



**Archaeological observation, investigation
and recording on land at
Stanford Hall, Stanford-on-Soar
Nottinghamshire
February-March 2015**

Report No 15/84

Author: Tim Sharman

Illustrator: Amir Bassir



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PROJECT DETAILS		OASIS No: molanort1- 211217	
Project title	Archaeological observation, investigation and recording on land at Stanford Hall, Stanford-on-Soar Nottinghamshire February-March 2015		
Short description	An Archaeological watching brief was undertaken on land at Stanford Hall DNRC, Stanford-on-Soar, Nottinghamshire, prior to the excavation work for the installation of electricity sub-stations and associated underground cables. A brick-lined drain, possible road surfaces and a kerb were recorded. There were no finds.		
Project type	Archaeological observation, investigation and recording		
Site Status	None		
Previous work	Desk-based assessment (Arup 2012), Building recording (Bassir and Upson-Smith 2014), Watching briefs (Markus 2014 and Kidd 2014)		
Current land use	Pasture		
Future work	None		
Monument type/period	Grade II* listed hall, grade II listed park and gardens		
Significant finds	None		
PROJECT LOCATION			
County	Nottinghamshire		
Site address	Stanford Hall, Stanford-on-Soar		
Post code	LE12 5QW		
OS co-ordinates	455871 323895		
Area (sq m/ha)	0.01ha (size of excavations)		
Height aOD	70-90m above Ordnance Datum		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	Rushcliffe Borough Council		
Project Design originator	MOLA		
Director/Supervisor	T Sharman		
Project Manager	A Yates		
Sponsor or funding body	Arup on behalf of BS Stanford		
PROJECT DATE			
Start date	09/02/2015		
End date	03/03/2015		
ARCHIVES	Location (Accession no.)	Contents	
Physical	SOSSH 15	None	
Paper		Site records (1 small archive box)	
Digital		Client report PDF	
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)		
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**Archaeological observation, investigation and recording
on land at Stanford Hall, Stanford-on-Soar
Nottinghamshire
February – March 2015**

Abstract

A programme of archaeological observation, investigation and recording was undertaken on land at Stanford Hall DNRC, Stanford-on-Soar, Nottinghamshire, prior to excavation works for the installation of electricity sub-stations and associated underground cables. A brick-lined drain, road surfaces and a kerb were recorded. There were no finds.

1 INTRODUCTION

MOLA was commissioned by Ove Arup and Partners (Arup), on behalf of BS Stanford, to provide archaeological monitoring, investigation, and recording on land at Stanford Hall Defence and National Rehabilitation Centre (DNRC), Stanford-on-Soar, Nottinghamshire (Fig 1; NGR 455871 323895). The work was carried out in advance of the installation of three electricity sub-stations and associated underground cables (Fig 2).

A desk-based assessment was produced in 2012 by Arup. The excavation followed an approved Written Scheme of Investigation prepared by MOLA (2014a), and adhered to the procedural document *Management of Research Projects in the Historic Environment* and *MoRPHE* (EH 2006).

