

Contamination & Land Quality Assessment

Executive Summary First Issue

Bartley Wood
Business Park,
Hook

Project Ref: NSB/12962/LQA

4th June 2021



Client
XLB Properties

Baynham Meikle Partnership Ltd
8 Meadow Road
Edgbaston
Birmingham
B17 8BU

Tel: +44 (0)121 434 4100
Fax: +44 (0)121 434 4073

Table of Contents

1.0	INTRODUCTION	3
2.0	SITE HISTORY	3
3.0	TOPOGRAPHY	3
4.0	GEO ENVIRONMENTAL SETTINGS AND FINDINGS	4
5.0	HYDROGEOLOGY AND GROUNDWATER VULNERABILITY	4
6.0	FLOOD RISK AND FLOOD MAPPING	5
7.0	SITE SENSITIVITY AND SOIL CHEMISTRY	5
8.0	RECOMMENDATIONS / CONCLUSIONS	6

1.0 Introduction

This executive summary has been prepared on behalf of XLB Properties, in support of the planning application for a proposed industrial unit with associated access road, service yards and car parking located at Bartley Wood Business Park, Hook.

A Site Location Plan is included within the Appendices. The site is centred approximately at National Grid Reference E473300, N453750 and has a development area of 4.138 Hectares.

The existing site is currently developed with three vacant commercial building built on it that are due to be demolished.

A Phase 1 desk top report and initial factual intrusive ground investigation information has been provided by Applied Geology key extracts of which are appended to this report.

2.0 Site History

1871 – 1875

The site and immediate surroundings are seen to be agricultural fields in the north of the site farm buildings. A Stream running north/ south is indicated.

1894-1987

No significant on-site changes observed.

1987 – 1994

Griffin Way south infrastructure road is now shown to the northern boundary of the site. The site itself is undeveloped.

1994 – Onward

The site is shown as fully developed as per its present-day layout.

3.0 Topography

The topography of the site is said that there is a fall of approximately 5.7m from the northeast corner to the Western corner at a gradient of approximately 1 in 75. There are no significant variations in levels between the southern boundary to the northern site access road, other than an

existing retaining wall along a short section of the eastern boundary supporting the adjacent higher ground at a height of approximately 2m.

4.0 Geo environmental settings and findings

Desktop and intrusive site investigations have been carried out by Applied Geology in 2021.

Made Ground -	Thickness: 0.5 – 2.1m (Asphalt and block paving over a subbase layer) This was noted as the above a well compacted granular layer of material across a large majority of the site (possibly a pilling mat).
River Terrace Deposits (noted in pocket over the site) -	Thickness: 0.9 – 2.0m Silty gravelly fine to medium SAND. Gravel is fine to coarse with flint and chalk. The GRAVEL is dense orange brown slightly sandy and clayey.
London Clay Formation -	Thickness: 8.0m – 10.0m. Firm/ stiff brown/grey clay. Clay is slightly silty with rare fine shell fragments.

Permeability testing were undertaken as part of the site investigation work to BRE 365.

As expected, the test confirmed a very low infiltration due to the underlying geology.

The site has been confirmed as not being in a Radon affected as no such protection measures are required.

This site is not indicated to be in an area of historic underground coal or other mining.

5.0 Hydrogeology and Groundwater Vulnerability

The nearest surface watercourse is described as an inland river and runs through the site travelling south to north.

There was no water quality data available at the time of writing this report.

There are no surface water abstraction licenses within 500m of the site.

The London Clay formation is classified as an unproductive stratum. The River Terrace deposits indicated on site are classified as a secondary A Aquifer.

The likely groundwater flow direction is to be to south following the general topography.

6.0 Flood Risk and Flood Mapping

According to the current site investigation reports as well as Environment Agency flood map information, the site is located in an area considered to be a very low risk of flooding from Rivers or Watercourses – Floodzone 1.

The site is not at risk of flooding from reservoirs or other artificial sources.

Sea (Tidal) - The site is not located in the vicinity of the coast and is therefore not at risk of sea (tidal) flooding.

The investigation data has confirmed that the site is at risk of pluvial flooding in the form of surface water flooding and groundwater flooding. From review of the mapping data this flooding is focus to the western section of the site adjacent to the existing ditch/ culvert.

Is depth of flooding for the 1 in 30 year storm event is stated as being between 0.3 – 1.0m in this localised area.

Flood maps have been appended to this report.

7.0 Site Sensitivity and Soil Chemistry

The new development site appears to be an impact zone for a site of Special Scientific Interest (SSSI).

The area to the south of the southern boundary is designated as a “Dwarf Shrub Heath-Lowland” recognised as “Hook Common and Bartley Heath”.

With regard to on-site contamination, visual inspections on site found no evidence of Hydrocarbon contamination.

The British Geological Survey have established the following potential for ground stability hazards on site.

- | | |
|---------------------------------------|------------|
| • Shrink/ swell Clay | Low |
| • Landslides | Low |
| • Ground Dissolution of Soluble Rocks | Negligible |
| • Compression Deposits | Very Low |
| • Running Sand | Very Low |

The Conceptual Site Model has concluded that there is a risk of elevated concentrations of sulphates to be present in the natural London Clay Soil and that this could present a Medium risk to new buried concrete structures.

8.0 Recommendations / Conclusions

Additional, unidentified localised areas of contamination may exist at the Site and an appropriate 'hotspot' protocol should be in place for ground workers to act upon should such contamination be identified during the construction process.

Due to site history and previous site uses there might be underground foundations present on site. Slit trenching and further trial holes may be required to investigate the locations where former structures exist.

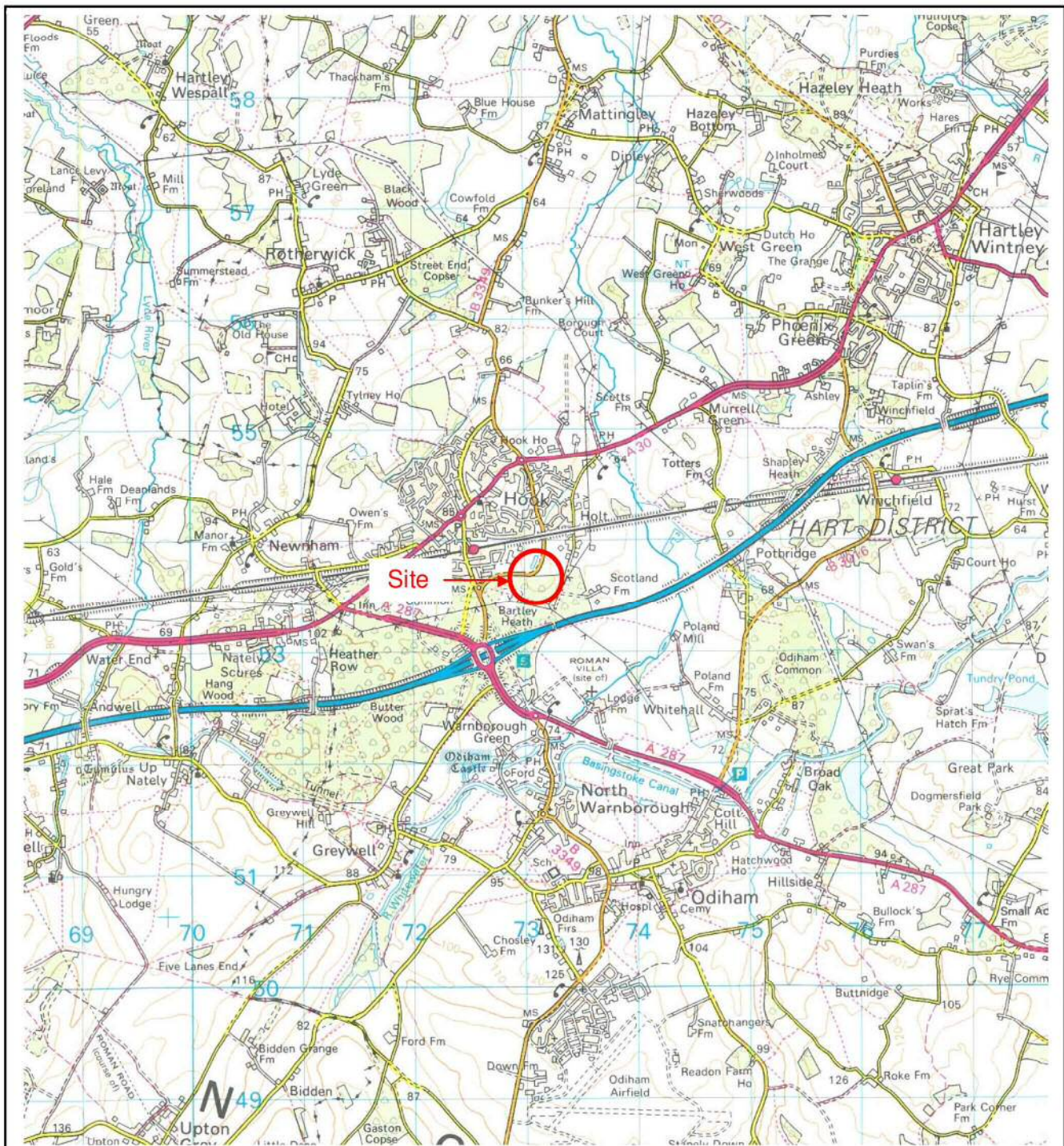
A phase 2 intrusive investigation is currently being completed on site.

The scope of this work is to include the following:

- Gas / groundwater monitoring
- Asbestos survey of existing buildings
- Intrusive ground investigation including investigation (establish soil geotechnical properties including soakaway, CBR, WAC, etc testing)

Once a further site-specific intrusive geo-environmental / geotechnical investigation is completed the land quality assessment is reviewed and updated as necessary. This may more accurately identify the nature of the existing ground including the composition and geotechnical parameters of the underlying soil that will assist to inform the subsequent detailed design.

Appendices



Reproduced from the Ordnance Survey Map with permission of the Controller of Her Majesty's Stationary Office, Crown Copyright © LICENCE No: 100055022

APPLIED GEOLOGY

Unit 23
Abbey Park
Stareton
Kenilworth
CV8 2LY

Tel: 02476 511822
email: admin@appliedgeology.co.uk

Client:

PATRON HOOK LTD

Project:

BARTLEY WOOD BUSINESS PARK, HOOK

Drawn By:

JS

Checked By:

CE

Paper Size:

A4

Scale:

NTS

Date:

20.04.2021

NGR:

473274 153769

Title:

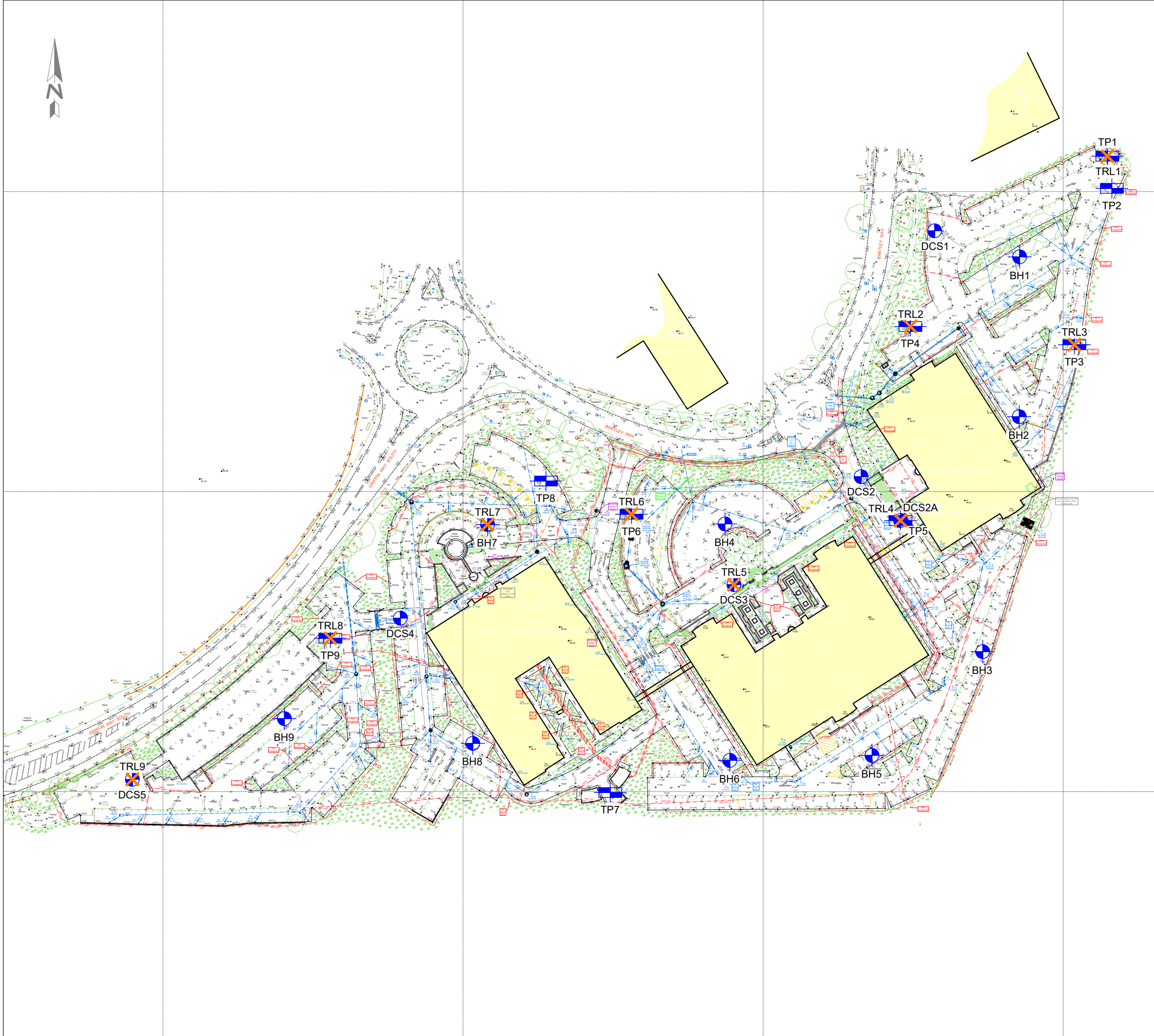
SITE LOCATION PLAN

Drawing No:


AG3265-21-01

Revision:


0




KEY:




TP1



BH1



DCS1



TRL1

Trial Pit

Cable Percussion Borehole

Driven Continuous Sampling Borehole

Transport Research Laboratory
Dynamic Cone Penetrometer

Drawing based on Greenhatch Group, drawing No:36938_T
Revision 1 dated 25/11/2020.

