



Northamptonshire Archaeology

Archaeological evaluation, Cranford Estate Wind Turbine, Northamptonshire May 2011



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Report 11/117

May 2011



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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS		
Project title	Archaeological evaluation, Cranford Estate Wind Turbine, Northamptonshire, May 2011	
Short description	An archaeological evaluation was carried out to inform a planning application for the construction of a single wind turbine, Cranford Estate, Northamptonshire. The evaluation revealed a number of tree throw depressions and root disturbance, however, no archaeology was present.	
Project type	Trial trench evaluation	
Previous work	None	
Current land use	Arable	
Future work	Unknown	
Monument type and period	None	
Significant finds	None	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Cranford Estate, Cranford St. Andrew, Northamptonshire	
Easting Northing	4933 2789	
Area (sq m/ha)	0.20 ha	
Height aOD	87m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Nexus Heritage	
Project Design originator	NA	
Director/Supervisor	Anne Foard-Colby	
Project Manager	Tony Walsh	
Sponsor or funding body	Engena Ltd	
PROJECT DATE		
Start date	16/05/2011	
End date	16/05/2011	
ARCHIVES	Location (Accession no.)	Contents
Physical	NA store	
Paper		Site records (1 small archive box)
Digital		Client report PDF
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title	Archaeological evaluation, Cranford Estate Wind Turbine, Northamptonshire, May 2011	
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**ARCHAEOLOGICAL EVALUATION
CRANFORD ESTATE WIND TURBINE
NORTHAMPTONSHIRE
MAY 2011**

Abstract

An archaeological evaluation was carried out to inform a planning application for the construction of a single wind turbine, Cranford Estate, Northamptonshire. The evaluation revealed a number of tree throw depressions and root disturbance, however, no archaeology was present.

1 INTRODUCTION

In May 2011, an archaeological trial trench evaluation was carried out by Northamptonshire Archaeology (NA) on land at Cranford Estate, Northamptonshire (NGR: SP 933 789; Fig 1). The work was commissioned by Nexus Heritage on behalf of Engena Ltd and was undertaken to inform a planning application for a proposed single wind turbine.

