



LIDL Norway Road Hilsea, Portsmouth

Archaeological Watching Brief Report





**New LIDL Store
At Former A Hasker & Sons Ltd
Norway Road
Hilsea
Portsmouth**

Archaeological Watching Brief Report

Prepared for:
LIDL UK GmbH
Creavan House
Huxley Close
Plympton
Plymouth
PL7 4JN

by:
Wessex Archaeology
Portway House
Old Sarum Park
Salisbury
Wiltshire
SP4 6EB

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Figure 1 Site and trench location Plan
Figure 2 Photographs and section

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Summary

Wessex Archaeology was commissioned by LIDL UK GmbH (The Client) to carry out an archaeological watching brief on land at the former A Haskers and Sons Ltd, Norway Road, Hilsea, Portsmouth (hereafter 'the Site) during groundworks for the proposed construction of a single storey LIDL food store up to 1673m² in size with associated parking. The Site, is centred on National Grid Reference (NGR) 465940 103860.

The archaeological work carried out was in support of planning application 08/00889/FUL, which granted conditional permission, for the proposed redevelopment of the Site. Condition 15 of the planning permission related to archaeology and stipulated that a watching brief should be undertaken during groundworks for the new development.

The watching brief was maintained during the excavation of foundation pits and service trenches associated with the building's construction. This exposed an underlying geology consisting of brickearth. Modern backfill was seen to directly overlie the natural geology and no archaeological features or artefacts were identified within the foundation pits and service trenches.

The watching brief was carried out from the 11th November to 19th November 2008.

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Archaeological Watching Brief Report

Acknowledgements

Wessex Archaeology was commissioned by LIDL UK GmbH (The Client) to carry out an archaeological watching brief and particularly thanks are given to Phil Dyer of LIDL UK GmbH for commissioning the work and his help and advice. Thanks are also due to Andy Russel of Southampton City Council for approving the written scheme of Investigation as archaeological advisor on behalf of Portsmouth City Council the Local Planning authority

The project was managed for Wessex Archaeology by Damian De Rosa. The archaeological watching brief fieldwork was carried out by Vasileios Tsamis and David Reay.

This report was compiled by Vasileios Tsamis and edited by Damian De Rosa. The illustrations were prepared by Linda Coleman.

New LIDL Store At Former A Hasker & Sons Ltd Norway Road Hilsea Portsmouth

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by LIDL UK GmbH (The Client) to carry out an archaeological watching brief on land at the former A Haskers and Sons Ltd, Norway Road, Hilsea, Portsmouth (hereafter 'the Site) during groundworks for the proposed construction of a single storey LIDL foodstore. The Site, is centred on National Grid Reference (NGR) 465940 103860 (**Figure 1**).

1.1.2 The work carried out was in support of planning application 08/00889/FUL, which has granted conditional permission, for the proposed redevelopment of the Site comprising the construction of a single storey LIDL footsore up to 1673m² in size with associated parking.

1.1.3 A condition for an archaeological watching brief was attached to the planning permission (condition 15) and stated that;

The applicant shall arrange for an archaeologist recognised by the Local Planning Authority (LPA) to carry out a watching brief during all stages of the development involving ground disturbance in accordance with a scheme to be agreed in writing with the Local Planning Authority before development commences. A report of the findings, which shall include arrangements for the conservation and long term storage of artefacts removed from the site, shall be submitted within a period to be agreed in writing with the Local Planning Authority.

1.1.4 Prior to the demolition of the former building that occupied the Site a Geo-Environmental Investigation of the Site was undertaken by Jones Pike & Associates (JPA 2007). The aims of the investigation were to obtain information relating to the ground and groundwater conditions at the Site in order to determine suitable methods of design and construction for the development.

1.1.5 A Written Scheme of Investigation (WA 2008) was prepared and approved in advance of the watching brief. It set out in detail the methodologies and standards proposed by Wessex Archaeology to undertake the archaeological works. The watching brief and this report on the results will complete the programme of archaeological work.

