

# Redhill Data Centre – Site Condition Report

Digital Realty (UK) Limited  
(EPR/MP3834JU/A001)/(EPR/JP3929SJ/A001)



**www.eco-act.com**  
**Company registered in England. No 557 5619**  
**Carbon Clear Limited trading as EcoAct**  
**Registered Office: Second Floor, Mid City Place, 71 High Holborn, London, WC1V 6EA**

### **Copyright and Non-Disclosure Notice**

The contents and layout of this report are subject to copyright owned by © EcoAct 2024. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report.

The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of EcoAct. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this report by any means will, in any event, be subject to the Third-Party Disclaimer set out below.

### **Third-Party Disclaimer**

Any disclosure of this report to a third-party is subject to this disclaimer. The report was prepared by EcoAct at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third-party who is able to access it by any means. EcoAct excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

## Contents

<b>Executive Summary .....</b>	<b>5</b>
<b>1 Introduction.....</b>	<b>6</b>
1.1 Scope of Work .....	6
1.2 Background.....	6
<b>2 Site Setting .....</b>	<b>8</b>
2.1 Site Location .....	8
2.2 Surrounding Land Use .....	8
2.3 Site Layout – Operations and Infrastructure .....	8
2.4 Site History .....	9
2.5 Potentially Contaminative Land Uses .....	13
<b>3 Environmental Setting.....</b>	<b>14</b>
3.1 Geology .....	14
3.2 Hydrology and Surface Water Features .....	14
3.3 Hydrogeology .....	15
3.4 Flood Risk .....	15
3.5 Environmental Sensitivity.....	16
<b>Regulatory Setting .....</b>	<b>17</b>
4.1 Environmental Permits.....	17
4.2 Discharge Consents and Industrial Processes.....	17
4.3 Landfill and Waste Licences .....	17
4.4 Records of Pollution Incidents and Contaminated Land.....	18
4.5 Petroleum Licences .....	18
4.6 Mining .....	18
4.7 Ground Workings .....	19
4.8 Railways and Tunnels .....	19

<b>Baseline Soil Conditions .....</b>	<b>20</b>
5.1 Baseline Soil Conditions .....	20
<b>Environmental Risk Assessment.....</b>	<b>21</b>
6.1 Risk Assessment Framework .....	21
6.2 Potential Sources .....	21
6.3 Potential Pathways .....	23
6.4 Potential Receptors .....	23
6.5 Potentially Complete Source-Pathway-Receptor Linkages .....	24
<b>Conclusions and Recommendations .....</b>	<b>29</b>
7.1 Conclusions .....	29
7.2 Recommendations.....	29
<b>Statement of Limitations.....</b>	<b>30</b>
<b>Annex A Figures .....</b>	<b>31</b>
<b>Annex B Photos.....</b>	<b>40</b>
<b>Annex C Historical Maps.....</b>	<b>42</b>
<b>Annex D Groundsure reports.....</b>	<b>71</b>



## Executive Summary

EcoAct was commissioned by Digital Realty (UK) Limited, known as 'Digital Realty' to produce a Site Condition Report (SCR) in support of their Environmental Permitting (England and Wales) Regulations 2016 permit application for Unit 2 and Unit 3 Redhill Data Centre. The site is located at Foxboro Business Park, St Anne's Boulevard, Redhill, RH1 1AX. The whole site has an area of 2.4105 hectares and the surrounding land use is a mix of industrial, commercial and residential.

Diesel standby generators provide electricity generation capacity to power the data centre in the event of a mains power failure. Unit 2 has four generators and one smaller landlord generator. The four generators are fed from individual aboveground bulk tanks, each with a maximum capacity of 10,000 litres. The smaller landlord generator is fed from a 2,000-litre aboveground tank. In Unit 3, nine generators on the east side are fed from individual aboveground 10,000-litre bulk tanks. Six generators on the west side are fed from individual aboveground 8,000-litre day tanks. Three of the west side day tanks are fed from an aboveground 50,000-litre bulk fuel tank. There is a short run of underground pipework between the 50,000-litre bulk fuel tank and the generator compound. There is also a small landlord generator fed from a 2,000-litre aboveground tank.

The site is underlain by superficial deposits of River Terrace Deposits (clay and silt), overlying Folkestone Formation Sandstone, which is permeable.

The source-pathway-receptor linkage is the method of identifying potential risks of contamination. The potential medium risks identified include:

- Significant spills or leaks of hydrocarbon fuels and chemicals from primary storage and/or equipment
- Leaking of hydrocarbon fuels from the limited underground pipework on site (Unit 3 service yard)

The following receptors were identified:

- Site employees
- Construction workers (excavation)
- Adjacent residential inhabitants
- Surrounding groundwater abstractions
- Nearby surface water bodies and local sewerage system

The site has been given an overall risk classification of low risk, based on the historical development of the site, and the multiple layers of resilience management which mitigate any potential impact from the large quantities of hydrocarbon fuel storage on-site. If the site continues to adhere to good environmental site management practices, including the use of spill kits, emergency response plans, visual inspections, maintenance of the generators and associated fill point and leakage alarms, then the current operation is unlikely to cause an impact to the existing site condition.

---

# 1 Introduction

## 1.1 Scope of Work

---

EcoAct was commissioned by Digital Realty (UK) Limited, known as 'Digital Realty' to produce a Site Condition Report (SCR) in support of their Environmental Permitting (England and Wales) Regulations 2016 permit application for Unit 2 and Unit 3 Redhill Data Centre located at St Anne's Boulevard, Redhill, RH1 1AX.

The aim of this report was to identify the baseline conditions with regards to soil and ground water contamination by carrying out a site visit, and by reviewing additional relevant data and reports.

## 1.2 Background

---

The Environment Agency has requested that a permit application be submitted for the area of land identified in Figure 1, Annex A.

The area of land under consideration is the Digital Realty Unit 2 and Unit 3 Redhill Data Centre site located on St Anne's Boulevard, Redhill and requires an installation permit under section 1.1 of the Industrial Emissions Directive (IED) for combustion activities, implemented through the Environmental Permitting (England and Wales) Regulations 2016.

This report has been written in accordance with Environment Agency H5 guidance for producing a Site Condition Report (SCR) and comprises a site walkover, Groundsure data (GS5932100/ GS5932101), and involved discussions with the Environment Agency. This report has also been completed in accordance with BS 10175:2011 – "Investigation of Potentially Contaminated Sites", code of practice and CLR 11 – "Model Procedures for the Management of Contaminated Land".

The work undertaken for this SCR comprises:

- a site walkover assessment,
- a review of the historical land uses associated with the site to assess the potential for ground contamination,
- a review of the environmental setting to assess the sensitivity of the surrounding environment to contamination/pollution,
- consultation with the regulatory authorities to establish whether there are any significant, environmental issues that may impact upon the site,
- a review of the Groundsure Geo and Enviro Insight reports dated 08/04/2019 reference GS5932100 and GS5932101.

- A review of additional publicly and commercially available reports and data sets.

The environmental risk assessment presented within this report has been prepared having regard to the source-pathway-receptor model introduced under Part IIA of the Environmental Protection Act 1990 and associated guidance on contaminated land published by the Department of Environment, Food and Rural Affairs. The methodology is essentially a qualitative assessment based on the identification and evaluation of potential 'source-pathway-receptor pollutant linkages'. On the basis of this risk assessment, consideration has been given to the potential for the site to be designated as 'contaminated land' (under the local authority contaminated land inspection strategy) as defined in Part IIA of the Environmental Protection Act 1990.

*This report has been produced solely for supporting Digital Realty (UK) Limited's permit application (EPR/MP3834JU/A001)/(EPR/JP3929SJ/A001). EcoAct is not liable for any other use of its contents other than those listed in this report nor for use by any other 3rd party than Digital Realty (UK) Limited. A statement of limitations is presented at the end of this report.*

---

## 2 Site Setting

### 2.1 Site Location

---

The Digital Realty Redhill site is located at Foxboro Business Park, St Anne's Boulevard, Redhill, RH1 1AX, just minutes from Junction 8 of the M25 and within walking distance of Redhill railway station. The site has two units: Unit 2 (LGW11) and Unit 3 (LGW10).

The National Grid Reference for the site is:

Unit 2 - TQ 28612 51443

Unit 3 - TQ 28707 51482

The whole site has an area of 2.4105 hectares and is shown in Figure 1 in Annex A.

### 2.2 Surrounding Land Use

---

The surrounding land use in the area is mix of industrial, commercial, and residential. Residential housing is located within 25m of the site to the south and west. There is dense woodland located within 25m of the site to the east. The Foxboro Business Park includes, vehicle repair workshops, commercial and industrial businesses.

### 2.3 Site Layout – Operations and Infrastructure

---

The following observations were made during the site walkover carried out on 17<sup>th</sup> July 2019. Present at the site walkover was EcoAct consultants, Digital Realty site engineering team and the local Environment Agency officer. The site is a data hosting facility located in an area approximately 2.41 hectares in size. The site was a former industrial site, which was developed by Digital Realty between 2008-2011. Digital Realty has been operating the site and maintaining the plant for Unit 2 and 3 ever since.

Both Units 2 and 3 are operational 24 hours/day, 7 days/week and each unit is powered by two HV electrical incomers. Both incomers (A and B feeds) supply each unit with electricity, but each unit can also be supported by either supply in isolation. The A and B HV feeds are supplied by different electrical substations, which provides a layer of power resilience to both units.

Diesel standby generators provide electricity generation capacity to power the data centre in the event of a mains power failure. Unit 2 has four generators (1600kW

output each) and one smaller landlord generator (200kW output). The four generators are fed from individual aboveground bulk tanks, each with a maximum capacity of 10,000 litres. The smaller landlord generator is fed from a 2,000-litre aboveground tank.

In Unit 3, nine generators (1600kW output each) on the east side are fed from individual aboveground 10,000-litre bulk tanks. Six generators (1280kW output each) on the west side are fed from individual aboveground 8,000-litre day tanks. Three of the west side day tanks are fed from an aboveground 50,000-litre bulk fuel tank. There is a short run of underground pipework between the 50,000-litre bulk fuel tank and the generator compound. There is also a small landlord generator (220kW output), fed from a 2,000-litre aboveground tank.

The site and surrounding area is covered in good quality hardstanding. There are petrol interceptors at both units which surface water drains through before exiting to mains sewer.

## 2.4 Site History

---

The site is located under the Local Planning Authority of Reigate and Banstead Borough Council and a review of nearby planning applications and historical maps of the site are described below and presented in Annex C.

### 2.4.1 Planning History

Table 1 below shows the records of the planning history of the site covering Unit 2 and Unit 3.

No	Description	Address	Reference
1	FOXBORO-YOXALL LTD., WIGGIE LANE, REDGILL. ERECTION OF 3 CONCRETE STORE SHEDS FOR THE STORAGE OF INFLAMMABLE LIQUIDS.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 74P/0853   Validated: Mon 01 Jan 1900   Decision Issued Date: Fri 17 Jan 1975   Status: Decided (Approved)
2	FOXBORO-YOXALL LIMITED, WIGGIE LANE, REDHILL DETAIL PERMISSION - ERECTION OF A SINGLE STOREY EXTENSION TO STORE BUILDING TO PROVIDE TOILET FACILITIES AS SHOWN ON DRAWING NOS. TS/5902/1 AND TS/5902/2.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 76P/1048   Validated: Mon 01 Jan 1900   Decision Issued Date: Thu 13 Jan 1977   Status: Unknown   Decision: LC Code – Approval (with time condition)

3	FOXBORO YOXALL LTD. WIGGIE LANE, REDHILL DEMOLITION OF PART OF EXISTING BUILDINGS AND ERECTION OF A SINGLE STOREY EXTENSION TO PROVIDE TRAINING FACILITIES AND PROVISION OF A DELIVERY TURNING AREA AS SHOWN ON DRAWINGS NUMBERS 1655/5 TO /7 INCLUSIVE.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 79P/1007   Validated: Mon 01 Jan 1900   Decision Issued Date: Wed 19 Jan 1977   Status: Decided (Approved)
4	FOXBORO-YOXALL, WIGGIE LANE, REDHILL. ERECTION OF EXTENSIONS TO FLOW RIG BUILDING INCLUDING A NEW WATER TANK AS SHOWN ON DRAWING Nos. D148/01 & 02.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 77P/0980   Validated: Mon 01 Jan 1900   Decision Issued Date: Mon 06 Feb 1978   Status: unknown   Decision: Approval (with time condition)
5	FOXBORO-YOXALL LTD., WIGGIE LANE, REDHILL. ERECTION OF 2 STOREY BUILDING COMPRISING COMPUTER SUITE & OFFICE AREA OF 6,240 FT SQ WITH LINK CORRIDOR.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 79P/1142   Validated: Mon 01 Jan 1900   Decision Issued Date: Thu 17 Jan 1980   Status: Decided (Approved)
6	FOXBORO YOXALL PREMISES, WIGGIE LANE, REDHILL ERECTION OF A PRECAST CONCRETE BUILDING TO PROVIDE STORAGE FOR OXYGEN BOTTLES.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 80P/0585   Validated: Mon 01 Jan 1900   Decision Issued Date: Wed 18 Jan 1980   Status: Decided (Approved)
7	FOXBORO-YOXALL LTD., WIGGIE LANE, REDHILL. PROVISION OF AN EMERGENCY ACCESS AREA.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 79P/1142/AP   Validated: Mon 01 Jan 1900   Decision Issued Date: Mon 14 Apr 1980   Status: Decided (Approved)
8	FOXBORO YOXALL, WIGGIE LANE, REDHILL REFURBISHMENT OF EXISTING TRAINING CENTRE TO FORM OFFICE ACCOMMODATION	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 81P/0014   Validated: Mon 01 Jan 1900   Decision Issued Date: Mon 02 Mar 1981   Status: Decided (Approved)
9	LAND STH OF HOLMETHORPE AVENUE, E & STH E OF WIGGIE LANE, REDHILL. PROPOSED INDUSTRIAL & WAREHOUSING DEVELOPMENT; RELOCATION OF SPORTS GROUND; CONSTRUCTION OF LINK ROAD CONNECTING HOLMETHORPE AVENUE WITH NOKE DRIVE & REDSTONE HILL; & ASSOCIATED IMPROVEMENTS TO NOKE DRIVE/ REDSTONE HILL JUNCTION.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 82P/0625/0   Validated: Mon 01 Jan 1900   Decision Issued Date: Fri 04 Feb 1983   Status: Decided (Refused)
10	LAND SOUTH OF HOLMETHORPE AVENUE, EAST AND SOUTH EAST OF WIGGIE LANE AND EMBRACING APPLICANT COMPANY'S PREMISES AT REDHILL PROPOSED INDUSTRIAL & WAREHOUSING DEVELOPMENT; RELOCATION OF SPORTS GROUND; CONSTRUCTION OF LINK ROAD CONNECTING HOLMETHORPE AVENUE WITH NOKE DRIVE & REDSTONE HILL, & ASSOCIATED IMPROVEMENTS TO NOKE DRIVE & NOKE DRIVE / REDSTONE HILL JUNCTION.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 83P/0673/0   Validated: Mon 01 Jan 1900   Decision Issued Date: Fri 08 Mar 1984   Status: Decided (Approved)

11	FOXBORO YOXALL LTD., OFF WIGGIE LANE, REDHILL EXTEND EXISTING STORAGE BUILDING BY 48' & JOIN INTO OTHER EXISTING BUILDING LOCATED NEXT TO IT. PURPOSE TO INCREASE AREA AVAILABLE FOR COMPONENT PART & FINISHED GOODS STORAGE.	3 St Anne's, Boulevard Redhill Surry RH1 4AX	Ref No: 83P/1132/F   Validated: Mon 01 Jan 1900   Decision Issued Date: Mon 30 Jan 1984   Status: Decided (Approved)
12	AMENDED PROPOSAL: Conversion of warehouse and office for data centre use and associated works (within B1, B8) (Drawing Nos: 0263-001, 002, 010, 011, 020, 030, 100, 110, 120, 130 & 140)	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 4AX	Ref No: 09/00766/F   Validated: Fri 12 Jun 2009   Decision Issued Date: Fri 21 Aug 2009   Status: Decided (Approved)
13	Additional security perimeter fences, new sliding vehicle entrance gate, pivot opening pedestrian gate and relocation of existing crossover to suit. (Drawing Nos: 0302-100, 101, 102, 190, 191, 192 & 220) Amended plan received 11/08/2010 (Drwg No: 0302-102RevB) Amended plans rec'd 18.08.10 (Drwg nos. 0302-100A, 102C, 122B, 190B, 191B) * Amended plans rec'd 27.09.10 showing revised landscaping (Drwg nos. 0302-501, 0302-102 Rev D)	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 4AX	Ref No: 10/01086/F   Validated: Fri 25 Jun 2010   Decision Issued Date: Tue 09 Nov 2010   Status: Decided (Approved)
14	Submission on Acoustic Attenuation details pursuant to condition No 03 of permission ref no: 09/00766/F for conversion of warehouse and office for data centre use and associated works (within B1, B8)	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 4AX	Ref No: 09/00766/DET03   Validated: Tue 29 Mar 2011   Decision Issued Date: Tue 24 May 2011   Status: Decided (Approved)
15	Submission of landscaping details pursuant to condition no 04 of permission ref no: 10/01086/F Additional security perimeter fences, new sliding vehicle entrance gate, pivot opening pedestrian gate and relocation of existing crossover to suit.	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 4AX	Ref No: 10/01086/DET04   Validated: Fri 13 May 2011   Decision Issued Date: Mon 20 Jun 2011   Status: Decided (Refused)
16	Submission of landscaping details pursuant to condition no 04 of permission ref no: 10/01086/F Additional security perimeter fences, new sliding vehicle entrance gate, pivot opening pedestrian gate and relocation of existing crossover to suit.	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 4AX	Ref No: 10/01086/DET04   Validated: Mon 08 Aug 2011   Decision Issued Date: Mon 03 Oct 2011   Status: Decided (Approved)
17	Addition of 2 air conditioning condenser units on steel gantry within existing fenced compound to side of building and erection of proprietary smoking shelter to car park area in front of existing building	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 1AX	Ref No: 12/00853/F   Validated: Fri 25 May 2012   Decision Issued Date: Fri 20 Jul 2012   Status: Decided (Approved)
18	Addition of two loading bay doors with dock levellers including excavation and formation of associated ramp to an existing building	2 Foxboro Business Park, St. Anne's Boulevard Redhill Surry RH1 1AX	Ref No: 00/12310/F   Validated: Mon 24 Jul 2020   Decision Issued Date: Fri 15 Sept 2020   Status: Decided (Approved)

*Table 1: Historical Planning Records*

## 2.4.2 Historical Mapping

Historical maps have been collected dating back to 1840 up to present day and there are presented in Annex C. Table 2 below shows the history of the site from the historical mapping.

Date	Key Features
1871	The site is comprised of open land with an old main railway line located approximately 100m west of the site.
1895	Clay pits and brick works were identified approximately 55m and 85m north of the site respectively.
1913	A historical railway line is present approximately 50m southeast of the site.
1933	Allotment gardens are located adjacent northwest of the site.
1963-64	The site is utilised as a recreation ground with unspecified buildings adjacent north of the site, works adjacent east/northeast and southwest of the site.
1974	Unspecified buildings are located in the southwest corner of the site, which are associated with the adjacent engineering works located southwest of the site.
1977	The majority of the site is still an open/recreation ground. An electricity substation is identified on site.
1982	A garage was identified approximately 13m north of the site.
1994	Site still utilised as a sports ground with an electricity substation and unspecified tanks on site, and adjacent south of the site boundary.
1995	A garage was identified approximately 31m north of the site.
2002	Two unspecified buildings are located on site. The adjacent engineering works to south/southwest of the site has been removed.
2010	Residential properties are located adjacent south and southwest of the site, with commercial and industrial buildings to the west, north, northeast and east of the site.

*Table 2: Historical Mapping Summary*



## 2.5 Potentially Contaminative Land Uses

---

There are 56 potentially historical contaminative land uses within 250m of the site including clay pit, bricks works, railway sidings and unspecified works and a further 76 potentially contaminative land uses within 500m.

Currently, there is an electricity substation on site and another one approximately 19m south of the site.

There are no records of National Grid high voltage underground electricity transmission cables or National Grid high pressure gas transmission pipelines within 500m of the site.

---

## 3 Environmental Setting

### 3.1 Geology

---

Geological information has been obtained from the Groundsure Report Annex D and the British Geological Survey (BGS) Map website<sup>1</sup>. Both these sources use the BGS 1:50,000 Digital Geological Map of Britain.

The site is located on worked ground from the redevelopment of the site and is underlain by superficial deposits of River Terrace Deposits (clay and silt), overlying Folkestone Formation Sandstone. The River Terrace Deposits formed 2.588 million years ago in the Quaternary period and has low to very low permeability. The Folkestone Formation Sandstone was formed between 126.3 and 100.5 million years ago during the Cretaceous period and has high permeability. Beneath the Folkestone Formation Sandstone is the Sandstone and Mudstone of the Sandgate Formation. There is also a fault feature located approximately 210m northwest of the site boundary.

The site is not located in a Radon Affected Area, as less than 1% of properties are above the action level, therefore no radon protective measures are necessary.

The site is located in a low-risk zone for shrink-swell clay and the ground conditions predominantly have medium plasticity. There is a recommendation not to plant trees with high soil moisture demands near to buildings. The site is also located in a low-risk zone for collapsible deposits. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits.

A borehole<sup>2</sup> was sunk approximately 186m east of the site boundary to a depth of 7.62m in 1964. Folkestone Beds containing white, dirty and clayey sands were found at depths of 15-35cm, with Andgate Beds comprising fullers earth and brown sandy clay from 53cm in depth.

### 3.2 Hydrology and Surface Water Features

---

The nearest surface water feature is an inland river located approximately 150m east of the site.

---

<sup>1</sup> [https://geologyviewer.bgs.ac.uk/?\\_ga=2.153516344.1858143427.1713478322-668584212.1713478322](https://geologyviewer.bgs.ac.uk/?_ga=2.153516344.1858143427.1713478322-668584212.1713478322)

<sup>2</sup> [https://scans.bgs.ac.uk/sobi\\_scans/boreholes/585834/images/12205877.html](https://scans.bgs.ac.uk/sobi_scans/boreholes/585834/images/12205877.html)

There is no river quality information within 1.5km of the site, therefore, there is no chemical or biological river quality analysis available.

There are no surface water abstraction licences identified within 2km of the site.

### 3.3 Hydrogeology

---

The superficial geology below the site is classified as a Secondary Aquifer with undifferentiated layers, which is where the layers have been identified previously as both minor and non-aquifer in different locations, due to the variable characteristics of the rock type. The underlying bedrock Folkestone Formation Sandstone is classified as a Principal Aquifer, where the geology provides a high level of water storage and may support water supply/river base flow on a strategic scale. Generally, Principal Aquifers were previously Major Aquifers.

The soil underlying the site is assumed by the Groundsure data (G5-5932100) to have a high leaching potential and therefore be highly permeable, as there is an absence of site-specific information.

Two historical groundwater abstraction licences 1.589km northeast and 1.941km southeast of the site were identified for mineral washing and general farming/domestic activities respectively. There are two active groundwater abstraction licences located 1.589km northeast of the site for mineral washing and dust suppression activities.

There are no potable water abstraction licences within 2km of the site.

There are no Source Protection Zones (SPZ) or SPZ within Confined Aquifer within 500m of the site.

### 3.4 Flood Risk

---

#### 3.4.1 Surface Water Flooding

The site is not located in an Environment Agency designated Flood Zone 2 or 3. However, there is a designated Flood Zone 2 floodplain located approximately 103m southeast of the site, which estimates the annual probability of flooding from rivers between 1 in 1000 (0.1%) and 1 in 100 (1%). A further designated Flood Zone 3 floodplain is located approximately 159m southeast of the site, where the estimated annual probability of flooding from rivers is 1 in 100 (1%) or greater chance of occurring in any year.

In addition, the Risk of Flooding from Rivers and the Sea (RoFRaS) flood rating is very low, which is less than 1 in 1000 chance of flooding in any given year.

No flood defences are located within 250m of the site.

### 3.4.2 Groundwater Flooding

No British Geological Survey groundwater flooding susceptibility areas were identified within 50m of the site. The area is not considered to be prone to groundwater flooding based on the rock type.

## 3.5 Environmental Sensitivity

---

The site is located within an existing Nitrate Vulnerability Zone.

There are 11 records of Green Belt Land (London Area Greenbelt) from approximately 79m east of the site.

The Surrey Hills which is classified as an Area of Outstanding Natural Beauty (AONB) is located approximately 750m northwest and 1.83km east of the site.

There are 15 records of Ancient Woodland within 2km of the site, with the nearest being approximately 752m northwest of the site.

The nearest Site of Special Scientific Interest (SSSI), Mole Gap to Reigate Escarpment is located approximately 1.62km west of the site.

None of the following environmentally sensitive designations exist within 2km of the site:

- National Nature Reserves (NNR)
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Ramsar sites
- Local Nature Reserves (LNR)
- World Heritage Sites
- Environmentally Sensitive Areas
- National Parks (NP)
- Nitrate Sensitive Areas

---

## Regulatory Setting

### 4.1 Environmental Permits

---

There are three records of Part A(1) and IPCC Authorised Activities within 500m of the site. These records belong to the same site located approximately 297m north of the site. The permits were issued between 2006 and 2018 and the permits are for the processing of non-ferrous metals, producing cadmium/mercury and alloys containing >0.05%.

There are three records of Part A(2) and Part B Activities within 500m of the site, with the nearest being approximately 171m north of the site, held by for the respraying of road vehicles.

There are no records of List 1 or List 2 Dangerous Substance Inventory Sites, Category 3 or 4 Radioactive Substances Authorisations, Planning Hazardous Substance Consents and Enforcements or COMAH & NIHHS sites within 500m of the site.

### 4.2 Discharge Consents and Industrial Processes

---

There are six records of revoked licensed discharge consents within 500m of the site, with the nearest revoked consent being for a sewage discharge pumping station located approximately 122m east of the site.

There are no records of Red List Discharge Consents or Water Industry Referrals within 500m of the site.

### 4.3 Landfill and Waste Licences

---

There are 2 landfill sites located within 1km of the site, of which the nearest is approximately 356m southeast of the site, which handles inert waste. A further two non-operational landfill sites have been identified from 1.17km southeast of the site. In addition, two records of refuse tips have been identified from 1.28km east of the site.

Seven records of historical landfill sites were identified from approximately 464m northeast of the site.

There are 9 records of Environment Agency licensed waste sites within 1.5km of the site, of which the nearest is located approximately 298m north of the site and is categorised as a physio-chemical treatment facility.

There are no records of waste treatment, transfer or disposal sites within 500m of the site.

## 4.4 Records of Pollution Incidents and Contaminated Land

---

Pollution incidents are recorded by the Environment Agency on the National Incident Recording System (NIRS) and given a category rating based on their severity of impact caused to water, land and air. One incident is recorded under List 2 as occurring in 2013 approximately 173m south of the site for atmospheric pollutants and effects through landfill odour. The incident was given a Category 2 rating (significant) for air impact, but Category 4 rating (no impact) for water and land.

No sites have been determined as Contaminated Land under the Part 2A Contaminated Land Regulations within 500m.

## 4.5 Petroleum Licences

---

There are no records of petrol or fuel sites within 500m of the site.

## 4.6 Mining

---

The British Geological Survey has identified a non-coal mining area on site for sand, although sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered.

No coal mining areas or brine affected areas have been identified within 75m of the site. No brine, gypsum, tin or clay mining has been identified within 1km of the site. There are no natural cavities located within 1km of the site.

## 4.7 Ground Workings

---

Historical surface ground working features have been identified within 250m of the site. The nearest is a historical clay pit approximately 55m north of the site, dating back to 1895. The nearest historical underground working feature was a tunnel located approximately 930m south of the site back in 1912.

There are 17 records of current ground workings identified within 1km of the site. All these ground works have ceased, but the nearest was Holmethorpe Clay Pit located approximately 75m north of the site.

## 4.8 Railways and Tunnels

---

No underground railway lines or tunnels have been identified on site or within 250m of the site.

Active railways line (Brighton Main Line – quarry line) has been identified from approximately 57m east of the site and another railway line approximately 80m west of the site.

Historical railway sidings have been identified from approximately 87m northwest of the site. Historical razed and abandoned railways have been identified approximately 93m northwest from the site.

---

## Baseline Soil Conditions

### 5.1 Baseline Soil Conditions

---

The Groundsure data identified two on site records of estimated background soil chemistry. The element and estimated concentrations are as follows:

- Arsenic = 25-35 mg/kg
- Cadmium = <1.8 mg/kg
- Chromium = 60-90 mg/kg
- Nickel = 15-30 mg/kg
- Lead = 100-200 mg/kg



---

## Environmental Risk Assessment

### 6.1 Risk Assessment Framework

---

The following environmental risk assessment has been prepared using the source-pathway-receptor model introduced under Part IIA of the Environmental Protection Act 1990. Guidance on contaminated land published by the Department of Environment, Food and Rural Affairs has also been used.

The methodology is a qualitative assessment based on the identification and evaluation of potential 'source-pathway-receptor pollutant linkages'. An environmental risk assessment involves assessing the likely probability and consequence of a pollutant linkage existing, in order to obtain a level of risk. For a risk to exist, all three of the following components must be present:

- Source of contamination
- Pathway for the contaminant to move from source to receptor
- Receptor that could be affected by the contaminant

The following sections identify the potential sources, pathways and receptors present on-site and the potential linkages.

### 6.2 Potential Sources

---

Table 3 below identifies the potential sources of contamination on the site and qualitatively assesses their significance on a scale of 1 (Low) to 5 (High), versus the likelihood on a scale of 1 (Unlikely) to 3 (Very likely).

The risk score is the product of the significance and likelihood, and it has been categorised as follows:

- 1-4 = Low Potential Risk
- 5-10 = Medium Potential Risk
- 11-15 = High Potential Risk

<b>ID</b>	<b>Potential Source</b>	<b>Potential Significance (1 low, 5 high)</b>	<b>Likelihood (1 unlikely, 3 very likely)</b>	<b>Risk Score</b>
1	Unknown historic/legacy contamination beneath the site from the location of concrete storage sheds housing inflammable liquids in the southwestern area of the site, and its previous commercial use	3	1	3
2	Significant spills or leaks of hydrocarbon fuels and chemicals from primary storage and/or equipment	5	1	5
3	Leaking of hydrocarbon fuels from the limited underground pipework on site (Unit 3 service yard)	5	2	10

*Table 3: Potential Sources On-site*

## 6.3 Potential Pathways

---

Table 4 below identifies the potential pathways that exist on-site.

ID	Potential Pathways
1	Vertical and lateral leaching through permeable superficial deposits into the underlying soils
2	Underlying Secondary and Principal Aquifer flow
3	Dermal contact and ingestion through inhalation during excavation without PPE
4	Dermal contact and ingestion
5	Surface water run off through the drainage network

*Table 4: Potential Pathways On-site*

## 6.4 Potential Receptors

---

Table 5 identifies the potential receptors that have been identified on-site and in the surrounding area.