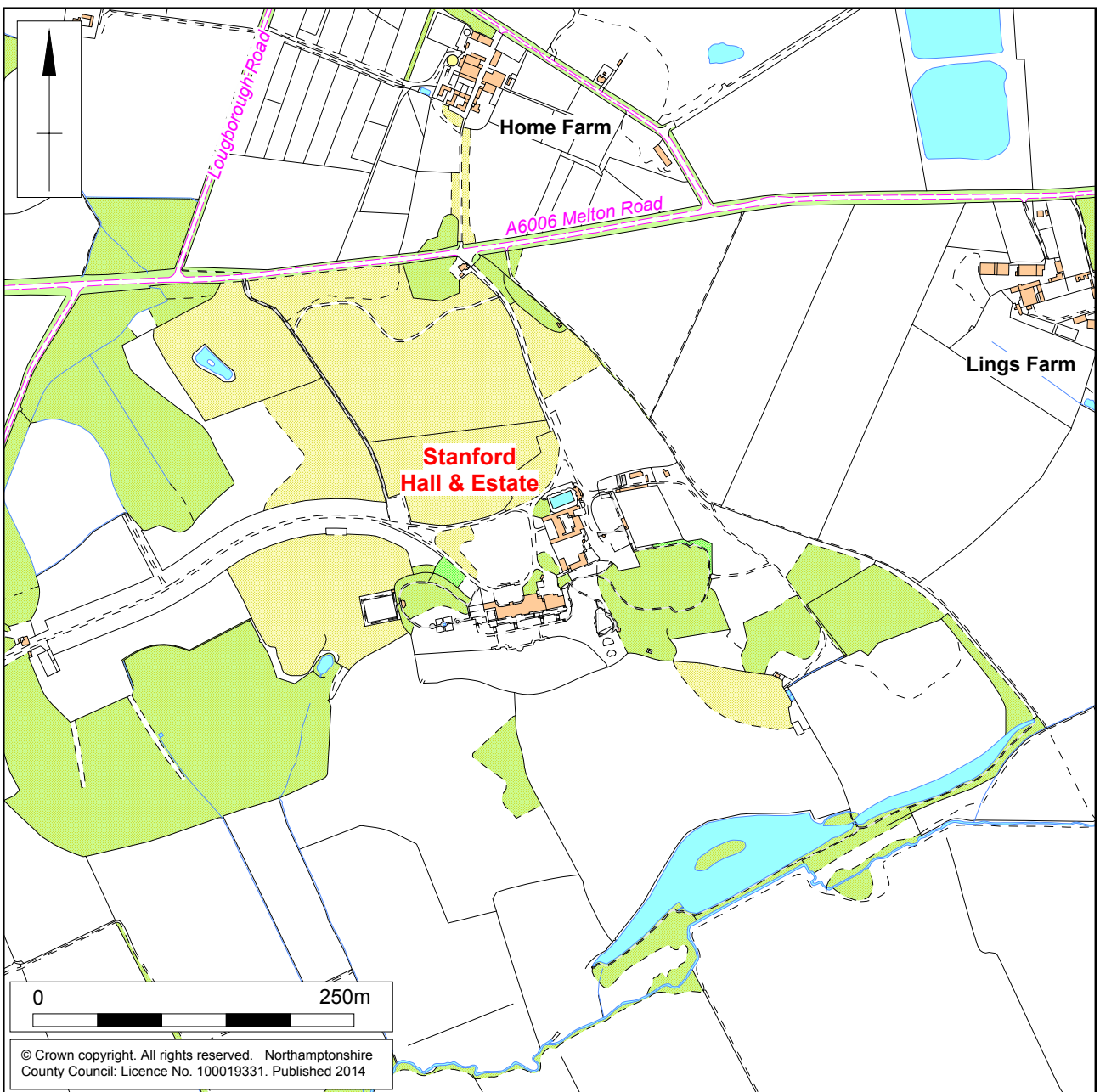
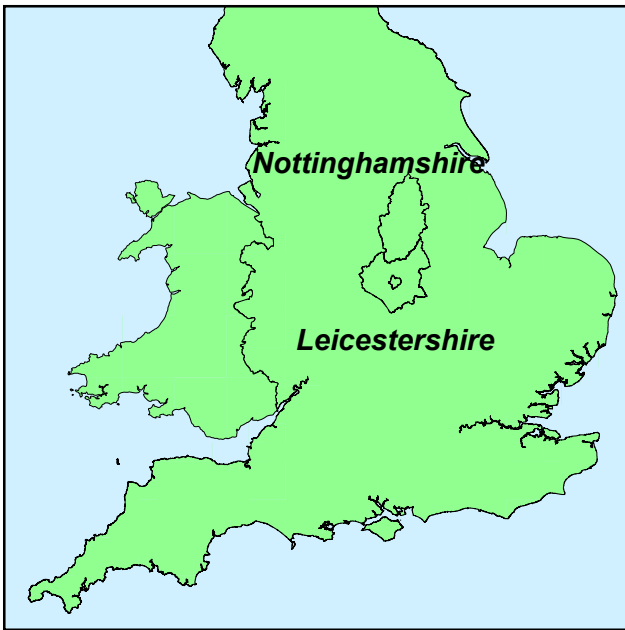
This report has been prepared in accordance with current best archaeological practice as defined in the Chartered Institute for Archaeologists' *Standard and Guidance for archaeological watching brief* (CIfA 2014a) and the *Code of Conduct* (CIfA 2014b).