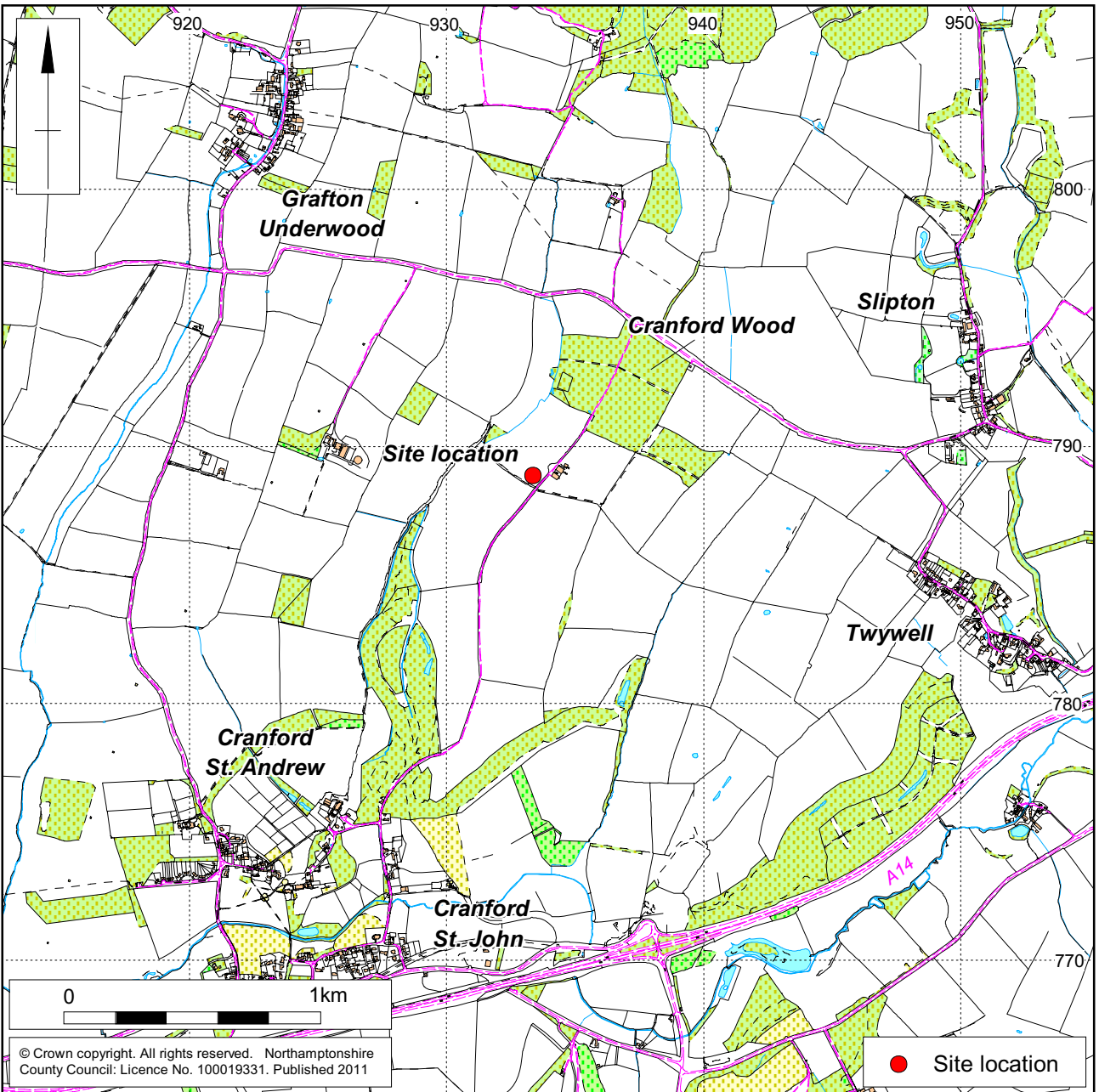
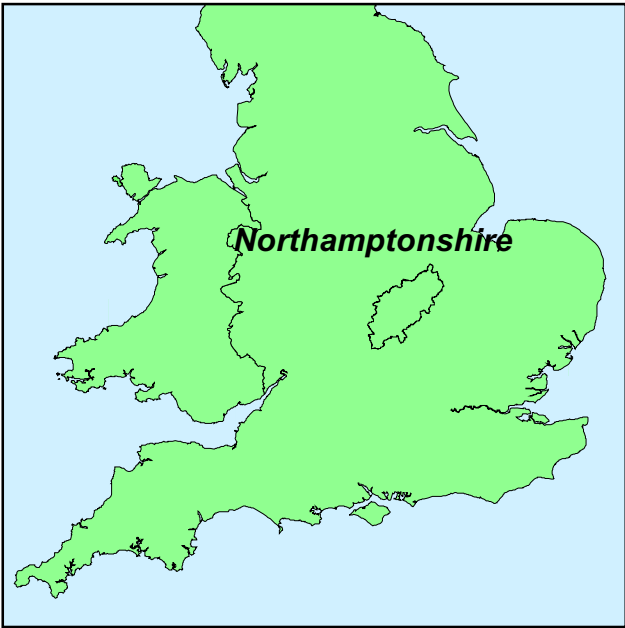
Following discussion with Northamptonshire County Council's Archaeological Advisor (NCCAA) a programme of archaeological evaluation was agreed. The objectives of the evaluation were to determine the presence of any archaeological features or deposits within the application area and to date and characterise their extent, depth of burial and state of preservation.

2 BACKGROUND

2.1 Topography and geology

The proposed wind turbine site, which covers an area of c0.20ha, is located approximately 2km equidistant between the villages of Grafton Underwood to the north-west, Twywell to the south-east and Cranford St. Andrew to the south-west. It is bounded to the north-east by Cranford Wood and lies on a natural rise along the southern boundary of an arable field. Ground level lies at an average height of 87m aOD. At the time of the evaluation the land was waste and covered in a rape crop.

