

Santander Data Centre
Carlton Park, Narborough,
Leicestershire, LE19 0AL
(NGR 453572 298320)

Survey of Ridge and Furrow
Earthworks

August 2011



Souterrain Archaeological Services Ltd

for
MetroMOLA

on behalf of
HurleyPalmerFlatt

Souterrain

Archaeological Services Ltd



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Project Code SOU11-199

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PREFACE

All statements and opinions presented in this report arising from the programme of investigation are offered in good faith and compiled according to professional standards. Souterrain Archaeological Services Ltd (Souterrain) cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

The fieldwork was undertaken by Martin Wilson BA Hons, MIfA, MEnvSc, MEAGE, FSA Sc. The field survey illustrations in this report were created by Mercedes Planas BA, MSc, MIfA, ICES.

SUMMARY

In August 2011 a survey of ridge and furrow earthworks was carried out in advance of proposed development at Carlton Park, Narborough, Leicestershire (NGR 453572 298320) by Souterrain Archaeological Services Limited. The survey was commissioned by MetroMOLA, on behalf of HurleyPalmerFlatt, for Santander PLC.

The Study Area comprised part of a small enclosed field of probable mid-18th century date which contained the relict remains of medieval cultivation strips in low-relief, forming the terminus of a furlong field.

The survey revealed two distinct phases of earthworks, whereby a system of narrow cultivation ridges had been later bundled together to form wider ridges.

The results of the survey are depicted as a digital terrain model of the earthworks, a contour plan to show the topographical aspect of the Study Area, and a series of representative photographs. A detailed profile of the earthworks is contained in the digital archive.

1. INTRODUCTION

Subject of the survey

- 1.1 On the 11th August 2011 a survey of earthwork remains of a ridge and furrow field was conducted at Carlton Park, Narborough, Leicestershire (NGR 453572 298320) by Souterrain Archaeological Services Ltd. The earthworks comprise a remnant of an ancient landscape of local and regional historic interest. The survey was commissioned by MetroMOLA, for HurleyPalmerFlatt on behalf of Santander PLC.
- 1.2 The survey was carried out in advance of site usage for soil storage during the nearby construction of a computer data centre and associated landscaped areas.
- 1.3 The survey was conducted in accordance with national integrated heritage planning strategy defined in Planning Policy Statement 5 (PPS5)¹, which brings together all aspects of the historic environment, below and above ground (including historic buildings and structures, landscapes and archaeological sites) for consideration in the planning process.
- 1.4 The technique of mitigation was agreed at a site meeting between Teresa Hawtin, Leicestershire County Council's Senior Planning Archaeologist and Huw Sherlock, Regional Manager of MetroMOLA and archaeological consultant for the project, on the 2nd August 2011.

Site description, location and topography

- 1.5 The site (hereafter the Study Area) is situated within the parish of Narborough in the County of Leicestershire. It lies 1.5 km to the north west of the River Stoar, occupying the crest of a natural south east facing scarp rising above the valley of the River Stoar.
- 1.6 The Study Area (Fig.1) comprises a small, roughly rectangular enclosed field located on the west side of Carlton Business Park, approximately 1km west of Junction 21 of the M1 motorway and 2km northwest of the Narborough Rail Station. Access is gained to the business park from the B4114 to the south.
- 1.7 The Study Area is located at approximately 92 m OD. It is bounded on its northwest side by metal railing fence which was erected in the mid-20th century forming the southern boundary of an ambulance station. The other three sides of the Study Area are lined with hedges, the boundary lines of which probably date to the mid-18th century (*post.4.1*). The field is accessed from a gap in the western corner. Ground cover at the time of the survey comprised recently mown long grass, covered with the cuttings.

2. OBJECTIVES

- 2.1 The purpose of the field survey was:
 - To gain a clearer understanding of the morphological characteristics and extent of earthworks;

¹ DCLG [Department of Communities and Local Government], March 2010 *Planning Policy Statement 5: Planning for the Historic Environment*.; DCLG [Department of Communities and Local Government], EH [English Heritage] & DCMS [Department for Culture, Media and Sport], March 2010 *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide*.

- To provide an accurately measured survey and an illustrative and descriptive archive record of the earthworks.
- To help achieve a better understanding of the significance of the earthworks, and their spatial and, if possible, chronological relationships.