1.2 Location, topography and geology

- 1.2.1 The Site comprises an area of c.0.57 hectares and is situated off Norway Road, Hilsea, Portsmouth. (**Figure 1**). The former A Haskers & Sons Ltd furniture store has been demolished and concrete hardstanding covered the Site.
- 1.2.2 The Site lies at approximately 3m above Ordnance Datum (aOD).
- 1.2.3 The underlying geology comprises Brickearth, which is underlain by strata derived from the Upper Chalk. (BGS, Sheet 316, Fareham)

2 HISTORICAL AND GEOTECHNICAL BACKGROUND

2.1 Historical Background

- 2.1.1 The Site lies c.4m north of the historic port of Portsmouth and c.200m to the south of the Hilsea Lines, which is a 2 mile long defensive structure, which lies in a green corridor that separates Portsea Island from the mainland.
- 2.1.2 The first Hilsea Line defences were built in 1544 to protect the naval interests from an inland attack and further established in 1757 south of Ports Creek. They remained largely unaltered for over 100 years before the existing Lines replaced them in 1871 when the renewed threat of a French invasion prompted the need for stronger defences. The 2 mile long structure consisted of chalk and earth ramparts 9m high and 20m wide, with six Bastions of bombproof casemates and a moat to the north. The expected invasion did not materialise and the Lines were never used in battle. Some changes took place early 20th Century, but most of the original structure is unaltered. The Lines were designated a Scheduled Ancient Monument in 1964 and the site was given Conservation Area status in 1994 in recognition of the value, not only of the monument, but also of its setting.
- 2.1.3 A Desk-based study was undertaken for the Geo-Environmental Investigation Report (JPA 2007), which consulted historical (Ordnance Survey) mapping to establish key developments in the history of the Site. The results were as follows;
- 2.1.4 The earliest plan of the Site, dated 1870, indicates the Site to have been part of Hilsea Farm and that present day Norway Road was already established, but known as Rat Lane. The construction of a navigable channel and a quay can be seen to the north.
- 2.1.5 By the time of the publication of the 1897 plans the construction of an artillery barracks can be seen to have taken place 200m south of the Site. No significant changes are recorded on the Site until 1910 when the town of North End can be seen c.1000m southwest of the Site and Hilsea Gas Works can be seen to have been constructed 1000m southeast of the Site. The Site itself remains unchanged.
- 2.1.6 In 1932 the surrounding land had undergone significant development with significant residential land to the west and railway sidings and associated buildings having been constructed to the east and north. The 1938 plans show large scale development of the surrounding land to the south and north. The Site remained undeveloped and Hilsea Farm was still present to the northwest of the Site.

- 2.1.7 The 1950 plan shows the Site identified as allotment gardens and the land to the east is redeveloped as industrial buildings. The railway sidings were removed between 1960 and 1968.
- 2.1.8 The 1970 map shows the Site still undeveloped. Hilsea Farm has been redeveloped as housing and Rat Lane has been renamed Norway Road. No other significant changes to the Site or its surroundings have occurred.
- 2.1.9 The 1976 map shows that development had been undertaken at the Site with the commercial buildings that occupied the Site prior to their recent demolition ahead of the proposed new development. In the surrounding area no further significant development has occurred other than the removal of the barracks in the 1970s.

2.2 Geo-Environmental Investigation

- 2.2.1 Prior to the demolition of the former building that occupied the Site a Geo-Environmental Investigation of the Site was undertaken by Jones Pike & Associates (JPA 2007). The aims of the investigation were to obtain information relating to the ground and groundwater conditions at the Site in order to determine suitable methods of design and construction for the development.
- 2.2.2 The investigation comprised of five window sample holes (WS101 to WS105 – **Appendix 2**), which were advanced using a tracked rig to depths ranging from 3.00 to 5.00m.
- 2.2.3 Surfacing in the form of bituminous or concrete hardstanding was encountered within all boreholes to depths of between 0.05m and 0.10m. Below the hardstanding the Site was underlain by made ground consisting of varying materials including granular sub-base and gravelly clay along with fragments of brick, ash and debris. Within WS103 to 105 the made ground was observed to depths of 0.70m. In WS102 the natural underlying clay was observed directly below the hardstanding. In WS101 made ground with fragments of ash and brick was recorded to a depth of 1.00m. Below this a dark grey to green clay interpreted as made ground containing occasional carbonaceous fragments and some decayed woody plant remains was shown to be present to a depth to a borehole depth of 3.50m. This may be evidence for the presence of peat deposits in this area of the Site.
- 2.2.4 Underlying the made ground the natural soils were encountered apart from in WS101. The natural consisted of a soft to firm brown yellow brown and grey gravelly clay. In WS102 this was underlain at a depth of 4.70m by structureless white chalk.
- 2.2.5 Groundwater was observed in WS101, 102 and 104 at depths between 1.80m and 3.60m.

