geotechnical and environmental consultants

ground&water

Phase I Desk Study

Phase 1, East Horton Golf Club, Mortimers Lane, Fair Oak SO50 7EA

East Horton Golf Club

Report Reference: GWPR5988/DS/February 2025			Status: Final
Issue	Prepared By	Checked By	Verified By
v.1.02	Myles Finnerty BSc (Hons) MSc Geotechnical Engineer	Miltiadis Mellios MSc(Eng) CGeol FGS MIEnvSc GMICE Principal Engineer	Francis Williams MGeol (Hons) FGS CEnv CGeol Director

Site Investigations | Environmental Consultants | Geotechnical Engineers

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Table of Contents

..... 0

Table of Contents i

1. INTRODUCTION 1

1.1. General 1

1.2. Aims of the Investigation 1

1.3. Conditions and Limitations 1

1.4. Technical Glossary 1

2. SITE SETTING 2

2.1. Site Location 2

2.2. Site Description 2

2.3. Proposed Development 2

2.4. Geology 3

2.5. Hydrogeology and Hydrology 4

2.6. Radon 4

2.7. Internet Search (Site Setting) 5

2.7.1. Available Unexploded Ordnance (UXO) Map Review 5

2.7.2. Historical Landfill Tool Review 5

3. HISTORICAL REVIEW 6

3.1. Historical Map Review 6

3.2. Historical Aerial Photography Review 6

4. ENVIRONMENTAL AND GEOLOGICAL INSIGHT 8

4.1. Groundsure Datasheets 8

5. ONLINE REVIEW AND HISTORICAL INVESTIGATIONS 11

5.1. Online Council Planning Database 11

5.2. Internet Search 11

5.3. Previous Site Investigations 11

6. PRELIMINARY RISK ASSESSMENT 12

6.1. Contaminant Source-Pathway-Receptor Model 12

6.2. Potential On-site Sources of Contaminants 12

6.3. Potential Off-site Sources of Contaminants 12

6.4. Potential Receptors 13

6.5. Contaminant Absorption Pathways 14

6.6. Tabulated Conceptual Site Model 14

7. RECOMMENDATIONS AND PHASE II OBJECTIVES 19
7.1. Soils 19
7.2. Services 19
7.3. Groundwater 20
7.4. Ground-gas 20
7.5. Vapours 20
7.6. Geotechnical Review 20
7.6.1. General 20
FIGURES .....
APPENDIX A: Conditions and Limitations .....
APPENDIX B: Technical Glossary .....
APPENDIX C: Site Photographs .....
APPENDIX D: Historical Maps .....
APPENDIX E: GroundSure EnviroInsight and GeoInsight Datasheets .....

EXECUTIVE SUMMARY	
PROPOSED DEVELOPMENT	Phase 1 (Greenland Course) of the proposed development includes the closure and replanting of the 1st fairway, the development of a new tee box for the 1st hole, the development of a new fairway for the 1st hole along the existing driving range and improvements to the 18th green. It also includes the closure of the existing driving range; reprofiling to create a swale and landform; replanting – all to create a new garden, walkway and wildlife areas along with an attractive edge to the new 1st Fairway, accessibility improvements and alleviation of waterlogging and poor drainage. No demolition, new buildings or new water crossings proposed. No works within Flood Zone. Phase 2 (Parkland Course) of the proposed development includes the closure of holes 14, 15 and 18, reprofiling and landscaping to create a new 300 yard driving range, creating of swales and drainage to reduce waterlogging and improve drainage and construction of a new driving range building. No demolition or new water crossings proposed. No works with Flood Zone. Generally the proposed development aims to achieve drainage improvement through reprofiling, leading to an improvement in play and allowing the golf course to be open more regularly, ensuring its viability. The proposed development plan can be seen within Figure 4.
GEOLOGY AND HYDROGEOLOGY	The British Geological Survey Solid and Drift Geology Map for the Fairoak area (Southampton Sheet No. 315) revealed that the site was underlain by superficial Alluvium in an ~80m wide band running parallel to the route of the River along the southern boundary of the site. The majority of the site was noted to not have superficial deposits present. Bedrock deposits of the London Clay Formation were noted underlying the entire site. An area of Made Ground was noted adjacent to the western boundary of the site comprising the Fairoak Landfill measuring 255m wide by 490m long. 3No. further historic landfills were noted beyond the Fairoak Landfill to the north of the site. Bedrock deposits of the Durley Sand Member was noted 70m south of the site. Bedrock deposits of the Wittering Formation were noted 160m south of the site. No other areas of Made Ground or Reworked Ground were noted within a 250m radius. A study of the aquifer maps on the DEFRA website revealed the site was underlain by a **Secondary (Aquifer) Aquifer** comprising the superficial Alluvial Deposits where present. No designation was present for superficial deposits given their likely absence across much of the norther and western portions of the site. The underlying London Clay Formation was classified as **Unproductive Strata**. Examination of the Environment Agency records showed that the site **did not** fall within a Groundwater Source Protection Zone (SPZ) as classified in the Policy and Practice for the Protection of Groundwater. The Horton Heath Stream was noted running in a north-east to south-west direction along the eastern boundary of the site, and cutting into the site boundary. A number of ponds were noted surrounding the site including 170m north, 3No. located 40 – 250m east of the site and 1No. adjacent to the south-western corner of the site within the Fair Oak Landfill complex. A tributary of the stream was noted 90m south of the site and a second was noted adjacent to the north-eastern corner of the site. No other surface water features were noted within a 250m radius of the site. 2No. surface water abstraction points for irrigation were noted, one historical and one current adjacent to site.

	From analysis of hydrogeological and topographical maps the actual groundwater table was anticipated to be encountered at shallow depth within the Alluvial deposits where present on-site. Some amounts of groundwater however may be present at shallower depths within Made ground or capping Head Deposits where present or silty/sandy pockets of the London Clay Formation. It was considered that groundwater was flowing in a south-westerly direction toward the Horton Heath Stream in line with local topography. Examination of the Environment Agency records showed that the northern and western portions of the site were located within a Flood Zone 1, i.e. an area with a low probability of fluvial flooding. Adjacent to the Horton Heath Stream occupying an ~35m wide strip running parallel to the eastern boundary of the site was located within Flood Zone 3, i.e.an area with high probability of flooding. The Groundsure Datasheets revealed the site was at a high risk of flooding from rivers and the sea. The datasheets also revealed the northern and western portions of the site to be at a low risk of groundwater flooding, with the 35m wide portion of the site adjacent to the stream at a high risk of surface water flooding. The datasheets also revealed the northern and western portions of the site to be at a negligible/low risk of surface water flooding, with the 35m wide portion of the site adjacent to the stream at a high risk of surface water flooding.
POTENTIAL SOURCES OF CONTAMINATION	Full details can be seen in sections 6.3 and 6.4 of this report. Onsite - The Desk study has revealed the following potential sources of contamination onsite: • Potential for Made Ground (associated with site re-profiling) • Alluvium Offsite - The Desk study has revealed the following potential sources of contamination within the site's environs: • Made Ground associated with nearby construction and demolition • Backfilled voids/landfilling area
RECOMMENDATIONS / PHASE II OBJECTIVES	Soils It is possible that asbestos and asbestos containing materials will be incorporated within any Made Ground. An asbestos management strategy should be implemented to ensure that any asbestos uncovered during the investigation does not pose a risk to members of the public that use the site. On the basis of the Phase 1 Site Assessment the following contaminants of concern have been identified and should be included in the chemical analysis suite for the ground investigation: Asbestos. Semi-metals and heavy metals; Poly-cyclic aromatic hydrocarbons (PAHs); Speciated TPH including full aliphatic/aromatic split; Volatile/semi-volatile organic compounds – BTEX Used as marker compounds; and Sulphates; The list above does not imply that these determinands are present on-site or that they are likely to cause contamination issues at the site. The ground investigation will be used to prove the presence or absence of these contaminants. The sampling and testing strategy must be in line with current standards. Random sampling should be adopted across the site. Results should be assessed against suitable assessment criteria to be protective of human health as well as vegetation. Sub-surface concrete may be damaged due to being in contact with aggressive ground conditions. Sampling should be undertaken where the proposed foundations will be in

	contact with Made Ground and/or natural ground and tested for aggressive ground conditions (sulphates/pH). Classification should then be undertaken of the ground conditions in accordance with Building Research Establishment Special Digest 1, 2005, **'Concrete in Aggressive Ground'**. Services The CSM has identified a moderate risk for aggressive ground conditions that may affect water supply pipes as part of the development. Consideration should be given to the targeted sampling (0.75 – 1.50m bfgl) and scheduling for contaminants of concern: TPH, Naphthalene, Phenols, BTEX, VOCs and SVOCs. Groundwater If analytical results show elevated concentrations of contaminants of concern in the soil samples then there might be a requirement to assess the potential risks of leachability of contaminants migrating into the Principal Aquifer groundwater underlying the site. This might mean leachate testing on soils samples is required or groundwater sampling and testing. Ground-gas The CSM has identified a moderate risk from ground-gases at the site as a result of a number of nearby landfills and backfilled ponds. Analysis of soil samples should include Total Organic Carbon (TOC) testing in order to provide an indication of risk from on-site sources. In addition, ground gas monitoring should be undertaken within monitoring wells installed as part of the investigation. At this stage of investigation, in accordance with BS8576:2013, it is anticipated that a minimum of six spot monitoring visits will be required within the ground gas risk assessment. Vapours The CSM has identified limited sources and therefore the soil screening of BTEX is considered sufficient at this stage as well as PID monitoring of the ground gas monitoring wells installed. Should elevated results of BTEX be identified or PID readings of >10ppm then additional testing comprising ground water or gas cannisters should be considered.

1. INTRODUCTION

1.1. General

Ground and Water Limited were instructed by East Horton Golf Club on the 17th April 2024 to conduct a Phase I Desk Study on the site at Phase 1, East Horton Golf Club, Mortimers Lane, Fair Oak SO50 7EA. The scope of the investigation was detailed within the emailed fee proposal from Francis Williams dated 10th April 2024.

1.2. Aims of the Investigation

This Phase 1 Desk Study was undertaken to advise the client on risk factors pertaining to the site with special reference to former and present day potential contaminative uses and their impact on sensitive receptors, these being human health, controlled waters, buildings, building materials and services.

This Phase I Desk Study comprises a Tier 1 Preliminary Risk Assessment, under Land Contamination Risk Management (LCRM).

1.3. Conditions and Limitations

This report has been prepared based on the terms, conditions and limitations outlined within Appendix A.

This version of the report (V1.02) supersedes the previous version (V1.01).

1.4. Technical Glossary

Generic technical terms and their description can be viewed within the glossary provided within Appendix B.

2. SITE SETTING

2.1. Site Location

The site comprised a ~5.03ha irregular shaped plot of land, to the south of Mortimers Lane. The site was located in the eastern portion of Eastleigh, Hampshire.

The national grid reference for the centre of the site was approximately SU 50635 18093. A site location plan is given within Figure 1. A Site Development Area has been provided within Figure 2. An aerial view of the site has been provided within Figure 3.

2.2. Site Description

A Site Walkover was undertaken on the 25rd April 2024. A description of the site, as noted during the Site Walkover, is tabulated below. Photographs can be seen in Appendix C.

Site Description Sheet	
Use of site	At the time of the visit the site is a large open area currently used as a driving range for a golf club
Site topography	The site was relatively flat and level.
Area topography	The area surrounding the site was noted to form a valley like shape with high points noted north-west of the site at Knowle Hill and an area of high land south east of the site within Durley Copse. A stream is noted flowing along the southern boundary of the site in a north-east to south-west direction.
Structures onsite	A small hut used for he driving range shelter.
Structures off-site	The main buildings comprising the East Horton Golf Club are noted to the north-of the site.
Use of surrounding ground	Fairoak Landfill to the west, East Horton Golf Club north and east, woodland of Durley Copse south.
Boundary features	Northern Boundary: East Horton Golf Club Eastern Boundary: Open undeveloped land – soft landscaping. Southern Boundary: Large row of mature trees. Western Boundary: Open undeveloped land – soft landscaping (Fairoak Landfill).
Site covering	The entire site was noted to be covered with grass soft landscaping with the exception of the driving range shelter.
Contamination sources onsite	None noted.
Contamination sources off-site	Fairoak Landfill located adjacent to the western boundary of the site. No other sources noted.
Vegetation onsite	Grass soft landscaping across much of the site, row of mature trees and shrubs along site boundaries generally 5-7m high.
Vegetation off-site	Grass soft landscaping across much of the site surroundings, rows of mature trees and shrubs across site environs generally 5-7m high.
Services	None noted on-site.

2.3. Proposed Development

Phase 1 (Greenland Course) of the proposed development includes the closure and replanting of the 1st fairway, the development of a new tee box for the 1st hole, the development of a new fairway for the 1st hole along the existing driving range and improvements to the 18th green. It also includes the closure of the existing driving range; reprofiling to create a swale and landform; replanting – all to create a new garden, walkway and wildlife areas along with an attractive edge to the new 1st Fairway,

accessibility improvements and alleviation of waterlogging and poor drainage. No demolition, new buildings or new water crossings proposed. No works within Flood Zone.

Phase 2 (Parkland Course) of the proposed development includes the closure of holes 14, 15 and 18, reprofiling and landscaping to create a new 300 yard driving range, creating of swales and drainage to reduce waterlogging and improve drainage and construction of a new driving range building. No demolition or new water crossings proposed. No works with Flood Zone.

Generally the proposed development aims to achieve drainage improvement through reprofiling, leading to an improvement in play and allowing the golf course to be open more regularly, ensuring its viability.

The proposed development plan can be seen within Figure 4.

2.4. Geology

The British Geological Survey Solid and Drift Geology Map for the Fairoak area (Southampton Sheet No. 315) revealed that the site was underlain by superficial Alluvium in an ~80m wide band running parallel to the route of the River along the southern boundary of the site. The majority of the site was noted to not have superficial deposits present. Bedrock deposits of the London Clay Formation were noted underlying the entire site. An area of Made Ground was noted adjacent to the western boundary of the site comprising the Fairoak Landfill measuring 255m wide by 490m long. 3No. further historic landfills were noted beyond the Fairoak Landfill to the north of the site. Bedrock deposits of the Durley Sand Member was noted 70m south of the site. Bedrock deposits of the Wittering Formation were noted 160m south of the site. No other areas of Made Ground or Reworked Ground were noted within a 250m radius.

Superficial deposits (Drift) are the youngest geological deposits formed during the most recent period of geological time. They rest on older deposits or rocks referred to as bedrock (Solid), which are the main mass forming the Earth. Bedrock is present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Alluvium

Alluvium is the most recent river or estuarine deposit and generally comprises silty clays usually with an appreciable organic content. Lenses of sand and gravel are also commonly found, as are pockets of peat.

London Clay Formation – Hampshire Basin

In the Hampshire Basin area the London Clay Formation comprises blue, brown and grey clay with yellow and grey sands and silts interspersed with pebble beds. Localised developments of sandstone also occur. Concretions of argillaceous limestone in nodular form (Claystones) occur throughout the formation. Crystals of Gypsum (Selenite) are often found within the weathered part of the London Clay Formation, and precautions against sulphate attack to concrete are sometimes required. The basement beds of the London Clay Formation are sandy with rounded flints.

A BGS borehole (SU51NW29) located ~1.59km east of the site revealed a 1.50m capping of Topsoil over a brown to grey clay of the London Clay Formation to a depth of 32.00m bgl, underlain by reddish brown to yellowish green clay of the Lambeth Group to a depth of 35.00m bgl. This was underlain by

the Upper Chalk Formation to the base of the borehole at a depth of 105.00m bgl. The rest water level was noted at 11.00m bgl upon completion of the borehole.

2.5. Hydrogeology and Hydrology

A study of the aquifer maps on the DEFRA website revealed the site was underlain by a **Secondary (Aquifer) Aquifer** comprising the superficial Alluvial Deposits where present. No designation was present for superficial deposits given their likely absence across much of the norther and western portions of the site. The underlying London Clay Formation was classified as **Unproductive Strata**.

Examination of the Environment Agency records showed that the site **did not** fall within a Groundwater Source Protection Zone (SPZ) as classified in the Policy and Practice for the Protection of Groundwater.

The Horton Heath Stream was noted running in a north-east to south-west direction along the eastern boundary of the site, and cutting into the site boundary. A number of ponds were noted surrounding the site including 170m north, 3No. located 40 – 250m east of the site and 1No. adjacent to the south-western corner of the site within the Fair Oak Landfill complex. A tributary of the stream was noted 90m south of the site and a second was noted adjacent to the north-eastern corner of the site. No other surface water features were noted within a 250m radius of the site.

2No. surface water abstraction points for irrigation were noted, one historical and one current adjacent to site.

From analysis of hydrogeological and topographical maps the actual groundwater table was anticipated to be encountered at shallow depth within the Alluvial deposits where present on-site. Some amounts of groundwater however may be present at shallower depths within Made ground or capping Head Deposits where present or silty/sandy pockets of the London Clay Formation. It was considered that groundwater was flowing in a south-westerly direction toward the Horton Heath Stream in line with local topography.

Examination of the Environment Agency records showed that the northern and western portions of the site were located within a Flood Zone 1, i.e. an area with a low probability of fluvial flooding. Adjacent to the Horton Heath Stream occupying an ~35m wide strip running parallel to the eastern boundary of the site was located within Flood Zone 3, i.e.an area with high probability of flooding.

The Groundsure Datasheets revealed the site was at a high risk of flooding from rivers and the sea. The datasheets also revealed the northern and western portions of the site to be at a low risk of groundwater flooding, with the 35m wide portion of the site adjacent to the stream at a high risk of surface water flooding. The datasheets also revealed the northern and western portions of the site to be at a negligible/low risk of surface water flooding, with the 35m wide portion of the site adjacent to the stream at a high risk of surface water flooding.

2.6. Radon

A review of the freely available UK Health Security Agency radon database, UK Radon, indicated that the site was located within a 1km grid square, where the maximum radon potential of 3 – 5% was recorded for above ground structures. Basic radon protection measures are required in areas where more than 3% of houses are at or above the Action Level.

Basic Radon Protection Measures are required on-site.

2.7. Internet Search (Site Setting)

2.7.1. Available Unexploded Ordnance (UXO) Map Review

A review of the data available on www.zeticauxo.com/ revealed the site was located within a low-risk area associated with unexploded ordnance (UXO), as indicated by having <15 bombs dropped per 1000 acres. No Strategic Targets or Other Points of Notice were recorded within a 1km radius of the site.

2.7.2. Historical Landfill Tool Review

A review of the data available on www.groundsure.io/ revealed a Authorised Landfill located adjacent to the western boundary of the site – Fair Oak Landfill. 3No. Historic Landfills were noted beyond the Fair Oak Landfill. Knowle Lane Landfill 280m north-west of the site, Knowlehill Lane Landfill noted 280m west of the site and Harding Copse & Scotland Copse Lanfill 520m west of the site. No other areas of Historic or Authorised Landfilling.

3. HISTORICAL REVIEW

3.1. Historical Map Review

The object of this search was to report on the history of the site and its environs from available County Series and Ordnance Survey Maps dating from the mid to late 19th Century to the present day and downloaded from Groundsure. In the following sections dealing with individual maps, only features considered to have a potential contaminative impact on the site and usually within a notional 250 metre radius of the site boundaries are discussed. Any distances quoted for features remote from the site have been scaled from the maps and are only approximate. The north point and approximate extent of the site are indicated on each figure. The historical maps referred to are given within Appendix D. The implications of the map search are discussed later within this report.

Environmental Significance of Data from Historical Maps		
Maps Dated Between	**Site**	**Environs**
1868 - 1896	The site comprised a part of an undeveloped open plot of land, likely agricultural land/fields. Stream noted running in a north-east to south-west direction along eastern boundary of the site.	The site environs generally comprised undeveloped agricultural land/fields. Greenwood Copse is noted adjacent to the south-eastern boundary of the site. A small surface working is noted labelled Brick Field ~150m east of the site 10m diameter (1868), a second sand pit is noted 240m south-east 10m diameter. 2 buildings of presumed residential/agricultural use are noted 250m south-east. By 1869 East Horton Farm is noted adjacent to the northern boundary of the site. Sand pit labelled ~160m north-west (1896). Remainder as previous map.
1909	No significant change recorded.	The old sand pits are no longer labelled but remain visible as depressions 150m east and 240m south-east. Remainder as previous map.
1939	No significant change recorded.	Sand pit noted 140m north-west appears to double in size (30m long & 15m wide). Remainder as previous map.
1962	No significant change recorded.	Sand pit noted 140m north-west appears to double in size again (60m long & 30m wide). Small ponds noted 80m north of the site (<10m diameter) and adjacent to north-eastern corner of the site (<10m diameter). Greenwood Copse now labelled Durley Copse. Remainder as previous map.
1988 - 1989	No significant change recorded.	No significant change recorded.
2001	No significant change recorded.	East Horton Farm now labelled as buildings further north of the site. Two larger buildings adjacent to the northern boundary of the site have been constructed and labelled as East Horton Golf Centre. A large pond has been constructed 200 – 205m north-east of the site. Remainder as previous map.
2010	No significant change recorded.	A number of additional ponds appear to have been constructed 100 – 150m north-east of the site. Remainder as previous map.
2024	No significant change recorded.	No significant change recorded.

3.2. Historical Aerial Photography Review

The object of this search was to report on the history of the site and its immediate environs from available Aerial Photography dating from the late-20th Century to the present day and downloaded from Google Earth and Groundsure. Any distances quoted for features remote from the site have been scaled from the photography and are only approximate.

At the time of the earliest aerial photography, 1999, the site appears to be occupied by the golf course within the north-eastern third of the site. With a green and bunkers visible. The remainder of the site to the south-west appears to be undeveloped open land. The stream is visible along the eastern boundary of the site with pockets of vegetation noted along it. The main golf centre and car park is noted adjacent to the northern boundary of the site. No significant changes are noted from the 2005, 2013, 2017and 2020 aerial imagery.

Surrounding the site environs in 199 the golf centre and parking area is visible adjacent to the northern boundary of the site. Durley Copse is visible adjacent to the southeast of the site with the fairway visible to the east of the site. Adjacent to the west of the site activity can be seen on the Fair Oak landfill. It is not clear whether it is still being backfilled or if the works are related to the decommissioning. No changes are then noted up until 2013 at which point the Fair Oak Landfill appears to be entirely backfilled with no activity noted on-site. No changes are then noted up until the present day.

4. ENVIRONMENTAL AND GEOLOGICAL INSIGHT

4.1. Groundsure Datasheets

Groundsure Environmental and Geological Datasheets were obtained for the site. Unless the data indicates a significant risk, only information within a 250m buffer zone has been included. The GroundSure Datasheets are also presented in Appendix E and a summary is given below and overleaf(s).

Environmental Insight	
Source	Nearest Distance from Site/Dated/Type
Past Land Use	
Historical industrial land uses	15 off-site records within a 250m radius: 1x brick field 126m E (1868) 2x Sand Pit 140m N (1957), 146m N (1908 – 1938) 8x Unspecified pit 141m NW (1968 – 1985) 149m SE (1957) 150m SE (1938) 151m SE (1868) 151m SE (1908) 215m SE (1957) 215m SE (1908) 217m SE (1868) 1x Refuse Heap 147m N (1895) 2x Old Sand Pit 150m SE (1895) 216m SE (1895) 1x Brick Kiln 179m SE (1868)
Waste and Landfill	
Active or recent landfill	1 off-site records within a 250m radius: Marked as on-site but boundary marking error site adjacent to western boundary of the site – Fair Oak Landfill operated by Suez. Waste Landfill.
Historical landfill (LA/mapping records)	1 off-site records within a 250m radius: 249m NW - Fair Oak Landfill operated by Suez. Waste Landfill.
Licensed waste sites	3x records within a 250m radius: 3x 69m NE – Fair Oak Landfill Sites.
Waste exemptions	1x record within a 250m radius: 1x 243m W – Knowle Industrial Estate – Use of Waste in Construction – Not on a farm.
Current Industrial Land Use	
Recent Industrial Land Uses	1x record within a 250m radius: 1x 165m N – Tank – Hampshire – Industrial Feature.
Licensed pollutant release (Part A(2)/B)	1x record within a 250m radius: 1x 121m NW – Tarmac Topmix – Other Mineral Processes – Historical Permit – Type B
Radioactive Substance Authorisations	None within a 250m radius.
Licensed Discharges to controlled waters	1x record on-site and 2x records within a 250m radius: 1x On-site East Horton Farm – Sewage Discharge – Issued 1992. 2x Marked as on-site but boundary marking error. Fair Oak Quarry Trade Discharges Site Drainage – operated between 1995 – 2012.
Pollution Incidents (EA/NRW)	14x off-site records: All records relate to the landfill adjacent to the west and north-west of the site. Pollutants include suspended solids, landfill odour, noise and other. Minor land and significant air impact noted.
Pollution inventory substances	2x records off-site within a 250m radius: Relating to Fair Oak Landfill – Non-hazardous landfill.
Hydrogeology	
Superficial Aquifer	1 record on-site: 1x Secondary A Aquifer.
Bedrock Aquifer	2 records onsite: 1x Secondary A Aquifer; 1x Unproductive Aquifer.
Groundwater Vulnerability	5x record onsite & 2x records within a 250m radius: 1x Secondary superficial aquifer – medium vulnerability, leaching class: low. 1x Secondary bedrock aquifer – high vulnerability. 3x Unproductive bedrock aquifer
Surface Water Abstractions	1x record onsite & 4x records within a 250m radius:

	1x on-site Spray Irrigation – storage – East Horton Golf Centre 1x 3m NE Spray Irrigation – storage – East Horton Golf Centre 1x 26m E Spray Irrigation – direct – East Horton Golf Centre 1x 157m E Spray Irrigation – direct – East Horton Golf Centre
Hydrology	
Water Network (OS MAsterMap)	1x record onsite & 17x records within a 250m radius: 1x on-site - Inland River not influenced by normal tidal action – on ground surface 12x 12m NE, 14m NE, 50m E, 53m E, 55m E, 56m SW, 80m E, 92m E, 123m NE, 127m NE 134m NE & 205m W - Inland River not influenced by normal tidal action – on ground surface 4x 45m E, 50m E, 132m NE & 193m SW - Inland River not influenced by normal tidal action – underground
Surface Water Features	13No. surface water features within a 250m radius of the site.
WFD Surface Water Body Catchments	1 record on-site: 1x River – Horton Heath Stream.
WFD Surface Water Bodies	1 record on-site: 1x River – Horton Heath Stream.
WFD Groundwater Bodies	1 record within a 250m radius: 1x on-site – South East Hants Bracklesham Group.
Environmental Designations	
Designated Ancient Woodland	On-site – Durley Copse
Visual and Cultural Designations	
Agricultural Designations	
Agricultural Land Classification	1x record within a 250m radius: 1x Grade 4 on-site.
Habitat Designation	
Priority Habitat Inventory	3x records within a 250m radius: 3 x deciduous woodland on-site to 107m S.

Geological Insight	
Source	Nearest Distance from Site/ Type
Superficial Geology (1:10,000 Scale)	1x on-site record: 1x record on-site – Alluvium.
Bedrock Geology (1:10,000 Scale)	3 on-site records: 1x London Clay Formation (Clay Silt Sand) 1x Durley Sand Member (Sand) 1x Whitecliff Sand Member (Sand Silt & Clay)
Superficial Geology and Permeability (1:50,000 scale)	1 on-site record: 1x Alluvium – Intergranular Very Low to High.
Bedrock Geology and Permeability (1:50,000 scale)	1 record onsite: 1x London Clay Formation – Mixed Very Low to Moderate 1x Whitecliff Sand Member – Intergranular High 1x Durley Sand Member – Intergranular High
Boreholes	
BGS recorded boreholes	1 record within a 250m radius: 213m NW – 4.70m depth
Natural Hazard Findings	
Shrink-Swell Clay	Negligible to Low hazard onsite.
Running Sands	Very Low to Low hazard onsite.
Compressible Deposits	Negligible to moderate hazard onsite.
Collapsible Deposits	Negligible to Very Low hazard onsite.
Landslides	Very Low hazard onsite.
Ground Dissolution of Soluble Rocks	Negligible hazard onsite.
Mining, Ground Working and Natural Cavities	
Records of BritPits	3x records within a 250m radius: 1x Fair Oak Sand – 107m NW

	1x Greenwood Brick Field – 160m SE 1x Knowlehill Copse Sand Pit – 176 – 356m NW
Records of Surface Ground Workings	19x records within a 250m radius: 2x Pond 52m NE & 140m NE. 1x Brick Field 126m E. 3x Sand Pit 140m N, 146m N & 148m N. 9x Unspecified Pit 141m NW, 149m SE, 150m SE, 151m SE, 215m SE & 217m SE. 1x Refuse Heap 147m N 2x Old Sand Pit 150m SE & 216m SE 1x Brick Kiln 179m SE.
Radon	
Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	Yes, along the boundary of Alluvial deposits along the eastern boundary of the site 3-5% of properties are above the Action Level. The remainder of the site had a <1% designation.
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	Therefore basic Radon Protection Measures would be required on-site.
Estimated Background Soil Chemistry	
Records of BGS estimated background soil chemistry	13 records within a 250m radius of the site.
Railway Infrastructure and Projects	

5. ONLINE REVIEW AND HISTORICAL INVESTIGATIONS

5.1. Online Council Planning Database

A review of the Eastleigh Borough Council Planning Database revealed that five planning applications had been filed for the East Horton Golf Club. Those pertinent to the site development area are tabulated below.

Planning Applications for the site		
Application No./Date	**Proposed**	Decision
07/00895/FUL 05/04/2007	Extension to existing golf course	Permitted
06/03210/FUL 25/10/2006	Form extension to existing golf course	Refused
98/00970/FUL 27/05/1998	Proposed winter water storage pond for irrigation purposes	Permitted
94/01235/OLD 16/05/1994	Extend golf course, alterations to existing	Permitted
92/01113/OLD 04/04/1991	Development of land as golf course including fairways and tees	Permitted

5.2. Internet Search

An internet search did not identify any other information pertinent to this report.

5.3. Previous Site Investigations

At the time of reporting, February 2025, Ground & Water were not aware of any existing site investigation information relating to the site.

6. PRELIMINARY RISK ASSESSMENT

6.1. Contaminant Source-Pathway-Receptor Model

In the UK, the assessment of risk from contamination follows the source-pathway-receptor (SPR) approach. For a risk to be present there must be a source of contamination, a receptor or receptors, and a pathway for contaminants to migrate or be absorbed. If one of these three elements are absent, it is considered that there is no risk of harm. If, however, there is a linkage between any given source and any given receptor, then a risk-based approach is used to assess the significance or impact of the pollutant linkage.

This Phase 1 Desk Study has been used to identify potential on-site and off-site sources of contamination, which are summarised in this section of the report. Additional potential sources of contamination identified within the Desk Study have been discounted based on the absence of a realistic SPR linkage (i.e. the distance from the site or the nature or age of any potential contamination sources).

In line with the requirements of BS 21365:2020, *Soil Quality – Conceptual site models for potentially contaminated sites*, the Conceptual Site Model (CSM) can be described in text, tabulated or presented as a figure. A tabulated CSM is provided in Section 6.6 of this report, where each component is discussed in the following sections.

6.2. Potential On-site Sources of Contaminants

This Desk Study revealed that at the time of the earliest historical mapping (1868) the site comprised part of an undeveloped open plot of land, likely agricultural land/fields. A stream was noted flowing in a north-east to south-west direction along the eastern boundary of the site. By 1999 the north-eastern third of the site is being used for golf course itself. The remaining two-thirds of the site appear to remain open and undeveloped land, where it remained unchanged to present day.

The Phase 1 Desk Study revealed the following on-site sources of contamination:

- The site has undergone re-profiling within the north-eastern third of the site that forms part of the golf course. A thin capping of Made Ground may be encountered within this area.

  Contaminants of concern associated with Made Ground deposits include; metals, Petroleum Hydrocarbons (TPHs), Polycyclic aromatic hydrocarbons (PAHs), asbestos, sulphates, volatile organic compounds (VOCs) and ground gases.

- Along the length of the Horton Heath River, Alluvial Deposits are mapped according to the BGS records. Alluvium has the potential to pose a risk from a ground gas perspective.

6.3. Potential Off-site Sources of Contaminants

The Phase 1 Desk Study revealed the following potential off-site sources of contamination:

- The nearby site environs are noted to have been developed, particularly adjacent to the northern boundary of the site. Made Ground will be encountered within this area and has the potential to pose a risk to the site.

Contaminants of concern associated with Made Ground deposits include; metals, Petroleum Hydrocarbons (TPHs), Polycyclic aromatic hydrocarbons (PAHs), asbestos, sulphates, volatile organic compounds (VOCs) and ground gases.

- As recorded on Groundsure.io, the groundsure historical maps and datasheets a number of backfilled former sand pits/gravel pits and ponds are recorded adjacent to the western boundary of the site extending to ~450m west of the site. The land to the west of the site is designated as a current landfill. Similarly a number of smaller features were recorded to the east and south east of the site within a 250m radius of the site. Backfilled voids were often filled with hazardous putrescible material that has the potential to pose a moderate risk to the site from both a soil and ground gas perspective.

  Contaminants of concern associated with backfilled Made Ground deposits include; metals, Petroleum Hydrocarbons (TPHs), Polycyclic aromatic hydrocarbons (PAHs), asbestos, sulphates, volatile organic compounds (VOCs) and ground gases.

- A tank was noted 165m north of the site. Given the distance from the site and the groundwater flow direction to the south-west any contamination would likely have been degraded and away from the site. Therefore this feature is considered to pose a negligible risk to the site.

6.4. Potential Receptors

At the time of reporting, February 2025, the proposed development was understood to comprise relandscaping of the existing 1st tee and 18th Green of Greenwood Course. The relandscaping is inclusive of planting, grading, turf or seed providing and external wedding ceremony area on-site. The proposed development includes proposals to improve the drainage within the wider landholding as it is a low lying area. The proposed development plan can be seen within Figure 4.

Based on the proposed development, the potential receptors are presented below and comprise:

Human Health

- End users of the site (Future site visitors);
- Construction workers during redevelopment;
- Site operatives during maintenance works; and
- Neighbours and members of the public.

Flora and Fauna

- Vegetation within soft landscaped areas;
- Ecological Receptor (Durley Copse ~5m east).

Building Materials and Services

- Buildings;
- Buried concrete;
- Confined spaces; and
- Underground services (Water Pipes).

Controlled Waters

- Secondary A Aquifers (Alluvium, Whitecliff Sand Member & Durley Sand Member); and

- Horton Heath River

6.5. Contaminant Absorption Pathways

The potential pathways for contaminant absorption between the identified sources and the identified receptors are as follows:

Human Health:

- Direct ingestion of soil and soil derived dust;
- Dermal contact of soil and soil derived dust;
- Inhalation of dust (indoors and outdoors) with elevated concentration of determinands;
- Direct ingestion of groundwater;
- Inhalation of volatile vapour (indoors and outdoors);
- Inhalation of ground gases.; and
- Explosion.

Flora and Fauna

- Direct uptake of groundwater; and
- Direct uptake of contaminants in the soil.

Building Materials and Services

- Direct contact;
- Explosion.

Controlled Waters

- Vertical and lateral migration in permeable strata horizons;
- Via anthropogenic pathways (infilled ground and service runs);
- Surface water Runoff.

6.6. Tabulated Conceptual Site Model

The tabulated Conceptual Site Model developed as part of this Desk Study is outlined overleaf. For ease of reference and understanding, the risks have been classified within this risk assessment against four possible levels / categories, summarised in the table below.

Risk Categories used in the Tabulated CSM	
Negligible	Regarding this potential SPR linkage, the site is considered suitable for the proposed end-use and there is no plausible risk. Therefore, there is no need to further assess this potential source of contamination.
Low Risk	Regarding this potential SPR linkage, the site is considered suitable for the proposed end-use and there is not considered to be an unacceptable risk to receptors. However, it is considered that further investigation to confirm this is recommended.
Moderate Risk	Regarding this potential SPR linkage, the site may not be suitable for the proposed end-use in its current condition and there may be an unacceptable risk to receptors. Further investigation is required to confirm this.
High Risk	Regarding this potential SPR linkage, the site is probably or certainly not suitable for proposed end-use and there is likely to be an unacceptable risk to receptors. Contaminants probably or certainly present and urgent action required in the short term.

Tabulated Conceptual Site Model – Pollutant Linkage Summary (On-Site Sources)			
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
Made Ground from re-profiling of site: • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Site workers/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public	**Moderate**
	• Direct uptake of groundwater • Direct uptake of determinands in the soil	**Flora and Fauna** • Vegetation within soft landscaped areas • Ecological Receptor (Durley Copse)	**Moderate**
	• Anthropogenic (man-made) pathways • Vertical and lateral migration in permeable strata • Surface water runoff	**Controlled Waters** • Secondary A Aquifer (Alluvium, Whitecliff Sand Member & Durley Sand Member) • Horton Heath River	**Moderate**
Aggressive ground conditions with Made Ground and natural ground, including groundwater: • Sulphates, • PAH/TPH.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Moderate**
Ground gases generated by Made Ground: • Methane, • Carbon Dioxide, • Hydrogen Sulphide, and • Carbon Monoxide.	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces • Neighbours and public	**Low**
	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Low**
Ground gases generated by Alluvium: • Methane,	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Future site visitors) • Construction workers during development (especially in confined spaces)	**Moderate**

• Carbon Dioxide, • Hydrogen Sulphide, and • Carbon Monoxide.		• Site operatives during maintenance works in confined spaces Neighbours and public	
	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Moderate**

Tabulated Conceptual Site Model – Pollutant Linkage Summary (Off-Site Sources)			
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
Made Ground from nearby construction/demolition activities: • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Future site visitors) • Construction workers during development • Site operatives during maintenance works	**Low**
	• Direct uptake of groundwater	**Flora and Fauna** • Vegetation within soft landscaped areas	**Low**
Aggressive ground conditions associated with impacted groundwater; • Sulphates, • PAH/TPH.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Moderate**
Made Ground from nearby backfilled pits and ponds/landfill • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Future site visitors) • Construction workers during development • Site operatives during maintenance works	**Moderate**
	• Direct uptake of groundwater	**Flora and Fauna** • Vegetation within soft landscaped areas	**Moderate**
Aggressive ground conditions associated with impacted groundwater; • Sulphates, • PAH/TPH.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Moderate**
Ground gases generated by Made Ground associated with landfill and backfilled ponds/pits: • Methane, • Carbon Dioxide,	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces	**Moderate**

Tabulated Conceptual Site Model – Pollutant Linkage Summary (Off-Site Sources)			
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
• Hydrogen Sulphide, and • Carbon Monoxide.	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Moderate**
Contaminants associated with tank 165m North: • PAHs, • TPHs, and • VOCs.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Future site visitors) • Construction workers during development • Site operatives during maintenance works	**Negligible**
	• Direct uptake of groundwater	**Flora and Fauna** • Vegetation within soft landscaped areas	**Negligible**

7. RECOMMENDATIONS AND PHASE II OBJECTIVES

This section of the report will present recommendations for the further investigation of each plausible pollutant linkage identified by the Conceptual Site Model.

It is recommended that an intrusive ground investigation is undertaken at the site to evaluate the risk that contaminants of concern within the soils and groundwater may affect end-users. This should determine the underlying ground and groundwater conditions and include an assessment of the level of contamination to enable the quantification of the ground-related risks associated with the proposed redevelopment.

Consideration should be given to the testing of soil samples recovered from exploratory holes for chemical laboratory testing. The testing should be for a broad range of contaminants in accordance with DEFRA / CLEA methodologies and include the contaminants of concern identified within the Conceptual Site Model.

7.1. Soils

It is possible that asbestos and asbestos containing materials will be incorporated within any Made Ground. An asbestos management strategy should be implemented to ensure that any asbestos uncovered during the investigation does not pose a risk to members of the public that use the site.

On the basis of the Phase 1 Site Assessment the following contaminants of concern have been identified and should be included in the chemical analysis suite for the ground investigation:

- Asbestos.
- Semi-metals and heavy metals;
- Poly-cyclic aromatic hydrocarbons (PAHs);
- Speciated TPH including full aliphatic/aromatic split;
- Volatile/semi-volatile organic compounds – BTEX Used as marker compounds; and
- Sulphates;

The list above does not imply that these determinands are present on-site or that they are likely to cause contamination issues at the site. The ground investigation will be used to prove the presence or absence of these contaminants. The sampling and testing strategy must be in line with current standards. Random sampling should be adopted across the site. Results should be assessed against suitable assessment criteria to be protective of human health as well as vegetation.

Sub-surface concrete may be damaged due to being in contact with aggressive ground conditions. Sampling should be undertaken where the proposed foundations will be in contact with Made Ground and/or natural ground and tested for aggressive ground conditions (sulphates/pH). Classification should then be undertaken of the ground conditions in accordance with Building Research Establishment Special Digest 1, 2005, ‘Concrete in Aggressive Ground’.

7.2. Services

The CSM has identified a moderate risk for aggressive ground conditions that may affect water supply pipes as part of the development. Consideration should be given to the targeted sampling (0.75 –

1.50m bfgl) and scheduling for contaminants of concern: TPH, Naphthalene, Phenols, BTEX, VOCs and SVOCs.

7.3. Groundwater

If analytical results show elevated concentrations of contaminants of concern in the soil samples then there might be a requirement to assess the potential risks of leachability of contaminants migrating into the Principal Aquifer groundwater underlying the site. This might mean leachate testing on soils samples is required or groundwater sampling and testing.