2 BACKGROUND

2.1 Topography and geology

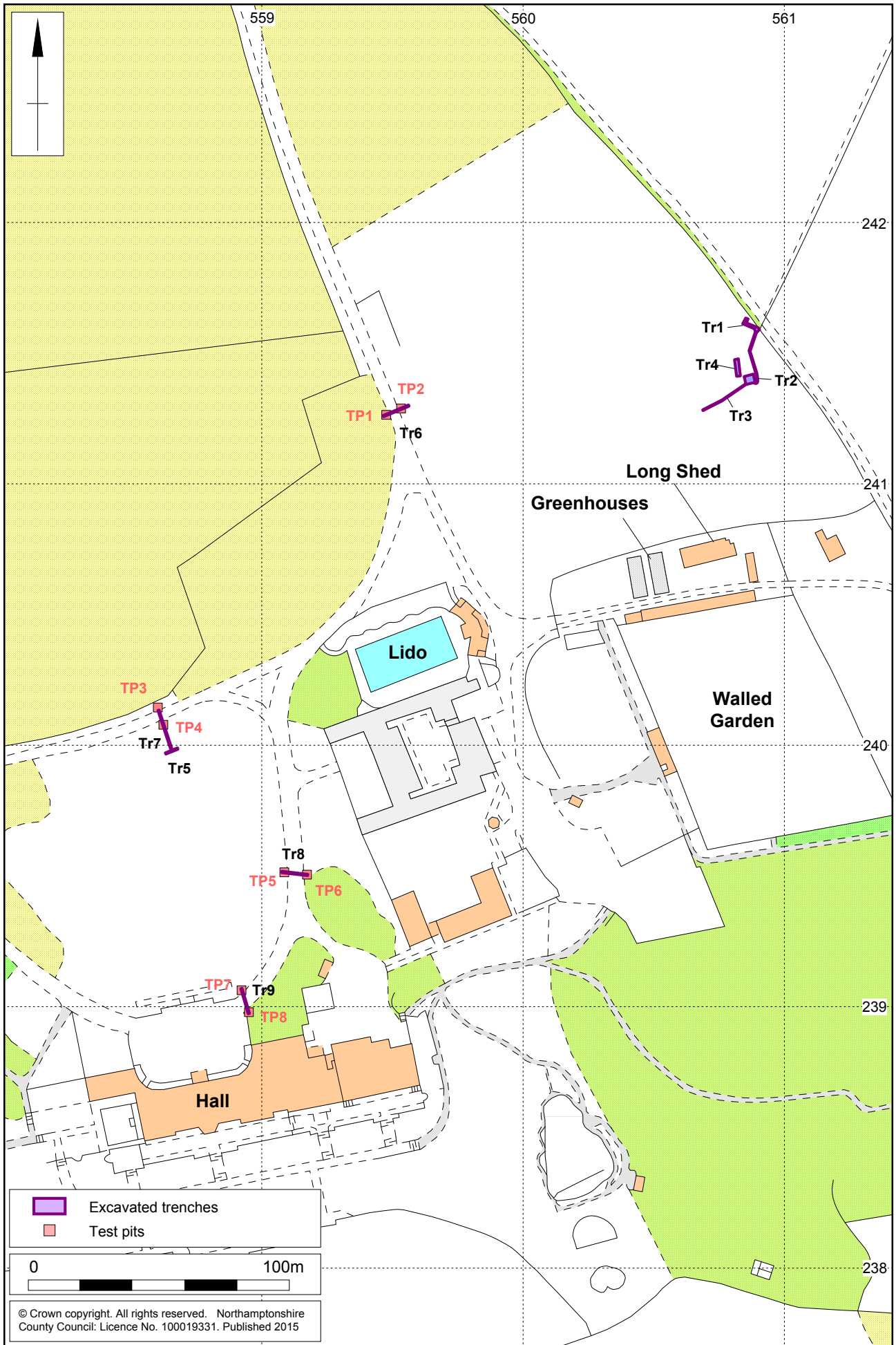
The development area is located to the north-east of the village of Stanford-on-Soar and c5km north of Loughborough. The site comprises the grade II* listed Stanford Hall and associated buildings which lie within Stanford Hall Registered Park and Garden (grade II), covering an area of approximately 120ha.

