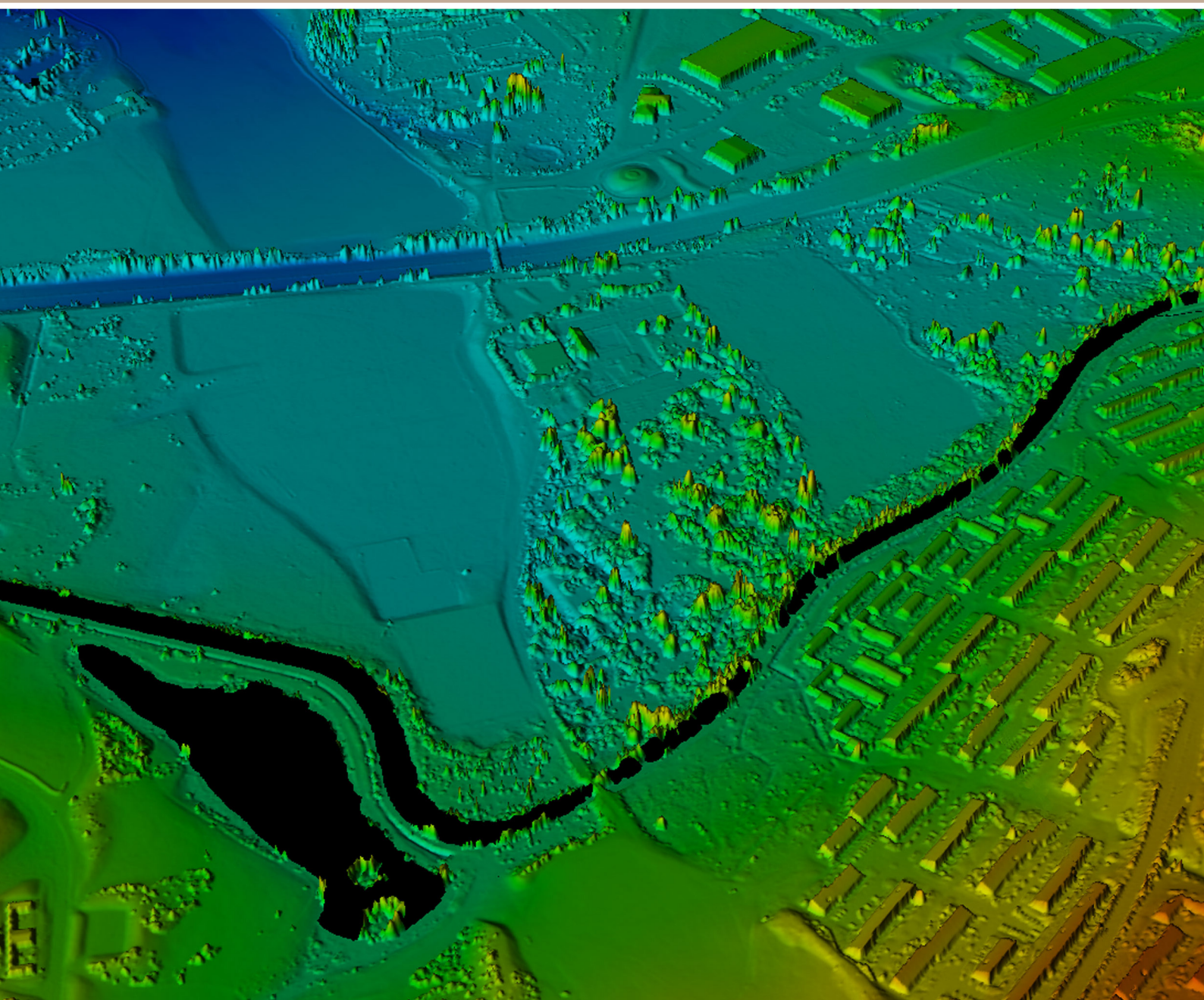


NORTON PRIORY, CHESHIRE AIR PHOTOGRAPH ASSESSMENT

Sally Radford



Research Department Report Series 059-2011

NORTON PRIORY, CHESHIRE: AIR PHOTOGRAPH ASSESSMENT

SPECIAL PROJECT

Sally Radford

SJ 5484 8302

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ISSN 1749-8775

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SUMMARY

Air photographs, held by the National Monuments Record, were assessed for Norton Priory and the immediate surroundings. In addition, lidar data held by the Environment Agency was purchased and assessed. Using these sources, all visible archaeological features (additional to those on depicted by the Ordnance Survey) were mapped and recorded. This report provides an overview of the results.

CONTRIBUTORS

Mapping and recording for this assessment was carried out by Sally Radford of English Heritage's Air Survey & Investigation team.

ACKNOWLEDGEMENTS

With thanks to Enquiry and Research Services, based at the National Monuments Record, for the loan of the aerial photographs.