7.4. Ground-gas

The CSM has identified a moderate risk from ground-gases at the site as a result of a number of nearby landfills and backfilled ponds. Analysis of soil samples should include Total Organic Carbon (TOC) testing in order to provide an indication of risk from on-site sources. In addition, ground gas monitoring should be undertaken within monitoring wells installed as part of the investigation. At this stage of investigation, in accordance with BS8576:2013, it is anticipated that a minimum of six spot monitoring visits will be required within the ground gas risk assessment.

7.5. Vapours

The CSM has identified limited sources and therefore the soil screening of BTEX is considered sufficient at this stage as well as PID monitoring of the ground gas monitoring wells installed. Should elevated results of BTEX be identified or PID readings of >10ppm then additional testing comprising ground water or gas cannisters should be considered.

7.6. Geotechnical Review

7.6.1. General

The BGS have identified the following natural hazards on-site and within a 50m buffer.

Natural Hazards	
Shrink-Swell Clay	Negligible to Low hazard onsite.
Running Sands	Very Low to Low hazard onsite.
Compressible Deposits	Negligible to moderate hazard onsite.
Collapsible Deposits	Negligible to Very Low hazard onsite.
Landslides	Very Low hazard onsite.
Ground Dissolution of Soluble Rocks	Negligible hazard onsite.

When designing foundations, the potential presence of aggressive ground conditions should be taken into consideration. Further investigation may be required in accordance with the guidance established in BRE Special Digest 1 (SD1) (2005) 'Concrete in aggressive ground'. The BGS do not record any details regarding the potential for aggressive ground conditions within shallow units identified at the site.

It is recommended that as part of the site-specific ground investigation on-site, geotechnical testing is undertaken to determine the underlying ground conditions and to evaluate any geotechnical related risks associated with the proposed redevelopment of the site.

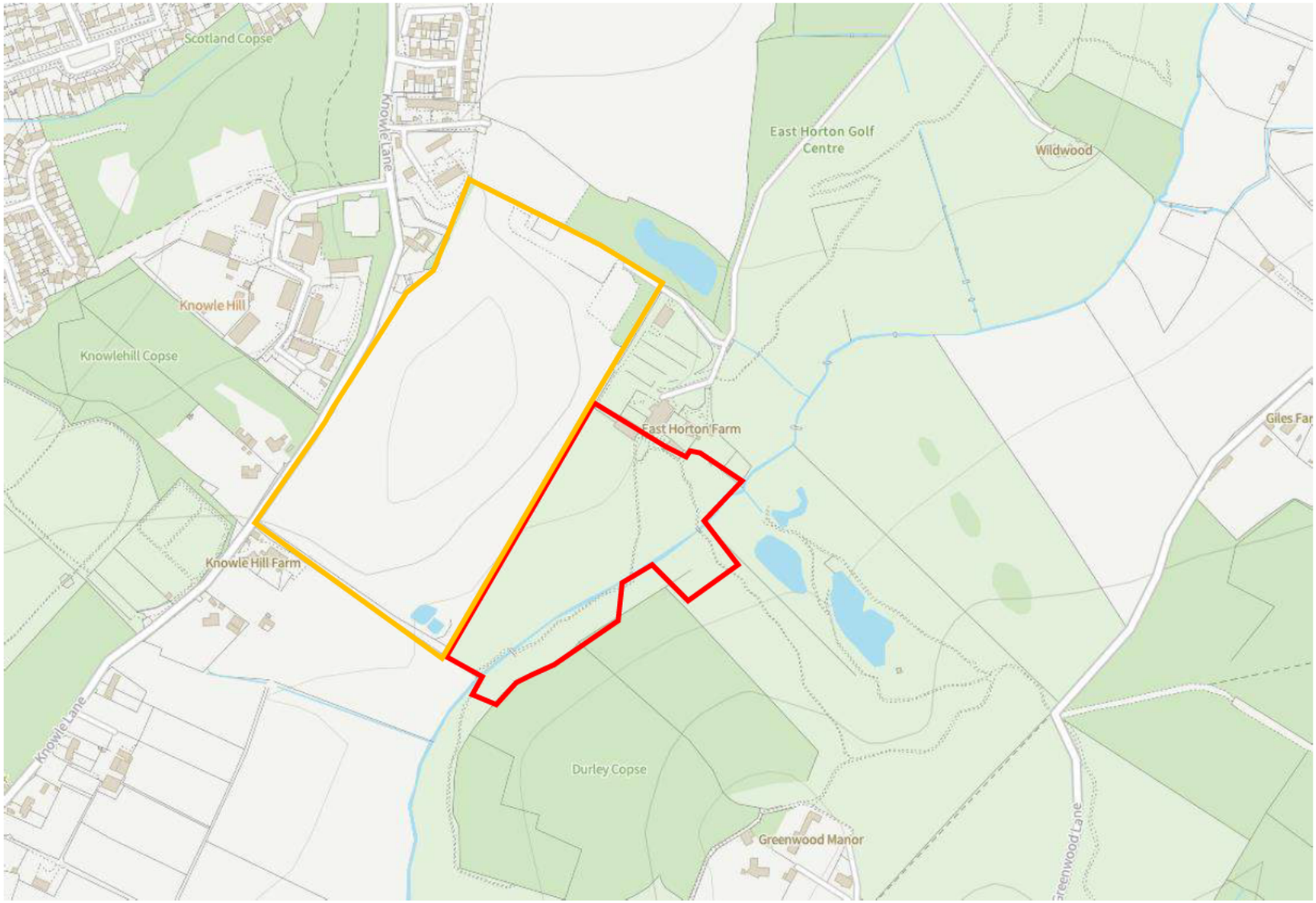
The Groundsure datasheets have indicated that the superficial Alluvium is likely to have a very low to high permeability and may not be suitable for surface water disposal. The underlying Whitecliff Sand Member and Durley Sand Member was recorded as having high permeability and therefore would be suitable for surface water disposal. The underlying London Clay Formation was recorded as having

Very Low to Moderate permeability and may not be suitable for surface water disposal. These will be subject to on-site testing.

FIGURES

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

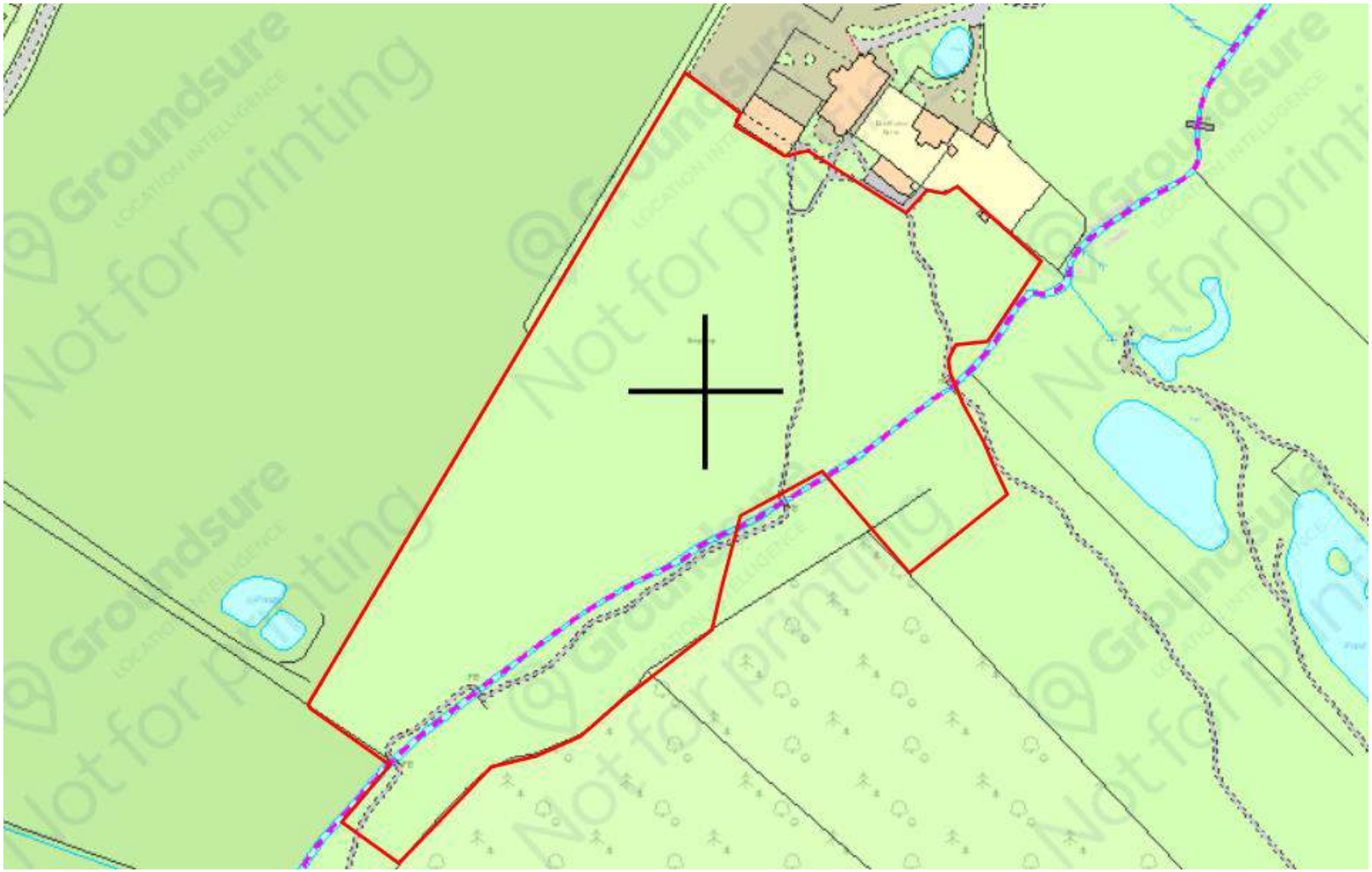


Site Boundary

Fair Oak Landfill Boundary

Phase 1 East Horton Gold Club, Mortimers Lane, Fair Oak SO50 7EA	
East Horton Golf Club	**February 2025**
Figure 1 – Site Location Plan	**GWPR5988**

ground&water



Site Boundary

Phase 1 East Horton Gold Club, Mortimers Lane, Fair Oak SO50 7EA	
East Horton Golf Club	**February 2025**
Figure 2 – Site Development Area	**GWPR5988**

ground&water



Site boundary

NOT TO SCALE

Phase 1 East Horton Gold Club, Mortimers Lane, Fair Oak SO50 7EA	
East Horton Golf Club	**February 2025**
Figure 3 – Aerial View of The Site	**GWPR5988**



NOT TO SCALE

Phase 1 East Horton Gold Club, Mortimers Lane, Fair Oak SO50 7EA	
East Horton Golf Club	**February 2025**
Figure 4 – Proposed Development Plan View	**GWPR5988**

ground&water

APPENDIX A: Conditions and Limitations

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

The ground is a product of continuing natural and artificial processes. As a result, the ground will exhibit a variety of characteristics that vary from place to place across a site, and also with time. Whilst a ground investigation will mitigate to a greater or lesser degree against the resulting risk from variation, the risks cannot be eliminated.

The report has been prepared on the basis of information, data and materials which were available at the time of writing. Accordingly, any conclusions, opinions or judgements made in the report should not be regarded as definitive or relied upon to the exclusion of other information, opinions and judgements.

The investigation, interpretations, and recommendations given in this report were prepared for the sole benefit of the client in accordance with their brief; as such these do not necessarily address all aspects of ground behaviour at the site. No liability is accepted for any reliance placed on it by others unless specifically agreed in writing.

Any decisions made by you, or by any organisation, agency or person who has read, received or been provided with information contained in the report ("you" or "the Recipient") are decisions of the Recipient and we will not make, or be deemed to make, any decisions on behalf of any Recipient. We will not be liable for the consequences of any such decisions.

Current regulations and good practice were used in the preparation of this report. An appropriately qualified person must review the recommendations given in this report at the time of preparation of the scheme design to ensure that any recommendations given remain valid in light of changes in regulation and practice, or additional information obtained regarding the site.

Any Recipient must take into account any other factors apart from the Report of which they and their experts and advisers are or should be aware. The information, data, conclusions, opinions and judgements set out in the report may relate to certain contexts and may not be suitable in other contexts. It is your responsibility to ensure that you do not use the information we provide in the wrong context.

This report is based on readily available geological records, the recorded physical investigation, the strata observed in the works, together with the results of completed site and laboratory tests. Whilst skill and care has been taken to interpret these conditions likely between or below investigation points, the possibility of other characteristics not revealed cannot be discounted, for which no liability can be accepted. The impact of our assessment on other aspects of the development required evaluation by other involved parties.

The opinions expressed cannot be absolute due to the limitations of time and resources within the context of the agreed brief and the possibility of unrecorded previous in ground activities. The ground

conditions have been sampled or monitored in recorded locations and tests for some of the more common chemicals generally expected. Other concentrations of types of chemicals may exist.

The conclusions and recommendations relate to Phase 1 East Horton Golf Centre, Mortimers Lane, Fair Oak SO50 7EA.

Trial hole is a generic term used to describe a method of direct investigation. The term trial pit, borehole or window sampler borehole implies the specific technique used to produce a trial hole.

The depth to roots and/or of desiccation may vary from that found during the investigation. The client is responsible for establishing the depth to roots and/or of desiccation on a plot-by-plot basis prior to the construction of foundations. Where trees are mentioned in the text this means existing trees, recently removed trees (approximately 15 years to full recovery on cohesive soils) and those planned as part of the site landscaping.

Ownership of copyright of all printed material including reports, laboratory test results, trial pit and borehole log sheets, including drillers log sheets, remain with Ground and Water Limited. Licence is for the sole use of the client and may not be assigned, transferred or given to a third party.

Only our client may rely on this report and should this report or any information contained in it be provided to any third party we accept no responsibility to the third party for the contents of this report save to the extent expressly outlined by us in writing in a reliance letter addressed from us to the third party.

Recipients are not permitted to publish this report outside of their organisation without our express written consent.

APPENDIX B: Technical Glossary

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

TECHNICAL GLOSSARY

The list of possible definitions within the report may be seen below. Please note that some definitions may not be relevant to this report.

HYDROGEOLOGY:

A **Principal Aquifer** is a layer of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Secondary (A) Aquifers consist of deposits with 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.

Secondary (B) Aquifers consist of deposits with predominantly lower permeability layers with may stoke and yield limited amounts of groundwater due to localised features such as fissures, think permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

Secondary Aquifers (Undifferentiated) are assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both a minor aquifer and non-aquifer in different locations due to the variable characteristics of the rock type.

Unproductive Strata are rock layers with low permeability that have negligible significance for water supply or river base flow. These were formerly classified as non-aquifers.

FLOOD ZONES:

Environment Agency Flood Zone 2, defined as; land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.

Environment Agency Flood Zone 3 shows the extent of a river flood with a 1 in 100 (1%0 or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year.

Environment Agency Flood Zone 3 area that benefits from flood defences, defined as; land and property in this flood zone would have a high probability of flooding without the local flood defences. These protect the area against a river flood with a 1% chance of happening each year, or a flood from the sea with a 0.5% chance of happening each year.

GROUNDWATER SOURCE PROTECTION ZONES (SPZS):

Inner Zone (SPZ1): This zone is 50 day travel time of pollutant to source with a 50 metres default minimum radius.

Outer Zone (SPZ2): This zone is 400 day travel time of pollutant to source. This has a 250 or 500 metres minimum radius around the source depending on the amount of water taken.

Total Catchment (SPZ3): This is the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point.

Zone of Special Interest (SPZ4): This zone is where local conditions require additional protection.

IN-SITU STRENGTH GEOTECHNICAL TESTING:

Windowless Sample and/or Cable Percussion and/or Rotary Boreholes provide samples of the ground for assessment but they do not give any engineering data. The standard penetration test (SPT) is an in-situ dynamic penetration test designed to provide information on the geotechnical engineering properties of soil. The test uses a thick-walled sample tube, with an outside diameter of 50mm and an inside diameter of 35mm, and a length of around 650mm. This is driven into the ground at the bottom of a borehole by blows from a slide hammer with a weight of 63.5kg falling through a distance of 760mm. The sample tube is driven 150mm into the ground and then the number of blows needed for the tube to penetrate each 75mm up to a depth of 450mm is recorded. The sum of the number of blows is termed the "standard penetration resistance" or the "N-value".

Dynamic Probing involves the driving of a metal cone into the ground via a series of steel rods. These rods are driven from the surface by a hammer system that lifts and drops a 63.5kg (SHDP) hammer onto the top of the rods through a set height, thus ensuring a consistent energy input. The number of hammer blows that are required to drive the cone down by each 100mm increment are recorded. These blow counts then provide a comparative assessment from which correlations have been published, based on dynamic energy, which permits engineering parameters to be generated. (The Dynamic Probe 'Super Heavy' (SHDP) Tests were conducted in accordance with BS 1377; 1990; Part 9, Clause 3.2).

APPENDIX C: Site Photographs

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Photograph 1.



Photograph 2.



Photograph 3.



Photograph 4.



Phase 1 East Horton Golf Club, Mortimers Lane, Fair Oak, Eastleigh SO50 7EA	
East Horton Golf Club	**February 2025**
Photo Plate: Site Walkover	**GWPR5988**

ground&water

Photograph 4



Photograph 5.



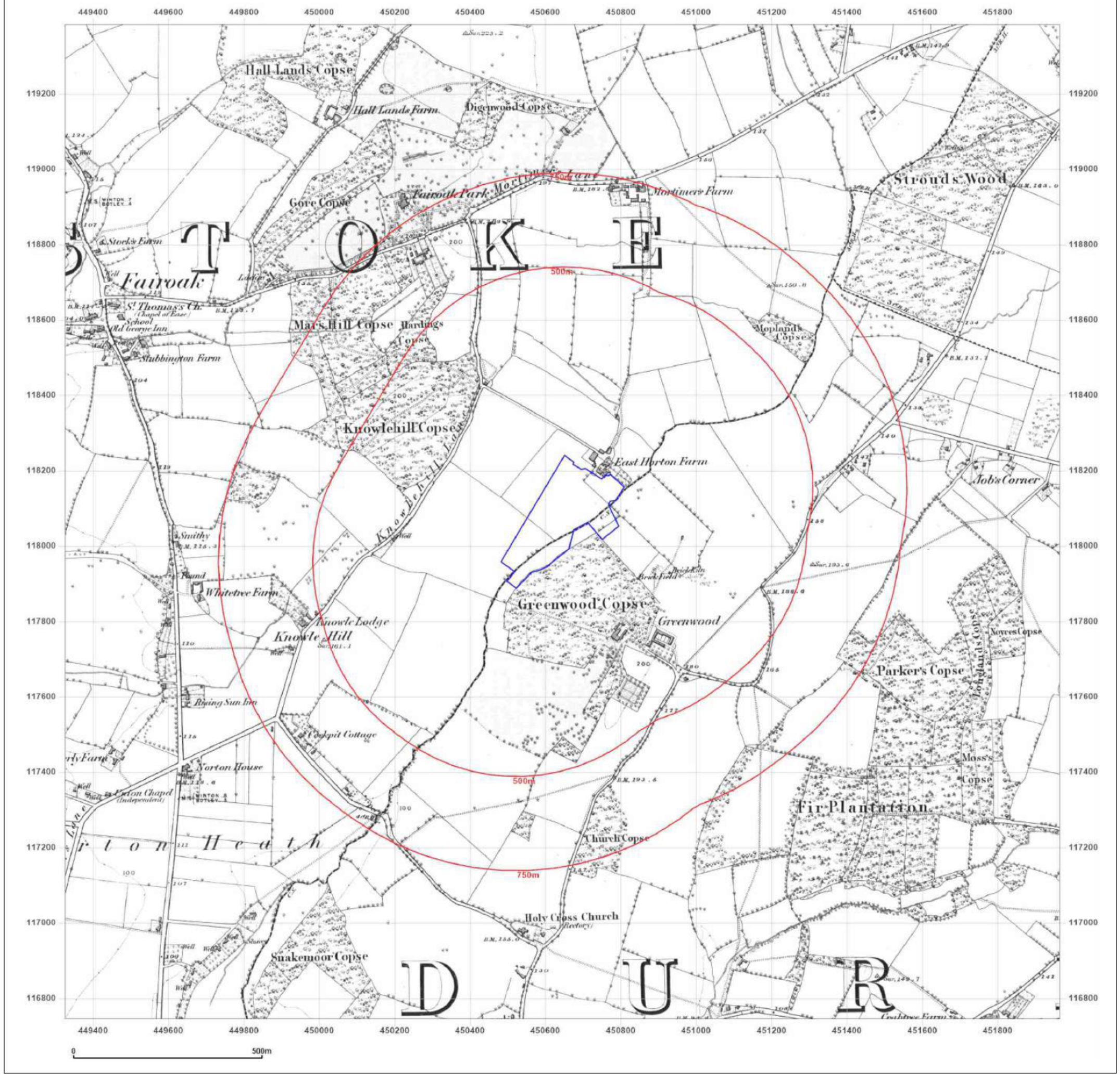
Phase 1 East Horton Golf Club, Mortimers Lane, Fair Oak, Eastleigh SO50 7EA	
East Horton Golf Club	**February 2025**
Photo Plate: Site Walkover	**GWPR5988**

ground&water

APPENDIX D:
Historical Maps

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1868**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1868
Edition N/A
Copyright N/A
Levelled N/A

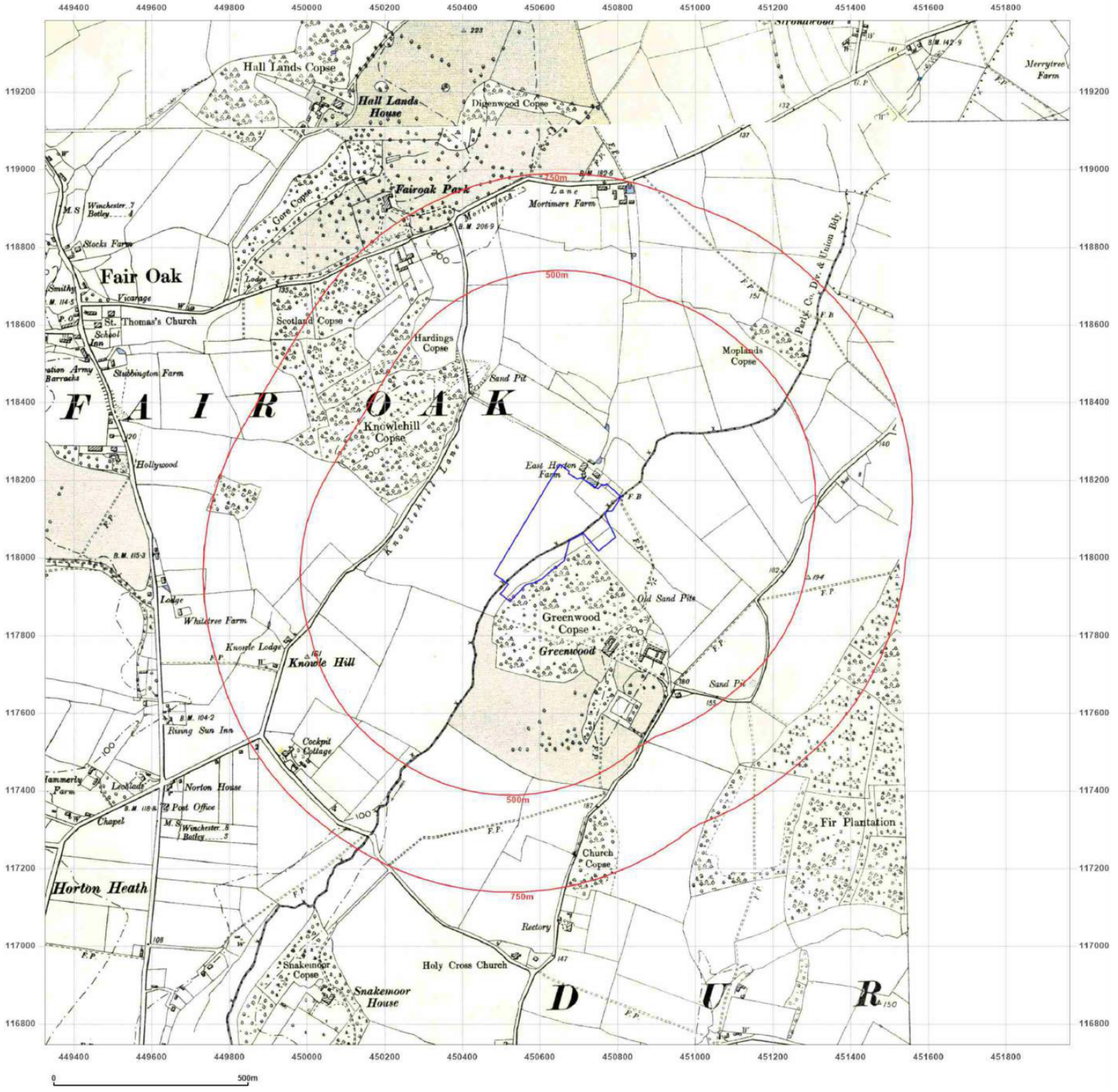
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

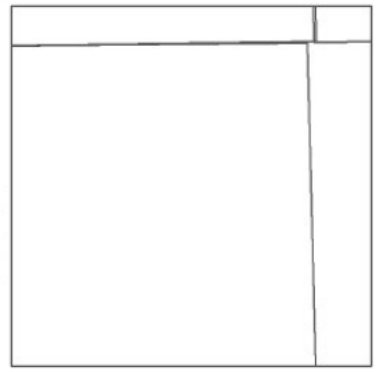
Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1888**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

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

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



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

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

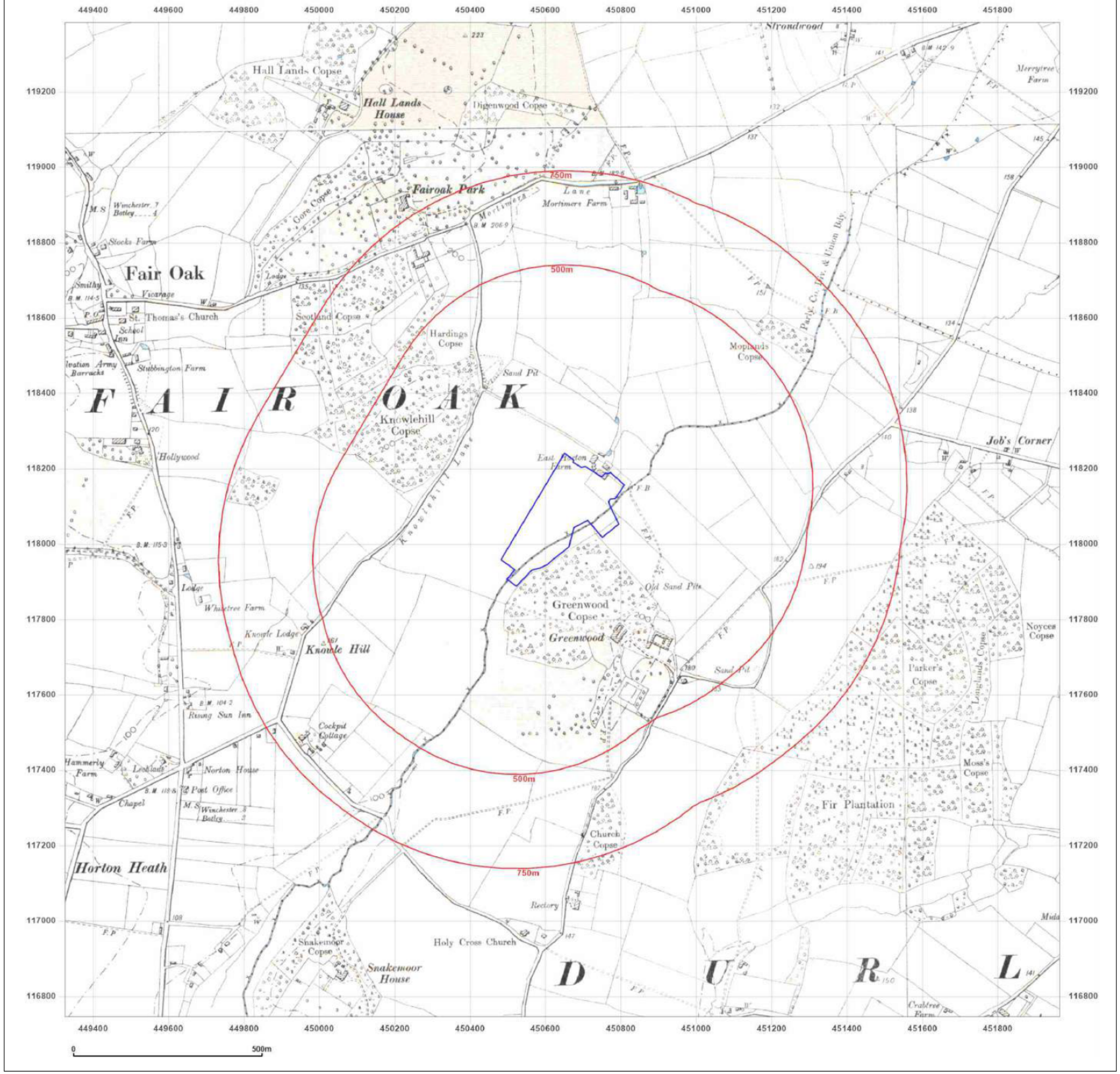
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1895-1896**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1869
Revised 1896
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1868
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1868
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

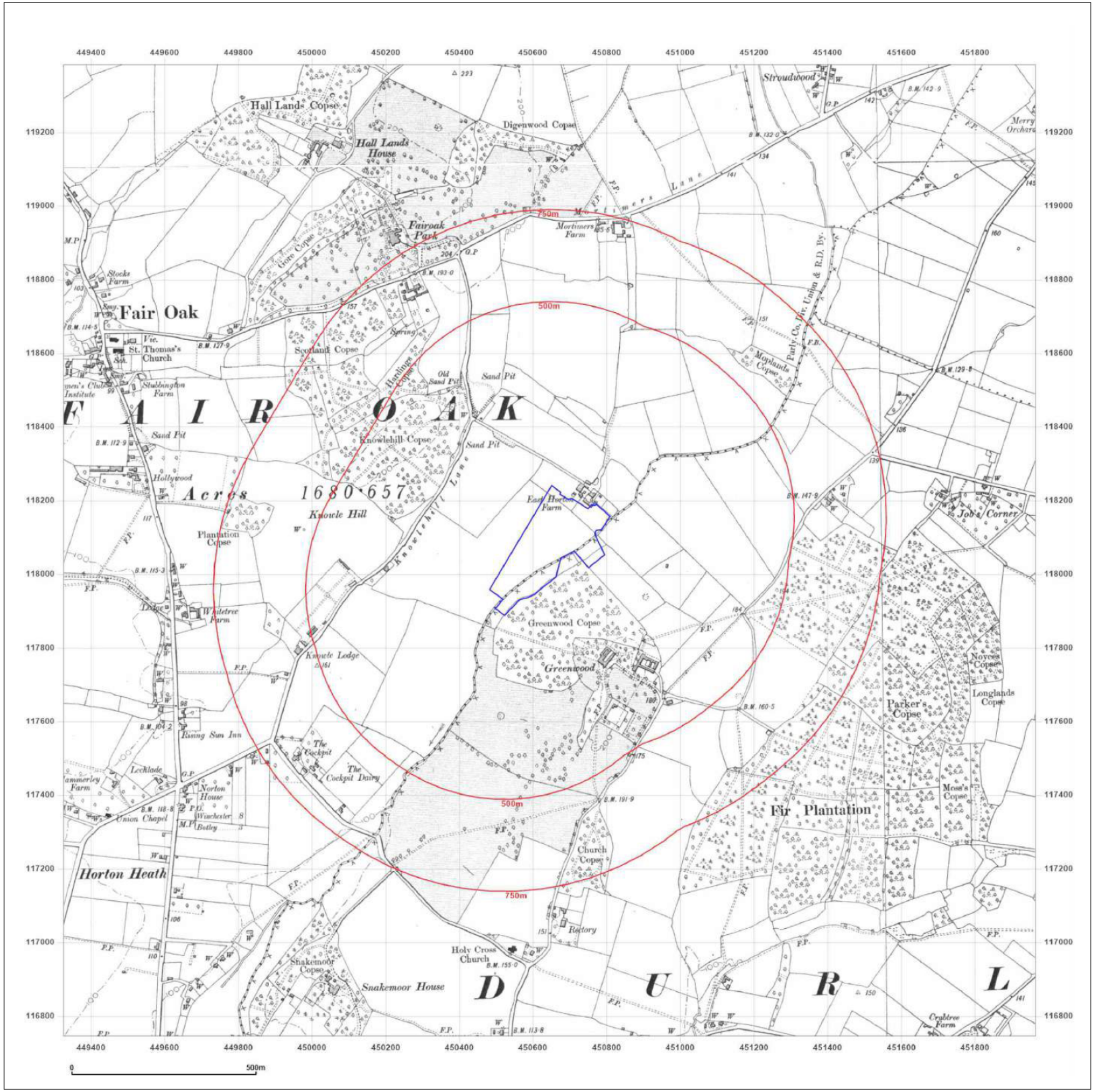
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1908-1910**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1868
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1867
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1866
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

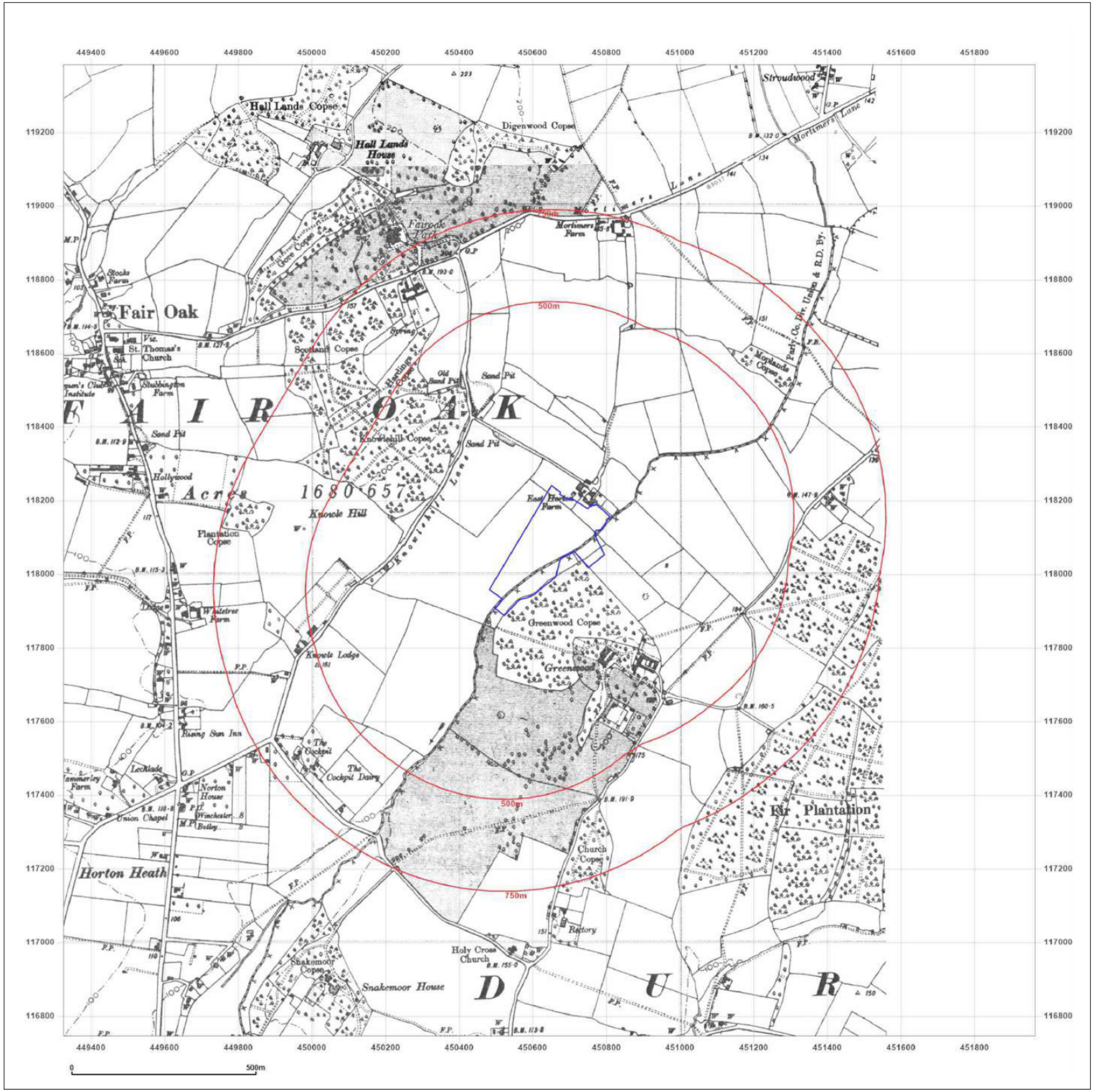
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

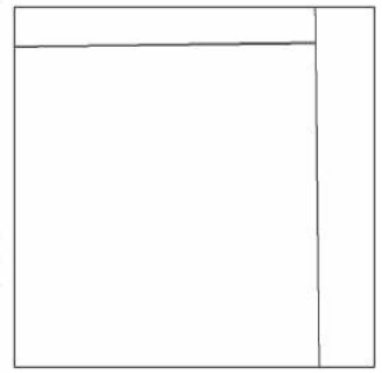
EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1938-1939**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1867
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

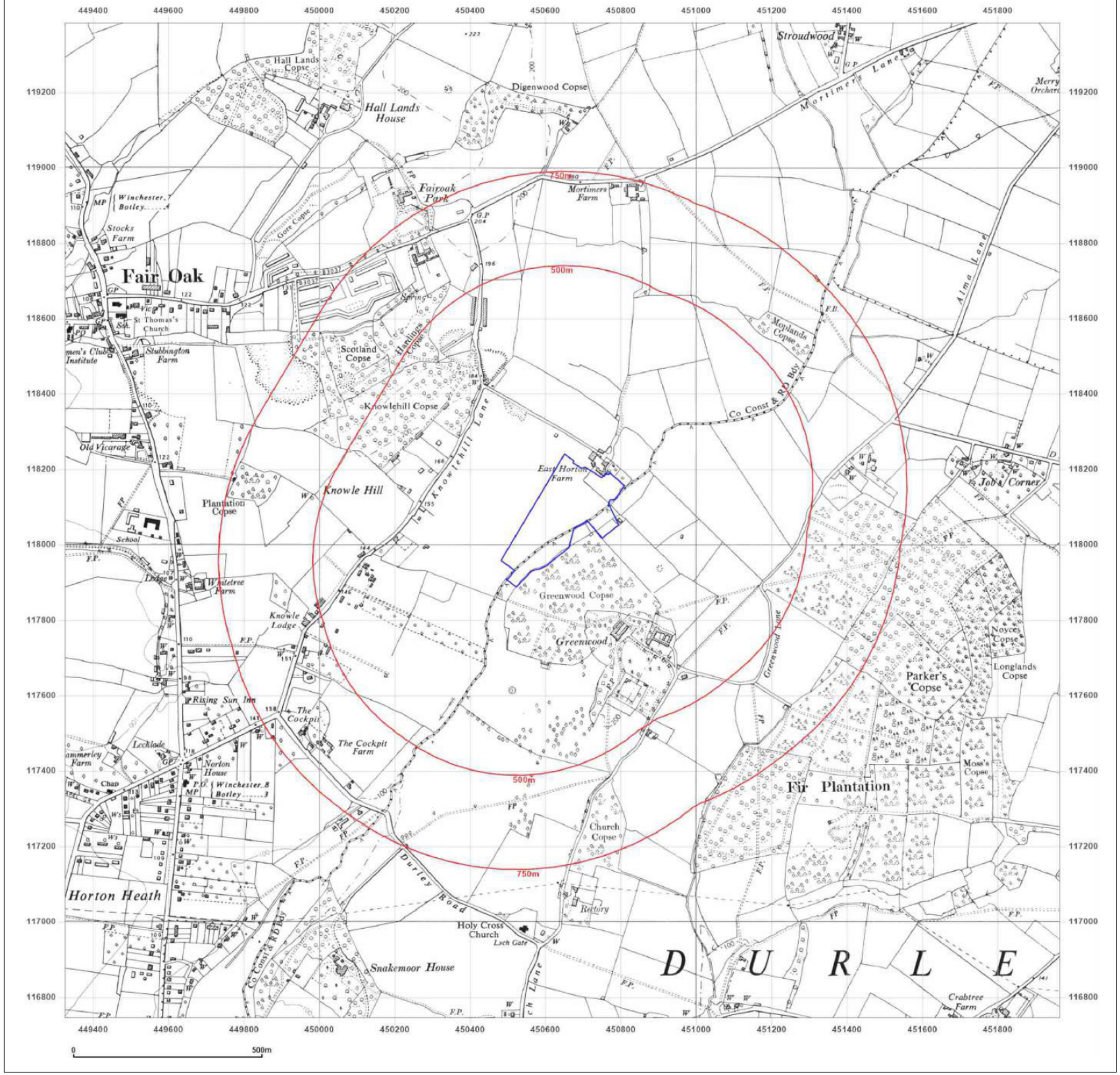
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: Provisional
Map date: **1957**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

