

# GOOSHAYS ROAD, HAROLD HILL, ROMFORD

Archaeological Evaluation

commissioned by Persimmon homes

August 2013





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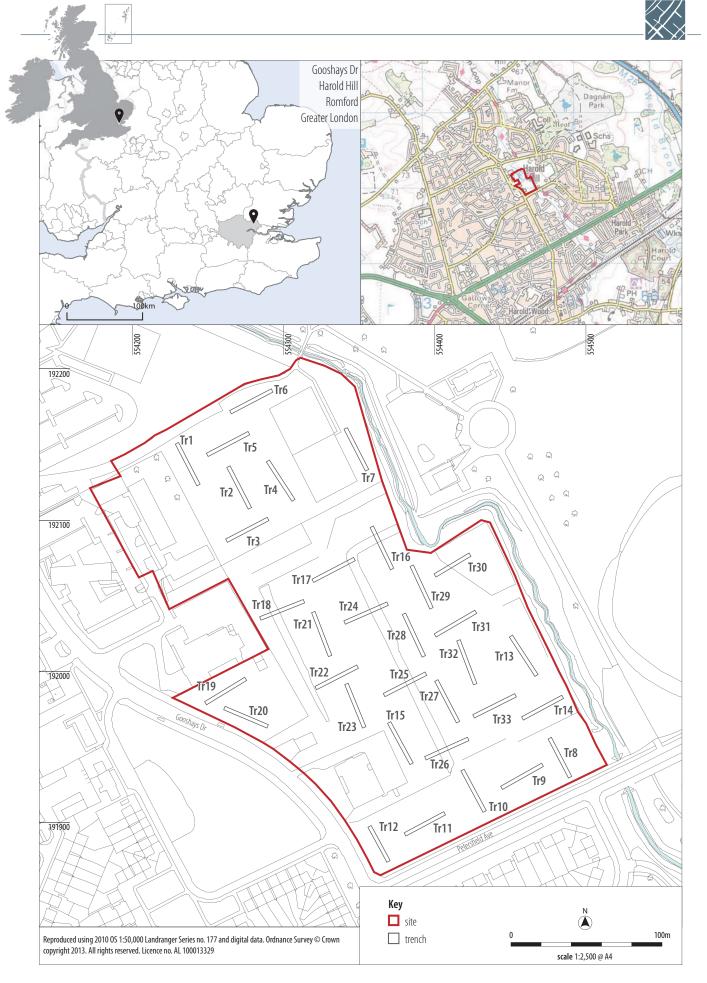
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**Illus 1** *Site location* 

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# GOOSHAYS ROAD, HAROLD HILL, ROMFORD

### Archaeological Evaluation

Headland Archaeology Ltd conducted an evaluation at a proposed development site on Gooshays Drive, Harold Hill, Romford, in order to provide further information on the archaeological potential of the site. The work was commissioned by Persimmon Homes. A total of thirty-three trenches were excavated over the Development Area (DA) which revealed locally significant remains associated with the 17th century manor of Gooshays and the subsequent Georgian farm. These comprised brick-built culverts, truncated ditches, damaged remains of fish ponds and the footings of a 19th century farm building.

#### 1 INTRODUCTION

#### 1.1 PLANNING BACKGROUND

Havering Borough Council have granted permission (P1451.10) for residential development on land at Gooshays Drive, Harold Hill, Romford (*Illus 1*) henceforth referred to as the Development Area (DA). Due to the archaeological interest of the DA, Greater London Archaeological Advisory Service (GLAAS) advised that a condition relating to archaeology should be attached to the permission. The condition stated that:

23. Archaeology Prior to the commencement of any phase of development a programme of archaeological field evaluation and survey shall be undertaken, in accordance with a written scheme of investigation which shall previously be submitted to and approved by the Local Planning Authority. The results of the field evaluation shall inform a mitigation strategy to either conserve archaeological assets or ensure their recording prior to development. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Local Planning Authority and the development carried out in accordance with the mitigation strategy.

Reason: Important archaeological remains may exist on this site and the provision of archaeological evaluation must be secured to inform the determination of any detailed planning consent and to accord with the provisions of Policy DC70 of the LDF Core Strategy and Development Control Policies Development Plan Document.

Persimmon Homes (the client) commissioned a programme of archaeological trial trenching and a report on the results. This report documents the final findings of two phases of archaeological trial trenching carried out within the DA.

#### 1.2 SITE LOCATION AND BACKGROUND

The DA is located to the north east of Romford in an area known as Harold Hill and comprises football pitches and informal open spaces. It is bounded to the south by Petersfield Avenue and to the west by Gooshays Drive with housing beyond. The eastern boundary is formed by Paines Brook, whilst mature trees form the northern boundary with the remainder of Central Park beyond including the Ardleigh Green Cricket Club ground to the east.

The solid geology comprises largely of London clay formations (<u>www.bgs.ac.uk</u>) overlain by a restricted area of overlying alluvium within the eastern part of the site, adjacent to Paines Brook.

#### 1.3 Archaeological background

The archaeological background is covered in detail in the Cultural Heritage Assessment (Cotswold 2010).

A single Bronze Age axe found during groundworks at the Community Centre to the west of the DA is the only evidence of prehistoric activity in the vicinity. The London to Colchester Roman road passes within 800m to the south of the site, but no other Roman activity is known in the immediate vicinity.

Prior to trial trenching the greatest potential for archaeological remains was considered to relate to the medieval and post-medieval manor house of Gooshays, which is thought to have been located on the western edge of the DA on the site of the extant community centre (Cotswold 2010).

The medieval manor was replaced in the 17th century by a new manor building which was in turn replaced by a Georgian farmhouse. Associated remains principally comprise a group of U-shaped



fishponds in the eastern part of the DA along Paines brook (clearly visible on historic mapping). The ponds are likely to have been part of the medieval or 17th century manor, although they may also have been in use during the Georgian farm phase. Terraces and trackways shown on the 1st edition Ordnance Survey map are also likely to relate to the 17th century manor.