ID	Potential Receptors
1	Site employees
2	Construction workers (excavation)
3	Adjacent residential inhabitants
4	Surrounding groundwater abstractions
5	Nearby surface water bodies and local sewerage system

*Table 5: Potential Receptors*

## 6.5 Potentially Complete Source-Pathway-Receptor Linkages

<b>Potential Receptors</b>						
		<b>Site Employees</b>	<b>Construction workers (excavation)</b>	<b>Adjacent residential inhabitants</b>	<b>Surrounding groundwater abstractions</b>	<b>Nearby surface water bodies and local sewerage system</b>
<b>Potential Sources</b>	<b>Unknown historic/legacy contamination beneath the site from the location of concrete storage sheds housing inflammable liquids in the southwestern area of the site, and its previous commercial use</b>	N/A	Inhalation, ingestion and dermal contact	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the underlying soils	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the surrounding groundwater system	Vertical and lateral leaching of contaminants through the permeable superficial deposits into nearby surface water bodies
	<b>Significant spills or leaks of hydrocarbon fuels and chemicals from primary storage and/or equipment</b>	Inhalation, ingestion and dermal contact	N/A			Surface water run off through the drainage network into nearby surface water bodies and local sewerage system
	<b>Leaking of hydrocarbon fuels from the limited underground pipework on site (Unit 3 service yard)</b>	Inhalation, ingestion and dermal contact	N/A			Vertical and lateral leaching of contaminants through the permeable superficial deposits into nearby surface water bodies

Table 6: Review of source-pathway-receptor linkages on-site

Potential Source	Pathway	Receptor	Risk	Rationale
<p><b>Unknown historic/legacy contamination beneath the site from the location of concrete storage sheds housing inflammable liquids in the southwestern area of the site, and its previous commercial use</b></p>	Inhalation, ingestion and dermal contact	Construction workers (excavation)	Low	Potential historic contamination may have occurred on site in pockets due to historic storage of liquids and its former commercial use. However, the use of appropriate personal protective equipment (PPE) by construction workers would reduce the risk of contamination through inhalation, ingestion and dermal contact.
	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the underlying soils	Adjacent residential inhabitants	Low	Potential historic contamination may have occurred on site in pockets due to historic storage of liquids and its former commercial use. However, residual contamination would have been removed from the site during the redevelopment.
	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the surrounding groundwater system	Surrounding groundwater abstractions	Low	Potential historic contamination may have occurred on site in pockets due to historic storage of liquids and its former commercial use. However, residual contamination would have been removed from the site during the redevelopment.
	Vertical and lateral leaching of contaminants through the permeable superficial deposits into nearby surface water bodies	Nearby surface water bodies and local sewerage system	Low	Potential historic contamination may have occurred on site in pockets due to historic storage of liquids and its former commercial use. However, residual contamination would have been removed from the site during the redevelopment.
<p><b>Significant spills or leaks of hydrocarbon fuels and chemicals from primary storage and/or equipment</b></p>	Inhalation, ingestion and dermal contact	Site Employees	Low	<p>The site is covered in good quality hardstanding and is raised above ground level, therefore reducing the likelihood of any potential leaks contaminating the underlying soils.</p> <p>Emergency Response Plan and Pollution Prevention Response Plan have been communicated to all staff.</p> <p>Spill prevention kits are available in the plant areas. Staff have been fully trained in spill response and the use of personal protective equipment (PPE).</p>

	<p>Vertical and lateral leaching of contaminants through the permeable superficial deposits into the underlying soils</p>	<p>Adjacent residential inhabitants</p>	<p>Low – management control measures in place</p>	<p>The site is covered in good quality hardstanding and is raised above ground level, therefore reducing the likelihood of any potential leaks contaminating the underlying soils.</p> <p>Diesel is stored in aboveground tanks which are internally bunded. Tanks are checked as part of plant rounds and fuel levels are reported monthly. Fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.</p> <p>Each set of generators are housed in acoustic containers, so any potential leaking is contained. Chemicals are stored in a bunded and locked cabinets.</p> <p>Emergency Response Plan and Pollution Prevention Response Plan have been communicated to all staff.</p> <p>Spill prevention kits are available in the plant areas. Staff have been fully trained in spill response and the use of personal protective equipment (PPE).</p>
	<p>Vertical and lateral leaching of contaminants through the permeable superficial deposits into the surrounding groundwater system</p>	<p>Surrounding groundwater abstractions</p>	<p>Low – management control measures in place</p>	<p>The site is covered in good quality hardstanding and is raised above ground level, therefore reducing the likelihood of any potential leaks contaminating the underlying soils.</p> <p>Diesel is stored in aboveground tanks which are internally bunded. Tanks are checked as part of plant rounds and fuel levels are reported monthly. Fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.</p> <p>Each set of generators are housed in acoustic containers, so any potential leaking is contained. Chemicals are stored in a bunded and locked cabinets.</p> <p>Emergency Response Plan and Pollution Prevention Response Plan have been communicated to all staff. Spill kits have been</p>

				<p>provided across the site and staff are fully trained in their use.</p> <p>Petrol interceptors are located in the drainage systems, which are is cleaned on an annual basis.</p>
	Surface water run off through the drainage network into nearby surface water bodies and local sewerage system	Nearby surface water bodies and local sewerage system	Low – management control measures in place	<p>Surface drains flow through petrol interceptors, which will capture any accidental oil spills in the surface water drainage system. Interceptors are inspected and cleaned on an annual basis.</p> <p>Emergency Response Plan and Pollution Prevention Response Plan have been communicated to all staff. Spill kits have been provided across the site and staff are fully trained in their use.</p>
<b><i>Leaking of hydrocarbon fuels from the limited underground pipework on site (Unit 3 service yard)</i></b>	Inhalation, ingestion and dermal contact	Site Employees	Low – management control measures in place	<p>Although there is limited underground pipework in Unit 3, leak detection alarms and fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.</p> <p>Spill prevention kits are available in the plant areas. Staff have been fully trained in spill response and the use of personal protective equipment (PPE).</p>
	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the underlying soils	Adjacent residential inhabitants	Low/Medium - management control measures in place	<p>Although there is limited underground pipework in Unit 3, leak detection alarms and fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.</p>
	Vertical and lateral leaching of contaminants through the permeable superficial deposits into the surrounding groundwater system	Surrounding groundwater abstractions	Low - management control measures in place	<p>Although there is limited underground pipework in Unit 3, leak detection alarms and fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.</p> <p>The nearest groundwater abstraction system is located over 1km in distance from the site, therefore reduces the likelihood of potential contamination of groundwater abstractions.</p>

	Vertical and lateral leaching of contaminants through the permeable superficial deposits into nearby surface water bodies	Nearby surface water bodies and local sewerage system	Low/Medium - management control measures in place	Although there is limited underground pipework in Unit 3, leak detection alarms and fill point alarms have been installed within the diesel tanks. The alarms are linked to the BMS system.
--	---------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------	---------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

*Table 7: Summary of potentially complete Source-Pathway-Receptor linkages and risk ratings identified on-site*



## Conclusions and Recommendations

### 7.1 Conclusions

---

The site has been given an overall risk classification of low risk, based on the historical development of the site, and the multiple layers of resilience management which mitigates any potential impact from the large quantities of hydrocarbon fuel storage on-site.

The potential medium risks identified included:

- Significant spills or leaks of hydrocarbon fuels and chemicals from primary storage and/or equipment
- Leaking of hydrocarbon fuels from the limited underground pipework on site (Unit 3 service yard)

If the site continues to adhere to good environmental site management practices, then the current operation is unlikely to cause an impact to the existing site condition.

### 7.2 Recommendations

---

The following recommendations should be adhered to in order to reduce the impact of the potential source, pathway and receptor linkages:

- Continue to adhere to the site's environmental management system which includes an Emergency Response Plan and Pollution Prevention Response Plan, which has been communicated to all staff. Staff should continue to use the available spill kits to manage any potential contaminative material.
- Use of PPE by site employees and contractors to reduce any risk of potential contamination through inhalation, ingestion and dermal contact.
- Maintenance of the fuel storage tanks, fill point and leakage alarm system linked to the BMS.
- Regular visual inspections of hardstanding to reduce potential leakage off site.
- Integrity testing of the limited underground pipework on a regular basis to provide additional mitigation to any risk of potential contamination.

## Statement of Limitations

This report has been prepared in accordance with the scope of work outlined within this report and is subject to applicable cost, time and other constraints. EcoAct performed the services on behalf of the Client in a manner consistent with the normal level of care and expertise exercised by members of the environmental profession. No warranties, expressed or implied, are made.

Except as otherwise stated, EcoAct's assessment is limited strictly to identifying the specified environmental conditions associated with the subject site and does not evaluate structural or geotechnical conditions of any part of the site (including any buildings, equipment or infrastructure).

All conclusions and recommendations made in the report are the professional opinions of the EcoAct personnel involved with the project and, while normal checking of the accuracy of data has been conducted, EcoAct assumes no responsibility or liability for errors in data obtained from such sources, regulatory agencies or any other external sources, nor from occurrences outside the scope of this project.

EcoAct is not engaged in environmental consulting and reporting for the purpose of advertising, sales promoting, or endorsement of any client interests, including raising investment capital, recommending investment decisions, or other publicity or investment purposes.

This report has been prepared for the sole use of Digital Realty (UK) Limited. The report may not be relied upon by any other party without the express written agreement of EcoAct. The provision of a copy of this report to any third party is provided for information purposes only and any reliance on this report by a third party is done so at their own risk and EcoAct disclaim all liability to such third party to the extent permitted by law. Any use of this report by a third party is deemed to constitute acceptance of this limitation.

This report does not constitute legal advice.

---

## Annex A Figures

Figure 1 – Site Boundary and Location

Figure 2 – Unit 2 Site Drainage Plan

Figure 3 – Unit 3 Site Drainage Plan

Figure 4 - Hydrogeology Map

Figure 5 – Flood Map

Figure 6 – Designated Environmentally Sensitive Sites

Figure 7 – Pollution Incidents, Permits and Registers Map

Figure 8 – Railway and Tunnel Map

Figure 1: Site Boundary and Location





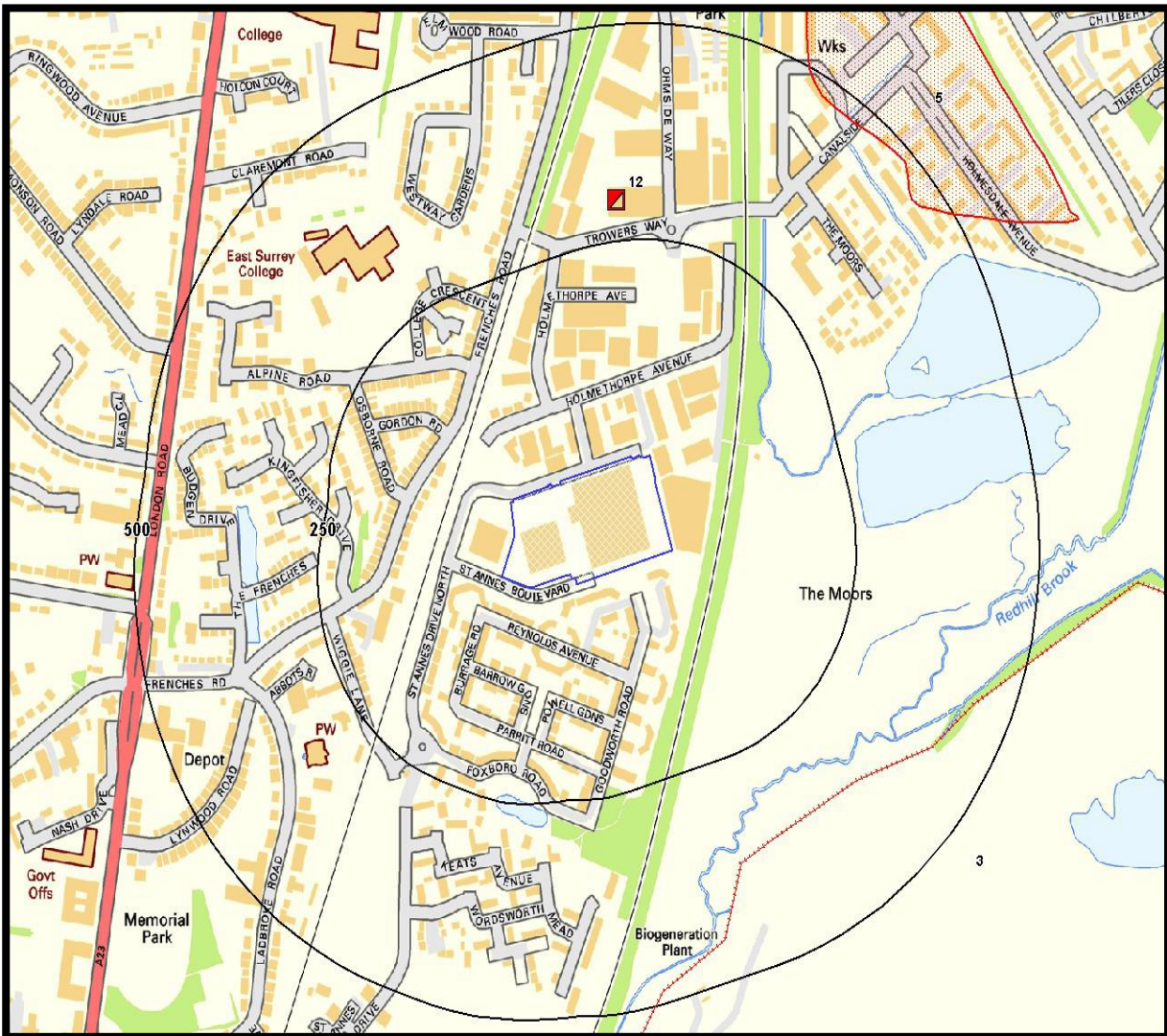


Figure 2: Unit 2 Site Drainage Plan

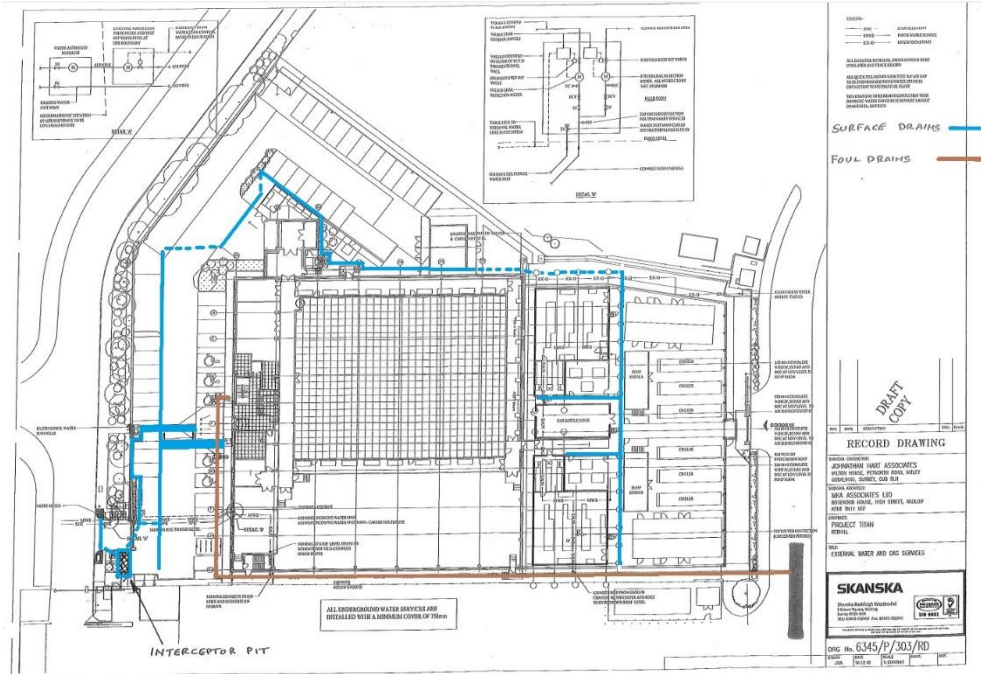


Figure 3: Unit 3 Site Drainage Plan

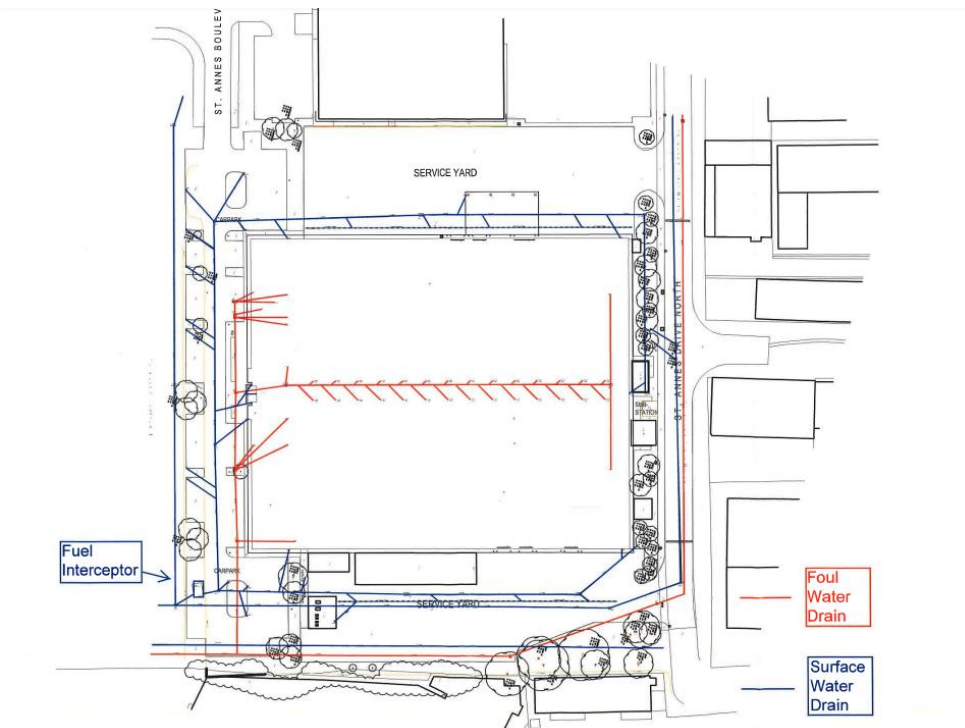


Figure 4: Hydrogeology Map

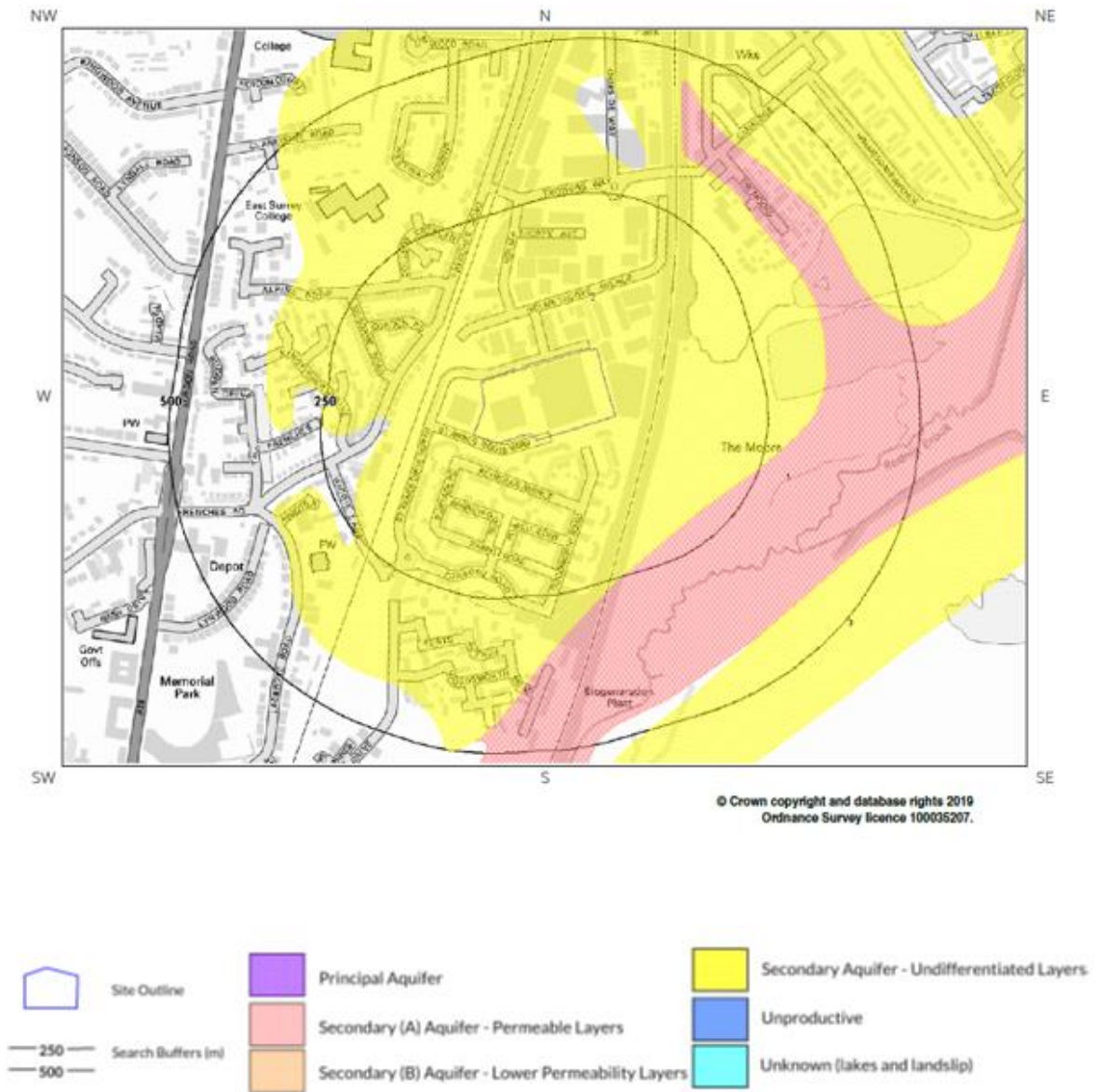
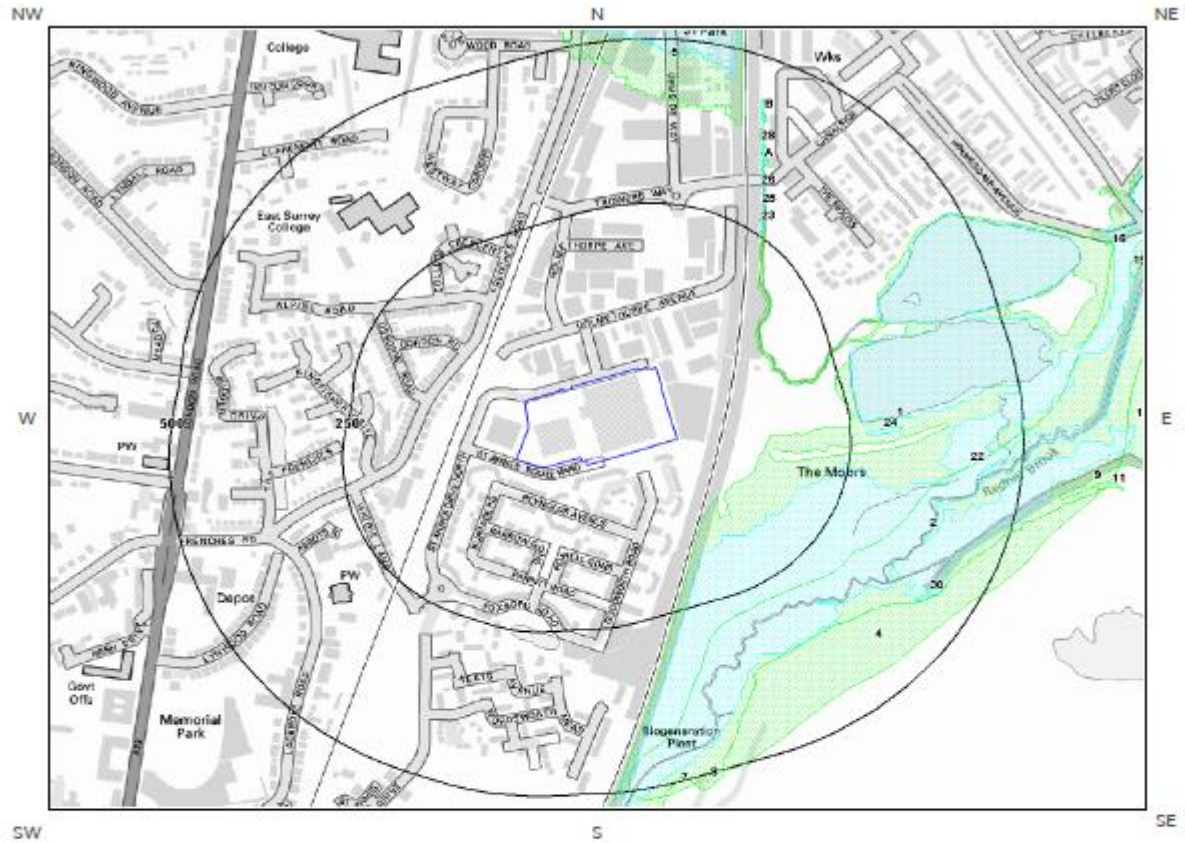




Figure 5: Flood Map from rivers and the sea



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100095207.