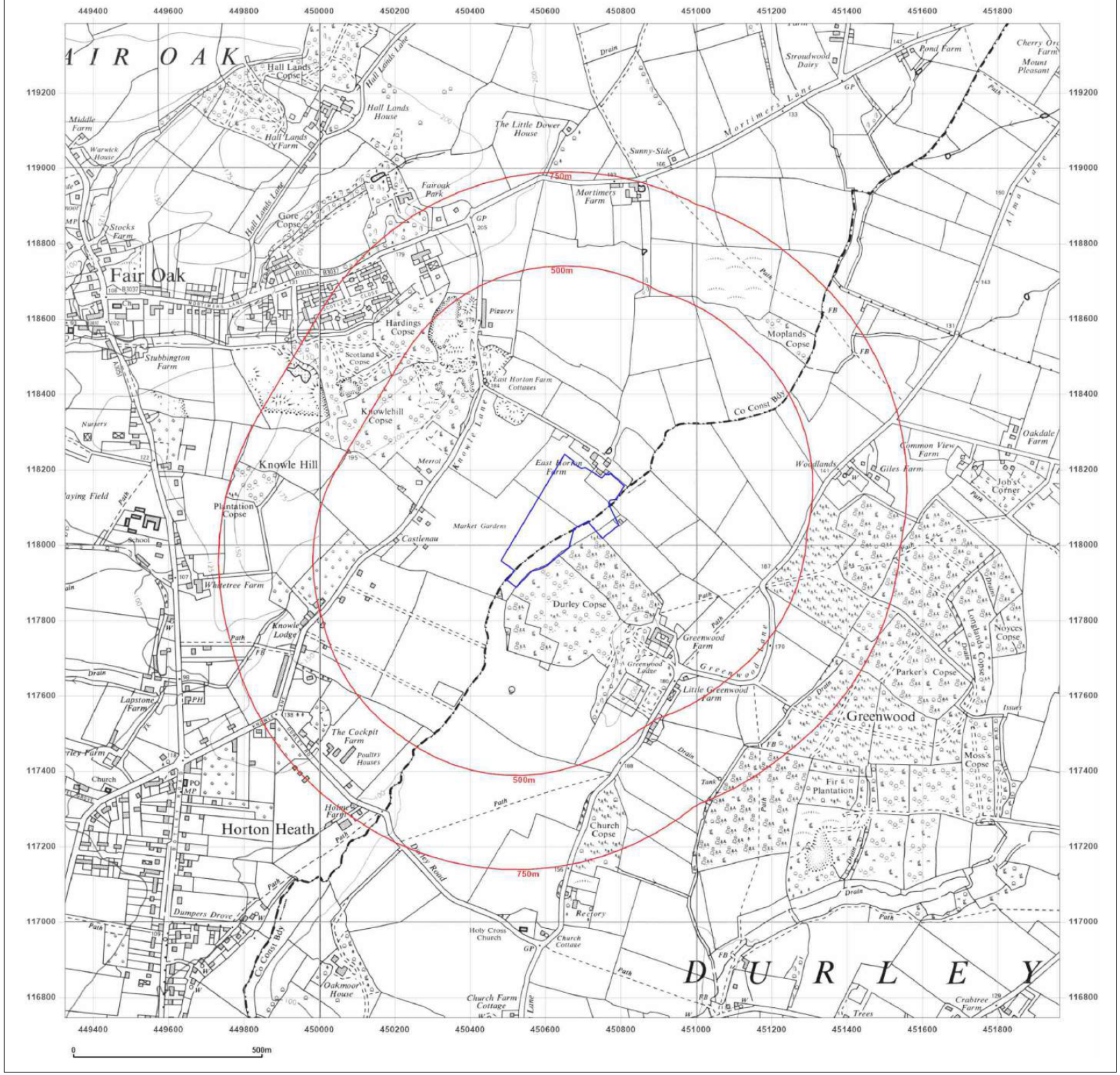
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: Provisional
Map date: **1968**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A

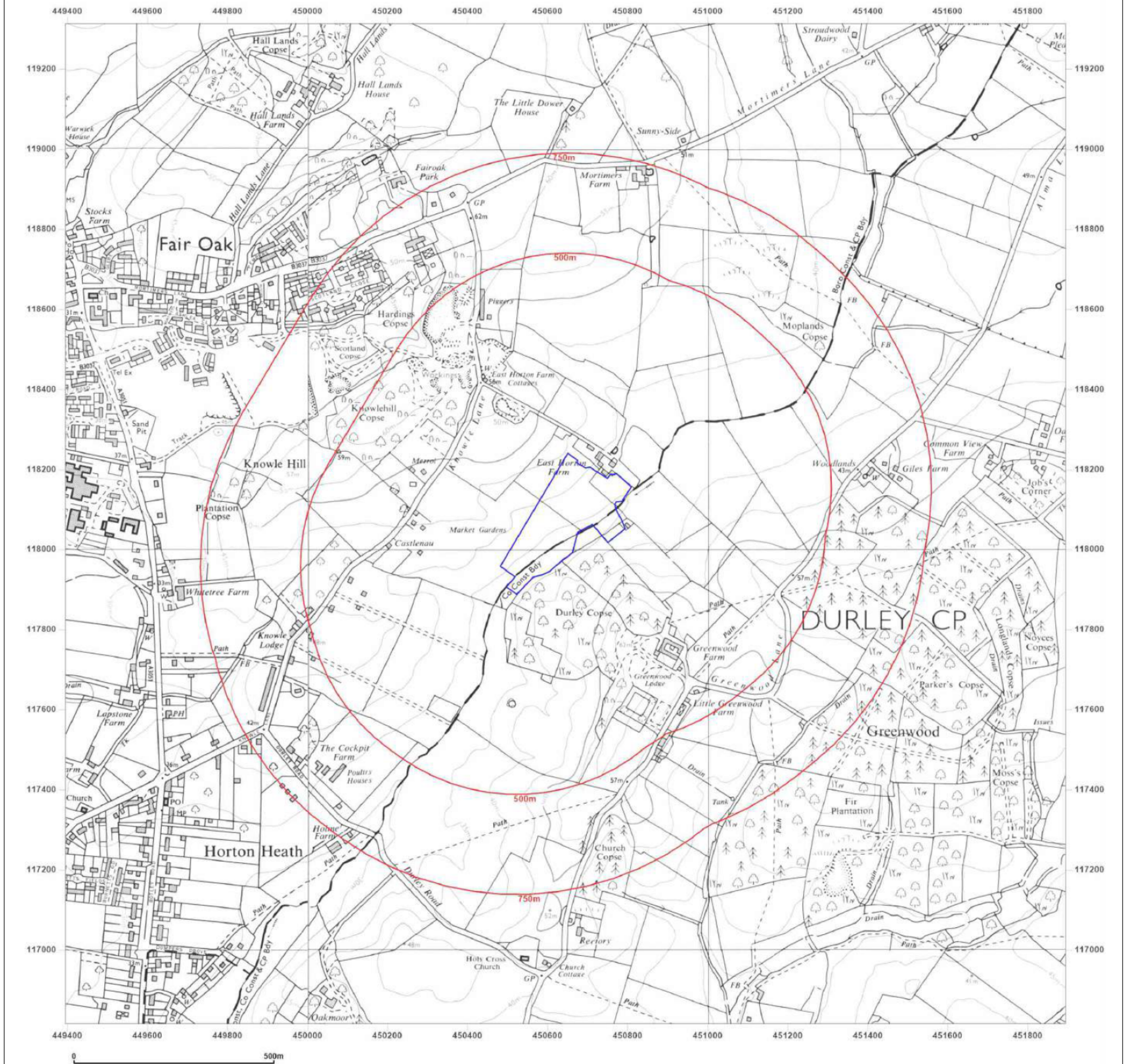
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **1981-1985**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

Surveyed 1980
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1963
Revised 1985
Edition N/A
Copyright N/A
Levelled N/A

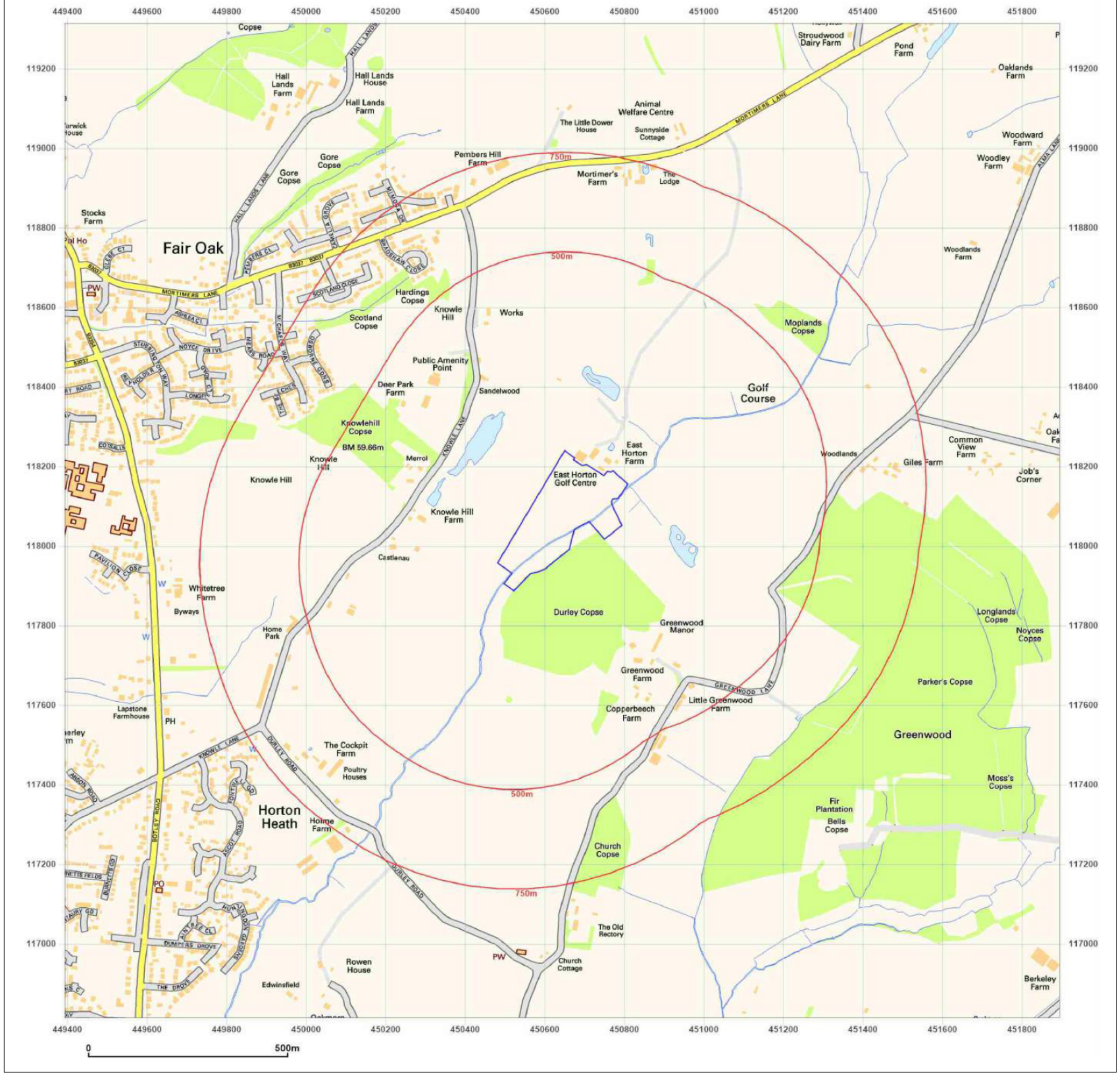
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

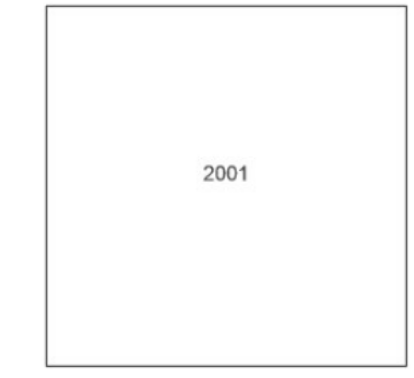
Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **2001**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S



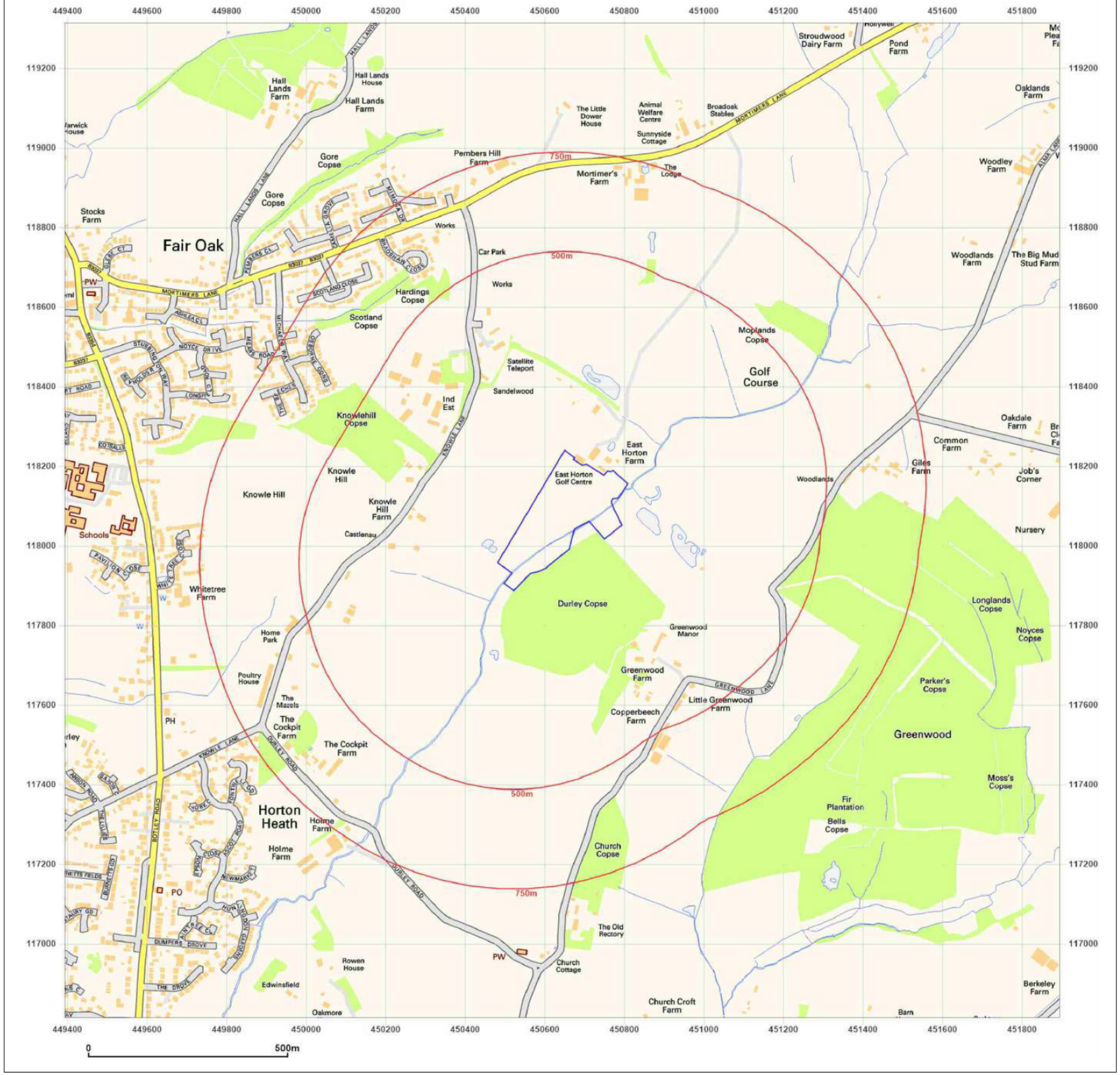
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **2010**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

2010

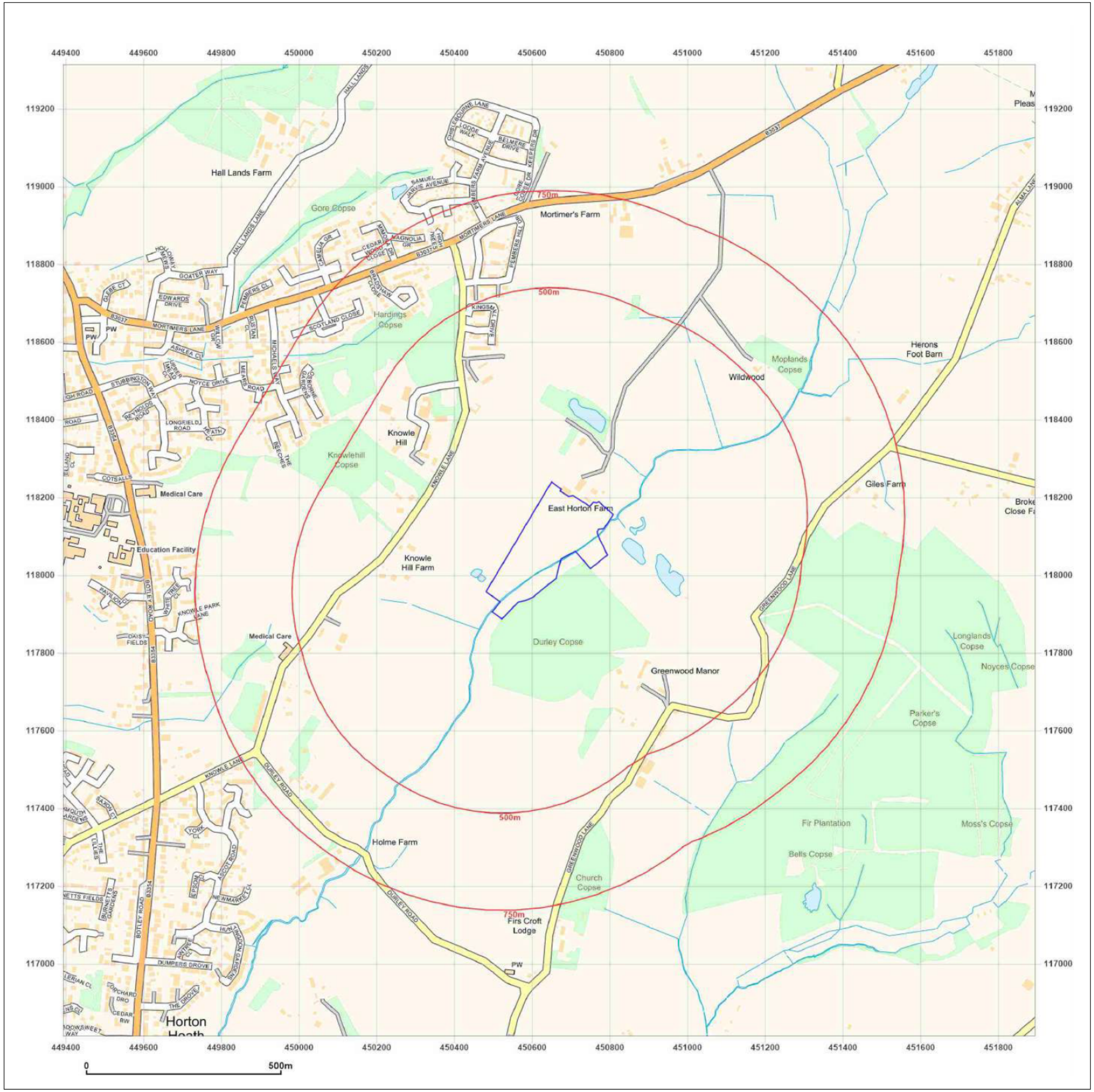
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **2024**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

2024

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_1250_1_2
Grid Ref: 450394, 118314

Map Name: National Grid
Map date: **1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

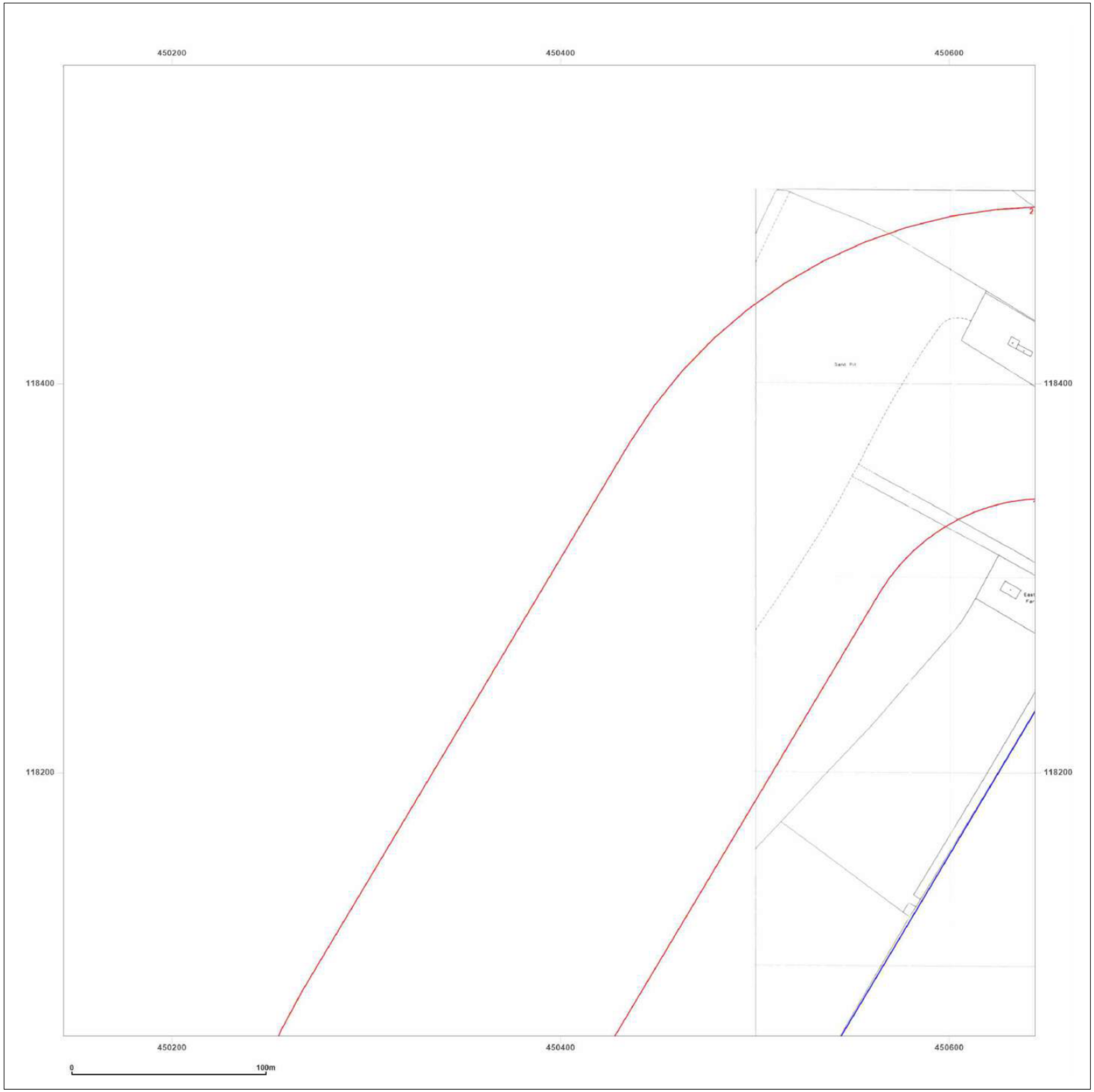
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

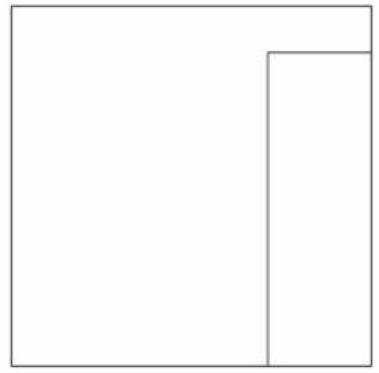
Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_1250_1_2
Grid Ref: 450394, 118314

Map Name: National Grid
Map date: **1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_1250_2_2
Grid Ref: 450894, 118314

Map Name: National Grid
Map date: **1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_1250_2_2
Grid Ref: 450894, 118314

Map Name: National Grid
Map date: **1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

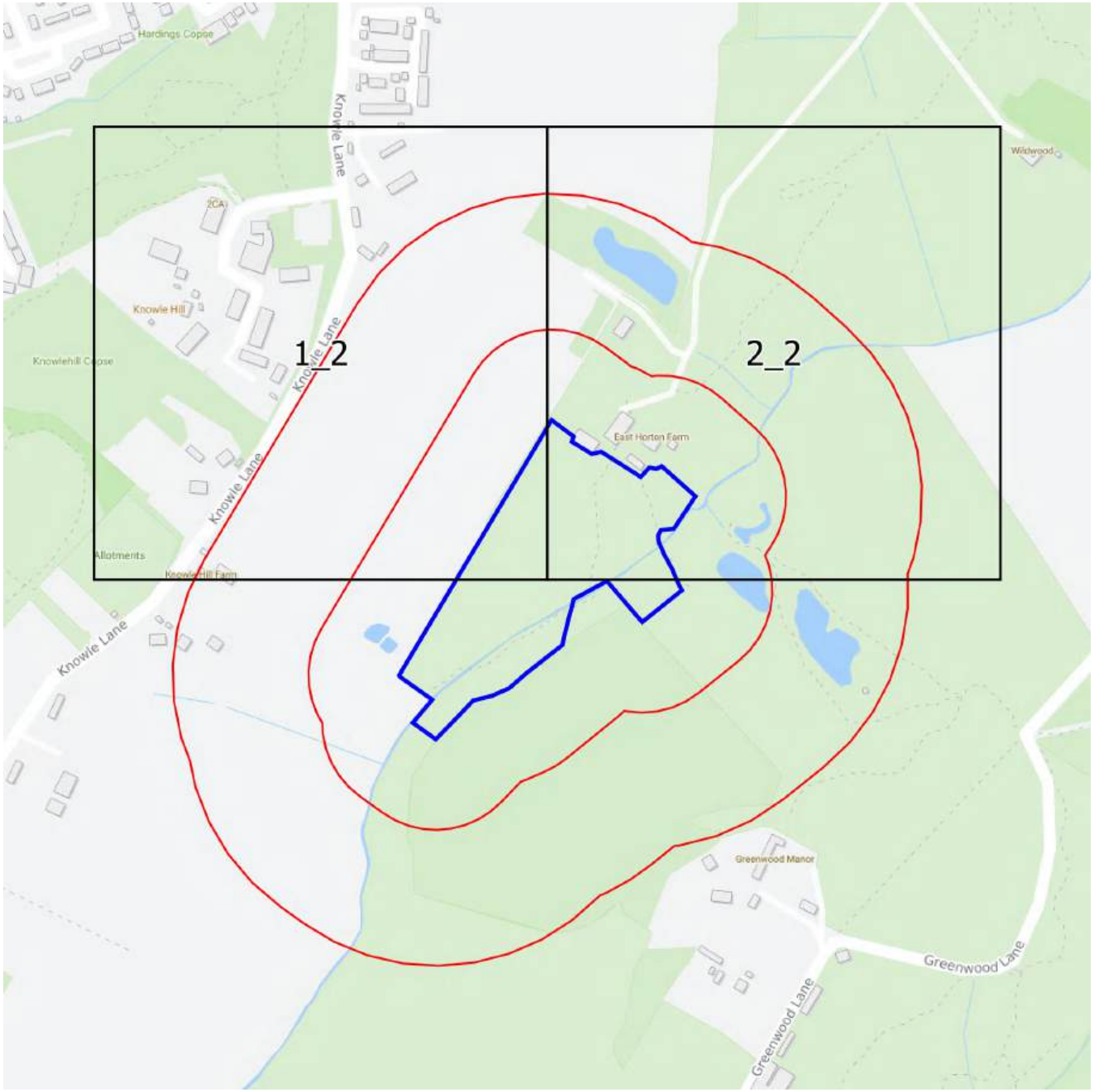
Powered by

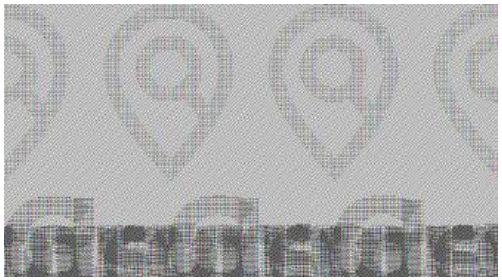
Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

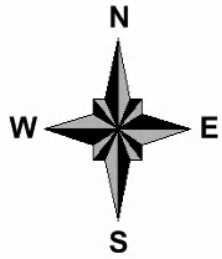
Production date: 22 April 2024

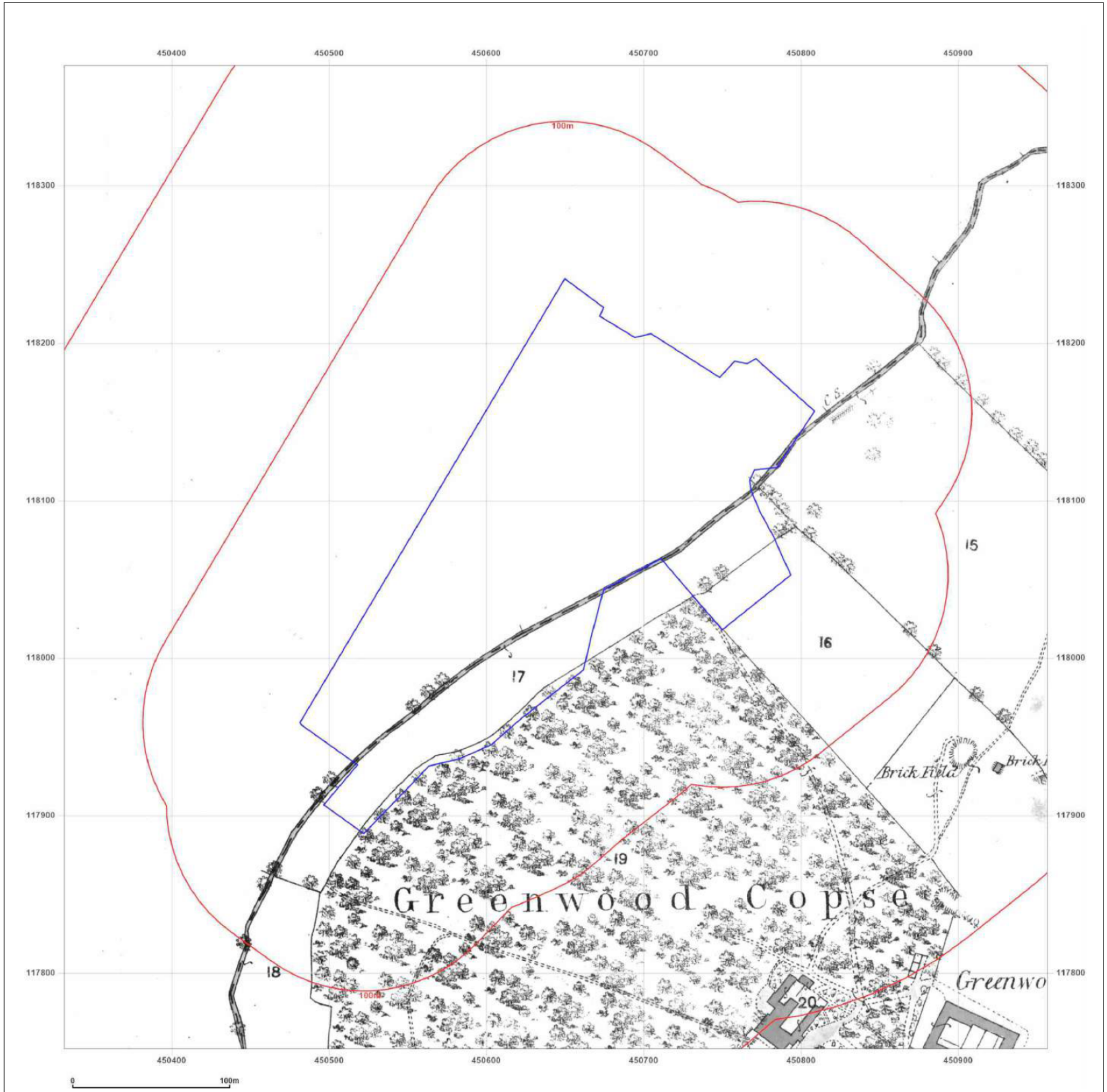
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf





1:1,250 Scale Grid Index





Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1868**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1868
Revised 1868
Edition N/A
Copyright N/A
Levelled N/A

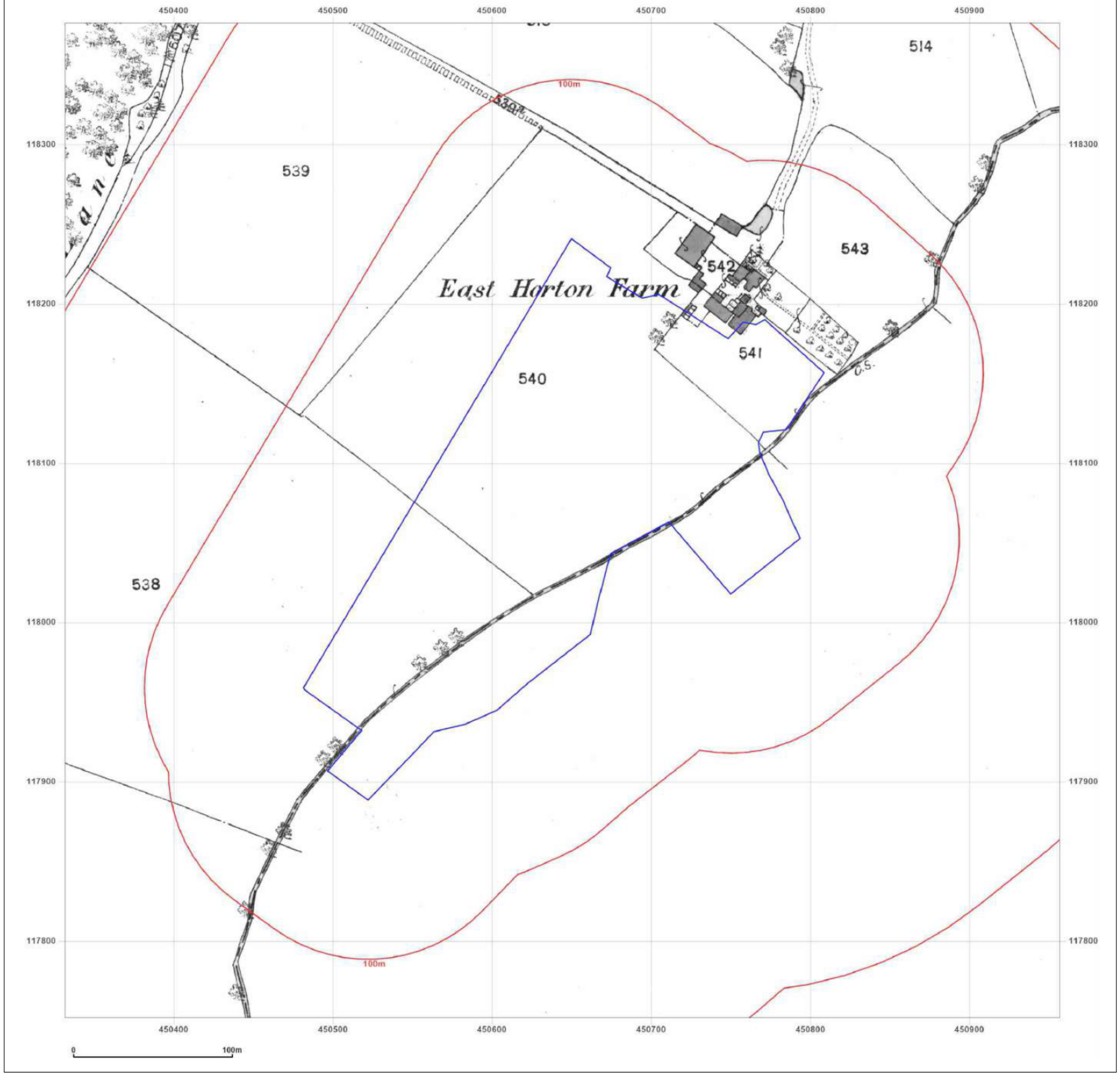
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1869**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1869
Revised 1869
Edition N/A
Copyright N/A
Levelled N/A

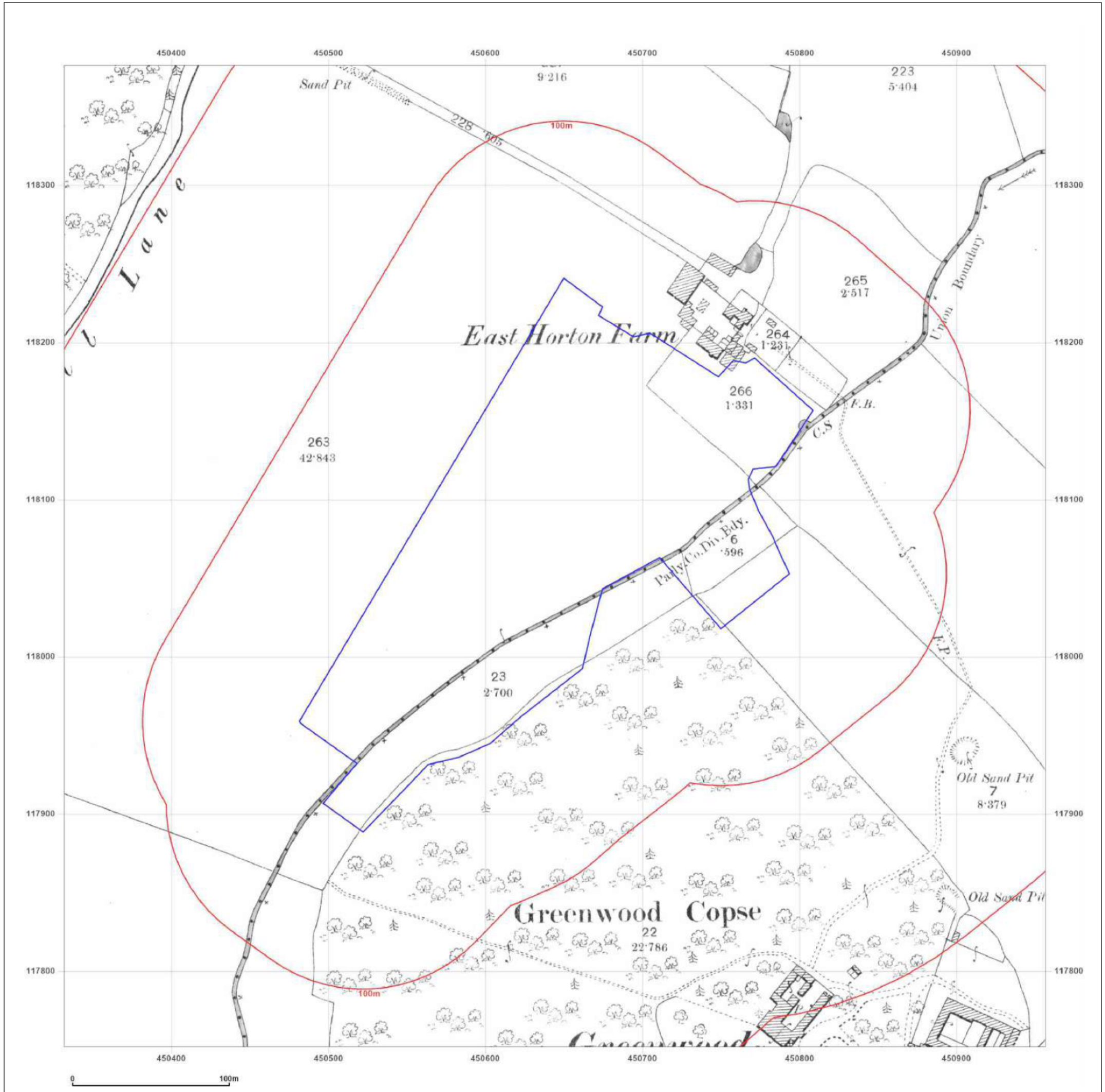
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1896**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