The underlying bedrock comprises outcrops of various different formations of mudstone and limestone and, where present, the superficial geology comprises glaciofluvial deposits of sand, clay and gravel (www.bgs.ac.uk).



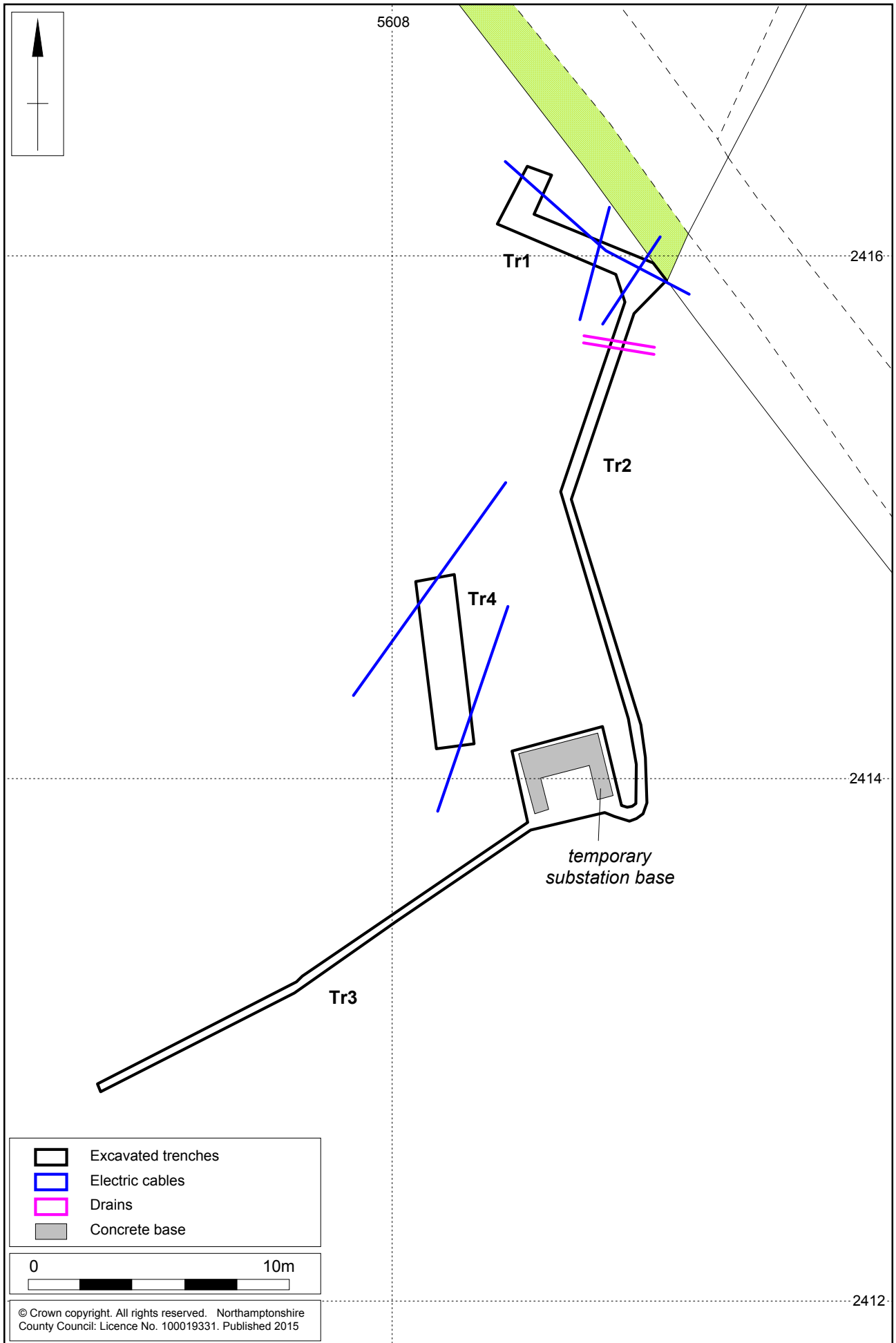
Scale 1:10,000

Site location Fig 1



Scale 1:2000

The areas of archaeological observation Fig 2



Scale 1:200

The areas of archaeological observation in the eastern area of the site

Fig 3

2.2 Historical and archaeological background

The following background information is largely derived from the desk-based assessment prepared as part of the planning application (Arup 2012).

Prior to 2014, there had been no previous archaeological investigations within the proposed development site. The closest recorded by Nottinghamshire Historic Environment Record (HER) was undertaken at East Leake Quarry to the north-east. A small number of prehistoric flints were recovered during fieldwalking, a possible Bronze Age burnt mound and an area of Iron Age settlement, including a roundhouse, enclosure, pits, ditches and field systems, was uncovered during topsoil stripping in 2005. Further phases of investigation have not revealed any further evidence of prehistoric activity.

No Romano-British activity has been recorded in the vicinity. Although no Anglo-Saxon activity has been recorded within the proposed development site, a number of finds have been found 300m to the north-east and an Anglo-Saxon cemetery has been found 430m to the north-east.

The estate at Stanford was granted by Queen Mary to her goldsmith Robert Raynes in 1558. In 1641 his grandson built a stone hall here, although by 1770 the estate had passed to the Dashwood family and this hall was demolished and a new brick mansion was commissioned. Early 18th-century drawings indicate that there were extensive walled formal gardens to the south of the old hall within an enclosed deer park.