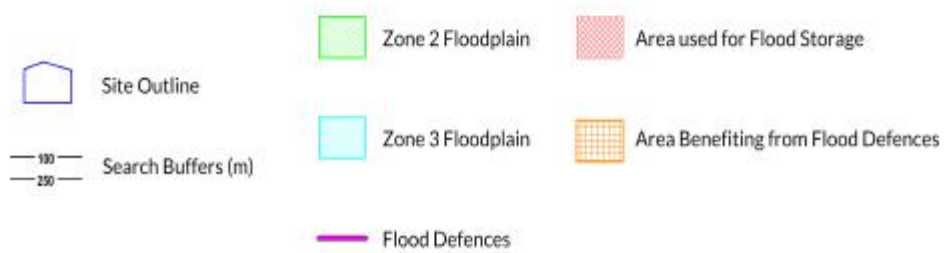




Figure 6: Designated Environmentally Sensitive Sites Map

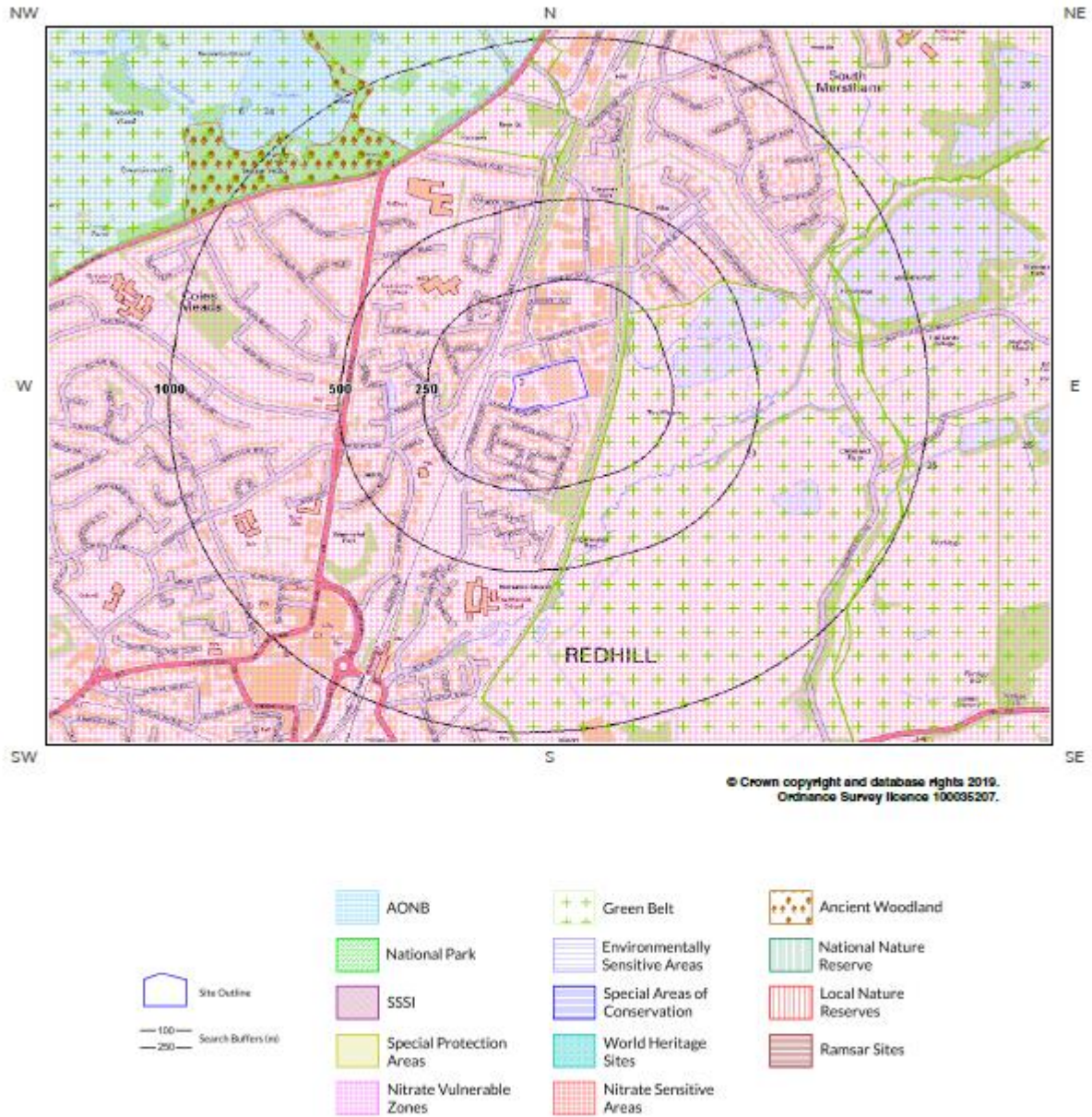


Figure 7: Pollution Incidents, Permits and Registers Map

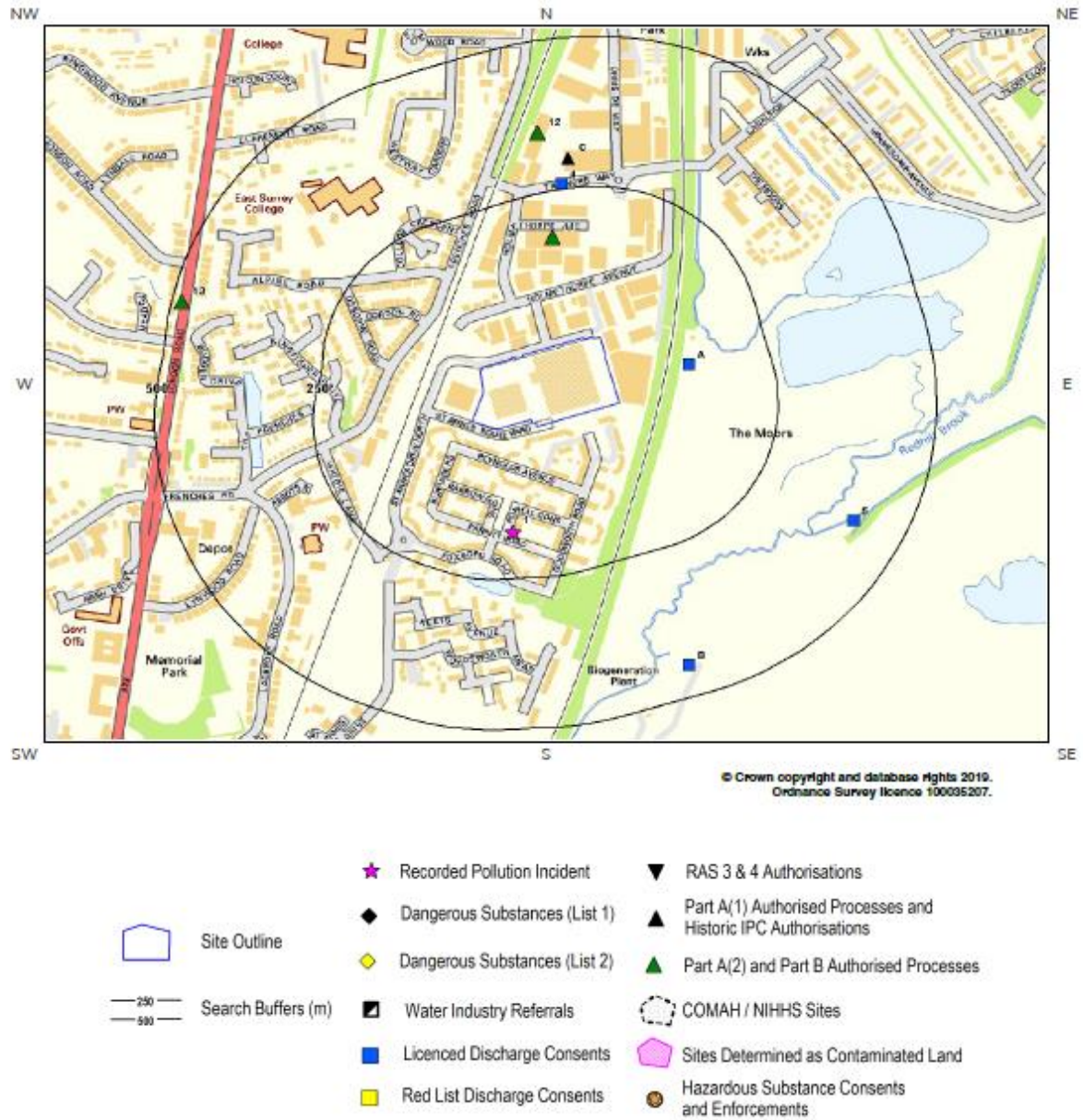
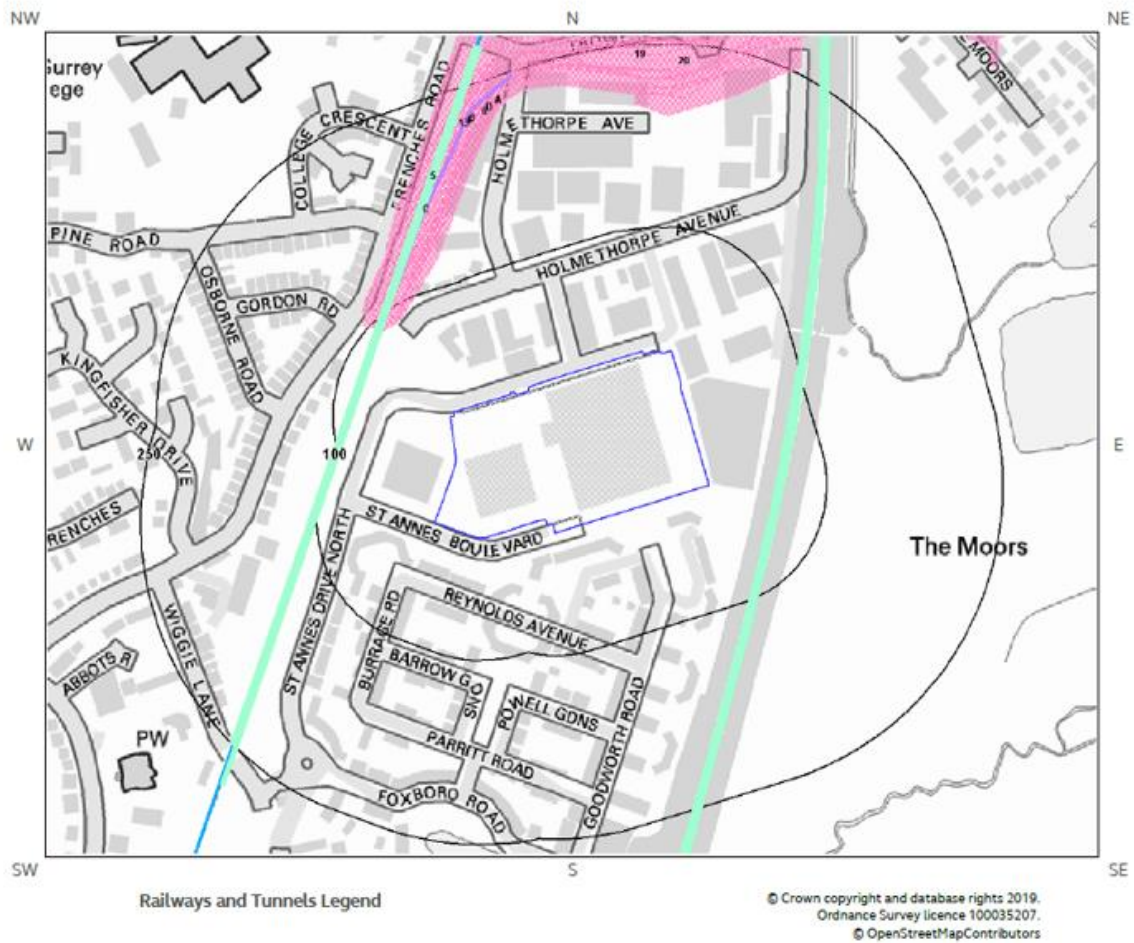




Figure 8: Railway and Tunnels Map



## Annex B Photos



*Figure 9: Unit 2 generator exhaust*



*Figure 10: Unit 2 fuel pipework*



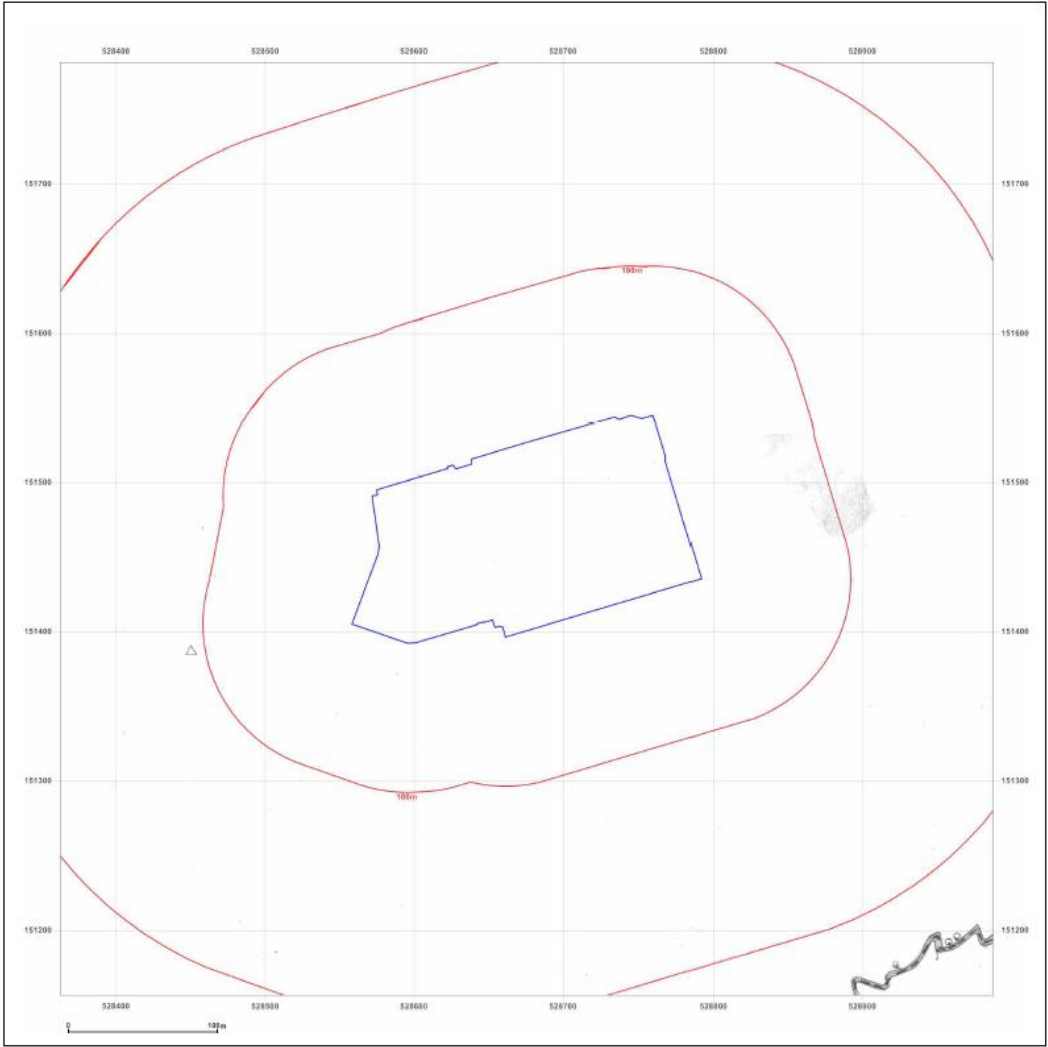
*Figure 11: Unit 3 view of S120/S130 generator exhausts*



*Figure 12: Unit 3 underground pipework marking*

---

## Annex C Historical Maps



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX


**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

**Map date:** 1840

**Scale:** 1:2,500

**Printed at:** 1:2,500

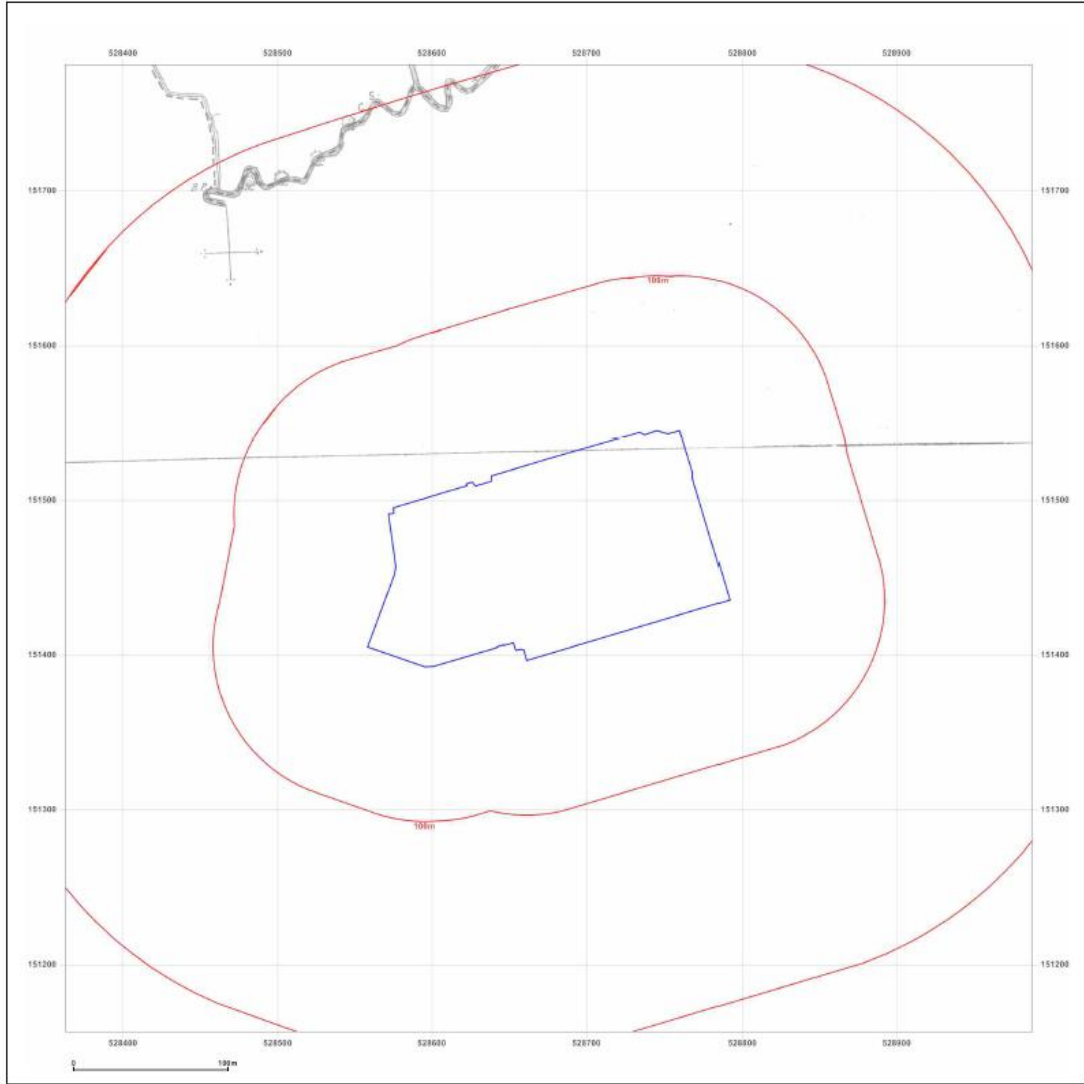
Surveyed 1840  
 Revised 1840  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

**Powered by**  Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/site/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/site/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series  
**Map date:** 1870  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



Surveyed 1870  
 Revised 1870  
 Edition N/A  
 Copyright N/A  
 Levelling N/A



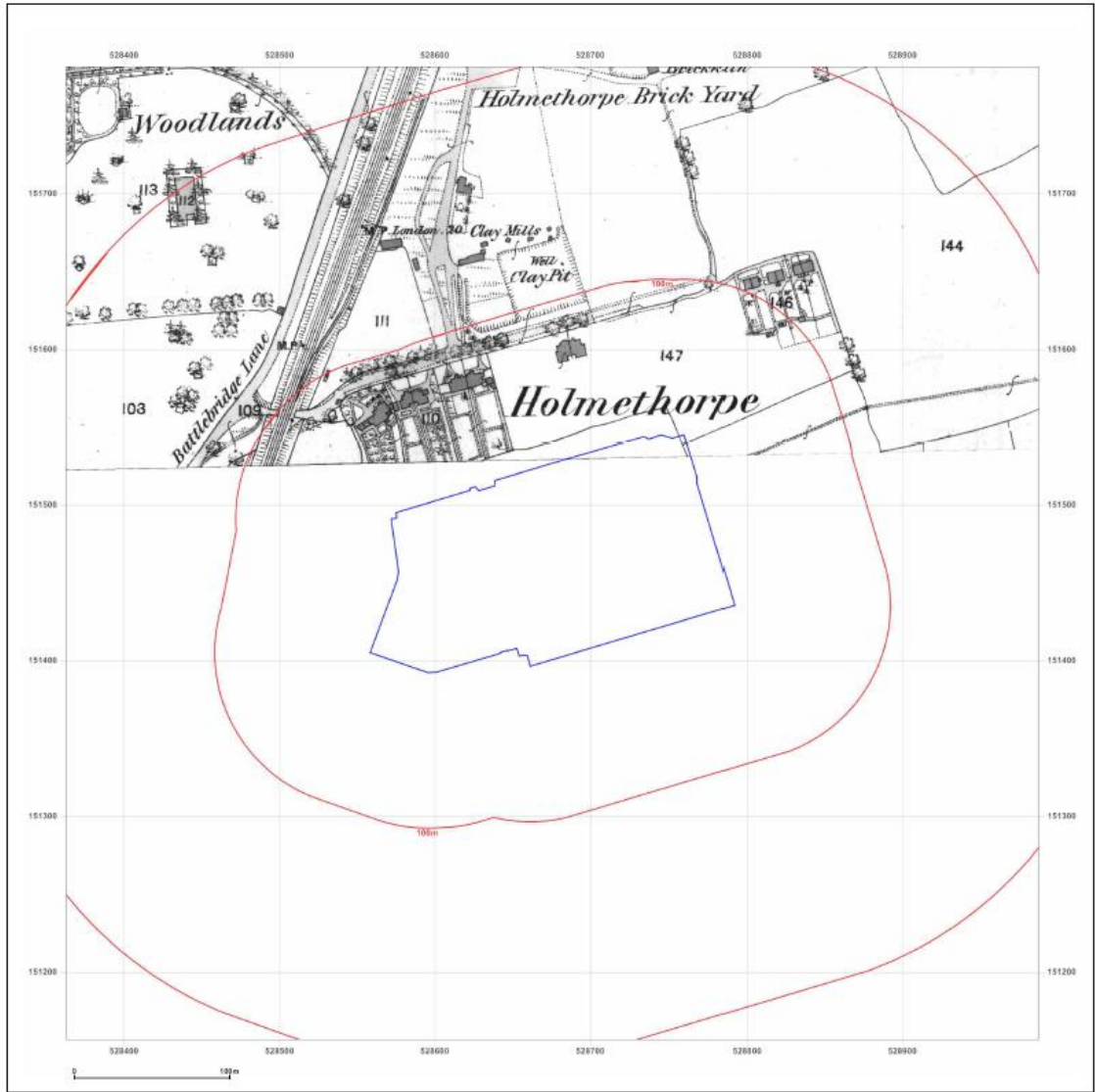
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 TAX

Client Ref: Redhill  
 Report Ref: GS-5932102  
 Grid Ref: 528675, 151469

Map Name: County Series  
 Map date: 1871  
 Scale: 1:2,500  
 Printed at: 1:2,500



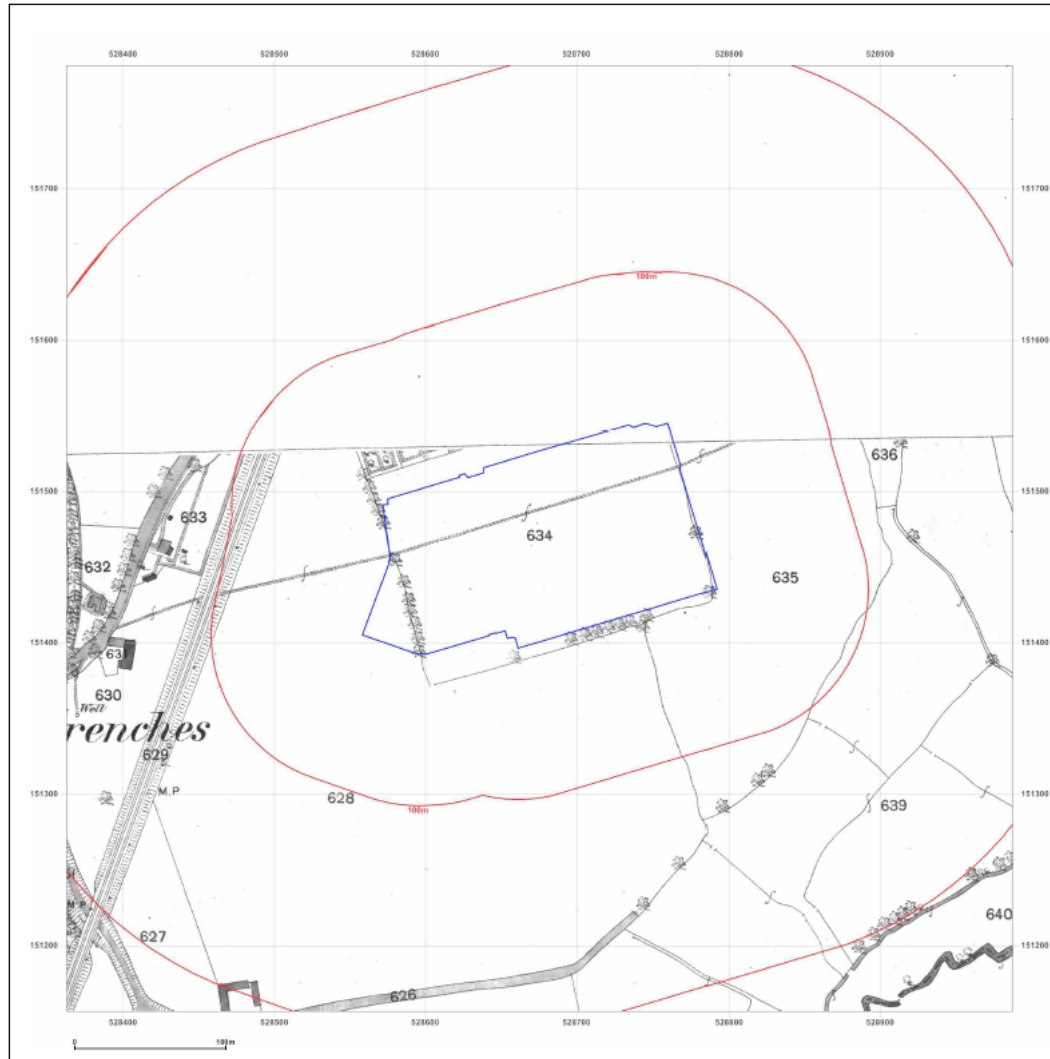
Surveyed 1871  
 Revised 1871  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at: [www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)




**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series  
**Map date:** 1870-1871  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



Surveyed 1870  
 Revised 1870  
 Edition N/A  
 Copyright N/A  
 Levelled N/A



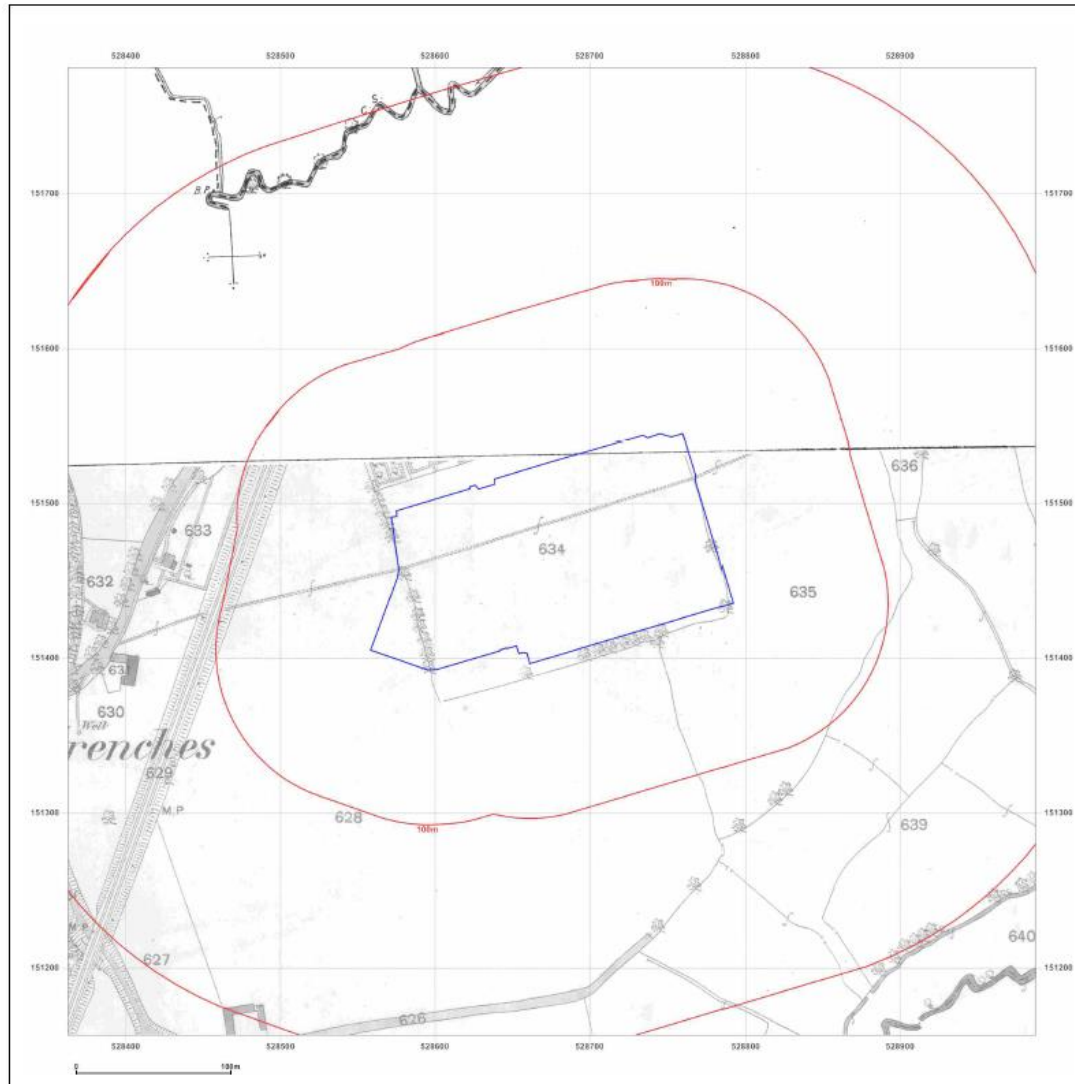
Surveyed 1871  
 Revised 1871  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

**Powered by**  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

**Production date:** 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



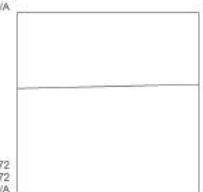
**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series  
**Map date:** 1870-1872  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



Surveyed 1870  
 Revised 1870  
 Edition N/A  
 Copyright N/A  
 Levelled N/A



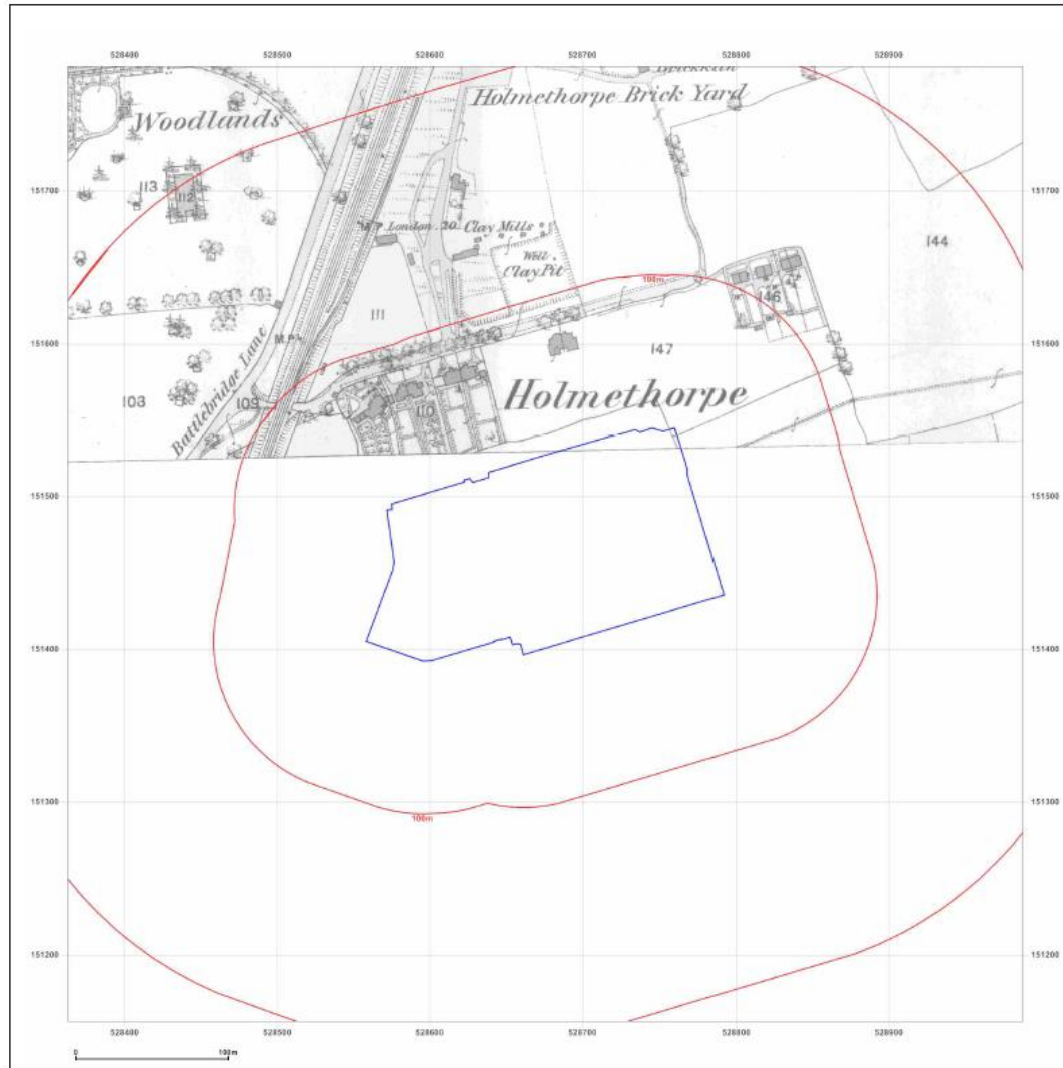
Surveyed 1872  
 Revised 1872  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES  
BOULEVARD, REDHILL, RH1  
1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

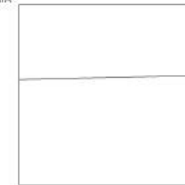
**Map date:** 1874

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1874  
Revised 1874  
Edtion N/A  
Copyright N/A  
Levelled N/A

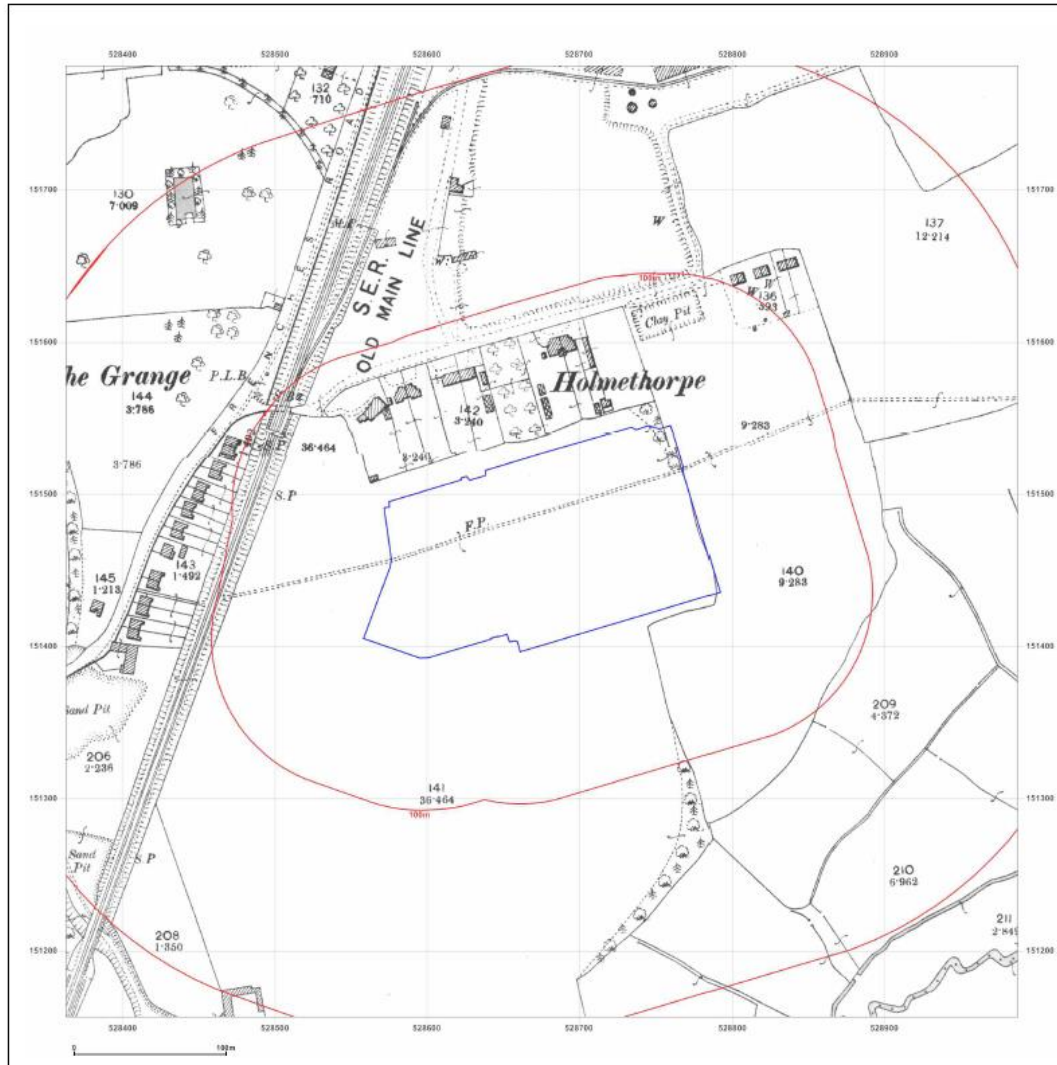


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 TAX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