The 17th Century manor was recorded in Morant's History of Essex of 1768 as being mostly pulled down. Indeed, by 1800, the foundations of the 17th century manor, the fishponds and terracing were apparently all that remained (Lingham 1969). The demolition recorded in 1768 corresponds with a late 18th century build date for the farm house which is likely to represent the structure shown on the 1777 Chapman and André map of Essex.

Recent aerial images indicate that prior to 1981, the fishponds were still visible on the surface, their edges marked by mature trees and vegetation. At this time, the southern part of the DA contained structures forming part of an apparent storage yard which extend into the central part of the DA. All of these features have been demolished in recent years to level the site to its current form (Cotswolds 2010).

The Cultural Heritage Assessment also considered there is a further potential for archaeological and palaeo-environmental remains within the alluvial deposits of the Paines Brook along the eastern boundaries of the DA.

#### 2 2. METHODOLOGY

#### 2.1 OBJECTIVES

In general the objectives of the evaluation are presented in the WSI (Headland Archaeology 2013, Section 4).

The specific objectives of the evaluation were:

- Establishing the presence or absence of archaeological remains within the proposed application site. In particular any evidence associated with the medieval Manor of Gooshays or later phases as well as determining the presence/absence and preservation of alluvial deposits.
- Determining the nature, extent, condition, date, character, quality, significance and state of preservation of any archaeological features and deposits affected by the proposed development.
- Assessing the ecofactual and palaeo-environmental potential of archaeological deposits and features within the site and to take samples where deemed appropriate.

#### 2.2 METHODOLOGY

Fieldwork took place in two phases; Phase 1 between the 21st and 30th January 2013 and Phase 2 between 9th and 15th July 2013. A total of thirty-three 30m by 2.0m trenches were excavated (*Illus* 1). Trenches were laid out in order to determine the presence or absence of archaeological remains within the DA.

The trenches were opened down to the top of alluvial deposits whereupon a sondage was dug to establish the depth of the alluvium and to asses if sampling of these deposits was required

#### 2.3 RECORDING

All recording was in accordance with the code of practice of the Institute for Archaeologists (IfA). All trenches and contexts were given unique numbers and all recording was undertaken on pro forma record cards that conform to accepted archaeological standards. All stratigraphic relationships were recorded.

An overall site plan at an appropriate scale and relative to the National Grid was recorded by digital survey using a differential GPS.

A full photographic record comprising colour slide and black and white print photographs was taken, supplemented with digital photography. A metric scale was clearly visible in record photographs of contexts.

#### 3 RESULTS

#### 3.1 Introduction

Full trench descriptions, including orientation, length and depth of overburden are presented in Appendix 1.1. Technical details of individual contexts are presented in Appendix 1.2. Context numbers are expressed according to the trench in which they were found; i.e. Trench 1 - [100], [101]; Trench 2, [200], [201] etc. Cut features are shown as [100] and the deposits within them are expressed as (102). The results are described in chronological order and feature type.

#### 3.1.1 ALLUVIAL DEPOSITS

Alluvial deposits consisting of yellow brown silty clays and gravels were recorded across the DA. These were investigated by machine dug sondages which revealed varying depths of between 0.30-0.80m. The alluvium was revealed to be deepest at the NW end of the DA and the shallowest in the SW corner. The difference in these deposits suggests that the Northern part of the DA represents the least disturbed area with other areas having been terraced or reduced during post-medieval and modern landscaping and construction.

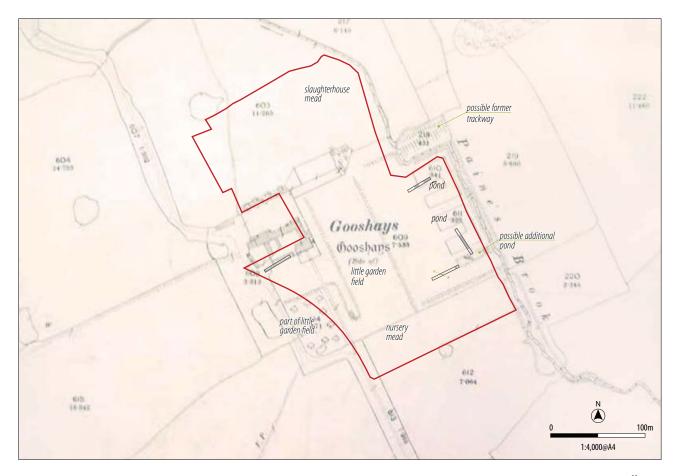
#### 3.1.2 THE NORTHERN AREA – TRENCHES 1–7

In the northernmost Trenches (1–7) (*Illus 2*), topsoil deposits up to 0.38m in depth overlay deposits of subsoil up to 0.20m in depth which in turn overlay alluvial deposits consisting of silty clays and gravels. These alluvial deposits were subsequently investigated by machine dug sondage and found to be up to 0.80m in depth. No archaeological features were present in these trenches.

#### 3.1.3 THE SOUTHERN AREA – TRENCHES 8–12

This area contained deposits of topsoil up to 0.23m in depth overlaying layers of made ground with total depths up to 0.85m. Layers of tarmac were also identified in Trenches 10–12 between the topsoil and made ground. Alluvium directly underlay the made ground and was recorded between 0.30–0.65m in thickness, increasing from west to east. The absence of buried topsoil and subsoil above the alluvium indicate that the southern area has been truncated, possibly during construction of Gooshays Drive in the





Illus 3

Trench plan superimposed onto extract from 2nd edn OS map of 1896, showing field names recorded on 1919 Sales Particular

post-war period and subsequent clearance of the storage yard in the 1980s. The made ground deposits are also likely to be associated with these clearance works. A small number of brick and tile built drains were recorded in the trenches. Assessment of brick samples taken from the drains shows they are modern in date.