Further extensive work to both the hall and gardens were undertaken by the Ratcliffe family at the end of the 19th century and in 1928, when the estate was sold to Sir Julien Cahn, further major works were undertaken including the construction of the theatre, sea-lion enclosure and penguin pool. From the middle of the 20th century the hall was owned by the Co-operative College.

In January 2014 a watching brief undertaken by MOLA (Markus 2014) on environmental improvements, uncovered the remains of a post medieval trackway. In October 2014 further watching brief work by MOLA (Kidd 2014) during the installation of a new septic tank revealed no archaeological remains or features. The hall itself has recently been the subject of a programme of building recording. (Bassir and Upson-Smith 2014)

3 AIMS AND OBJECTIVES

In order to examine the archaeological resource within the proposed development area the objectives of the archaeological work were to:

- Observe the groundworks for the installation of the three electricity sub-stations and associated underground cable trenches;
- Determine and record the date, extent, character, state of preservation and depth of burial of any archaeological deposits;
- Create a permanent archive and record of the archaeological information collected during the course of the fieldwork and analysis.

Further objectives included:

- Establishing the relationship of any remains found to the surrounding contemporary landscapes;
- Recovering artefacts to assist in the development of type series within the region;
- Recovering palaeo-environmental remains to determine local environmental conditions as an intrinsic part of the investigation.