**Map date:** 1896

**Scale:** 1:2,500

**Printed at:** 1:2,500



<p>Surveyed 1896                  Revised 1896                  Edition N/A                  Copyright N/A                  Levelled N/A</p>	
<p>Surveyed 1896                  Revised 1896                  Edition N/A                  Copyright N/A                  Levelled N/A</p>	



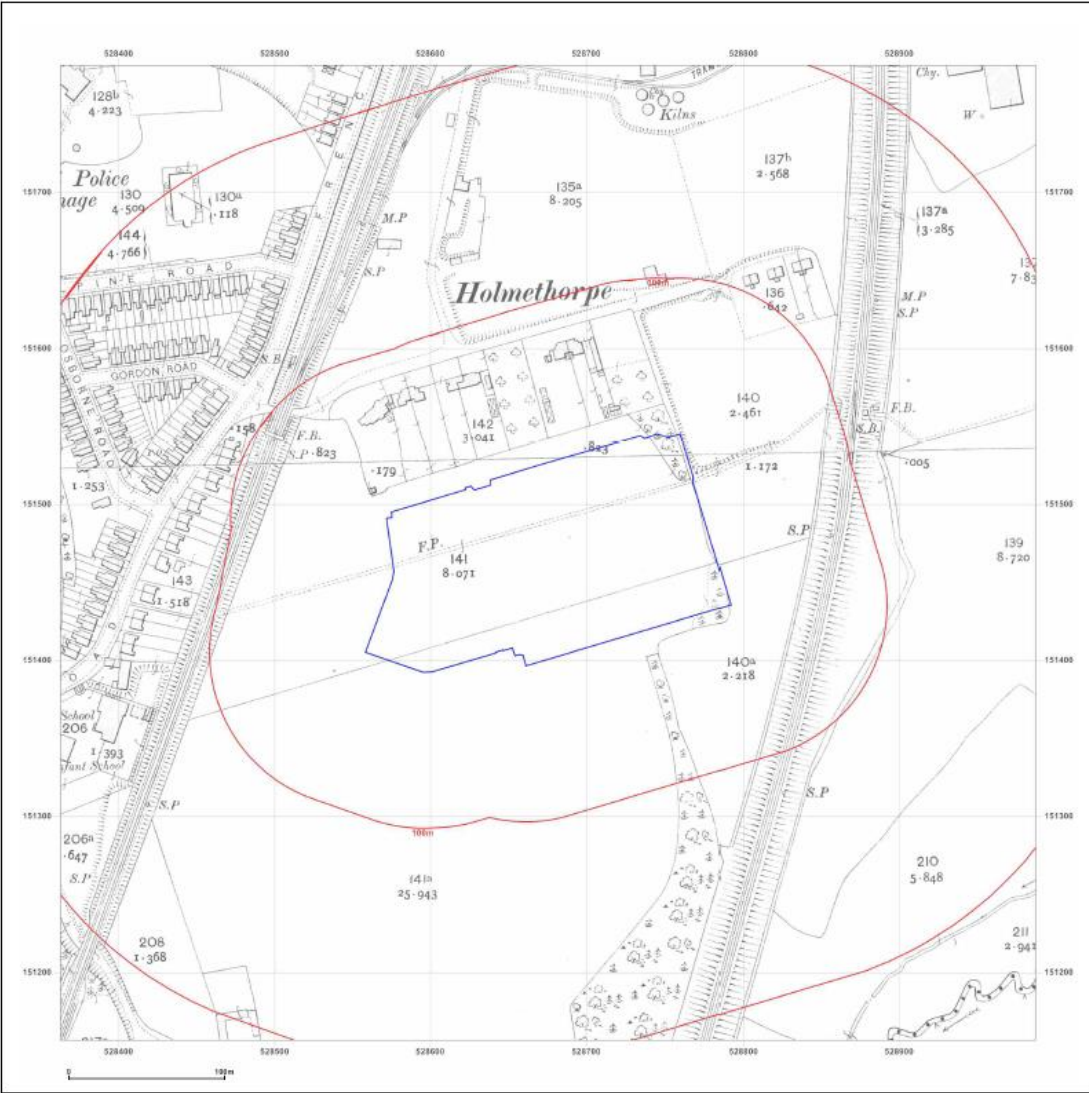
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

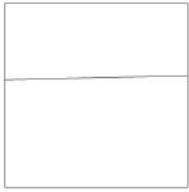
**Map date:** 1913

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1913  
 Revised 1913  
 Edition N/A  
 Copyright N/A  
 Levelled N/A



Surveyed 1913  
 Revised 1913  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

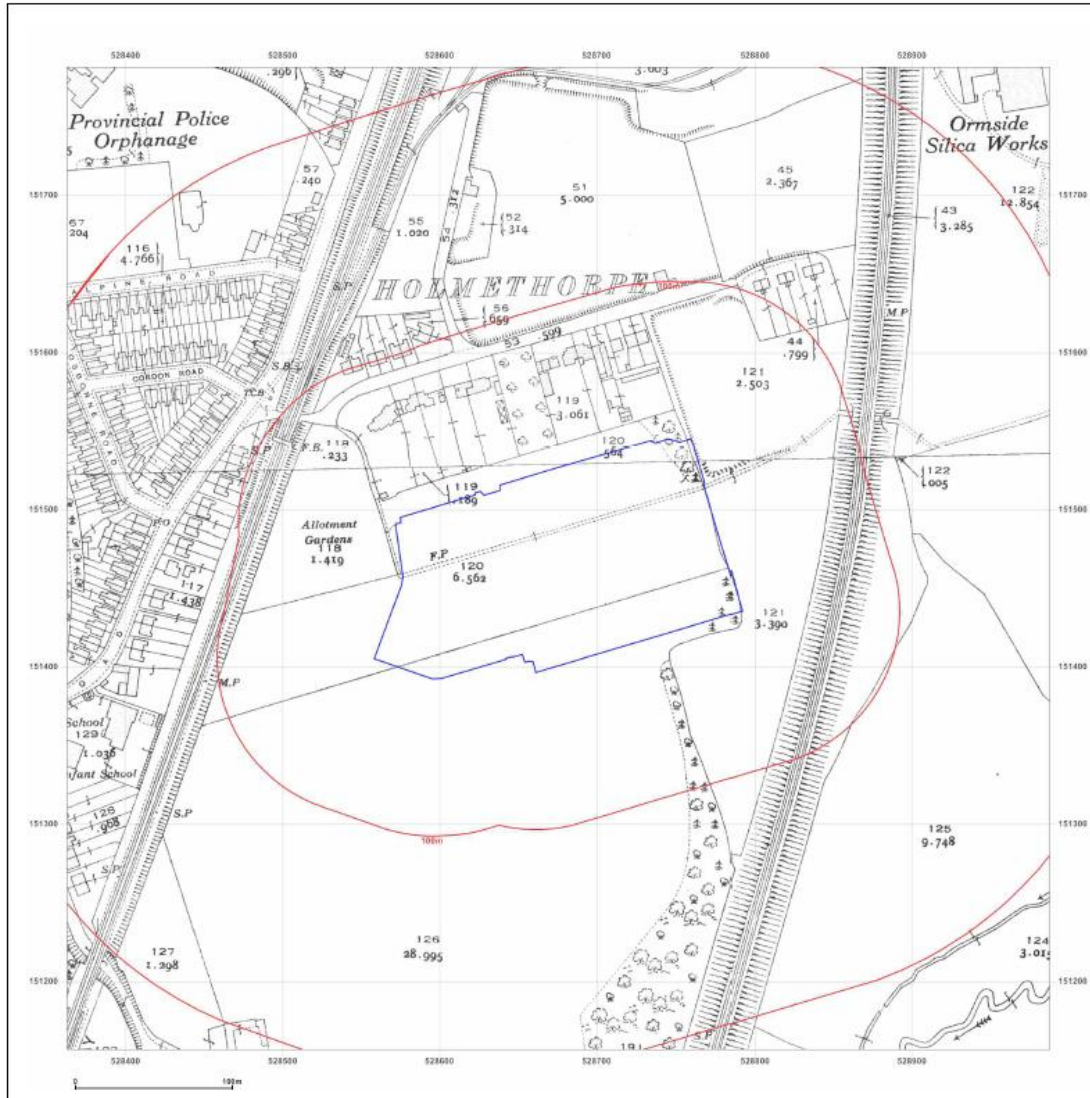


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

**Map date:** 1933

**Scale:** 1:2,500

**Printed at:** 1:2,500

Surveyed 1933  
 Revised 1933  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

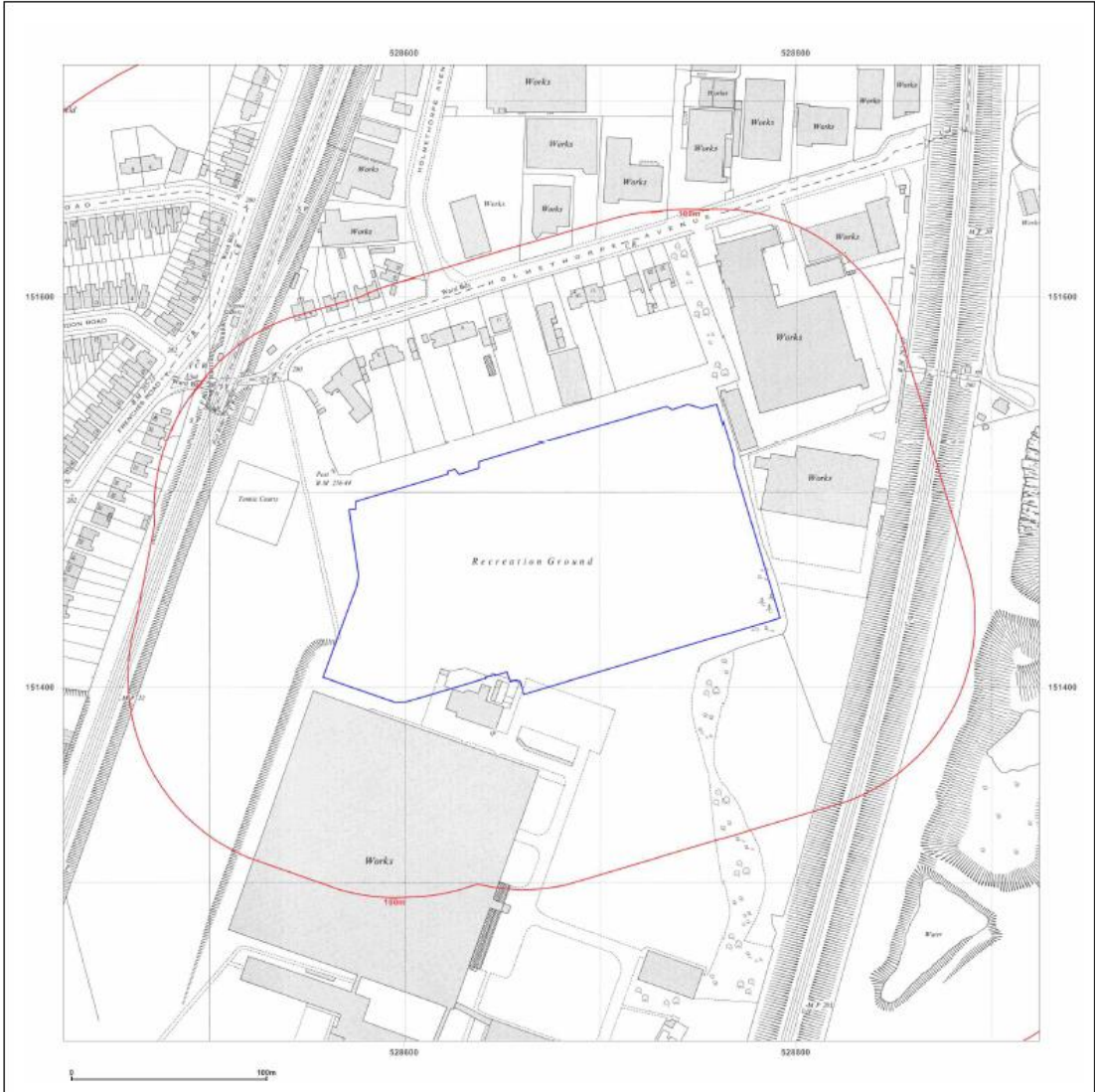
Surveyed 1933  
 Revised 1933  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at: [www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1963-1964  
**Scale:** 1:1,250  
**Printed at:** 1:2,000



Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1950	Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1950
Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1950	Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled N/A



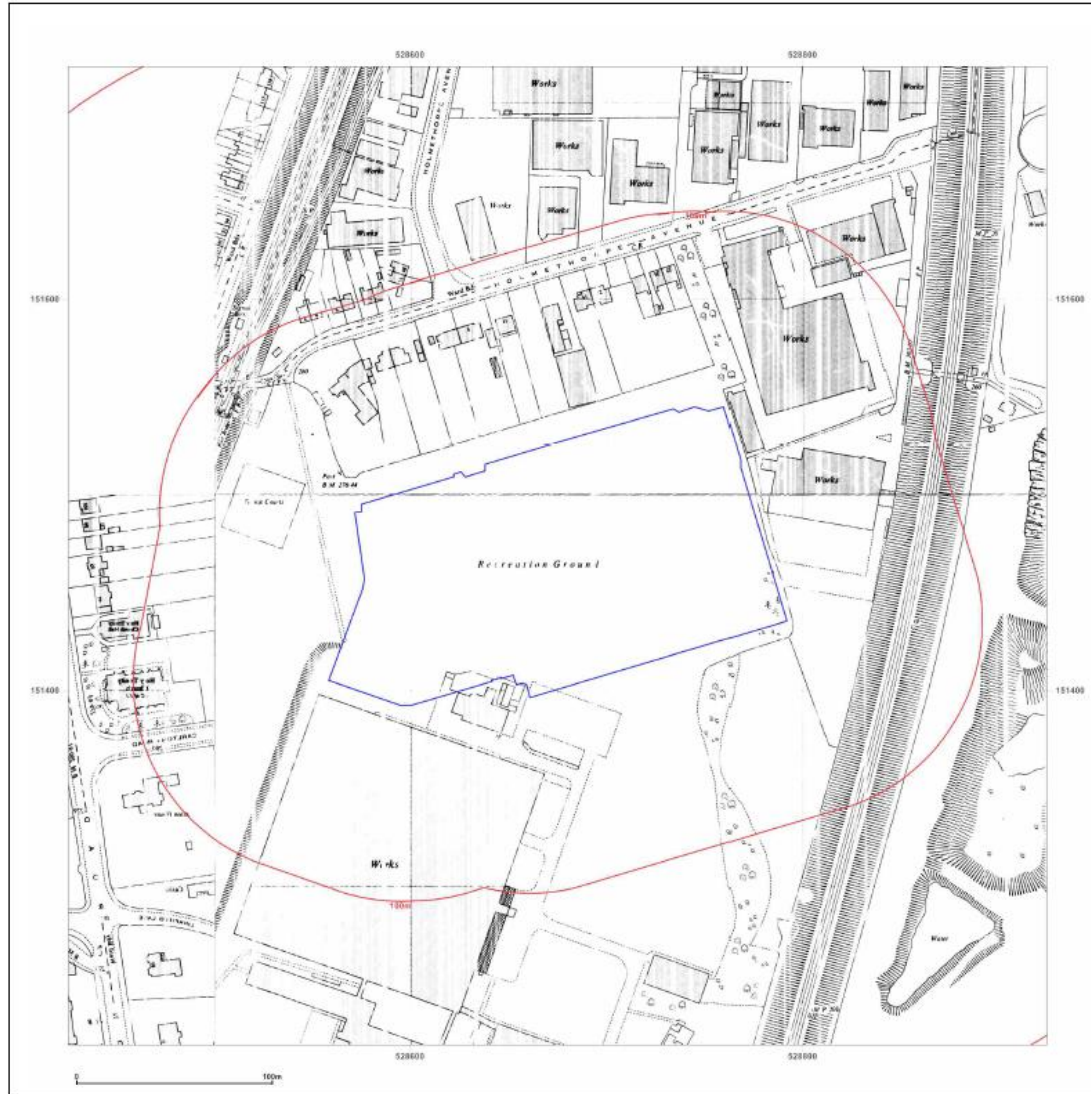
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1964  
**Scale:** 1:1,250  
**Printed at:** 1:2,000



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

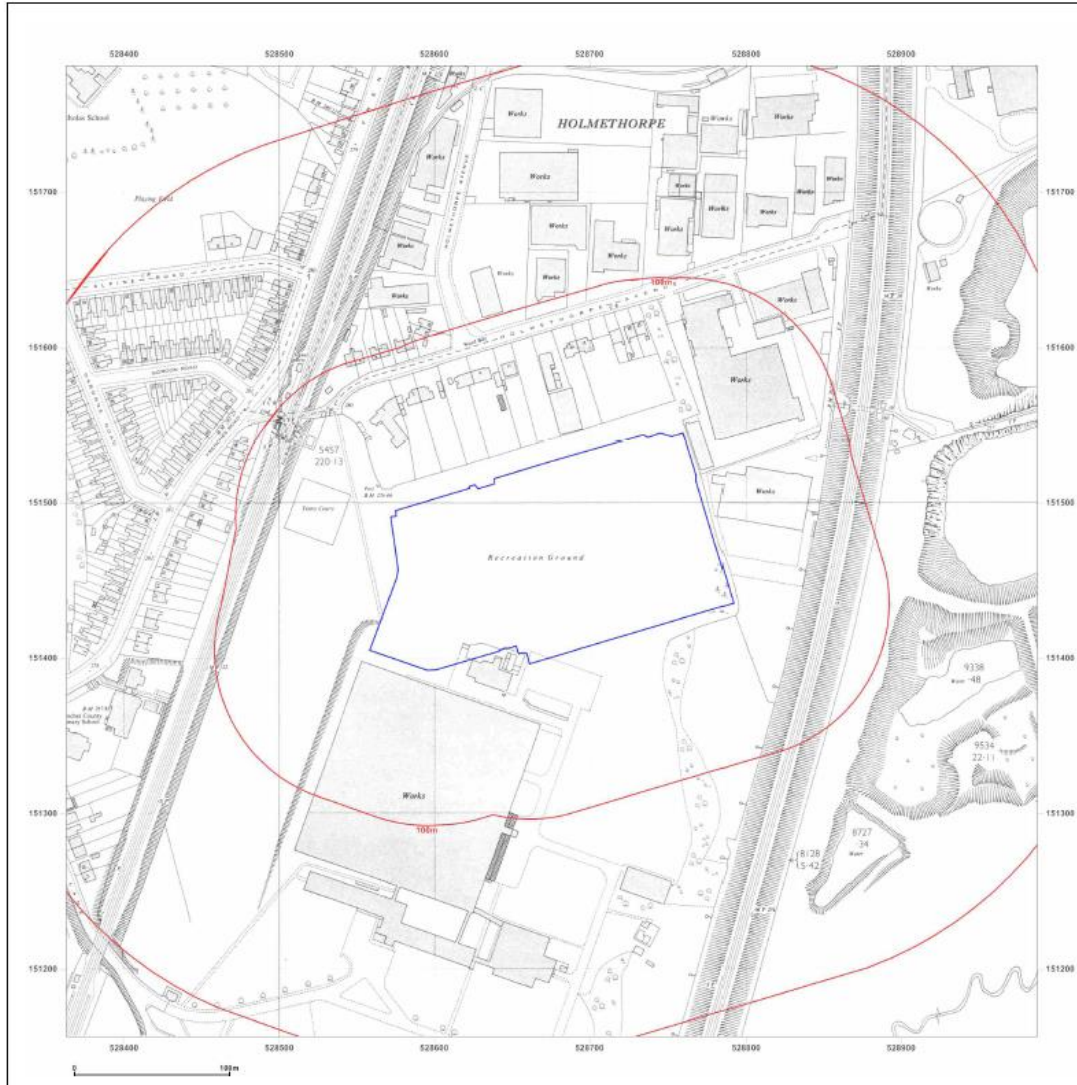


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1965  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



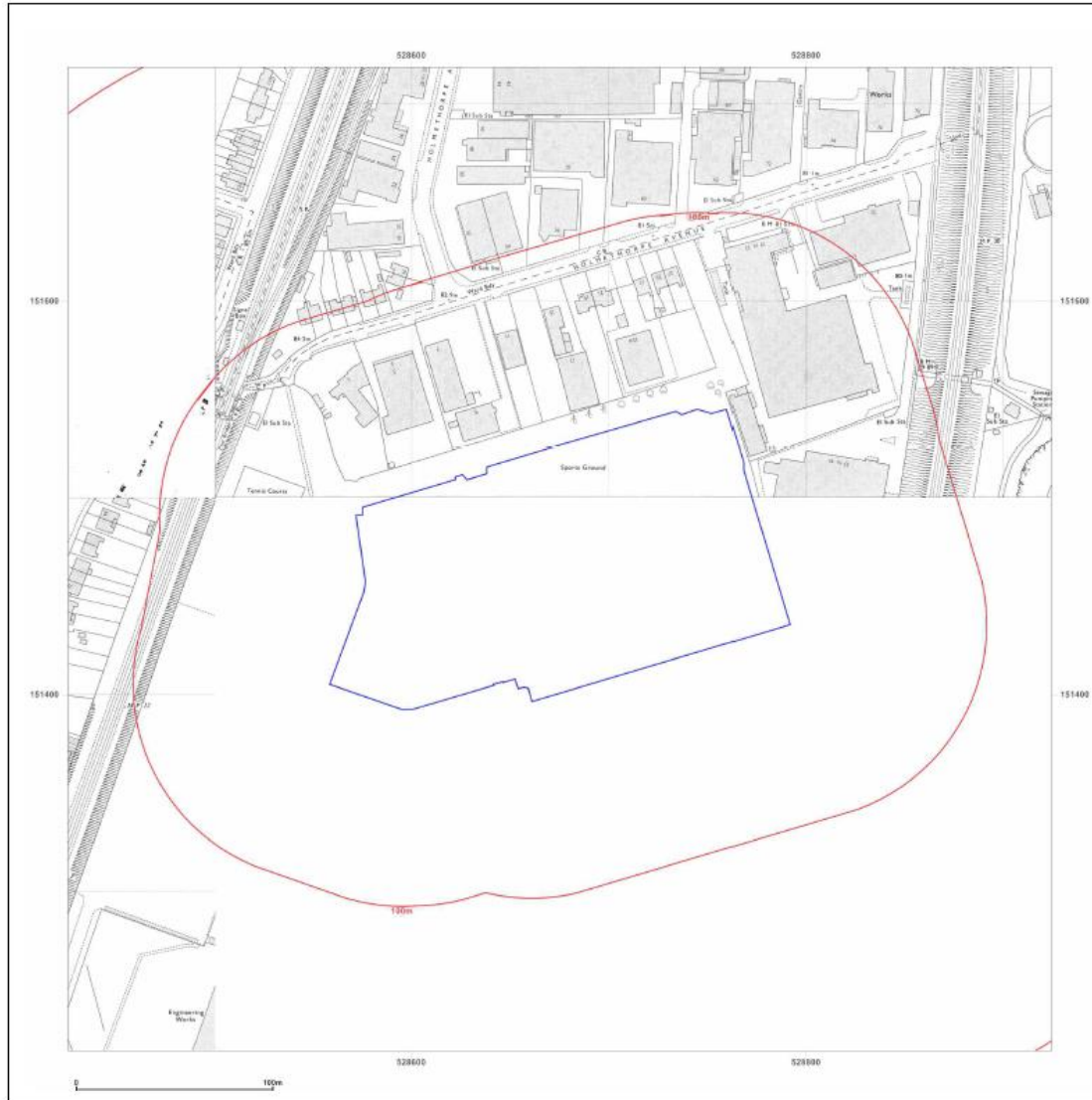
Surveyed 1965  
 Revised 1965  
 Edition N/A  
 Copyright 1967  
 Levelled 1963

**Powered by**  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at: [www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932 102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1970-1974  
**Scale:** 1:1,250  
**Printed at:** 1:2,000

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

Surveyed 1963  
 Revised 1971  
 Edition N/A  
 Copyright 1972  
 Levelled 1963

Surveyed 1963  
 Revised 1969  
 Edition N/A  
 Copyright 1970  
 Levelled 1963

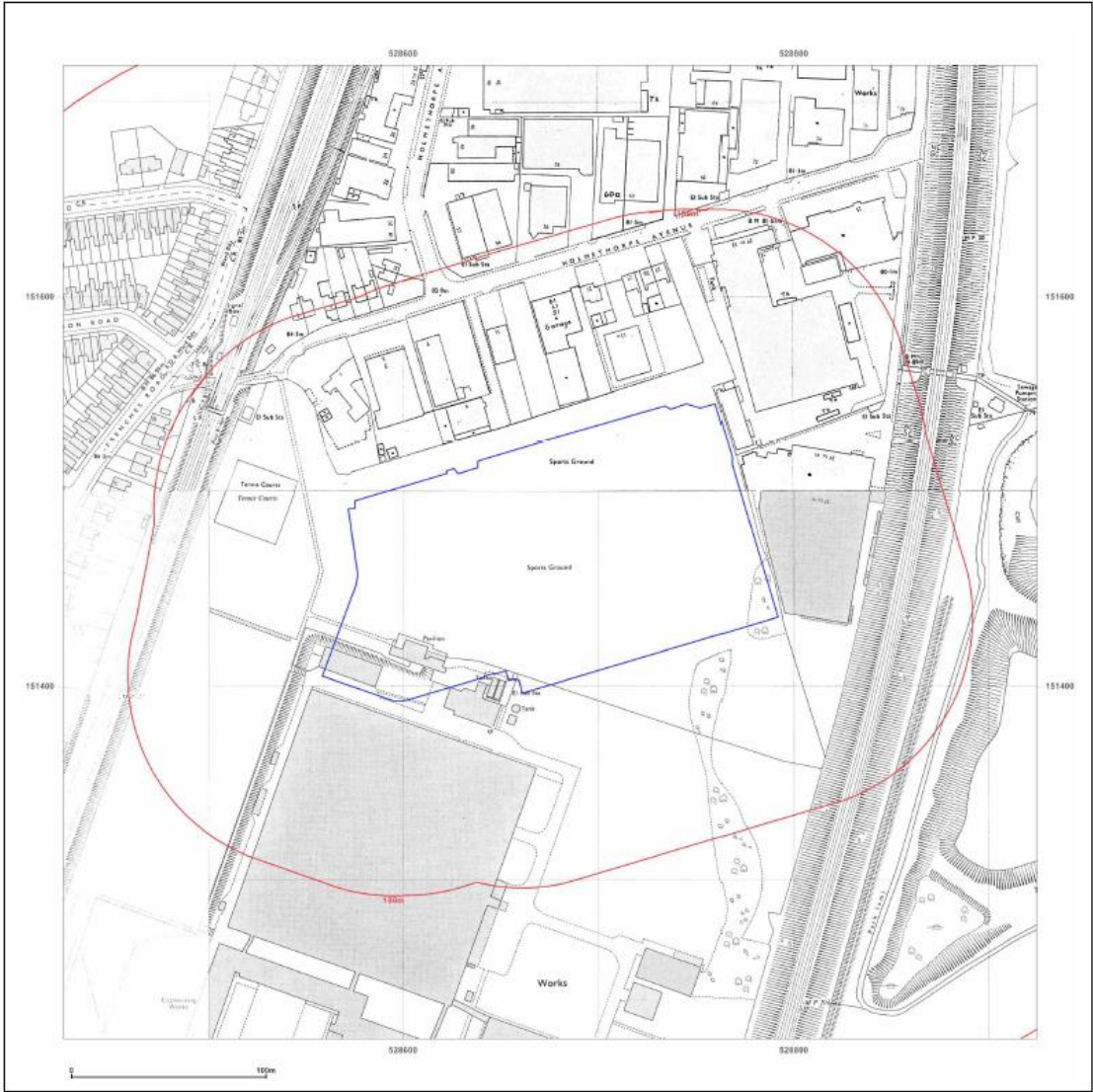
Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at: [www.groundsure.com/site/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/site/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 TAX

**Client Ref:** Redhill  
**Report Ref:** GS-5932 102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1977-1982  
**Scale:** 1:1,250  
**Printed at:** 1:2,000



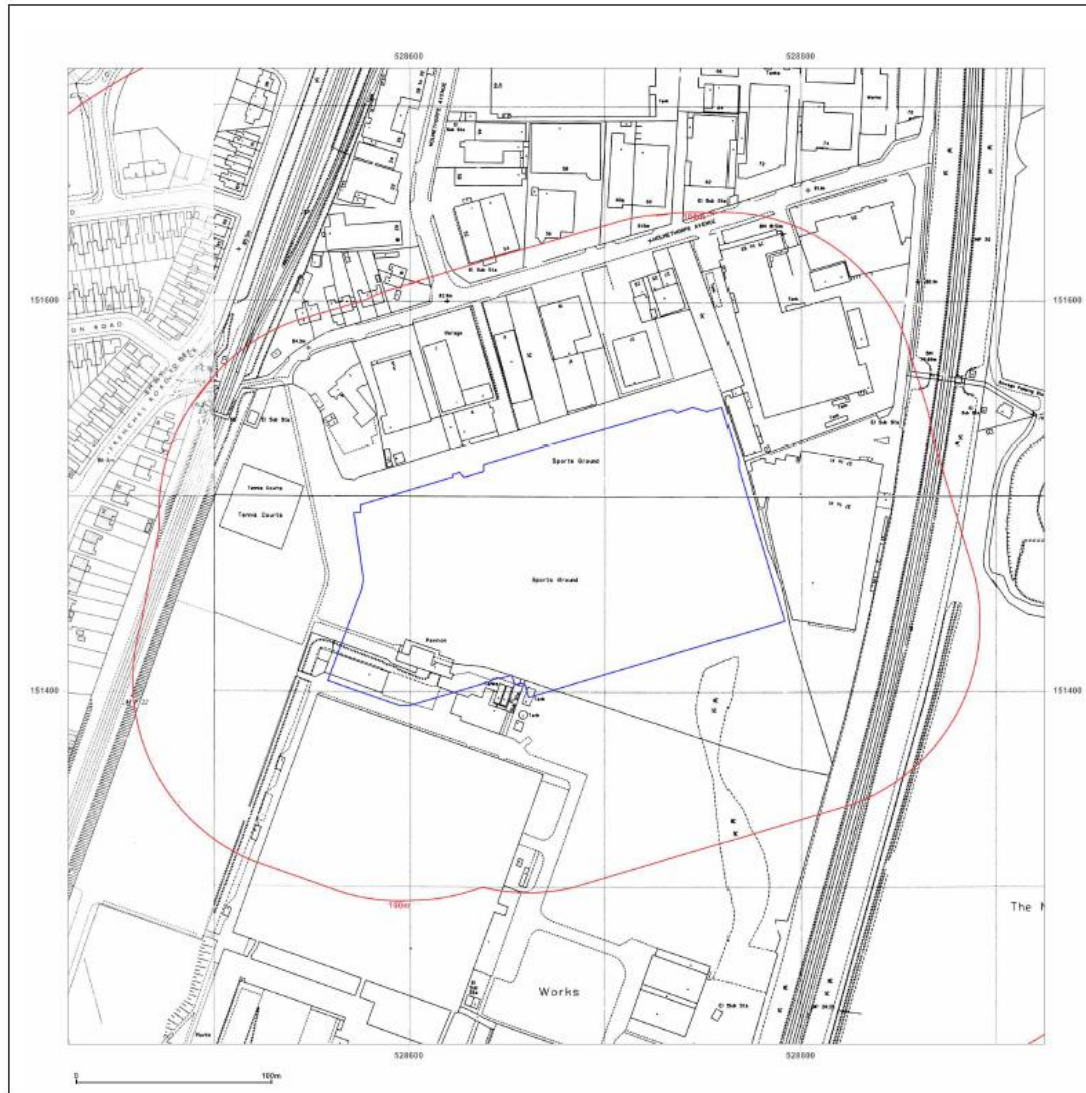
Surveyed 1963 Revised 1976 Edition N/A Copyright 1977 Levelled 1963	Surveyed N/A Revised N/A Edition N/A Copyright 1982 Levelled 1964
Surveyed N/A Revised N/A Edition N/A Copyright 1980 Levelled N/A	Surveyed 1963 Revised 1976 Edition N/A Copyright 1977 Levelled 1963