Several amorphous anomalies of blue silty clay were also investigated by machine in Trenches 10–12 (1006) (*Illus 4*), (1102) and (1203) (*Illus 4*). They were found to be identical in depth and geological constitution to the surrounding alluvial deposits with both resting on the underlying London Clay. They contained no finds and are considered to be natural variations in the alluvium.

#### 3.1.4 THE CENTRAL AREA - TRENCHES 13-33

Trenches 13–33, located around the current football pitches in the central part of the DA contained topsoil deposits (001) up to 0.3m in depth which in turn overlay a layer of made ground (003) up to 0.2m thick (*Illus 21*). This layer was truncated by modern plastic drainage pipes and is likely to relate to modern levelling of the site for the creation of the football pitches. Below the made ground, a 0.5m-thick layer of silty brown grey clay was revealed. It contained fragments of brick and tile and was truncated by modern ceramic land drains. It is thought that this layer also represents made ground associated with levelling of the site prior to the construction of the football pitches (002 – *Illus 21*). This deposit in turn overlay 0.65m

thick alluvial deposits similar to those seen to the northern and southern areas.

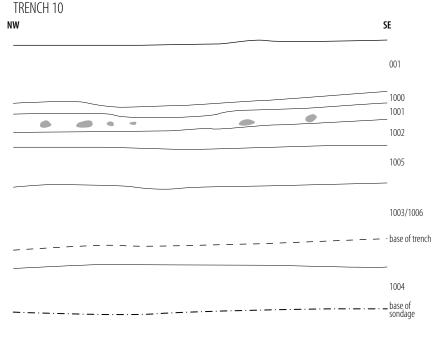
#### 3.2 Post-medieval terracing development

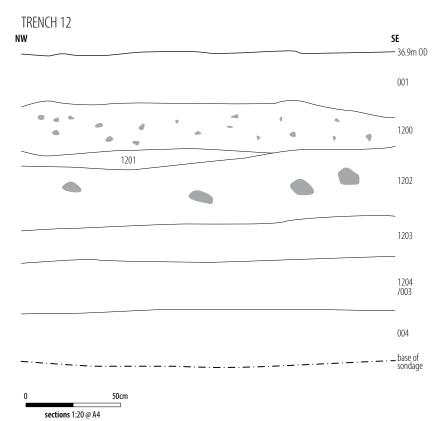
Terracing of the site is shown from the 2nd edition Ordnance Survey map of 1896 onwards (*Illus 3*). This terracing is likely to have formed part of the formal landscape surrounding the 17th century manor and Georgian farm. Historic maps also show the location of the fish ponds on the eastern side of the DA adjacent to Paines Brook, a track running along the northern terraces and a possible boundary feature obscured by a tree line at the southern part of the DA. The terracing is shown on a NW-SE/NE-SW alignment which dictated the layout of subsequent uses of the sites, including the extant football pitches.

#### 3.3 Drains and culverts

A number of brick and tile built drains were recorded cutting into the alluvial deposits in Trenches 8, [800 and 802], 10 [1003], 15 [1501, 1503], 16 [1600, 1604], 22 [2202], 27 [2700], 28 [2800], 31 [3100, 3102], 32 [3200] and 33 [3302]. They measured 0.30m in width and comprised one or two courses of modern, unfrogged brick (measuring 230x100x70mm) lying on a single course of tile, with no mortar. All were sealed by the overlying deposit of grey brown silty clay made ground (002 – *Illus 21*).







Two culverts with arched roofs were recorded [2200] (*Illus 11 & 12*) and [2500] (*Illus 14*), which, like the drains, were sealed by made ground. The culverts measured 0.55m in height and 0.5m in width and were aligned respectively NE-SW and NW-SE. They were made of at least 8 courses of unfrogged bricks measuring 215x104x65mm. Given the absence of a culvert in Trenches 28 and 24 it is possible that [2200] is the same as {2500], having changed alignment between the two areas. Their alignments follow the layout of the terraced ground shown on the 1896 2nd Edition Ordnance Survey map. This

#### Illus 4

Sections of sondages in Trenches 10 and 12 36.28m OD

and their modern brick construction indicates that they are contemporary with or post-date the creation of the terracing which is likely to be associated with the post-medieval manor and/or Georgian farm (*Illus 3*).

#### 3.4 FISH PONDS

A large feature in Trench 13 [1301] (*Illus 5*) was recorded in the location of one of the fish ponds associated with the 17th Century and Georgian phases of the manor/farm (*Illus 3*). It measured 16.0m in width with a depth up to 1.8m. Machining of the feature revealed evidence of tipping (1302) and deliberate backfilling (1303) containing large concrete blocks, modern bricks, and a lower deposit of sands and gravels (1304) which also contained fragments of modern brick and tile.