4 METHODOLOGY

All works were conducted in accordance with the procedural documents *The Management of Archaeological Projects* issued by English Heritage (1991), *Management of Research Projects in the Historic Environment (MoRPHE)* (EH 2006), the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Watching Brief* (2014a) and *Code of Conduct* (2014b). Where appropriate the research frameworks were borne in mind (Knight *et al* 2012).

With the exception of eight small, hand-dug test pits, the topsoil and non-structural post-medieval and later deposits were removed by a mechanical excavator to reveal significant archaeological remains or, where these were absent, the natural substrate. The character, composition and general depositional sequence of the site stratification was recorded on *pro-forma* sheets, with a unique context number being allocated to each distinct deposit and feature. All recording followed the guidelines detailed in the MOLA Northampton *Archaeological fieldwork manual* (2014b).

The groundwork areas were cleaned sufficiently to enable the identification and definition of archaeological features, if present.

A photographic record comprising black and white negatives and digital images was maintained.

All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive. All records and materials will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural document, *Management of Archaeological Projects 2* (1991)

Two areas of observation took place within the site in generally good weather conditions during February and March.

4.1 The eastern area

In the eastern part of the site close to eastern wall of the park (Figs 2-3), three trenches were excavated for the installation of electricity cables (T1-T3) and one trench for the installation of an electricity sub-station (T4). The electricity cable trenches (T1-3) and T6-7) were excavated using a mini 360° excavator fitted with a 0.3m toothed bucket. The electricity sub-station trench (T4) was excavated using a 360° mechanical excavator fitted with a 1m ditching bucket.

4.2 The access roads to the north of the Hall

On the access roads and grassed area to the north of the Hall, one trench for the construction of a temporary electricity sub-station (T5), four trenches for the installation of associated electricity cables (T6-9), and eight test-pits (TP1-8) were

excavated (Fig 2). The sub-station trench (T5) was excavated using a mechanical excavator fitted with a 1m ditching bucket, the electricity cable trenches (T6-9) were excavated using a 0.3m toothed bucket. The test pits (TP1-8) were excavated by hand. On one occasion during March, two of the electricity cable trenches (T8-9) were excavated without archaeological observation, though a limited photographic record was compiled by the ground work staff.

5 THE ARCHAEOLOGICAL EVIDENCE

5.1 The eastern area

In the eastern area of observation, the natural substrate in the four excavated trenches (T1-4) generally consisted of a mid orange-brown sand and sandy clay with small to large stones and was approximately 0.60m deep from the surface (103, 203, 303, 403). This was overlain by 0.25m thick layer of dark yellowish sandy loam subsoil (102, 202, 302, 402) above which was a 0.3m thick dark grey-brown sandy loam topsoil (101, 201, 301, 401).

Trenches 1, 2 and 3 were generally excavated to c0.6m below the surface. Trench 4 was excavated to approximately 0.8m below the surface (Fig 4). Trench 1 was excavated in order to locate an existing underground live electricity main. This was found on the floor of the trench at c0.6m below the surface, together with two other buried electricity cables, both of which were also encountered in the electricity sub-station trench (T4). No archaeological features were encountered in Trenches 1 and 3, however, in Trench 2, the remains of a badly damaged, brick-lined field drain of post-medieval date was noted in the base of the trench (Fig 5). The drain (204) consisted of un-mortared hand-made red bricks aligned north-west to south-east.



Trench 4, section looking east

Fig 4



Trench 2, possible brick-lined drain (204), looking south-east Fig 5

5.2 The access roads to the north of the Hall

A rectangular trench (T5) measuring 3.0m long by 1.5m wide by 0.8m deep was excavated for the installation of an electricity sub-station at a point 120m to the north of the Hall and 70m west of the former Lido pool (S2 and Fig 6). The natural substrate was a yellowish-brown sand with patches of orange and grey clay at c0.6 below the surface (503) and was overlain by a 0.25m deep, greyish-brown sandy clay loam with numerous small pebble inclusions (502), above which was a topsoil consisting of a 0.3m deep dark grey-brown sandy loam (501). No archaeology was encountered in this trench.