3. SURVEY METHOD AND TECHNIQUES

- 3.1 A visual inspection was first made of the Study Area, following which a methodology was devised to achieve a level of digital resolution appropriate to the aspect of the earthworks. Field data was accurately captured at a high resolution using Real Time Smartnet GPS (Leica SR1200), logging X, Y and Z point data at regularly-spaced intervals, usually <4m separation, throughout the Study Area with plan precision to 6 to 20mm, and heights between 15 to 25mm. The earthworks were surveyed to Ordnance Survey National Grid co-ordinates and orthometric heights. A representative detailed profile was also made with points logged at intervals of approximately c.0.25m (post.4.4).
- 3.2 A digital photographic record (Figs. 5 to 8) was made of the earthworks with appropriately sited metric scales. The photographic viewpoints are shown on Figure 4.

4. SURVEY RESULTS

Historic significance

- 4.1 The Study Area is known was once part of a medieval *open field* system and was situated in the vicinity two medieval settlements². Narborough, which lies about one kilometre to the southwest was not recorded in the Domesday Survey of 1086 AD, the earliest known documentary reference being 1215. However, the settlement may have been in existence and may have been included in the entry for Huncote, about 3 kilometres to the west, which was a town of considerable note at that time. The open fields of Narborough were enclosed by Act of Parliament in 1752³ and it is likely that the field boundaries of the Study Area were constructed during that event. Ignoring the modern metal fence to the north of the Study Area, and the post and rail fence within the site on the east side, the first edition Ordnance Survey (County series) map of 1886 shows depicts the same boundaries as those present today.
- 4.2 The enclosed field (the Study Area) contains a relict fragment of a former *furlong field*, in the form of earthworks, commonly referred to today as ridge and furrow. The earthworks represent cultivation ridges, or *selions*, separated by 'furrows' which were for used for access and drainage. A *furlong* was customarily the distance that a medieval plough team could cover without stopping for rest; the later standard measurement represented 220 yards (201.17m), but in reality was variable, due to the nature of the terrain, or local custom. A *furlong field* refers to a group of parallel *selions*. Such earthworks frequently originated in the late Saxon period (late 9th / 10th century-1066) and while many fields went out of use and were transformed to enclosed grazing land in from the High

² 2011. Sherlock, H. 'Sites A & B Santander Data Centre Carlton Park Narborough Leicestershire LE19 0AL, An historic environment assessment NGR 453572,298320', MetroMOLA Central Unpublished Report.

³ "78 An Act for dividing and enclosing the Common Fields and Common Meadows of Norborow, otherwise Narborough, in the County of Leicester", House of Lords Journal Volume 27: March 1752, 21-31', *Journal of the House of Lords volume 27: 1746-1752 (1767-1830)*, pp. 697-708. URL: <http://www.british-history.ac.uk/report.aspx?compid=114344> Date accessed: 19 August 2011.

Medieval period (11th to 13th centuries) onwards, others persisted as cultivation strips through to the late 17th century.

- 4.3 The *selions* in the Study Area are in low relief and in a differential state of survival; they are notably pronounced in the eastern and south-east part of the field, becoming less distinct towards the north and west.

Presentation of results

- 4.4 A digital terrain model (Fig.2) was considered the most useful technique of visual representation. In view of the low relief of the earthworks; the vertical scale on Figure 2 is exaggerated by one third. A detailed contour plan (Fig.3) shows more generally the topographical aspect of the Study Area. The surveyed profile (*ante.3.1*) of the earthworks, which does not lend itself to scale depiction in the format of this report, is included in digital format (AutoCAD) on the archive disk.

Remarks on phasing and chronology

- 4.5 The survey revealed the presence of two separate agricultural regimes. The earlier regime, distinct on the digital terrain model (Fig.2), is represented by approximately 18 parallel *selions*, each about 6m apart (ridge to ridge), in very low relief. The *selions* are aligned northwest-southeast, with a perceptible curve towards the southeast where they widen, denoting the start of the turning area of the plough team at the end of the furlong. This turning area is frequently demarcated by a linear mound of earth (a *headland*) which has accumulated by the turning action. A headland is not visible in the Study Area, but may be concealed by the wide hedgerow on the southeast side.
- 4.6 In the later phase, *selions* were bundled together to form wider cultivation strips (each about 9-10m wide, ridge to ridge), the profiles of which are distinct against the dark background south hedge line (Figs. 5 to 7).
- 4.7 The chronology of each agricultural regime may only be broadly suggested; the narrower ridges are known to be common place in the High Medieval period, whilst the broader ridges are likely to be post-medieval, but were certainly defunct by the mid-18th century (*ante.4.1*).