APPLIED GEOLOGY

Unit 23
Abbey Park
Stareton
Kenilworth
CV8 2LY

Tel: 02476 511822
email: admin@appliedgeology.co.uk

Client:

PATRON HOOK LTD

Project:

BARTLEY WOOD BUSINESS PARK, HOOK

Title:

EXPLORATORY HOLE LOCATION PLAN

Drawn By:	JS	Checked By:	FC	Paper Size:	A3
Scale:	1:1250	Date:	18.05.2021		
Drawing No:	AG3265-21-02	Revision:	0		

BOREHOLE LOG - CABLE PERCUSSION

BH1

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Start 11/05/2021

Coordinates E 473385.50 N 153878.25

Scale

1:50

End 11/05/2021

Ground Level 74.63m AOD

Total Depth

10.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10			74.53	(0.10)	Asphalt.			
				74.48	0.10	(MADE GROUND)			
B	0.60			74.03	(0.05)	Greyish brown and reddish brown slightly sandy GRAVEL. Gravel is fine to medium subangular limestone.			
					0.15	(MADE GROUND - SUBBASE)			
					(0.45)	Greyish brown and grey slightly sandy GRAVEL with occasional cobbles. Gravel is fine to coarse angular to subangular concrete, brick, flint and limestone. Cobbles are subangular concrete and occasional brick.			
UT	1.50	(25)			0.60	(MADE GROUND - SUBBASE)			
					(1.40)	Firm locally stiff orangish brown mottled greyish brown fine sandy silty CLAY.			
D	1.90			72.63	2.00	(LONDON CLAY FORMATION)			
						Firm brown and greyish brown locally mottled orangish brown slightly fine sandy silty CLAY.			
D	2.50					(LONDON CLAY FORMATION)			
S	2.50	N = 11	1.20		(1.50)				
UT	3.50	(30)		71.13	3.50	Firm to stiff grey locally brownish grey sandy silty CLAY with occasional bands of clayey silt. Sand is fine.			
						(LONDON CLAY FORMATION)			
D	3.95								
D	4.50								
S	4.50	N = 15	1.20			Below 4.50m bgl: slightly sandy.			
UT	5.50	(40)							
D	5.90					Below 6.00m bgl: stiff.			
D	6.50								
S	6.50	N = 19	1.20		(6.50)				
D	7.50								
UT	8.00	(55)							
D	8.45					Below 8.50m bgl: becoming very stiff.			
D	9.00								
D	9.50								
S	9.50	N = 27	1.20						
				64.63	10.00	End of Borehole at 10.00m			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 3.00m bgl.

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH2

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Start 11/05/2021

Coordinates E 473385.37 N 153824.95

Scale

1:50

End 11/05/2021

Ground Level 72.04m AOD

Total Depth

10.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10			71.99	(0.05)	Asphalt.			
					0.05	(MADE GROUND)			
					(1.05)	Greyish brown and grey slightly sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular to subrounded concrete, flint, brick and asphalt. Cobbles are subangular concrete and brick. (MADE GROUND - SUBBASE)			
B	1.20			70.94	1.10				
C	1.20	N = 6			(0.90)	Loose slightly gravelly to gravelly silty fine to medium SAND. Gravel is fine to coarse subangular to subrounded flint and occasional chalk. (RIVER TERRACE DEPOSITS)			
B	2.00			70.04	2.00				
D	2.50				(1.00)	Firm locally soft orangish brown mottled brown fine sandy silty CLAY. (LONDON CLAY FORMATION)			
S	2.50	N = 13	1.50			From 2.00m to 2.30m bgl: soft.			
B	3.00			69.04	3.00				
UT	3.50	(55)				Firm to stiff grey slightly sandy silty CLAY with rare fine shell fragments. (LONDON CLAY FORMATION)			
D	3.95								
D	4.50								
S	4.50	N = 19	1.50						
UT	5.50	(55)							
D	5.90								
D	5.95					Below 6.00m bgl: stiff.			
D	6.50				(7.00)				
S	6.50	N = 20	1.50						
D	7.50								
UT	8.00	(60)							
D	8.40					Below 8.50m bgl: very stiff.			
D	9.00								
D	9.50								
S	9.50	N = 30	1.50						
				62.04	10.00	End of Borehole at 10.00m			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH3

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 2

Start 05/05/2021

Coordinates E 473373.20 N 153746.63

Scale

1:50

End 05/05/2021

Ground Level 72.07m AOD

Total Depth

10.45m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20			72.02	(0.05)	Asphalt.			
				71.97	0.05	(MADE GROUND)			
B	0.60			71.47	(0.05)	Grey and reddish brown slightly sandy GRAVEL. Gravel is fine to medium occasionally coarse angular to subangular limestone, rare brick and concrete.			
					0.10	(MADE GROUND - SUBBASE)			
					(0.50)				
					0.60				
					(1.10)	Brownish grey and brown sandy GRAVEL with occasional cobbles. Gravel is fine to coarse angular to subrounded brick, concrete, limestone, asphalt and concrete. Cobbles are subangular concrete and brick.			
D	1.50					(MADE GROUND - SUBBASE)			
S	1.50	N = 19	1.50	70.37	1.70				
UT	2.00	(20)				Firm orangish, brown and grey slightly gravelly sandy silty CLAY. Sand is fine to medium. Gravel is fine to coarse subangular to subrounded flint and chalk. (REWORKED LONDON CLAY FORMATION)			
D	2.40					Firm orangish brown silty slightly fine sandy CLAY. (REWORKED LONDON CLAY FORMATION)			
					(2.10)	From 2.00m to 2.45m bgl: slightly gravelly, rare fine subrounded gravel of chalk and flint.			
D	3.00								
S	3.00	N = 12	1.50						
				68.27	3.80				
UT	4.00	(40)				Firm becoming stiff grey silty locally slightly fine sandy CLAY with rare fine shell fragments. (LONDON CLAY FORMATION)			
D	4.45								
D	5.00								
S	5.00	N = 15	1.50						
UT	6.00	(40)				Below 6.00m bgl: stiff.			
D	6.45								
D	7.00				(6.65)				
D	7.50								
S	7.50	N = 25	1.50						
D	8.50								
UT	9.00	(55)							
D	9.45								
D	10.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
								Logged: FC
								Checked: AS

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 4.00m bgl.

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH4

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 2

Start 04/05/2021

Coordinates E 473287.33 N 153789.22

Scale

1:50

End 04/05/2021

Ground Level 71.27m AOD

Total Depth

10.45m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20			71.22	(0.05)	Block paving.			
B	0.45			71.02	0.05	(MADE GROUND)			
					(0.20)	Yellowish brown slightly silty fine to medium SAND.			
					0.25	(MADE GROUND - SUBBASE)			
					(0.75)	Firm friable orangish brown gravelly sandy CLAY. Gravel is fine to coarse angular to subangular flint and quartzite.			
B	1.00			70.27	1.00	(MADE GROUND)			
WAC	1.00					At 0.40m bgl: black plastic membrane.			
D	1.20					From 0.40m to 0.90m bgl: slightly gravelly.			
S	1.20	N = 11				Firm orangish brown mottled light grey slightly sandy silty slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to coarse angular to subangular flint. (REWORKED LONDON CLAY FORMATION)			
UT	2.00	(20)			(1.70)				
D	2.45								
B	2.70			68.57	2.70				
D	3.00					Stiff locally very stiff brownish grey and grey slightly fine sandy silty CLAY with rare fine gravel sized shell fragments.			
S	3.00	N = 18	1.50			(LONDON CLAY FORMATION)			
						From 3.20m to 3.30m bgl: silt.			
UT	4.00	(35)							
D	4.45								
D	5.00								
S	5.00	N = 15	1.50						
UT	6.00	(40)							
D	6.45				(7.75)				
D	7.00					From 7.00m to 7.05m bgl: dark brown silt band with frequent fine gravel sized pyrite nodules.			
D	7.50								
S	7.50	N = 22	1.50						
D	8.50								
UT	9.00	(50)							
D	9.40								
D	10.00					Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 5.00m bgl.

Diameter: 150mm to 10.45m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH5

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Start 05/05/2021

Coordinates E 473336.31 N 153712.06

Scale

1:50

End 05/05/2021

Ground Level 72.10m AOD

Total Depth

10.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10			72.05	(0.05)	Asphalt.			
				72.00	0.05	(MADE GROUND)			
				71.90	(0.05)	Grey and reddish brown slightly sandy GRAVEL. Gravel is fine to medium occasionally coarse angular to subangular limestone and rare brick.			
B	0.80			71.30	(0.10)	(MADE GROUND - SUBBASE)			
					0.20	Weak light grey CONCRETE.			
					0.80	(MADE GROUND)			
B	1.50			70.60	(0.70)	Grey and brownish grey slightly sandy to sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, concrete, flint and rare asphalt. Cobbles are subangular concrete and brick.			
S	1.50	N = 31	1.50		1.50	(MADE GROUND - SUBBASE)			
					(0.60)	At 0.80m bgl: black plastic membrane.			
				70.00	2.10	Firm brown slightly sandy gravelly CLAY with occasional cobbles. Gravel is fine to coarse subangular brick, concrete and flint. Cobbles are subangular brick.			
D	2.50					(MADE GROUND)			
S	2.50	N = 13	1.50			Dense orangish brown slightly sandy clayey GRAVEL. Gravel is fine to coarse angular to subangular flint and occasional chalk.			
					(2.00)	(RIVER TERRACE DEPOSITS)			
UT	3.50	(40)				Firm locally stiff orangish brown and brown slightly gravelly slightly sandy silty CLAY. Gravel is fine subangular chalk and flint.			
						(REWORKED LONDON CLAY FORMATION)			
D	3.95			68.00	4.10	Stiff brownish grey and grey silty CLAY with rare fine shell fragments.			
D	4.10					(LONDON CLAY FORMATION)			
D	4.50								
S	4.50	N = 18	1.50						
UT	5.50	(45)							
D	5.95					From 5.95m to 6.50m bgl: very stiff, slightly fine sandy.			
D	6.50								
S	6.50	N = 22	1.50						
					(5.90)				
D	7.50								
UT	8.00	(50)							
D	8.40								
D	9.00					Below 9.00m bgl: very stiff.			
D	9.50								
S	9.50	N = 23	1.50						
				62.10	10.00	End of Borehole at 10.00m			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 9.50m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH6

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 2

Start 06/05/2021

Coordinates E 473288.95 N 153710.40

Scale

1:50

End 06/05/2021

Ground Level 71.02m AOD

Total Depth

10.50m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10			70.92	(0.10)	Asphalt.			
					0.10	(MADE GROUND)			
B	0.50			70.52	(0.40)	Brown, grey and reddish brown slightly sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, asphalt, concrete and flint. Cobbles are subangular brick.			
				70.42	0.50	(MADE GROUND - SUBBASE)			
					(0.10)				
					0.60	Brown and locally grey slightly sandy gravelly CLAY. Gravel is fine to coarse subangular brick, flint and rare glass.			
					(0.90)	(MADE GROUND)			
D	1.50			69.52	1.50	Orangish brown and brown slightly silty sandy GRAVEL with cobble sized pockets of gravelly clay. Gravel is fine to coarse angular to subangular occasionally subrounded flint and rare chalk.			
S	1.50	N = 9	1.50			(RIVER TERRACE DEPOSITS)			
					(1.50)	Firm brown mottled orangish brown locally grey slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular to subrounded flint and chalk. (REWORKED LONDON CLAY FORMATION)			
D	2.40								
UT	2.50	(20)							
B	3.00			68.02	3.00	Firm becoming stiff grey locally greyish brown silty CLAY with rare fine shell fragments.			
						(LONDON CLAY FORMATION)			
D	3.50								
S	3.50	N = 15	1.50						
UT	4.50	(30)							
D	4.95								
D	5.50								
S	5.50	N = 20	1.50						
D	6.50								
					(7.50)				
UT	7.00	(45)							
D	7.45								
D	8.00					Below 8.00m bgl: very stiff.			
D	8.50								
S	8.50	N = 26	1.50						
D	9.50								
UT	10.00	(55)				Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
								Logged: FC
								Checked: AS

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 4.00m bgl.