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DATE OF SURVEY

11 May 2011 - 20 May 2011

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CONTENTS

1. Overview	1
2. Archaeology within scheduled area	1
3. Archaeology outside of the scheduled area	2
4. Non-archaeological activity	3

NORTON PRIORY, CHESHIRE: AIR PHOTOGRAPH ASSESSMENT

I. Overview

The vertical and oblique air photographs held by the National Monuments Record (NMR) were assessed for Norton Priory and the immediate surroundings. The NMR held no oblique photography for the assessment area; most likely as a result of air traffic restrictions in place for Liverpool and Manchester airports. Of the vertical coverage RAF 106G/UK/1186 3048-3055 21-Feb-1946 and MAL 75002 203, 205 & 207 16-Jan-1975 were the most useful runs. Additionally, orthophotography supplied to English Heritage by Next Perspectives™ through the Pan Government Agreement (PGA), dating to 2005, was consulted.

Lidar data held by the Environment Agency, dating to 2002, was purchased for the assessment. The data comprised 1m resolution digital surface model (DSM) and digital terrain model (DTM) data in ASCII grid (.asc) format. The ASCII data were used in AutoCAD MAP 3D 2008 to create raster surfaces that could be manipulated. The data were also converted into QT files (.qtt) for use in Quick Terrain Reader.

The area of Norton Priory was originally mapped as part of the North-West Rapid Coastal Zone Assessment Survey (NWRCZAS), National Mapping Programme (NMP) undertaken between November 2007 and May 2009 (Event UID 1461811). Any archaeological features discovered as part of this assessment have monument unique identifiers (UID) within the AMIE database. Additional features discovered by this assessment, but not recorded as part of the NWRCZAS NMP, are also described below; they do not have an AMIE UID.

2. Archaeology within scheduled area

UID 71788. Norton Priory (centred at SJ 5484 8305)

The priory itself was not mapped as no additional features to those depicted on Ordnance Survey mapping could be identified using the available photography.

UID 1462967. World War II barrage balloon site (centred at SJ 5489 8316)

A Second World War barrage balloon site is visible as a structure on vertical air photographs (RAF/106GUK/1186 3051 21-FEB-1946), situated to the northeast of Norton Priory. The feature appears to have been removed in the period following the war and is visible as a cropmark on 1951 vertical photography (RAF/58/709 3221 03-Jun-1951). In 1975, the construction of the Daresbury expressway destroyed the position of the barrage balloon site. Nevertheless, there is a small possibility that remnants of the barrage balloon site survive in the trees to the north of Norton Priory's car park and south of the expressway.

UID 1463005. Medieval/post medieval ridge and furrow (centred at SJ 5496 8307)

Post medieval ridge and furrow is visible as earthworks in the field to the east of Norton Priory on vertical air photographs (RAF/I06GUK/I186 305I 2I-FEB-1946). The slightly curving form of the ridge and furrow may suggest that it has its origins in the medieval period. Photographs taken in 1975 (MAL 75002 205 16-Jan-1975) reveal that spoil excavated from the route of the Daresbury expressway has been levelled across the field. In addition, the northernmost section of the ridge and furrow has been destroyed by the construction of a cutting for the road.

3. Archaeology outside of the scheduled area

A. Post medieval embankment (centred at SJ 5439 8289)

Two post medieval embankments are visible as earthworks on vertical air photographs (RAF/I06GUK/I186 305I 2I-FEB-1946). The embankments are situated to the north and south of the Bridgewater Canal and presumably provided the footings for a small bridge, oriented northeast-southwest. The northern embankment is partially hidden by tree cover within Haddock's Wood. The southern embankment is adjacent to Halton-gate Farm (now The Barge). Study of the 2002 lidar (LIDAR SJ5482 Environment Agency DSM 16-MAR-2002) reveals that the majority of the embankments have been destroyed by the construction of a 'busway'.

B. Post medieval trackways (centred at SJ 5457 8310)

A series of post medieval trackways are visible as earthworks on vertical air photographs (RAF/I06GUK/I186 305I 2I-FEB-1946). The ditched trackways run along a northeast-southwest alignment between Haddock's Wood (and presumably the bridge described above) and the woodland to the south of the Norton Priory Walled Garden. The trackways appear levelled on the 2002 lidar (LIDAR SJ5482 Environment Agency DSM 16-MAR-2002 & LIDAR SJ5483 Environment Agency DSM 16-MAR-2002), mostly as a result of landscaping for the creation of playing fields.

C. Post medieval pond (centred at SJ 5451 8319)

A small post medieval pond is visible as an earthwork on vertical air photographs (RAF/I06GUK/I186 305I 2I-FEB-1946), fed by a series of ditched field boundaries. The pond has been destroyed by the creation of the Daresbury Expressway in 1975.

D. Post medieval spoil heaps (centred at SJ 5470 8266)

Post medieval spoil heaps are visible as earthworks on vertical air photographs (RAF/I06GUK/I186 305I 2I-FEB-1946), situated to the southwest of Norton Priory. The spoil heaps are spread over an area of approximately 0.7ha. The spoil heaps have been levelled on the 2002 lidar (LIDAR SJ5482 Environment Agency DTM 16-MAR-2002).

