDINGTON Lincs and Notts Air Ambulance Headquarters, RAF Waddington, Sleaford Road, Bracebridge Heath, Lincs. LN5 9FG

Postcode LN5 9FG

Study area 0 Square metres

Site coordinates SK 99714 65086 53.173235989951 -0.508009518202 53 10 23 N 000 30 28 W Point

Project creators

Name of PCAS Archaeology Ltd.
Organisation

Project brief Local Authority Archaeologist and/or Planning Authority/advisory body
originator

Project design PCAS Archaeology Ltd.
originator

Project Will Munford
director/manager

Project supervisor S A Savage

Type of Developer
sponsor/funding
body

Project archives

Physical Archive No
Exists?

Digital Archive The Collection, Lincoln
recipient

Digital Contents "none"

Digital Media "GIS","Images raster / digital photography","Survey","Text"
available

Paper Archive The Collection, Lincoln
recipient

Paper Contents "none"

Paper available Media "Context sheet", "Diary", "Drawing", "Map", "Notebook - Excavation',
Research', General
Notes", "Photograph", "Plan", "Report", "Section", "Survey "

Entered by Leigh Brocklehurst (leigh.brocklehurst@pcas-archaeology.co.uk)

Entered on 10 January 2020