3 AIMS & OBJECTIVES

3.1 Watching Brief

- 3.1.1 The principal aim of the watching brief was to provide further information concerning the presence/absence, date, nature and extent of any buried archaeological remains and to investigate and record these within the proposed footprint of the Site.

4 METHODOLOGY

4.1 Introduction

4.1.1 The watching brief was carried out in accordance with guidance given in the Institute of Field Archaeologist's *Standard and Guidance for Archaeological Watching Briefs* (2001).

4.2 Groundworks monitoring

4.2.1 The groundworks comprised the excavation of twenty nine foundation trenches, forming the footprint of the new LIDL store along with associated services. The foundation trenches were c.2m² by c.0.30m deep. Trenches 2 and 3 were excavated to a depth of 1.60m. A north-south orientated service trench (Trench 1), measuring 8m by 0.80m wide was excavated to a depth of 1.20m deep. A large 15.80m by 1m by 2.10m deep trench (Trench 4) for the installation of a water storage area was also excavated. (**Figures 1 and 2**)

4.2.2 Excavation was undertaken using a JCB mechanical excavator fitted with a 0.80m toothless bucket. The excavation was carried out under constant archaeological supervision until such time that it was apparent that the potential for archaeological remains to be exposed has been exhausted. The excavation subsequently continued to the depth required by the site manager. All excavated material was routinely inspected for artefacts.

4.2.3 All trenches were recorded using Wessex Archaeology's *pro forma* recording system. A photographic record, which included high resolution digital images, was maintained. The trenches were mapped in relation to the construction footprint and the Ordnance Survey.

5 RESULTS

5.1.1 Twenty six of the twenty nine foundation trenches were only excavated to a depth of c.0.30m at which depth the trenches still remained within a layer of modern back fill.

5.1.2 Two foundation trenches, 2 and 3, were excavated to a depth of c.1.6m along with a service trench to a depth of c.1.2m and a water storage area to a depth of 2.10m (**Figures 1 and 2**). Within these trenches the following soil sequence was revealed (Trench summaries are provided in **Appendix 1**);

5.1.3 A layer of modern redeposited gravel was recorded to a depth of 0.19m. This overlay a layer of modern backfill c. 0.44m deep consisting of a dark brown silty clay with modern building rubble and charcoal inclusions. Beneath the modern backfill, natural geology comprising of a light yellowish brown sandy clay layer was revealed to a depth of 0.89m, below which a change in the natural was observed comprised of a thick layer of mid yellowish brown silty clay with no inclusions (**Figure 2**).

5.1.4 No features or deposits of archaeological origin were identified during the watching brief.

6 FINDS

- 6.1.1 No artefacts were recovered during the watching brief.

7 ENVIRONMENTAL

- 7.1.1 No material suitable for environmental sampling was demonstrated to be present within the foundation pits and service trenches.

8 CONCLUSIONS

- 8.1.1 The archaeological watching brief undertaken during groundworks associated with the development of the new LIDL store did not identify any archaeological remains on the Site. The observations made within the foundation trenches, excavated to a depth of up to c.2.10m, confirmed the results of the geo-environmental survey, which indicted modern overburden directly overlying the natural geology. A deposit of peat, which was indicated during the geo-environmental survey was not identified during the course of the watching brief.

9 ARCHIVE

- 9.1.1 The project archive was prepared in accordance with the guidelines outlined in Appendix 3 of *Management of Archaeological Projects* (English Heritage 1991) and in accordance with the *Guidelines for the preparation of excavation archives for long term storage* (UKIC 1990). It comprises a ring-bound file containing a watching brief attendance form, site 'day book', trench record sheets, photographic register and *Written Scheme of Investigation*. It is currently held at Wessex Archaeology's office building under the site code 70600, but will ultimately be deposited for permanent storage with the Berkshire Heritage Museum.