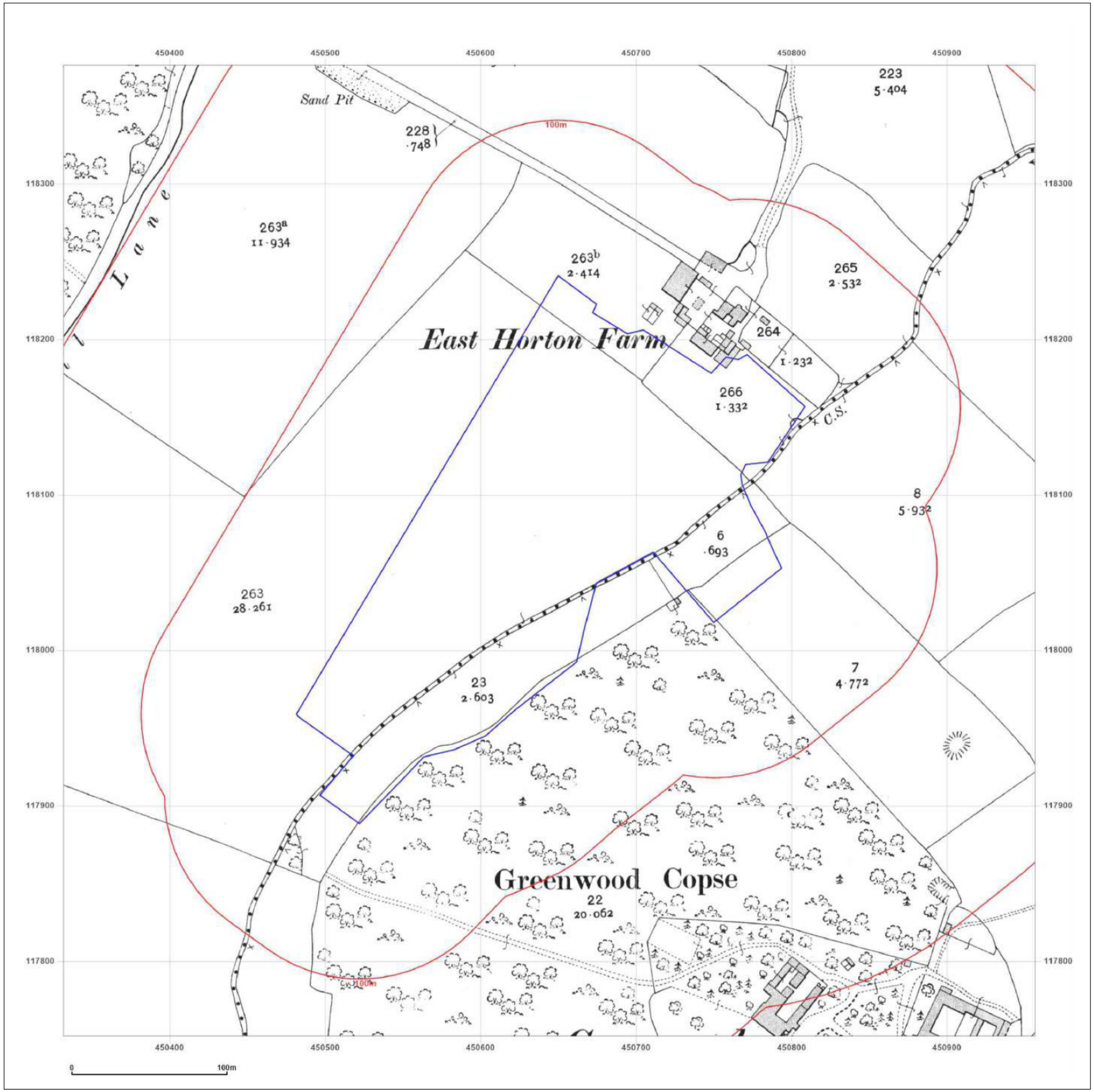
Surveyed 1896
Revised 1896
Edition N/A
Copyright N/A
Levelled N/A

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1909**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

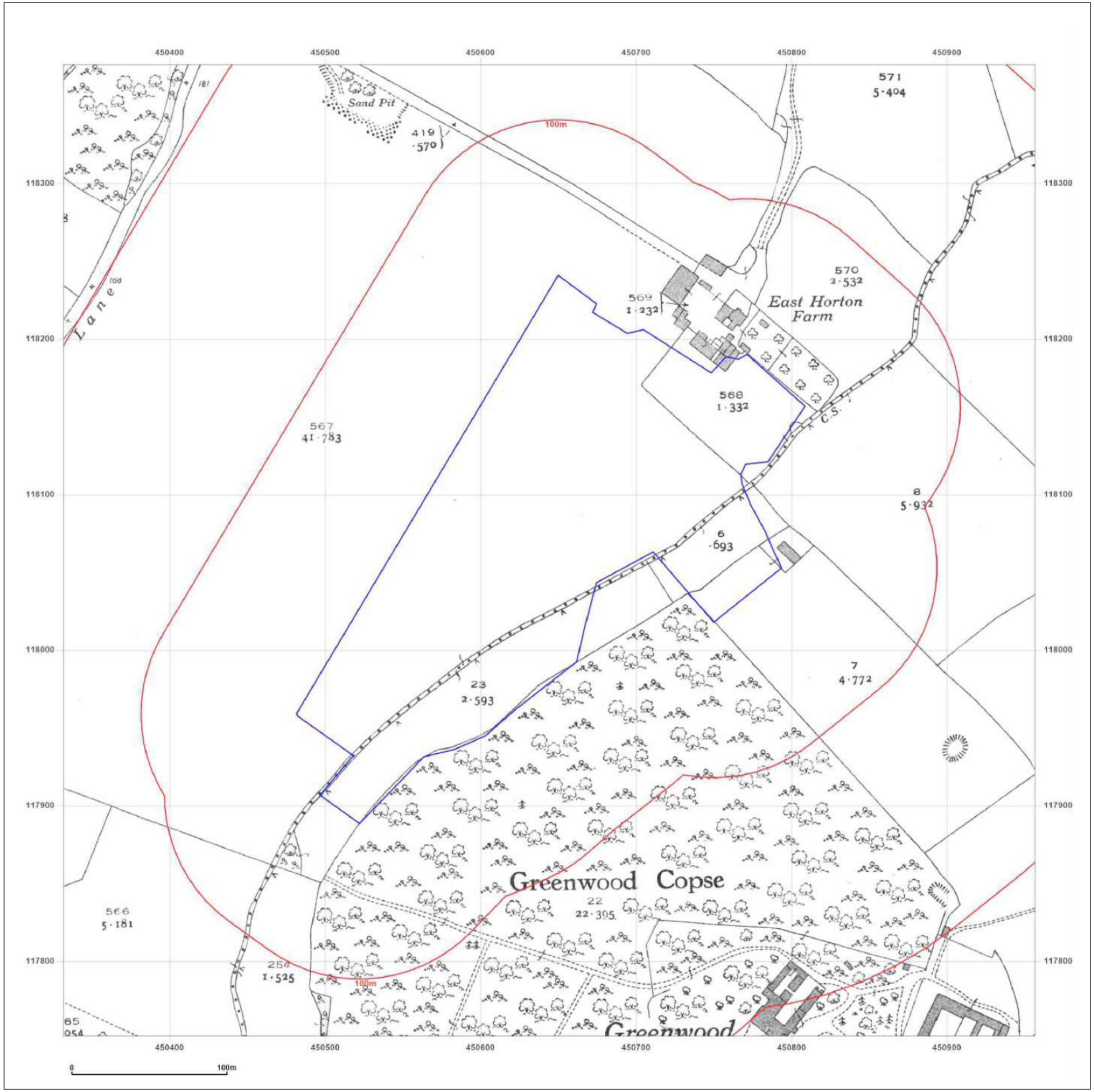
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: County Series
Map date: **1939**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1939
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A

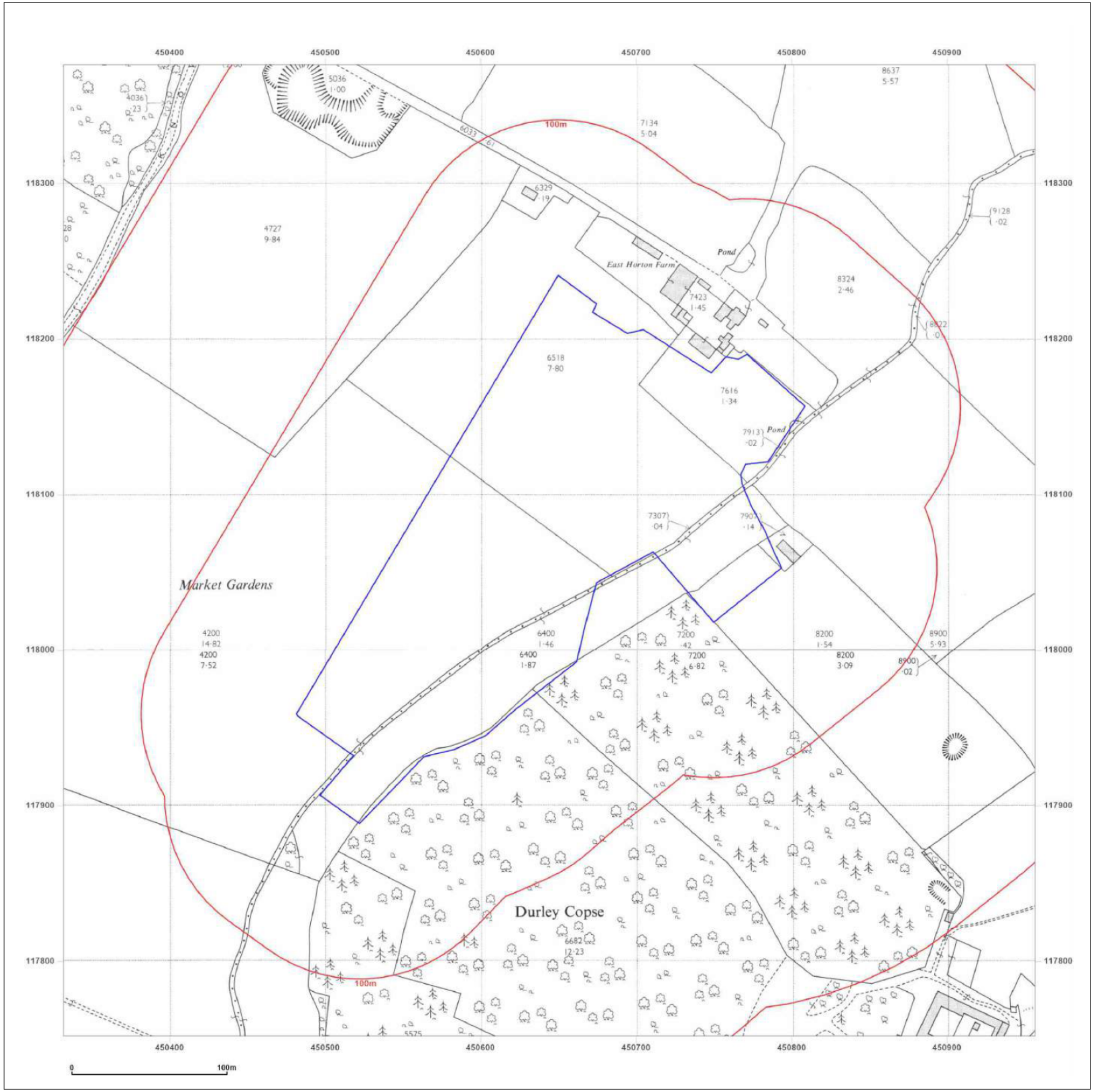
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **1962**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1962
Revised 1962
Edition N/A
Copyright 1963
Levelled 1959

Surveyed 1962
Revised 1962
Edition N/A
Copyright 1963
Levelled 1959

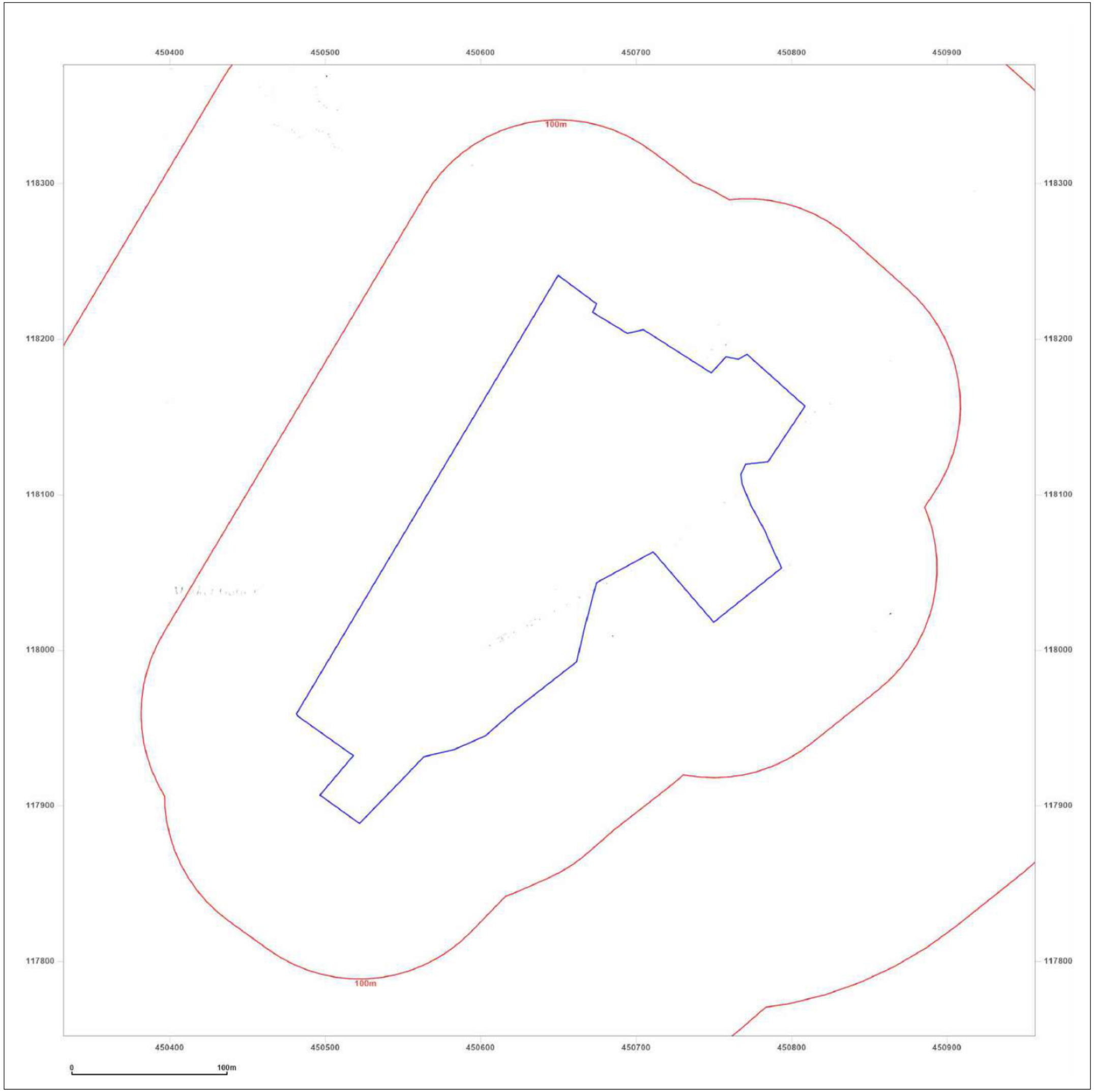
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **1974**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

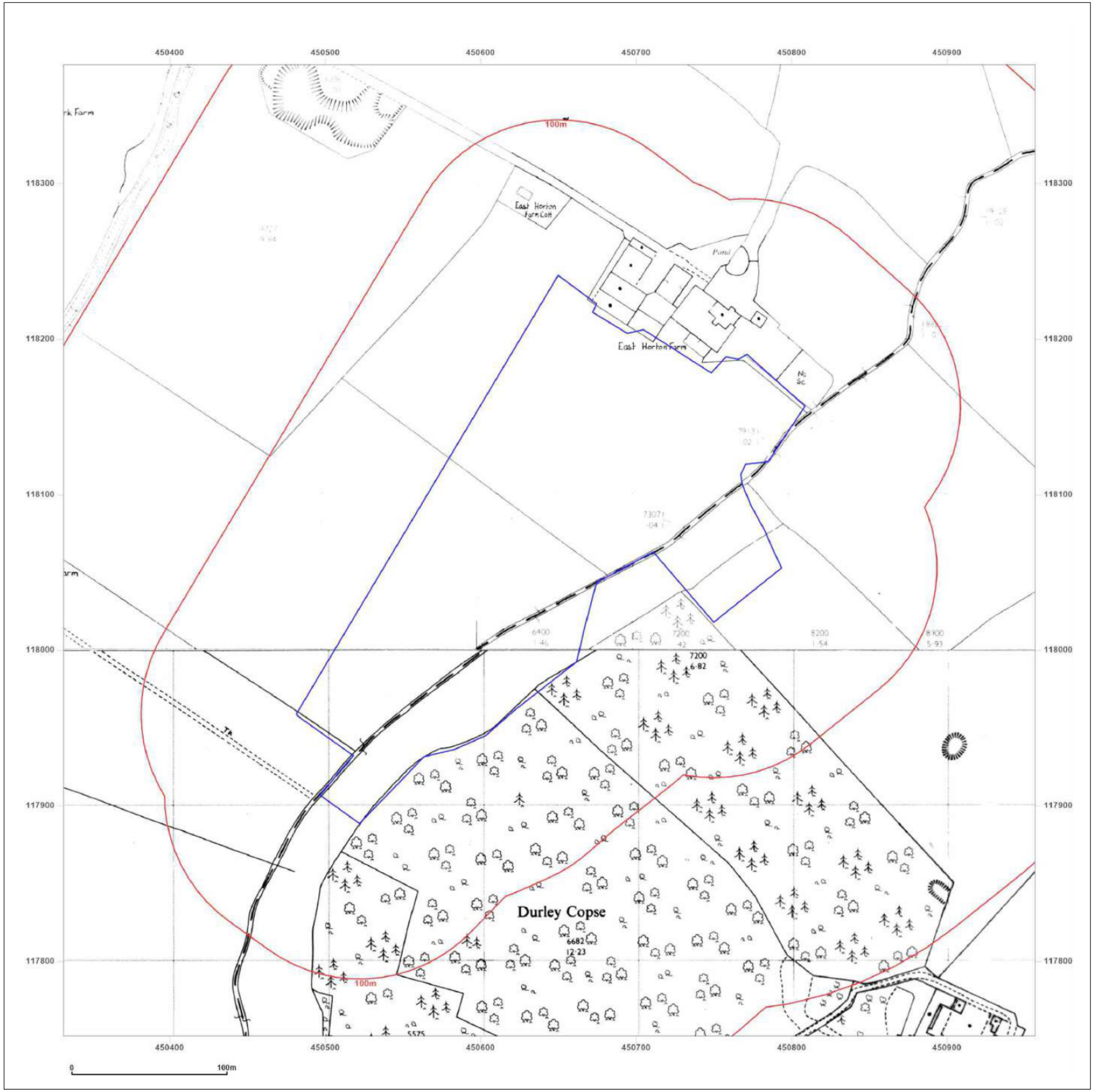
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **1988-1989**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1952
Revised 1988
Edition N/A
Copyright 1988
Levelled 1952

Surveyed 1959
Revised 1989
Edition N/A
Copyright 1989
Levelled 1959

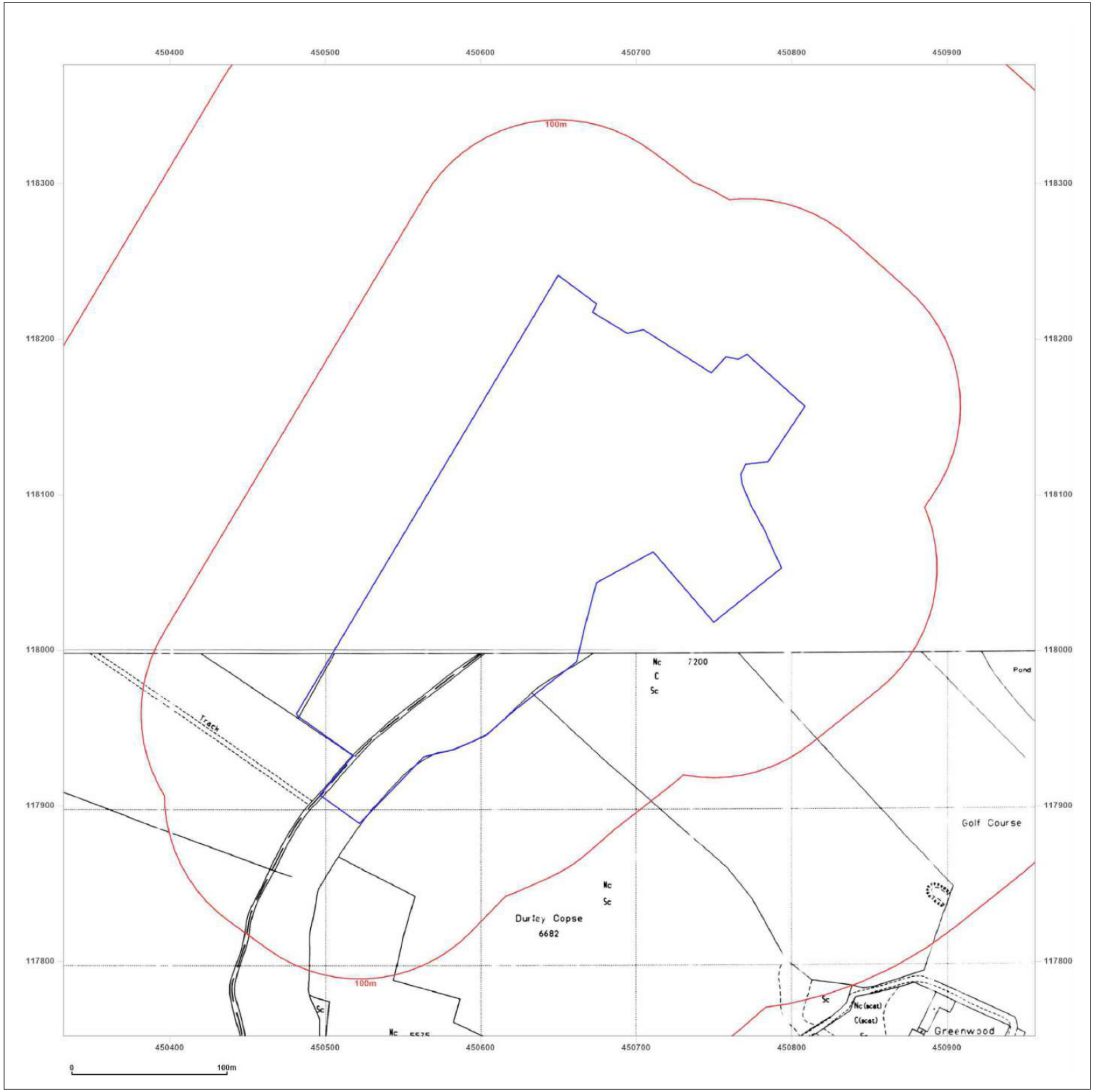
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_2500
Grid Ref: 450644, 118064

Map Name: National Grid
Map date: **1993**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

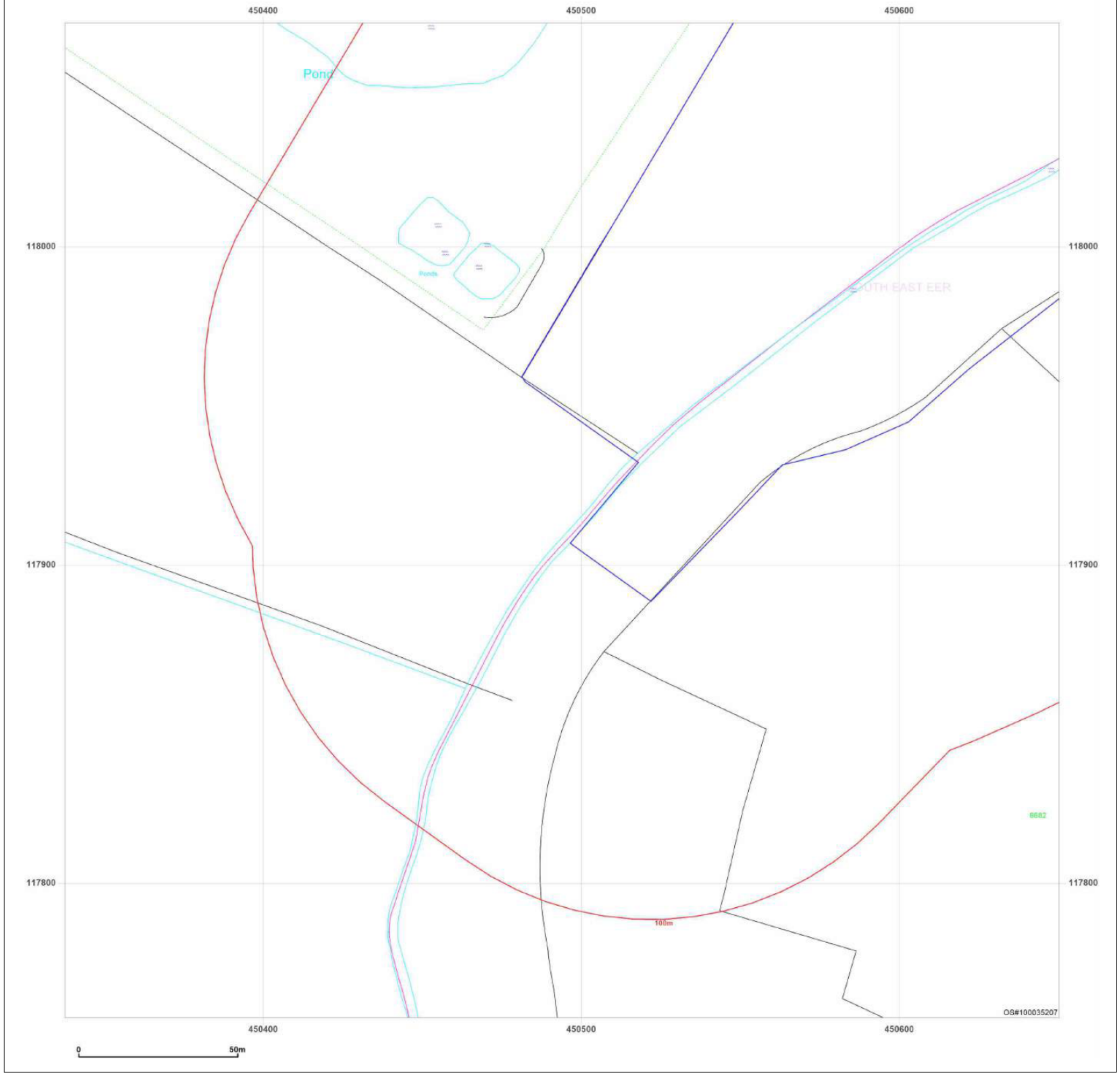
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

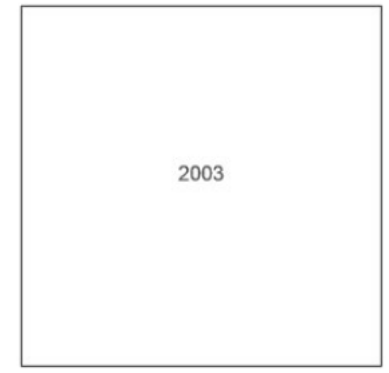
Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_Landline_1_1
Grid Ref: 450494, 117914

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S



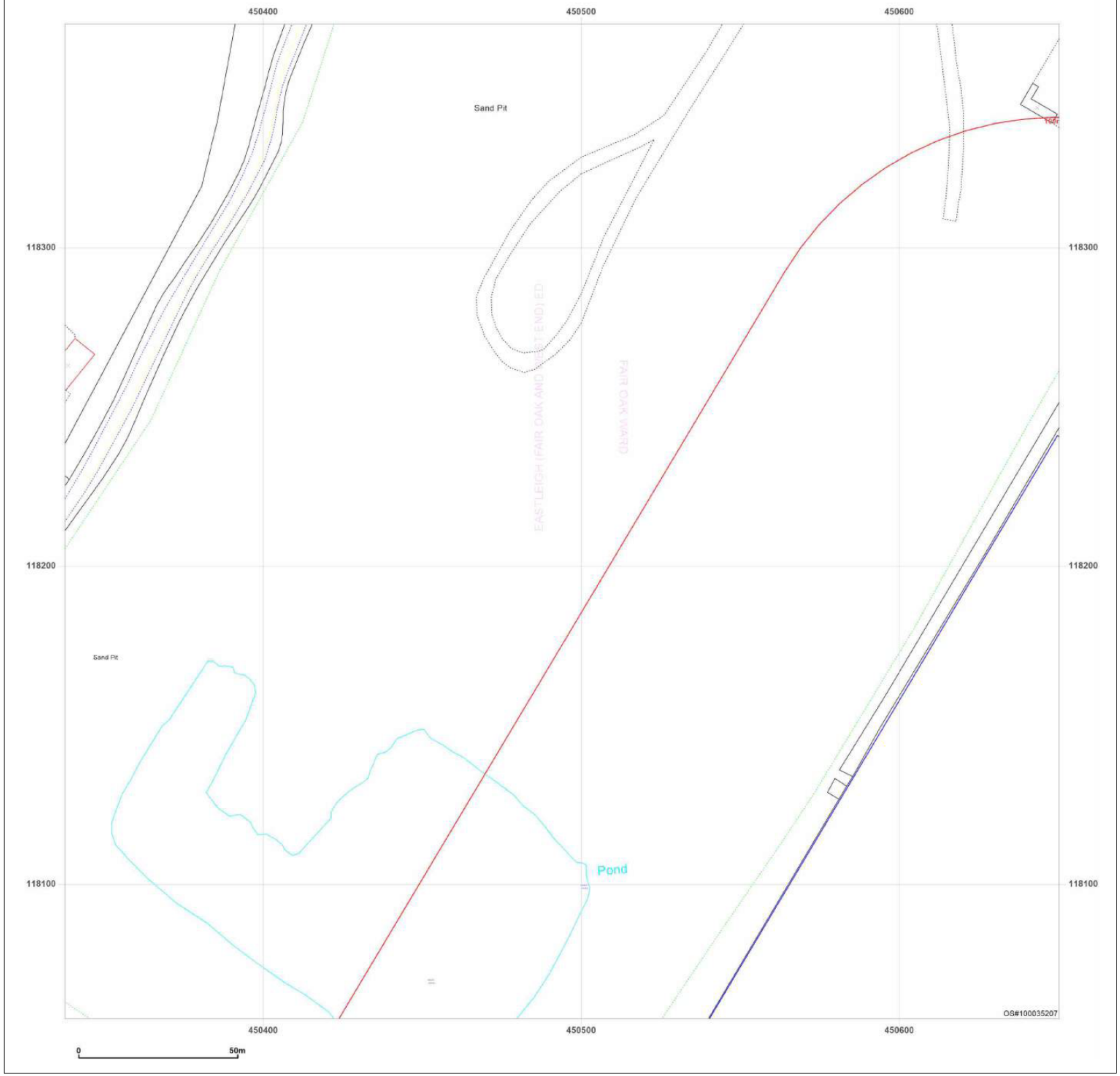
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

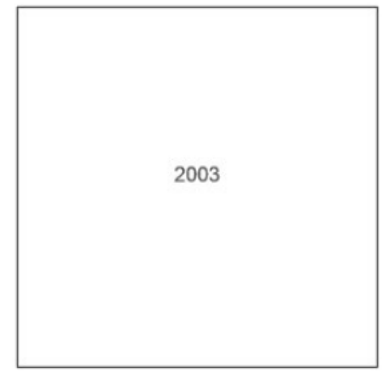
Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_Landline_1_2
Grid Ref: 450494, 118214

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S



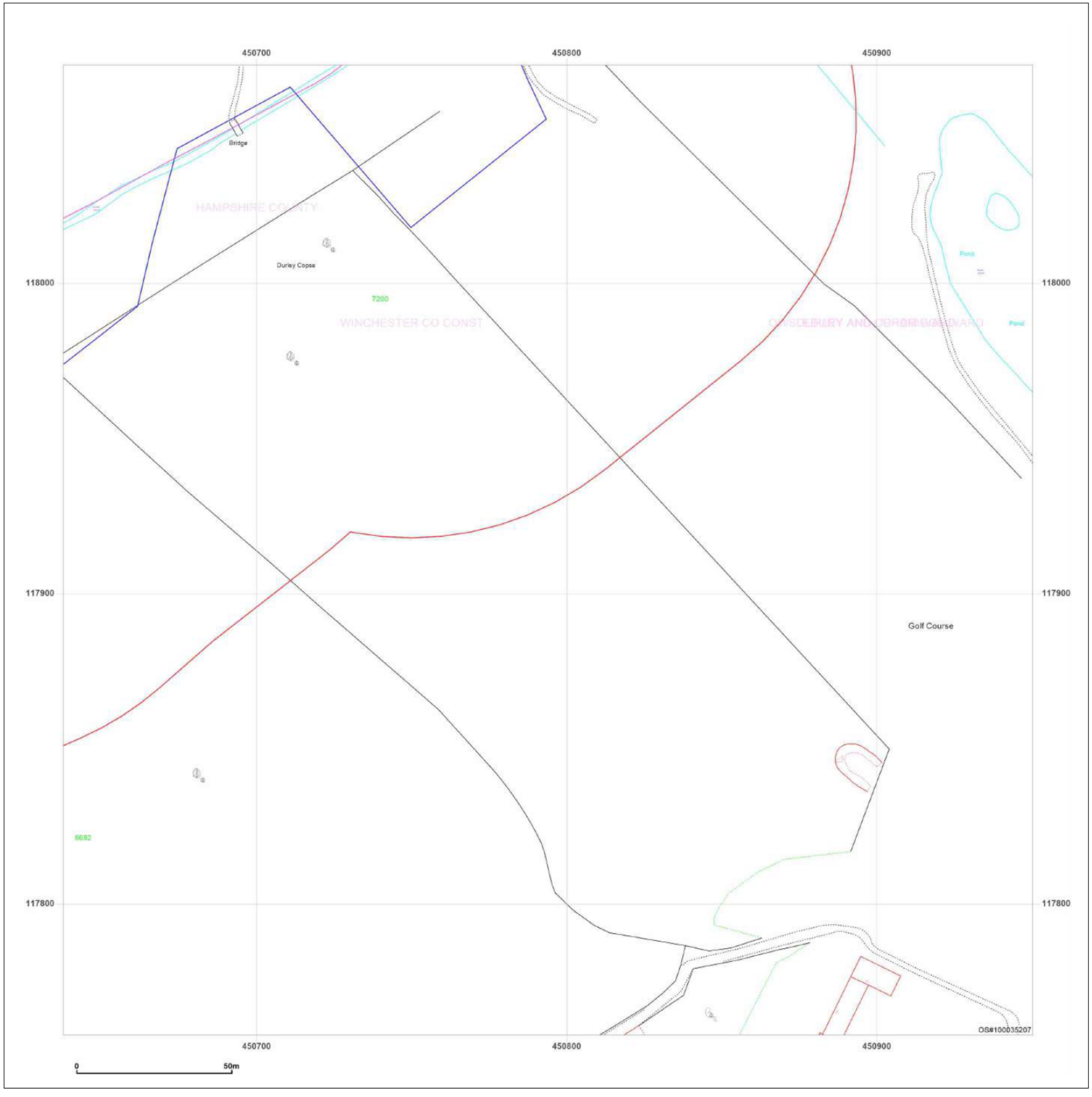
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

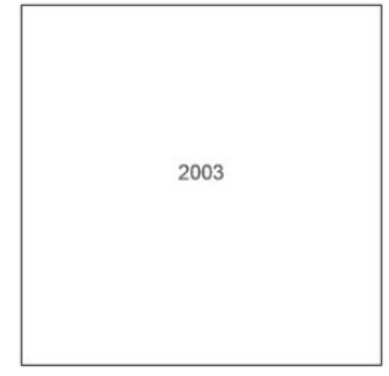
Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_Landline_2_1
Grid Ref: 450794, 117914

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S



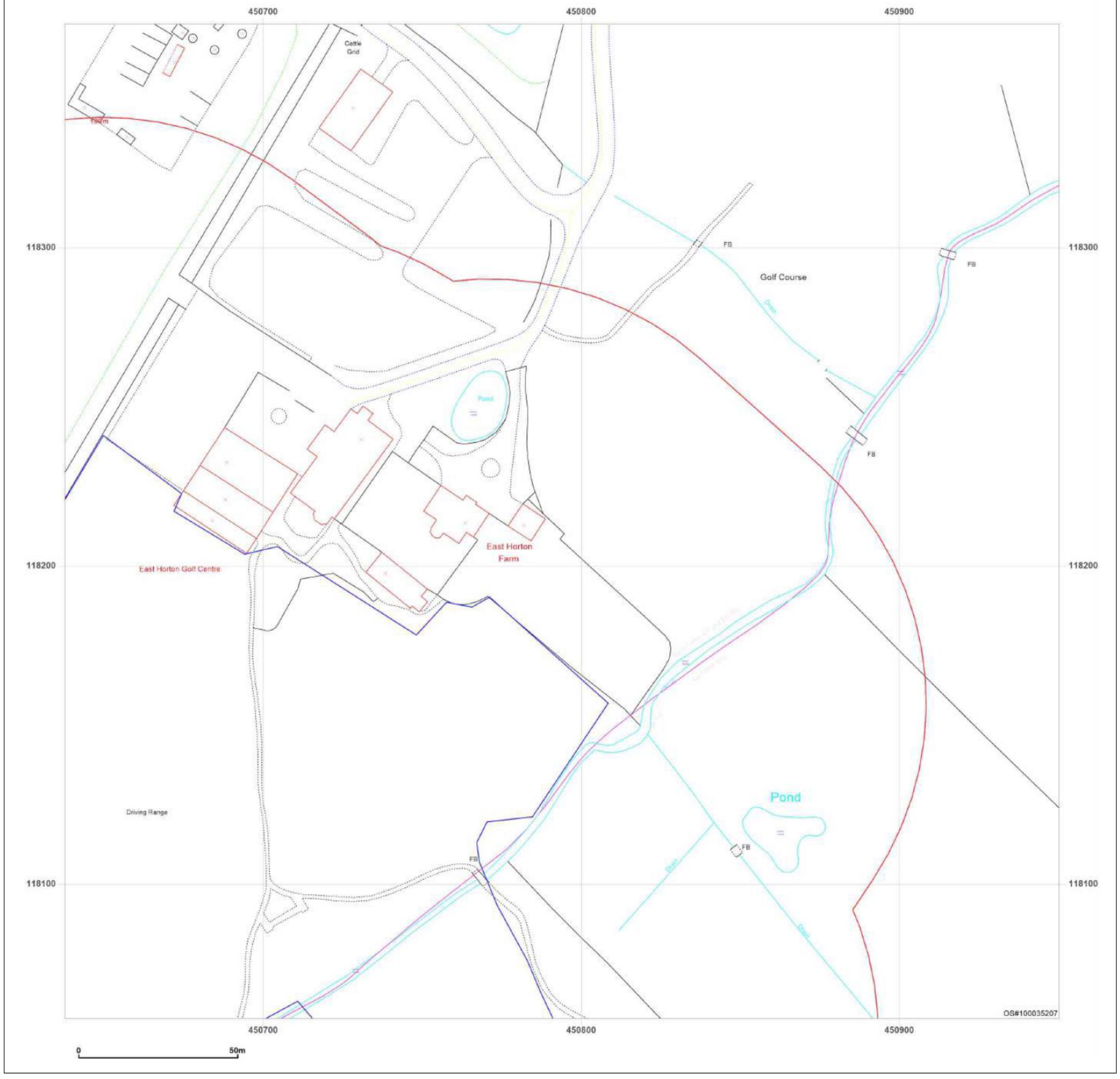
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 22 April 2024

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



Groundsure INSIGHTS

Site Details:

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Client Ref: GWPR5988A
Report Ref: GS-D85-SNJ-VQ6-OI2_Landline_2_2
Grid Ref: 450794, 118214

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S

2003

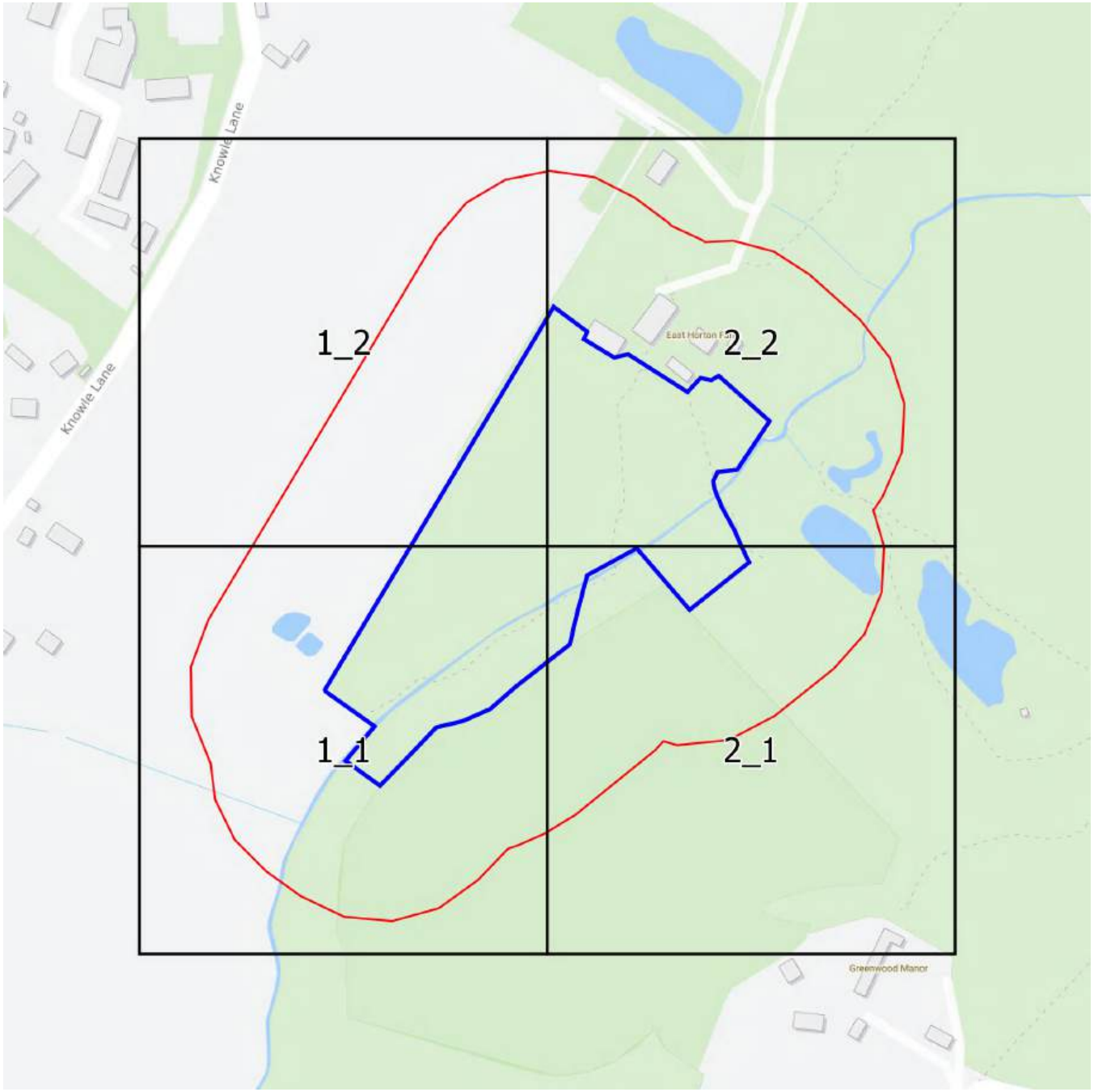
Powered by

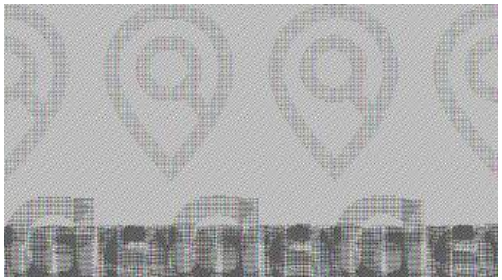
Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