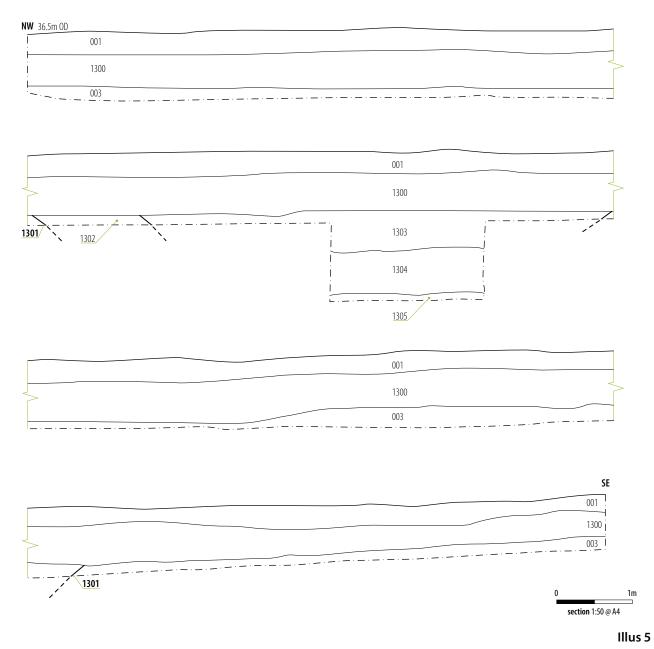
Further evidence of the fishponds was found in Trenches 30 [3000] (*Illus 13*) and 33 [3300]. Both were found to have been previously damaged (probably during levelling of the site) and backfilled with various deposits of modern rubble including brick, wood and concrete with depths up to 2.6m. The lack of structural remains or lining within the ponds and the nature of their fills suggest they have been previously demolished and the subsequent hole filled in. It is likely this had taken place by 1946 when aerial photographs indicate they had been filled in and were being colonized by trees and shrubs (Cotswold 2010, Figure 11).

#### 3.5 DITCHES

Three broadly NE-SW aligned linear features [1400] (*Illus 6*), [1602] and [2100] were identified across the central part of the DA. Ditch [1400] measured 30.0m in length and up to 1.2m of its width was exposed in the trench. It had a depth of 0.27m and filled with silty brown grey clay (1401) which contained small fragments of undated CBM were recovered. [1602] and [2100] were similar in size and character to

[1400]. Ditch [1602] also contained fragments of CBM whereas [1400] was devoid of finds.

The form and character of the ditches indicates they are likely to represent field boundaries possibly associated with the agricultural phase of the site from the Georgian period onward. Indeed their alignment, with the terracing indicates they are associated with or follow the 17th and 18th century layout. The location of ditch [1400] suggests it may be the remains of an NE-SW aligned feature visible on the 2nd edition OS map



Section of Trench 13

of 1896. Although the CBM from their fills is itself generic and undatable, it is most likely to originate from nearby demolished buildings, the only evidence for which are is the 19th century structure within Trench 19 (Section 3.6) and the brick built culverts. This would fit with the ditches being broadly contemporary with the farm.

#### 3.6 FARM BUILDING

A series of walls relating to the old farm house shown on aerial photographs and historic maps were recorded in Trench 19 (1900, 1902, 1903, 1904). The walls were made of up to 3 courses of modern, frogged bricks and measured between 0.4–0.6m in width. They were overlain by topsoil up to 0.23m thick and cut into the brown silty clay up to 0.4m thick (*Illus 15*). Demolition deposits (1901) were also recorded between the walls, probably resulting from the clearance of the building in the 1980s.

Although the Chapman and André Map of Essex shows buildings in this general area in 1777, there do not appear to be buildings within the footprint of Trench 19. The first clear map reference to such a building is the 1832 Map of the Liberty of Havering-atte-Bower. The walls identified in Trench 19 broadly match the alignment of that building and the bricks used in its construction are consistent with a 19th century date.

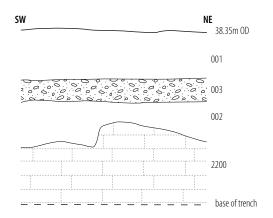
# 3.7 Description of the significance of the Heritage Assets

Remains within the DA have been divided into Heritage Assets (HA) and assigned significance (outlined in *Table 1*) with respect to the following research agendas.











section 1:20 @ A4

Illus 11

SE facing section of Trench 22

## Illus 12

Culvert [2200] looking NW

#### Illus 13

Section of sondage through Fishpond [3000] Looking NE

#### Illus 14

Culvert [2500] looking NW

# Illus 15

Trench 19 showing wall [1900]











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Relevant regional research frameworks comprise Research and Archaeology Revisited: A revised framework for the East of England (Medlycott 2011)

'The large number of post-medieval sites recorded by the NMP represents a substantial body of data. There is huge potential for further research into topics such as field systems, enclosures, roads and trackways or parks and gardens, in particular utilising historic maps and documents.'

**Table 1**Significance of Heritage Assets (HA)

Description of HA	Trench	Feature no/s	Significance of heritage asset on Local, Regional, National, International scale
Known remains			
Fish Ponds (HA1)	13, 30 & 33	1301, 3000, 3300	Local
Boundary ditches (HA2)	14, 16 & 21	1400, 1602, 2100	Local
Farm building (HA3)	19	1900, 1902, 1903, 1904	Local
Culverts (HA4)	22 & 25	2200, 2500	Local

#### 4 FINDS ASSESSMENT

#### 4.1 FINDS

by Julie Franklin

The finds assemblage numbered three fragments of ceramic building material (CBM), possibly brick or tile. Both are of a similar red well fired fabric. They cannot be accurately dated and could be of any age from Roman to modern. However, given the proximity of a post-medieval and modern farm and its subsequent demolition, it is likely that they relate to structures belonging to one of these complexes. This may also indicate that the ditches containing the CBM were likely backfilled following the demolition of the buildings in the modern era.

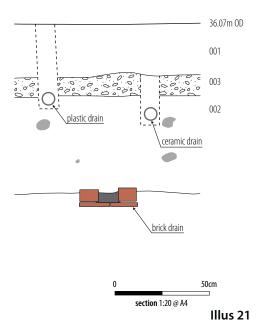
**Table 2** *Finds catalogue* 

Context	Material	0bject	Qty	Weight (g)	Description	Period
1401	CBM	Brick/Tile	2	11	fragments, red well fired fabric, flint inclusion	Medi/PM?
1603	CBM	Brick/Tile	1	8	fragment, red well fired fabric	Medi/PM?