The underlying geology comprises Cornbrash and Great Oolite Series from the Jurassic (www.bgs.ac.uk/geoindex). The beds consist of (in an upward sequence), the Upper Estuarine Series, the Great Oolite Limestone (Blisworth Limestone) and the Great Oolite Clay (Blisworth Clay).



Scale 1:25,000

Site location Fig 1

2.2 Historical and archaeological background

No archaeological remains are recorded by the Historic Environment Record within the development area. However, extensive possible prehistoric settlement activity has been identified within the area surrounding the site. The features were identified by the National Mapping Programme and aerial surveys in 1981, (NHER Event No: ENN10907) and 1984 (NHER Event No: ENN11052). Further details of the sites can be found in the Desk-Based Assessment, section 4, figs 2a and 2b (Page-Smith 2010).

During the medieval period the area of the development is likely to have been laid out within the open fields of Cranford parish, as common meadow or pasture.

The general outline of the current fields is shown in William Brazier's A Map of the Mannor of Cranford, dated 1748. The development is located in the southern part of Percivals Close (*Ibid* fig 4). The close was divided into two hedged fields by 1875 and thereafter the boundaries remained largely unchanged until c1975 when they were recombined into a single large field. Recently the northern boundary of the field has been straightened by the extension of Cranford Wood southward.

The open fields of Cranford were enclosed by act of Parliament in 1775 (*ibid* section 4.5.2).

To the south-east lies Cranford Lodge, this stylistically may be dated to the early 19th century. The farm is shown on Bryant's Map of the County of Northampton dated 1824-5 (*Ibid* fig 6).

A walkover survey has previously been undertaken in conjunction with the preparation of the desk-based assessment; otherwise, the site has not been subject to previous archaeological intervention.

3 AIMS AND OBJECTIVES

The purpose of the work is to determine and understand the nature, function and character of the archaeological site in its cultural and environmental setting.

The aims of the investigation are to:

- Establish the date, nature and extent of the activity or occupation on the development site
- recover artefacts to assist in the development of type series within the region
- recover palaeo-environmental remains to determine local environmental conditions.

4 METHODOLOGY

Two trial trenches, one measuring 20m long and the other 10m long by 2m wide (Trenches 1 and 2), were excavated on the turbine and substation sites in accordance with the trench plan approved by NCCAA (Fig 2). In addition, a further two trenches one measuring 30m and the other 10m (Trenches 3 and 4) were excavated to investigate the hard standing for the turbine and the upgraded site access area (Fig 2). They were positioned using a Leica 1200 GPS surveying system.

A 360° tracked mechanical excavator fitted with a 1.8m wide ditching bucket was used to remove overburden to the natural substrate. Deposits were examined by hand excavation to determine their nature.

Recording followed standard NA procedures as described in the *Fieldwork Manual* (NA 2006). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships and interpretation.

A photographic record was made using 35mm black and white negative film and digital images. Spoil heaps were scanned by eye and metal detector to maximise the recovery of any artefacts.

All works were conducted in accordance with the Institute for Archaeologists' *Code of Conduct* (IfA 2010) and *Standard and Guidance for Archaeological Field Evaluation* (IfA 1994, revised 2008).