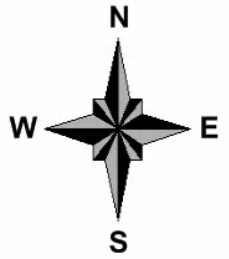
Production date: 22 April 2024

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





Landline Scale Grid Index



APPENDIX E: GroundSure EnviroInsight and GeoInsight Datasheets

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

EAST HORTON, EAST HORTON GOLF CENTRE, MORTIMERS LANE, FAIR OAK, SO50 7EA

Order Details

Date: 22/04/2024

Your ref: GWPR5988A

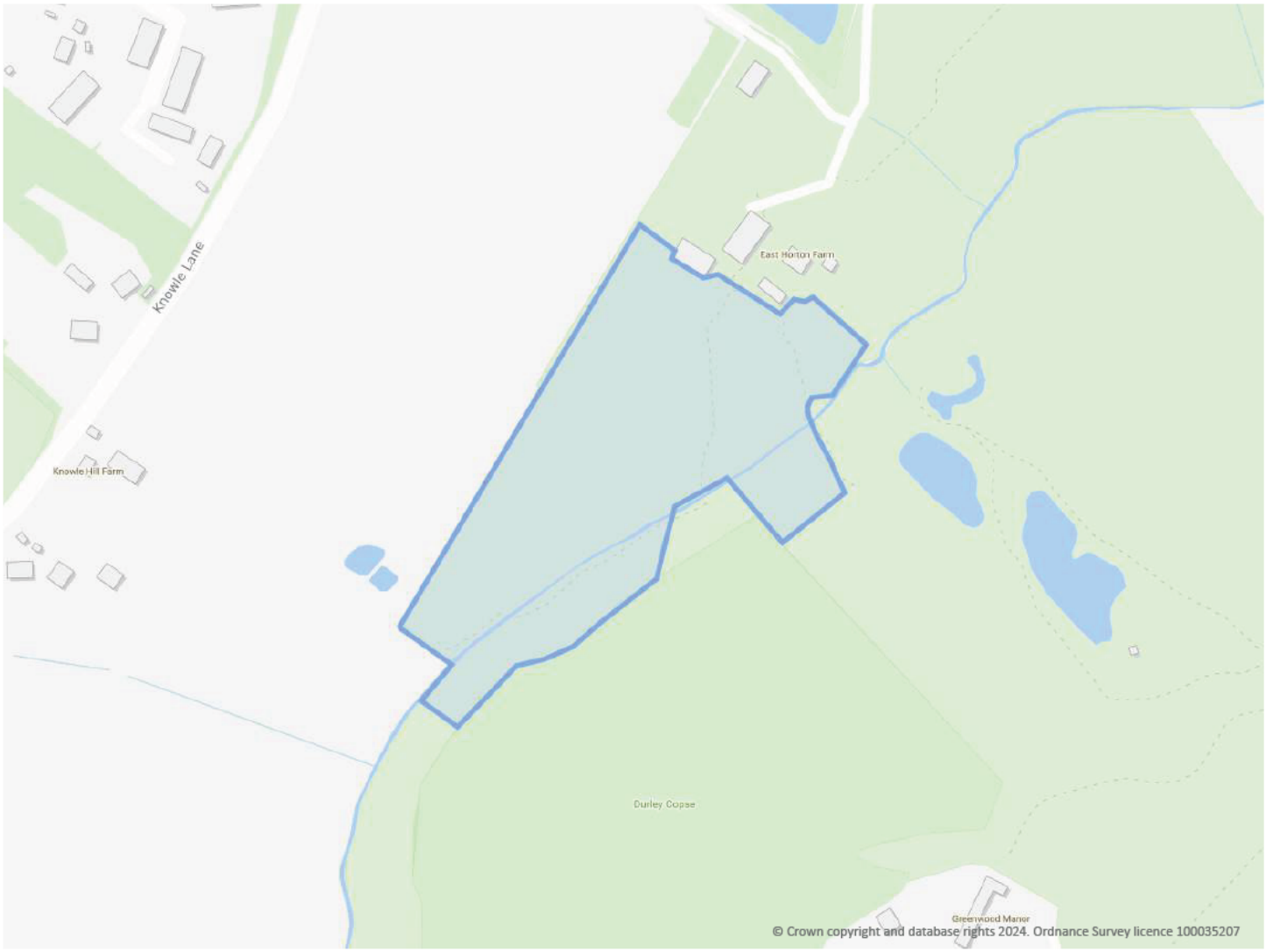
Our Ref: GS-PSA-5LM-F7O-9VO

Site Details

Location: 450658 118099

Area: 5.03 ha

Authority: Eastleigh Borough Council ↗, Winchester City Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan p.14 >

Insight User Guide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	15	15	-
17	1.2	Historical tanks	0	0	0	0	-
17	1.3	Historical energy features	0	0	0	0	-
17	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	1.6	Historical military land	0	0	0	0	-
Page	**Section**	**Past land use - un-grouped >**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
19 >	2.1 >	Historical industrial land uses >	0	0	17	26	-
21	2.2	Historical tanks	0	0	0	0	-
21	2.3	Historical energy features	0	0	0	0	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	**Section**	**Waste and landfill >**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
23 >	3.1 >	Active or recent landfill >	1	0	0	0	-
24 >	3.2 >	Historical landfill (BGS records) >	0	0	0	2	-
24 >	3.3 >	Historical landfill (LA/mapping records) >	0	0	1	4	-
24 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	0	3	-
25 >	3.5 >	Historical waste sites >	0	0	0	1	-
26 >	3.6 >	Licensed waste sites >	0	0	3	7	-
29 >	3.7 >	Waste exemptions >	0	0	1	64	-
Page	**Section**	**Current industrial land use >**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
36 >	4.1 >	Recent industrial land uses >	0	0	1	-	-
37	4.2	Current or recent petrol stations	0	0	0	0	-
37	4.3	Electricity cables	0	0	0	0	-
37	4.4	Gas pipelines	0	0	0	0	-
37	4.5	Sites determined as Contaminated Land	0	0	0	0	-

37	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
38	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
38 >	4.10 >	Licensed industrial activities (Part A(1)) >	0	0	21	0	-
41 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	0	-
42	4.12	Radioactive Substance Authorisations	0	0	0	0	-
42 >	4.13 >	Licensed Discharges to controlled waters >	3	0	0	6	-
43	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
43	4.15	Pollutant release to public sewer	0	0	0	0	-
44	4.16	List 1 Dangerous Substances	0	0	0	0	-
44	4.17	List 2 Dangerous Substances	0	0	0	0	-
44 >	4.18 >	Pollution Incidents (EA/NRW) >	0	1	13	14	-
47 >	4.19 >	Pollution inventory substances >	0	0	2	0	-
49	4.20	Pollution inventory waste transfers	0	0	0	0	-
49	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
50 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
51 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
53 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
55	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
55	5.5	Groundwater vulnerability- local information	None (within 0m)				
56 >	5.6 >	Groundwater abstractions >	0	0	0	0	4
57 >	5.7 >	Surface water abstractions >	1	3	1	0	0
59 >	5.8 >	Potable abstractions >	0	0	0	0	2
59	5.9	Source Protection Zones	0	0	0	0	-
60	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
61 >	6.1 >	Water Network (OS MasterMap) >	1	3	14	-	-

63 >	6.2 >	Surface water features >	1	4	8	-	-
63 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
64 >	6.4 >	WFD Surface water bodies >	1	0	0	-	-
64 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
65 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
66	7.2	Historical Flood Events	0	0	0	-	-
66	7.3	Flood Defences	0	0	0	-	-
66	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
66	7.5	Flood Storage Areas	0	0	0	-	-
67 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
68 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
69 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
71 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
72	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
73	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
73	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
73	10.4	Special Protection Areas (SPA)	0	0	0	0	0
73	10.5	National Nature Reserves (NNR)	0	0	0	0	0
74	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
74 >	10.7 >	Designated Ancient Woodland >	1	0	0	1	9
75	10.8	Biosphere Reserves	0	0	0	0	0
75	10.9	Forest Parks	0	0	0	0	0
75	10.10	Marine Conservation Zones	0	0	0	0	0
75	10.11	Green Belt	0	0	0	0	0
75	10.12	Proposed Ramsar sites	0	0	0	0	0

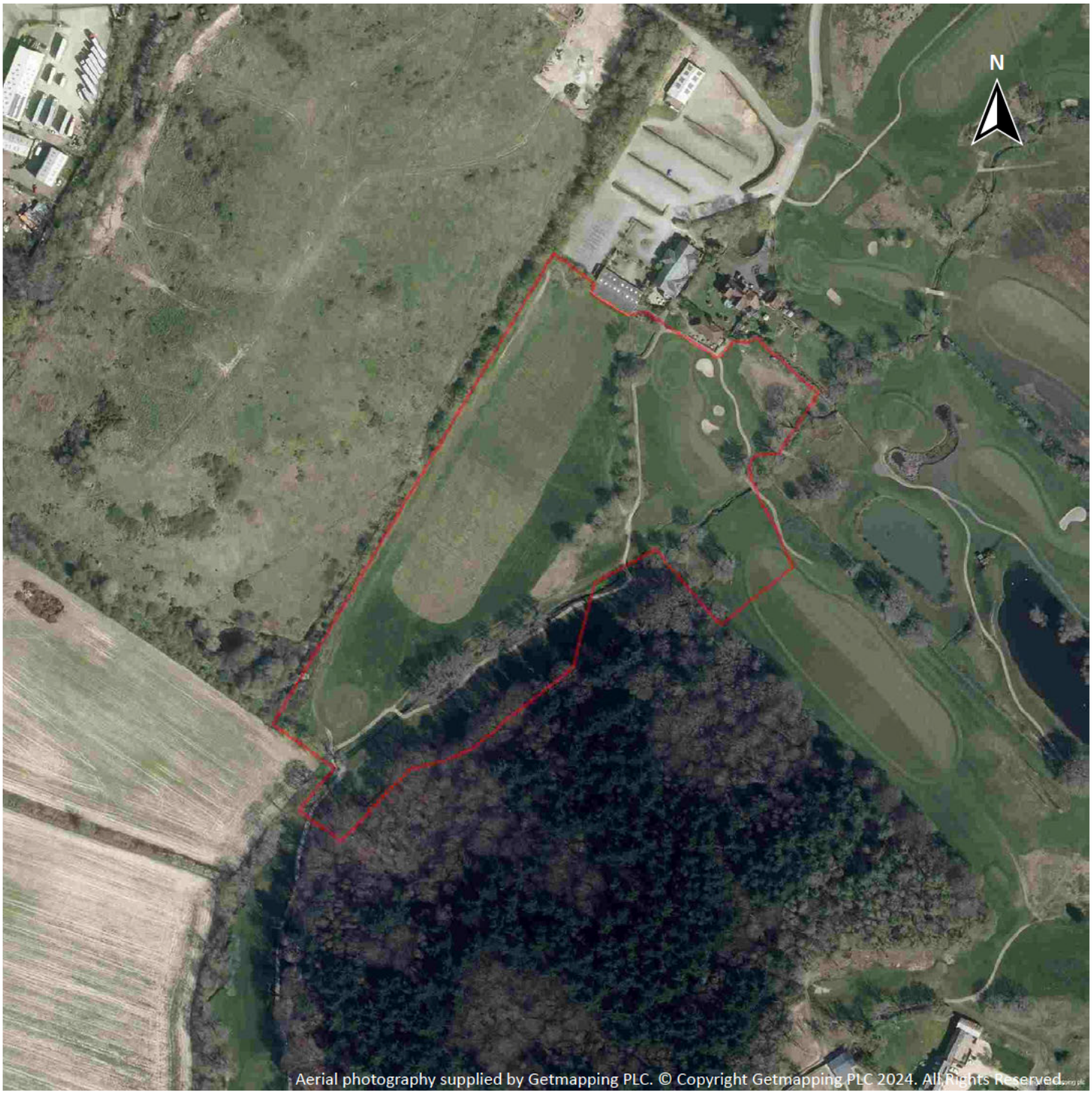
76	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
76	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
76	10.15	Nitrate Sensitive Areas	0	0	0	0	0
76 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	4
78 >	10.17 >	SSSI Impact Risk Zones >	2	-	-	-	-
79	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
80	11.1	World Heritage Sites	0	0	0	-	-
81	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
81	11.3	National Parks	0	0	0	-	-
81 >	11.4 >	Listed Buildings >	0	2	0	-	-
82	11.5	Conservation Areas	0	0	0	-	-
82	11.6	Scheduled Ancient Monuments	0	0	0	-	-
82	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
83 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
84	12.2	Open Access Land	0	0	0	-	-
84	12.3	Tree Felling Licences	0	0	0	-	-
84	12.4	Environmental Stewardship Schemes	0	0	0	-	-
84	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
85 >	13.1 >	Priority Habitat Inventory >	1	1	1	-	-
86	13.2	Habitat Networks	0	0	0	-	-
86 >	13.3 >	Open Mosaic Habitat >	1	0	1	-	-
86	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
87 >	14.1 >	10k Availability >	Identified (within 500m)				
88 >	14.2 >	Artificial and made ground (10k) >	0	0	0	2	-
89 >	14.3 >	Superficial geology (10k) >	1	0	0	0	-

90	14.4	Landslip (10k)	0	0	0	0	-
91 >	14.5 >	Bedrock geology (10k) >	3	0	2	1	-
92	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	15.1 >	50k Availability >	Identified (within 500m)				
94 >	15.2 >	Artificial and made ground (50k) >	0	0	0	1	-
95	15.3	Artificial ground permeability (50k)	0	0	-	-	-
96 >	15.4 >	Superficial geology (50k) >	1	0	0	0	-
97 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
97	15.6	Landslip (50k)	0	0	0	0	-
97	15.7	Landslip permeability (50k)	None (within 50m)				
98 >	15.8 >	Bedrock geology (50k) >	3	0	2	0	-
99 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
99	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
100 >	16.1 >	BGS Boreholes >	0	0	1	-	-
Page	Section	Natural ground subsidence >					
101 >	17.1 >	Shrink swell clays >	Low (within 50m)				
103 >	17.2 >	Running sands >	Low (within 50m)				
105 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
107 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
108 >	17.5 >	Landslides >	Low (within 50m)				
110 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
112 >	18.1 >	BritPits >	0	0	3	2	-
113 >	18.2 >	Surface ground workings >	0	0	19	-	-
114	18.3	Underground workings	0	0	0	0	0
115	18.4	Underground mining extents	0	0	0	0	-
115 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	8	-

116	18.6	Non-coal mining	0	0	0	0	0
116	18.7	JPB mining areas	None (within 0m)				
116	18.8	The Coal Authority non-coal mining	0	0	0	0	-
116 >	18.9 >	Researched mining >	0	0	0	1	-
117	18.10	Mining record office plans	0	0	0	0	-
117	18.11	BGS mine plans	0	0	0	0	-
117	18.12	Coal mining	None (within 0m)				
117	18.13	Brine areas	None (within 0m)				
117	18.14	Gypsum areas	None (within 0m)				
118	18.15	Tin mining	None (within 0m)				
118	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
119	19.1	Natural cavities	0	0	0	0	-
119	19.2	Mining cavities	0	0	0	0	0
119	19.3	Reported recent incidents	0	0	0	0	-
119	19.4	Historical incidents	0	0	0	0	-
120	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
121 >	20.1 >	Radon >	Between 3% and 5% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
123 >	21.1 >	BGS Estimated Background Soil Chemistry >	8	5	-	-	-
124	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
124	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
125	22.1	Underground railways (London)	0	0	0	-	-
125	22.2	Underground railways (Non-London)	0	0	0	-	-
125	22.3	Railway tunnels	0	0	0	-	-
125	22.4	Historical railway and tunnel features	0	0	0	-	-
125	22.5	Royal Mail tunnels	0	0	0	-	-

126	22.6	Historical railways	0	0	0	-	-
126	22.7	Railways	0	0	0	-	-
126	22.8	Crossrail 1	0	0	0	0	-
126	22.9	Crossrail 2	0	0	0	0	-
126	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 05/04/2020

Site Area: 5.03ha

Recent site history - 2017 aerial photograph



Capture Date: 21/06/2017

Site Area: 5.03ha

Recent site history - 2013 aerial photograph



Capture Date: 04/06/2013

Site Area: 5.03ha

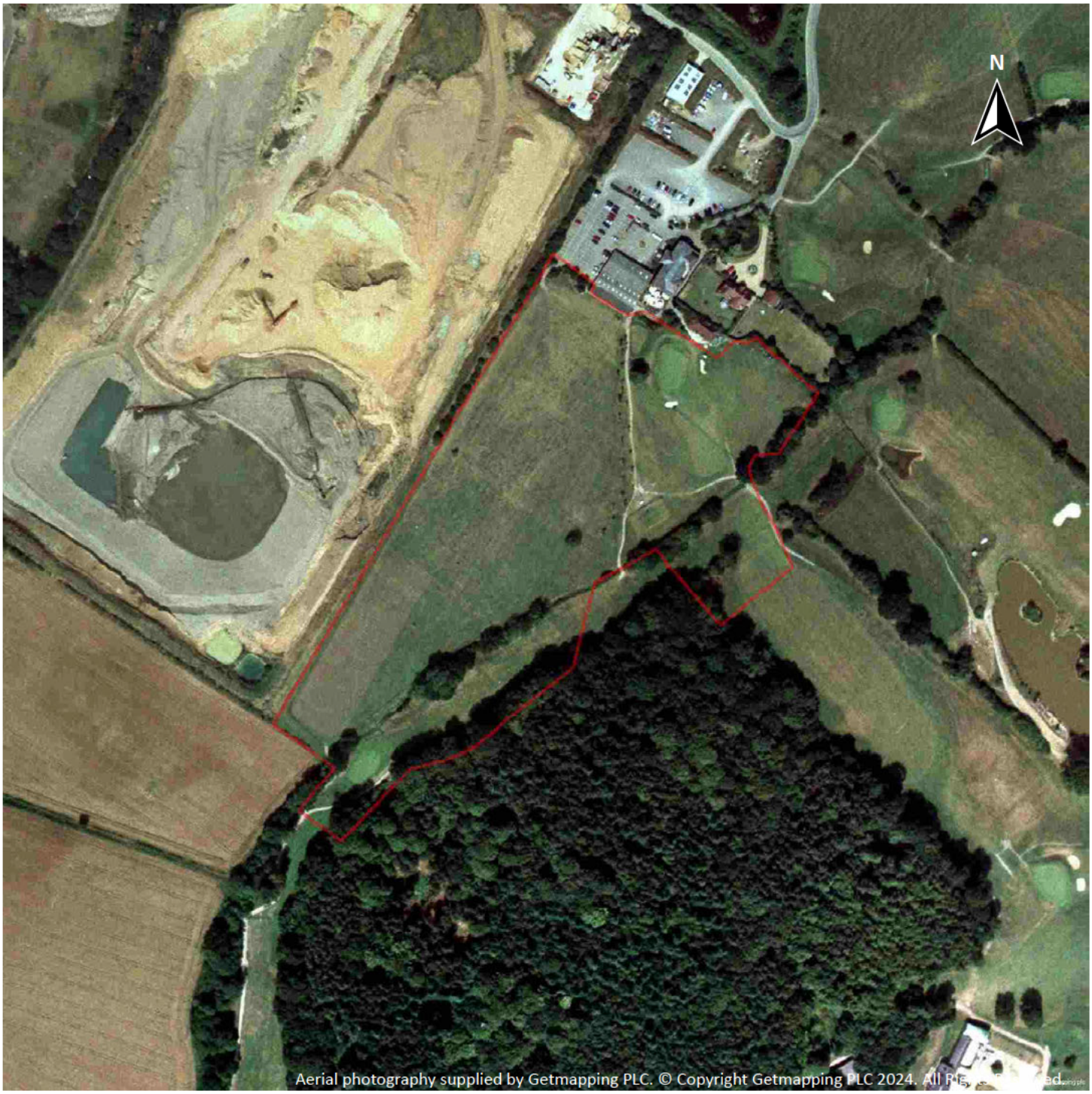
Recent site history - 2005 aerial photograph



Capture Date: 27/05/2005

Site Area: 5.03ha

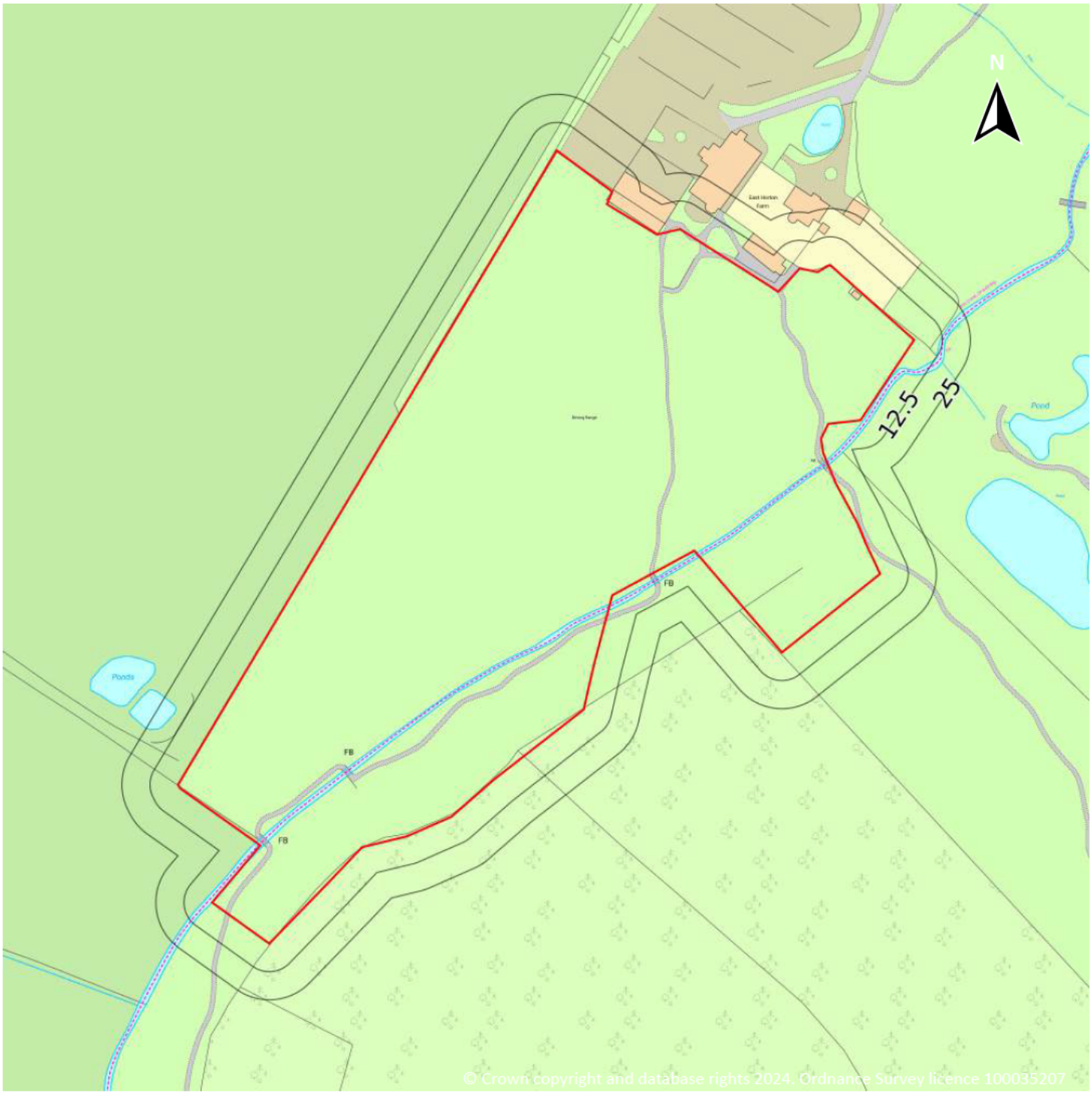
Recent site history - 1999 aerial photograph



Capture Date: 29/07/1999

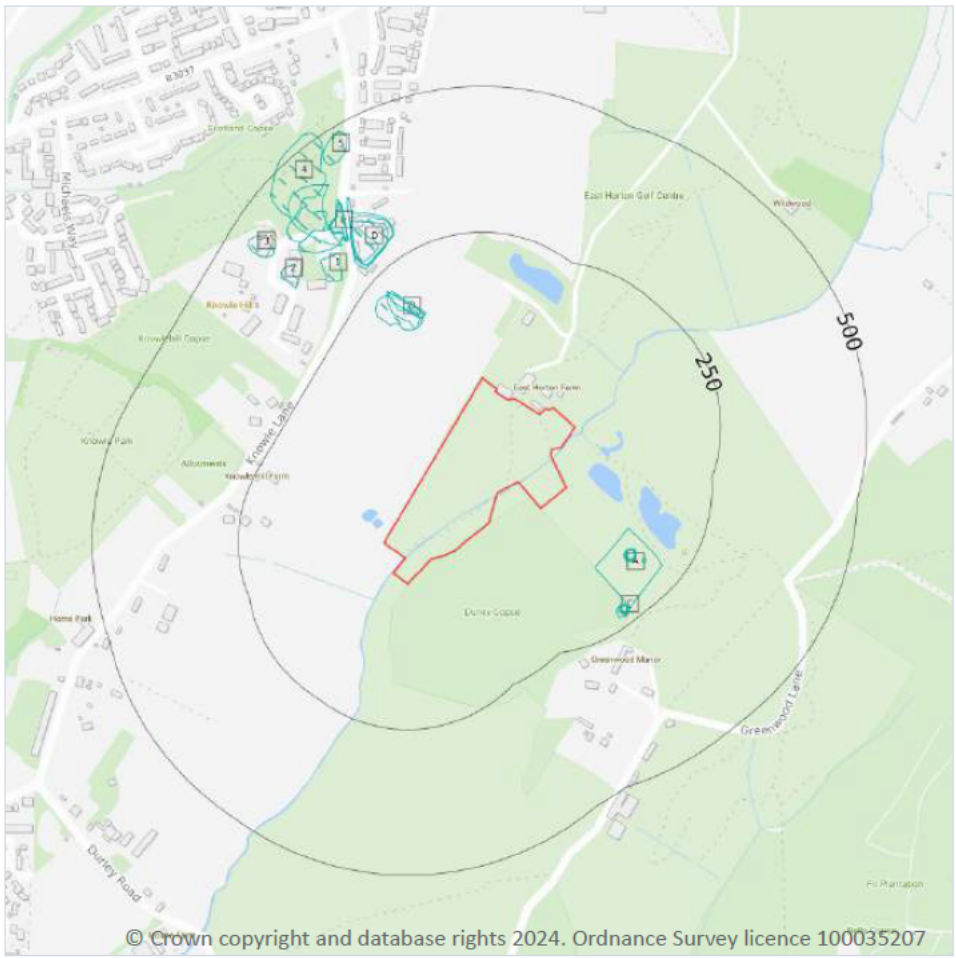
Site Area: 5.03ha

OS MasterMap site plan



Site Area: 5.03ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	30

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on page 15 >

ID	Location	Land use	Dates present	Group ID
A	126m E	Brick Field	1868	1884699

ID	Location	Land use	Dates present	Group ID
B	140m N	Sand Pit	1957	1942403
B	141m NW	Unspecified Pit	1968 - 1985	1910583
B	146m N	Sand Pit	1908 - 1938	1960587
B	147m N	Refuse Heap	1895	1883992
A	149m SE	Unspecified Pit	1957	1935336
A	150m SE	Old Sand Pits	1895	1861584
A	150m SE	Unspecified Pit	1938	1968128
A	151m SE	Unspecified Pit	1868	1932946
A	151m SE	Unspecified Pit	1908	1924929
A	179m SE	Brick Kiln	1868	1859659
C	215m SE	Unspecified Pit	1957	1942951
C	215m SE	Unspecified Pit	1908	1928195
C	216m SE	Old Sand Pits	1895	1861585
C	217m SE	Unspecified Pit	1868	1954949
D	273m NW	Sand Pit	1895	1964063
D	275m NW	Unspecified Pit	1957 - 1985	1959468
D	276m NW	Sand Pit	1908 - 1938	1900822
D	283m NW	Unspecified Pit	1868	1927133
1	294m NW	Sand Pit	1968 - 1985	1954412
E	329m NW	Old Sand Pit	1908 - 1938	1959998
E	331m NW	Unspecified Pit	1895	1966779
E	331m NW	Sand Pit	1957	1899990
E	332m NW	Unspecified Pit	1868	1964079
E	336m NW	Refuse Heap	1968 - 1985	1952572
2	353m NW	Sand Pit	1968 - 1985	1920401
E	371m NW	Unspecified Pit	1968 - 1985	1936190
3	416m NW	Refuse Heap	1968 - 1985	1916569
4	422m NW	Sand Pit	1968 - 1985	1933140

ID	Location	Land use	Dates present	Group ID
5	446m NW	Unspecified Heap	1968 - 1985	1965830

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

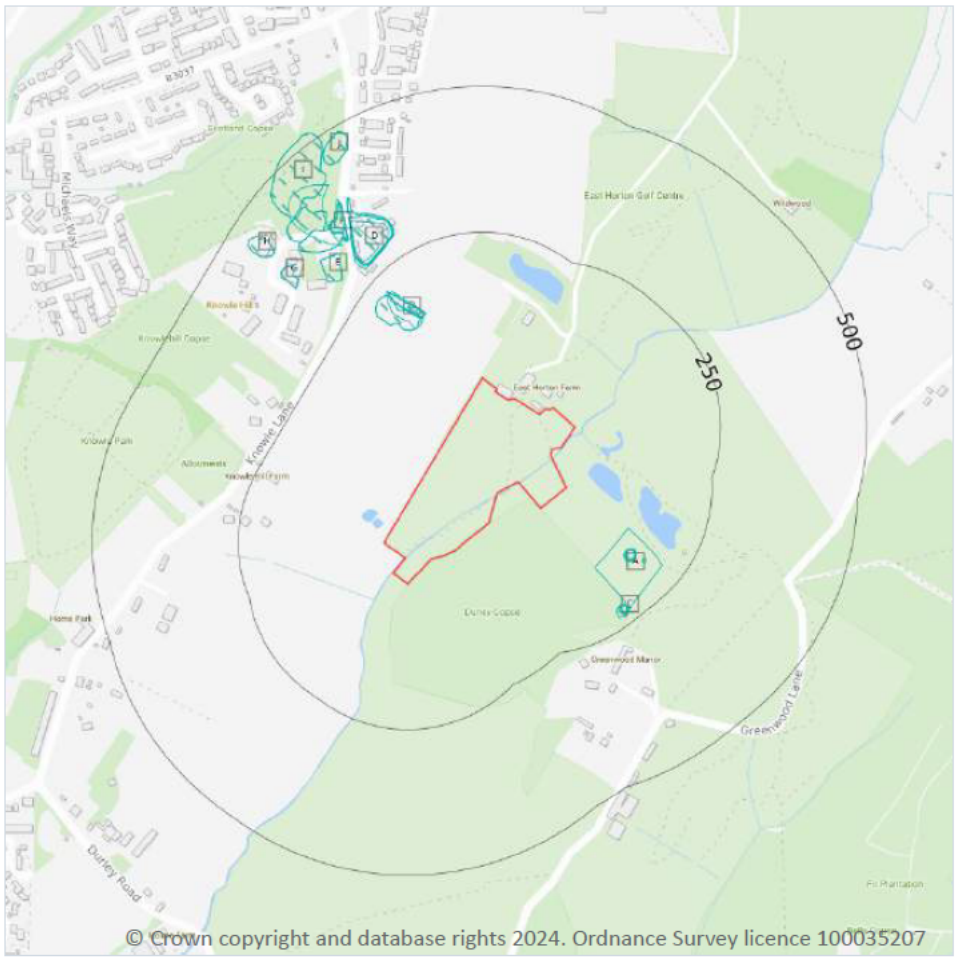
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	43

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on page 19 >

ID	Location	Land Use	Date	Group ID
A	126m E	Brick Field	1868	1884699
B	140m N	Sand Pit	1957	1942403
B	141m NW	Unspecified Pit	1968	1910583

ID	Location	Land Use	Date	Group ID
B	141m NW	Unspecified Pit	1985	1910583
B	146m N	Sand Pit	1908	1960587
B	147m N	Refuse Heap	1895	1883992
B	148m N	Sand Pit	1938	1960587
A	149m SE	Unspecified Pit	1957	1935336
A	150m SE	Unspecified Pit	1938	1968128
A	150m SE	Old Sand Pits	1895	1861584
A	151m SE	Unspecified Pit	1868	1932946
A	151m SE	Unspecified Pit	1908	1924929
A	179m SE	Brick Kiln	1868	1859659
C	215m SE	Unspecified Pit	1957	1942951
C	215m SE	Unspecified Pit	1908	1928195
C	216m SE	Old Sand Pits	1895	1861585
C	217m SE	Unspecified Pit	1868	1954949
D	273m NW	Sand Pit	1895	1964063
D	275m NW	Unspecified Pit	1968	1959468
D	275m NW	Unspecified Pit	1985	1959468
D	275m NW	Unspecified Pit	1957	1959468
D	276m NW	Sand Pit	1908	1900822
D	278m NW	Sand Pit	1938	1900822
D	283m NW	Unspecified Pit	1868	1927133
E	294m NW	Sand Pit	1968	1954412
E	294m NW	Sand Pit	1985	1954412
F	329m NW	Old Sand Pit	1908	1959998
F	331m NW	Unspecified Pit	1895	1966779
F	331m NW	Old Sand Pit	1938	1959998
F	331m NW	Sand Pit	1957	1899990
F	332m NW	Unspecified Pit	1868	1964079

ID	Location	Land Use	Date	Group ID
F	336m NW	Refuse Heap	1968	1952572
F	336m NW	Refuse Heap	1985	1952572
G	353m NW	Sand Pit	1968	1920401
G	353m NW	Sand Pit	1985	1920401
F	371m NW	Unspecified Pit	1968	1936190
F	371m NW	Unspecified Pit	1985	1936190
H	416m NW	Refuse Heap	1968	1916569
H	416m NW	Refuse Heap	1985	1916569
I	422m NW	Sand Pit	1968	1933140
I	422m NW	Sand Pit	1985	1933140
J	446m NW	Unspecified Heap	1968	1965830
J	446m NW	Unspecified Heap	1985	1965830

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

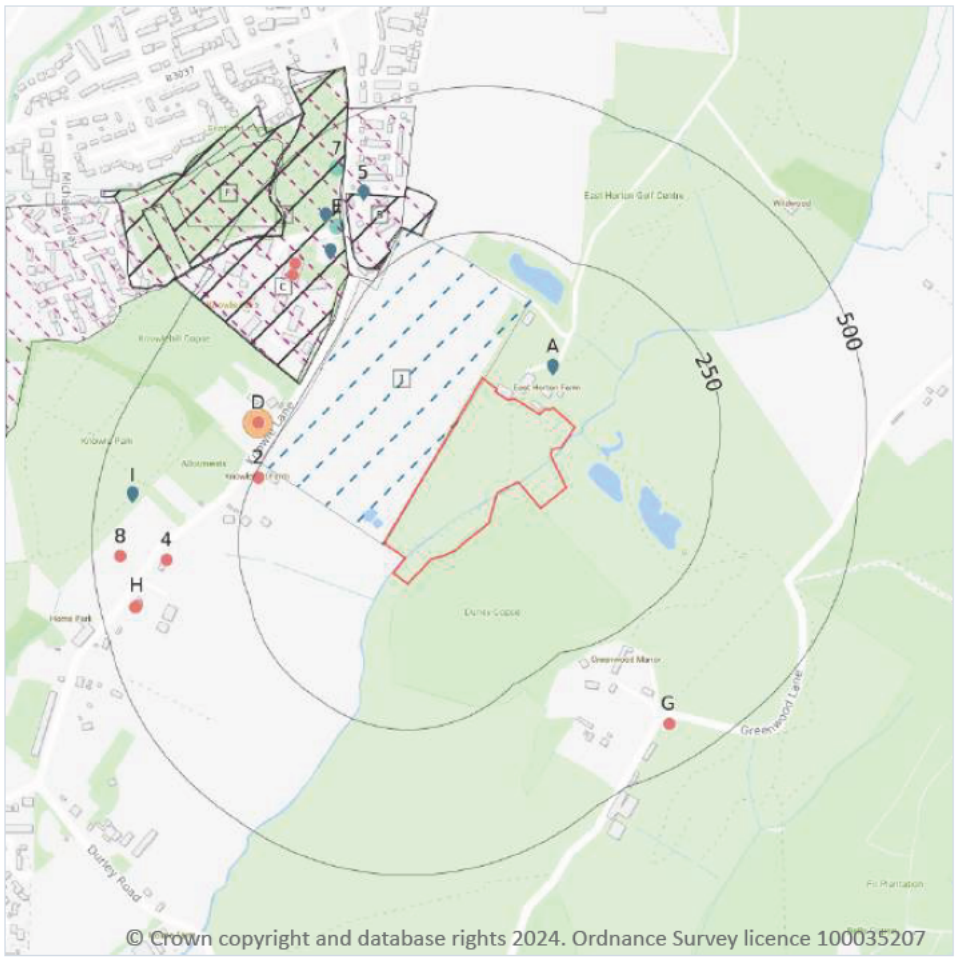
2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Active or recent landfill

Historical landfill (EA/NRW)

Historical landfill (BGS)

Historical landfill (LA/OS)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Details	
1	On site	**Operator: Suez Recycling And Recovery Southern Ltd Site Address: Off Mortimers Lane, Fair Oak Landfill Epr/bk1244ia, Fair Oak, Eastleigh, Windsor And Maidenhead, SO50 7EA**	**WML Number: 0 EPR Reference: - Landfill type: Waste Landfilling; >10 T/D With Capacity >25,000T Excluding Inert Waste - 5.2 A(1) a) Status: Effective IPPC Reference: - EPR Number: EPR/BK1244IA**

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	2

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

Features are displayed on the Waste and landfill map on **page 23 >**

ID	Location	Address	BGS Number	Risk	Waste Type
E	360m NW	Knowle Lane, Fair Oak, Hants	1494	Risk to minor aquifer	N/A
7	437m NW	Knowle Hill Lane, Fair Oak	307	Risk to minor aquifer	N/A

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	5

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 23 >**

ID	Location	Site address	Source	Data type
3	249m NW	Fair Oak Landfill	Eastleigh	Polygon
B	257m NW	Knowle Lane	Eastleigh Borough Council	Polygon
C	264m NW	Knowlehill Lane	Eastleigh Borough Council	Polygon
F	421m NW	Hardings copse and Scotland copse	Eastleigh Borough Council	Polygon
6	425m NW	Refuse Tip	1982 mapping	Polygon

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	3

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on **page 23 >**

ID	Location	Details		
B	259m NW	Site Address: Knowle Lane, Fair Oak, Hampshire Licence Holder Address: Cintra, Botley Road, Horton Heath, Hampshire	Waste Licence: Yes Site Reference: FEA4, 9/6 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Dr P Klepper Licence Holder: M J Passingham Limited First Recorded 06/01/1972 Last Recorded: -
C	269m NW	Site Address: Knowlehill Lane, Fair Oak, Hampshire Licence Holder Address: -	Waste Licence: - Site Reference: FEA19, EAST 6 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Winchester Rural District Council Licence Holder: Winchester Rural District Council First Recorded 26/07/1966 Last Recorded: -
F	421m NW	Site Address: Hardings Copse and Scotland Copse, Hardings Copse and Scotland Copse, Fair Oak, Hampshire Licence Holder Address: Botley Road, Fair Oak, Eastleigh, Hampshire	Waste Licence: Yes Site Reference: 9/5, FEA5, FEA3, FEA1, 9/1 Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: Sunny Bank Tipping Limited First Recorded - Last Recorded: -