#### 5 DISCUSSION

Trenching did not reveal any remains relating to the medieval manor of Gooshays, nor did it reveal any evidence of the trackway shown on historic mapping. Limited evidence associated with the postmedieval manor and Georgian farm was identified. These comprised

#### REPRESENTATIVE SECTION



Representative section showing overburden on site and drainage

the heavily damaged remains of the fish ponds (HA1), backfilled field/drainage ditches probably associated with the Georgian farm (HA2), the footings of a 19th century element of the farm buildings (HA3) and a number of post-medieval/modern brick-built culverts (HA4). All are considered to be of local significance.

#### 5.1 THE NORTHERN AREA

Trial trenching in this phase has revealed that the northern part of the DA (Trenches 1–7) is covered by relatively undisturbed alluvial deposits associated with Paines Brook. However, no archaeological remains were revealed in this part of the DA and its potential is considered to be negligible.

#### 5.2 THE SOUTHERN AREA

The southern part of the DA (Trenches 8–12) has been heavily disturbed in the modern era following the clearance of buildings shown on aerial images from 1981 (Cotswolds 2010). This is evinced by the absence of subsoil, presence of thick modern overburden, particularly in the Trenches 10–12. The truncation, and lack of significant archaeological features indicates that potential in this part of the DA is negligible.

#### 5.3 THE CENTRAL AREA

Trial trenching revealed an absence of subsoil within the central part of the DA. This indicates that the land within it has also been truncated to an unknown extent through a sequence of landscaping events in the post-medieval and modern eras. The earliest traceable event is the terracing shown on the 1896 2nd edition Ordnance Survey map. This work is likely to have been part of the formal landscape surrounding the 17th-century manor of Gooshays and/



or the subsequent Georgian farm. The extant layout results from a second phase of landscaping which involved the demolition of the farm (which appears to have stood as late as 1981 – Cotswold 2010, Figure 12) and the introduction of made ground, containing demolition material across the central pert of the DA. If any medieval remains were present within the DA, they are likely to have been removed by these processes. However, it is also possible that any such remains would have been located outside the DA, probably on the site of the post-medieval manor. As such, the truncation, and lack of significant archaeological features indicates that potential in this part of the DA is also negligible.

# **5.4** Assessment of the impact of development on the significance of heritage assets

The change of use of the DA will be from football pitches and grassland to housing. Heritage Assets (HA1–HA4) are located within the DA between 0.40–0.80m below current ground level. Groundworks for the proposed development and levelling of the site could impact these remains depending on the depth of such works. In the case of the fishpond (HA1) the existing damage is such that little of the original structure survives – any impacts through development are likely to be within the modern backfilled deposits which lie between 0.75m, and 1.85m below present ground level. In the case of the remaining assets, (HA2-HA4) they are modern in date, are of limited significance and further excavation of these is unlikely to contribute any further information to our understanding of the site.

#### 6 REFERENCES

#### 6.1 BIBLIOGRAPHY

- British Geological Survey (Website) www.bgs.ac.uk accessed 22.07.12.
- Cotswold Archaeology 2010, Gooshays Drive, Havering, Greater London: Cultural Heritage Assessment. CA Report: 10056
- English Heritage 2007 **Geoarchaeology: Using earth sciences to understanding the archaeological record.**
- English Heritage 2011 *Moats, ponds and ornamental lakes in the historic environment.*
- Lingham, B Fm 1969 *The History of Harold hill and Noak Hill,* Harold Hill Library.
- Medlycott, M 2011 Research and archaeology Revisited: A revised framework for the east of England.
- Museum of London 2002 A Research framework for London Archaeology.