Powered by  Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and data base rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid

**Map date:** 1989-1992

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed 1964	Surveyed N/A
Revised 1990	Revised N/A
Edition N/A	Edition N/A
Copyright 1980	Copyright 1992
Levelled 1964	Levelled N/A

Surveyed 1964	Surveyed N/A
Revised 1989	Revised N/A
Edition N/A	Edition N/A
Copyright 1989	Copyright 1992
Levelled 1964	Levelled N/A

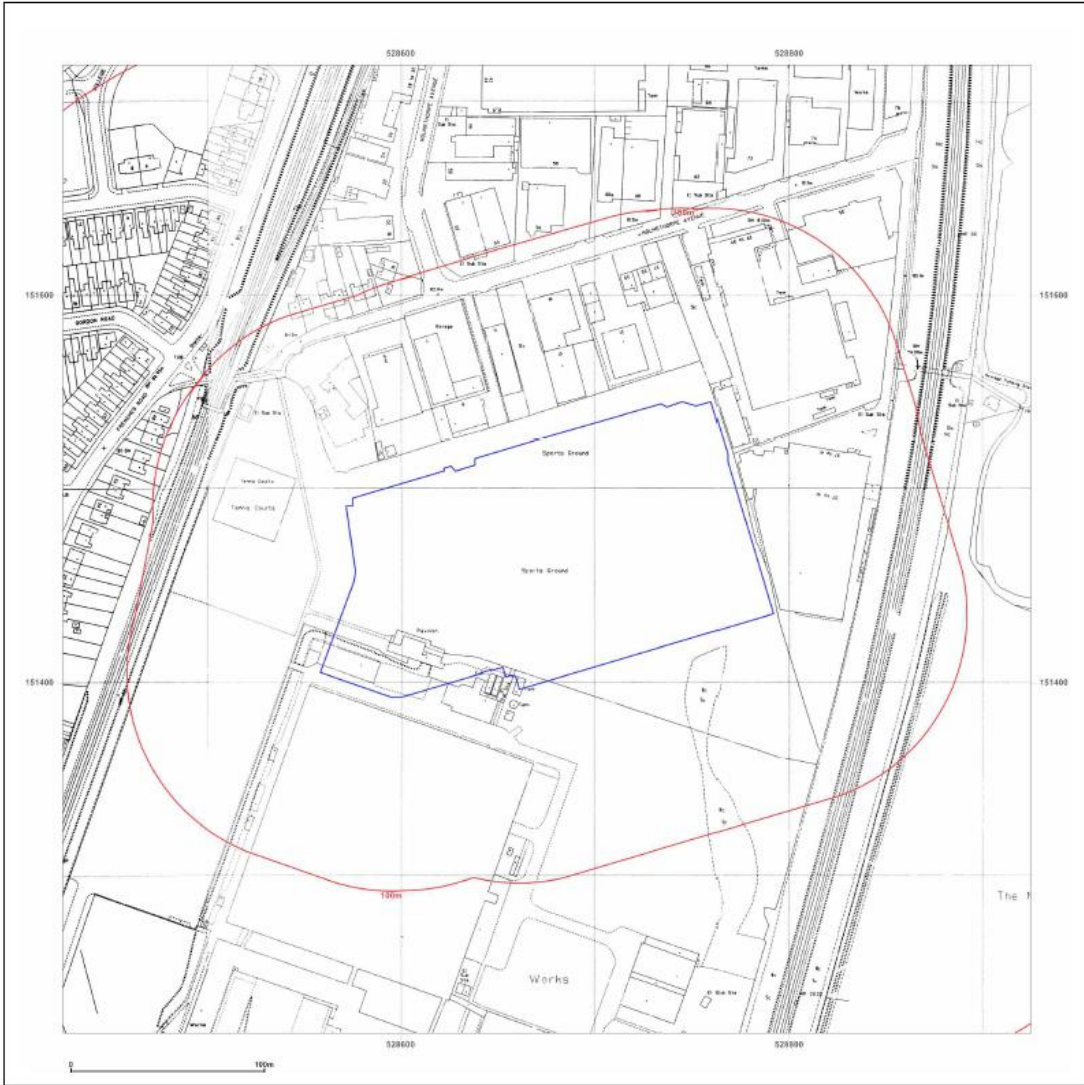


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid

**Map date:** 1992-1995

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1995 Levelled N/A
Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1994 Levelled N/A



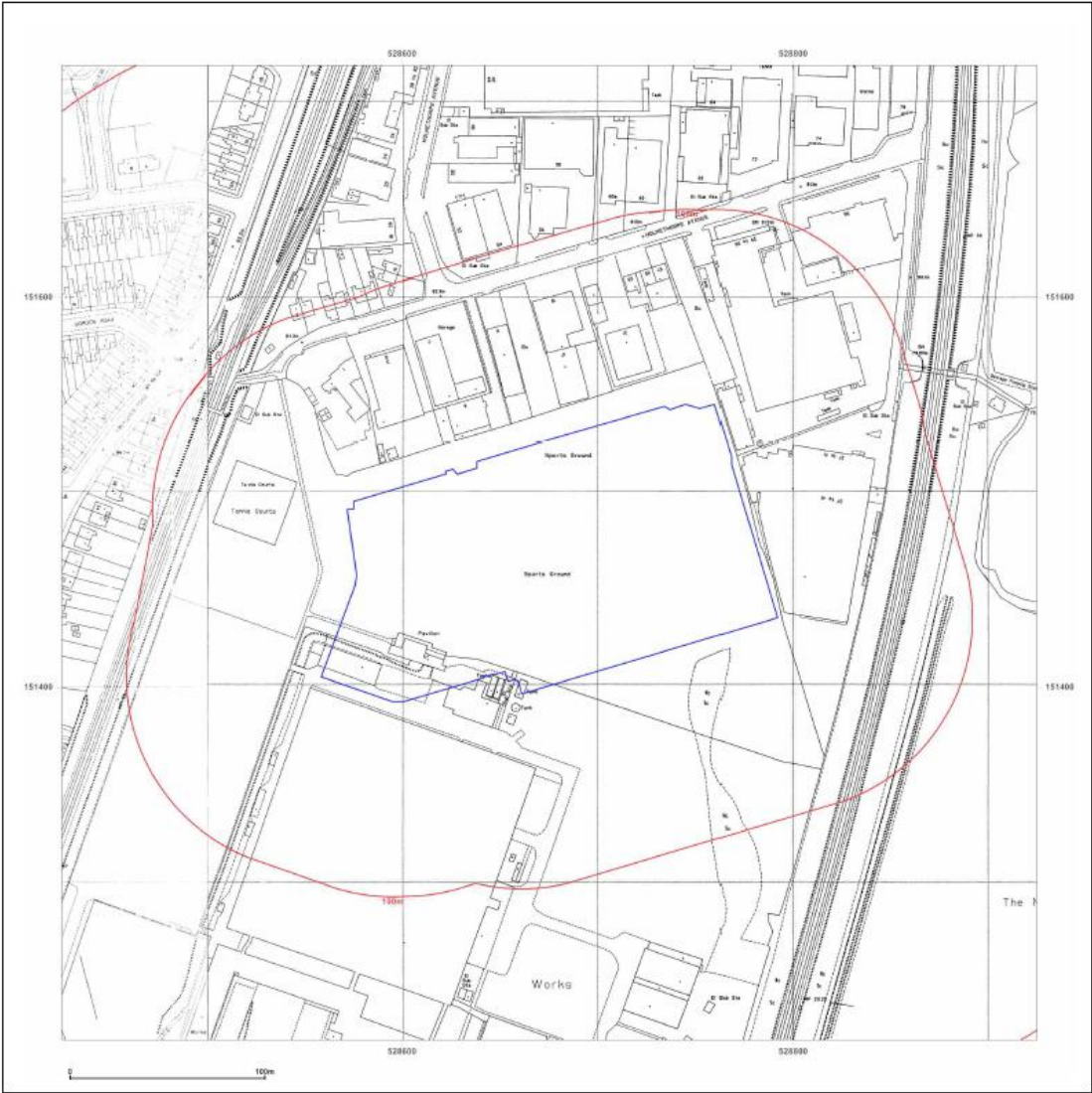
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)






**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932 102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1994-1995  
**Scale:** 1:1,250  
**Printed at:** 1:2,000



Surveyed N/A Revised N/A Edition N/A Copyright 1865 Levelled N/A	Surveyed 1995 Revised 1995 Edition N/A Copyright N/A Levelled N/A
Surveyed N/A Revised N/A Edition N/A Copyright 1994 Levelled N/A	Surveyed 1994 Revised 1994 Edition N/A Copyright N/A Levelled N/A



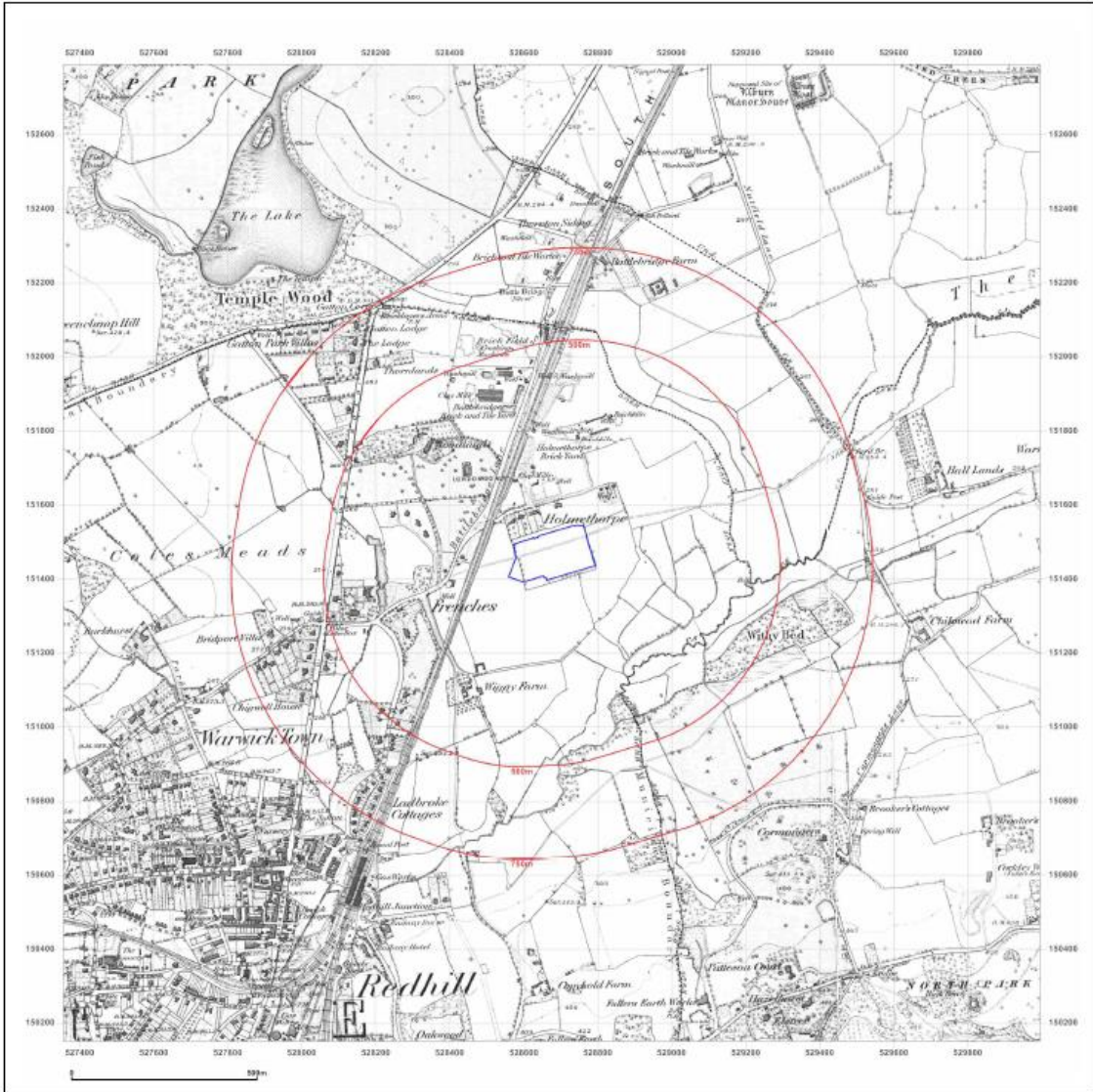
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights: 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX

**Client Ref:** Redhill\_  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

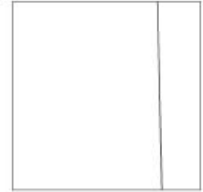
**Map date:** 1869

**Scale:** 1:10,560

**Printed at:** 1:10,560



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

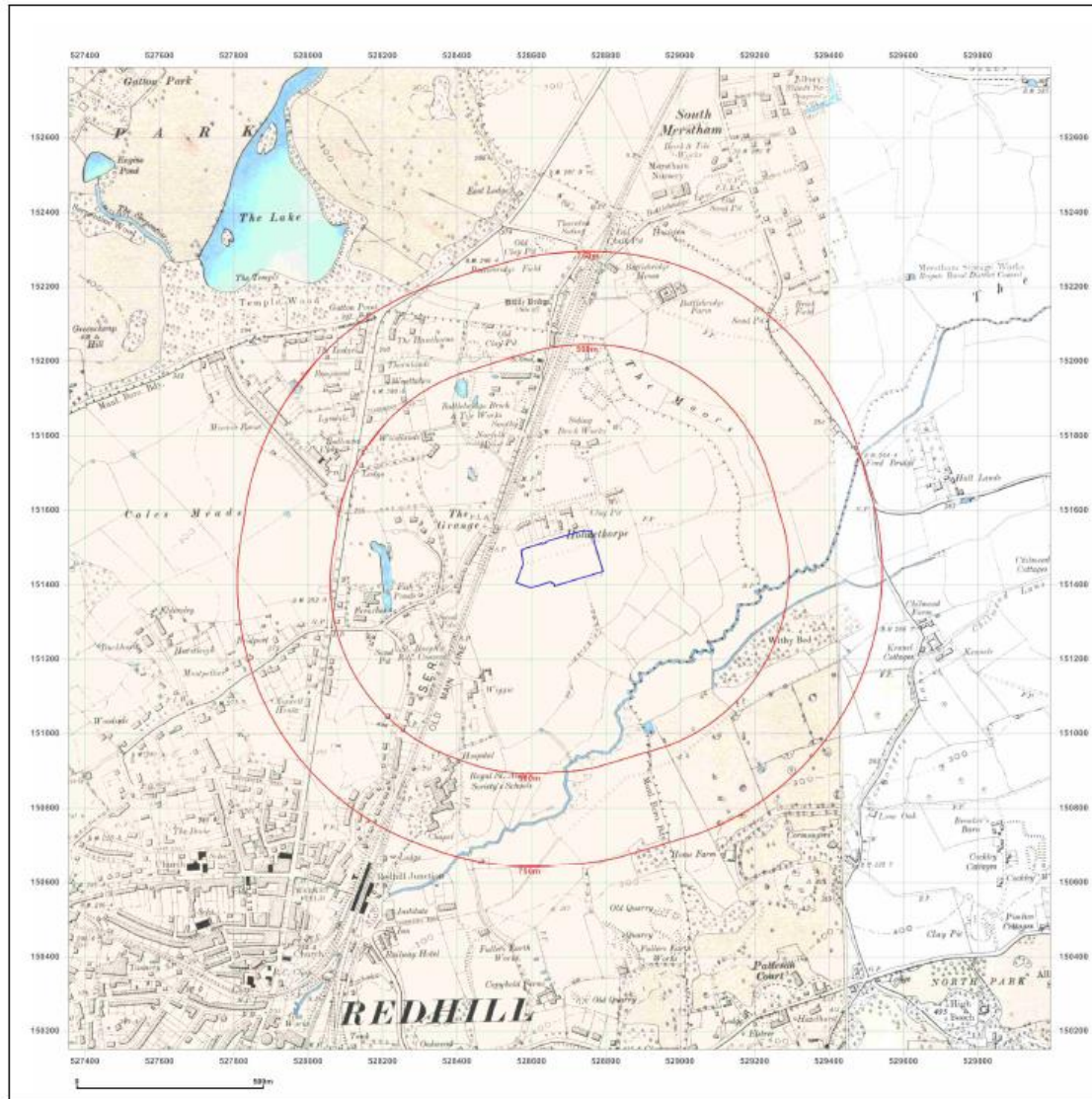


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

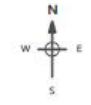
**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series

**Map date:** 1895-1897

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1871  
 Revised 1895  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Surveyed 1869  
 Revised 1895  
 Edition N/A  
 Copyright N/A  
 Levelled N/A



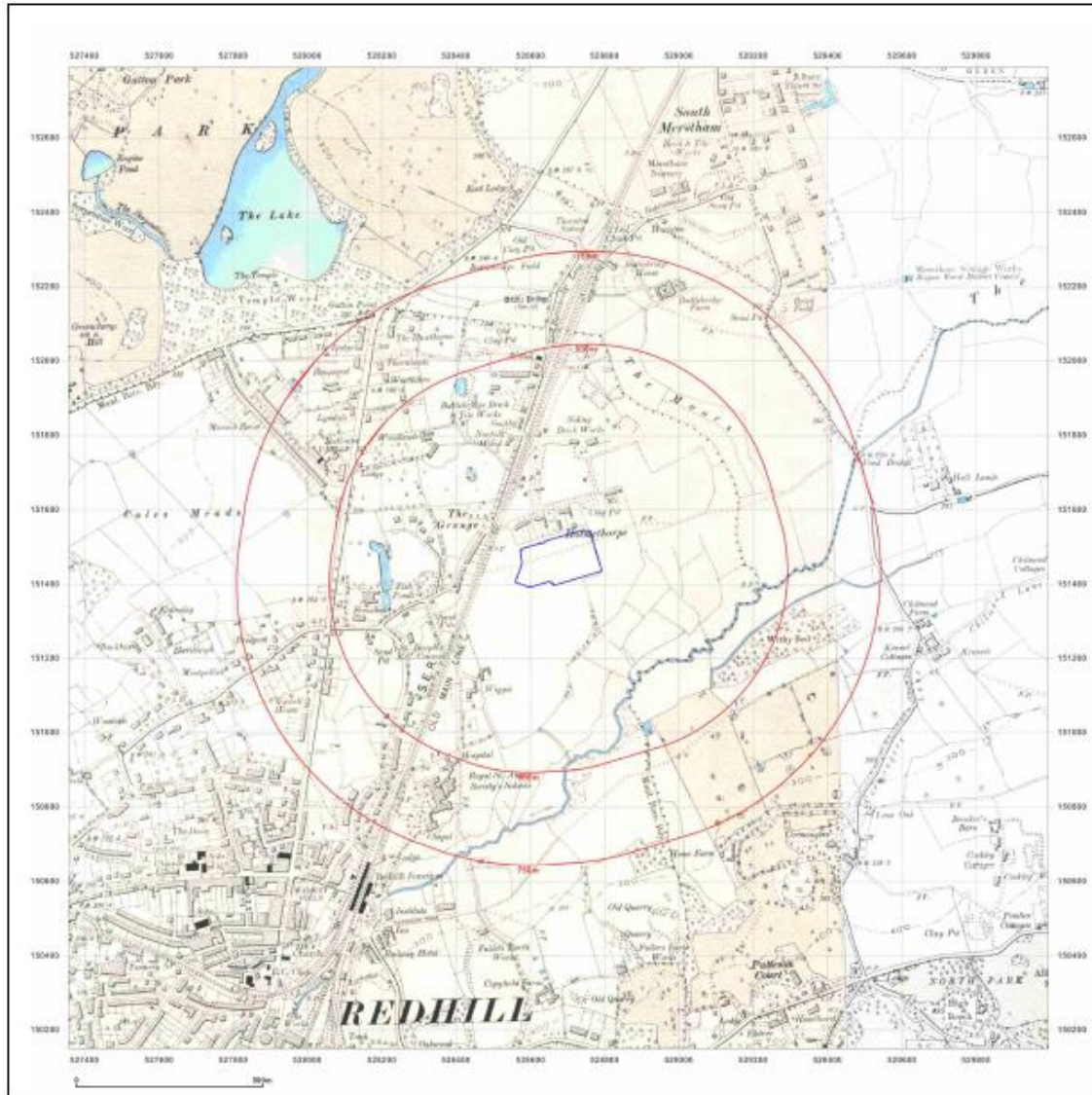
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 1 000 35207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/gtcc/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/gtcc/default/files/groundsure_legend.pdf)





**Site Details:**

DIGITAL REALTY, 3, ST ANNES  
BOULEVARD, REDHILL, RH1  
TAX

Client Ref: Redhill  
Report Ref: GS-5932102  
Grid Ref: 528675, 151469

Map Name: County Series

Map date: 1895-1898

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871  
Revised 1885  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1880  
Revised 1885  
Edition N/A  
Copyright N/A  
Levelled N/A

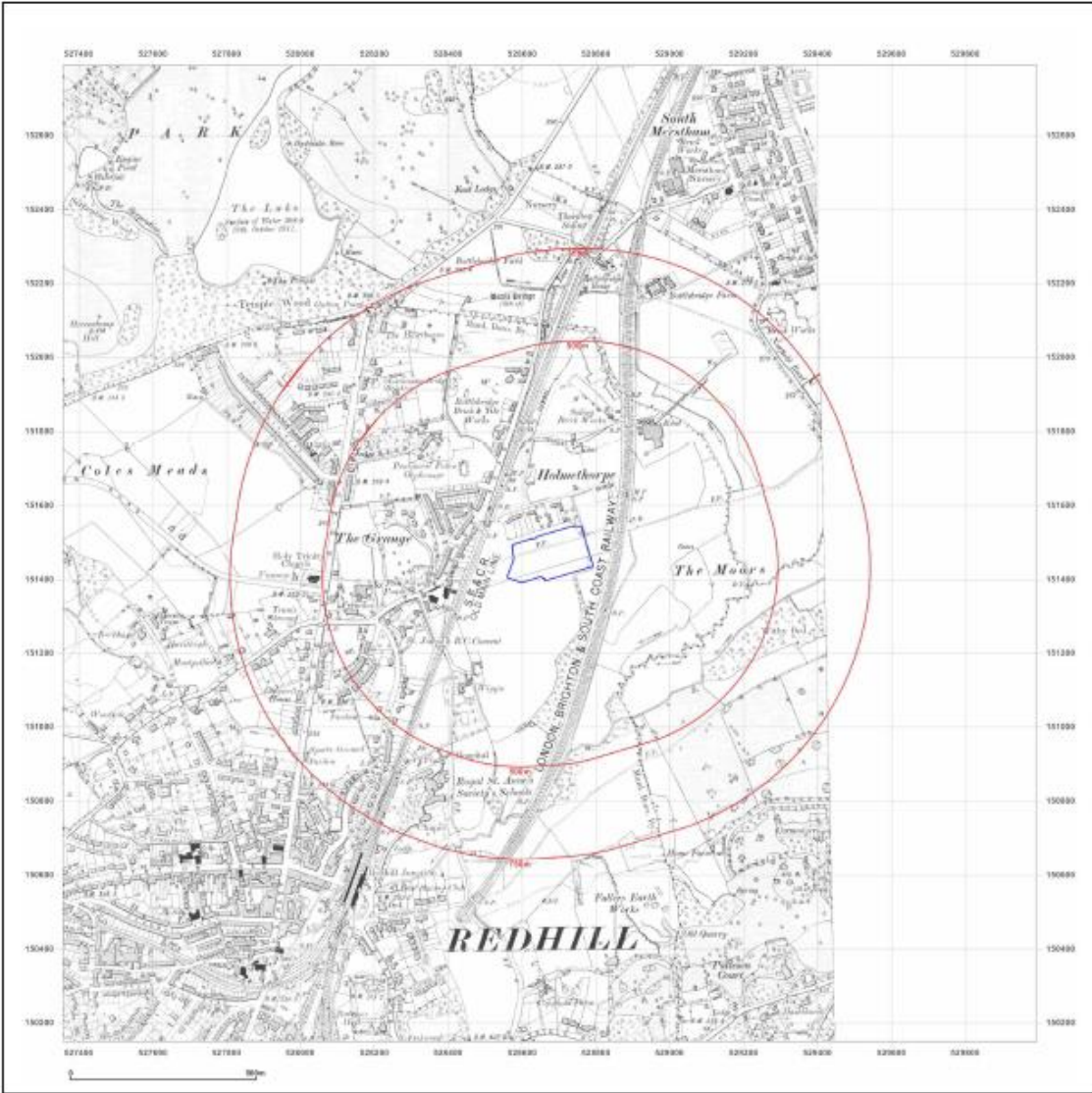


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100025207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series  
**Map date:** 1920  
**Scale:** 1:10,560  
**Printed at:** 1:10,560



Surveyed 1870  
 Revised 1912  
 Edition 1920  
 Copyright NIA  
 Levelled NIA

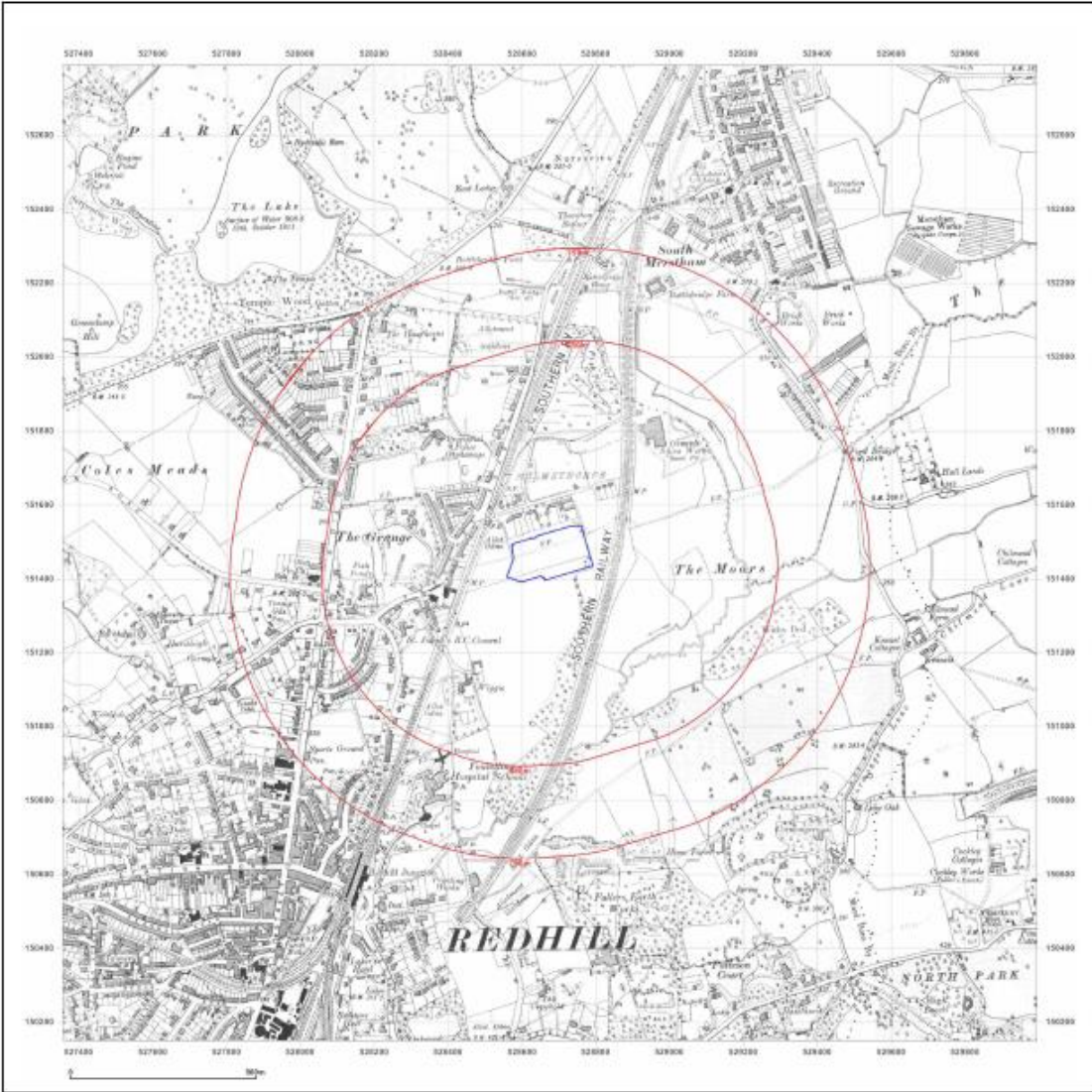
**Powered by**  
 Produced by Groundsure Insights  
 T: 08444 15900  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** County Series  
**Map date:** 1933-1934  
**Scale:** 1:10,560  
**Printed at:** 1:10,560