Archive

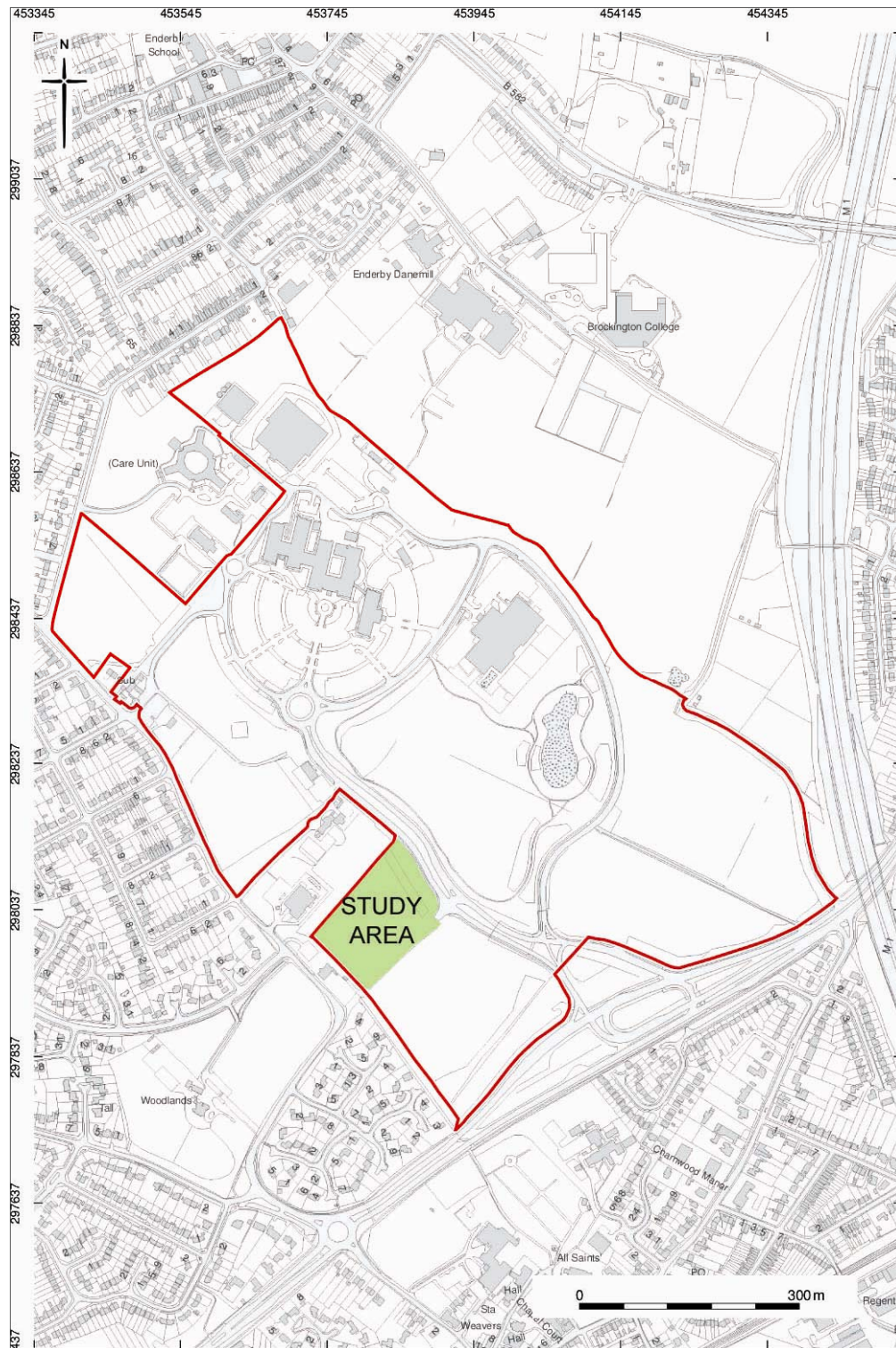
- 4.8 A disk containing a copy of this report, the survey data and digital photographs is to be submitted to MetroMOLA for integration to the final site archive.