Diameter: 150mm to 10.50m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH7

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 2

Start 10/05/2021

Coordinates E 473208.20 N 153789.01

Scale

1:50

End 10/05/2021

Ground Level 69.32m AOD

Total Depth

10.45m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20			69.22	(0.10)	Block paving.			
				69.17	0.10	(MADE GROUND)			
					(0.05)	Yellowish brown fine to medium SAND.			
					0.15	(MADE GROUND - SUBBASE)			
B	0.90			68.42	(0.75)	Brown and grey slightly silty SAND and GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, limestone, asphalt and concrete. Cobbles are subangular brick and concrete.			
				68.12	1.20	(MADE GROUND - SUBBASE)			
UT	1.50	(20)			(0.50)	Firm grey and brown slightly gravelly to gravelly sandy CLAY. Gravel is fine to coarse subangular flint, brick and concrete.			
				67.62	1.70	(MADE GROUND)			
D	1.95				(0.65)	Soft locally firm brown mottled orangish brown and grey silty slightly fine sandy CLAY.			
						(LONDON CLAY FORMATION)			
D	2.35			66.97	2.35	Firm grey locally mottled brown silty CLAY.			
D	2.50					(LONDON CLAY FORMATION)			
S	2.50	N = 10	1.50			From 1.95m bgl: closely spaced fissured.			
						Firm becoming stiff grey silty CLAY with rare fine shell fragments.			
						(LONDON CLAY FORMATION)			
UT	3.50	(25)							
D	3.95								
						Below 4.00m bgl: stiff.			
D	4.50								
S	4.50	N = 16	1.50						
UT	5.50	(30)							
D	5.95								
D	6.50				(8.10)				
D	7.00								
S	7.00	N = 19	1.50						
D	8.00								
						Below 8.00m bgl: very stiff.			
						From 8.00m to 9.00m bgl: slightly fine sandy.			
UT	8.50	(45)							
D	8.95								
D	10.00								
						Continued next sheet			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
			0.35	0.35	Slight seepage			Logged: FC
								Checked: AS

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH7

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

2 of 2

Start 10/05/2021

Coordinates E 473208.20 N 153789.01

Scale

1:50

End 10/05/2021

Ground Level 69.32m AOD

Total Depth

10.45m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
S	10.00	N = 26	1.50	58.87	10.45	Firm becoming stiff grey silty CLAY with rare fine shell fragments. (LONDON CLAY FORMATION)	<div> <div>×</div> <div>—</div> <div>×</div> </div>		
						End of Borehole at 10.45m			

DRAFT

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
			0.35	0.35	Slight seepage			

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH8

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Start 06/05/2021

Coordinates E 473203.27 N 153716.06

Scale

1:50

End 06/05/2021

Ground Level 70.39m AOD

Total Depth

10.00m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAOD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20			70.34	(0.05)	Asphalt.			
				70.29	0.05	(MADE GROUND)			
				70.19	(0.05)	Grey and reddish brown slightly sandy GRAVEL. Gravel is fine to medium angular to subangular limestone and rare brick.			
					0.10	(MADE GROUND - SUBBASE)			
					(0.10)	(MADE GROUND - SUBBASE)			
B	0.90			69.49	0.20	Weak light grey CONCRETE.			
B	1.20				(0.70)	(MADE GROUND)			
C	1.20	N = 31	1.50		0.90	Brown, grey and reddish brown slightly silty sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, concrete, flint and asphalt. Cobbles are subangular concrete.			
					(0.80)	(MADE GROUND - SUBBASE)			
				68.69	1.70	Dense orangish brown slightly clayey to clayey sandy GRAVEL. Gravel is fine to coarse subangular to subrounded flint and rare fine chalk. (RIVER TERRACE DEPOSITS)			
UT	2.00	(20)				Firm brown mottled orangish brown silty slightly fine sandy CLAY. (REWORKED LONDON CLAY FORMATION)			
D	2.45				(2.00)	From 1.70m to 2.00m bgl: slightly gravelly, gravel is fine subangular chalk and flint.			
D	3.00								
S	3.00	N = 10	1.50						
				66.69	3.70	Stiff brownish grey and grey silty slightly fine sandy CLAY. (LONDON CLAY FORMATION)			
D	3.80					From 3.95m and 4.00m bgl: Driller notes claystone band.			
UT	4.50	(35)							
D	4.95								
D	5.00								
S	5.00	N = 11	1.50						
D	6.00								
UT	6.50	(30)							
D	6.95				(6.30)				
D	7.50								
D	8.00								
S	8.00	N = 19	1.50			Below 8.00m bgl: grey, very stiff.			
D	9.00								
UT	9.50	(35)							
D	9.95			60.39	10.00	End of Borehole at 10.00m			

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	
			4.00	3.82	Seepage	1.50		Logged: FC
								Checked: AS

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 5.00m bgl.

Diameter: 150mm to 10.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH9

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 2

Start 07/05/2021

Coordinates E 473140.48 N 153724.31

Scale

1:50

End 07/05/2021

Ground Level 70.03m AOD

Total Depth

10.50m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20			69.93	(0.10)	Asphalt.			
				69.88	0.10	(MADE GROUND)			
					(0.05)	Orangish brown and reddish brown slightly sandy GRAVEL. Gravel is fine to medium angular to subangular limestone and rare asphalt.			
					0.15	(MADE GROUND - SUBBASE)			
					(1.25)	Brownish grey occasionally grey and brown slightly sandy to sandy GRAVEL with occasional cobbles and rare wood fragments. Gravel is fine to coarse subangular brick, concrete, asphalt, glass and flint.			
B	1.50			68.63	1.40	Cobbles are concrete and brick.			
C	1.50	N = 11	1.50	68.43	(0.20)	(MADE GROUND - SUBBASE)			
					1.60	Firm grey and brown slightly sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded brick, flint and chalk.			
						(MADE GROUND)			
					(1.20)	Firm orangish brown locally brown silty fine sandy slightly gravelly CLAY. Gravel is fine to medium subangular to subrounded flint and chalk. (REWORKED LONDON CLAY FORMATION)			
UT	2.50	(20)				From 1.60m to 1.80m bgl: gravelly.			
D	2.95			67.23	2.80	Firm orangish brown locally brown silty fine sandy CLAY.			
					(0.70)	(LONDON CLAY FORMATION)			
B	3.50			66.53	3.50	Firm becoming stiff grey silty CLAY with rare shell fragments.			
D	3.50					(LONDON CLAY FORMATION)			
S	3.50	N = 12	1.50						
UT	4.50	(30)							
D	4.95								
						Between 5.00m and 5.20m bgl: band of hard silt.			
D	5.50								
S	5.50	N = 18	1.50						
D	6.50								
UT	7.00	(40)			(7.00)	Below 7.00m bgl: stiff.			
D	7.45								
D	8.00								
D	8.50								
S	8.50	N = 26	1.50			Below 8.50m bgl: very stiff.			
D	9.50								
UT	10.00	(50)							

Continued next sheet

Chiselling			Groundwater Strikes					Drilled: Gap Drilling Services Ltd Logged: FC Checked: AS
From	To	Duration (hh:mm)	Depth Strike	Rose to	Remarks	Cased	Sealed	

Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Installation: 50mm diameter standpipe installed to 4.00m bgl.

Diameter: 150mm to 10.50m

Exploratory hole logs should be read in conjunction with key sheets

APPLIED GEOLOGY

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS1

Project

Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client

Patron Hook Ltd

Sheet

1 of 2

Start

06/05/2021

Coordinates

E 473357.17 N 153886.92

Scale

1:25

End

06/05/2021

Ground Level

75.35m AOD

Total Depth

5.45m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.40			75.20	(0.15)	Asphalt.			
					0.15	(MADE GROUND)			
					(0.45)	Grey and brown slightly sandy GRAVEL with rare cobbles. Gravel is fine to coarse subangular brick, concrete, asphalt and igneous stone. (MADE GROUND - SUBBASE)			
D S	1.20	N = 11		74.75	0.60	Firm orangish brown slightly sandy gravelly CLAY. Gravel is fine to medium subangular flint. (REWORKED LONDON CLAY)			
					(0.40)				
					74.35	1.00			
D S	2.00	N = 11	101mm /80%			Firm locally stiff orangish brown locally grey slightly fine sandy silty CLAY with occasional thin bands of silt. (LONDON CLAY FORMATION)			
D S	3.00	N = 11	92mm /100%		(2.90)	From 3.00m to 3.20m bgl: soft.			
D S	4.00	N = 12	79mm /100%	71.45	3.90	Firm locally stiff grey locally dark orangish brown silty CLAY. (LONDON CLAY FORMATION)			
D	5.00				(1.55)	Continued next sheet			

Installation:
Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: FC Checked: AS
Depth Strike	Rose to	Remarks	Cased	Sealed	

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS3

Project

Bartley Wood Business Park, Hook

Client

Patron Hook Ltd

Start

06/05/2021

End

06/05/2021

Coordinates

E 473290.30 N 153768.99

Ground Level

71.22m AOD

Project No.

AG3265-21

Sheet


1 of 2

Scale

1:25

Total Depth

5.45m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.50	N = 11		71.14	(0.08)	Block paving. (MADE GROUND) Yellowish brown slightly silty fine to medium SAND. (MADE GROUND - SUBBASE) Reddish brown and grey slightly sandy fine to medium subangular GRAVEL. Gravel is fine to coarse angular to subangular limestone and igneous stone. (MADE GROUND - SUBBASE) Firm locally soft brown and grey slightly gravelly slightly sandy CLAY with rare cobbles. Gravel is fine to coarse subangular brick, concrete, flint and asphalt. Cobbles are subangular brick. (MADE GROUND) Firm orangish brown locally mottled grey silty fine sandy CLAY. (LONDON CLAY FORMATION)			
				71.07	0.08				
					(0.07)				
					0.15				
				70.77	(0.30)				
D	0.80			70.62	(0.15)				
				0.60					
D	1.20								
S	1.20								
D	2.00			101mm /80%		(2.20)			
S	2.00								
D	2.00								
S	3.00			68.42	2.80	Between 2.50m and 2.80m bgl: locally brownish grey.			
D	3.40				(1.00)				
				79mm /100%					
D	4.00			67.42	3.80	Firm locally stiff grey and brownish grey silty CLAY with rare fine shell fragments. (LONDON CLAY FORMATION)			
S	4.00					Stiff grey silty CLAY with rare fine shell fragments and occasional thin silt laminae. (LONDON CLAY FORMATION) Between 4.00m and 5.00m bgl: occasional fine shell fragments.			
D	4.00								
				70mm /100%					
D	5.00				(1.65)				
Continued next sheet									

Installation:
Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: FC Checked: AS
Depth Strike	Rose to	Remarks	Cased	Sealed	

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS4

Project

Bartley Wood Business Park, Hook

Client

Patron Hook Ltd

Start

06/05/2021

End

06/05/2021

Coordinates

E 473179.14 N 153757.80

Ground Level

69.86m AOD

Project No.

AG3265-21

Sheet






































1 of 2

Scale

1:25

Total Depth

5.45m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.50	N = 11		69.78	(0.08)	Block paving.			
				69.71	0.08	(MADE GROUND)			
					(0.07)	Yellowish brown slightly silty fine to medium SAND.			
				69.56	0.15	(MADE GROUND - SUBBASE)			
					(0.15)	CONCRETE (weak).			
	0.30		(MADE GROUND)						
	(0.65)		Grey and brown slightly silty sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular to subrounded brick, concrete, quartzite and rare asphalt. Cobbles are subangular brick. (MADE GROUND - SUBBASE)						
	68.91		0.95	At 0.95m bgl: black plastic membrane.					
D	1.20			68.76	(0.15)	Firm greyish brown mottled brown slightly gravelly sandy CLAY. Gravel is fine to medium subangular flint. (REWORKED LONDON CLAY FORMATION)			
S	1.20				1.10	Firm orangish brown locally mottled light grey silty CLAY. (LONDON CLAY FORMATION)			
D	1.80	N = 8	101mm /80%						
									
									
									
									
S	2.00								
D	2.20								
D	3.00	N = 14	92mm /100%	(2.30)					
									
									
									
									
S	3.00								
D	3.80	N = 16	79mm /100%	66.46	3.40	Firm becoming stiff brownish grey slightly fine sandy silty CLAY. (LONDON CLAY FORMATION)			
									
									
									
									
S	4.00								
D	4.50	N = 17	70mm /-%	(2.05)					
									
									
									
									
S	5.00								
Continued next sheet									

Installation:

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: FC Checked: AS
Depth Strike	Rose to	Remarks	Cased	Sealed	
0.90	0.90	Slight seepage			

DCS4

Project No. AG3265-21

Sheet 2 of 2

Scale 1:25

Total Depth 5.45m

DRAFT

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Drilled: DH
Logged: FC
Checked: AS

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS5

Project

Bartley Wood Business Park, Hook

Client

Patron Hook Ltd

Start

06/05/2021

End

06/05/2021

Coordinates

E 473089.80 N 153704.07

Ground Level

70.76m AOD

Project No.