7	APPEN	NDICE	S		Trench	Orientation	Length (m)	Description	Min Depth of archaeology (m)
APPEN		ITE REGI			13	NW-SE	30.6	0-0.24m topsoil; 0.24-0.90m made ground deposits; 0.90m+ alluvial clays and gravels	0.9
Trench			Description	Min Depth of archaeology (m)	14	SW-NE	29.8	0-0.18m topsoil; 0.18-0.4m made ground deposits; 0.4m+ alluvial clays and gravels	0.4
1	NW-SE	30.2	0-0.19m topsoil; 0.19-0.31m light grey brown clay subsoil; 0.31-1.25m alluvial clays and gravels; 1.25m+ London clay	0.31	15	NW-SE	30.4	0-0.29m topsoil; 0.29-0.49m made ground; 0.49-1.4m alluvial clays and gravels; 1.40m+ London clay	0.49
2	NW-SE	30.9	0-0.21m topsoil; 0.21-0.41m light grey brown clay subsoil; 0.41m+ alluvial clays and gravels	0.41	16	NW-SE	29.2	0-0.15m topsoil; 0.15-0.4m light grey brown silty clay subsoil; 0.4-1.15m alluvial clays and gravels; 1.15m+ London clay	0.4
3	SW-NE	30.3	0-0.3m topsoil; 0.3-0.48m light grey brown clay subsoil; 0.48m+ alluvial clays and gravels	0.48	17	SW-NE	30.3	0-0.29m topsoil; 0.29-0.49m light grey brown clay subsoil; 0.49-0.90m alluvial clays and gravels; 0.90m+ London clay	0.49
4	NW-SE	30	0-0.27m topsoil; 0.27-0.45m light grey brown clay subsoil; 0.45m+ alluvial clays and gravels		18	SW-NE	30.1	0-0.30m topsoil; 0.3-0.6m made ground; 0.6-0.96m grey brown silty clay subsoil; 0.96m + alluvial clays and gravels	0.96
5	SW-NE	30.9	0-0.23m topsoil; 0.23-0.4m light grey brown clay subsoil; 0.4-1.30m alluvial clays and gravels; 1.30m+ London clay	0.4	19	SW-NE	30	0-0.2m topsoil; 0.2-0.34m made ground; 0.34-0.65m subsoil; 0.65m+ alluvial clay	0.65
6	SW-NE	30.9	0-0.19m topsoil; 0.19-0.33m light grey brown clay subsoil; 0.33m+ alluvial clays and gravels	0.33	20	NW-SE	30.2	0-0.3m topsoil; 0.3-0.71m made ground; 0.71m + alluvial day	0.71
7	NW-SE	29.7	0-0.38m topsoil; 0.38-0.56m light grey brown clay subsoil; 0.56-1.35m alluvial clays and gravels; 1.35m+ London clay	0.56	21	NW-SE	30.3	0-0.24m topsoil; 0.24-0.56m made ground; 0.56-0.85m subsoil; 0.85m+alluvial clay	0.85
8	NW-SE	28.7	0-0.33m topsoil; 0.33-0.45m made ground; 0.45-1.06m+ alluvial clays and gravels; 1.06m+ London clay	0.45	22	SW-NE	30.1	0-0.24m topsoil; 0.24-0.58m made ground; 0.58-0.9m subsoil; 0.9m+ alluvial clay	0.9
9	SW-NE	30.1	0-0.25m topsoil; 0.25-0.43m made ground; 0.43-1.20m alluvial clays and gravels; 1.20m+ London clay	0.43	23	NW-SE	30	0-0.27m topsoil; 0.27-0.68m subsoil; 0.68m+ alluvial days	0.68
10	NW-SE	30	0-0.30m topsoil; 0.30-0.35m tarmac; 0.35-0.77m various deposits of made ground 0.77-1.15m alluvial clays and gravels including (1006); 1.15m+London clay	0.77	24	SW-NE	29.9	0-0.20m topsoil; 0.20-0.36m made ground; 0.36-0.76m subsoil; 0.76m+ alluvial clays	0.76
11	SW-NE	30.4	0-0.34m topsoil; 0.34-0.39m tarmac; 0.39-0.68m made ground 0.68-1.05m alluvial clays and gravels including	0.68	25	SW-NE	30.1	0-0.24m topsoil; 0.24-0.42m made ground; 0.42-0.85m subsoil; 0.85m+alluvial clays	0.85
12	NW-SE	25.9	(1102); 1.05m+ London day  0-0.18 (0.30)m topsoil; 0.30-1.1m made ground deposits; 1.1-1.3m+ alluvial days and gravels including (1204); 1.3m+ London day	1.1	26	SW-NE	30.2	0-0.25m topsoil; 0.25-0.41m made ground; 0.41-0.81m subsoil; 0.81m+ alluvial days	0.71