10 REFERENCES

British Geological Survey. 1958, Sheet 315, Fareham. 1:63 360

Institute of Field Archaeologists (2001) Standards and Guidance for Archaeological Watching Briefs

Jones Pike and Associates Ltd, 2007. Lidl UK GmbH, Norway Road, Hilsea, Portsmouth. Geo-Environmental Investigation Report. Ref.: AS/16070169/001.

Wessex Archaeology, 2008. *New LIDL Store At Former A Hasker & Sons Ltd Norway Road Hilsea Portsmouth Written Scheme of Investigation for an Archaeological Watching Brief*. WA Ref 70600.01

Appendix 1 – Trench summaries

Trench 1		Digital Photos 024-028, 048, 049
Dimensions (length x width x depth) 8.20m x 0.78m x 1.21m		1.78m aOD
Context	Description	Depth
100	Modern backfill: mid whitish red silty clay mixed with sub-angular flint <0.10m and gravels. It was placed by the constructors prior to digging for better drainage and levelling of the site.	0m - 0.19m
101	Modern backfill: dark brownish grey silty clay loam. Very compact with abundant charcoal inclusions <0.10m. Moderate sub-angular flint <0.10m. Evidence for manganese and modern ceramic built material. Clear boundary. Possibly formed during the construction and demolition of the pre-existing warehouses.	0.19m - 0.44m
102	Natural sandy clay: light yellowish brown sandy clay. Mid greyish brown mottling. Fairly loose, clear boundary. Sparse sub-angular flint <0.05m.	0.44m - 0.89m
103	Natural brick earth: mid yellowish red very compact and thick clay loam. No inclusions.	0.89m - 1.21m

Trench 2		Digital Photos 030, 031, 032, 033, 050
Dimensions (length x width x depth) 2.30m x 2.05m x 1.60m		1.96m aOD
Context	Description	Depth
200	Modern backfill: mid whitish red silty clay mixed with sub-angular flint <0.10m and gravels. It was placed by the constructors prior to digging for better drainage and levelling of the site.	0m - 0.20m
201	Modern backfill: dark brownish grey silty clay loam. Very compact with abundant charcoal inclusions <0.10m. Moderate sub-angular flint <0.10m. Evidence for manganese and modern ceramic built material. Clear boundary. Possibly formed during the construction and demolition of the pre-existing warehouses.	0.20m - 0.42m
202	Natural sandy clay: light yellowish brown sandy clay. Mid greyish brown mottling. Fairly loose, clear boundary. Sparse sub-angular flint <0.05m.	0.42m - 0.70m
203	Natural brick earth: mid yellowish red very compact and thick clay loam. No inclusions.	0.70m - 1.60m

Trench 3		Digital Photos 034, 035, 036
Dimensions (length x width x depth) 2.35m x 2.10m x 1.20m		1.38m aOD
Context	Description	Depth
300	Modern backfill: mid whitish red silty clay mixed with sub-angular flint <0.10m and gravels. It was placed by the constructors prior to digging for better drainage and levelling of the site.	0m - 0.20m
301	Modern backfill: dark brownish grey silty clay loam. Very compact with abundant charcoal inclusions <0.10m. Moderate sub-angular flint <0.10m. Evidence for manganese and modern ceramic built material. Clear boundary. Possibly formed during the construction and demolition of the pre-existing warehouses.	0.20m - 0.42m
302	Natural sandy clay: light yellowish brown sandy clay. Mid greyish brown mottling. Fairly loose, clear boundary. Sparse sub-angular flint <0.05m	0.42m - 0.70m
303	Natural brick earth: mid yellowish red very compact and thick clay loam. No inclusions.	0.70m - 1.60m

Trench 4 (Water Storage Area)		Digital Photos 061-065
Dimensions (length x width x depth) 15.8m x 7m x 2.10m		2.68m aOD
Context	Description	Depth
400	Natural sandy clay: light yellowish brown firm sandy clay. Mid greyish brown mottling. Fairly loose, clear boundary. Sparse sub-angular flint <0.05m.	0m - 2.10m

Appendix 2 – Geotechnical borehole locations and logs

NOTES

1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings.
3. Should there be any conflict between the details indicated on this drawing and those indicated on other drawings, the engineer should be informed prior to construction on site.
4. Until technical approval has been obtained from the relevant authority, it should be understood that all drawings issued are Preliminary and Not for construction. Should the contractor commence site work prior to approval being given, it is entirely at his own risk.