AG3265-21

Sheet


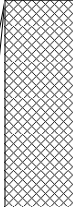
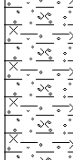
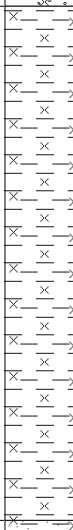



1 of 2

Scale

1:25

Total Depth

5.45m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.40	N = 6		70.68	(0.08)	Block paving.			
				70.61	0.08	(MADE GROUND)			
				70.61	(0.07)	Yellowish brown fine to medium SAND.			
					(0.00)	(MADE GROUND - SUBBASE)			
					0.15	CONCRETE (weak).			
ES	1.00				0.15	(MADE GROUND)			
				(1.10)	Brown and grey slightly silty sandy GRAVEL with are cobbles. Gravel is fine to coarse angular to subangular brick, concrete, quartzite, flint and rare asphalt. Cobbles are subangular brick and concrete.				
					(MADE GROUND - SUBBASE)				
C	1.20	N = 6		69.52	1.25	Firm brownish grey mottled orangish brown and grey slightly gravelly silty CLAY with occasional rootlets. Gravel is fine to medium subangular flint. (REWORKED LONDON CLAY FORMATION)			
D	1.30								
D S	2.00	N = 11	101mm /80%		(0.55)	Below 1.60m bgl: no gravel.			
				68.96	1.80	Firm grey mottled brown silty CLAY. (LONDON CLAY FORMATION)			
D S	3.00	N = 11	92mm /100%		(1.70)				
D S	4.00	N = 11	79mm /90%	67.26	3.50	Firm becoming stiff brownish grey and grey slightly fine sandy silty CLAY with rare fine shell fragments. (LONDON CLAY FORMATION)			
D	5.00	N = 11	70mm /-%		(1.95)	Below 4.50m bgl: stiff, locally fissured.			
Continued next sheet									

Installation:
Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Groundwater Strikes					Drilled: DH Logged: FC Checked: AS
Depth Strike	Rose to	Remarks	Cased	Sealed	

DCS5

Project No. AG3265-21

Sheet 2 of 2

Scale 1:25

Total Depth 5.45m

DRAFT

Groundwater Strikes					Drilled: DH
Depth Strike	Rose to	Remarks	Cased	Sealed	
					Logged: FC
					Checked: AS

TRIAL PIT LOG

TP1

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 10/05/2021

Scale

1:25

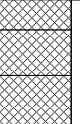
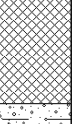
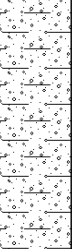

Ground Level 76.60m AOD

Coordinates

E 473414.73 N 153911.81

Total Depth

1.80m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES B WAC D	0.60		76.50	(0.10)	M-H	Asphalt. (MADE GROUND)		
				0.10	M	Greyish brown and reddish brown slightly sandy GRAVEL. Gravel is fine to medium angular to subangular limestone, rare concrete and brick.		
			76.36	(0.15)		(MADE GROUND - SUBBASE)		
				0.25				
D	0.75			(0.50)	M-H	Greyish brown and brown slightly silty slightly sandy to sandy GRAVEL with occasional cobbles. Gravel is fine to coarse angular to subangular brick, flint, concrete, rare asphalt and limestone.		
	0.75					(MADE GROUND - SUBBASE)		
	0.80		75.86	0.75		At 0.75m bgl: black plastic membrane.		
						Orangish brown locally mottled grey slightly sandy very clayey GRAVEL with occasional cobble sized pockets of slightly gravelly clay. Gravel is fine to coarse subangular to subrounded flint and occasional chalk.		
D				(0.90)	E	(RIVER TERRACE DEPOSITS)		
			74.96	1.65				
	1.75		74.81	(0.15)	E	Firm brown and orangish brown slightly gravelly sandy CLAY. Gravel is fine to coarse subangular to subrounded flint and quartzite. (REWORKED LONDON CLAY FORMATION)		
				1.80		End of Trial Pit at 1.80m		

DRAFT

Method: Backhoe excavator

Groundwater: Slight seepage at 1.80m bgl.

Stability: Stable.

Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length:	1.30m
Width:	0.50m
Logged:	FC
Checked:	AS

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.30		75.92	(0.15)		Asphalt.		
				0.15		(MADE GROUND)		
D	0.70		75.57	(0.35)		Grey and brownish grey slightly sandy slightly silty GRAVEL with occasional cobbles and wood fragments. Gravel is fine to coarse subangular brick, flint, concrete and asphalt. Cobbles are subangular concrete and brick.		
				0.50		(MADE GROUND - SUBBASE) At 0.50m bgl: black plastic membrane.		
D	1.70		74.67	(0.90)		Soft to firm orangish brown occasionally mottled light grey silty CLAY. (LONDON CLAY FORMATION)		
				1.40		From 1.20m to 1.40m bgl: slightly fine sandy, firm.		
D	2.70			(2.30)		Firm brown mottled orangish brown and brownish grey silty CLAY. (LONDON CLAY FORMATION)		
						From 1.60m to 2.60m bgl: locally slightly friable.		
D	3.80		72.37	3.70		Firm brownish grey locally grey and dark orangish silty CLAY with thin bands of fine sandy silt.		
				(0.20)		(LONDON CLAY FORMATION)		
			72.17	3.90		End of Trial Pit at 3.90m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Trial pit backfilled with arisings on completion.

Length:

Width: 0.50m

Logged: FC

Checked: AS

TRIAL PIT LOG

TP3

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 14/05/2021

Scale

1:25

Ground Level 73.05m AOD

Coordinates

E 473403.74 N 153848.95

Total Depth

3.30m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
			72.93	(0.12)		Asphalt.		
				0.12		(MADE GROUND)		
			72.75	(0.18)	M-H	Reddish brown and greyish brown slightly sandy GRAVEL. Gravel is fine to medium angular to subangular limestone.		
				0.30		(MADE GROUND - SUBBASE)		
					M-H	Grey and brown slightly sandy slightly silty GRAVEL with occasional to frequent cobbles. Gravel is fine to coarse subangular to subrounded concrete, brick, asphalt, glass, flint and limestone. Cobbles are concrete and limestone.		
			72.25	(0.50)		(MADE GROUND - SUBBASE)		
				0.80		Soft to firm orangish brown mottled brown slightly fine sandy silty CLAY. (LONDON CLAY FORMATION)		
D	1.00							
D	1.50							
				(2.30)	E			
D	2.50							
						From 2.80m and 3.10m bgl: firm predominantly brown mottled brownish grey.		
D	3.15		69.95	3.10		Stiff locally very stiff grey silty CLAY with occasional hard thin silt bands. (LONDON CLAY FORMATION)		
D	3.30		69.75	(0.20)	E			
				3.30	M-H	Between 3.20m and 3.30m bgl: siltstone/hard silt band.		
						End of Trial Pit at 3.30m		

Method: Backhoe excavator

Groundwater: Slight seepage from 1.20m bgl on footing side only.

Stability: Stable.

Remarks: Trial pit incorporated excavation to establish presence of footing of a retaining wall, this was encountered at 1.20m bgl, extending 1.50m out from the retaining wall. Trial pit backfilled with arisings on completion.

Length:	1.70m
Width:	0.50m
Logged:	FC
Checked:	AS

TRIAL PIT LOG

TP4

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 10/05/2021

Scale

1:25

Ground Level 74.00m AOD

Coordinates

E 473349.11 N 153855.02

Total Depth

2.40m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
B ES	0.50 0.60		73.92	(0.08)	M	Asphalt. (MADE GROUND)		
			73.80	(0.12)	E	Reddish brown and grey slightly sandy GRAVEL. Gravel is fine to medium subangular limestone, rare brick and asphalt.		
				(0.20)	E	(MADE GROUND - SUBBASE)		
			73.50	0.50		Yellowish brown fine to medium SAND. (MADE GROUND - SUBBASE)		
D	1.20			(0.55)	M	Brown and greyish brown slightly silty slightly sandy to sandy GRAVEL with occasional cobbles. Gravel is fine to coarse brick, concrete, asphalt, limestone and flint. Cobbles are subangular concrete. (MADE GROUND - SUBBASE)		
			72.95	1.05	E	Soft to firm locally friable orangish brown silty sandy slightly gravelly CLAY. Gravel is fine to medium subangular chalk and flint. (REWORKED LONDON CLAY FORMATION)		
				(0.85)				
D	1.80		72.10	1.90	E	Firm brown mottled light grey and orangish brown silty slightly sandy CLAY. (LONDON CLAY FORMATION)		
				(0.50)				
D	2.30		71.60	2.40		End of Trial Pit at 2.40m		

Method: Backhoe excavator

Groundwater: Slight seepage at 2.40m bgl.

Stability: Stable.

Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length:	1.60m
Width:	0.50m
Logged:	FC
Checked:	AS

TRIAL PIT LOG

TP5

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 14/05/2021

Scale

1:25






Ground Level 72.00m AOD

Coordinates

E 473345.80 N 153790.35

Total Depth

3.00m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.60		71.90	(0.10)	M	Asphalt. (MADE GROUND)		
				0.10		Brown and greyish brown slightly sandy to sandy slightly silty GRAVEL with occasional cobbles and rare plastic fragments. Gravel is fine to coarse subangular to subrounded limestone, concrete, brick and flint. (MADE GROUND - SUBBASE)		
			71.46	(0.45)				
D	1.70			0.55	H-VH	Cemented grey and brown slightly sandy slightly silty GRAVEL with occasional cobbles. Gravel is fine to coarse subangular to subrounded concrete, brick, asphalt, limestone and flint. Cobbles are subangular concrete. (MADE GROUND - SUBBASE)		
				(0.65)				
			70.81	1.20	E	Soft to firm orangish brown occasionally mottled brown and grey slightly gravelly sandy CLAY. Sand is fine. Gravel is fine to coarse subangular to subrounded flint and chalk. (REWORKED LONDON CLAY FORMATION)		▼
			70.50	(0.30)		Firm brown mottled light grey silty CLAY. (LONDON CLAY FORMATION)		
D	2.70			1.50				
				(1.50)	E	Between 2.30m and 2.70m bgl: locally slightly friable.		
			69.00	3.00		End of Trial Pit at 3.00m		▼

Method: Backhoe excavator

Groundwater: Slight seepae at 1.20m bgl, slight seepage at 3.00m bgl.

Stability: Stable.

Remarks: Trial pit backfilled with arisings on completion.

Length: 1.70m

Width: 0.50m

Logged: FC

Checked: AS

TRIAL PIT LOG

TP6

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 14/05/2021

Scale

1:25

Ground Level 70.60m AOD

Coordinates

E 473256.14 N 153792.47

Total Depth

0.60m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
			70.50	(0.10)	M	Asphalt. (MADE GROUND)		
			70.35	(0.15)	M	Reddish brown and grey slightly sandy GRAVEL. Gravel is fine to medium subangular limestone and occasional asphalt.		
				0.25	M-H	(MADE GROUND - SUBBASE)		
			70.00	(0.35)	M-H	Greyish brown and brown slightly sandy slightly silty GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, concrete, limestone and flint. Cobbles are subangular tile, concrete and brick.		
				0.60		(MADE GROUND - SUBBASE)		
						End of Trial Pit at 0.60m		

DRAFT

Method: Backhoe excavator

Groundwater: Ingress from pipe.

Stability: Stable.

Remarks: Trial pit terminated at 0.60m bgl services encountered. Surface water ceramic drainage pipe approximately 100mm diameter encountered at 0.55m bgl, fractured - water flowing out steady level at 0.30m bgl. Repaired using plastic cover and bentonite. Trial pit backfilled with arisings on completion.

Length:	1.40m
Width:	0.50m
Logged:	FC
Checked:	AS

TRIAL PIT LOG

TP7

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 10/05/2021

Scale

1:25


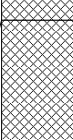
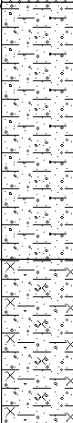
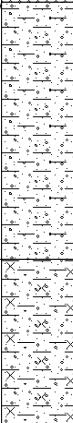
Ground Level 71.04m AOD

Coordinates

E 473249.07 N 153699.67

Total Depth

2.00m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.50		70.96	(0.08)	M	Block paving.		
				0.08	E	(MADE GROUND)		
			70.84	(0.12)		Yellowish brown SAND.		
				0.20		(MADE GROUND - SUBBASE)		
D	0.80			(0.40)	E	Brownish grey and grey slightly silty sandy GRAVEL with rare cobbles. Gravel is fine to medium occasionally coarse angular to subangular limestone, occasional concrete and flint and rare brick. Cobbles are subangular concrete.		
			70.44	0.60		(MADE GROUND - SUBBASE) <i>At 0.60m bgl: black plastic membrane.</i>		
D	1.30			(0.85)	E	Firm locally soft orangish brown locally mottled light grey slightly sandy gravelly locally very gravelly CLAY. Gravel is fine to medium occasionally coarse angular to subangular flint and rare chalk. (REWORKED LONDON CLAY FORMATION)		
			69.59	1.45				
D	1.90			(0.55)	E	Firm orangish brown mottled brown and grey slightly sandy slightly gravelly silty CLAY. Gravel is fine to coarse subangular flint and rare chalk. (REWORKED LONDON CLAY FORMATION)		
			69.04	2.00				
End of Trial Pit at 2.00m								

DRAFT

Method: Backhoe excavator

Groundwater: Slight seepage at 2.00m bgl.

Stability: Stable.

Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length: 1.60m

Width: 0.50m

Logged: FC

Checked: AS

TRIAL PIT LOG

TP8

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 10/05/2021

Scale

1:25

Ground Level 69.82m AOD

Coordinates

E 473227.64 N 153803.52

Total Depth

2.00m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
B ES	0.30 0.40		69.72	(0.10)	H	Asphalt.		
				0.10	M	(MADE GROUND)		
			69.57	(0.15)		Greyish brown and reddish brown slightly sandy GRAVEL. Gravel is fine to medium angular to subangular limestone, rare asphalt and igneous stone.		
				0.25	E	(MADE GROUND - SUBBASE)		
D	0.70		69.32	(0.25)		Brown slightly silty slightly sandy GRAVEL with occasional cobble and wood fragments. Gravel is fine to coarse subangular to subrounded concrete, brick, flint and quartzite.		
				(0.50)		(MADE GROUND - SUBBASE)		
						At 0.50m bgl: black plastic membrane.		
						Soft to firm locally slightly friable orangish brown locally mottled grey silty sandy CLAY.		
D	2.00					(LONDON CLAY FORMATION)		
				(1.40)				
						Below 1.50m bgl: predominantly firm.		
			67.92	1.90	E	Firm grey silty CLAY with rare fine shell fragments.		
			67.82	(0.10)		(LONDON CLAY FORMATION)		
				2.00		End of Trial Pit at 2.00m		

Method: Backhoe excavator

Groundwater: Slight seepage at 2.00m bgl.

Stability: Stable.

Remarks: Soakaway test undertaken within trial pit, see separate results sheet for details. Trial pit backfilled with arisings on completion.

Length: 1.70m

Width: 0.50m

Logged: FC

Checked: AS

TRIAL PIT LOG

TP9

Project Bartley Wood Business Park, Hook

Project No.

AG3265-21

Client Patron Hook Ltd

Sheet

1 of 1

Date 14/05/2021

Scale

1:25


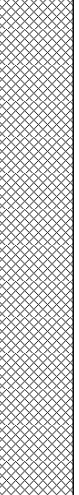
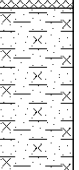
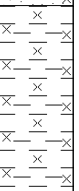
Ground Level 70.58m AOD

Coordinates

E 473155.79 N 153751.10

Total Depth

3.00m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
B ES	0.50 0.50		70.48	(0.10) 0.10	M	Asphalt. (MADE GROUND)		
				Brownish grey and grey slightly silty sandy GRAVEL with occasional cobbles. Gravel is fine to coarse subangular brick, concrete, flint, asphalt, glass and plastic fragments. Cobbles are concrete and brick. (MADE GROUND - SUBBASE)				
ES	1.50			(1.70)	H	Below 1.00m bgl: frequent concrete cobbles, weakly cemented.		
ES D	1.90 2.00		68.78	1.80	E	Soft to firm orangish brown mottled brown slightly fine sandy silty CLAY. (REWORKED LONDON CLAY FORMATION)		
				(0.55)				
D	2.40		68.23	2.35	E	Firm becoming locally stiff brown and greyish brown silty CLAY. (LONDON CLAY FORMATION)		
				(0.65)				
D	3.00		67.58	3.00		End of Trial Pit at 3.00m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Trial pit backfilled with arisings on completion.

Length: 1.60m

Width: 0.50m

Logged: FC

Checked: AS

Filling	1 of 1
Trial Pit Length (m)	1.30
Trial Pit Width (m)	0.50
Trial Pit Depth (m)	1.80
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Depth (m bgl)

Time (minutes)

Max effective depth

75%


25%

Empty

Time (minutes)	Max effective depth (m bgl)	75% (m bgl)	25% (m bgl)	Empty (m bgl)	Dark Blue Series (m bgl)
0.00	0.70	1.00	1.50	1.80	0.70
500.00	0.70	1.00	1.50	1.80	0.71
1000.00	0.70	1.00	1.50	1.80	0.72
1500.00	0.70	1.00	1.50	1.80	0.73
2000.00	0.70	1.00	1.50	1.80	0.74
2500.00	0.70	1.00	1.50	1.80	0.75
3000.00	0.70	1.00	1.50	1.80	0.75
3200.00	0.70	1.00	1.50	1.80	0.75

Soil Infiltration Rate (m/s)	*
------------------------------	---

* Water level did not drop sufficiently for the calculation to be made

Client:	Patron Hook Ltd	
Project:	Bartley Wood Business Park, Hook	
Project No.	AG3265-21	

Filling	1 of 1
Trial Pit Length (m)	1.60
Trial Pit Width (m)	0.50
Trial Pit Depth (m)	2.40
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Time (minutes)	Max effective depth (m bgl)	75% (m bgl)	25% (m bgl)	Empty (m bgl)
0	0.90	1.25	2.05	2.40
500	0.92	1.25	2.05	2.40
1000	0.93	1.25	2.05	2.40
1500	0.94	1.25	2.05	2.40
2000	0.95	1.25	2.05	2.40
2500	0.96	1.25	2.05	2.40
3000	0.97	1.25	2.05	2.40
3500	0.98	1.25	2.05	2.40

Soil Infiltration Rate (m/s)

*

* Water level did not drop sufficiently for the calculation to be made

Client:	Patron Hook Ltd
Project:	Bartley Wood Business Park, Hook
Project No.	AG3265-21

APPLIED GEOLOGY

Filling	1 of 1
Trial Pit Length (m)	1.60
Trial Pit Width (m)	0.50
Trial Pit Depth (m)	2.00
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Depth (m bgl)

Time (minutes)

Max effective depth

75%


25%

Empty

Time (minutes)	Max effective depth (m bgl)	75% (m bgl)	25% (m bgl)	Empty (m bgl)
0	0.60	1.00	1.60	2.00
250	0.65	1.00	1.60	2.00
500	0.65	1.00	1.60	2.00
1000	0.65	1.00	1.60	2.00
1600	0.65	1.00	1.60	2.00
3200	0.70	1.00	1.60	2.00

Soil Infiltration Rate (m/s)	*
------------------------------	---

* Water level did not drop sufficiently for the calculation to be made

Client:	Patron Hook Ltd	
Project:	Bartley Wood Business Park, Hook	
Project No.	AG3265-21	

Filling	1 of 1
Trial Pit Length (m)	1.70
Trial Pit Width (m)	0.50
Trial Pit Depth (m)	2.00
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Time (minutes)	Max effective depth (m bgl)	75% (m bgl)	25% (m bgl)	Empty (m bgl)
0	0.55	0.90	1.60	2.00
100	0.58	0.90	1.60	2.00
200	0.59	0.90	1.60	2.00
300	0.60	0.90	1.60	2.00
400	0.61	0.90	1.60	2.00
500	0.62	0.90	1.60	2.00
1000	0.63	0.90	1.60	2.00
1500	0.64	0.90	1.60	2.00
2000	0.65	0.90	1.60	2.00
2500	0.66	0.90	1.60	2.00
3000	0.67	0.90	1.60	2.00
3200	0.68	0.90	1.60	2.00

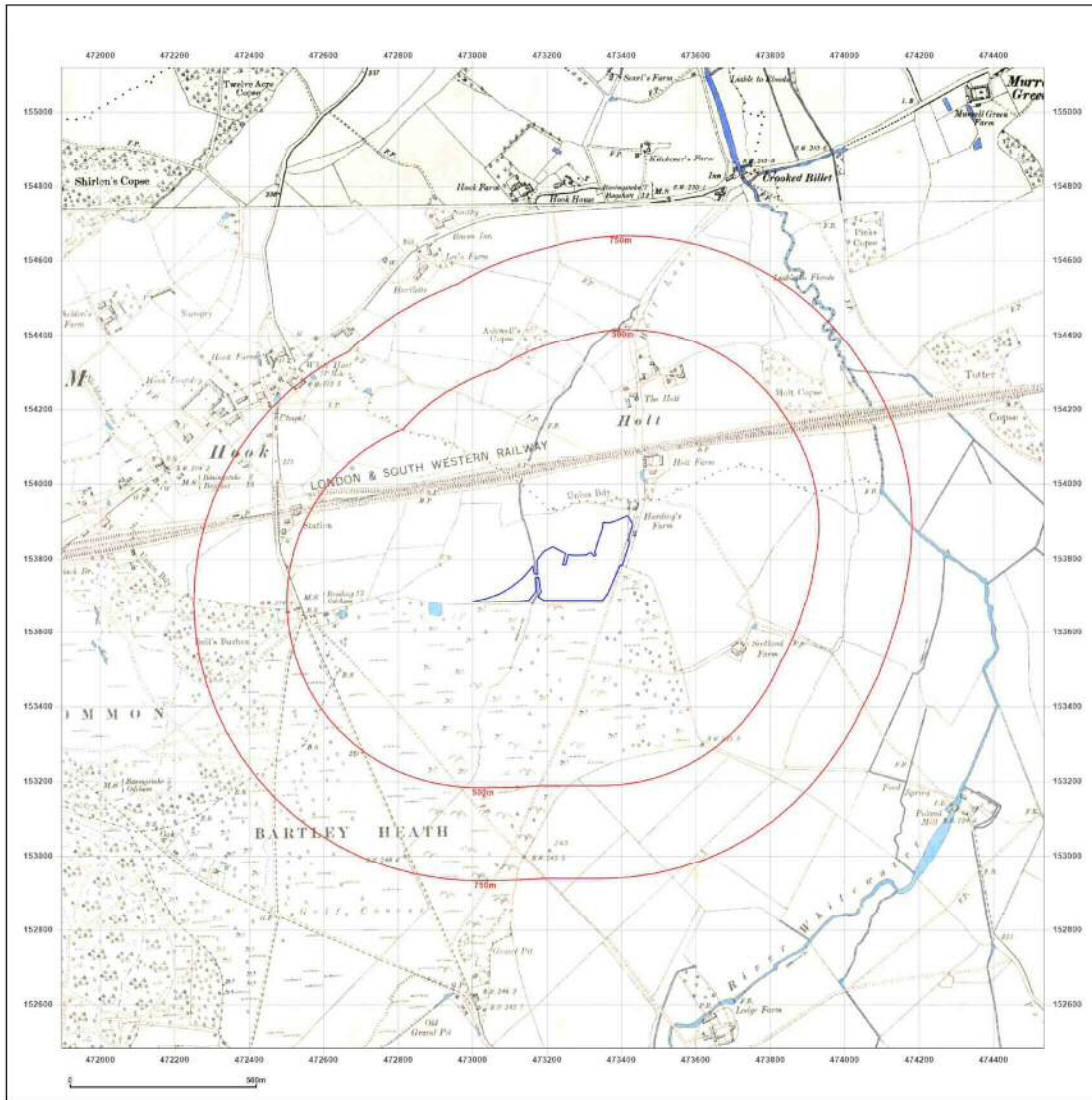
Soil Infiltration Rate (m/s)

*

* Water level did not drop sufficiently for the calculation to be made

Client:	Patron Hook Ltd
Project:	Bartley Wood Business Park, Hook
Project No.	AG3265-21

APPLIED GEOLOGY



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594
Report Ref: EMS-684965_899594
Grid Ref: 473215, 153799

Map Name: County Series

Map date: 1894-1897

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1894
Edition 1897
Copyright N/A
Levelled N/A

Surveyed 1872
Revised 1894
Edition N/A
Copyright N/A
Levelled N/A

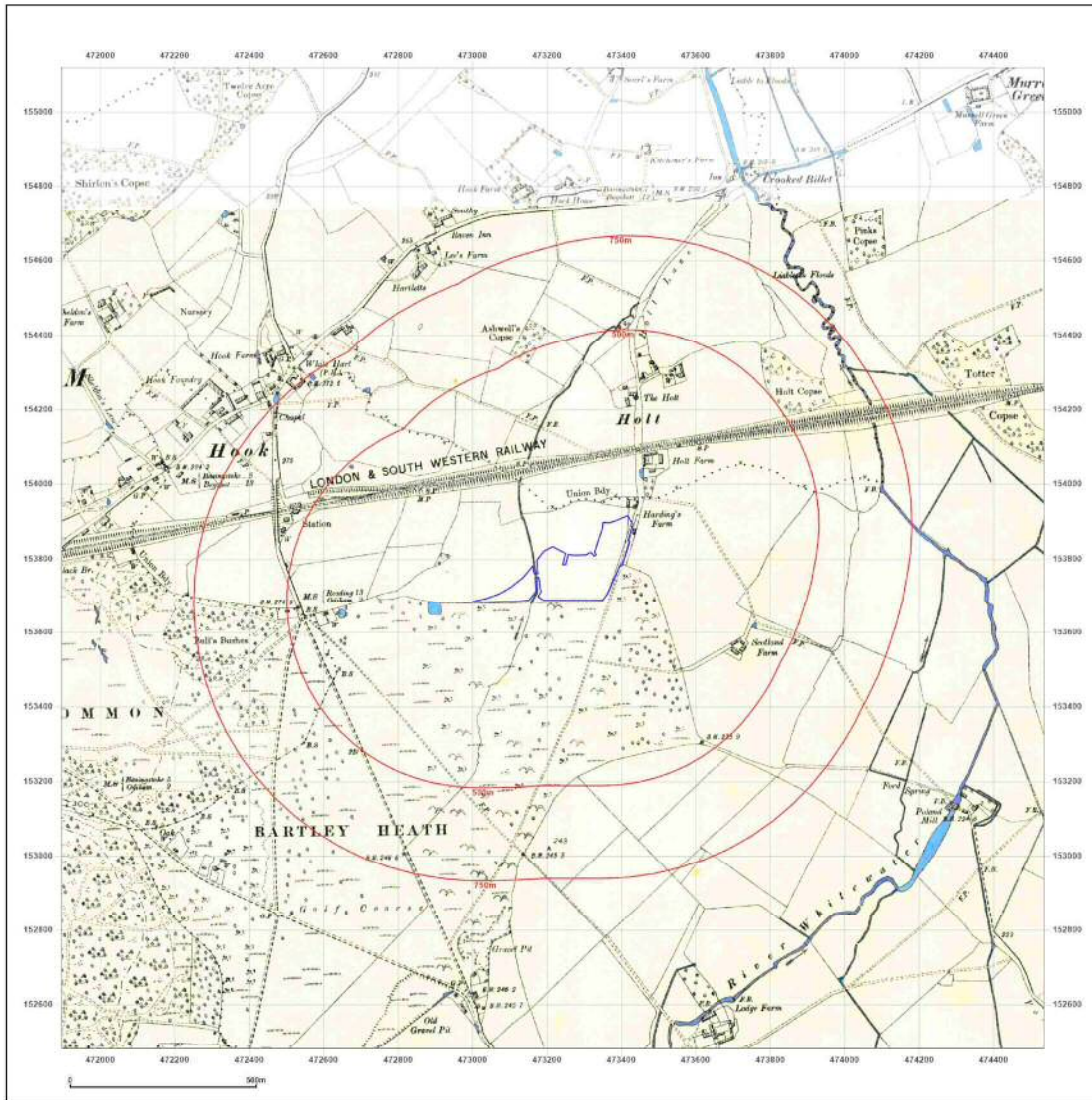


Produced by
Groundsure Insights
www.groundsure.com

Supplied by:
www.emapsite.com
sales@emapsite.com

© Crown copyright and database rights 2019 Ordnance Survey 100035207
Production date: 15 April 2021