5 THE EXCAVATED EVIDENCE

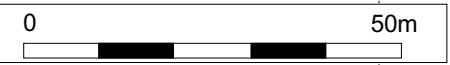
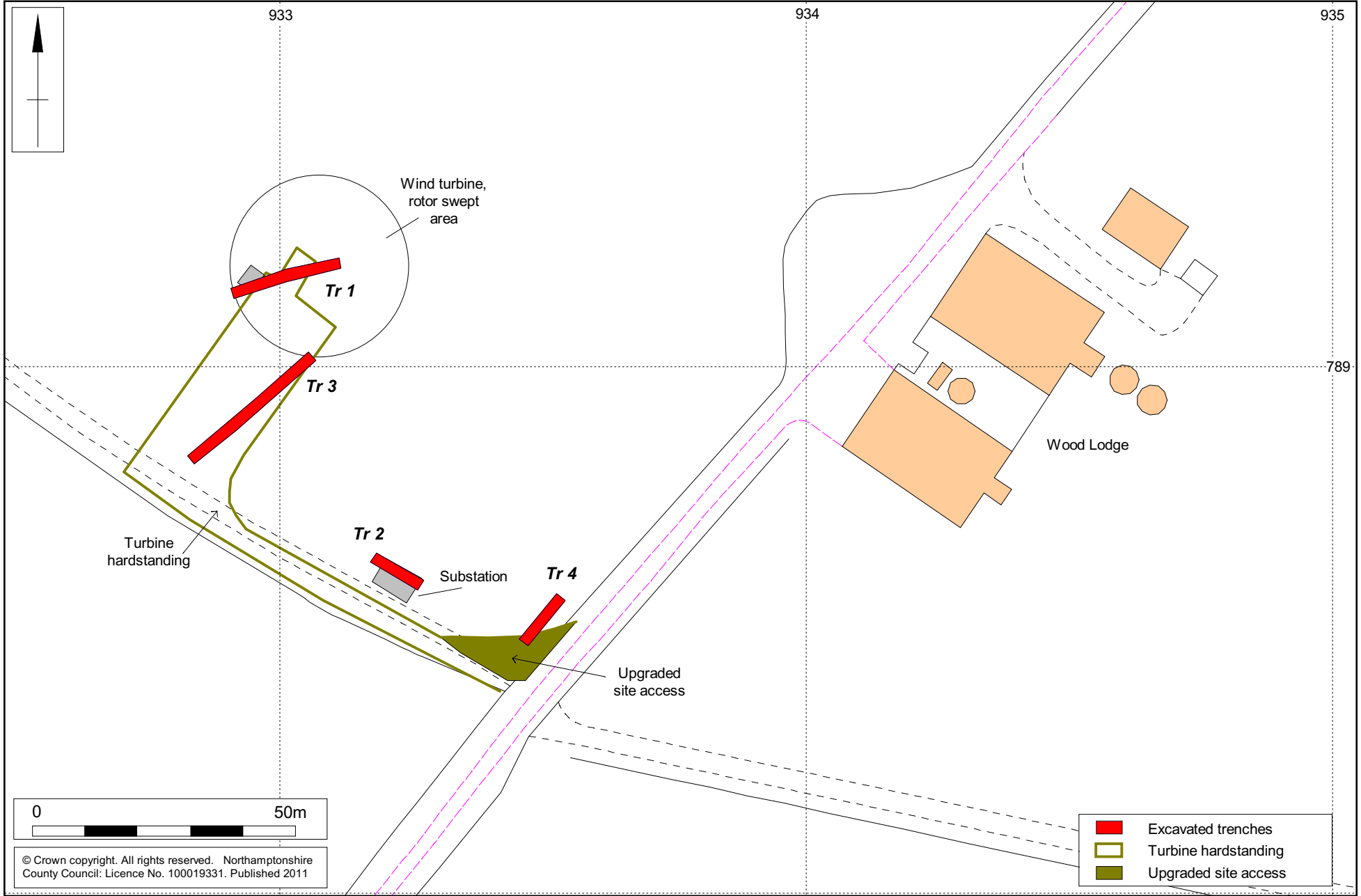
5.1 General stratigraphy

The underlying geology was light to medium orange-brown silty clay with inclusions of chalk and gravel pebbles. Within the clay were patches of chalk and gravel. It was encountered at a depth of between 0.25-0.55m below the modern ground surface.

The subsoil was medium orange-brown silty clay, which was generally 0.10-0.13m thick. The topsoil was friable, dark grey-brown, clayey loam 0.25m thick. Both soils contained chalk and gravel pebbles. One piece of broken ceramic land drain was recovered from the topsoil, otherwise both subsoil and topsoil were clean soils and devoid of modern debris.