KEY

⊕ Approximate window sample location

DESCRIPTION	REV	DATE	CHKD	APPR
DRAWING STATUS				

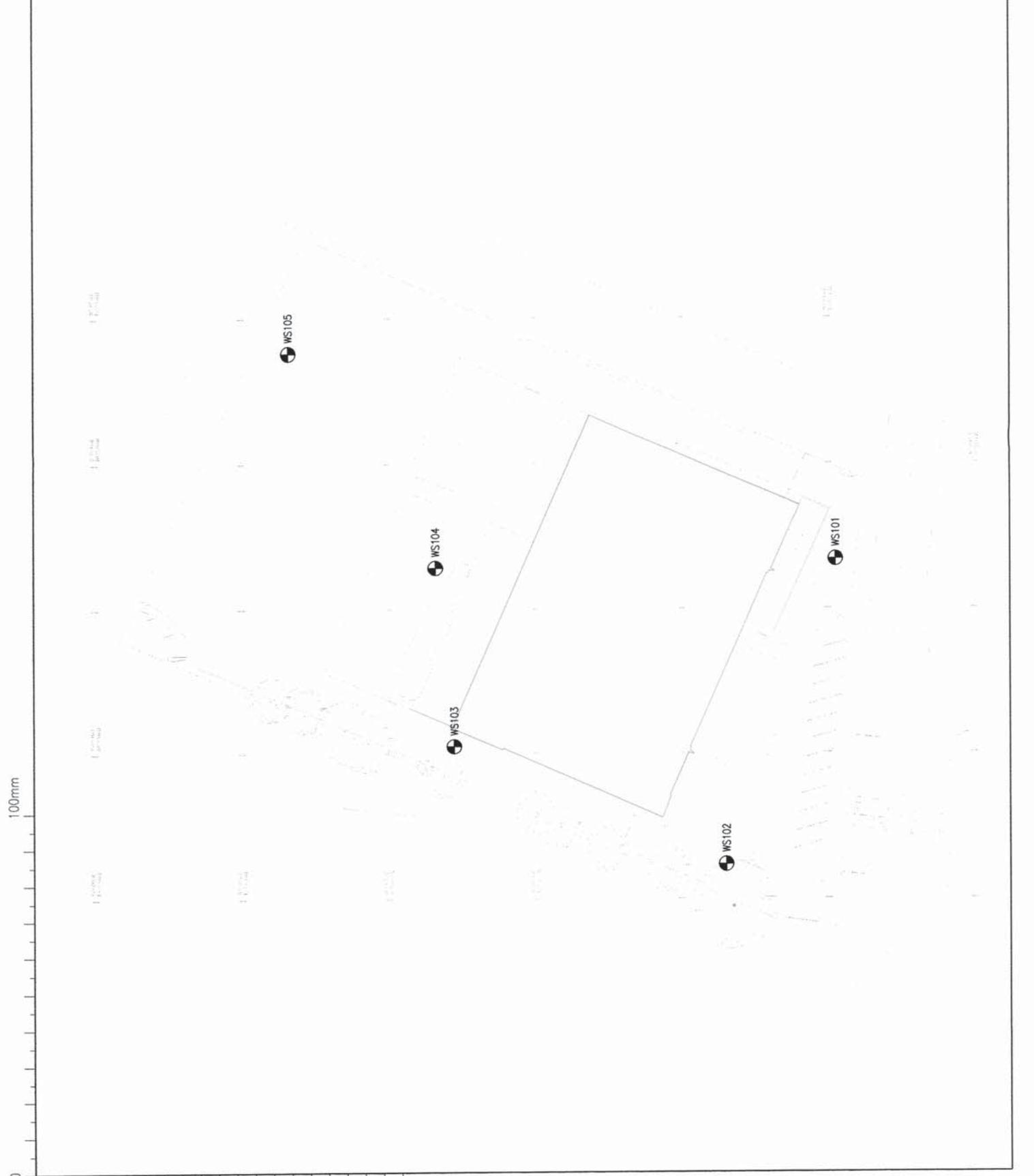
FOR INFORMATION

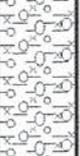
JPA JOYNTES PIKE & ASSOCIATES LTD
 CONSULTING ENGINEERS
 100, THE BRIDGE, PORTSMOUTH, HAMPSHIRE, UK
 TEL: 01323 326 1800
 FAX: 01323 326 1801
 E: JPA@JPA.CO.UK
 WWW.JPA.CO.UK

ERA ENVIRONMENTAL & RISK ANALYSIS
 CONSULTING ENGINEERS
 100, THE BRIDGE, PORTSMOUTH, HAMPSHIRE, UK
 TEL: 01323 326 1800
 FAX: 01323 326 1801
 E: ERA@ERA.CO.UK
 WWW.ERA.CO.UK

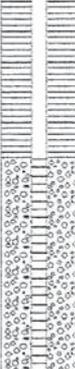
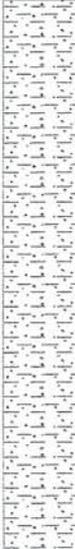
DATE: 3
 3000 APPROX
 ENVIRONMENTAL, TRANSPORTATION,
 AND SURVEILLANCE HEALTH & SAFETY ENGINEERING CONSULTANTS

CLIENT		Lidl UK GmbH	
PROJECT TITLE		Norway Road, Hilssea, Portsmouth	
DRAWING DETAIL		Exploratory Hole Location Plan	
DRAWN	CC	DATE	Sep 2007
PROJECT ENGINEER	AS	CHECKED	AS
APPROVED	AS	SCALE	1:500 @ A3
DRAWING NUMBER	16070169/002		
REVISION	-		



Borehole ID: WS101	Client: Lidl UK GmbH	Start Date: 24/08/2007						
	Site: Norway Road, Hilsea, Portsmouth	End Date: 24/08/2007						
Job No: 16070169		Backfill Date: 24/08/2007						
Drilling Equipment: Tracked window sampling rig	Co-ords:	Field Records: PW	www.joynespike.co.uk					
	Ground Level:	Logged: PW	Chkd: <i>PJS</i>	Appr: <i>PJS</i>				
Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND:- Concrete hardstanding.	0.10			D1	0.20			