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594
Report Ref: EMS-684965_899594
Grid Ref: 473215, 153799

Map Name: County Series

Map date: 1894-1897

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1894
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1894
Edition 1897
Copyright N/A
Levelled N/A



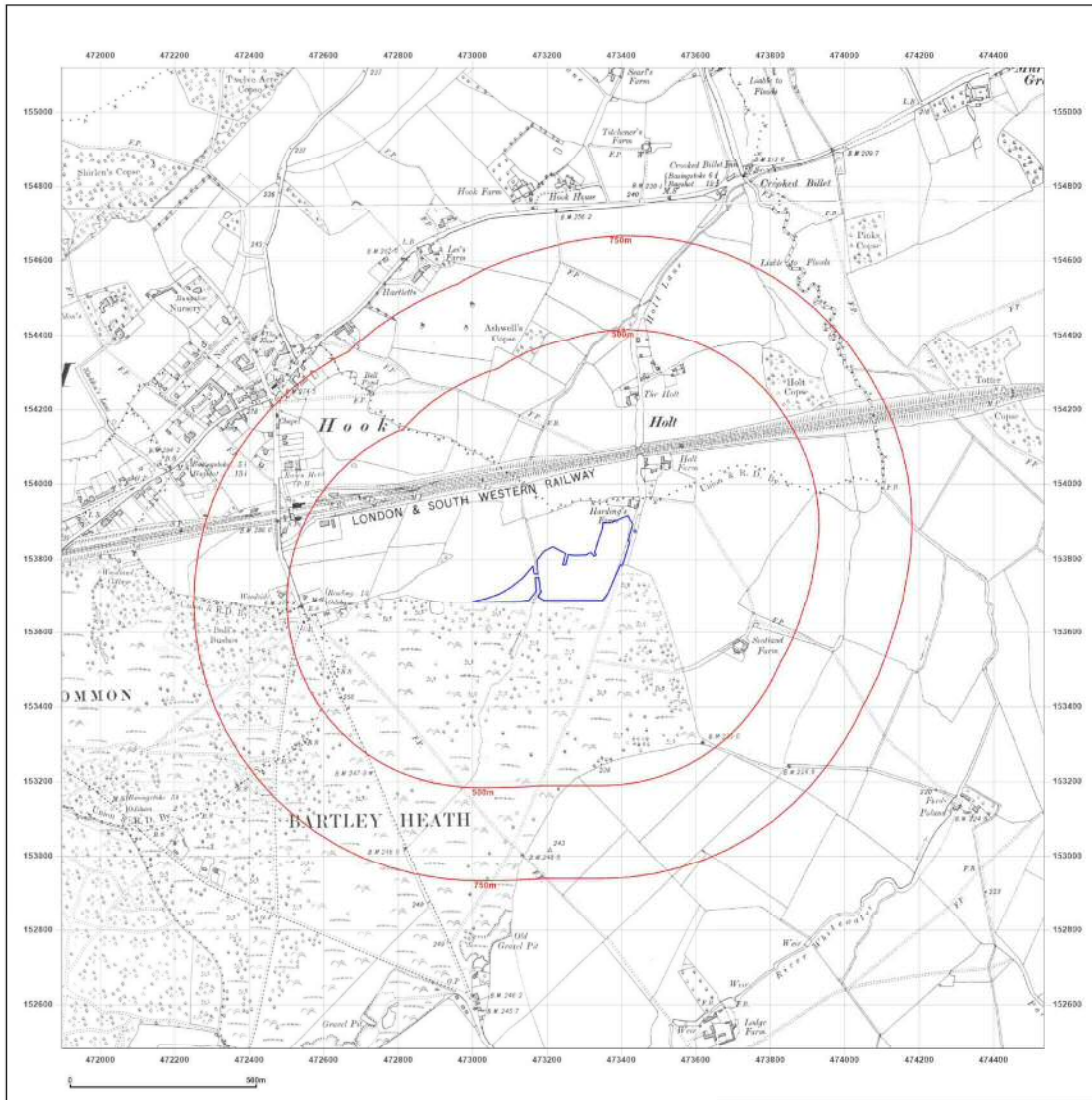
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.emapsite.com
sales@emapsite.com

© Crown copyright and database rights 2019 Ordnance Survey 100035207
Production date: 15 April 2021

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594
Report Ref: EMS-684965_899594
Grid Ref: 473215, 153799

Map Name: County Series

Map date: 1909-1912

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1871
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

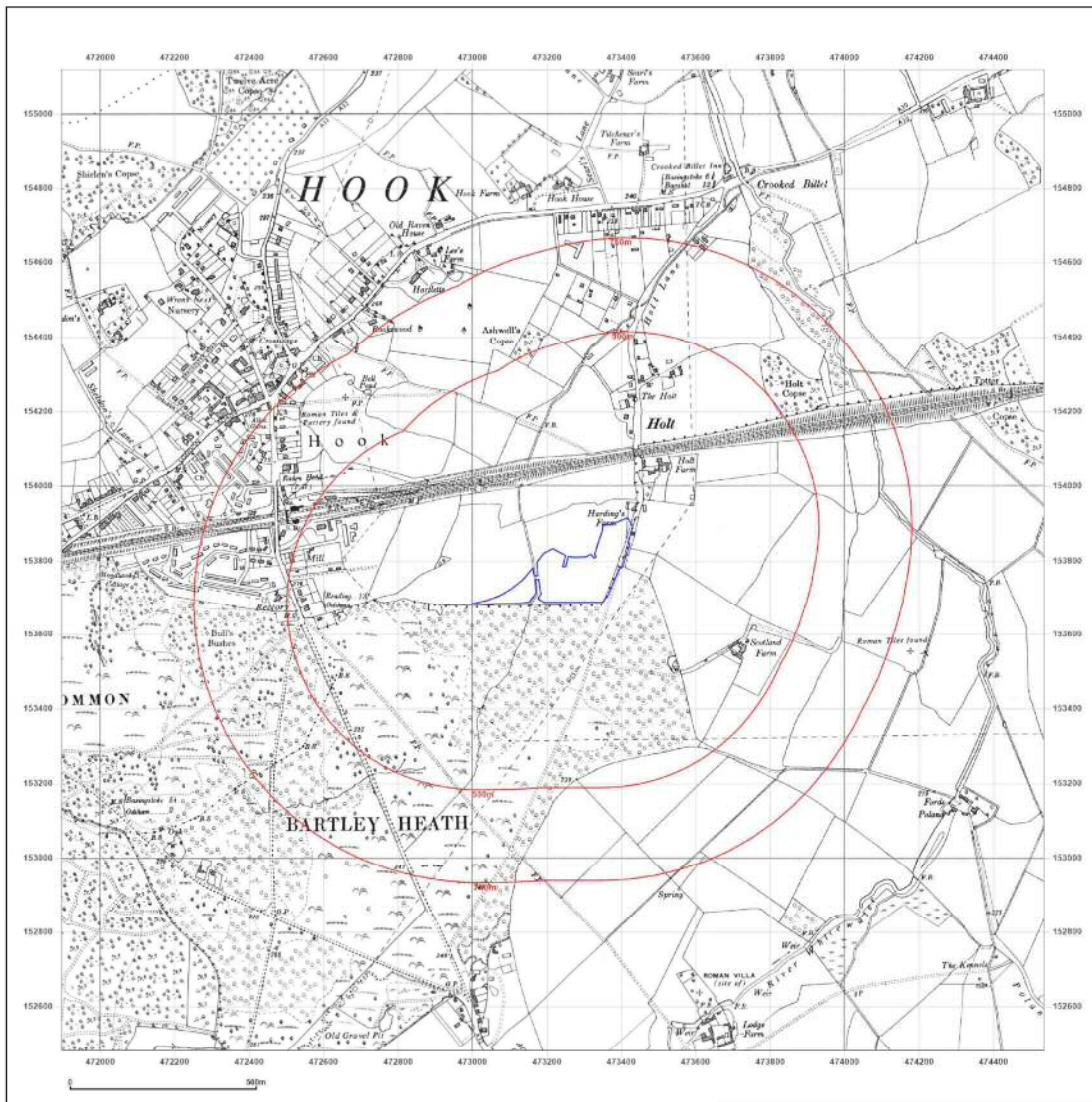


Produced by
Groundsure Insights
www.groundsure.com

Supplied by:
www.emapsite.com
sales@emapsite.com

© Crown copyright and database rights 2019 Ordnance Survey 100035207
Production date: 15 April 2021

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594

Report Ref: EMS-684965_899594

Grid Ref: 473215, 153799

Map Name: Provisional

Map date: 1956-1961

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1961
Edition N/A
Copyright 1961
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

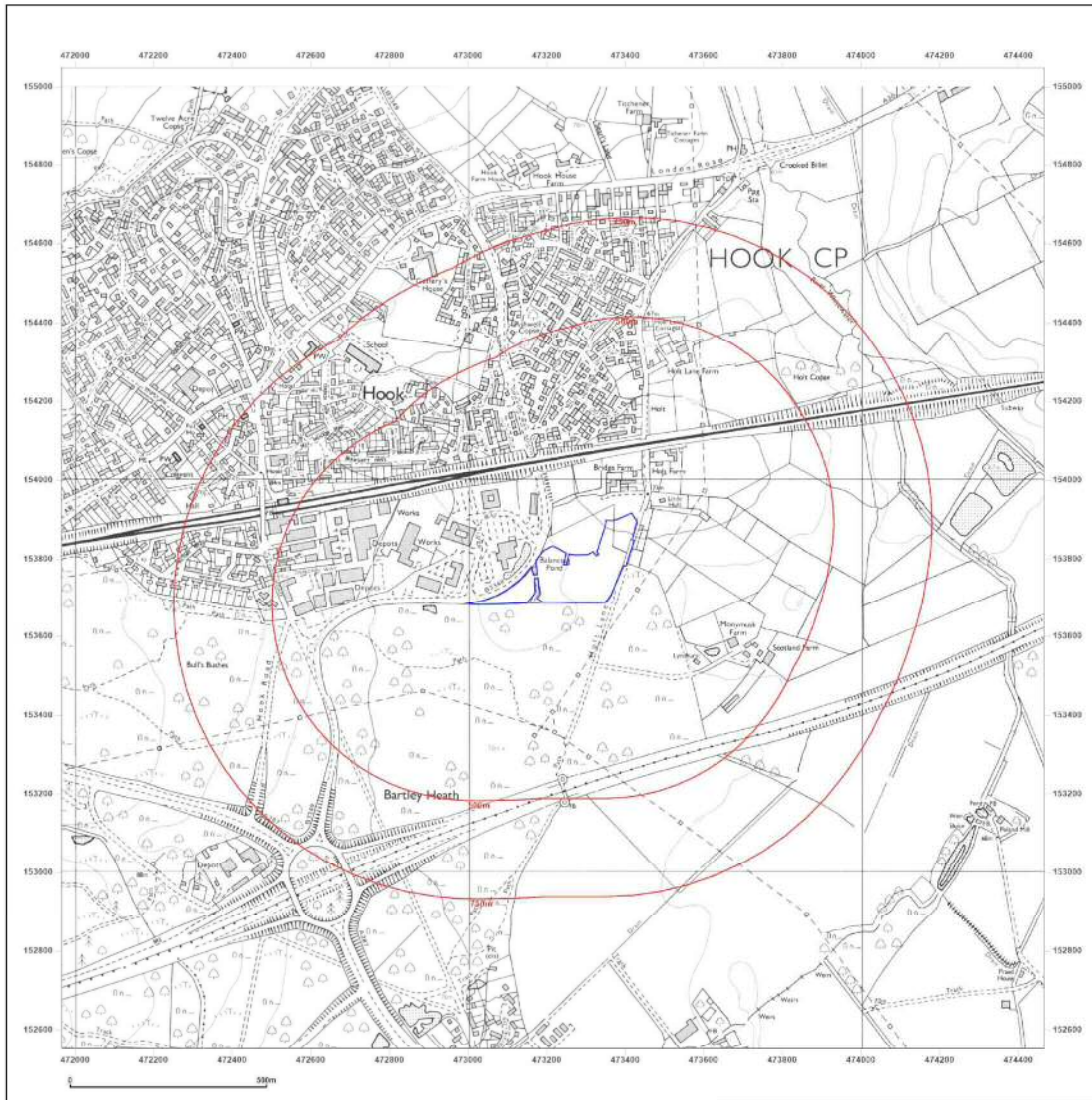


Supplied by:
www.emapsite.com
sales@emapsite.com

© Crown copyright and database rights 2019 Ordnance Survey 100035207

Production date: 15 April 2021

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594

Report Ref: EMS-684965_899594

Grid Ref: 473215, 153799

Map Name: National Grid

Map date: 1992

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1989
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com