5. GENERAL

Copyright and Confidentiality

- 5.1 Souterrain Archaeological Services Ltd retains full copyright of commissioned reports and other project documents under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive licence to the Client in all matters directly relating to the project as described in the WSI. Souterrain grants a licence to Leicestershire County Council Historic Environment Record for the use of all reports arising from projects for planning purposes and *bona fide* research requested.

V1 August 2011



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Figure 1. Location of the Study Area at Carlton Park, Narborough
(The red line denotes the area of the development scheme)

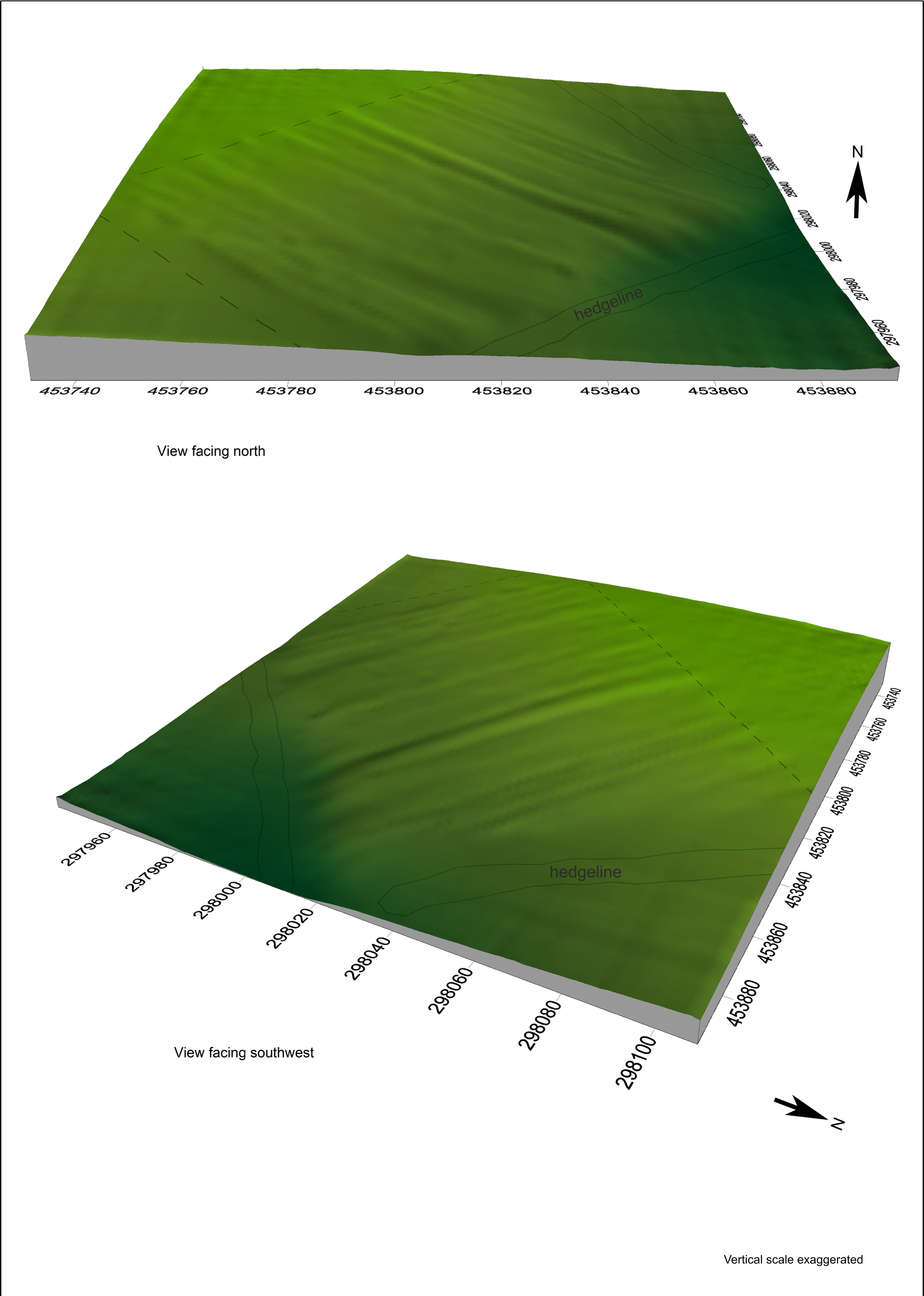
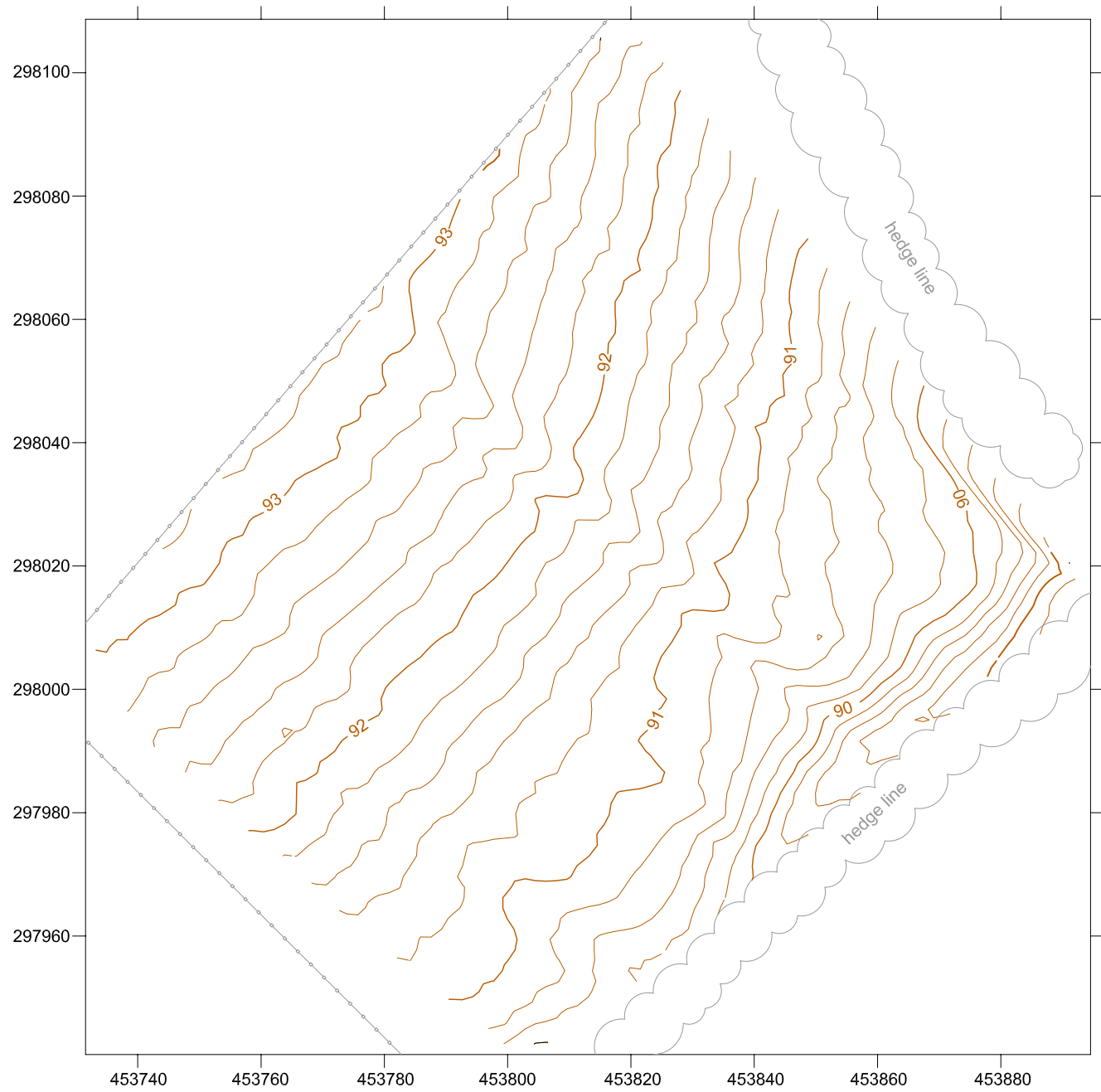