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	1

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 23 >**

ID	Location	Address	Further Details	Date
D	265m W	Site Address: Knowle Industrial Estate, Knowle Lane, Knowle Lane, Fair Oak, Eastleigh, Hampshire, SO50 7DZ	Type of Site: Waste Transfer System Planning application reference: S/16/78159 Description: Scheme comprises development of an inert waste transfer and recycling facility including associated site office and vehicle parking at Knowle Industrial Estate, Knowle Lane, Fair Oak, SO50 7DZ. Data source: Historic Planning Application Data Type: Point	04/07/2016

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m **10**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Details		
A	69m NE	Site Name: Fair Oak Landfill Site Site Address: Fair Oak Landfill Site, Mortimers Lane, Fair Oak, East Horton, Hampshire, SO50 7EA Correspondence Address: -	Type of Site: Landfill Gas Engine (3 mW) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT812 EPR reference: EA/EPR/BK1244IA/V006 Operator: Sita Southern Limited Waste Management licence No: 402537 Annual Tonnage: 0	Issue Date: 28/05/2015 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	69m NE	Site Name: Fair Oak Landfill Site Site Address: Fair Oak Landfill Site, Mortimers Lane, Fair Oak, East Horton, Hampshire, SO50 7EA Correspondence Address: -	Type of Site: Landfill Gas Engine (3 mW) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT812 EPR reference: EA/EPR/BK1244IA/V008 Operator: Shukco 348 Ltd Waste Management licence No: 402537 Annual Tonnage: 0	Issue Date: 28/05/2015 Effective Date: - Modified: 30/06/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
A	69m NE	Site Name: Fair Oak Landfill EPR/BK1244IA Site Address: OFF MORTIMERS LANE, FAIR OAK, EASTLEIGH, HAMPSHIRE, SO50 7EA Correspondence Address: -	Type of Site: Landfill Gas Engine (3 mW) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 654981 EPR reference: EA/EPR/BK1244IA Operator: Suez Recycling And Recovery Southern Ltd Waste Management licence No: 402537 Annual Tonnage: 0	Issue Date: 26/05/2021 Effective Date: 26/05/2021 Modified: 26/05/2021 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	339m NW	Site Name: Fair Oak H W R C Site Address: Fair Oak H W R C, Knowle Lane, Fair Oak, Hampshire, SO50 7DZ Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 631161 EPR reference: EA/EPR/DB3901SA Operator: Veolia Es Hampshire Ltd Waste Management licence No: 19918 Annual Tonnage: 7000	Issue Date: 01/07/1993 Effective Date: 01/07/1993 Modified: 01/07/1993 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
5	378m N	Site Name: Knowle Industrial Estate Site Address: Knowle Ind Est, Knowle Lane, Fair Oak, Hampshire, SO50 7DZ Correspondence Address: -	Type of Site: Deposit of waste to land as a recovery operation Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 653357 EPR reference: EA/EPR/KB3733RL Operator: Parsons Construction Limited Waste Management licence No: 104656 Annual Tonnage: 0	Issue Date: 27/01/2014 Effective Date: 27/01/2014 Modified: 27/01/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Surrendered
E	388m NW	Site Name: H W R C Knowle Lane Site Address: Knowle Lane, Fair Oak, Hampshire, SO50 7DZ Correspondence Address: Unit 10, Bridge Farm, Curbridge, Botley, Hampshire, SO30 2HB	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HOP004 EPR reference: - Operator: Hopkins Recycling Ltd Waste Management licence No: 19918 Annual Tonnage: 0	Issue Date: 01/07/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
E	388m NW	Site Name: Fair Oak H W R C Site Address: Fair Oak H W R C, Knowle Lane, Fair Oak, Hampshire, SO50 7DZ Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HOP004 EPR reference: EA/EPR/FP3092HX/V004 Operator: Hopkins Recycling Ltd Waste Management licence No: 19918 Annual Tonnage: 7000	Issue Date: 01/07/1993 Effective Date: - Modified: 11/03/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
I	438m W	Site Name: Fair Oak Landfill Site Site Address: Off Mortimers Lane, East Horton, Fair Oak, Hampshire Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BUL004 EPR reference: EA/EPR/RP3795HN/A001 Operator: Sita Southern Ltd Waste Management licence No: 10219 Annual Tonnage: 75000	Issue Date: 02/05/2001 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
I	438m W	Site Name: Fair Oak Landfill Site Site Address: Off Mortimers Lane, East Horton, Fair Oak, Hampshire Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BUL004 EPR reference: EA/EPR/RP3795HN/A001 Operator: Sita Southern Limited Waste Management licence No: 10219 Annual Tonnage: 75000	Issue Date: 02/05/2001 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC
I	438m W	Site Name: Fair Oak Landfill Site Site Address: Off Mortimers Lane, East Horton, Fair Oak, Hampshire, SO50 7EA Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 626172 EPR reference: EA/EPR/RP3795HN Operator: Suez Recycling And Recovery Southern Ltd Waste Management licence No: 10219 Annual Tonnage: 75000	Issue Date: 02/05/2001 Effective Date: 02/05/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	65

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Site	Reference	Category	Sub-Category	Description
2	243m W	KNOWLE INDUSTRIAL ESTATE, KNOWLE LANE, HORTON HEATH, EASTLEIGH, SO50 7DZ	WEX121794	Using waste exemption	Not on a farm	Use of waste in construction
D	291m W	Knowle Lane Business Park, Knowle Lane Business Park, Knowle Lane, Fair Oak, So50 7DZ	WEX121853	Using waste exemption	Not on a farm	Use of waste in construction
D	291m W	Drew Smith, Knowle Lane, Fairoak, SO50 7DZ	WEX106937	Using waste exemption	Not on a farm	Use of waste in construction
C	371m NW	UNIT 3A, DEER PARK FARM INDUSTRIAL ESTATE, KNOWLE LANE, HORTON HEATH, EASTLEIGH, SO50 7DZ	WEX295864	Disposing of waste exemption	Not on a Farm	Burning waste in the open
4	375m W	-	WEX269294	Using waste exemption	Not on a farm	Use of waste in construction
C	375m NW	DEER PARK FARM INDUSTRIAL ESTATE, UNIT 3B, KNOWLE LANE, HORTON HEATH, EASTLEIGH, SO50 7DZ	WEX160475	Disposing of waste exemption	Not on a Farm	Burning waste in the open
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in a secure place
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Treating waste exemption	Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Using waste exemption	Agricultural Waste Only	Burning of waste as a fuel in a small appliance
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Treating waste exemption	Agricultural Waste Only	Screening and blending of waste
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
G	430m SE	Little Greenwood Farm Greenwood Lane SOUTHAMPTON SO32 2AP	EPR/NE5281EV/A001	Using waste exemption	Agricultural Waste Only	Use of waste to manufacture finished goods

ID	Location	Site	Reference	Category	Sub-Category	Description
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX348397	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX348397	Disposing of waste exemption	On a farm	Burning waste in the open
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Use of waste in construction
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Storing waste exemption	On a Farm	Storage of waste in a secure place
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Storing waste exemption	On a Farm	Storage of waste in secure containers
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Disposing of waste exemption	On a Farm	Deposit of waste from a portable sanitary convenience
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Treating waste exemption	On a Farm	Preparatory treatments (baling, sorting, shredding etc)
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Use of waste for a specified purpose
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Disposing of waste exemption	On a farm	Deposit of waste from a portable sanitary convenience
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Storing waste exemption	On a farm	Storage of waste in secure containers
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Storing waste exemption	On a farm	Storage of waste in a secure place
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Use of waste in construction
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Spreading of plant matter to confer benefit

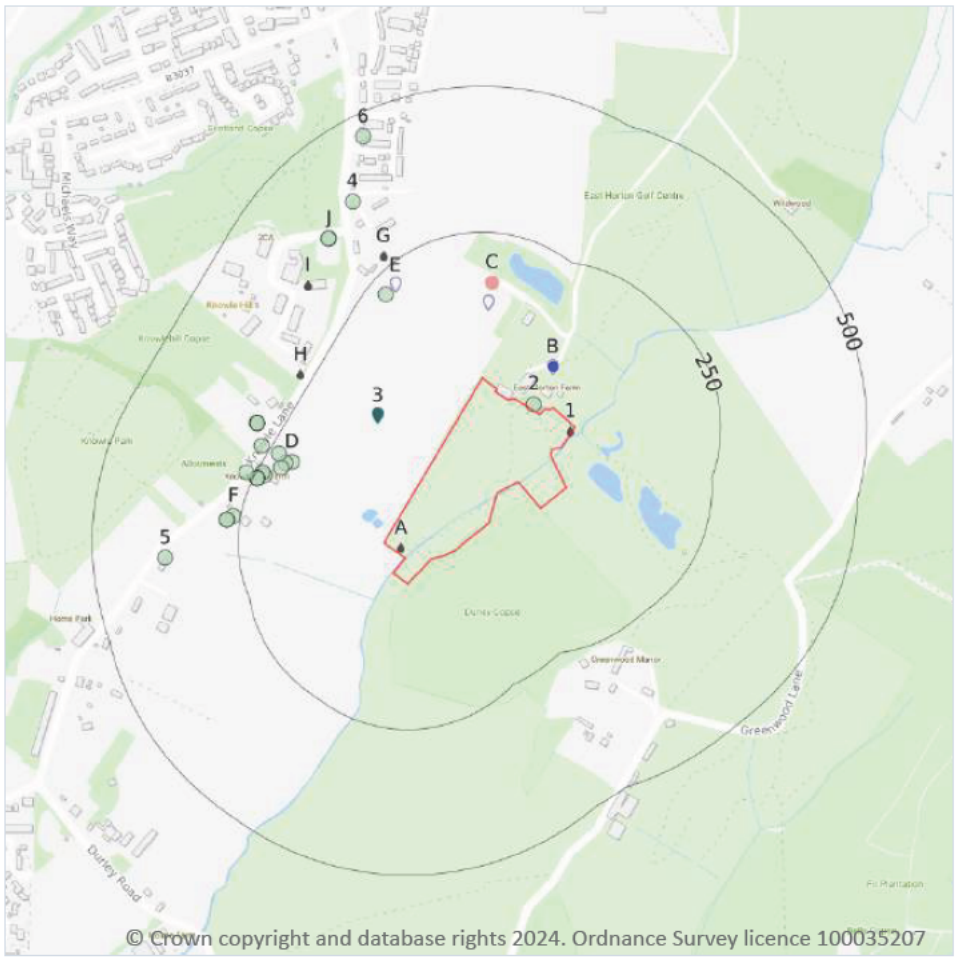
ID	Location	Site	Reference	Category	Sub-Category	Description
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Use of waste for a specified purpose
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX037235	Using waste exemption	On a farm	Use of waste in construction
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX220200	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX220200	Disposing of waste exemption	On a Farm	Burning waste in the open
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Disposing of waste exemption	On a Farm	Burning waste in the open
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Disposing of waste exemption	On a Farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Treating waste exemption	On a Farm	Manual treatment of waste
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Use of depolluted end-of-life vehicles for vehicle parts
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX222537	Using waste exemption	On a Farm	Use of waste to manufacture finished goods
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX071001	Disposing of waste exemption	On a farm	Burning waste in the open
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX071001	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Disposing of waste exemption	On a farm	Burning waste in the open
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Treating waste exemption	On a farm	Manual treatment of waste
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Use of depolluted end-of-life vehicles for vehicle parts
G	431m SE	LITTLE GREENWOOD FARM, GREENWOOD LANE, DURLEY, SOUTHAMPTON, SO32 2AP	WEX074761	Using waste exemption	On a farm	Use of waste to manufacture finished goods
H	438m W	Hanscott Livery 6 Knowle Lane SO50 7DZ	EPR/XE5880WX/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
H	441m W	6, KNOWLE LANE, HORTON HEATH, EASTLEIGH, SO50 7DZ	WEX360795	Using waste exemption	Not on a farm	Use of waste in construction
H	441m W	6, KNOWLE LANE, HORTON HEATH, EASTLEIGH, SO50 7DZ	WEX234519	Using waste exemption	Not on a farm	Use of waste in construction
8	453m W	Yard Knowle Lane Hampshire SO50 7DZ	EPR/BE5252WY/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Part A(1) industrial activities

Licensed pollutant release (Part A(2)/B)

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

Pollution inventory substances

4.1 Recent industrial land uses

Records within 250m	1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 36 >

ID	Location	Company	Address	Activity	Category
C	165m N	Tank	Hampshire, SO50	Tanks (Generic)	Industrial Features

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	21

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on page 36 >

ID	Location	Details	
B	69m NE	Operator: SUEZ RECYCLING AND RECOVERY SOUTHERN LTD Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: BK1244IA Original Permit Number: BK1244IA	EPR Reference: EPR/BK1244IA Issue Date: 26/05/2021 Effective Date: 26/05/2021 Last date noted as effective: 23/11/2023 Status: Effective

ID	Location	Details	
B	69m NE	Operator: SHUKCO 348 Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: GP3435DF Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/06/2016 Effective Date: 30/06/2016 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: FP3435AG Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 28/05/2015 Effective Date: 28/05/2015 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: RP3837SB Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/01/2006 Effective Date: 30/01/2006 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: RP3837SB Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/01/2006 Effective Date: 30/01/2006 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: BP3133NX Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 24/05/2013 Effective Date: 24/05/2013 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: CP3137EX Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 23/04/2014 Effective Date: 23/04/2014 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: YP3037AJ Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/07/2015 Effective Date: 30/07/2015 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: Suez Recycling & Recovery Southern Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: MP3104BM Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 26/05/2021 Effective Date: 26/05/2021 Last date noted as effective: 21/03/2023 Status: Effective

ID	Location	Details	
B	69m NE	Operator: Suez Recycling & Recovery Southern Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: MP3104BM Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 26/05/2021 Effective Date: 26/05/2021 Last date noted as effective: 21/03/2023 Status: Effective
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: YP3037AJ Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/07/2015 Effective Date: 30/07/2015 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: BP3133NX Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 24/05/2013 Effective Date: 24/05/2013 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SHUKCO 348 Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: GP3435DF Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 30/06/2016 Effective Date: 30/06/2016 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: AP3637LY Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 02/04/2008 Effective Date: 02/04/2008 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: AP3637LY Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 02/04/2008 Effective Date: 02/04/2008 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: CP3137EX Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 23/04/2014 Effective Date: 23/04/2014 Last date noted as effective: 21/03/2023 Status: Superceded
B	69m NE	Operator: SITA Southern Limited Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: FP3435AG Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 28/05/2015 Effective Date: 28/05/2015 Last date noted as effective: 21/03/2023 Status: Superceded

ID	Location	Details	
C	129m N	Operator: Suez Recycling & Recovery Southern Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: ASSOCIATED PROCESS Permit Number: TP3532JS Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 02/02/2018 Effective Date: 02/02/2018 Last date noted as effective: 21/03/2023 Status: Superceded
C	129m N	Operator: Suez Recycling & Recovery Southern Ltd Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: TP3532JS Original Permit Number: BK1244IA	EPR Reference: - Issue Date: 02/02/2018 Effective Date: 02/02/2018 Last date noted as effective: 21/03/2023 Status: Superceded
E	218m NW	Operator: SUEZ RECYCLING AND RECOVERY SOUTHERN LTD Installation Name: Fair Oak Landfill EPR/BK1244IA Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: BK1244IA Original Permit Number: BK1244IA	EPR Reference: EPR/BK1244IA Issue Date: 26/05/2021 Effective Date: 26/05/2021 Last date noted as effective: 23/11/2023 Status: Effective
E	218m NW	Operator: A AND J BULL (SOUTHERN) LTD Installation Name: - Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: BK1244 Original Permit Number: BK1244	EPR Reference: - Issue Date: 15/07/2002 Effective Date: 15/07/2002 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m **1**

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on page 36 >

ID	Location	Address	Details	
3	121m NW	Tarmac Topmix, Fairoak, Sandpit, S050 7BZ	Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	9

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on page 36 >

ID	Location	Address	Details	
1	**On site**	**EAST HORTON FARM, EAST HORTON FARM, MORTIMERS LANE, FAIR OAK, HAMPSHIRE**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P04231 Permit Version: 1 Receiving Water: FRESHWATER STREAM OR RIVER**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 20/07/1992 Effective Date: 20/07/1992 Revocation Date: -**
A	**On site**	**FAIR OAK QUARRY, FAIR OAK QUARRY, EAST HORTON FARM, MORTIMERS LANE, FAIR OAK**	**Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P05701 Permit Version: 2 Receiving Water: FORD LAKE**	**Status: SURRENDERED UNDER EPR 2010 Issue date: 18/07/1995 Effective Date: 18/07/1995 Revocation Date: 07/08/2012**
A	**On site**	**FAIR OAK QUARRY, FAIR OAK QUARRY, EAST HORTON FARM, MORTIMERS LANE, FAIR OAK**	**Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P05701 Permit Version: 1 Receiving Water: FRESHWATER RIVER**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 20/04/1995 Effective Date: 20/04/1995 Revocation Date: 18/07/1995**
G	269m NW	DISASTER RECOVERY FACILITY, DISASTER RECOVERY FACILITY, KNOWLE LANE, FAIR OAK, EASTLEIGH, HAMPSHIRE, SO50 7DZ	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P09911 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 22/06/2001 Effective Date: 22/06/2001 Revocation Date: 20/12/2012
G	269m NW	DISASTER RECOVERY FACILITY, DISASTER RECOVERY FACILITY, KNOWLE LANE, FAIR OAK, EASTLEIGH, HAMPSHIRE, SO50 7DZ	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P09911 Permit Version: 2 Receiving Water: INTO LAND	Status: REVOKED UNDER EPR 2010 Issue date: 21/12/2012 Effective Date: 21/12/2012 Revocation Date: 20/06/2018

ID	Location	Address	Details	
H	270m NW	PLOT 4, DEER PARK FARM, FAIR OAK, PLOT 4, DEER PARK FARM, FAIR OAK, EASTLEIGH, HAMPSHIRE, SO50 7DZ	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: G00971 Permit Version: 1 Receiving Water: GROUNDWATER VIA SOAKAWAY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 09/11/2006 Effective Date: 09/11/2006 Revocation Date: 20/12/2012
H	270m NW	PLOT 4, DEER PARK FARM, FAIR OAK, PLOT 4, DEER PARK FARM, FAIR OAK, EASTLEIGH, HAMPSHIRE, SO50 7DZ	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: G00971 Permit Version: 2 Receiving Water: GROUNDWATER VIA SOAKAWAY	Status: VARIED UNDER EPR 2010 Issue date: 21/12/2012 Effective Date: 21/12/2012 Revocation Date: -
I	338m NW	FAIROAK HOUSEHOLD WASTE.., FAIROAK HOUSEHOLD WASTE.., ..RECYLCING CENTRE, KNOWLE LANE, FAIR OAK, HANTS	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P09129 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 12/09/2000 Effective Date: 12/09/2000 Revocation Date: 20/12/2012
I	338m NW	FAIROAK HOUSEHOLD WASTE.., FAIROAK HOUSEHOLD WASTE.., ..RECYLCING CENTRE, KNOWLE LANE, FAIR OAK, HANTS	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P09129 Permit Version: 2 Receiving Water: INTO LAND	Status: VARIED UNDER EPR 2010 Issue date: 21/12/2012 Effective Date: 21/12/2012 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	28

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on page 36 >

ID	Location	Details	
2	10m NE	Incident Date: 27/01/2003 Incident Identification: 133581 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
D	207m W	Incident Date: 09/07/2003 Incident Identification: 172378 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	214m W	Incident Date: 09/07/2003 Incident Identification: 172064 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	218m W	Incident Date: 08/07/2003 Incident Identification: 171745 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)

ID	Location	Details	
E	219m NW	Incident Date: 13/10/2003 Incident Identification: 195765 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	233m W	Incident Date: 26/08/2003 Incident Identification: 184865 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
D	235m W	Incident Date: 19/05/2004 Incident Identification: 238142 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	240m W	Incident Date: 16/05/2004 Incident Identification: 237116 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	244m W	Incident Date: 29/07/2006 Incident Identification: 422497 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	244m W	Incident Date: 15/06/2003 Incident Identification: 165924 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	244m W	Incident Date: 05/09/2003 Incident Identification: 187665 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	244m W	Incident Date: 27/03/2002 Incident Identification: 66996 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	244m W	Incident Date: 13/03/2003 Incident Identification: 142756 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
D	244m W	Incident Date: 01/03/2004 Incident Identification: 220056 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)

ID	Location	Details	
F	262m W	Incident Date: 12/09/2002 Incident Identification: 107299 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	265m W	Incident Date: 26/02/2003 Incident Identification: 139695 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	265m W	Incident Date: 25/08/2003 Incident Identification: 184739 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
F	272m W	Incident Date: 14/02/2003 Incident Identification: 136972 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	272m W	Incident Date: 14/02/2003 Incident Identification: 136972 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	291m W	Incident Date: 15/07/2003 Incident Identification: 173796 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	291m W	Incident Date: 17/02/2003 Incident Identification: 137323 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	291m W	Incident Date: 09/10/2002 Incident Identification: 113685 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	291m W	Incident Date: 17/02/2003 Incident Identification: 137323 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	355m NW	Incident Date: 29/12/2001 Incident Identification: 49807 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
J	356m NW	Incident Date: 18/09/2003 Incident Identification: 190809 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
4	375m NW	Incident Date: 06/07/2001 Incident Identification: 14434 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
5	376m W	Incident Date: 21/02/2003 Incident Identification: 138539 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
6	461m N	Incident Date: 15/10/2001 Incident Identification: 36866 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	2

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on page 36 >

ID: B, Location: 70m NE, Permit: BK1244IA
Operator: Suez Recycling and Recovery Southern Ltd
Activity: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE
Address: Fair Oak Landfill Off Mortimers Lane Fair Oak Hampshire SO50 7EA
Sector: Landfill, Sub-sector: Non Hazardous Landfill
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ethylene dichloride (1,2-Dichloroethane)	1000kg	Below Reporting Threshold
Air	Trichlorobenzene - all isomers	1kg	Below Reporting Threshold

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Wastewater	Chlorides - as Cl	2000000kg	Below Reporting Threshold
Wastewater	Nitrogen - as total N	50000kg	Below Reporting Threshold
Air	Carbon dioxide	10000000kg	Below Reporting Threshold
Air	Carbon monoxide	100000kg	Below Reporting Threshold
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold
Air	Tetrachloroethane (1,1,2,2-Tetrachloroethane)	10kg	Below Reporting Threshold
Air	Perfluorocarbons (PFCs)	10kg	Below Reporting Threshold
Air	Benzene	1000kg	Below Reporting Threshold
Air	Butadiene (1,3-Butadiene)	100kg	Below Reporting Threshold
Air	Trichloroethylene	1000kg	Below Reporting Threshold
Air	Tetrachloroethylene (PER)	100kg	Below Reporting Threshold
Air	Methyl chloroform (1,1,1-Trichloroethane)	10kg	Below Reporting Threshold
Air	Vinyl chloride	1000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Air	Dichloromethane (DCM) (Methylene chloride)	1000kg	Below Reporting Threshold
Air	Hexachlorocyclohexane (HCH) -all isomers	1kg	Below Reporting Threshold
Air	Carbon tetrachloride (Tetrachloromethane)	10kg	Below Reporting Threshold
Air	Particulate matter - PM10	1000kg	Below Reporting Threshold
Air	Dioxins and furans (PCDDs/PCDFs) - as ITEQ	1e-5kg	Below Reporting Threshold
Air	Hydrofluorocarbons (HFCs)	100kg	Below Reporting Threshold
Air	Hydrochlorofluorocarbons (HCFCs)	1kg	Below Reporting Threshold
Air	Chlorofluorocarbons (CFCs)	1kg	Below Reporting Threshold
Air	Halons	1kg	Below Reporting Threshold
Air	Benzo(a)pyrene	1kg	Below Reporting Threshold
Air	Chloroform (Trichloromethane)	100kg	Below Reporting Threshold

ID: B, Location: 70m NE, Permit: BK1244IA
Operator: Suez Recycling and Recovery Southern Ltd
Activity: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE
Address: Fair Oak Landfill Off Mortimers Lane Fair Oak Hampshire SO50 7EA
Sector: Landfill, Sub-sector: Non Hazardous Landfill
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Methane	10000kg	85000kg

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

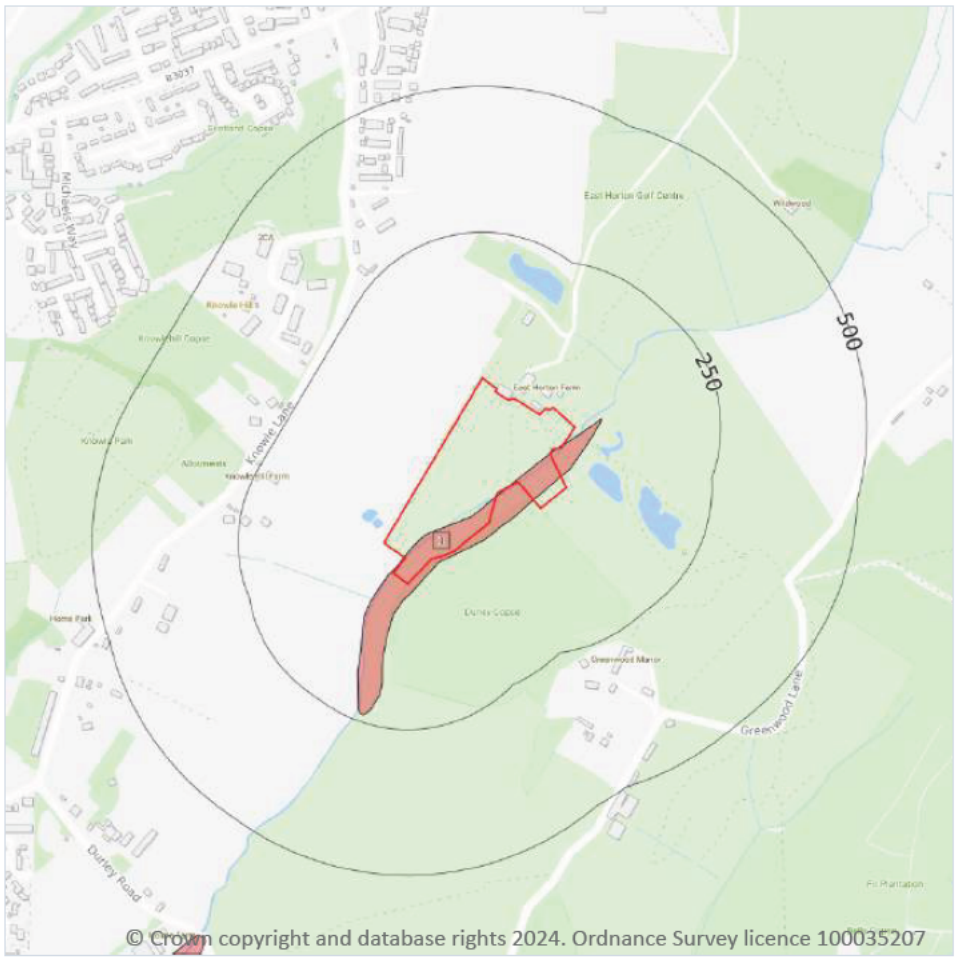
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

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

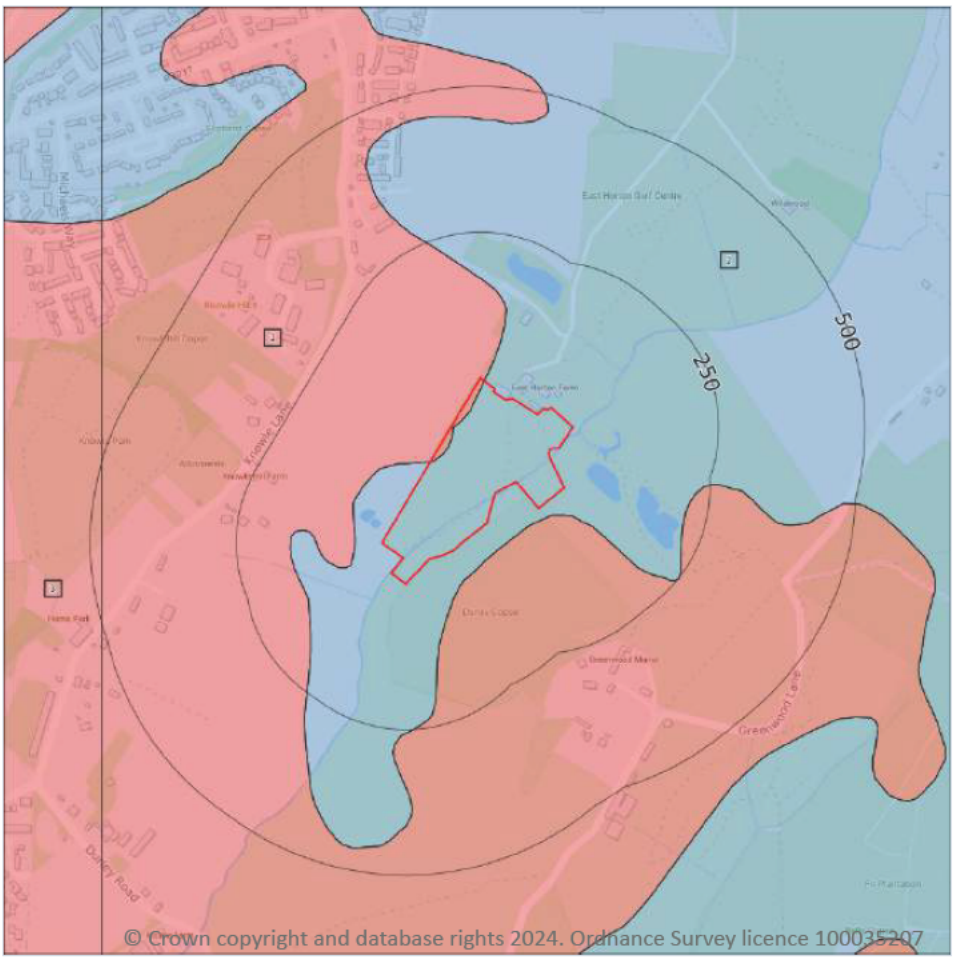
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 50 >

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	3

Aquifer status of groundwater held within bedrock geology.

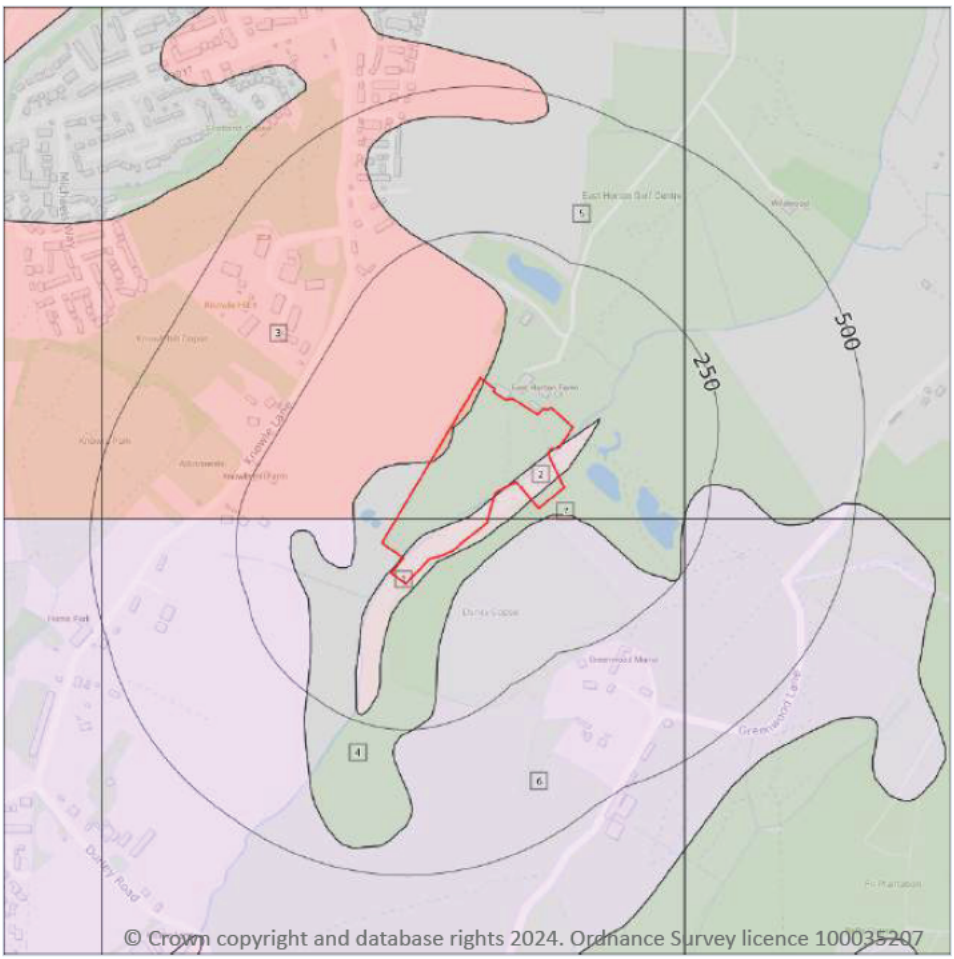
Features are displayed on the Bedrock aquifer map on page 51 >

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
2	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

ID	Location	Designation	Description
3	481m W	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.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	7

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 53 >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Mixed
4	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
5	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
6	20m SE	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Mixed

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	20m SE	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Mixed

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

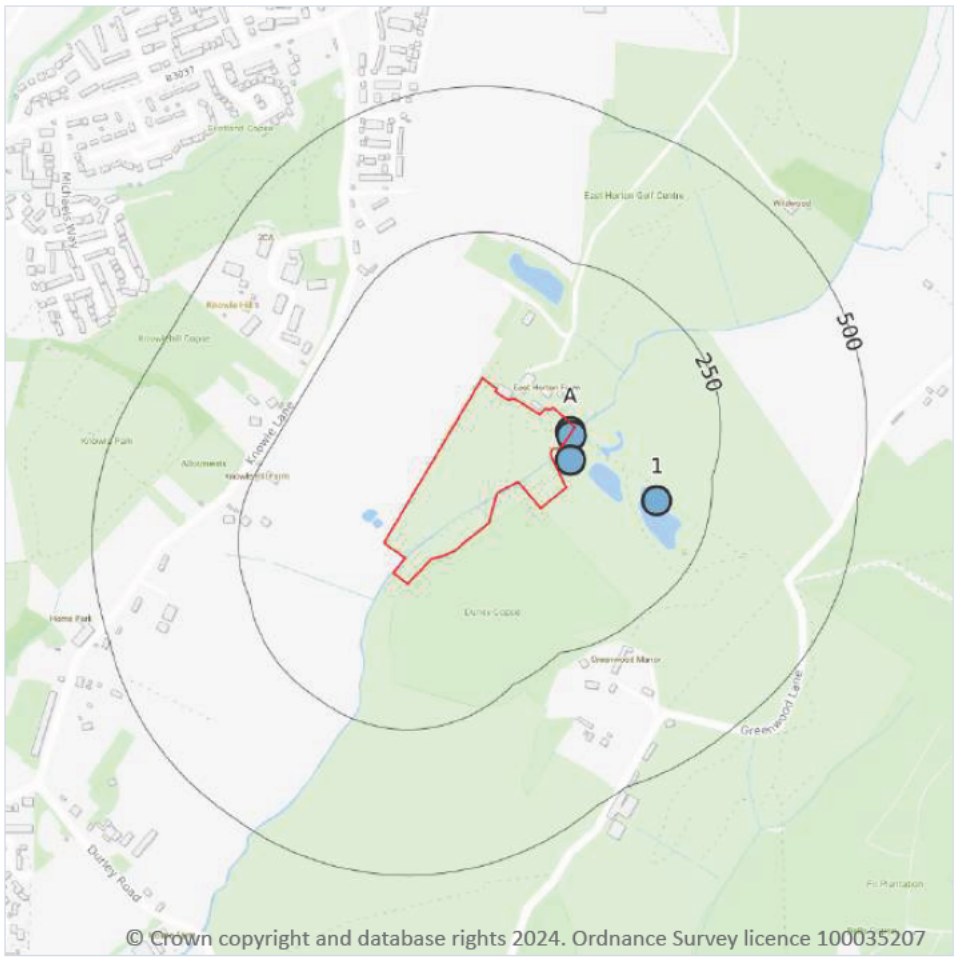
5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	4

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on page 56 >

ID	Location	Details	
-	1609m E	Status: Historical Licence No: 11/42/25.2/50 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: LOWER UPHAM Data Type: Point Name: Portsmouth Water Ltd Easting: 452350 Northing: 118620	Annual Volume (m^3): 7487260 Max Daily Volume (m^3): 31500.2 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 11/06/2009 Version End Date: -
-	1609m E	Status: Historical Licence No: 11/42/25.2/50 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LOWER UPHAM Data Type: Point Name: Portsmouth Water Ltd Easting: 452350 Northing: 118620	Annual Volume (m^3): 7487260 Max Daily Volume (m^3): 31500.2 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 11/06/2009 Version End Date: -
-	1615m E	Status: Active Licence No: 11/42/25.2/50 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LOWER UPHAM Data Type: Point Name: Portsmouth Water Ltd Easting: 452360 Northing: 118607	Annual Volume (m^3): 7487260 Max Daily Volume (m^3): 31500 Original Application No: NPS/WR/019140 Original Start Date: 17/02/1965 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2016 Version End Date: -
-	1935m N	Status: Historical Licence No: 11/42/22.9/107 Details: General Farming & Domestic Direct Source: Southern Region Groundwater Point: LOWHILL FARM, FISHERS POND Data Type: Point Name: Kelly Easting: 450330 Northing: 120150	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 15/04/1994 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	5

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on page 56 >

ID	Location	Details	
A	**On site**	**Status: Historical** **Licence No: 30/050** **Details: Spray Irrigation - Storage** **Direct Source: Southern Region Surface Waters** **Point: POINT A AT EAST HORTON FARM** **Data Type: Point** **Name: East Horton Golf Centre Ltd** **Easting: 450800** **Northing: 118150**	**Annual Volume (m^3): 9091** **Max Daily Volume (m^3): 126** **Original Application No: -** **Original Start Date: -** **Expiry Date: 15/03/2014** **Issue No: 101** **Version Start Date: 12/06/2009** **Version End Date: -**
A	3m NE	Status: Active Licence No: 30/050/R01 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: POINT A AT EAST HORTON FARM Data Type: Point Name: East Horton Golf Centre Ltd Easting: 450803 Northing: 118143	Annual Volume (m^3): 8182 Max Daily Volume (m^3): 126 Original Application No: NPS/WR/012658 Original Start Date: 16/03/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 01/04/2021 Version End Date: -
A	26m E	Status: Historical Licence No: 31/088CA Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: EAST HORTON FARM, FAIR OAK Data Type: Point Name: East Horton Golf Centre Ltd Easting: 450800 Northing: 118100	Annual Volume (m^3): 9000 Max Daily Volume (m^3): 88 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 06/09/1999 Version End Date: -
A	26m E	Status: Historical Licence No: 30/054 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: EAST HORTON FARM, FAIR OAK Data Type: Point Name: East Horton Golf Centre Ltd Easting: 450800 Northing: 118100	Annual Volume (m^3): 9000 Max Daily Volume (m^3): 88 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 1 Version Start Date: 12/06/2009 Version End Date: -
1	157m E	Status: Active Licence No: 30/054 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: EAST HORTON FARM, FAIR OAK Data Type: Point Name: East Horton Golf Centre Ltd Easting: 450949 Northing: 118030	Annual Volume (m^3): 9000 Max Daily Volume (m^3): 37.03 Original Application No: NPS/WR/015184 Original Start Date: 02/11/1992 Expiry Date: - Issue No: 2 Version Start Date: 19/12/2014 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	2

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on page 56 >

ID	Location	Details	
-	1609m E	Status: Historical Licence No: 11/42/25.2/50 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LOWER UPHAM Data Type: Point Name: Portsmouth Water Ltd Easting: 452350 Northing: 118620	Annual Volume (m^3): 7487260 Max Daily Volume (m^3): 31500.2 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 11/06/2009 Version End Date: -
-	1615m E	Status: Active Licence No: 11/42/25.2/50 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LOWER UPHAM Data Type: Point Name: Portsmouth Water Ltd Easting: 452360 Northing: 118607	Annual Volume (m^3): 7487260 Max Daily Volume (m^3): 31500 Original Application No: NPS/WR/019140 Original Start Date: 17/02/1965 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2016 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