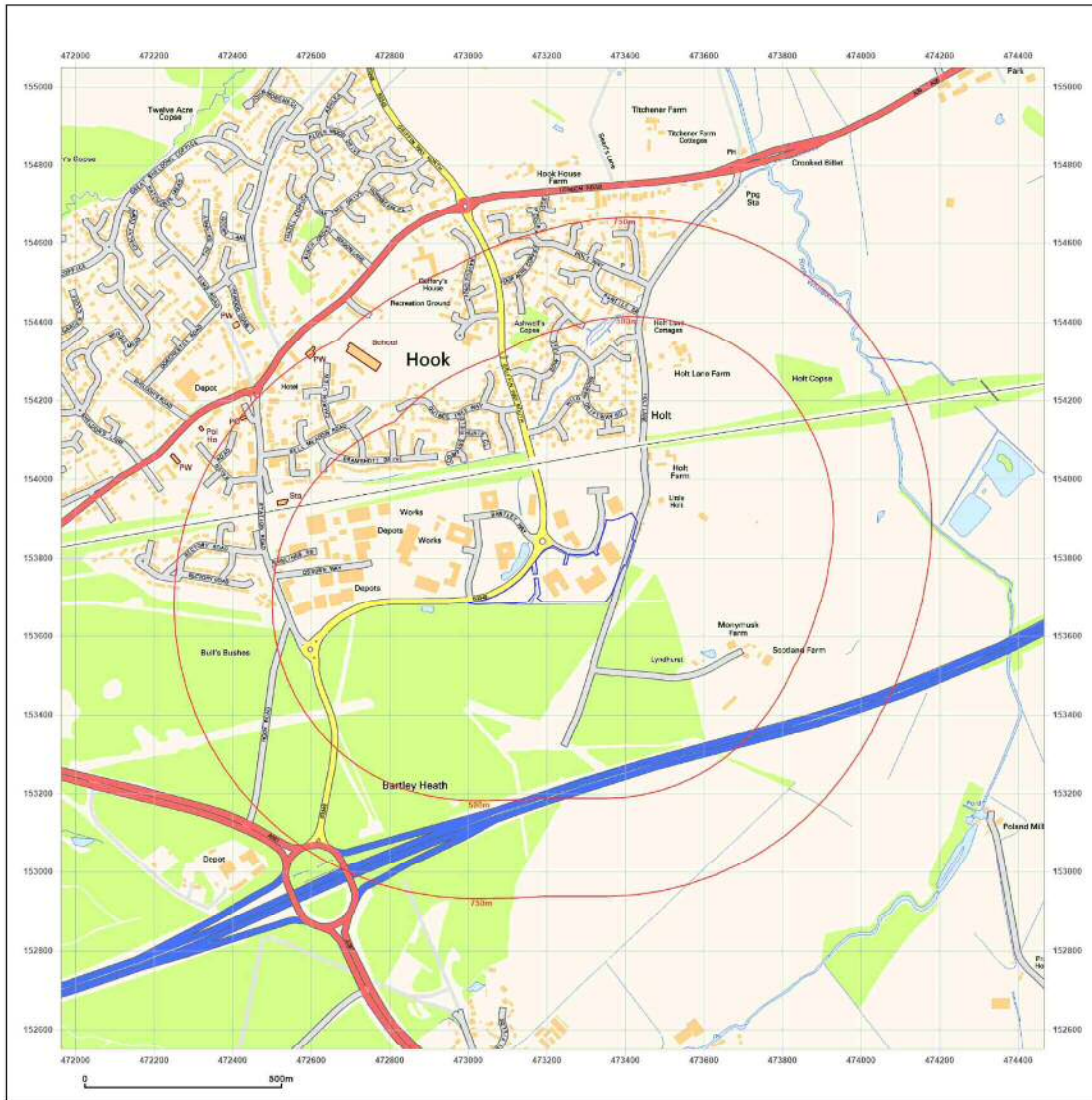
Supplied by:
www.emapsite.com
sales@emapsite.com

© Crown copyright and database rights 2019 Ordnance Survey 100035207

Production date: 15 April 2021

Map legend available at:

www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Bartley Wood Business Park,
Hook

Client Ref: EMS_684965_899594

Report Ref: EMS-684965_899594

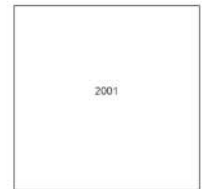
Grid Ref: 473215, 153799

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.emapsite.com
sales@emapsite.com

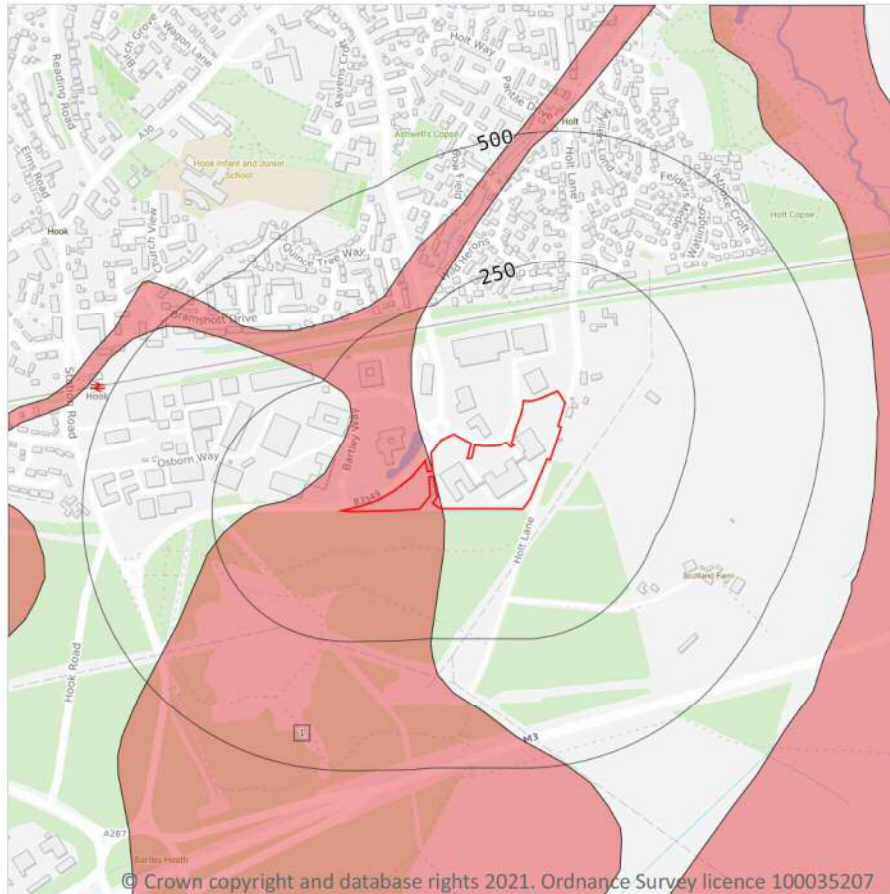
© Crown copyright and database rights 2019 Ordnance Survey 100035207

Production date: 15 April 2021

Map legend available at:

www.groundsure.com/sites/default/files/groundsure_legend.pdf

5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

1

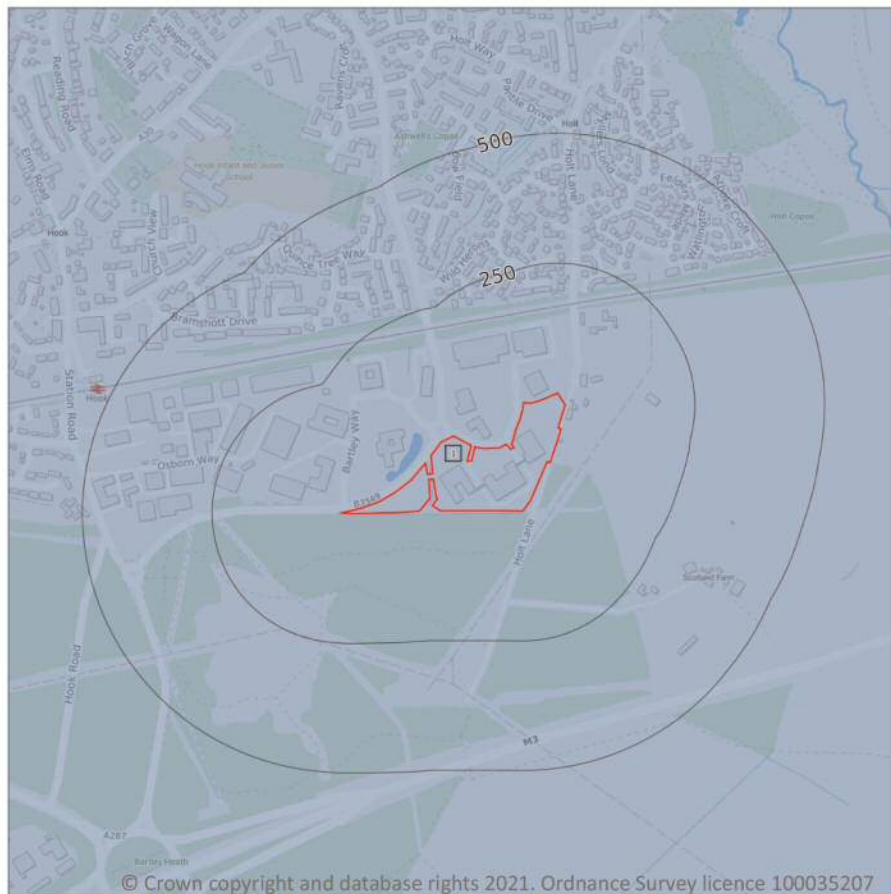
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 32**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

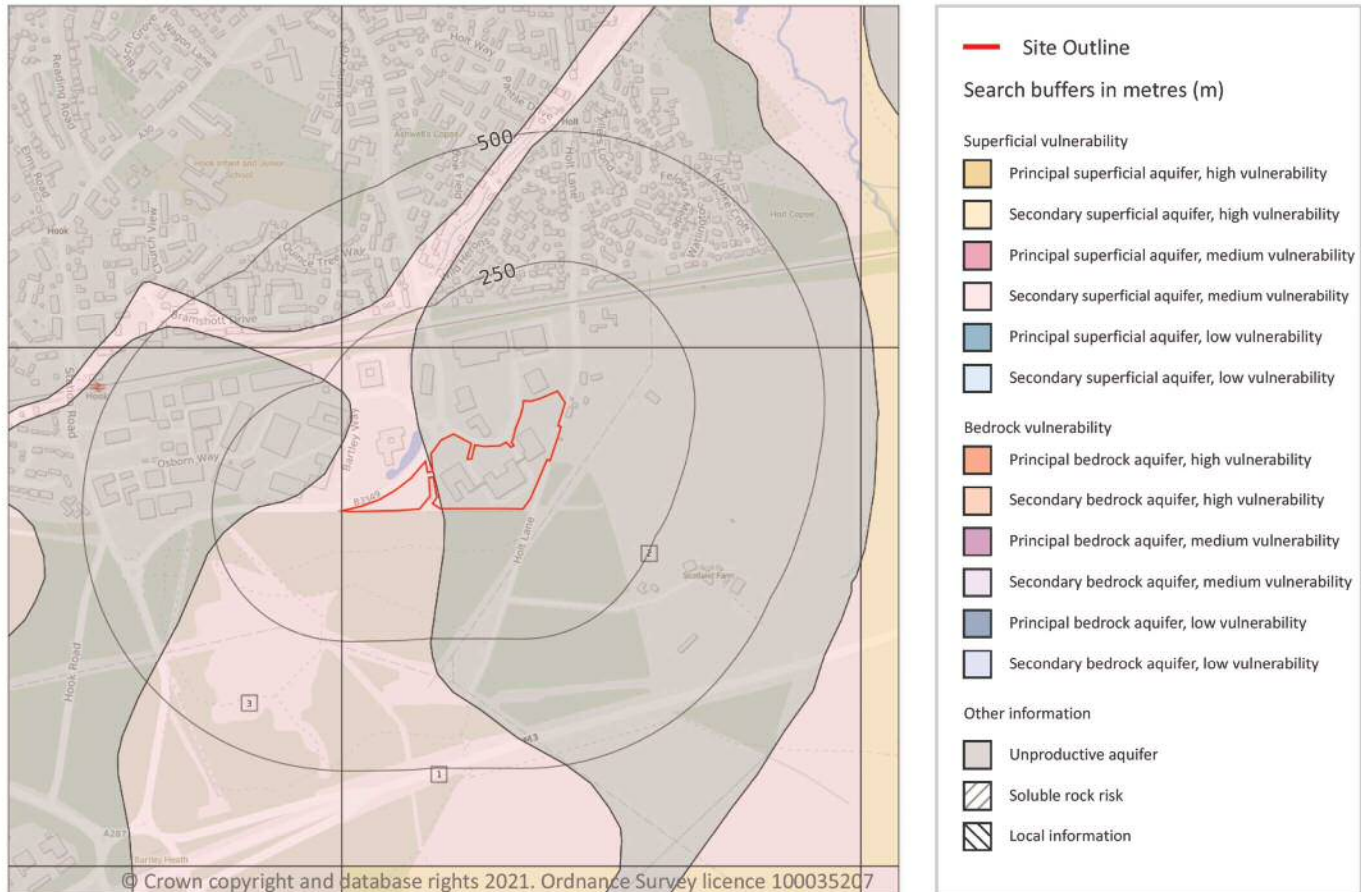
Features are displayed on the Bedrock aquifer map on **page 33**