MADE GROUND:- Dark grey gravelly soft consistency high plasticity clay with fragments of ash, crushed brick and fibres. Gravel is chalk and occasional flint.	1.00			D2	0.90	N=1(C)		
MADE GROUND:- Dark grey to green grey gravelly very soft to soft consistency clay. Gravel is subrounded chalk and occasional flint. Occasional carbonaceous fragments and some decayed woody plant remains.	1.00			D3	1.50	N=3(C)	1.90 ▼	
				D4	2.50	N=4(C)		
End of Borehole at 3.50 m	3.50							
Remarks: 1. Groundwater encountered at a depth of 1.90m. 2. Obstruction encounter at 3.50m						Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT		
						Sheet: Sheet 1 of 1		

Borehole ID: WS102	Client: Lidl UK GmbH	Start Date: 24/08/2007		
Job No: 16070169	Site: Norway Road, Hilsea, Portsmouth	End Date: 24/08/2007		
Drilling Equipment: Tracked window sampling rig	Co-ords:	Field Records: PW		
Ground Level:		Logged: PW	Chkd: <i>PSE</i>	Appr: <i>MC</i>

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND:- concrete hardstanding.	0.10							
Yellow brown mottled light grey very soft to soft consistency, low strength high plasticity CLAY with fine rootlets.				D1	0.70	N=17(C)		
Yellow brown mottled pale grey, gravelly, soft consistency low to medium strength high plasticity CLAY. Gravel is fine to coarse sub-angular to rounded chalk and flint.	2.00			D2	1.70	N=4(C)	1.80 ▼	
				D3	2.70	N=8(C)		
				D4	3.90	N=18(C)		
Structureless CHALK composed of white chalk gravel and soft white chalk clay Grade Dm (Upper Chalk Formation).	4.70							
End of Borehole at 5.00 m	5.00							