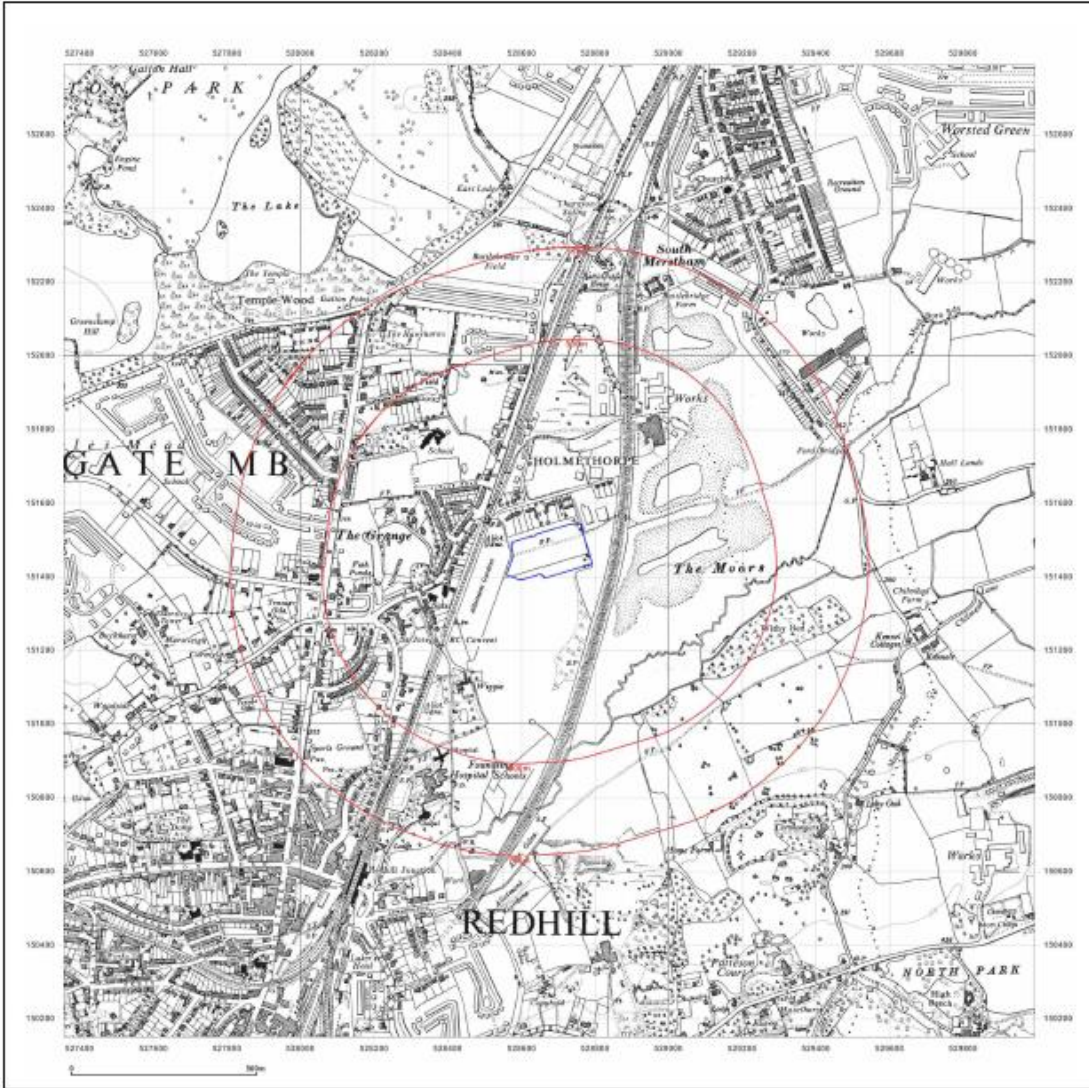
Surveyed 1870 Revised 1933 Edition N/A Copyright N/A Levelled N/A	Surveyed 1950 Revised 1924 Edition N/A Copyright N/A Levelled N/A
-------------------------------------------------------------------------------	-------------------------------------------------------------------------------

Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** Provisional  
**Map date:** 1955  
**Scale:** 1:10,560  
**Printed at:** 1:10,560



Surveyed 1955  
 Revised 1955  
 Edited N/A  
 Copyright N/A  
 Licensed N/A



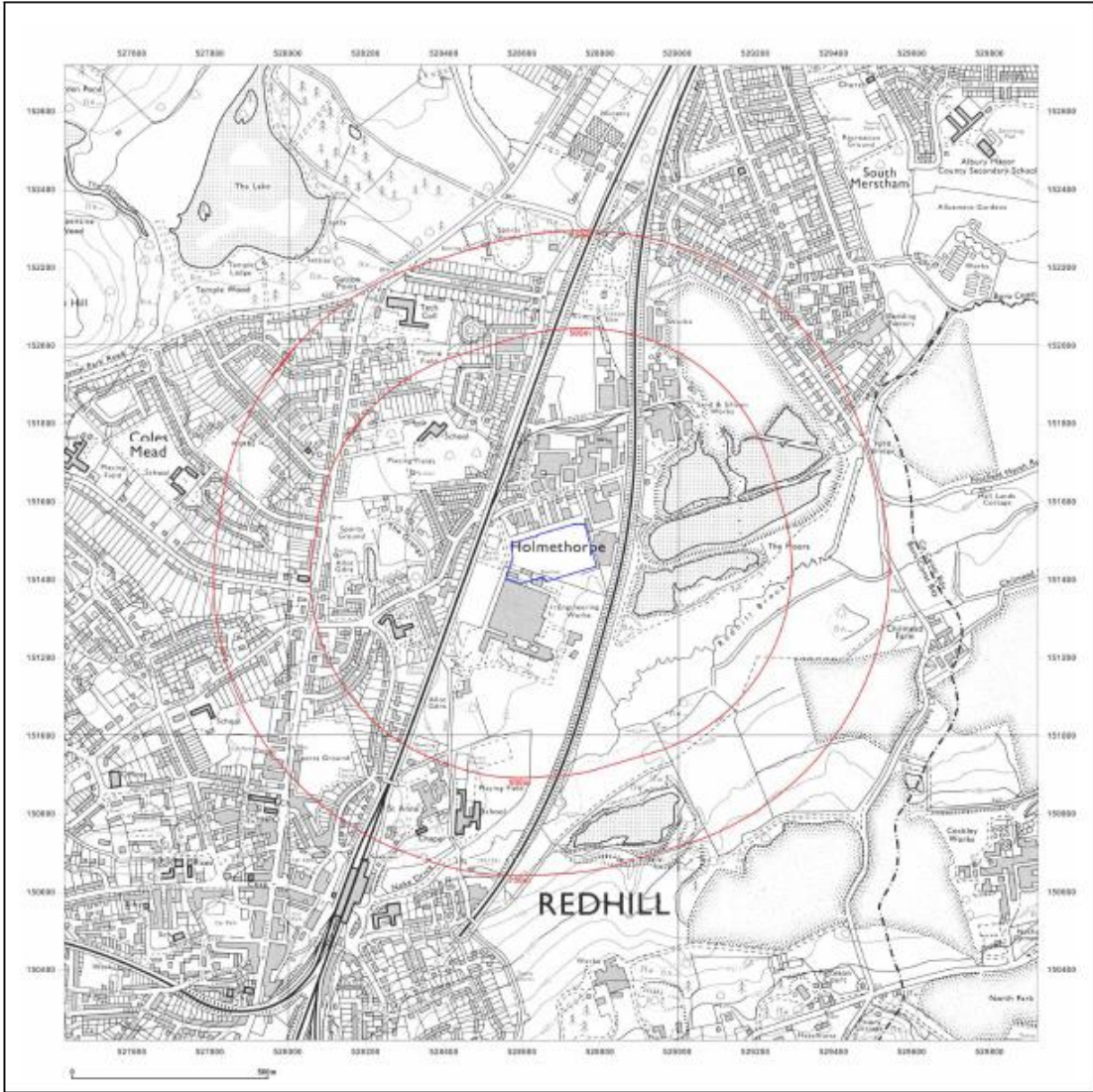
Produced by  
 Groundsure Insights  
 T: 08444 15900  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1974  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



Surveyed 1974  
 Revised 1974  
 Edited N/A  
 Copyright N/A  
 Licensed N/A



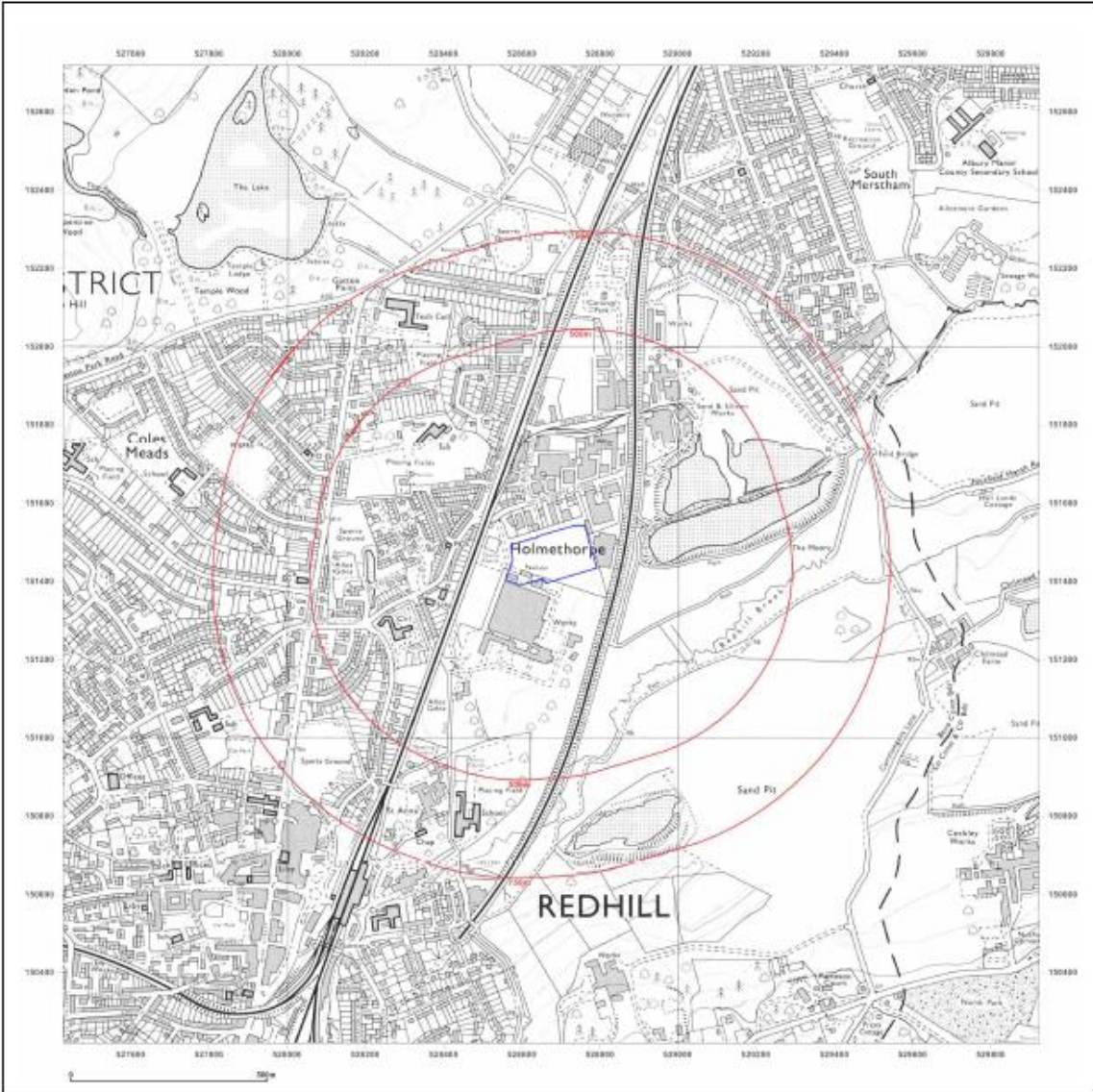
Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100025207

Production date: 08 April 2019

Map legend available at  
[www.groundsure.com/files/infocentre/infocentre-groundsure-legend.pdf](http://www.groundsure.com/files/infocentre/infocentre-groundsure-legend.pdf)





**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES  
 BOULEVARD, REDHILL, RH1  
 TAX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 1988  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



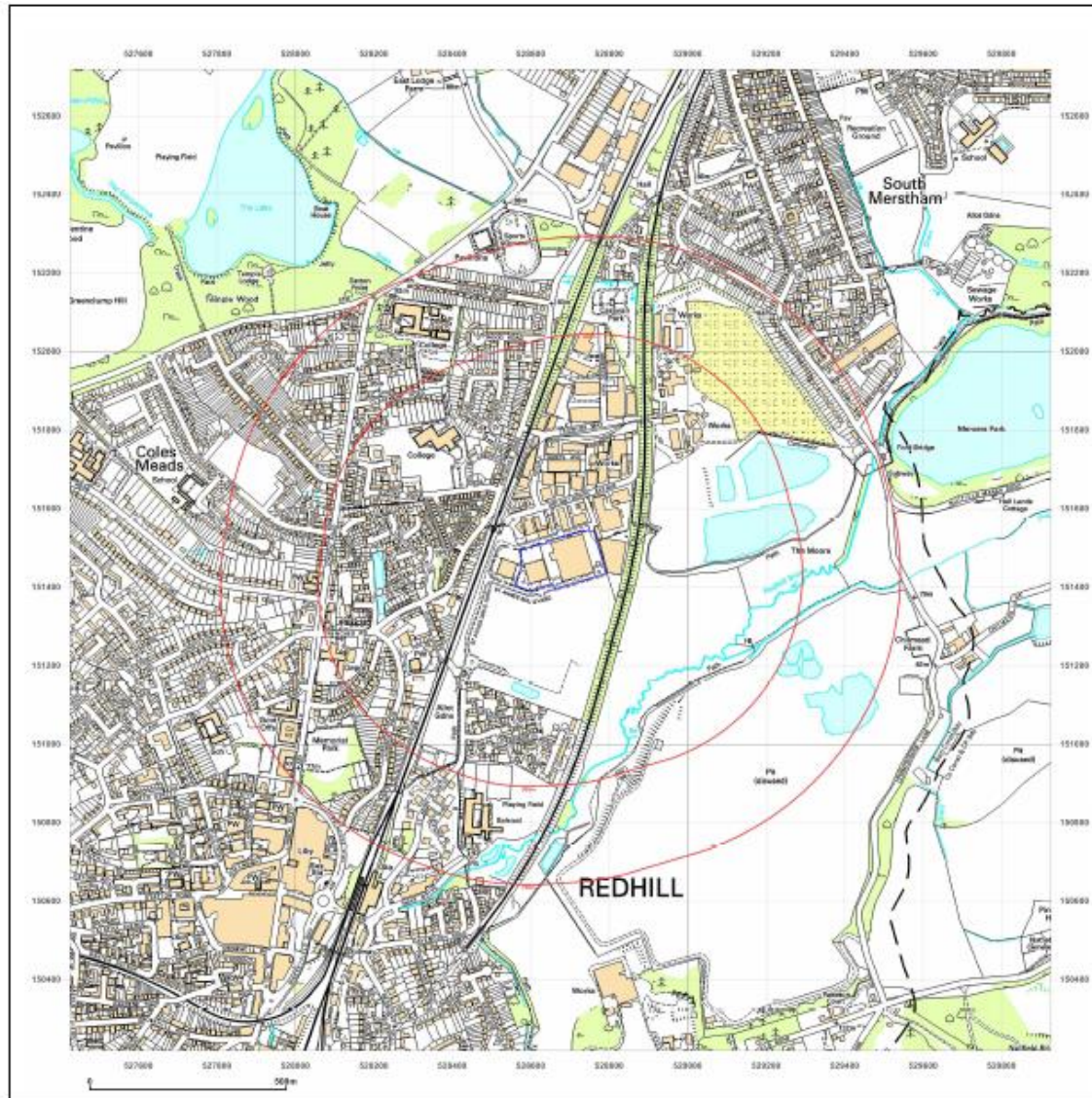
Surveyed 1977  
 Revised 1979  
 Edited N/A  
 Copyright N/A  
 Levelled N/A

**Powered by**  
 Produced by  
 Groundsure Insights  
 T: 0844 4 15 90 00  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

DIGITAL REALTY, 3, ST ANNES  
BOULEVARD, REDHILL, RH1  
1AX

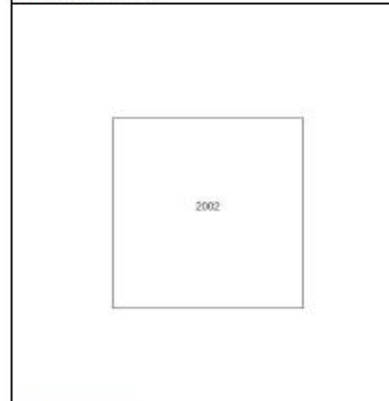
Client Ref: Redhill  
Report Ref: GS-5932102  
Grid Ref: 528675, 151469

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



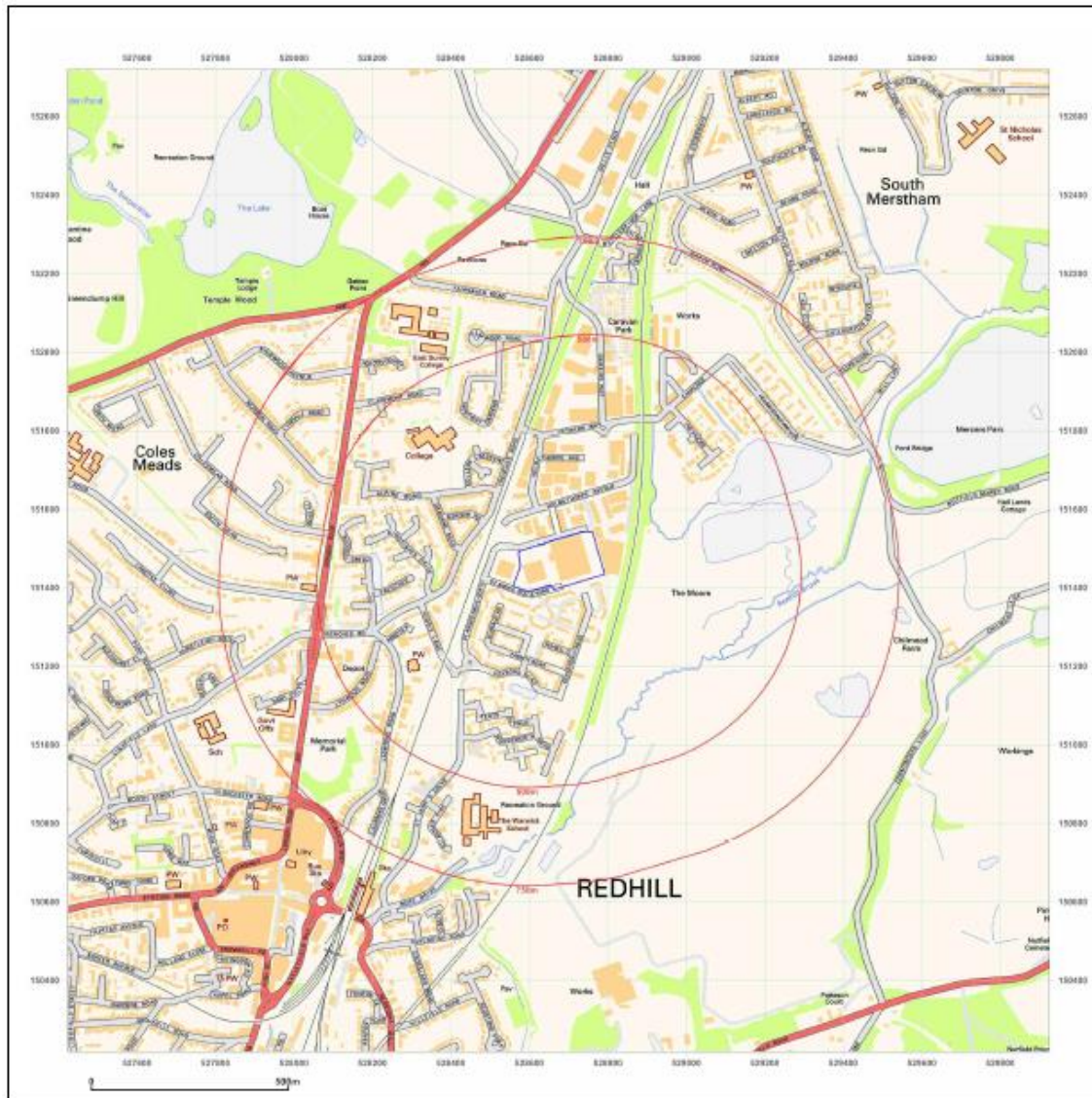
Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 08 April 2019

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

DIGITAL REALTY, 3, ST ANNES  
BOULEVARD, REDHILL, RH1  
1AX

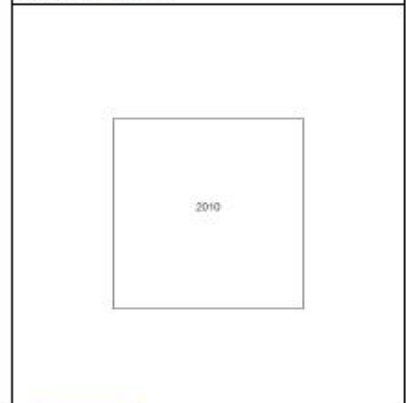
Client Ref: Redhill  
Report Ref: GS-5932102  
Grid Ref: 528675, 151469

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

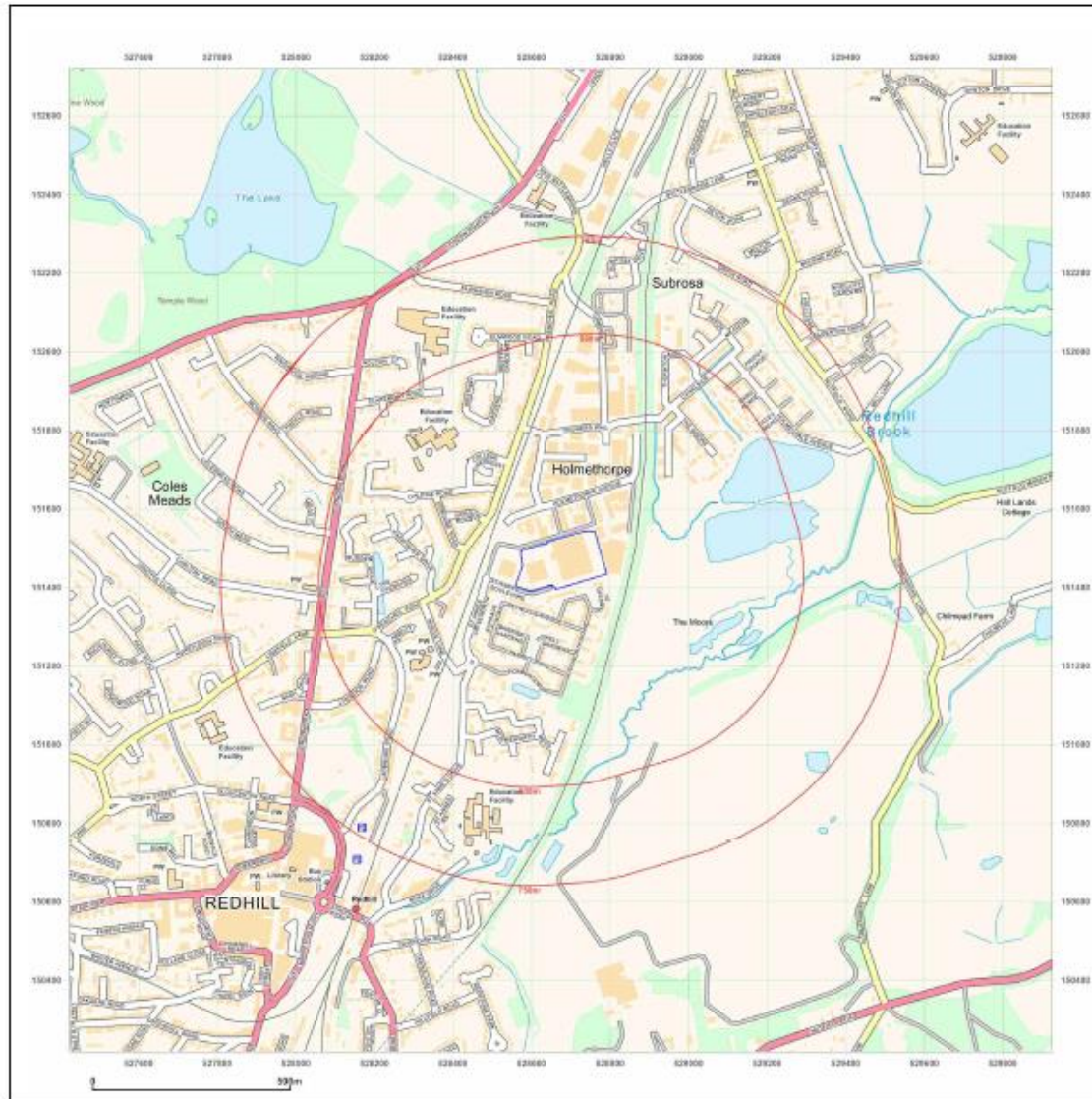


Produced by  
Groundsure Insights  
T: 08444 15900  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 09 April 2019

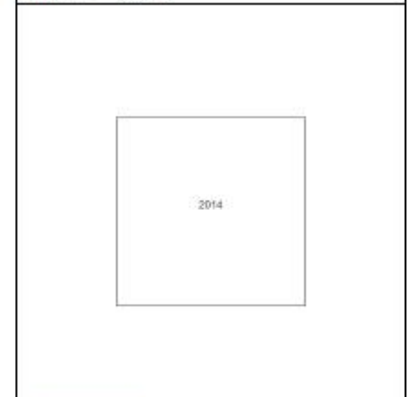
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

**Client Ref:** Redhill  
**Report Ref:** GS-5932102  
**Grid Ref:** 528675, 151469

**Map Name:** National Grid  
**Map date:** 2014  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



**Powered by**  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100025207

Production date: 09 April 2019

Map legend available at: [www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

---

## Annex D Groundsure reports





# Groundsure

LOCATION INTELLIGENCE

Carbon Clear Limited  
70-78, York Way,  
London, N1 9AG

Groundsure Reference: GS-5932100

Your Reference: Redhill\_

Report Date 8 Apr 2019

Report Delivery Method: Email - pdf

## Enviro Insight

Address: DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director  
Groundsure Limited

Enc.  
Groundsure Enviroinsight

**Address:** DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX  
**Date:** 8 Apr 2019  
**Reference:** GS-5932100  
**Client:** Carbon Clear Limited

NW

N

NE

W

E



SW

S

SE

**Aerial Photograph Capture date:** 27-May-2012  
**Grid Reference:** 528670,151462  
**Site Size:** 2.4105ha

**Report Reference:** GS-5932100  
**Client Reference:** Redhill\_

# Contents Page

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	12
1.2 Additional Information – Historical Tank Database	15
1.3 Additional Information – Historical Energy Features Database	17
1.4 Additional Information – Historical Petrol and Fuel Site Database	18
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	19
1.6 Historical military sites	19
1.7 Potentially Infilled Land	19
2. Environmental Permits, Incidents and Registers Map	22
2. Environmental Permits, Incidents and Registers	23
2.1 Industrial Sites Holding Licences and/or Authorisations	23
2.1.1 Records of historic IPC Authorisations within 500m of the study site	23
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site	23
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site	24
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site	24
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site	24
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site	24
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	25
2.1.8 Records of Licensed Discharge Consents within 500m of the study site	25
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site	26
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	26
2.2 Dangerous or Hazardous Sites	26
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents	26
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site	26
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site	26
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	27
3. Landfill and Other Waste Sites Map	28
3. Landfill and Other Waste Sites	29
3.1 Landfill Sites	29
3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site	29
3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site	29
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site	30
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site	31
3.2 Other Waste Sites	31
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site	31
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site	31
4. Current Land Use Map	34
4. Current Land Uses	35
4.1 Current Industrial Data	35
4.2 Petrol and Fuel Sites	38
4.3 National Grid High Voltage Underground Electricity Transmission Cables	38
4.4 National Grid High Pressure Gas Transmission Pipelines	38



5. Geology	39
5.1 Artificial Ground and Made Ground.....	39
5.2 Superficial Ground and Drift Geology .....	39
5.3 Bedrock and Solid Geology .....	39
6 Hydrogeology and Hydrology	40
6a. Aquifer Within Superficial Geology	40
6b. Aquifer Within Bedrock Geology and Abstraction Licences	41
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences	42
6d. Hydrogeology – Source Protection Zones within confined aquifer	43
6e. Hydrology – Watercourse Network and River Quality	44
6.Hydrogeology and Hydrology	45
6.1 Aquifer within Superficial Deposits.....	45
6.2 Aquifer within Bedrock Deposits.....	45
6.3 Groundwater Abstraction Licences.....	46
6.4 Surface Water Abstraction Licences.....	46
6.5 Potable Water Abstraction Licences.....	46
6.6 Source Protection Zones.....	47
6.7 Source Protection Zones within Confined Aquifer.....	47
6.8 Groundwater Vulnerability and Soil Leaching Potential.....	47
6.9 River Quality.....	47
6.9.1 Biological Quality:.....	47
6.9.2 Chemical Quality:.....	48
6.10 Ordnance Survey MasterMap Water Network.....	48
6.11 Surface Water Features.....	52
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)	53
7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map	54
7 Flooding	55
7.1 River and Coastal Zone 2 Flooding.....	55
7.2 River and Coastal Zone 3 Flooding.....	55
7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating.....	55
7.4 Flood Defences.....	56
7.5 Areas benefiting from Flood Defences.....	56
7.6 Areas benefiting from Flood Storage.....	56
7.7 Groundwater Flooding Susceptibility Areas.....	56
7.8 Groundwater Flooding Confidence Areas.....	56
8. Designated Environmentally Sensitive Sites Map	57
8. Designated Environmentally Sensitive Sites	58
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:.....	58
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:.....	58
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:.....	58
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:.....	58
8.5 Records of Ramsar sites within 2000m of the study site:.....	58
8.6 Records of Ancient Woodland within 2000m of the study site: .....	59
8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:.....	59
8.8 Records of World Heritage Sites within 2000m of the study site:.....	59
8.9 Records of Environmentally Sensitive Areas within 2000m of the study site: .....	60
8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site: .....	60
8.11 Records of National Parks (NP) within 2000m of the study site: .....	60
8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:.....	60
8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:.....	60

8.14 Records of Green Belt land within 2000m of the study site:.....	61
9. Natural Hazards Findings.....	62
9.1 Detailed BGS GeoSure Data.....	62
9.1.1 Shrink Swell.....	62
9.1.2 Landslides.....	62
9.1.3 Soluble Rocks.....	62
9.1.4 Compressible Ground.....	63
9.1.5 Collapsible Rocks.....	63
9.1.6 Running Sand.....	63
9.2 Radon.....	64
9.2.1 Radon Affected Areas.....	64
9.2.2 Radon Protection.....	64
10. Mining.....	65
10.1 Coal Mining.....	65
10.2 Non-Coal Mining.....	65
10.3 Brine Affected Areas .....	65
Contact Details.....	66
Standard Terms and Conditions.....	68



# Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

<b>Section 1: Historical Industrial Sites</b>	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	3	0	56	76
1.2 Additional Information – Historical Tank Database	2	5	23	34
1.3 Additional Information – Historical Energy Features Database	2	0	27	36
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	2	0	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	30	59
<b>Section 2: Environmental Permits, Incidents and Registers</b>	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	3
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	1	2
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	2	4
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	1	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
<b>3.1 Landfill Sites</b>						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	1	1	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	1	4	2
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	2
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	2
<b>3.2 Landfill and Other Waste Sites Findings</b>						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	1	8	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	1	12	51	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified					
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	4	44	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding	
7.1 Environment Agency Zone 2 floodplains within 250m of the study site	Identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	Identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Not Prone
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Not Applicable

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	1
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	1	14
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	1	1
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	1	0	0	0	0	3
8.14 Records of Green Belt land	0	0	1	0	2	8

## Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Negligible
9.2 Radon	
9.2.1 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?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 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?	No radon protective measures are necessary.

## Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	Identified
10.3 Brine affected areas within 75m of the study site	None identified

# Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

## 1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

## 2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

## 3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

## 4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

## 5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

## 6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

## 7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

## 8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

## 9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

## 10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

## 11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

### Note: Maps

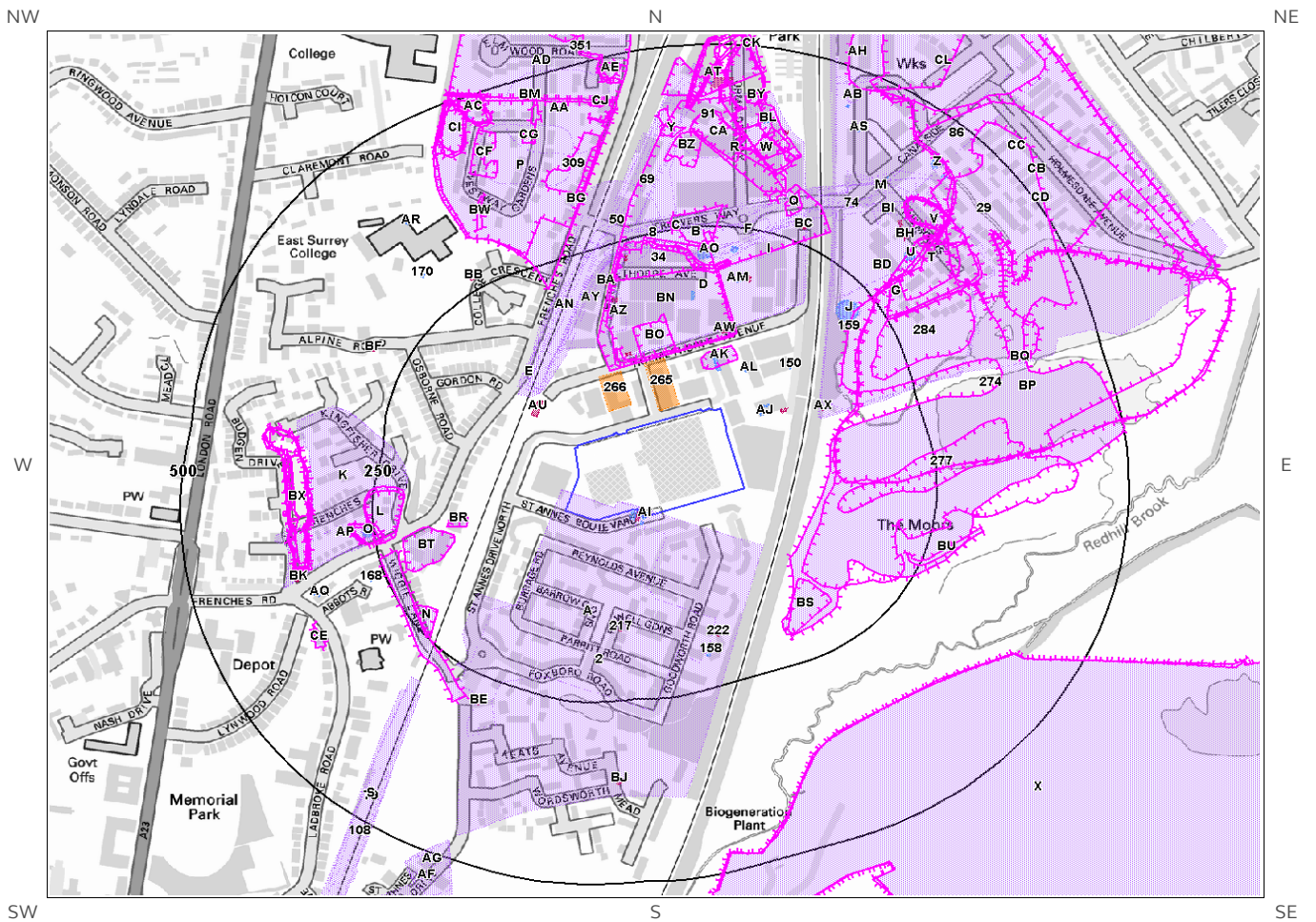
Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

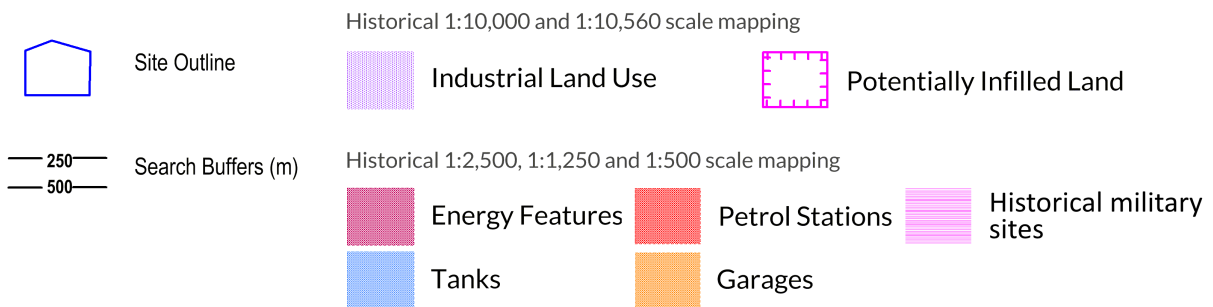
All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



# 1. Historical Land Use



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 1. Historical Industrial Sites

## 1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 135

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Unspecified Works	1988
2	0	On Site	Unspecified Works	1979
3A	0	On Site	Engineering Works	1974
4AK	55	N	Clay Pit	1895
5B	85	N	Brick Works	1895
6B	85	N	Brick Works	1912
7BN	85	N	Brick Yard	1869
8	87	NW	Railway Sidings	1938
9I	87	NW	Railway Sidings	1955
10C	87	NW	Railway Sidings	1912
11BO	89	N	Unspecified Pit	1869
12AV	89	N	Unspecified Ground Workings	1869
13C	91	NW	Railway Sidings	1938
14AN	92	NW	Railway Sidings	1869
15D	95	N	Unspecified Works	1974
16D	95	N	Unspecified Works	1988
17BP	96	SE	Refuse Heaps	1955
18D	97	N	Unspecified Works	1979
19H	97	NW	Railway Sidings	1895
20E	110	NW	Railway Building	1955
21E	111	NW	Railway Building	1938
22F	112	N	Railway Sidings	1974
23F	112	N	Railway Sidings	1988
24AY	119	N	Unspecified Commercial/Industrial	1979
25G	119	E	Silica Works	1938
26G	120	E	Silica Works	1938
27F	125	N	Railway Sidings	1979
28BR	127	W	Unspecified Pit	1912
29	128	E	Unspecified Works	1955
30AZ	133	N	Clay Mills	1869
31BS	143	SE	Unspecified Pit	1974
32BT	148	W	Sand Pits	1895
33H	187	N	Unspecified Heap	1938

34	187	N	Unspecified Heap	1938
35I	192	N	Unspecified Ground Workings	1955
36J	201	NE	Unspecified Tank	1988
37J	201	NE	Unspecified Tank	1974
38J	204	NE	Tank	1979
39AO	206	N	Kilns	1912
40K	209	W	Nurseries	1938
41K	209	W	Nurseries	1938
42L	210	W	Unspecified Ground Workings	1938
43L	210	W	Unspecified Pit	1912
44L	210	W	Unspecified Pit	1895
45M	210	NE	Sand and Silicon Works	1974
46M	210	NE	Sand and Silicon Works	1988
47AP	211	W	Nurseries	1955
48N	215	SW	Sand Pits	1895
49P	217	N	Brick and Tile Yard	1869
50	219	N	Wash Mill	1869
51M	220	NE	Sand and Silicon Works	1979
52N	224	W	Cuttings	1869
53B	225	N	Unspecified Pit	1869
54B	229	N	Brick Kiln	1869
55BU	230	SE	Unspecified Ground Workings	1974
56O	240	W	Unspecified Heap	1938
57O	240	W	Unspecified Heap	1938
58O	244	W	Unspecified Heap	1955
59O	248	W	Tank	1979
60O	252	W	Unspecified Tank	1938
61T	253	NE	Sand Pit	1938
62O	253	W	Unspecified Tank	1912
63BV	254	NE	Sand Pit	1938
64O	255	W	Unspecified Tank	1955
65O	255	W	Unspecified Tank	1974
66O	255	W	Unspecified Tank	1988
67P	264	N	Brick and Tile Works	1895
68P	264	N	Brick and Tile Works	1912
69	269	N	Unspecified Commercial/Industrial	1979
70Q	278	N	Unspecified Pit	1869
71W	282	N	Unspecified Commercial/Industrial	1979
72Q	292	N	Brick Kiln	1869
73S	300	SW	Railway Sidings	1938
74	301	NE	Kilns	1912
75R	303	N	Unspecified Heap	1938

76R	303	N	Unspecified Heap	1938
77BG	304	N	Smithy	1895
78M	311	NE	Railway Sidings	1955
79	315	SW	Railway Sidings	1955
80S	318	SW	Railway Sidings	1912
81S	318	SW	Railway Sidings	1938
82T	319	NE	Unspecified Tank	1974
83U	319	NE	Unspecified Tank	1988
84U	321	NE	Tank	1979
85BW	323	NW	Unspecified Ground Workings	1955
86	327	NE	Tramway Sidings	1912
87BZ	333	N	Unspecified Pit	1869
88CA	340	N	Unspecified Heap	1955
89V	342	NE	Unspecified Pits	1938
90V	342	NE	Unspecified Pits	1938
91	344	N	Wash Mill	1869
92W	347	N	Unspecified Pit	1895
93P	349	N	Clay Mill	1869
94X	351	SE	Sand Pit	1979
95X	351	SE	Sand Pit	1988
96CB	354	NE	Sand Pit	1979
97CC	355	NE	Sand Pit	1974
98CD	355	NE	Sand Pit	1988
99V	360	NE	Unspecified Pit	1955
100CE	361	SW	Sand Pit	1895
101Y	376	N	Unspecified Pit	1869
102AA	382	N	Wash Mill	1869
103CF	382	N	Unspecified Pit	1869
104Y	392	N	Unspecified Heaps	1869
105CG	412	N	Unspecified Heap	1869
106CH	413	N	Unspecified Ground Workings	1869
107BY	421	N	Unspecified Pit	1895
108	425	SW	Railway Sidings	1869
109AT	429	N	Unspecified Pit	1895
110Z	430	NE	Unspecified Tank	1988
111Z	430	NE	Unspecified Tank	1974
112Z	434	NE	Tank	1979
113CJ	436	N	Unspecified Ground Workings	1869
114AA	436	N	Unspecified Pit	1869
115AD	438	N	Brick Field	1869
116AB	453	N	Unspecified Tank	1988
117AB	453	N	Unspecified Tank	1974
118AB	454	N	Tank	1979
119AC	454	N	Unspecified Heap	1938



120AC	454	N	Unspecified Heap	1938
121AC	458	N	Unspecified Pit	1955
122AC	458	N	Unspecified Ground Workings	1938
123AD	460	N	Unspecified Ground Workings	1869
124AE	468	N	Unspecified Ground Workings	1938
125AE	468	N	Unspecified Ground Workings	1938
126CK	469	N	Unspecified Ground Workings	1979
127AH	469	N	Unspecified Works	1979
128AG	476	S	Hospital	1938
129CL	476	N	Refuse Heap	1955
130AF	477	S	Hospital	1895
131AF	477	S	Hospital	1912
132AG	479	S	Hospital	1955
133AH	480	N	Unspecified Works	1988
134AH	480	N	Unspecified Works	1974
135AG	499	S	Hospital	1938

## 1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

64

ID	Distance (m)	Direction	Use	Date
136AI	0	On Site	Unspecified Tank	1994
137AI	0	S	Tanks	1994
138AI	2	S	Tanks	1977
139AI	6	S	Unspecified Tank	1994
140AI	7	S	Unspecified Tank	1977
141AJ	47	E	Unspecified Tank	1982
142AJ	48	E	Unspecified Tank	1995
143AK	52	N	Unspecified Tank	1995
144AK	52	N	Unspecified Tank	1982
145AK	52	N	Unspecified Tank	1972
146AJ	54	E	Unspecified Tank	1982
147AJ	54	E	Unspecified Tank	1995
148AL	59	NE	Unspecified Tank	1982
149AL	60	NE	Unspecified Tank	1995
150	105	NE	Unspecified Tank	1972

151D	151	N	Unspecified Tank	1982
152D	152	N	Unspecified Tank	1995
153AM	175	N	Unspecified Tank	1982
154AM	176	N	Tanks	1995
155AM	177	N	Unspecified Tank	1982
156AN	190	N	Unspecified Tank	1982
157AN	191	N	Unspecified Tank	1995
158	196	S	Unspecified Tank	1994
159	197	NE	Unspecified Tank	1972
160J	199	NE	Unspecified Tank	1965
161J	199	NE	Unspecified Tank	1963
162J	199	NE	Unspecified Tank	1972
163I	206	N	Tanks	1896
164AO	215	N	Unspecified Tank	1982
165AO	216	N	Unspecified Tank	1995
166AP	253	W	Unspecified Tank	1896
167O	253	W	Unspecified Tank	1913
168	267	W	Unspecified Tank	1896
169Q	297	N	Unspecified Tank	1913
170	305	NW	Unspecified Tank	1913
171U	317	NE	Unspecified Tank	1965
172U	317	NE	Unspecified Tank	1993
173U	317	NE	Unspecified Tank	1996
174AQ	338	W	Tanks	1989
175AQ	338	W	Tanks	1980
176AQ	339	W	Tanks	1963
177AQ	339	W	Tanks	1965
178AQ	340	W	Tanks	1994
179AQ	344	W	Tanks	1970
180AQ	344	W	Tanks	1963
181BI	345	NE	Unspecified Tank	1933
182AR	371	NW	Tanks	1978
183AR	371	NW	Tanks	1977
184AR	373	NW	Unspecified Tank	1965
185AR	373	NW	Unspecified Tank	1964
186M	384	NE	Unspecified Tank	1972
187BL	397	N	Tanks	1972
188AS	420	NE	Unspecified Tank	1982
189AS	421	NE	Unspecified Tank	1972
190AS	422	NE	Unspecified Tank	1995
191Z	428	NE	Unspecified Tank	1965
192Z	431	NE	Unspecified Tank	1965
193Z	433	NE	Unspecified Tank	1993
194Z	433	NE	Unspecified Tank	1996
195AT	445	N	Unspecified Tank	1896
196AB	445	N	Unspecified Tank	1982

197AB	446	N	Unspecified Tank	1972
198AB	446	N	Unspecified Tank	1995
199AC	467	N	Unspecified Tank	1913

### 1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

65

ID	Distance (m)	Direction	Use	Date
200AI	0	On Site	Electricity Substation	1994
201AI	0	On Site	Electricity Substation	1977
202AU	66	NW	Electricity Substation	1982
203AU	66	NW	Electricity Substation	1972
204AU	66	NW	Electricity Substation	1995
205AJ	74	E	Electricity Substation	1982
206AJ	74	E	Electricity Substation	1995
207AJ	75	E	Electricity Substation	1972
208AV	98	N	Electricity Substation	1995
209AV	98	N	Electricity Substation	1972
210AV	98	N	Electricity Substation	1982
211AW	104	N	Electricity Substation	1995
212AW	104	N	Electricity Substation	1982
213AW	104	N	Electricity Substation	1972
214AX	126	E	Electricity Substation	1982
215AX	126	E	Electricity Substation	1995
216AX	127	E	Electricity Substation	1972
217	150	S	Electricity Substation	1994
218AY	172	N	Electricity Substation	1995
219AZ	173	N	Electricity Substation	1972
220AY	173	N	Electricity Substation	1982
221AM	178	N	Electricity Substation	1982
222	179	S	Electricity Substation	1994
223AM	179	N	Electricity Substation	1995
224AM	181	N	Electricity Substation	1972
225BA	199	N	Electricity Substation	1982
226BA	200	N	Electricity Substation	1995
227H	222	N	Electricity Substation	1982
228H	223	N	Electricity Substation	1995
229BB	263	NW	Electricity Substation	1990
230BB	264	NW	Electricity Substation	1995
231BC	269	NE	Electricity Substation	1982

232BC	269	NE	Electricity Substation	1995
233BC	269	NE	Electricity Substation	1972
234BD	283	NE	Electricity Substation	1982
235BD	285	NE	Electricity Substation	1995
236BE	285	SW	Electricity Substation	1989
237BE	285	SW	Electricity Substation	1980
238BE	285	SW	Electricity Substation	1970
239BF	292	NW	Electricity Substation	1995
240BF	292	NW	Electricity Substation	1977
241BF	294	NW	Electricity Substation	1990
242BF	294	NW	Electricity Substation	1978
243BG	327	N	Electricity Substation	1995
244BG	327	N	Electricity Substation	1972
245BG	327	N	Electricity Substation	1982
246BH	333	NE	Electricity Substation	1982
247BH	335	NE	Electricity Substation	1996
248BH	335	NE	Electricity Substation	1993
249BI	342	NE	Electricity Substation	1972
250BJ	355	S	Electricity Substation	1994
251BJ	355	S	Electricity Substation	1999
252BK	357	W	Electricity Substation	1989
253BK	357	W	Electricity Substation	1980
254BK	358	W	Electricity Substation	1995
255BK	358	W	Electricity Substation	1995
256BK	358	W	Electricity Substation	1994
257BK	358	W	Electricity Substation	1999
258BL	385	N	Electricity Substation	1982
259BL	385	N	Electricity Substation	1972
260BL	386	N	Electricity Substation	1995
261AT	441	N	Electricity Substation	1995
262AT	451	N	Electricity Substation	1982
263BM	471	N	Electricity Substation	1972
264BM	471	N	Electricity Substation	1995

---

## 1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

---

## 1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 2

ID	Distance (m)	Direction	Use	Date
265	13	N	Garage	1982
266	31	N	Garage	1995

## 1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

## 1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 89

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

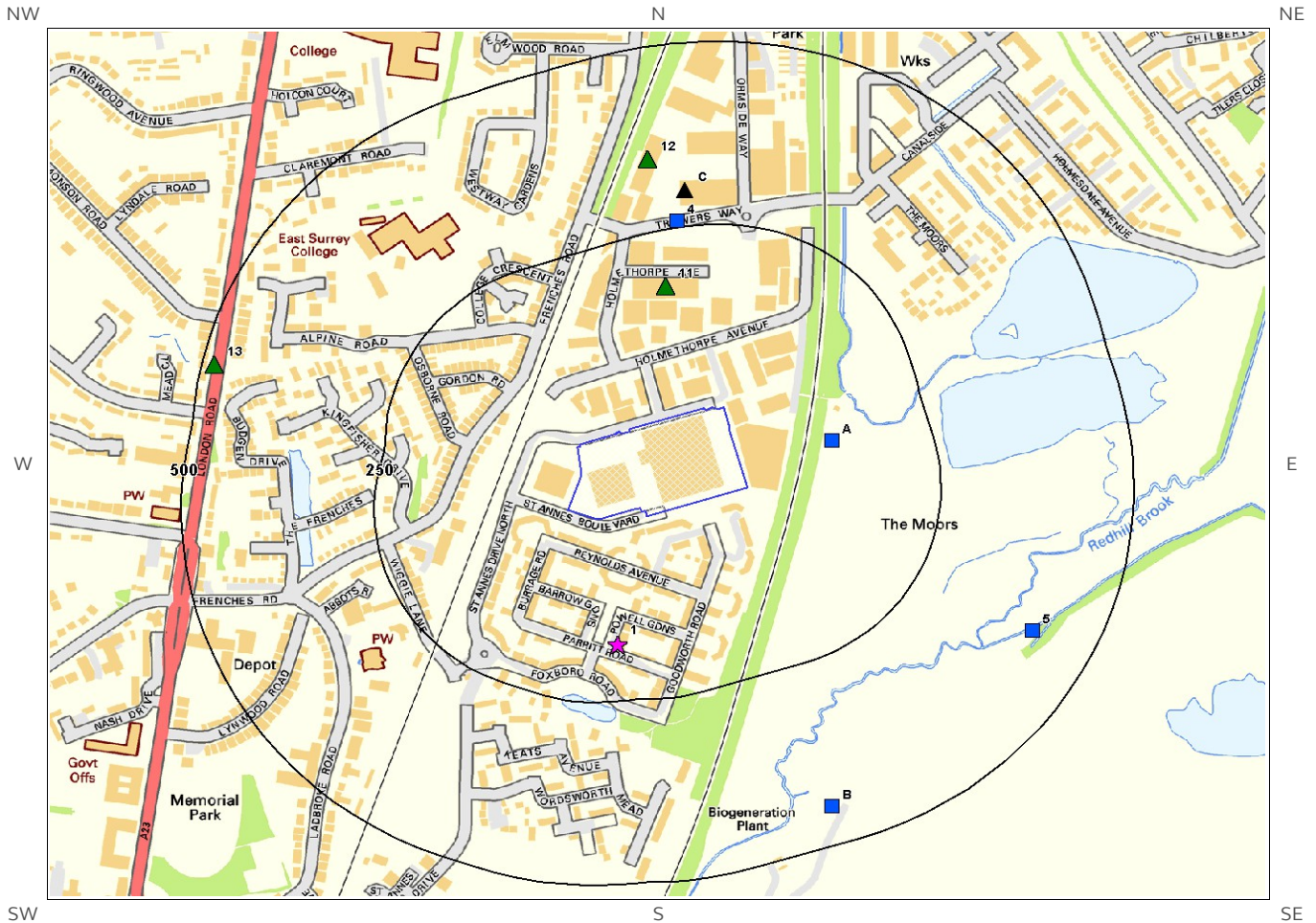
ID	Distance(m)	Direction	Use	Date
267AK	55	N	Clay Pit	1895
268B	85	N	Brick Works	1895
269B	85	N	Brick Works	1912
270BN	85	N	Brick Yard	1869
271BO	89	N	Unspecified Pit	1869
272AV	89	N	Unspecified Ground Workings	1869
273BP	96	SE	Refuse Heaps	1955
274	105	E	Ponds	1974
275BQ	120	E	Ponds	1988
276BQ	121	E	Water Bodies	1979
277	124	E	Pond	1955
278BR	127	W	Unspecified Pit	1912
279BS	143	SE	Unspecified Pit	1974
280BT	148	W	Sand Pits	1895
281H	187	N	Unspecified Heap	1938
282H	187	N	Unspecified Heap	1938
















283AO	192	N	Unspecified Ground Workings	1955
284	203	E	Pond	1955
285L	210	W	Unspecified Ground Workings	1938
286L	210	W	Unspecified Pit	1895
287L	210	W	Unspecified Pit	1912
288N	215	SW	Sand Pits	1895
289P	217	N	Brick and Tile Yard	1869
290N	224	W	Cuttings	1869
291B	225	N	Unspecified Pit	1869
292B	229	N	Brick Kiln	1869
293BU	230	SE	Unspecified Ground Workings	1974
294AP	240	W	Unspecified Heap	1938
295AP	240	W	Unspecified Heap	1938
296AP	244	W	Unspecified Heap	1955
297T	253	NE	Sand Pit	1938
298BV	254	NE	Sand Pit	1938
299P	264	N	Brick and Tile Works	1912
300P	264	N	Brick and Tile Works	1895
301Q	278	N	Unspecified Pit	1869
302Q	292	N	Brick Kiln	1869
303R	303	N	Unspecified Heap	1938
304R	303	N	Unspecified Heap	1938
305BW	323	NW	Unspecified Ground Workings	1955
306BX	328	W	Ponds	1869
307BX	330	W	Ponds	1974
308BX	330	W	Ponds	1988
309	330	N	Ponds	1869
310BX	331	W	Fish Ponds	1938
311BX	331	W	Pond	1979
312BX	331	W	Fish Ponds	1912
313BX	331	W	Fish Ponds	1895
314BX	331	W	Fish Ponds	1938
315BY	331	N	Fish Pond	1938
316BZ	333	N	Unspecified Pit	1869
317BX	334	W	Fish Ponds	1955
318BY	335	N	Fish Pond	1938
319CA	340	N	Unspecified Heap	1955
320V	342	NE	Unspecified Pits	1938
321V	342	NE	Unspecified Pits	1938
322W	347	N	Unspecified Pit	1895
323BY	351	N	Pond	1912
324X	351	SE	Sand Pit	1979
325X	351	SE	Sand Pit	1988

326CB	354	NE	Sand Pit	1979
327CC	355	NE	Sand Pit	1974
328CD	355	NE	Sand Pit	1988
329V	360	NE	Unspecified Pit	1955
330CE	361	SW	Sand Pit	1895
331Y	376	N	Unspecified Pit	1869
332CF	382	N	Unspecified Pit	1869
333Y	392	N	Unspecified Heaps	1869
334CG	412	N	Unspecified Heap	1869
335CH	413	N	Unspecified Ground Workings	1869
336AT	414	N	Pond	1955
337BY	421	N	Unspecified Pit	1895
338CI	428	N	Pond	1938
339AT	429	N	Unspecified Pit	1895
340CI	431	N	Pond	1955
341CI	431	N	Pond	1912
342CI	431	N	Pond	1938
343CI	431	N	Pond	1895
344CJ	436	N	Unspecified Ground Workings	1869
345AA	436	N	Unspecified Pit	1869
346AD	438	N	Brick Field	1869
347AC	454	N	Unspecified Heap	1938
348AC	454	N	Unspecified Heap	1938
349AC	458	N	Unspecified Pit	1955
350AC	458	N	Unspecified Ground Workings	1938
351	460	N	Unspecified Ground Workings	1869
352AE	468	N	Unspecified Ground Workings	1938
353AE	468	N	Unspecified Ground Workings	1938
354CK	469	N	Unspecified Ground Workings	1979
355CL	476	N	Refuse Heap	1955

# 2. Environmental Permits, Incidents and Registers Map



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.

- |                                                                                     |                               |                                                                                     |                                                                |                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------|
|  | Site Outline                  |  | Recorded Pollution Incident                                    |  | RAS 3 & 4 Authorisations                      |
|  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |  | Part A(2) and Part B Authorised Processes     |
|  | Dangerous Substances (List 2) |  | Water Industry Referrals                                       |  | COMAH / NIHS Sites                            |
|  | Licensed Discharge Consents   |  | Sites Determined as Contaminated Land                          |  | Hazardous Substance Consents and Enforcements |
|  | Red List Discharge Consents   |                                                                                     |                                                                |                                                                                     |                                               |

# 2. Environmental Permits, Incidents and Registers

## 2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

### 2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

### 2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

3

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
14C	297	N	528710 151840	Operator: ENLIGHTENED LAMP RECYCLING LTD Installation Name: MERCURY RECOVERY, REDHILL, SURREY Process: NON-FERROUS METALS; PRODUCING ETC CADMIUM/MERCURY AND ALLOYS CONTAINING >0.05 PERCENT	Permit Number: GP3339BE Original Permit Number: GP3339BE EPR Reference: - Issue Date: 15/06/2006 Effective Date: 15/06/2006 Last date noted as effective: 2018-07-01 Status: SUPERCEDED
15C	297	N	528710 151840	Operator: ENLIGHTENED LAMP RECYCLING LTD Installation Name: MERCURY RECOVERY, REDHILL, SURREY Process: NON-FERROUS METALS; PRODUCING ETC CADMIUM/MERCURY AND ALLOYS CONTAINING >0.05 PERCENT	Permit Number: GP3835FY Original Permit Number: GP3339BE EPR Reference: - Issue Date: 05/07/2011 Effective Date: 05/07/2011 Last date noted as effective: 2019-01-31 Status: SUPERCEDED
16C	297	N	528710 151840	Operator: ENLIGHTENED LAMP RECYCLING LTD Installation Name: MERCURY RECOVERY, REDHILL, SURREY Process: NON-FERROUS METALS; PRODUCING ETC CADMIUM/MERCURY AND ALLOYS CONTAINING >0.05 PERCENT	Permit Number: JP3337JJ Original Permit Number: GP3339BE EPR Reference: - Issue Date: 29/06/2018 Effective Date: 29/06/2018 Last date noted as effective: 2019-01-31 Status: EFFECTIVE

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

3

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
11	171	N	528685 151708	Address: Auto Body Language Ltd, 42-44 Holmethorpe Avenue, Holmethorpe Industrial Estate, Redhill, Surrey, RH1 2NL Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
12	346	N	528662 151882	Address: Hepworth Minerals, Trowers Way, Merstham, Redhill, RH1 2LP Process: Sand and Soil Processes Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
13	483	W	528101 151601	Address: Zonal Ltd, Holmthorpe Ave, Redhill, RH1 2NX Process: Solvent Emissions; Coating Processes Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified



### 2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

### 2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

6

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
2A	122	E	528900 151500	Address: Holmethorpe, Holmethorpe Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1177 Permit Version: 2	Receiving Water: Redhill Brook Status: SURRENDERED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: 19/08/2014
3A	122	E	528900 151500	Address: Holmethorpe, Holmethorpe Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1177 Permit Version: 1	Receiving Water: REDHILL BROOK Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02-Nov-1989 Revocation Date: 02/09/2010
4	258	N	528700 151800	Address: 25 TROWERS WAY, HOLMETHORPE, REDHILL, 25 TROWERS WAY, HOLMETHORPE, RED, HILL, SURREY Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTCTU.0826 Permit Version: 1	Receiving Water: - Status: REVOKED - UNSPECIFIED Issue date: 20/09/1978 Effective Date: 20-Sep-1978 Revocation Date: 26/09/1991
5	417	SE	529160 151240	Address: PATTESON COURT LANDFILL SITE, CORMO, PATTESON COURT LANDFILL SITE, CO, RMONGERS LANE, REDHILL, SURREY Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATM.3016 Permit Version: 1	Receiving Water: NUTFIELD MARSH DITCH Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 03/10/1997 Effective Date: 03-Oct-1997 Revocation Date: 03/02/2004
6B	448	S	528900 151000	Address: SAND & FULLERS EARTH WORKINGS, REDH, SAND & FULLERS EARTH WORKINGS, R, EDHILL, SURREY Effluent Type: MISCELLANEOUS DISCHARGES - UNSPECIFIED Permit Number: CTCR.1412 Permit Version: 1	Receiving Water: REDHILL BROOK Status: TRANSFERRED FROM R(PP)A 1951- 1961 Issue date: 09/02/1977 Effective Date: 09-Feb-1977 Revocation Date: 02/03/1992
7B	448	S	528900 151000	Address: SAND & FULLERS EARTH WORKINGS, REDH, SAND & FULLERS EARTH WORKINGS, R, EDHILL, SURREY Effluent Type: MISCELLANEOUS DISCHARGES - UNSPECIFIED Permit Number: CTCR.1412 Permit Version: 2	Receiving Water: REDHILL BROOK Status: REVOKED - UNSPECIFIED Issue date: 09/02/1977 Effective Date: 03-Mar-1992 Revocation Date: 02/10/1997

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

## 2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

## 2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

1

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
1	173	S	528622.0 151221.0	Incident Date: 13-Nov-2013 Incident Identification: 1175796.0 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)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

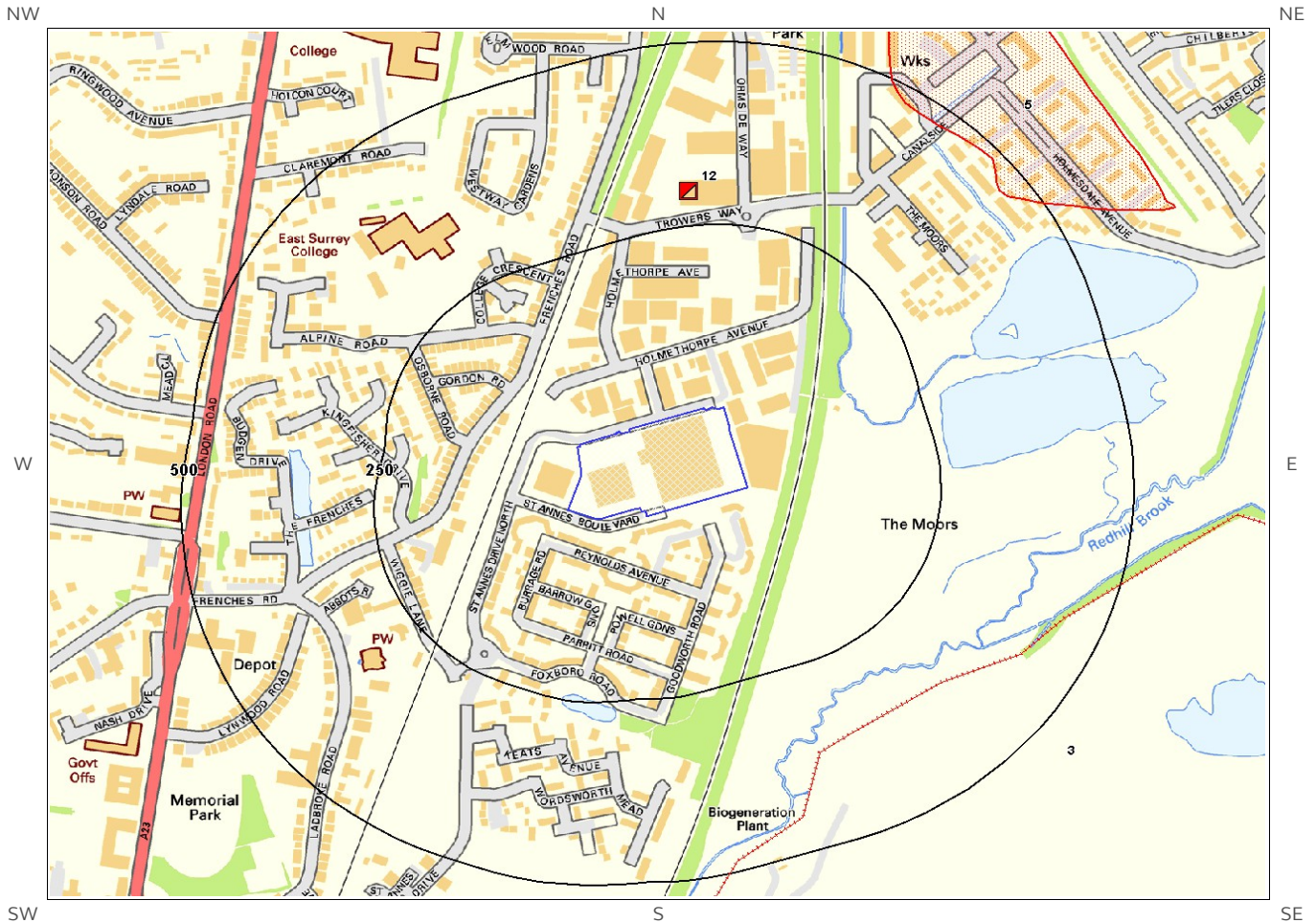
## 2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0










Database searched and no data found.