Trench	Orientation	Length (m)	Description	Min Depth of archaeology	Context	Area	Description
		(111)		(m)	1006	Tr10	Blue alluvial deposit
27 N	NW-SE	30.1	0-0.27m topsoil; 0.27-0.37m made ground; 0.37-0.77m subsoil; 0.77m+	0.77	1100	Tr11	Tarmac
			alluvial clays		1101	Tr11	Made ground
28	NW-SE	30	0-0.25m topsoil; 0.25-0.4m made ground; 0.4-0.81m subsoil; 0.81m+alluvial clays	0.81	1102	Tr11	Blue alluvial deposit
9	NW-SE	30.1	0-0.25m topsoil; 0.25-0.41m made	0.76	1200	Tr12	Made ground
			ground; 0.41–0.76m subsoil; 0.76m+ alluvial clays		1201	Tr12	Made ground
			·		1202	Tr12	Made ground
30	SW-NE	26.6	0-0.3m topsoil; 0.3-0.76m subsoil; 0.76m+ alluvial clays	0.76	1203	Tr12	Made ground
			,		1204	Tr12	Blue alluvial deposit
31	SW-NE	30.1	0-0.3m topsoil; 0.3-0.62m made	1.02			
			ground; 0.62–1.02m subsoil; 1.02m+ alluvial clays		1300	Tr13	Made ground
າາ	NIM/ CF	20.2	·	0.70	1301	Tr13	Cut of fish pond
32	NW-SE	30.3	0-0.25m topsoil; 0.25-0.38m made ground; 0.38-0.78m subsoil; 0.78m+	0.78	1302	Tr13	Tip line of fish pond containing metal and brick
			alluvial clays		1303	Tr13	Backfill of fishpond containing brick, tile and metal
33 SW-N	SW_NE	30.1	0-0.24m topsoil; 0.24-0.43m made	0.79	1304	Tr13	Gravel backfill of fishpond
	JVV IVL						
,5	JVV IVE		ground; 0.42–0.79m subsoil; 0.79m+alluvial clavs		1305	Tr13	Clay at base of sondage
33	JVV IVE		ground; 0.42-0.79m subsoil; 0.79m+ alluvial clays		1305 1306	Tr13 Tr13	Clay at base of sondage Clay to south of backfill
			alluvial clays				
APPENI	ых <b>1.2</b> С	CONTEXT					
APPENII ontext	DIX <b>1.2 C</b> Area D	CONTEXT	alluvial clays		1306	Tr13	Clay to south of backfill
APPENI ontext	DIX 1.2 C Area D Site To	CONTEXT escription	alluvial clays  REGISTER		1306 1400	Tr13	Clay to south of backfill  Cut of ditch
PPENE pntext 11	DIX 1.2 C Area D Site To Site M	CONTEXT escription psoil odern subso	alluvial clays  REGISTER		1306 1400	Tr13	Clay to south of backfill  Cut of ditch
PPENE ontext 01 02	Area Do Site M Site Al	CONTEXT escription psoil odern subso luvial clays	alluvial clays  REGISTER		1306 1400 1401	Tr13 Tr14 Tr14	Clay to south of backfill  Cut of ditch  Fill of ditch [1401]
<b>DONTEXT</b> 101  102  103  104	Area Doi: Site Modern All Site Lo	CONTEXT escription apsoil odern subso lluvial clays andon clay	alluvial days  REGISTER		1306 1400 1401 1500	Tr13 Tr14 Tr14 Tr15	Clay to south of backfill  Cut of ditch  Fill of ditch [1401]  Made ground
	Area Doi: Site Modern All Site Lo	CONTEXT escription psoil odern subso luvial clays	alluvial days  REGISTER		1306 1400 1401 1500 1501	Tr13 Tr14 Tr14 Tr15 Tr15	Clay to south of backfill  Cut of ditch Fill of ditch [1401]  Made ground Cut of drain
ntext 1011 1022 1033 1044 1055	Site M Site Lc Site M	context escription spsoil lodern subso lluvial clays ondon clay lodern made	alluvial days  REGISTER		1306 1400 1401 1500 1501 1502	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Site M Site Lc Site M Tr8 Cc	<b>CONTEXT escription</b> upsoil  odern subso  lluvial clays  ondon clay  lodern made	alluvial days  REGISTER  iil		1306 1400 1401 1500 1501 1502 1503	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15	Clay to south of backfill  Cut of ditch Fill of ditch [1401]  Made ground Cut of drain  Brick drain Cut of drain
D1	Site M Site Lc Site M Tr8 GL Tr8 Br	escription psoil odern subso prodon clay odern made ut of drain rick built drai	alluvial days  REGISTER  iil		1306 1400 1401 1500 1501 1502 1503	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15	Clay to south of backfill  Cut of ditch  Fill of ditch [1401]  Made ground  Cut of drain  Brick drain  Cut of drain
DITECT 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Site M Site Lc Site M Tr8 CL Tr8 CL	escription  apsoil  ap	alluvial days  REGISTER  iil		1306 1400 1401 1500 1501 1502 1503 1504	Tr13 Tr14 Tr15 Tr15 Tr15 Tr15 Tr15	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Brick drain
DITECT 101 101 101 101 101 101 101 101 101 10	Site M Site Lc Site M Tr8 CL Tr8 CL	escription psoil odern subso prodon clay odern made ut of drain rick built drai	alluvial days  REGISTER  iil		1306 1400 1401 1500 1501 1502 1503 1504	Tr13 Tr14 Tr15 Tr15 Tr15 Tr15 Tr15 Tr15	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of drain
11 12 13 14 15 15 10 10 11 12 12 13 13 14 15 15 10 10 11 12 13 13 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Site M Site Lc Site M Tr8 CL Tr8 Br Tr8 CL Tr8 Br	escription  appoil  odern subso  lluvial clays  ondon clay  odern made  ut of drain  rick built drain  rick built drain	alluvial days  REGISTER  iil		1306 1400 1401 1500 1501 1502 1503 1504 1600 1601	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of drain Brick drain
DITECT 101 101 101 101 101 101 101 101 101 10	Site M Site Lc Site M Tr8 CL Tr8 Br Tr8 CL Tr8 Br	escription  psoil  odern subso  lluvial clays  ondon clay  iodern made  ut of drain  rick built drai  ut of drain	alluvial days  REGISTER  iil		1306  1400  1401  1500  1501  1502  1503  1504  1600  1601  1602	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of drain
DITECT 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Site M Site AI Site Lc Site M Tr8 CL Tr8 Br Tr10 Ta Tr10 M	escription  spsoil  lodern subso  luvial clays  ondon clay  odern made  ut of drain  rick built drai  ut of drain  rick built drai	alluvial days  REGISTER  iil  n		1306  1400  1401  1500  1501  1502  1503  1504  1600  1601  1602  1603	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of drain Cut of drain Cut of drain Cut of drain Grey silty fill of linear [1602]
DITECT 1000 1000 1000 1000 1000 1000 1000 10	Area Dick 1.2 C Area Dick 1.2 C Site To Site Al Site Local Site Modern M	escription  spsoil  lodern subso  lluvial clays  ondon clay  lodern made  ut of drain  rick built drai  ut of drain  rick built drai	alluvial days  REGISTER  iil  n		1306  1400  1401  1500  1501  1502  1503  1504  1600  1601  1602  1603  1604	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16 Tr16 Tr16 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of Inear feature Grey silty fill of linear [1602] Cut of drain
Intext 111 122 133 144 155 150 100 101 1002 1003	Site Al Site Al Site Al Site Al Tr8 Br Tr8 Cu Tr8 Br Tr10 Tr10 Mr Tr10 Mr Tr10 Cu	context escription upsoil odern subso lluvial clays ondon clay tof drain rick built drain	alluvial days  REGISTER  iil  n		1306  1400  1401  1500  1501  1502  1503  1504  1600  1601  1602  1603  1604	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16 Tr16 Tr16 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain Cut of Inear feature Grey silty fill of linear [1602] Cut of drain
PPENII 11 12 13 14 15 10 11 12 13 10 10 10 10 10 10 10 10 10 10 10 10 10	Site M Site AI Site Lc Site M Tr8 Cc Tr8 Br Tr10 Ta Tr10 M Tr10 M Tr10 Cc Tr10 Pi	escription  spsoil  lodern subso  lluvial clays  ondon clay  lodern made  ut of drain  rick built drai  ut of drain  rick built drai	REGISTER  il  n		1306  1400  1401  1500  1501  1502  1503  1504  1600  1601  1602  1603  1604  1605	Tr13 Tr14 Tr14 Tr15 Tr15 Tr15 Tr15 Tr16 Tr16 Tr16 Tr16 Tr16 Tr16 Tr16	Cut of ditch Fill of ditch [1401]  Made ground Cut of drain Brick drain Cut of drain Brick drain  Cut of drain Cut of drain Brick drain Cut of drain Brick drain Cut of drain Brick drain Cut of linear [1602] Cut of drain Brick drain