Remarks: 1. Groundwater encountered at a depth of 1.8m.	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
	Sheet: Sheet 1 of 1

Borehole ID: WS103	Client: Lidl UK GmbH	Start Date: 24/08/2007	
Job No: 16070169	Site: Norway Road, Hilsea, Portsmouth	End Date: 24/08/2007	
		Backfill Date: 24/08/2007	

Drilling Equipment: Tracked window sampling rig	Co-ords:	Field Records: PW	www.joynespike.co.uk
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Ground Level:	Logged: PW	Chkd: <i>PSE</i>	Appr: <i>PSE</i>
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Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND:- concrete hardstanding.	0.10							
MADE GROUND:- Layers comprising fine to medium sand, fine to medium flint gravel and yellow brown clay.	0.40			D1	0.30			
MADE GROUND:- Black and green grey clay with fragments of brick, ash and debris.	0.70			D2	0.50			
Yellow brown mottled light grey gravelly, firm consistency CLAY. Gravel is fine chalk and carbonaceous fragments.				D3	0.90	N=11(C)		
								
				D4	1.90	N=12(C)		
								
Yellow brown mottled light grey, gravelly firm consistency CLAY. Gravel is fine chalk and coarse flint.	2.50							
	2.70							
Yellow brown mottled light grey, very gravelly, soft consistency high plasticity CLAY. Gravel is sub-rounded fine to medium chalk.	3.00			D5	2.90	N=8(C)		
End of Borehole at 3.00 m								

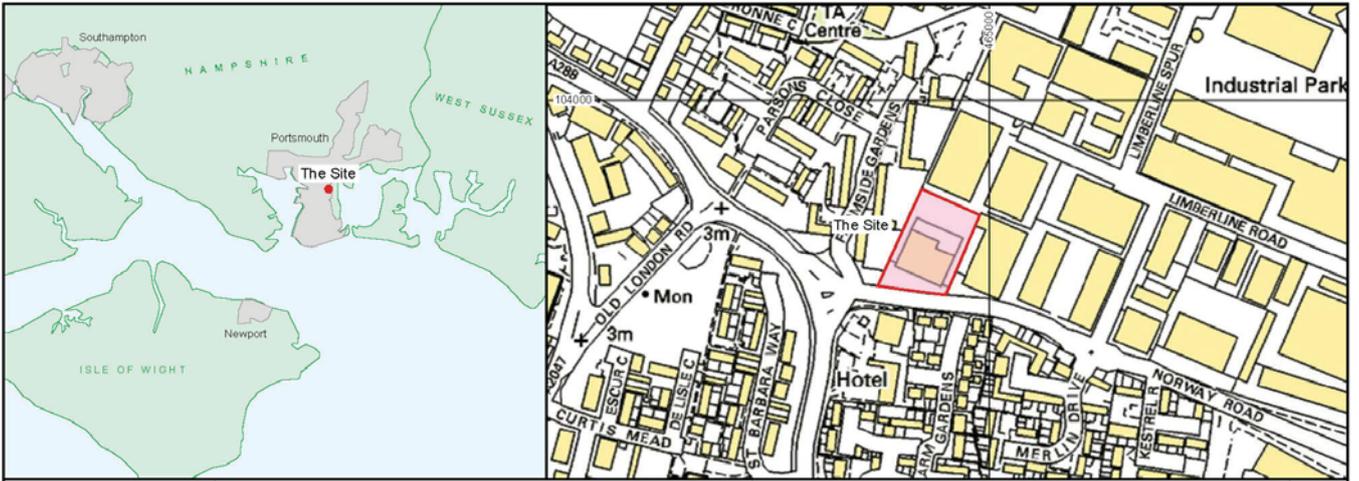
Remarks: 1.No groundwater encountered.	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
	Sheet: Sheet 1 of 1

Borehole ID: WS104	Client: Lidl UK GmbH	Start Date: 24/08/2007			
	Site: Norway Road, Hilsea, Portsmouth	End Date: 24/08/2007			
Job No: 16070169		Backfill Date: 24/08/2007			
Drilling Equipment: Tracked window sampling rig		Co-ords:	Field Records: PW		www.joynespike.co.uk
		Ground Level:	Logged: PW	Chkd: <i>PJK</i>	Appr: <i>PJK</i>