Eight small test pits (TP1-8) were dug by hand prior to the excavation of four machine-dug trenches T6-9 across the access roads.

Two hand-dug test pits (TP1 and TP2) were dug either side of the access road at a point 100m to the north of the former Lido. The test pits measured 0.6m by 0.6m and c0.45m deep. Both test pits were replaced at a later date by a machine dug trench (T6), aligned east-west, cutting across the line of the main access road, and was excavated to c0.9m below the surface of the road (Fig 7).



Trench 5, looking west

Fig 6



Trench 6, section looking north

Fig 7

Within Trench 6 the natural substrate was a mid-brown sandy clay (606) and was approximately 0.6m below the surface. This was overlain by a 0.25m deep layer of mid grey-brown sandy clay subsoil (605), above which was a 0.14 m deep layer of dark grey-brown gravel with brick and concrete fragments (604), this was overlain by a 0.1m deep layer of sandy gravel with frequent inclusions of small stones (602), above which were two layers of tarmac (601-2), a total of 0.12m deep. No archaeological features were noted in this trench.

Two small hand-dug test pits (TP3-TP4) were excavated either side of the east-west access road at a point 130m to the north of the Hall and 70m to the west of the former Lido pool. The test pits were completely removed at a later date by a machine-dug trench (T7), aligned north-south, and cutting across the east-west access road (Figs 8-9). The trench extended a further 10m southwards to join with the sub-station trench (T5). The natural substrate within the trench (705) consisted of an orange-brown clay with greyish sandy patches at a depth of approximately 0.65m below the road surface, this was overlain by a 0.21m deep layer of dark greyish-brown clay with gravel and building rubble inclusions (704) above which was a 0.2m deep layer of large stones (703) some of which were more than 0.3m in length. Above this was a 0.18m deep layer of gravel (702) which was overlain by a 0.07m deep layer of tarmac (701). No archaeology was observed in this trench apart from layers (704), (703) and (702) which may represent post-medieval road layers (Fig 8).

Two test-pits (TP5-TP6) were excavated by hand either side of the eastern approach road to the Hall at a location 70m to the north of the Hall. The test pits were each 0.5m square by 0.35m deep. In one test pit (TP5) a former buried topsoil was noted at the base of the trench which had been overlain by successive layers of modern roadmaking material (Fig 10). In the neighbouring test pit (TP6) the natural substrate of a yellowish-brown sandy clay was noted in the base of the trench, overlain by two thin layers of greyish-brown sandy loam, above which was a thin veneer of modern mortar and some topsoil (Fig 11). No archaeology was found in the test pits. Both test pits were completely removed during the excavation of Trench 8, aligned east to west, across the road, which was not observed.

Two test pits (TP7-TP8) were excavated by hand, either side of the eastern approach road at 20m to the north of the Hall. The test pits were each 0.5m square by 0.35m deep. Within the northernmost test pit (TP7) a mortar and crushed brick foundation, underlying the modern concrete road edge, was noted in the north facing section of the test pit (Fig 12). The stratigraphy below the dark brown loam topsoil consisted of three layers of sandy clay loam subsoil, the lowermost of which was mixed with brick rubble and pebbles. In the neighbouring test pit (TP8) two layers of sandy loam subsoil were noted. A sherd of modern "willow pattern" pottery was noted in this test pit. Both test pits were removed completely by the excavation of a narrow service trench (T9), which was aligned north to south, and was not observed.



Trench 7, section looking west Fig 8



Trench 7 looking south Fig 9



Test Pit 5, showing buried soil, looking west Fig 10



Test Pit 6, showing natural substrate, looking west Fig 11



Test Pit 7, showing mortar and brick foundation, looking south Fig 12

6 DISCUSSION

The possible brick-lined field drain noted in Trench 2 could be evidence of a 17th or 18th-century drainage system within the park. Within Trench 7, there was evidence for possible post-medieval or modern road surfacing layers. In Test Pit 7 the mortar and brick foundation may represent some form of kerb stone or edging to an earlier, possibly post-medieval or modern access road.