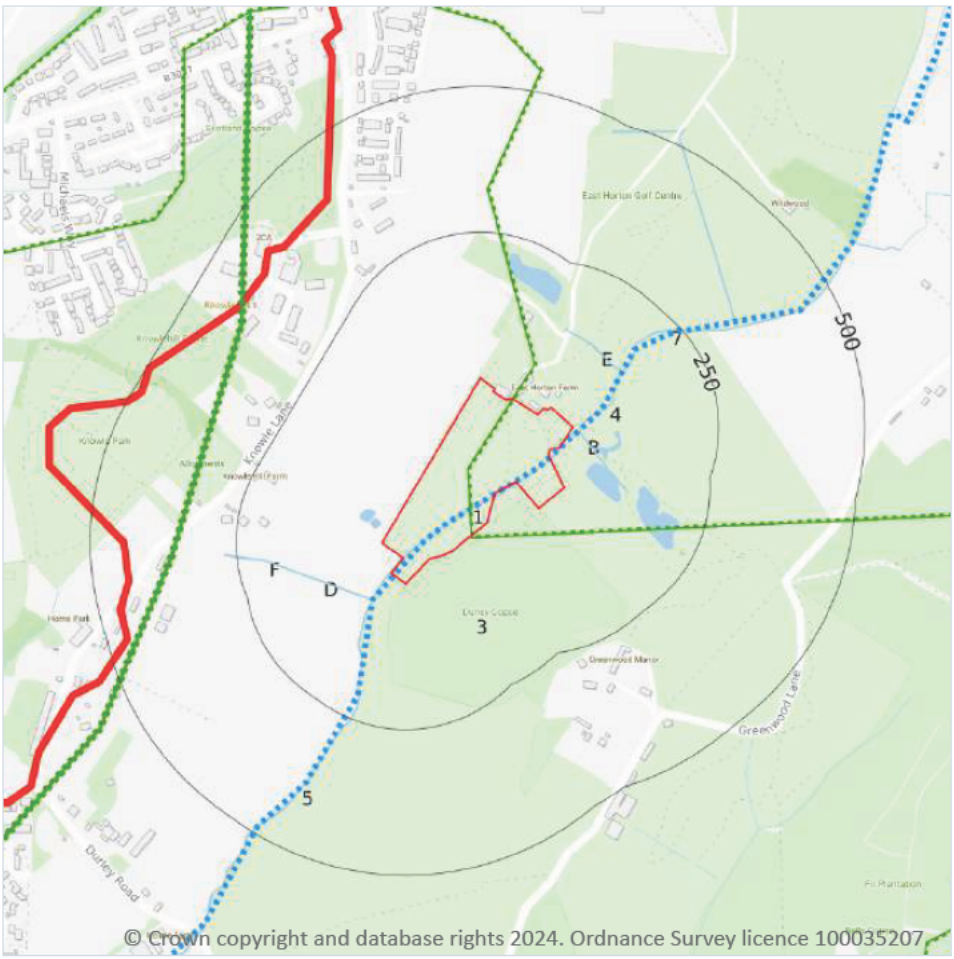
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m	18

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on page 61 >

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
4	12m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	14m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	45m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	50m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	50m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	53m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	55m E	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	56m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	56m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	80m E	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	92m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
E	123m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	127m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
E	132m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	134m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	193m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	205m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	13

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on page 61 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on page 61 >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**River**	**Horton Heath Stream**	**GB107042016270**	**East Hampshire Rivers**	**East Hampshire**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on page 61 >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	On site	River	Horton Heath Stream	GB107042016270 ↗	Moderate	Fail	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1

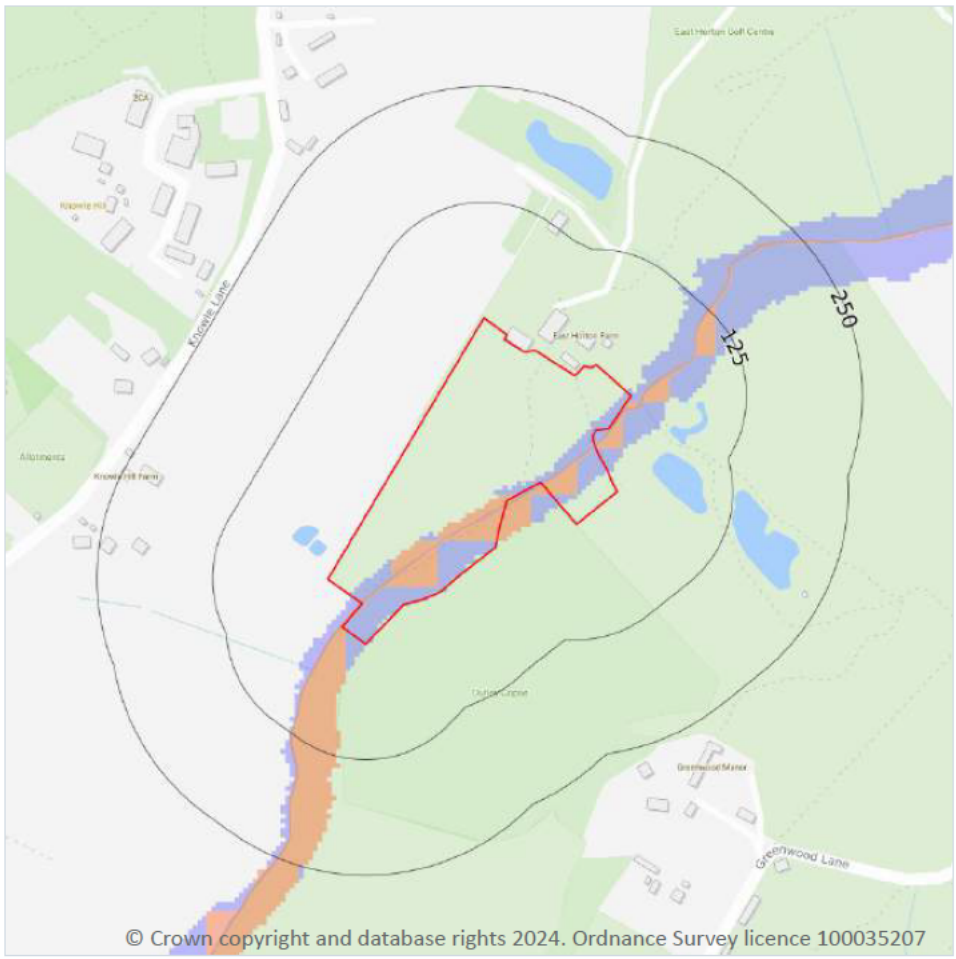
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on page 61 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
3	On site	South East Hants Bracklesham Group	GB40702G503000 ↗	Poor	Poor	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	17

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on page 65 >

Distance	Flood risk category
On site	**High**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

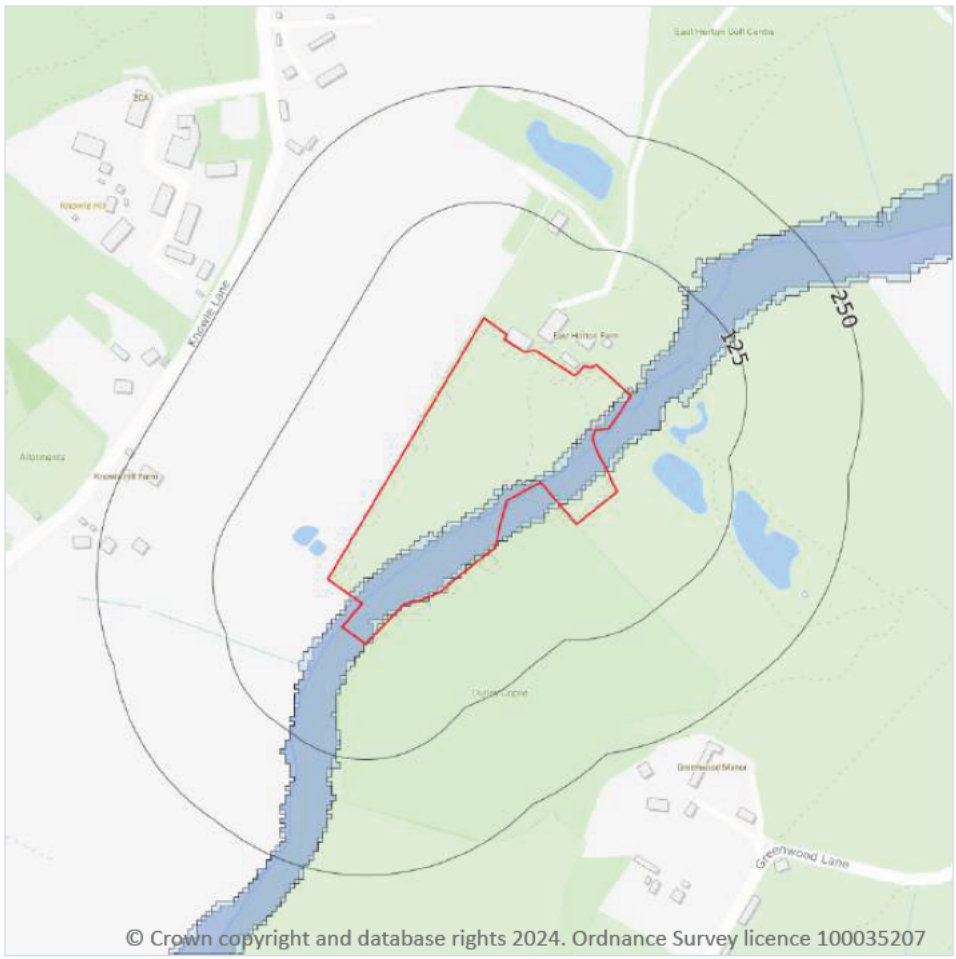
7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on page 65 >

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

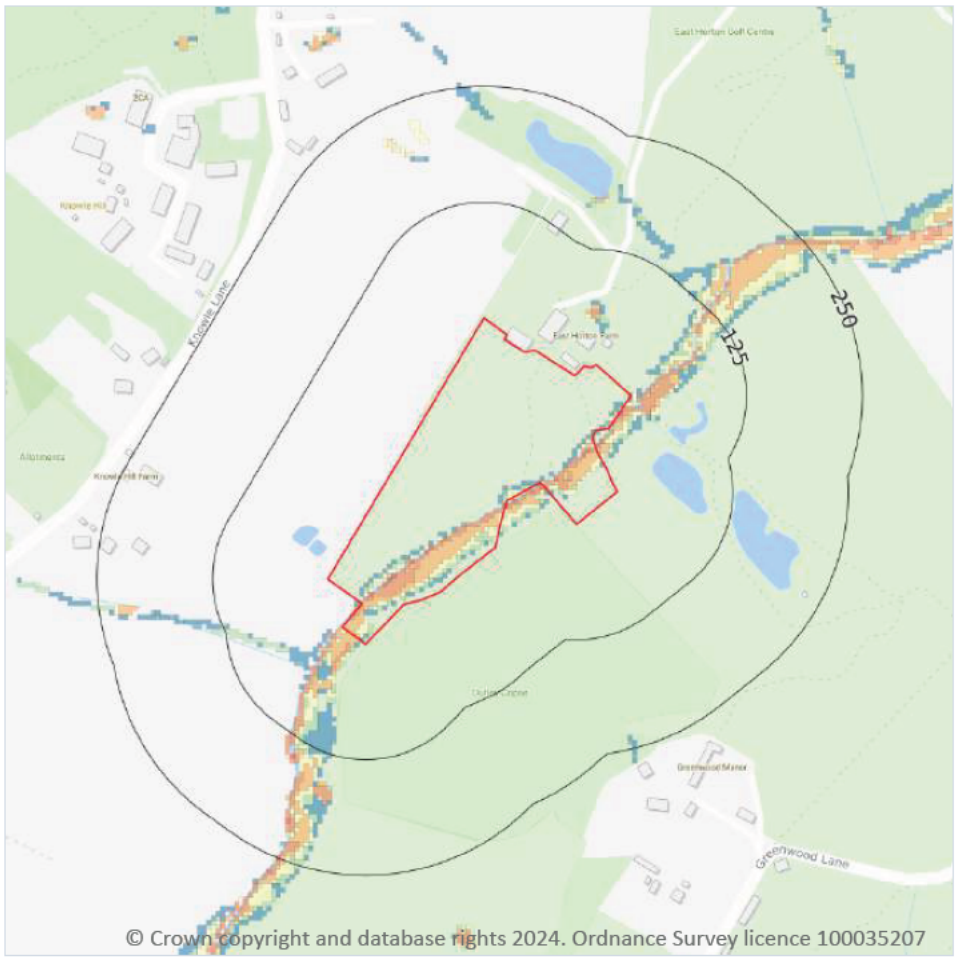
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on page 65 >

Location	Type
On site	**Zone 3 - (Fluvial Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 69 >

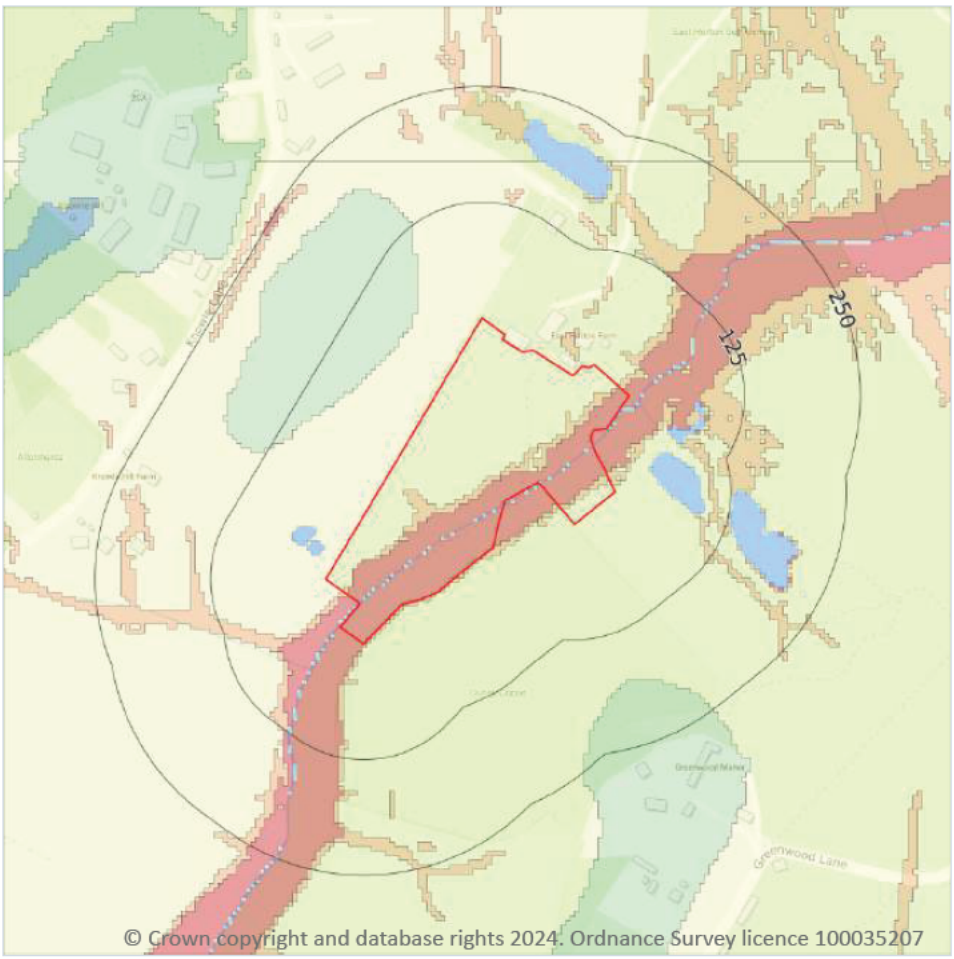
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 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

9.1 Groundwater flooding

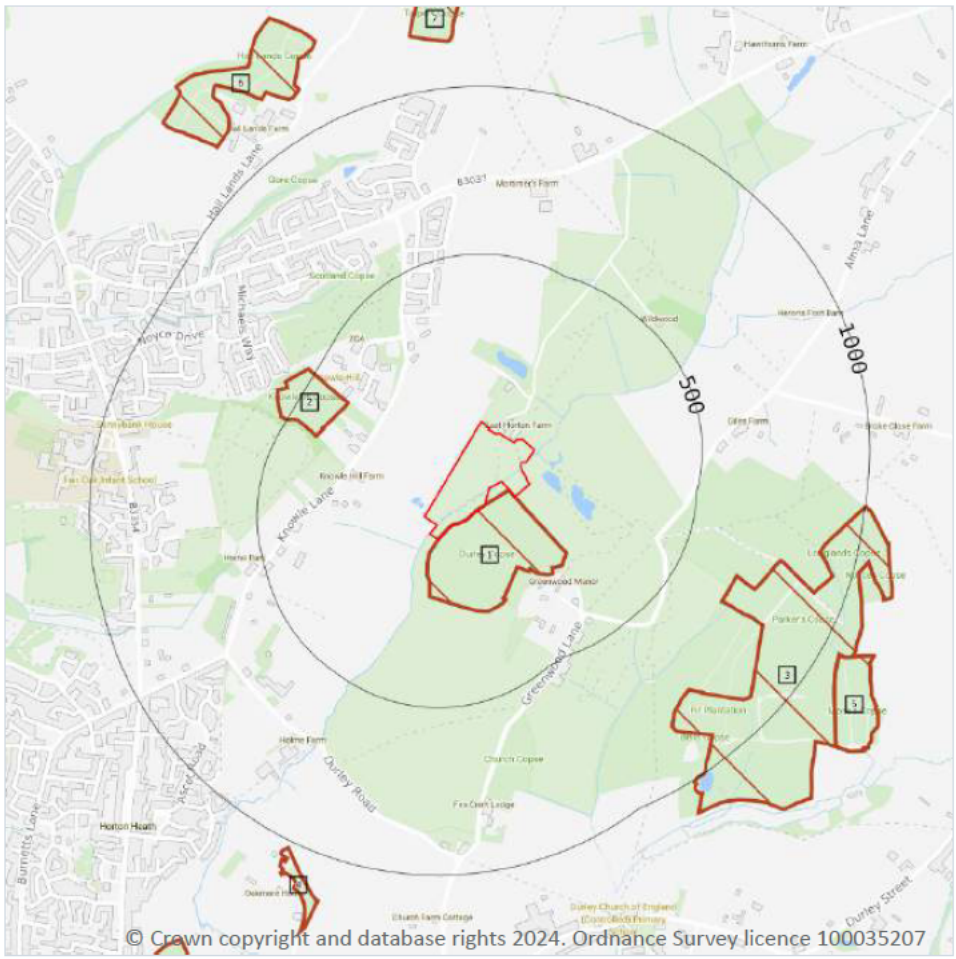
Highest risk on site	**High**
Highest risk within 50m	**High**

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 71 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	11

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 72 >**

ID	Location	Name	Woodland Type
1	**On site**	**Durley Copse**	**Ancient Replanted Woodland**
2	371m NW	Unknown	Ancient & Semi-Natural Woodland
3	671m SE	Greenwood	Ancient Replanted Woodland
4	1021m SW	Unknown	Ancient & Semi-Natural Woodland
5	1053m SE	Greenwood	Ancient & Semi-Natural Woodland
6	1117m NW	Hall Lands Copse	Ancient & Semi-Natural Woodland
7	1138m N	Tippers Copse	Ancient & Semi-Natural Woodland
-	1399m N	Park Hill's Wood	Ancient Replanted Woodland
9	1417m SW	Scoreys Copse	Ancient & Semi-Natural Woodland
-	1433m N	Park Hill's Wood	Ancient & Semi-Natural Woodland
-	1825m NW	Park Hill's Wood	Ancient Replanted Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	5

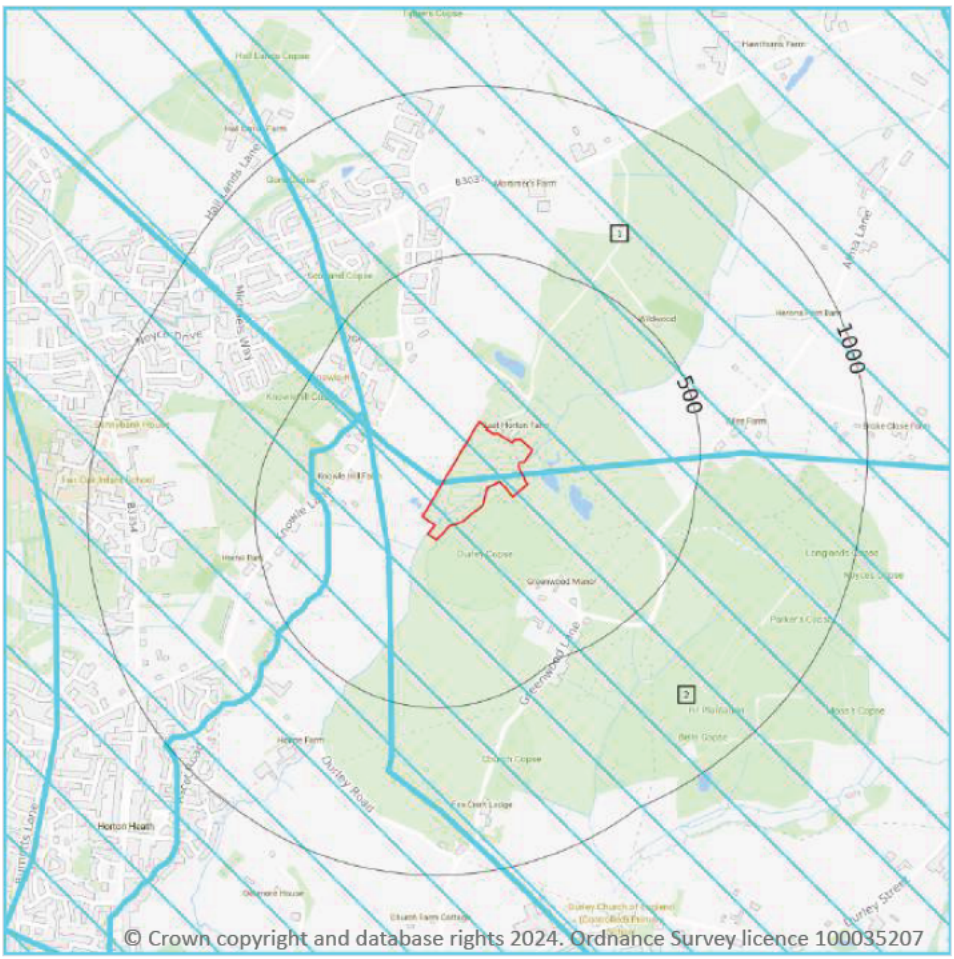
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Hamble Estuary Eutrophic NVZ (TraC)**	**Eutrophic Water**	**3**	**Existing**

Location	Name	Type	NVZ ID	Status
1258m N	Bow Lake NVZ	Surface Water	811	Existing
1832m E	Upper Hamble NVZ	Surface Water	810	Existing
1864m NE	Hampshire Chalk	Groundwater	143	Existing
1907m S	Hamble Estuary Eutrophic NVZ (TraC)	Eutrophic Water	3	Existing

This data is sourced from Natural England and Natural Resources Wales.

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	2

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 78 >

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Airports, helipads and other aviation proposals. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Notes: NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.**
2	On site	**Infrastructure - Airports, helipads and other aviation proposals. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**0**

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.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	2

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on page 80 >

ID	Location	Name	Grade	Reference Number	Listed date
1	11m NE	Barn To South Of East Horton Farmhouse	II	1322702	15/10/1976
2	27m NE	East Horton Farmhouse	II	1204057	15/10/1976

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

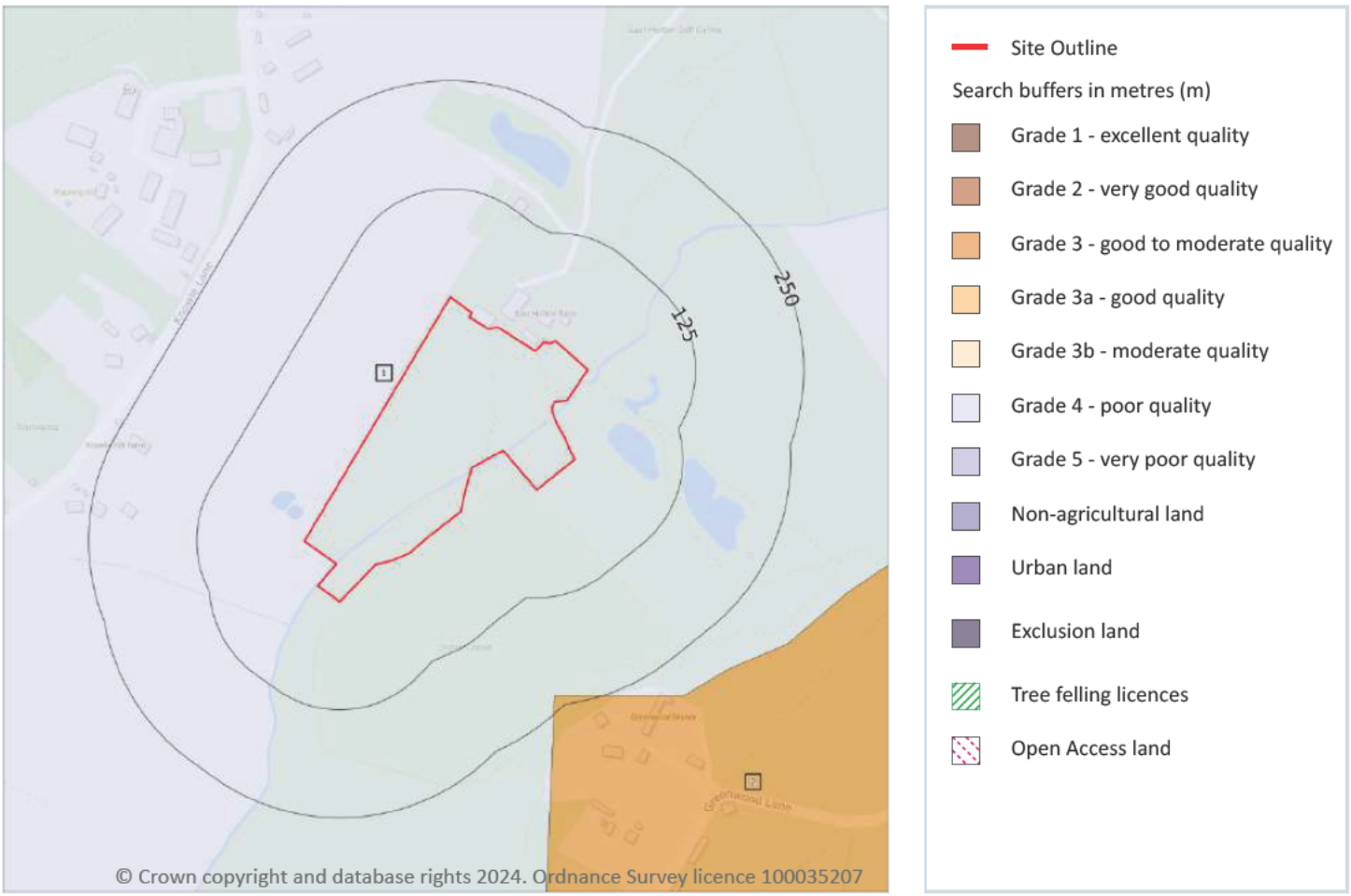
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

12.1 Agricultural Land Classification

Records within 250m	2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on page 83 >

ID	Location	Classification	Description
1	On site	Grade 4	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**

ID	Location	Classification	Description
2	234m SE	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

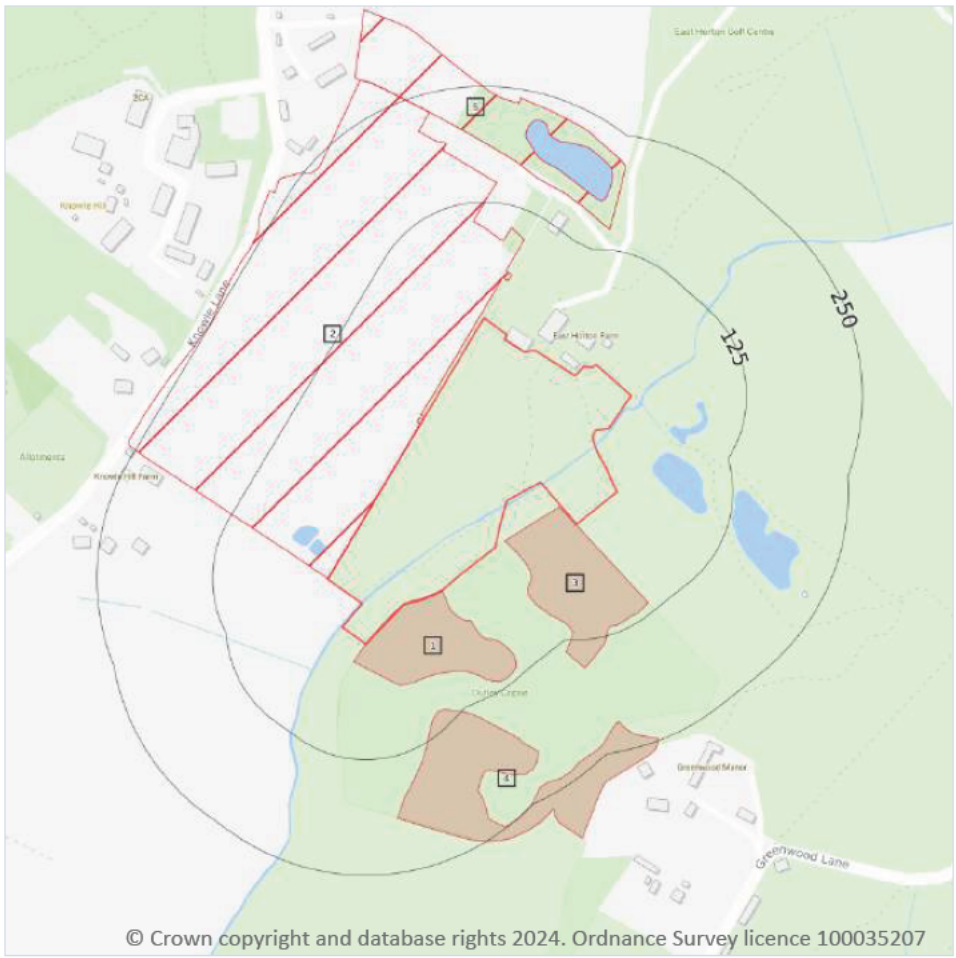
12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

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	3

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 85 >

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
3	1m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	107m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	2

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on page 85 >

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
2	**On site**	**BRITPITS ref: 2164**	**Low**	**British Geological Survey BRITPITS database**	**UK Perspectives Aerial Photography**	**-**
5	147m NE	HLD_refs: EAHLD20490	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

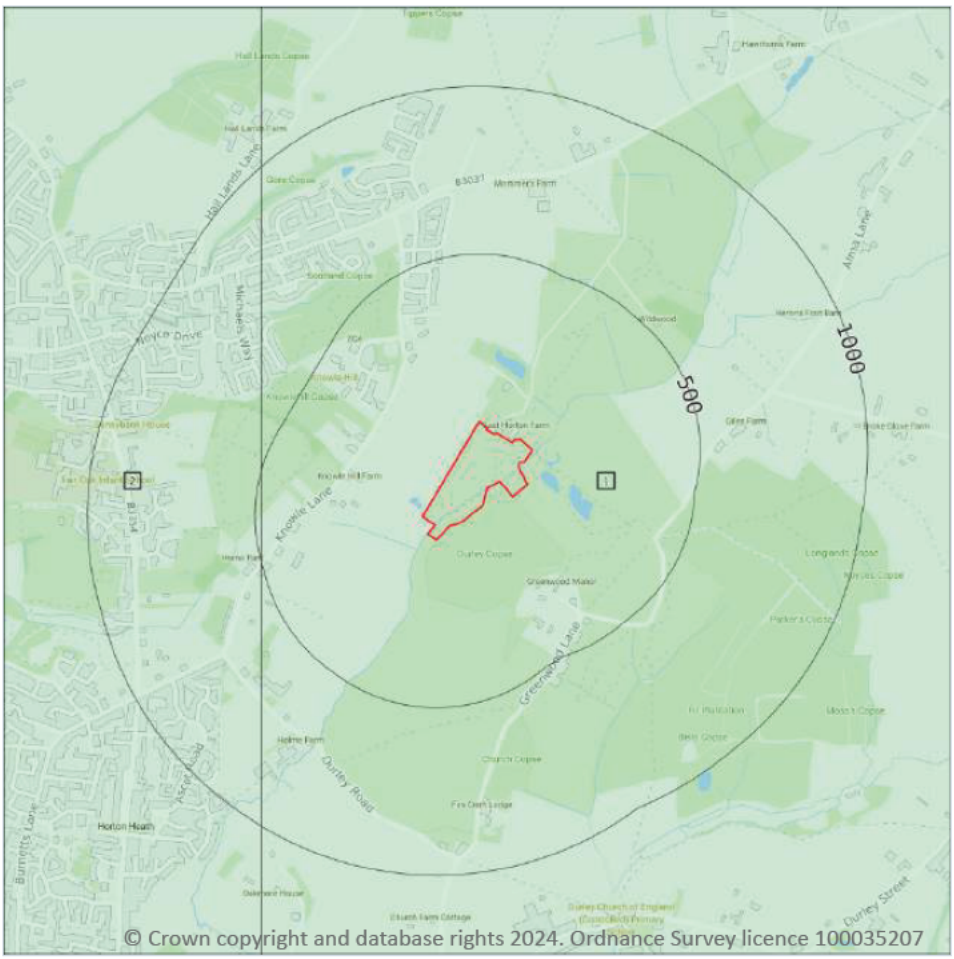
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	2

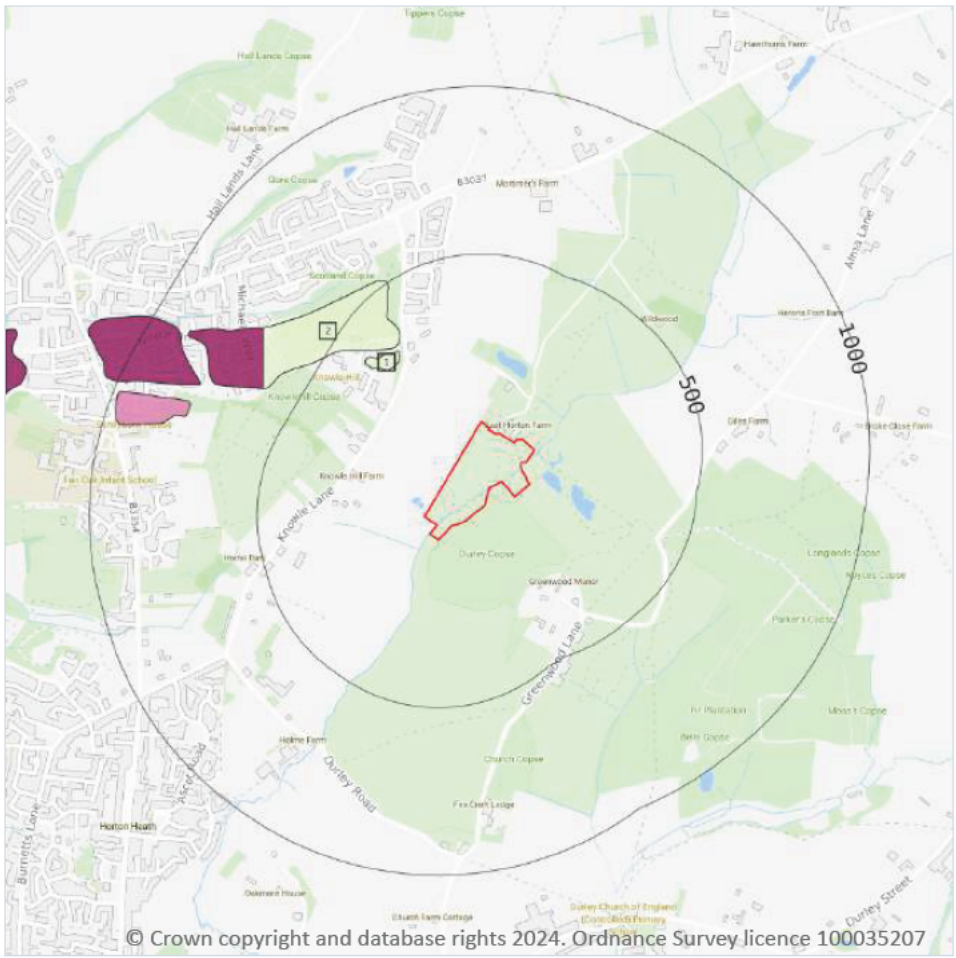
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on page 87 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SU51NW**
2	481m W	Full	Full	Full	No coverage	SU41NE

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	2

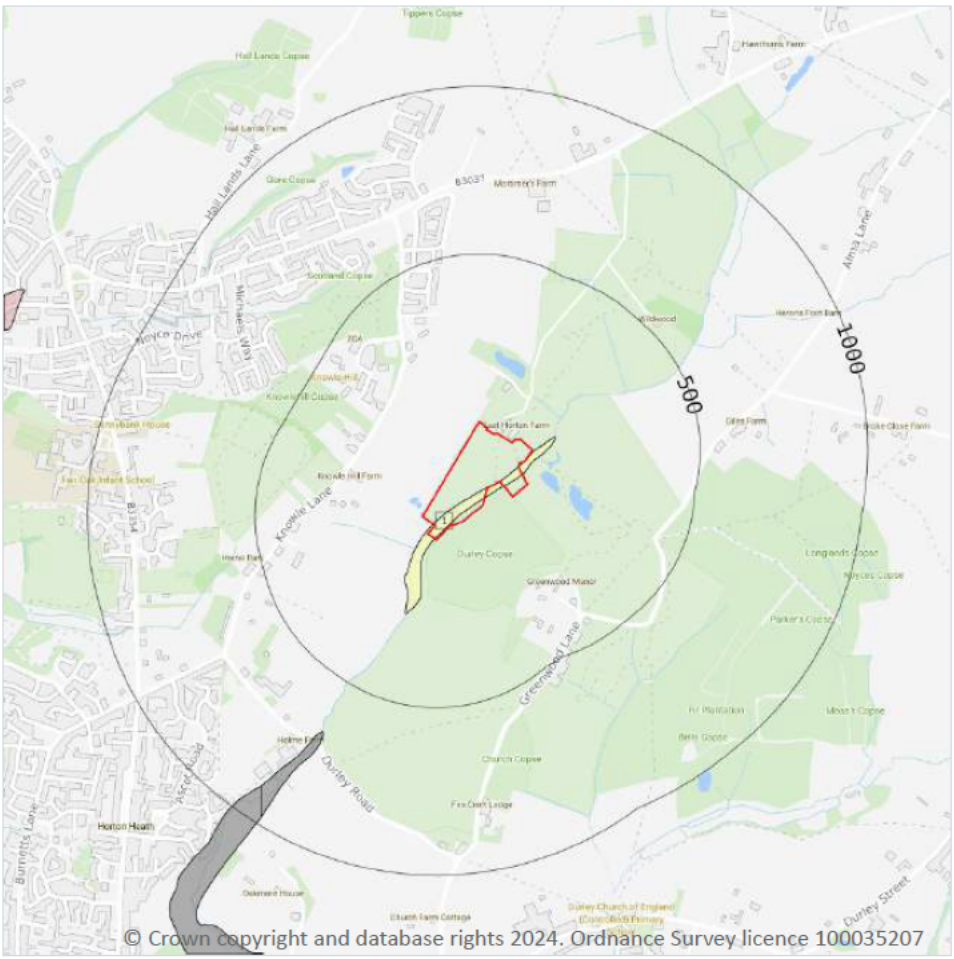
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on page 88 >

ID	Location	LEX Code	Description	Rock description
1	305m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	339m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m	1

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on page 89 >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

This data is sourced from the British Geological Survey.

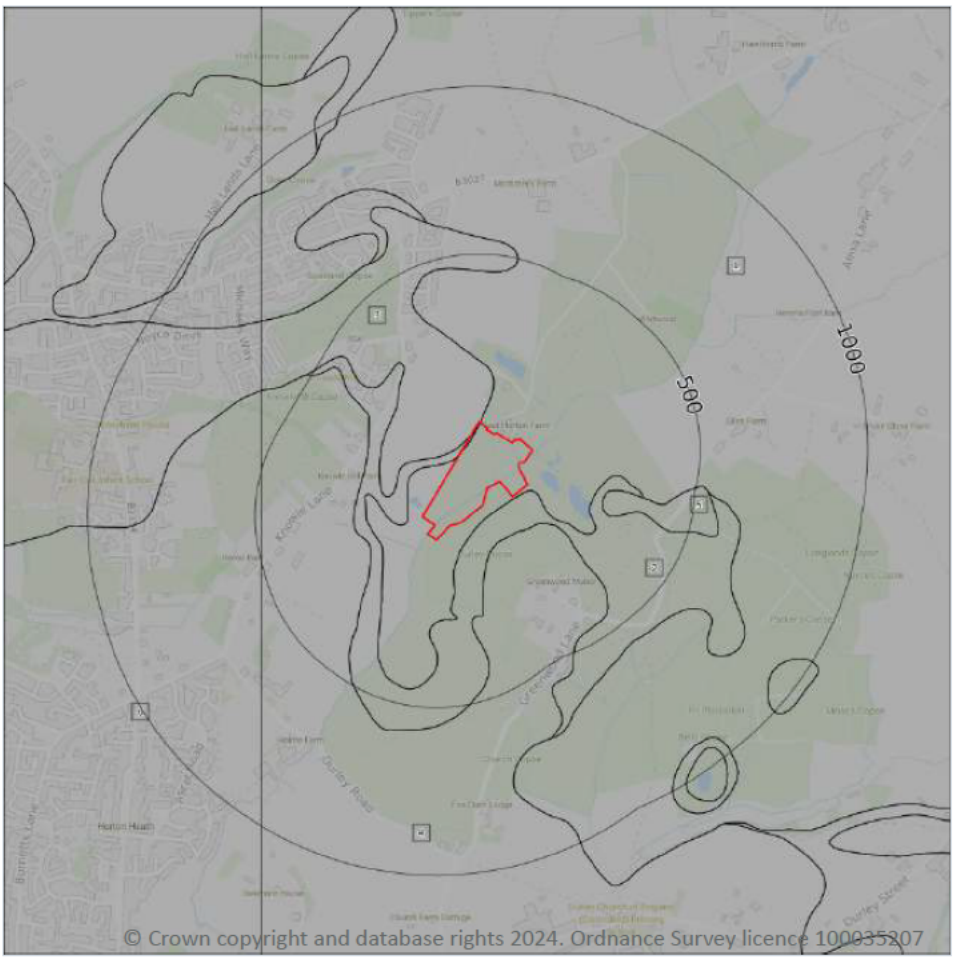
14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m 6

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 91 >**

ID	Location	LEX Code	Description	Rock age
1	On site	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch
2	On site	DYSA-SANDU	Durley Sand Member - Sand	Eocene Epoch
3	On site	WHI-SSCL	Whitecliff Sand Member - Sand, Silt And Clay	Palaeogene Period

ID	Location	LEX Code	Description	Rock age
4	105m SE	WTT-CLSISA	Wittering Formation - Clay, Silt And Sand	Lutetian Age - Ypresian Age
5	229m E	WHI-SSCL	Whitecliff Sand Member - Sand, Silt And Clay	Palaeogene Period
6	481m W	WTT-SACL	Wittering Formation - Sandy Clay	Lutetian Age - Ypresian Age

This data is sourced from the British Geological Survey.