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

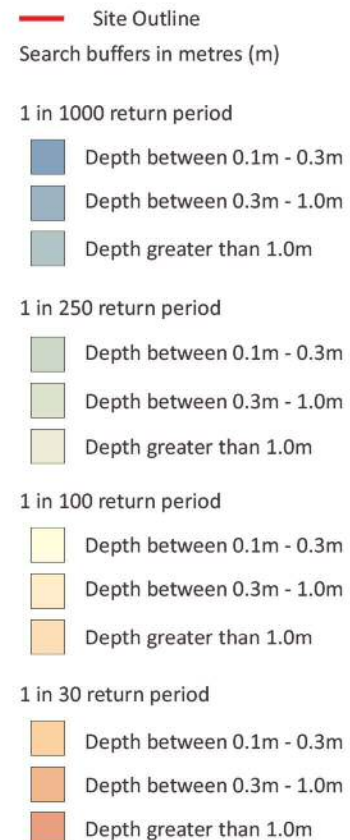
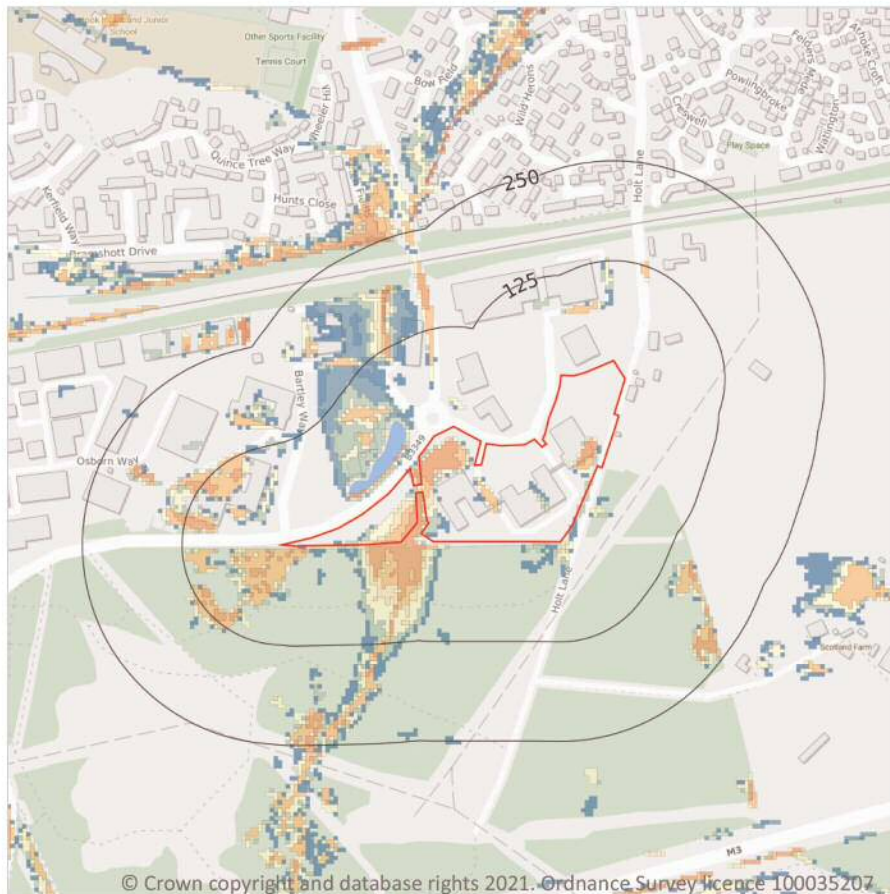
3

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 34**

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 47**

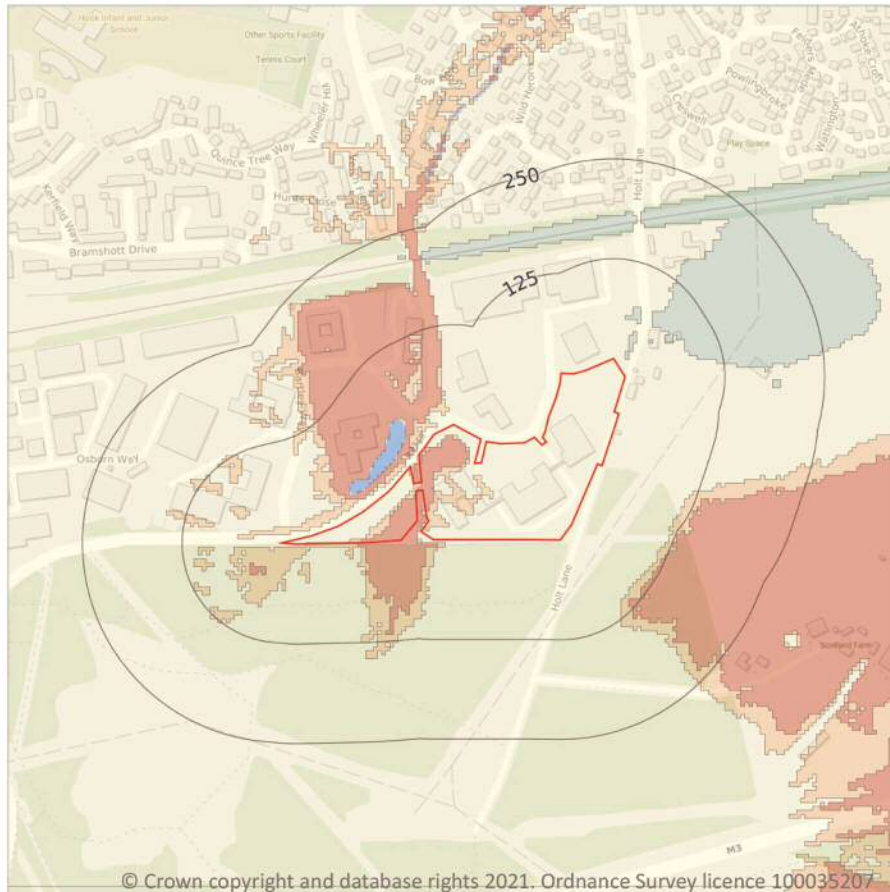
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

© Crown copyright and database rights 2021. Ordnance Survey licence 100035207

9.1 Groundwater flooding

Highest risk on site

High

Highest risk within 50m

High

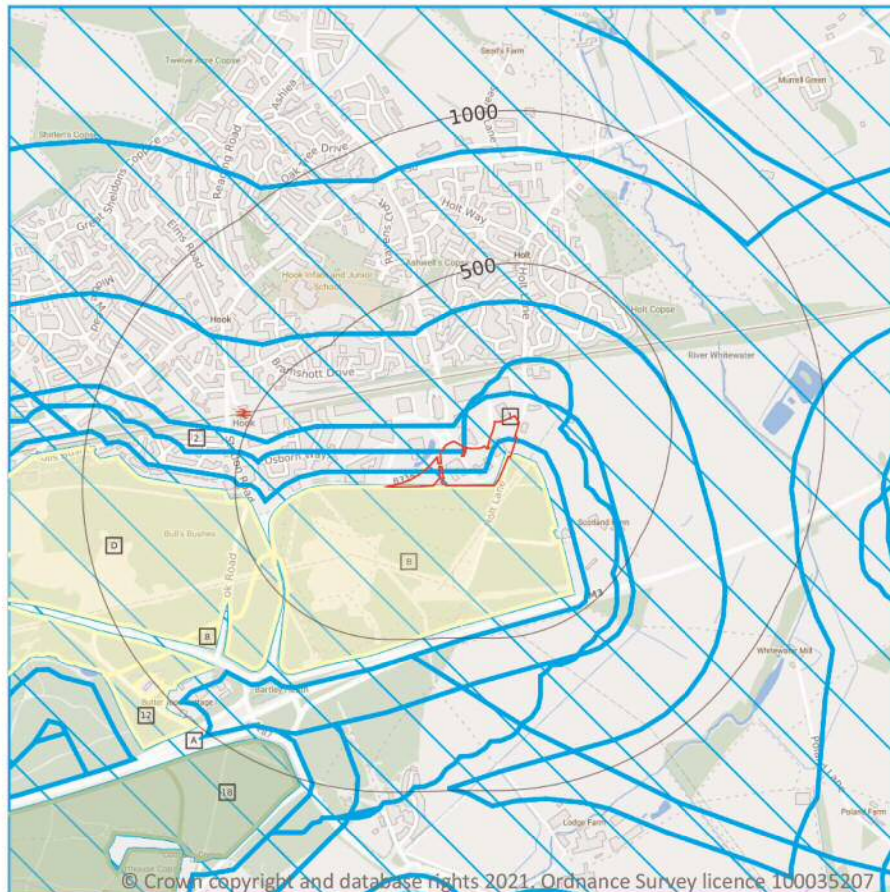
Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 49**

This data is sourced from Ambiental Risk Analytics.



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

4

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 56**

ID	Location	Type of developments requiring consultation
B	On site	All applications - All Planning Applications.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	16
-----------------------------	-----------

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 56**

ID: B
 Location: On site
 SSSI name: Hook Common and Bartley Heath
 Unit name: Bartley Heath
 Broad habitat: Dwarf Shrub Heath - Lowland
 Condition: Unfavourable - Recovering
 Reportable features:

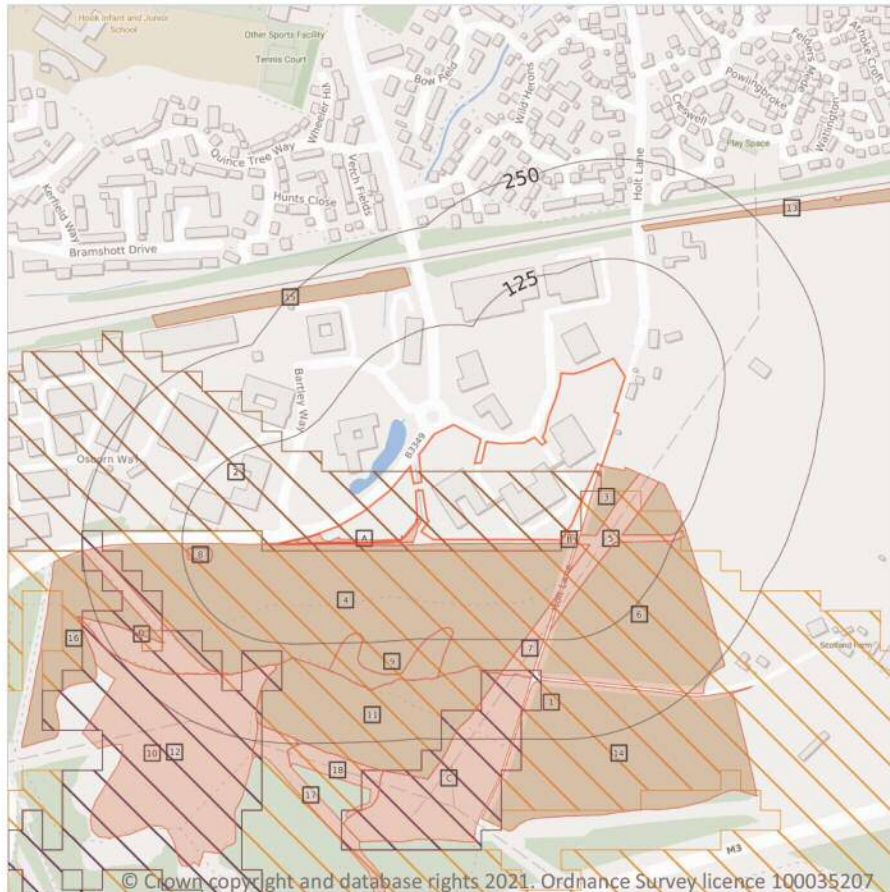
Feature name	Feature condition	Date of assessment
Invert. assemblage A1 arboreal canopy	Not Recorded	01/01/1900
Invert. assemblage F1 unshaded early successional mosaic	Not Recorded	01/01/1900
Invert. assemblage F2 grassland & scrub matrix	Not Recorded	01/01/1900
Lowland mixed deciduous woodland	Not Recorded	01/01/1900
Lowland wet heath	Not Recorded	01/01/1900

ID: D
 Location: 438m SW
 SSSI name: Hook Common and Bartley Heath
 Unit name: Hook Common (Bull's Bushes+gaine's Wood)
 Broad habitat: Dwarf Shrub Heath - Lowland
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A1 arboreal canopy	Not Recorded	01/01/1900



13 Habitat designations



- Site Outline**
- Search buffers in metres (m)**
- Priority Habitat Inventory
 - Open Mosaic Habitat
 - Limestone Pavement Orders
- Habitat Networks**
- Primary Habitat
 - Restorable Habitat
 - Associated Habitats
 - Habitat Restoration-Creation
 - Network Enhancement Zone 1
 - Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

21

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 71**

ID	Location	Main Habitat	Other habitats
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%); Additional: LHEAT (FEP 50%)
3	0m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); LHEAT (ENSIS L1)
4	1m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%); LHEAT (ENSIS L1)