No archaeological artefacts or remains predating the post-medieval and modern periods were found during the trenching work within the development area.

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APPENDIX 1: CONTEXT INVENTORY

Trench No	Length, width & alignment			
1	6.0m x 1.0m NW - SE			
Context	Context type	Description	Dimensions	Artefacts/Samples
101	Layer	Dark grey-brown sandy loam with occasional small stone inclusions	0.3m thick	—
102	Layer	Dark yellowish sandy clay loam	0.25m thick	—
103	Layer	Natural mid orange-brown sand and sandy clay with occasional small to large flint inclusions.	More than 0.2m thick	—

Trench No	Length, width & alignment			
2	20m x 0.3m N - S			
Context	Context type	Description	Dimensions	Artefacts/Samples
201	Layer	Dark grey-brown sandy loam with occasional small stone inclusions	0.3m thick	—
202	Layer	Dark yellowish sandy clay loam	0.25m thick	—
203	Layer	Natural mid orange-brown sand and sandy clay with occasional small to large flint inclusions.	More than 0.2m thick	—
204	Structure	Brick-lined field drain?	0.2m wide by 0.2m deep	

Trench No	Length, width & alignment			
3	19m x 0.3m NE - SW			
Context	Context type	Description	Dimensions	Artefacts/Samples
301	Layer	Dark grey-brown sandy loam with a occasional small stone inclusions	0.3m thick	—
302	Layer	Dark yellowish sandy clay loam	0.25m thick	—
303	Layer	Natural mid orange-brown sand and sandy clay with occasional small to large flint inclusions.	More than 0.2m thick	—

Trench No	Length, width & alignment			
4	6.5m x 1.5m N - S			
Context	Context type	Description	Dimensions	Artefacts/Samples
401	Layer	Dark grey-brown sandy loam with a occasional small stone inclusions	0.3m thick	—
402	Layer	Dark yellowish sandy clay loam	0.25m thick	—
403	Layer	Natural mid orange-brown sand and sandy clay with occasional small to large flint inclusions.	More than 0.2m thick	—

Trench No	Length, width & alignment			
5	3m x 1.5m W - E			
Context	Context type	Description	Dimensions	Artefacts/Samples
501	Layer	Dark greyish-brown sandy loam with occasional small-medium flint pebbles	0.3m thick	—
502	Layer	Light brown sandy clay loam with frequent small-medium rounded pebbles	0.25m thick	—
503	Layer	Natural light yellowish brown sand with occasional lenses of orangey grey clay.	More than 0.25m thick	—

Trench No	Length, width & alignment			
6	10.5m x 0.3m E - W			
Context	Context type	Description	Dimensions	Artefacts/Samples
601	Layer	Light grey tarmac	0.07m thick	—
602	Layer	Dark grey tarmac	0.05m thick	—
603	Layer	Light greyish brown sandy gravel with frequent stone inclusions	0.1m thick	—
604	Layer	Dark brownish-grey gravel with large stones and rounded sub-angular brick and concrete fragments	0.14m thick	—
605	Layer	Mid greyish brown sandy clay with occasional small stone inclusions	0.25m thick	—
606	Layer	Natural mid-brown sandy clay	More than 0.3m thick	—

Trench No	Length, width & alignment			
7	15.5m 0.3m N - S			
Context	Context type	Description	Dimensions	Artefacts/Samples
701	Layer	Tarmac	0.07m thick	—
702	Layer	Small stone gravel	0.18m thick	—
703	Layer	Large limestone fragments	0.2m thick	—
704	Layer	Dark brown silty clay with occasional small stone gravel and rubble fragments	0.21m thick	—
705	Layer	Natural orange clay	More than 0.3m thick	—



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