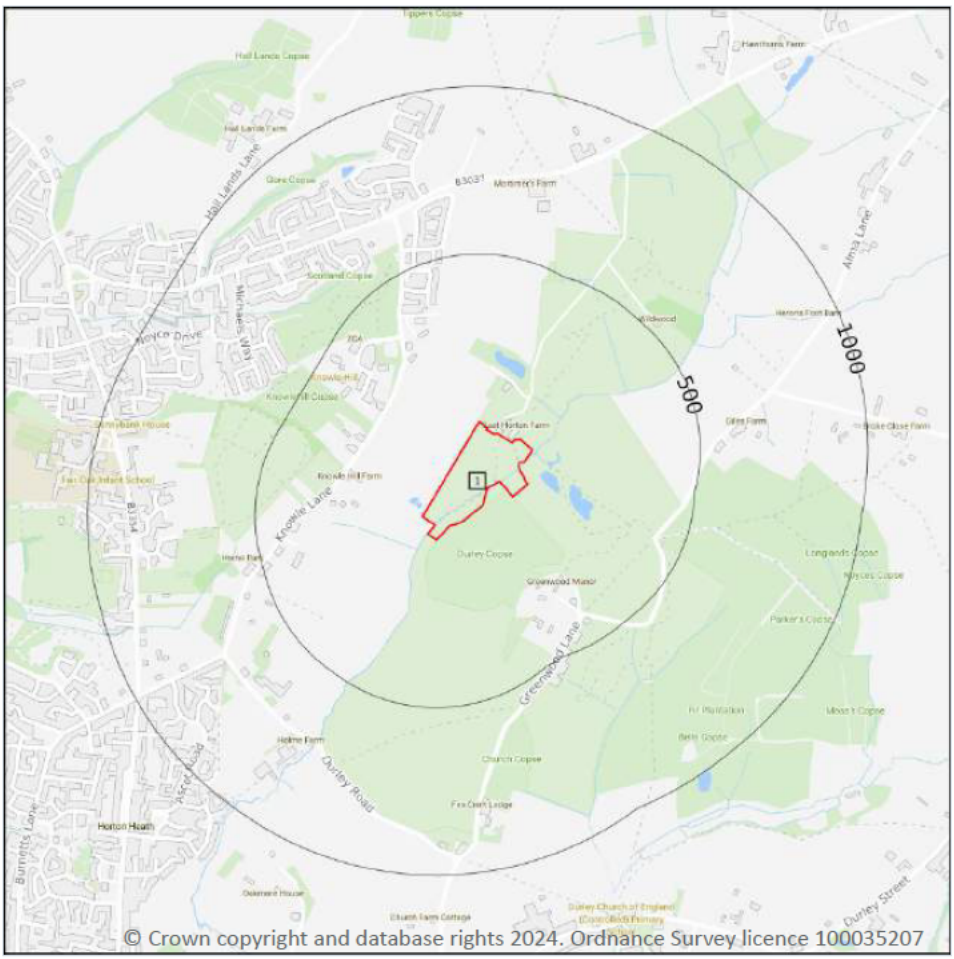
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

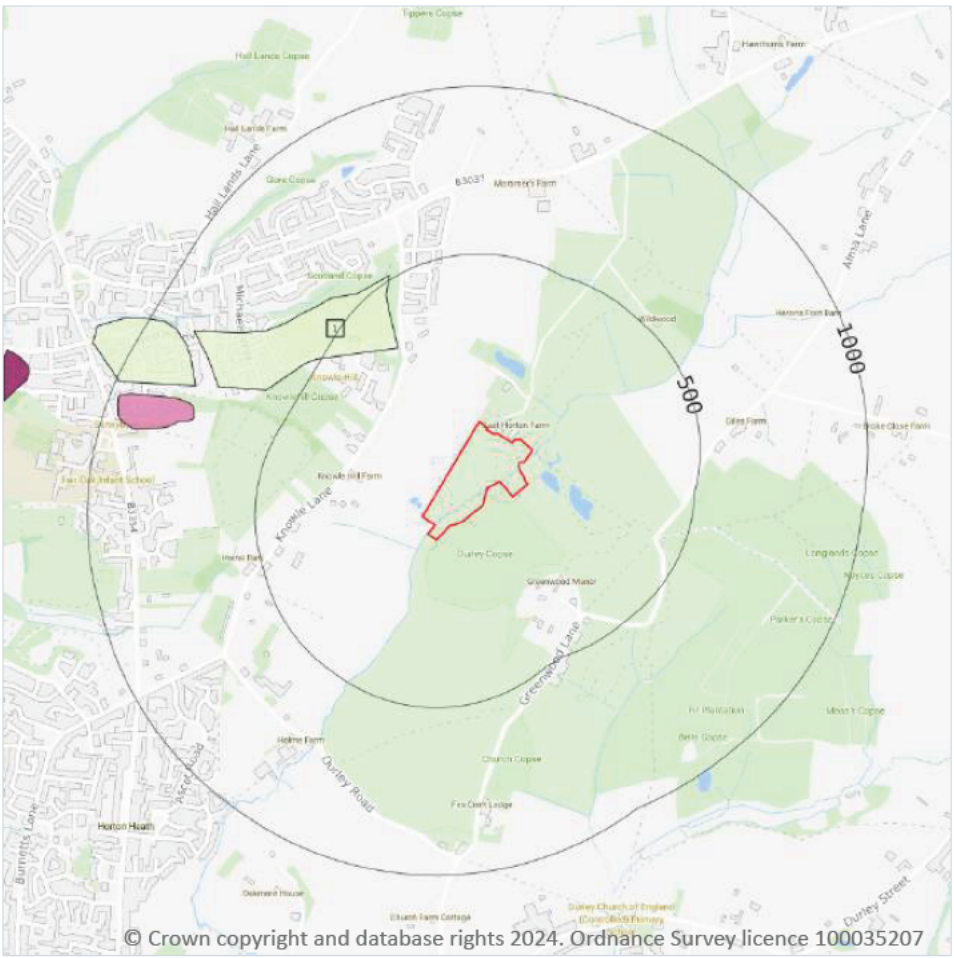
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on page 93 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW315_southampton_v4

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	1

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on page 94 >

ID	Location	LEX Code	Description	Rock description
1	328m NW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

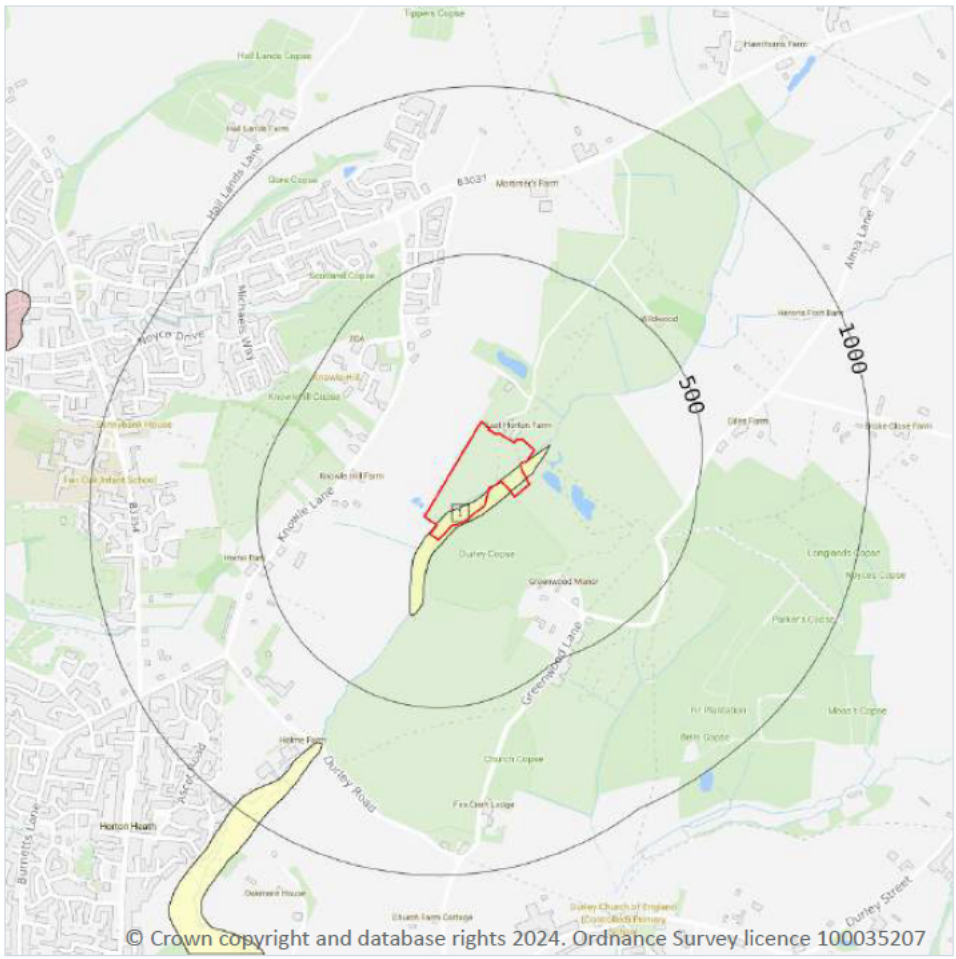
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m	1

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 96 >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

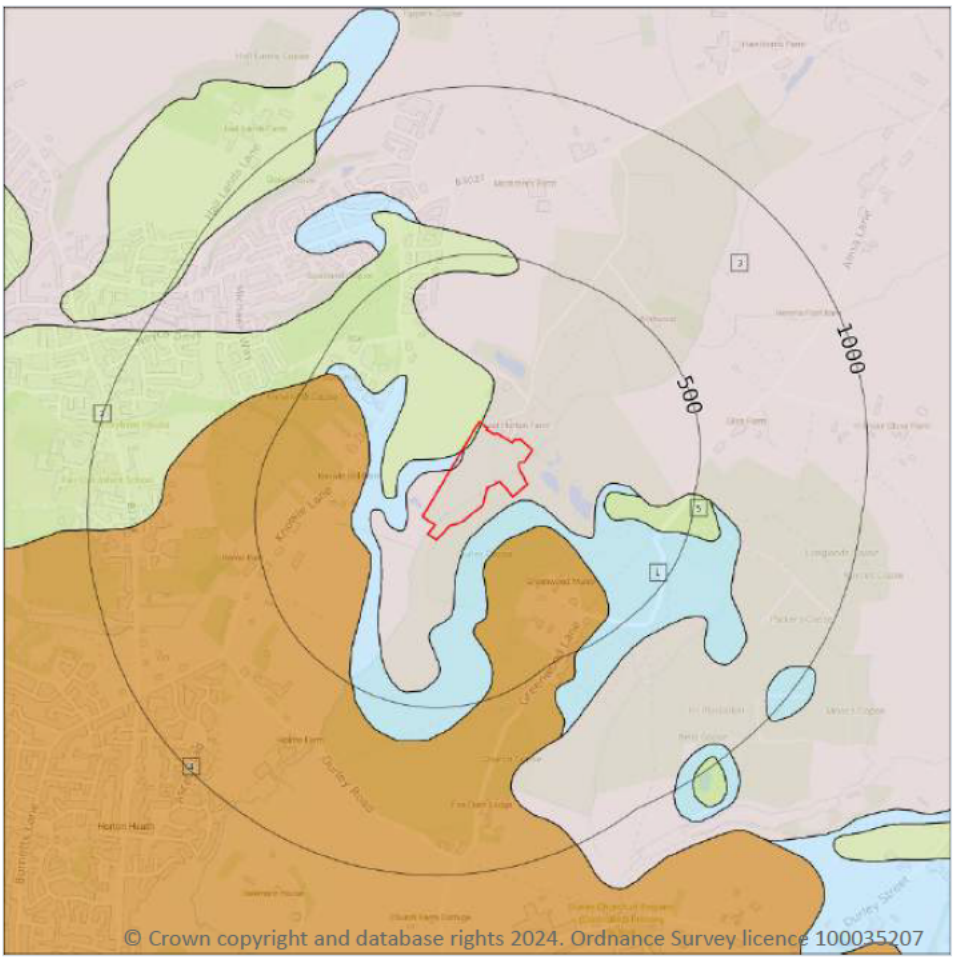
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m 5

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 98 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**DYSA-S**	**DURLEY SAND MEMBER - SAND**	**-**
2	**On site**	**WHI-S**	**WHITECLIFF SAND MEMBER - SAND**	**-**
3	**On site**	**LC-XCZS**	**LONDON CLAY FORMATION - CLAY, SILT AND SAND**	**YPRESIAN**
4	111m SE	WTT-XSZC	WITTERING FORMATION - SAND, SILT AND CLAY	YPRESIAN

ID	Location	LEX Code	Description	Rock age
5	236m E	WHI-S	WHITECLIFF SAND MEMBER - SAND	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	3

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Very Low**
On site	**Intergranular**	**High**	**High**
On site	**Intergranular**	**High**	**High**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m	1

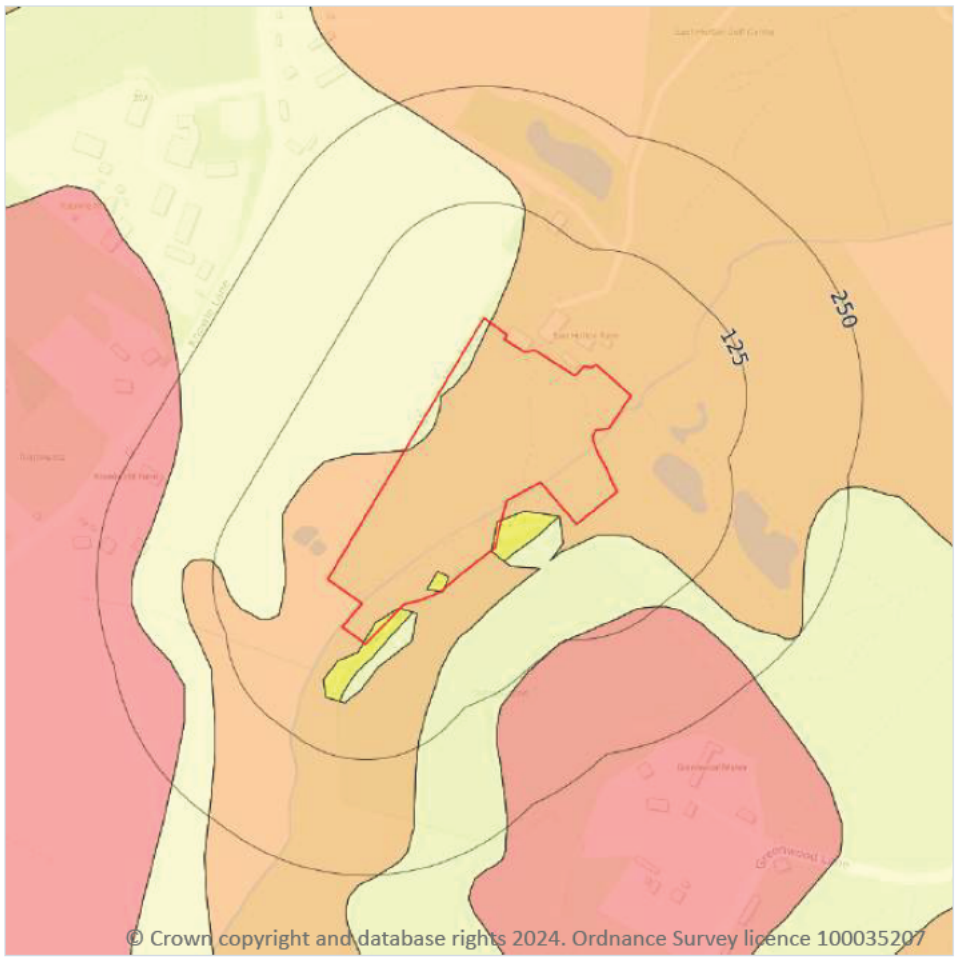
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on page 100 >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	213m NW	450480 118370	TEMP SECTION C	4.7	N	416324 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	4

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

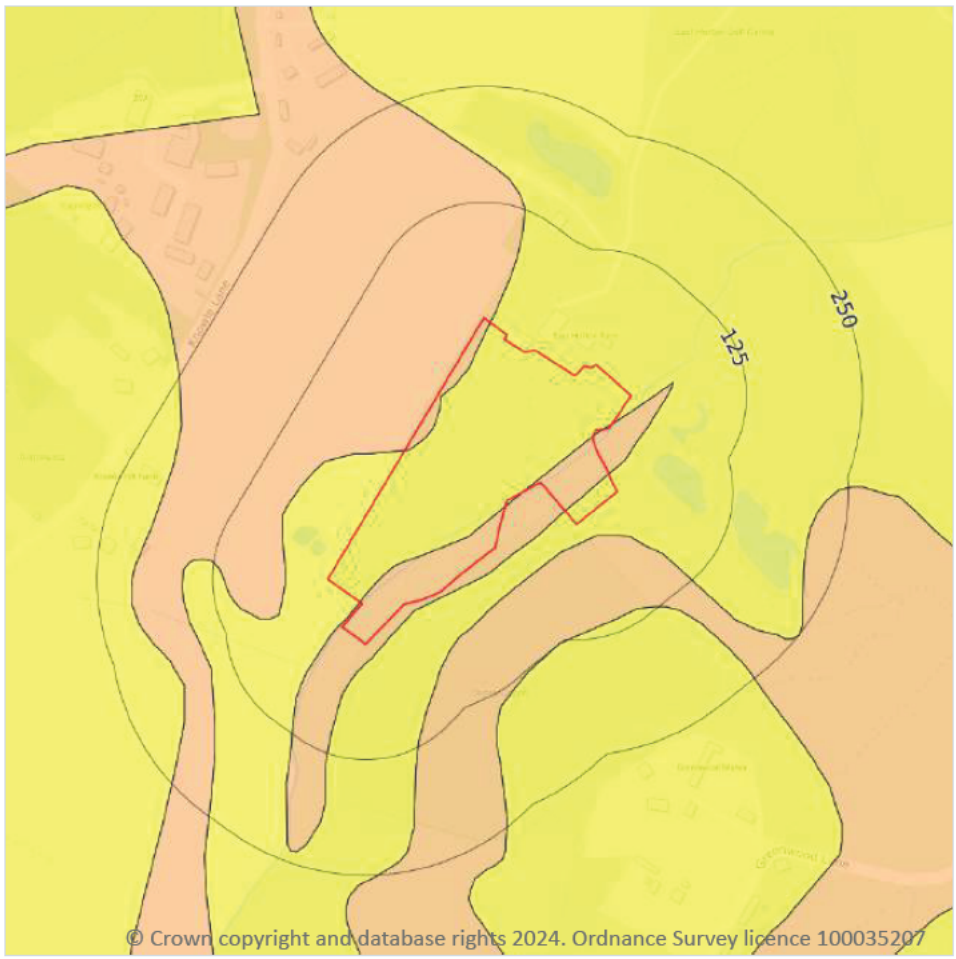
Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 101 >

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.
On site	Low	Ground conditions predominantly medium plasticity.

Location	Hazard rating	Details
11m SW	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

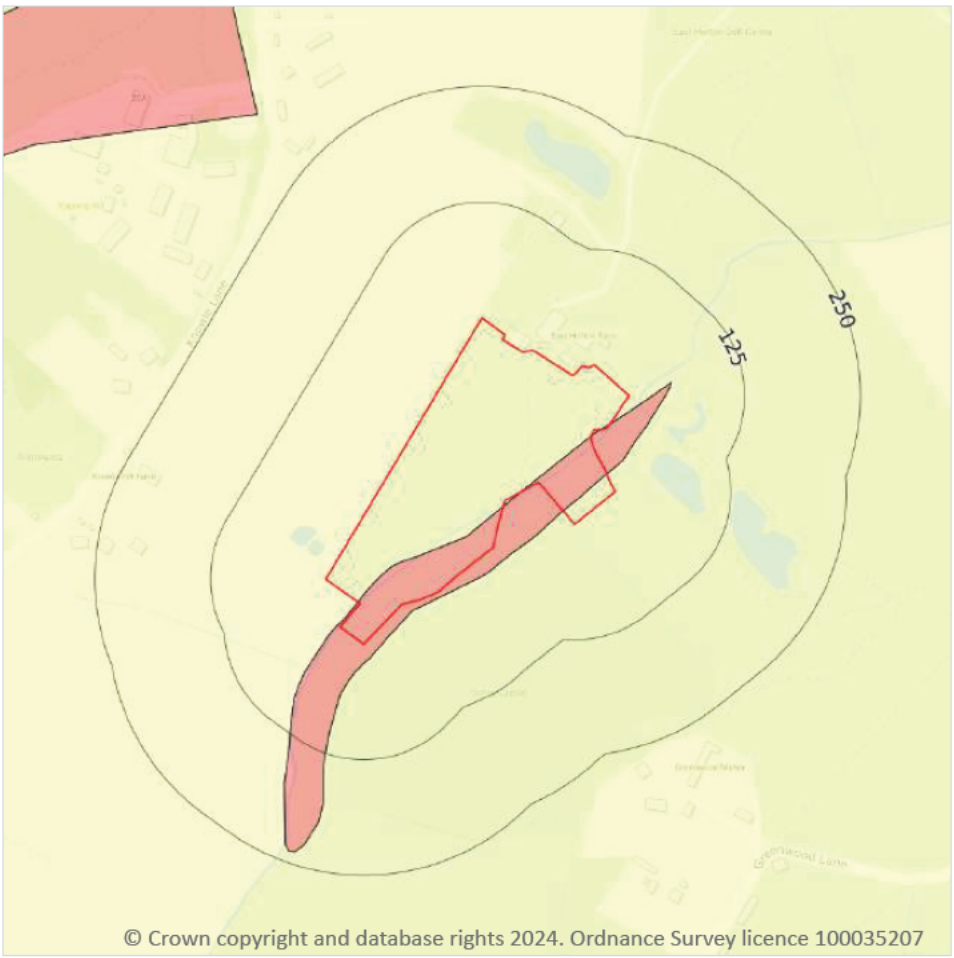
Features are displayed on the Natural ground subsidence - Running sands map on page 103 >

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

Location	Hazard rating	Details
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	2

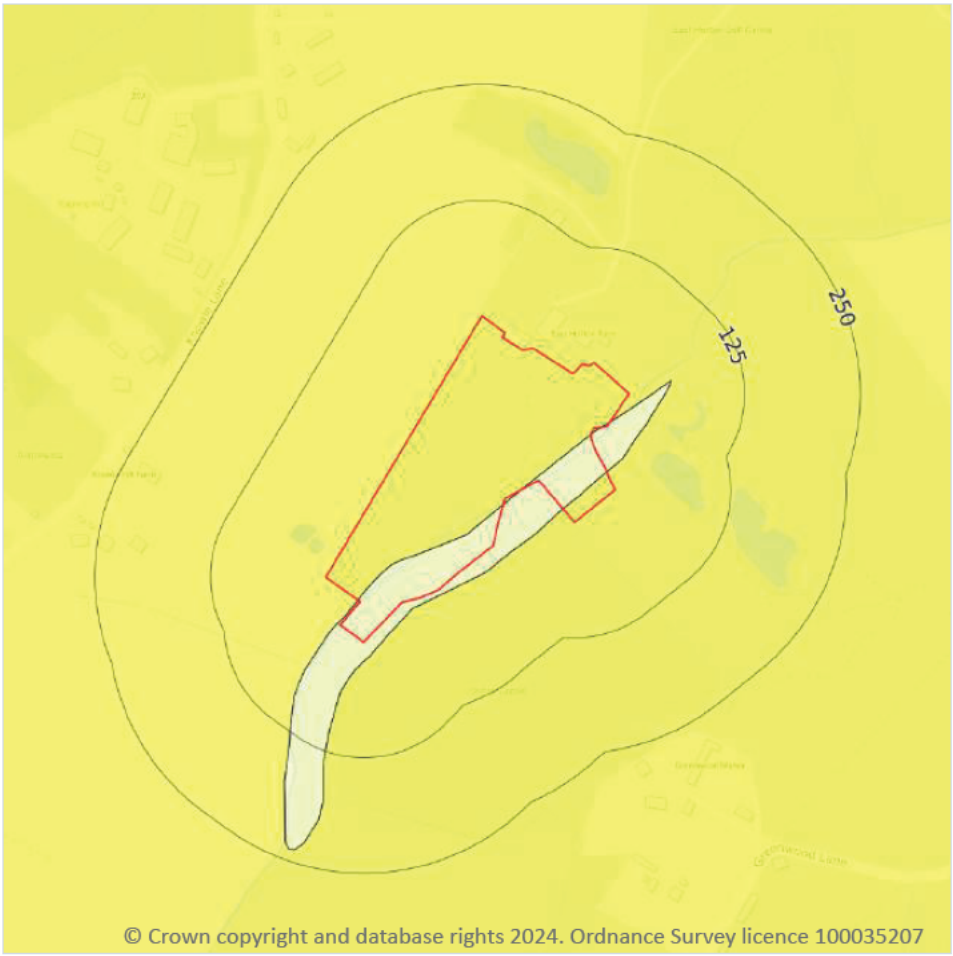
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 105 >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

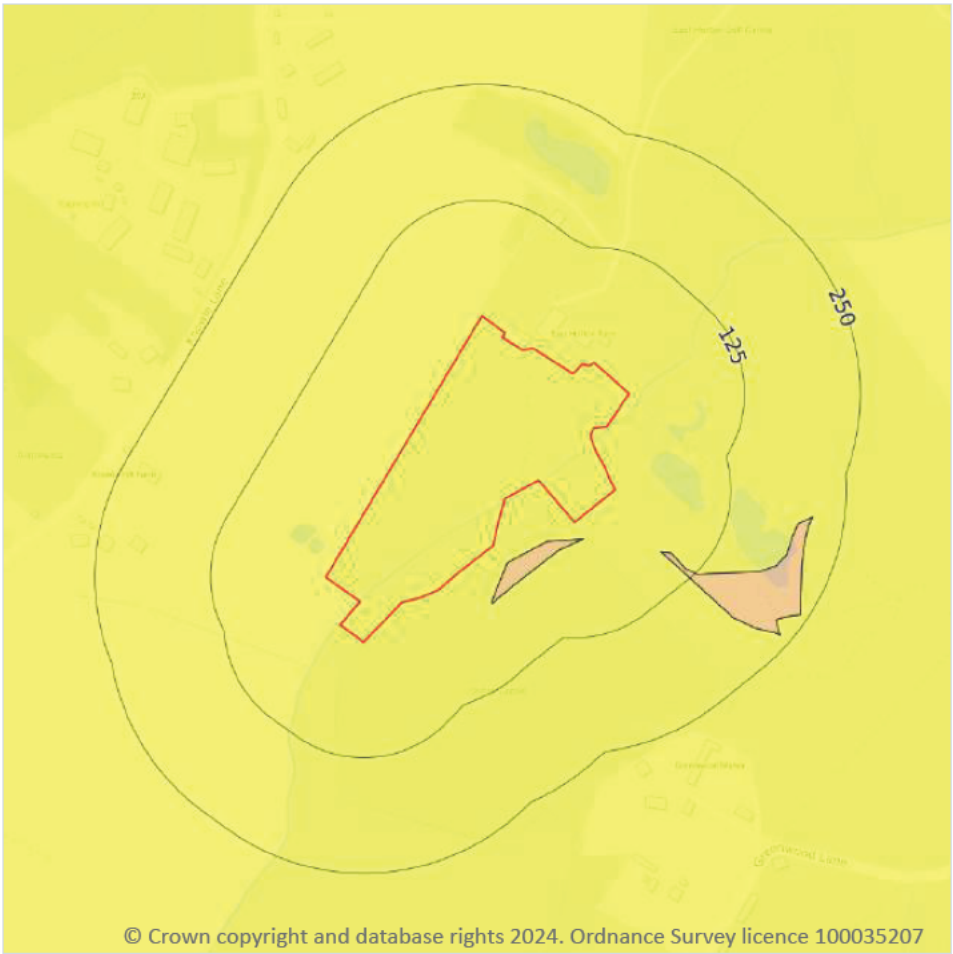
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 107 >

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	2

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

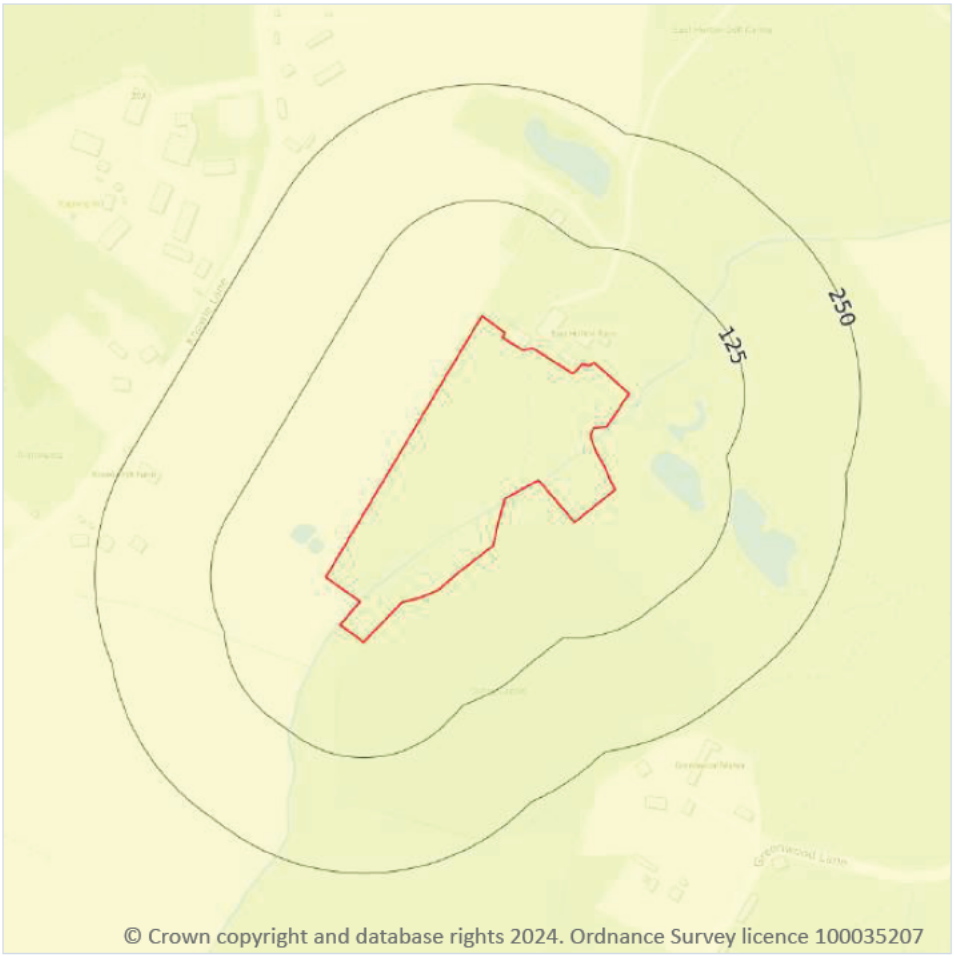
Features are displayed on the Natural ground subsidence - Landslides map on page 108 >

Location	Hazard rating	Details
On site	Very low	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

Location	Hazard rating	Details
19m SE	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

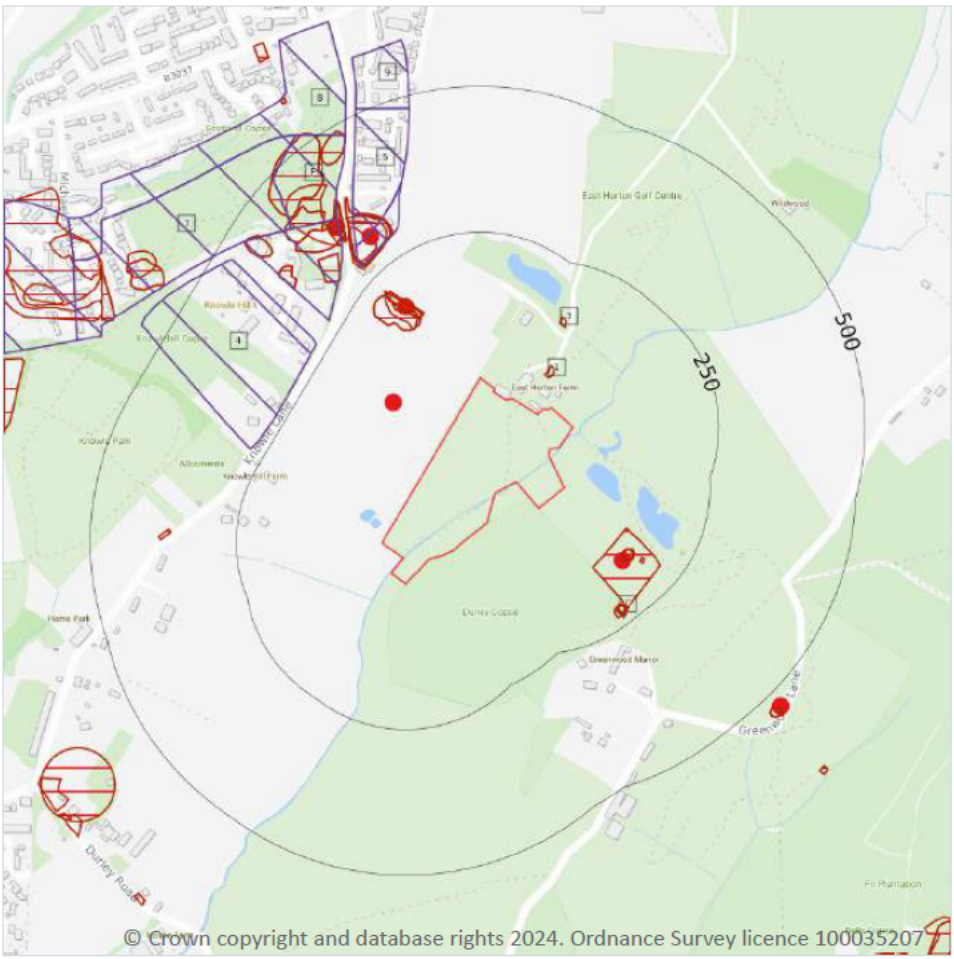
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 110 >

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	5

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on page 112 >

ID	Location	Details	Description
2	107m NW	Name: Fair Oak Sand Address: Fair Oak, EASTLEIGH, Hampshire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
A	160m SE	Name: Greenwood Brick Field Address: Fair Oak, EASTLEIGH, Hampshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	176m NW	Name: Knowlehill Copse Sand Pit Address: Fair Oak, EASTLEIGH, Hampshire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	307m NW	Name: Knowlehill Copse Sand Pit Address: Fair Oak, EASTLEIGH, Hampshire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	356m NW	Name: Knowlehill Copse Sand Pit Address: Fair Oak, EASTLEIGH, Hampshire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	19

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on page 112 >

ID	Location	Land Use	Year of mapping	Mapping scale
1	52m NE	Pond	1908	1:10560
A	126m E	Brick Field	1868	1:10560
B	140m N	Sand Pit	1957	1:10560
3	140m NE	Pond	1908	1:10560
B	141m NW	Unspecified Pit	1968	1:10560
B	141m NW	Unspecified Pit	1985	1:10000
B	146m N	Sand Pit	1908	1:10560
B	147m N	Refuse Heap	1895	1:10560
B	148m N	Sand Pit	1938	1:10560
A	149m SE	Unspecified Pit	1957	1:10560
A	150m SE	Unspecified Pit	1938	1:10560
A	150m SE	Old Sand Pits	1895	1:10560
A	151m SE	Unspecified Pit	1868	1:10560
A	151m SE	Unspecified Pit	1908	1:10560
A	179m SE	Brick Kiln	1868	1:10560
C	215m SE	Unspecified Pit	1957	1:10560
C	215m SE	Unspecified Pit	1908	1:10560
C	216m SE	Old Sand Pits	1895	1:10560
C	217m SE	Unspecified Pit	1868	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	8

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on page 112 >

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
4	267m W	Off Botley Road	Sand	Surface mineral working	Refused	Not available
E	273m NW	Off Botley Road	Sand	Surface mineral working	Valid	Not available
D	279m NW	Knowle Lane	Sand and Gravel, RMC plant	Surface mineral working	Valid	Not available
5	310m NW	Knowle Lane	Sand and Gravel, RMC plant	Surface mineral working	Valid	Not available
F	367m NW	Off Botley Road	Sand	Surface mineral working	Valid	03/55
7	413m NW	Off Botley Road	Sand	Surface mineral working	Valid	29/12/67
8	477m N	Off Botley Road	Sand	Surface mineral working	Valid	28/04/48
9	478m N	Knowle Lane	Sand and gravel	Surface mineral working	Valid	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	1

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
327m NW	Stone

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

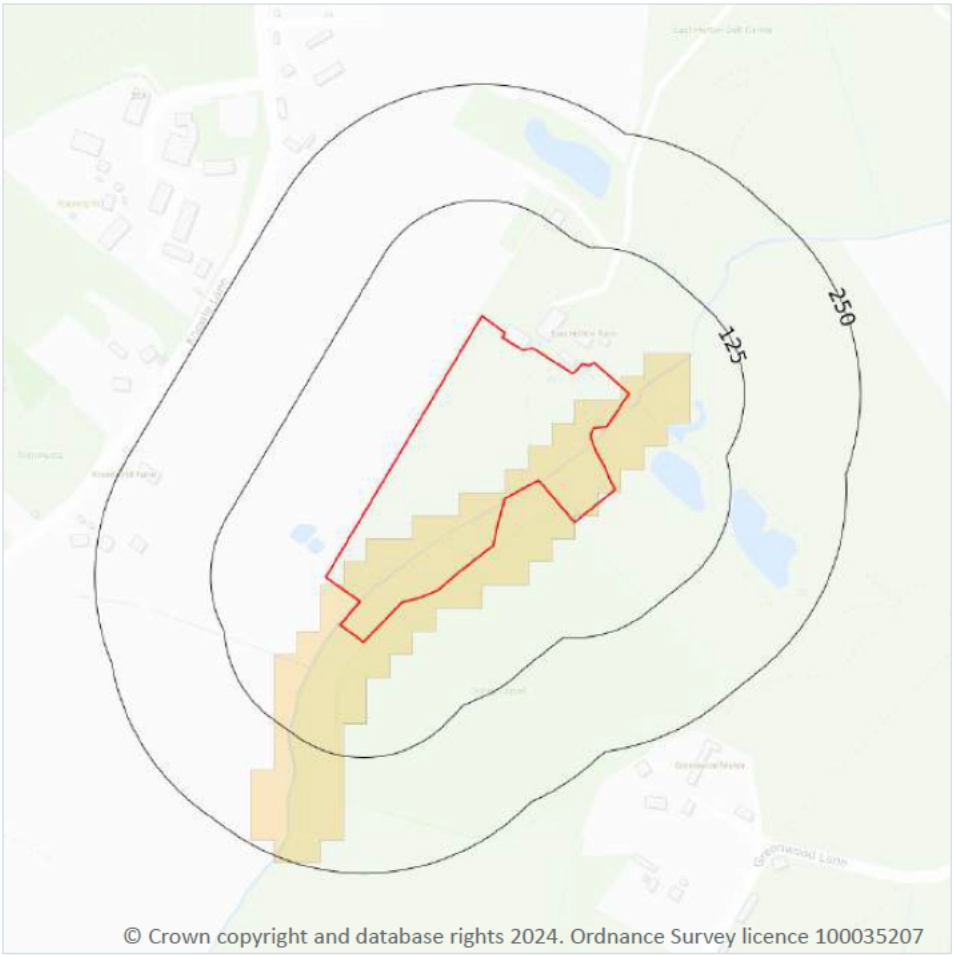
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	2

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on page 121 >

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 3% and 5%	Basic

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	13

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
5m SW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
6m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
20m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
20m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
46m SW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.