Scale 1:1000 (A4)

Trench locations 1-4
Fig 2



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- Excavated trenches
- Turbine hardstanding
- Upgraded site access

5.2 The archaeological evidence

Trench 1

Trench 1 (Figs 2 and 3), was aligned north-east to south-west and was located in the north of the site over the position of the proposed turbine. Within the trench was a tree throw, an area of root disturbance and a land drain. There were no archaeological features or artefacts present.



Trench 1, section looking north-east

Fig 3

Trench 2

Trench 2 (Figs 2 and 4), was located in the south of the site and aligned north-west to south-east, to investigate the position of the proposed substation. There were no archaeological features or artefacts present.



Trench 2, section looking north-west

Fig 4

Trench 3

Trench 3 (Figs 2 and 5), was positioned across the area of proposed turbine hard standing and was aligned north-east to south-west. It contained a tree throw and areas of root disturbance. There were no archaeological features or artefacts present.



Trench 3, section looking north-west

Fig 5

Trench 4

Trench 4 (Figs 2 and 6), was positioned across the site entrance area, which is proposed to be upgraded. It was aligned north-east to south-west. A disturbed area of rotted roots was present. There were no archaeological features or artefacts present.



Trench 4, section looking north-west

Fig 6

6 DISCUSSION

The archaeological evaluation identified the remains of two tree throws and areas of root disturbance within three of the trenches. Given the close proximity of Cranford Wood, a relict of ancient woodland, which lies 300m to the north, the presence of tree throws and root disturbance are likely to be associated with an earlier phase of ancient woodland, before the land was enclosed. The desk-based assessment had previously established that the field in which the propose turbine will be located had retained its particular shape since at least 1748 and had been enclosed prior to the enclosure act of 1775, which may suggest it was an area of common land or woodland.

There were no archaeological features or deposits encountered within the site. No finds were recovered from the subsoil or topsoil, save one piece of modern, ceramic land drain which was discarded.

7 BIBLIOGRAPHY

IfA 1994, revised 2008 *Standard and guidance for field evaluation*, Institute for Archaeologists

IfA 1995 revised 2010 *Code of Conduct*, Institute for Archaeologists

NA 2006 *Archaeological Fieldwork Manual*, Northamptonshire Archaeology

Page-Smith, 2010 *Cranford Estate Wind Turbine, Northamptonshire, Archaeological Desk-based Assessment*, Nexus Heritage, Report number: **3052 – 03.R01a**

Websites

BGS 2011 <http://www.bgs.ac.uk/geoindex/home.html> British Geological Survey website

APPENDIX 1: CONTEXT DATA

Trench no	Context	Type	Description	Thickness (m)
1	101	Layer	Topsoil, dark, grey-brown clayey loam	0.25m thick
	102	Layer	Subsoil, mid orange-brown silty clay with chalk and gravel pebbles	0.10-0.13m thick
	103	Layer	Natural substrate, light to mid orange-brown silty clay with inclusions of chalk and gravel pebbles and patches of chalk and gravel	
2	201	Layer	Topsoil, dark, grey-brown clayey loam	0.25m thick
	202	Layer	Subsoil, mid orange-brown silty clay with chalk and gravel pebbles	0.10m-0.13m thick
	203	Layer	Natural substrate, light to mid orange-brown silty clay with inclusions of chalk and gravel pebbles and patches of chalk and gravel	
3	301	Layer	Topsoil, dark, grey-brown clayey loam	0.15-0.25m thick
	302	Layer	Subsoil, mid orange-brown silty clay with chalk and gravel pebbles	0.10m thick
	303	Layer	Natural substrate, light to mid orange-brown silty clay with inclusions of chalk and gravel pebbles and patches of chalk and gravel	
4	401	Layer	Topsoil, dark, grey-brown clayey loam	0.15-0.20m thick
	402	Layer	Subsoil, mid orange-brown silty clay with chalk and gravel pebbles	0.10m thick
	403	Layer	Natural substrate, light to mid orange-brown silty clay with inclusions of chalk and gravel pebbles and patches of chalk and gravel	



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