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND:- Concrete paving slab.	0.05		[Cross-hatch pattern]					[Cross-hatch pattern]
MADE GROUND:- Yellow brown sandy gravel.	0.20		[Cross-hatch pattern]					[Cross-hatch pattern]
MADE GROUND:- Red brown sandy gravel.	0.30		[Cross-hatch pattern]	D1	0.35			[Cross-hatch pattern]
MADE GROUND:- Sandy gravel and crushed brick.	0.40		[Cross-hatch pattern]					[Cross-hatch pattern]
Yellow brown gravelly, very soft to firm consistency, low strength high plasticity CLAY. Gravel is fine chalk, flint and carbonaceous fragments becoming fine to medium with depth.			[Dotted pattern]	D2	0.90	N=2(C)		[Dotted pattern]
			[Dotted pattern]	D3	1.90	N=8(C)		[Dotted pattern]
Yellow brown, gravelly firm consistency, low to medium strength, high plasticity CLAY. Gravel is fine to medium chalk and flint.	2.60		[Dotted pattern]	D4	2.90	N=13(C)		[Dotted pattern]
			[Dotted pattern]	D5	3.90	N=15(C)		[Dotted pattern]
Very clayey, light brown and yellow brown GRAVEL. Gravel is fine to medium chalk and flint. Clay is firm consistency and high plasticity.	3.70		[Dotted pattern]				3.60 ▼	[Dotted pattern]
End of Borehole at 4.00 m	4.00		[Dotted pattern]					[Dotted pattern]

Remarks: 1. Groundwater encountered at a depth of 3.6m.	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
Sheet: Sheet 1 of 1	

Borehole ID: WS105	Client: Lidl UK GmbH	Start Date: 24/08/2007	 www.joynespike.co.uk					
Job No: 16070169	Site: Norway Road, Hilsea, Portsmouth	End Date: 24/08/2007						
Drilling Equipment: Tracked window sampling rig	Co-ords:	Field Records: PW						
Ground Level:		Logged: PW	Chkd: <i>PJE</i>	Appr: <i>PJE</i>				
Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND:- Bituminous and gravel hardstanding.	0.05							
MADE GROUND:- Orange brown sandy gravel.	0.25			D1	0.30			
MADE GROUND:- Gravelly, greeny grey gravelly CLAY. Gravel is fine chalk and flint.	0.50			D2	0.60			
MADE GROUND:- Black crushed clinker, brick and sand.	0.70			D3	0.90	N=9(C)		
Light brown gravelly, soft to firm consistency, low to medium strength high plasticity CLAY. Gravel is fine chalk.				D4	1.90	N=7(C)		
				D5	2.90	N=6(C)		
End of Borehole at 4.00 m	4.00					N=8(C)		
Remarks: 1. No groundwater encountered.					Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT			
					Sheet: Sheet 1 of 1			



- The Site
- Foundation trench
- Proposed development
- Former building

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Site and trench location plan

Figure 1



Plate 1: Trench 1, view from the west



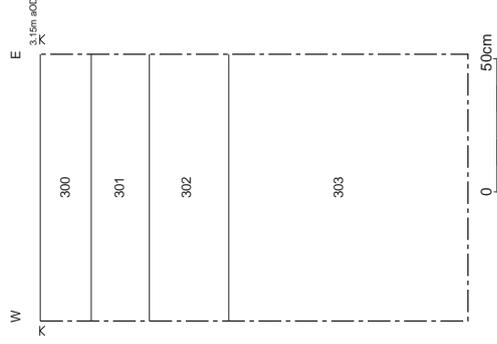
Plate 2: South facing section of Trench 1



Plate 3: Trench 2, view from the south



Plate 4: Trench 3, view from the south



Trench 3 section



Plate 5: Trench 4, view from the north-east



WESSEX ARCHAEOLOGY LIMITED.

Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

London Office: Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY.

Tel: 020 7953 7494 Fax: 020 7953 7499 london-info@wessexarch.co.uk www.wessexarch.co.uk