E. Post medieval field boundary (centred at SJ 5456 8291)

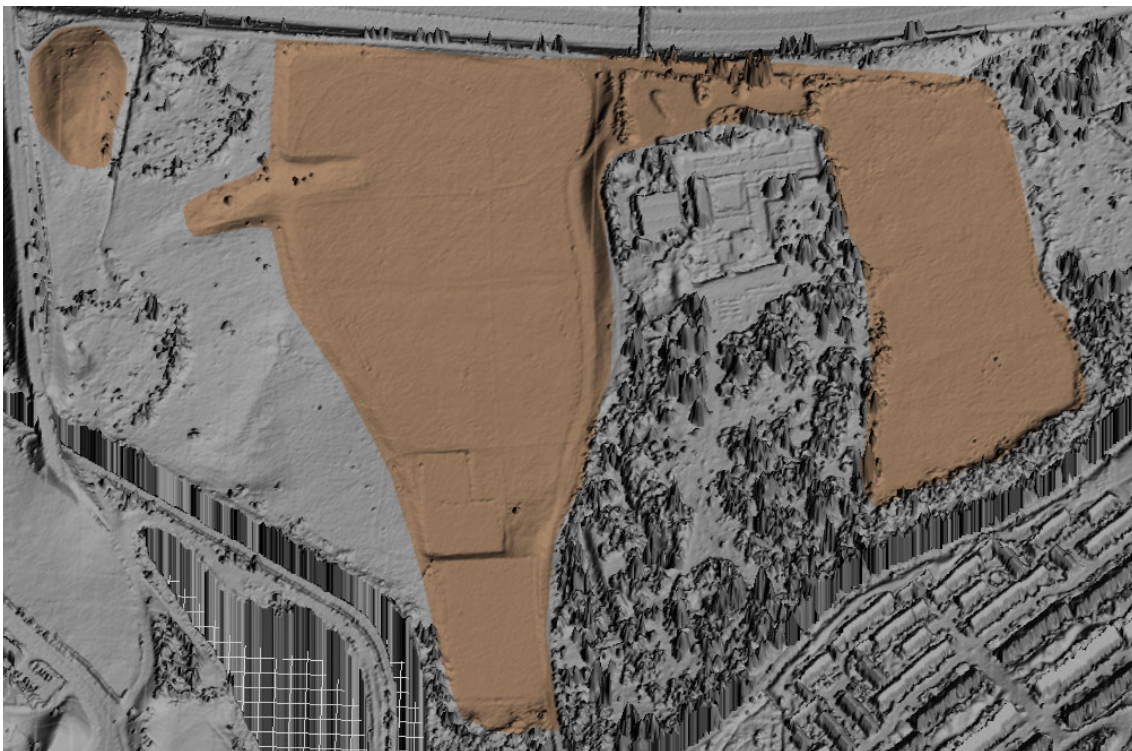
A post medieval ditched field boundary is visible as an earthwork on vertical air

photographs (RAF/106GUK/1186 3051 21-FEB-1946). The feature has been levelled on the 2002 lidar (LIDAR SJ5482 Environment Agency DTM 16-MAR-2002).

4. Non-archaeological activity

Landscaping

A vast amount of landscaping has occurred in the vicinity of Norton Priory, mainly as a result of the construction of the Daresbury Expressway. Large amounts of spoil removed along the route of the road were heaped on the field immediately east of the priory (within the scheduled area). A vertical photograph taken in 1975, (NMR MAL/75002 0205 16-JAN-1975) shows the spoil being bulldozed to form a level surface suitable for playing fields. It is unclear from the available sources what damage this may have caused



A digital surface model revealing the modern landscape surrounding Norton Priory, the highlighted areas have been landscaped, reducing the potential for archaeological survival. LIDAR SJ5482 Environment Agency DSM 16-MAR-2002 © Environment Agency copyright 2002. All rights reserved

to any underlying archaeological surfaces.

Further playing fields, situated to the immediate west of Norton Priory, are evident. Air photographs suggest that they were created later than 1968 but before 1975. In this instance, the surface was excavated to provide a level plane. Height data taken from the lidar suggest the playing field is at least 2 metres lower than the surrounding area. In these circumstances, the potential for survival of archaeological deposits is minimal.

Vegetation

Encroachment of vegetation within Norton Priory has been considerable over the time frame provided by the vertical photography - between 1946 and 2005. In the 1946 photography, vegetation appears to be either focussed around the perimeter of the priory, or located in a number of oval beds; covering a total area of approximately 4.5ha. By 2005 (the latest photography available for this study) vegetation cover had increased to 5.7 ha - the majority of southern section of the site. Obviously this is a crude observation some difference may result from the time of year of photography (February for the 1946 photography, April for the 2005 photography), but a 21% increase appears significant.



Orthophotography of Norton Priory taken in 2005 clearly shows extensive vegetation cover across the site. In contrast, the areas highlighted in red, depict tree cover visible on 1946 photography - a 21% increase over 59 years. Next Perspectives PGA Imagery NY5482 27-APR-2005. Aerial Photography: Licensed to English Heritage for PGA, through Next Perspectives™



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