Context	Area	Description
1902	Tr19	Wall
1903	Tr19	Wall
1904	Tr19	Wall
2100	Tr21	Cut of ditch
2101	Tr21	Fill of [2100]
2200	Tr22	Cut of culvert
2201	Tr22	Brickwork of culvert
2202	Tr22	Cut of drain
2203	Tr22	Brick drain
2500	Tr25	Cut of culvert
2501	Tr25	Brickwork of culvert
2700	Tr27	Cut of drain
2701	Tr27	Brick drain
2800	Tr28	Cut of drain
2801	Tr28	Brick drain
3000	Tr30	Cut of fishpond
3001	Tr30	Base deposit with concrete (Modern)
3002	Tr30	Modern backfill
3003	Tr30	Modern backfill
3100	Tr31	Cut of drain
3101	Tr31	Brick drain
3102	Tr31	Cut of drain
3103	Tr31	Brick drain
3200	Tr32	Cut of drain
3201	Tr32	Brick drain
3300	Tr33	Cut of fishpond
3301	Tr33	Modern backfill
3302	Tr33	Modern backfill
3303	Tr33	Cut of drain

Context	Area	Description
3304	Tr33	Brick drain

#### APPENDIX 1.3 DRAWING REGISTER

Drawing	Plan	Section	Description
001	1:50		Plan of Trench 8
002	1:50		Plan of Trench 10
003	1:50		Plan of Trench 12
004		1:20	Section of [1400] and Trench 14
005		1:50	Section of Trench 13
006		1:20	Section of sondage in Trench 10
007		1:20	Section of sondage in Trench 12
008		1:10	NW facing section of Culvert [2500]
009		1:10	SE facing section of Culvert [2200]
010		1:20	Section of wall (1900) facing SE
011	1:50		Plan of Trench 19

#### APPENDIX 1.4 PHOTOGRAPHIC REGISTER

, vi i Li	IUI/		HOTOGRAFIIC REGISTER
Frame	C/S	Direction	Description
001		S	Trench 1
002		S	Trench 1
003		N	S facing section of trench 1
004		S	Trench 2
005		N	S facing section of trench 2
006		W	Trench 3
007		Е	W facing section of trench 3
800		N	Trench 4
009		S	N facing section of trench 4
010		Е	Trench 5
011		W	E facing section of trench 5
012		Е	Trench 6
013		W	E facing section of trench 6
014		N	Trench 7
015		S	N facing section of trench 7
016		N	Trench 8
017		N	S facing section of trench 8
018		N	Drain [800]
019		S	Drain [802]
020		E	Modern pipes in trench 8



Frame	C/S	Direction	Description	Frame C/S	Direction	Description
021		N	Modern pipes in trench 8	059	N	Drain [1501]
022		N	S facing section of sondage adjacent to drain [800]	060	S	Flooded trench 13
023		N	S facing section of sondage adjacent to drain [800]	061	E	Cut of drain [1501]
024		W	Trench 9	062	E	Sondage in [1300]
025		E	W facing section of trench 9	063	NW	Trench 23
026		S	Trench 10	064	NE	Trench 22
027		N	S facing section of trench 10	065	SW	Culvert [2200]
028		S	Trench 10	066	SW	Trench 22
029		N	Pipe in trench 10	067	W	Trench 21
030		N	Pipe in trench 10	068	NW	Trench 21
031		N	Sondage into blue deposit in trench 10	069	N	Trench 21
032		W	E facing section in sondage of trench 10	070	NW	Trench 21
033		S	Sondage in trench 10	071	SW	Trench 18
034		E	Trench 11	072	NE	Trench 24
035		E	W facing section of trench 11	073	NW	Trench 29
036		S	Trench 12	074	NW	Land drain in Trench 29
037		E	Sondage in trench 12	075	NE	Trench 30
038		E	Sondage in trench 12	076	NE	Fishpond [3000]
039		S	Trench 13	077	N	Fishpond [3000]
040		E	W facing section of trench 13	078	NE	Fishpond [3000]
041		W	Trench 14	079	NE	Fishpond [3000]
042		S	N facing section of trench 14	080	NE	Fishpond [3000]
043		W	E facing section of ditch [1400]	081	NE	Fishpond [3000]
044		S	N facing section of trench 14	082	NE	Fishpond [3000]
045		S	Trench 15	083	NE	Fishpond [3000]
046		W	Drain in trench 15	084	NE	Trench 31
047		N	S facing section in trench 15	085	NE	Drain in trench 31
048		S	Sondage in trench 15	086	Е	Section of Trench 31
049		S	Trench 16	087	NE	Drain in trench 31
050		E	W facing section of trench 16	088	NW	Trench 28
051		S	Sondage in trench 16	089	NW	Drain in trench 28
052		E	Trench 17	090	SW	Drain in trench 28
053		E	Trench 17	091	NW	Drain in trench 28
054		W	Ditch [1602]	092	NE	Drain in trench 28
055		S	Ditch [1400]	093	NW	Drain in trench 28
056		E	Drain [1600]	094	SW	Drain in trench 28
057		E	Drain [1604]	095	NW	Trench 32
058		E	Drain [1503]	096	NE	Drain in trench 32

Frame C/S Direction Description

097	WNW	Section of trench 32
098	NE	Drain in trench 32
099	NW	Trench 25
100	NE	Culvert [2500]
101	NE	Culvert [2500]
102	SE	Culvert [2500]
103	SW	Culvert [2500]
104	NE	Trench 19
105	SE	Trench 20
106	NE	Wall (1900)
107	SW	Wall (1902)
108	NW	Wall (1903)
109	NE	Wall (1904)
110	NW	Culvert [2200]
111	N	Culvert 2200 Brickwork
112	NE	Trench 26
113	SE	Trench 27
114	NW	Trench 33



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