Figure 2: Digital Terrain Model



Contour intervals of 0.20m

Figure 3: Contour plan

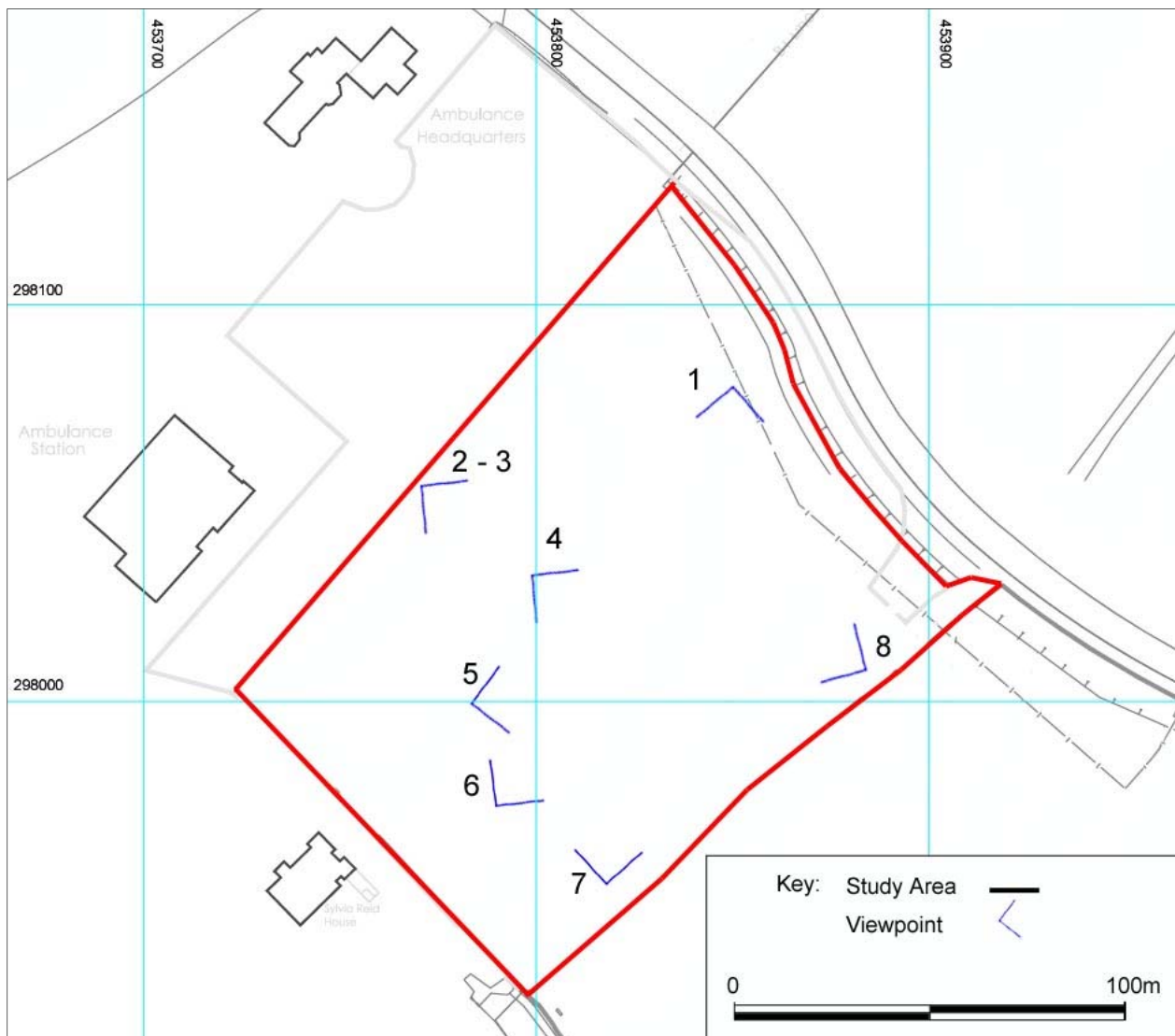


Figure 4. Location of photograph viewpoints (Figs. 5 to 7)



Figure 5. Top: Viewpoint 1, facing south. Bottom: Viewpoint 2, facing southeast



Figure 6. Top: Viewpoint 3, facing southeast. Bottom: Viewpoint 4, facing southeast



Figure 7. Top: Viewpoint 5, facing east. Bottom: Viewpoint 6, facing northeast



Figure 8. Top: Viewpoint 7, facing north. Bottom: Viewpoint 8, facing northwest