---

# 3. Landfill and Other Waste Sites Map



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.

-  Site Outline
-  250 Search Buffers (m)
-  500 Search Buffers (m)
-  EA/NRW Active Landfill
-  EA/NRW Historic Landfill
-  BGS / DoE Survey Landfill
-  Historic and Planned Waste Sites
-  EA/NRW Licensed Waste Site
-  Local Authority/Historical Mapping Landfill Records

# 3. Landfill and Other Waste Sites

## 3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

2

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
3	356	SE	529590 151150	Address: Biffa Waste Services Limited, Redhill Landfill Site, Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Landfill Reference: 0.0 Environmental Permitting Regulations (Waste) Reference: - Landfill Type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Operator: Biffa Waste Services Ltd Status: Effective IPPC Reference: EPR Reference:
Not shown	700	S	529590 151150	Address: Biffa Waste Services Limited, Redhill Landfill Site, Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Landfill Reference: 0.0 Environmental Permitting Regulations (Waste) Reference: - Landfill Type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Operator: Biffa Waste Services Ltd Status: Effective IPPC Reference: EPR Reference:

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

7

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
5	464	NE		Site Address: Holmethorpe Trading Estate, Holmethorpe Waste Licence: - Site Reference: RB/17, S/25 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: P J Brown Plant Hire First Recorded: 20-Jan-1978 Last Recorded: 31-Dec-1989
Not	739	N		Site Address: Battlebridge Lane, Licence Issue:



ID	Distance (m)	Direction	NGR	Details	
shown				Merstham Waste Licence: - Site Reference: S/255 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	913	E		Site Address: North Cockley Quarry, North Cockley Waste Licence: Yes Site Reference: 10/468, TA/23 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 27-Mar-1981 Licence Surrendered: 22-Jul-1991 Licence Holder Address: - Operator: - Licence Holder: Laporte Industries - Waste Management Limited First Recorded: 30-Apr-1981 Last Recorded: 31-Jul-1990
Not shown	938	SE		Site Address: Park Quarry, Nutfield, Surrey Waste Licence: Yes Site Reference: 10/454, TA/8/LLC, TA/8 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 07-Nov-1977 Licence Surrendered: 29-Aug-1979 Licence Holder Address: Public Health Engineering, 10 Great George Street, London Operator: - Licence Holder: The Greater London Council First Recorded: 01-Apr-1975 Last Recorded: 29-Mar-1979
Not shown	953	SE		Site Address: Park Works, Nutfield, Surrey Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Greater London Council Licence Holder: - First Recorded: 31-Dec-1973 Last Recorded: -
Not shown	1336	SE		Site Address: Nutfield Priory Landfill Site, Nutfield Road, Nutfield, Near Reigate Waste Licence: Yes Site Reference: 6/10/3, C/1/10/3, 6/1/10/3, TA/2/LLC, 10/453, 103 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 24-Jul-1978 Licence Surrendered: 09-Mar-1993 Licence Holder Address: - Operator: Reigate Borough Council Licence Holder: Surrey County Council First Recorded: 04-Apr-1967 Last Recorded: 31-Oct-1981
Not shown	1403	E		Site Address: Beechfield Quarry, Nutfield, Surrey Waste Licence: Yes Site Reference: 10/455, TA/9/LLC, TA/9 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 30-Sep-1977 Licence Surrendered: 28-Jul-1994 Licence Holder Address: - Operator: - Licence Holder: Laporte Industries First Recorded: 18-Jul-1969 Last Recorded: 31-May-1984

### 3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

2

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1173	SE	529500.0 150500.0	Address: Park Works, Nutfield, Surrey BGS Number: 908.0	Risk: Risk to major aquifer Waste Type: N/A
Not	1445	SE	529800.0	Address: Nutfield Priory, Nutfield, Surrey	Risk: Risk to major aquifer

ID	Distance (m)	Direction	NGR	Details
shown			150400.0	BGS Number: 907.0 Waste Type: N/A

### 3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

2

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
Not shown	1284	E	530062 150913	Refuse Tip	1984 mapping	Polygon
Not shown	1354	E	530324 151145	Refuse Tip	1977 mapping	Polygon

## 3.2 Other Waste Sites

### 3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

### 3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

9

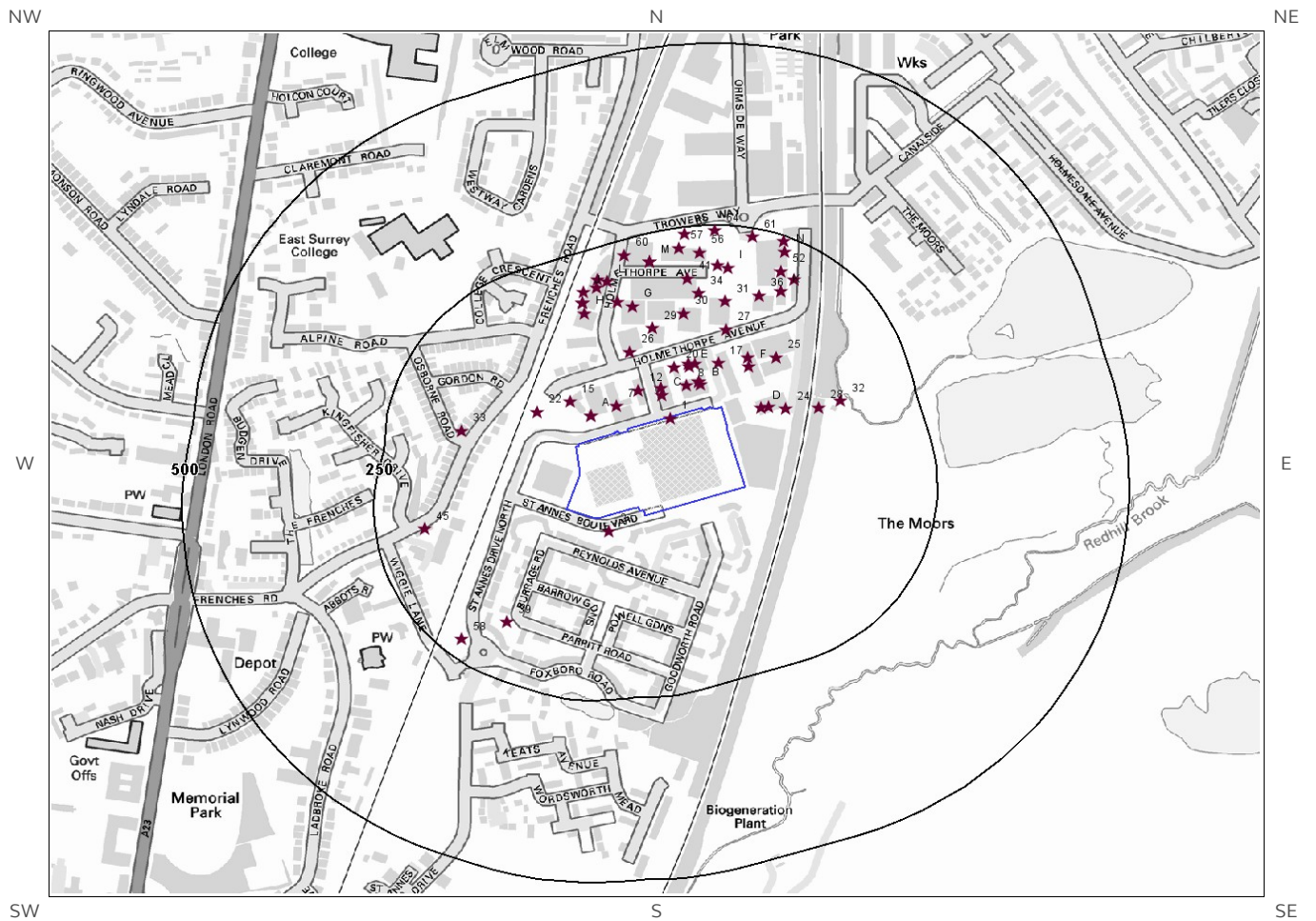
The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
12	298	N	528715 151842	Site Address: 11, Ormside Way, Holmethorpe Ind Estate, Redhill, Surrey, RH1 2LW Type: Physico-Chemical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENL001 EPR reference: EA/EPR/GP3339BE/V003 Operator: Enlightened Lamp Recycling Limited Waste Management licence No: 405037 Annual Tonnage: 0.0 Issue Date: 29/06/2018 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Mercury Recovery Redhill Surrey Correspondence Address: -
Not shown	850	E	529593 151153	Site Address: North East Quadrant, Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Type: Household, Commercial & Industrial Issue Date: 03/03/2004 Effective Date: - Modified: - Surrendered Date: -

ID	Distance (m)	Direction	NGR	Details
				<p>Waste Landfill Size: &lt; 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIF005 EPR reference: YP3490ES/A001 Operator: Biffa Waste Services Limited Waste Management licence No: 83533 Annual Tonnage: 500000.0</p> <p>Expiry Date: - Cancelled Date: - Status: IPPC Site Name: Redhill Landfill North East Quadrant Correspondence Address: -</p>
Not shown	850	E	529593 151153	<p>Site Address: North East Quadrant, Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Type: Household, Commercial &amp; Industrial Waste Landfill Size: &lt; 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIF005 EPR reference: EA/EPR/YP3490ES/A001 Operator: Biffa Waste Services Ltd Waste Management licence No: 83533 Annual Tonnage: 500000.0</p> <p>Issue Date: 03/03/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Redhill Landfill North East Quadrant Correspondence Address: -</p>
Not shown	870	S	529083 150616	<p>Site Address: Redhill Landfill Site, Cormongers Lane, Redhill, Surrey, RH1 4ER Type: Treatment of waste to produce soil &lt;75,000 tpy Size: &lt; 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BWS011 EPR reference: EA/EPR/JB3332RV/A001 Operator: Biffa Waste Services Limited Waste Management licence No: 104457 Annual Tonnage: 74999.0</p> <p>Issue Date: 06/09/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Redhill Landfill Site Correspondence Address: -</p>
Not shown	870	S	529083 150616	<p>Site Address: Redhill Landfill Site, Cormongers Lane, Redhill, Surrey, RH1 4ER Type: Treatment of waste to produce soil &lt;75,000 tpy Size: &lt; 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BWS011 EPR reference: EA/EPR/BU8126IY/V017 Operator: Biffa Waste Services Ltd Waste Management licence No: 104457 Annual Tonnage: 74999.0</p> <p>Issue Date: 06/09/2012 Effective Date: - Modified: 27/10/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Redhill Landfill Site Correspondence Address: -</p>
Not shown	894	SE	529300 150700	<p>Site Address: Biffa Waste Services Ltd, Patteson Court Landfill Site, off Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Type: Co-Disposal Landfill Site Size: &gt;= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIF003 EPR reference: - Operator: The Secretary, Biffa Waste Services Ltd Waste Management licence No: 83205 Annual Tonnage: 0.0</p> <p>Issue Date: 19/12/1989 Effective Date: - Modified: 11/02/1998 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Patteson Court Landfill, Redhill, Rh1 Correspondence Address: Mr Savoury, Env &amp; Tech Dept - Biffa Waste Services Ltd, C/o Severn Trent Water, Park Lane, Minworth, Sutton Coldfield, West Midlands, B76 9BL</p>
Not shown	894	SE	529300 150700	<p>Site Address: Biffa Waste Services Ltd, Patteson Court Landfill Site, off Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Type: Co-Disposal Landfill Site Size: &gt;= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIF003</p> <p>Issue Date: 19/12/1989 Effective Date: - Modified: 11/02/1998 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Patteson Court Landfill,</p>

ID	Distance (m)	Direction	NGR	Details
				<p>EPR reference: - Operator: The Secretary, Biffa Waste Services Ltd Waste Management licence No: 83205 Annual Tonnage: 0.0</p> <p>Redhill, Rh1 Correspondence Address: Mr Savoury, Env &amp; Tech Dept - Biffa Waste Services Ltd, C/o Severn Trent Water, Park Lane, Minworth, Sutton Coldfield, West Midlands, B76 9BL</p>
Not shown	894	SE	529300 150700	<p>Site Address: Biffa Waste Services Ltd, Redhill Landfill N E Quadrant, Cormongers Lane, Nutfield, Redhill, Surrey, RH1 4ER Type: Co-Disposal Landfill Site Size: &lt; 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIF003 EPR reference: EA/EPR/BP3090ER/V006 Operator: Biffa Waste Services Ltd Waste Management licence No: 83205 Annual Tonnage: 150000.0</p> <p>Issue Date: 19/12/1989 Effective Date: - Modified: 11/02/1998 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Redhill Swa, Redhill, Rh1 Correspondence Address: -</p>
Not shown	962	NW	527910 152190	<p>Site Address: - Type: Household Waste Amenity Site Size: &gt;= 25000 tonnes &lt; 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BAR006 EPR reference: - Operator: London Borough of Barnet Waste Management licence No: 80548 Annual Tonnage: 37105.0</p> <p>Issue Date: 19/03/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Civic Amenity &amp; Waste Recycling Centre Correspondence Address: Barnet House, 1255, High Road, Whetstone, London, N20 0EJ</p>

# 4. Current Land Use Map



-  Site Outline
-  Current Industrial Sites
-  Electricity Transmission Cables
-  Search Buffers (m)
-  Petrol & Fuel Sites
-  Gas Transmission Pipelines



# 4. Current Land Uses

## 4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

64

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Electricity Sub Station	528693 151531	Surrey, RH1	Electrical Features	Infrastructure and Facilities
2	19	S	Electricity Sub Station	528613 151376	Surrey, RH1	Electrical Features	Infrastructure and Facilities
3C	32	N	Redhill Vehicle Body Repairs	528683 151563	17, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Vehicle Repair, Testing and Servicing	Repair and Servicing
4B	33	N	Big Blue Print	528733 151577	Unit 21d Holmethorpe Avenue, Holmethorpe Industrial Estate, Redhill, Surrey, RH1 2NB	Published Goods	Industrial Products
5A	34	N	Maritime Progress	528590 151535	3-5, Holmethorpe Avenue, Redhill, Surrey, RH1 2LZ	Marine Engineers and Services	Engineering Services
6A	34	N	Warnstar Signage	528590 151535	3-5, Holmethorpe Avenue, Redhill, Surrey, RH1 2LZ	Signs	Industrial Products
7	36	NW	Abbey Motor Group	528623 151548	7, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Secondhand Vehicles	Motoring
8	36	N	St Marcus Fine Food Ltd	528715 151576	21c, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Catering and Non Specific Food Products	Foodstuffs
9B	37	N	Summit Print Ltd	528731 151581	21d, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services
10B	37	N	Q Print UK Ltd	528731 151581	21D, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Published Goods	Industrial Products
11C	43	N	Suit City	528681 151573	15, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Clothing, Components and Accessories	Consumer Products
12	47	N	Hydraquip	528652 151569	11, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Hydraulic Engineers	Engineering Services
13D	50	E	Maxlen	528812 151545	Unit 11 Redhill 23 Business Park 29, Holmethorpe Avenue, Redhill, Surrey, RH1 2GD	Glass	Industrial Products
14D	59	E	Tank	528821 151547	Surrey, RH1	Tanks (Generic)	Industrial Features
15	60	N	Hatto & Gibson Ltd	528563 151554	1, Holmethorpe Avenue, Redhill, Surrey, RH1 2NA	Precision Engineers	Engineering Services
16E	60	N	Totally Dynamic	528718 151602	Unit 14 Redhill 23, Holmethorpe Avenue, Redhill, Surrey, RH1 2DD	Vehicle Repair, Testing and Servicing	Repair and Servicing
17	62	N	Tank	528756 151607	Surrey, RH1	Tanks (Generic)	Industrial Features

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
18E	63	N	J S B Auto Spares	528725 151606	25-27, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Vehicle Parts and Accessories	Motoring
19E	64	N	Street Tyres	528717 151606	23, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Vehicle Parts and Accessories	Motoring
20	65	N	Printformation	528698 151601	21a, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Published Goods	Industrial Products
21F	67	NE	Tank	528796 151602	Surrey, RH1	Tanks (Generic)	Industrial Features
22	71	NW	Electricity Sub Station	528520 151540	Surrey, RH1	Electrical Features	Infrastructure and Facilities
23F	78	NE	Totally Dynamic Vehicle Wrapping	528794 151615	Unit 2 Redhill 23 Business Park 29, Holmethorpe Avenue, Redhill, Surrey, RH1 2GD	Vehicle Repair, Testing and Servicing	Repair and Servicing
24	80	E	Electricity Sub Station	528844 151544	Surrey, RH1	Electrical Features	Infrastructure and Facilities
25	100	NE	A B L	528831 151615	35, Holmethorpe Avenue, Redhill, Surrey, RH1 2NB	Vehicle Repair, Testing and Servicing	Repair and Servicing
26	101	N	Electricity Sub Station	528641 151622	Surrey, RH1	Electrical Features	Infrastructure and Facilities
27	108	N	Electricity Sub Station	528766 151653	Surrey, RH1	Electrical Features	Infrastructure and Facilities
28	122	E	Electricity Sub Station	528887 151546	Surrey, RH1	Electrical Features	Infrastructure and Facilities
29	124	N	Leader Components Ltd	528670 151655	56, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Parts and Accessories	Motoring
30	133	N	Fins Motorcycles	528711 151675	60a, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	New Vehicles	Motoring
31	147	N	British Wax	528765 151692	62-64, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Cleaning Equipment and Supplies	Industrial Products
32	151	E	Sewage Pumping Station	528915 151555	Surrey, RH1	Waste Storage, Processing and Disposal	Infrastructure and Facilities
33	151	W	Premier Cash Registers	528422 151514	43, Frenches Road, Redhill, Surrey, RH1 2HR	Office and Shop Equipment	Industrial Products
34	159	N	Tank	528730 151703	Surrey, RH1	Tanks (Generic)	Industrial Features
35G	160	N	Avant Contract Furnishers	528644 151685	46, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Office and Shop Equipment	Industrial Products
36	162	N	American Autoparts	528809 151700	74, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Parts and Accessories	Motoring
37H	169	N	Cartec Redhill Ltd	528581 151675	24a, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Repair, Testing and Servicing	Repair and Servicing
38G	172	N	Electricity Sub Station	528624 151691	Surrey, RH1	Electrical Features	Infrastructure and Facilities
39	173	SW	Electricity Sub Station	528481 151251	Surrey, RH1	Electrical Features	Infrastructure and Facilities
40K	178	NE	Works	528838 151705	Surrey, RH1	Unspecified Works Or Factories	Industrial Features
41	180	N	Auto Body Language	528716 151723	42-44, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Repair, Testing and Servicing	Repair and Servicing

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
42H	183	N	A V C UK Ltd	528579 151689	Unit 3 28-32, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Repair, Testing and Servicing	Repair and Servicing
43H	183	N	P S Auto Services	528579 151689	Unit 4 28-32, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Repair, Testing and Servicing	Repair and Servicing
44H	183	N	Your Image	528579 151689	28-32, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Workwear	Industrial Products
45	187	W	Jantech	528373 151379	Flat 2 Winchester House, Old School Close, Redhill, Surrey, RH1 2FR	Electrical Equipment Repair and Servicing	Repair and Servicing
46I	193	N	Halfords Autocentre	528768 151738	Praetorian Place, Trowers Way, Redhill, Surrey, RH1 2LH	Vehicle Repair, Testing and Servicing	Repair and Servicing
47I	196	N	HSS Hire Service Group Ltd	528755 151741	Unit 3 Praetorian Place 8, Trowers Way, Redhill, Surrey, RH1 2LH	Construction and Tool Hire	Hire Services
48J	197	N	Tank	528580 151704	Surrey, RH1	Tanks (Generic)	Industrial Features
49J	199	N	2Hot 2Cold Ltd	528597 151711	30, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Conservatories	Consumer Products
50K	200	NE	Euro Car Parts	528855 151721	78, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Parts and Accessories	Motoring
51L	202	N	Electricity Sub Station	528611 151719	Surrey, RH1	Electrical Features	Infrastructure and Facilities
52	203	NE	Cliff Electronic Components	528838 151733	76, Holmethorpe Avenue, Redhill, Surrey, RH1 2PF	Electrical Components	Industrial Products
53L	209	N	Surrey Stove Installations	528599 151722	Unit 1 32 Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Fireplaces and Mantelpieces	Consumer Products
54M	213	N	Orion Group	528666 151746	A 40, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Special Purpose Machinery and Equipment	Industrial Products
55M	213	N	South Eastern Hydraulics	528666 151746	40d, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Industrial Repairs and Servicing	Repair and Servicing
56	214	N	E J Soper Ltd	528732 151759	38a, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Leather Products	Consumer Products
57	223	N	Hogshead Publishing	528705 151765	36, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Published Goods	Industrial Products
58	224	SW	Electricity Sub Station	528422 151228	Surrey, RH1	Electrical Features	Infrastructure and Facilities
59N	230	N	Dream Cars	528842 151760	82, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Vehicle Repair, Testing and Servicing	Repair and Servicing
60	231	N	Electricity Sub Station	528633 151755	Surrey, RH1	Electrical Features	Infrastructure and Facilities
61	238	N	Electricity Sub Station	528800 151780	Surrey, RH1	Electrical Features	Infrastructure and Facilities
62	241	N	Service Plus	528712 151784	6, Trowers Way, Redhill, Surrey, RH1 2LH	Vehicle Repair, Testing and Servicing	Repair and Servicing
63N	243	N	Printmates	528841 151774	84, Holmethorpe Avenue, Redhill, Surrey, RH1 2NL	Published Goods	Industrial Products
64	244	N	Holmethorpe Industrial	528751 151789	Surrey, RH1	Business Parks and Industrial Estates	Industrial Features

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
Estate							

---

## 4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

---

## 4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

---

## 4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

---

# 5. Geology

## 5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

## 5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
RTDU-XCZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	CLAY AND SILT

## 5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
FO-SDST	FOLKESTONE FORMATION	SANDSTONE

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

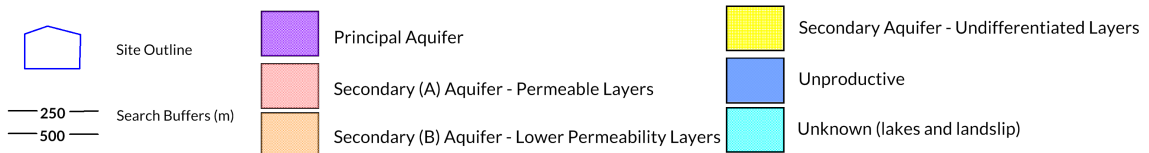


# 6 Hydrogeology and Hydrology

## 6a. Aquifer Within Superficial Geology



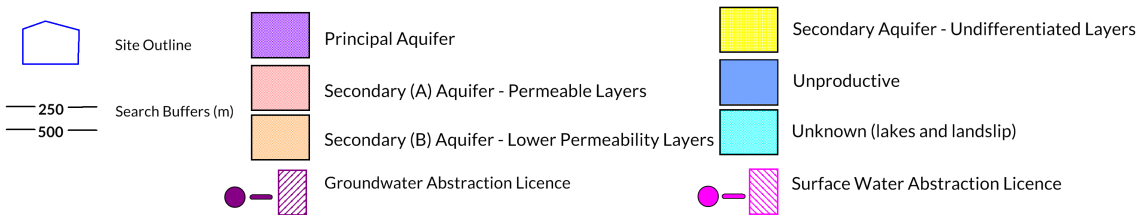
© Crown copyright and database rights 2019  
Ordnance Survey licence 100035207.



# 6b. Aquifer Within Bedrock Geology and Abstraction Licences



© Crown copyright and database rights 2019  
Ordnance Survey licence 100035207.

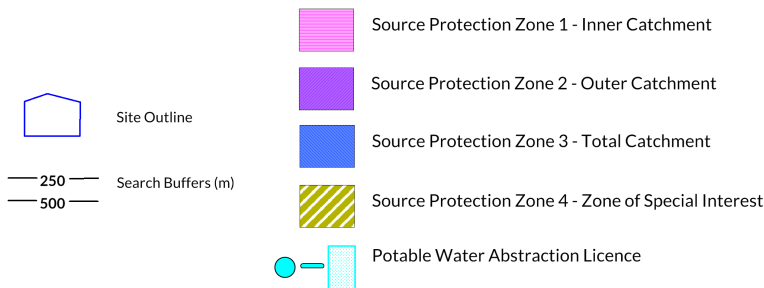




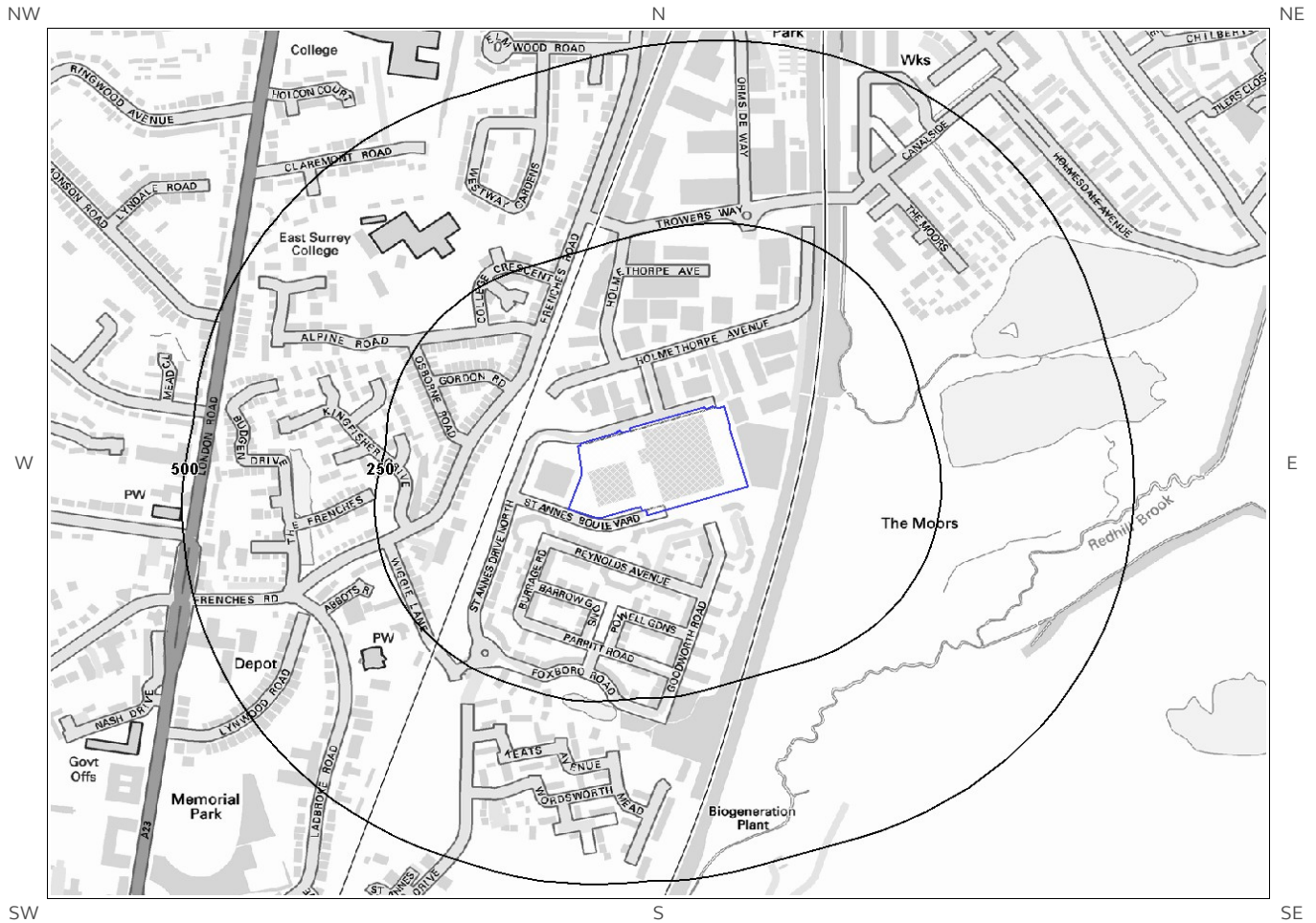
# 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



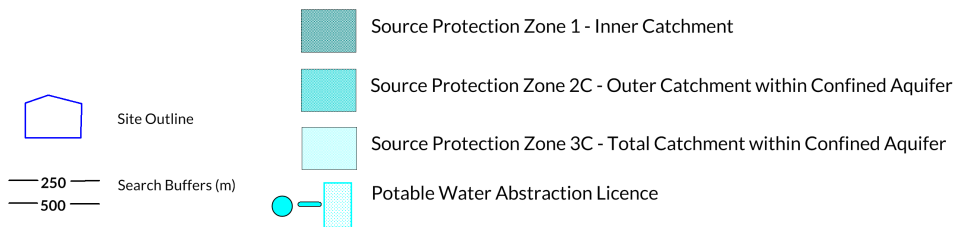
© Crown copyright and database rights 2019  
Ordnance Survey licence 100035207.



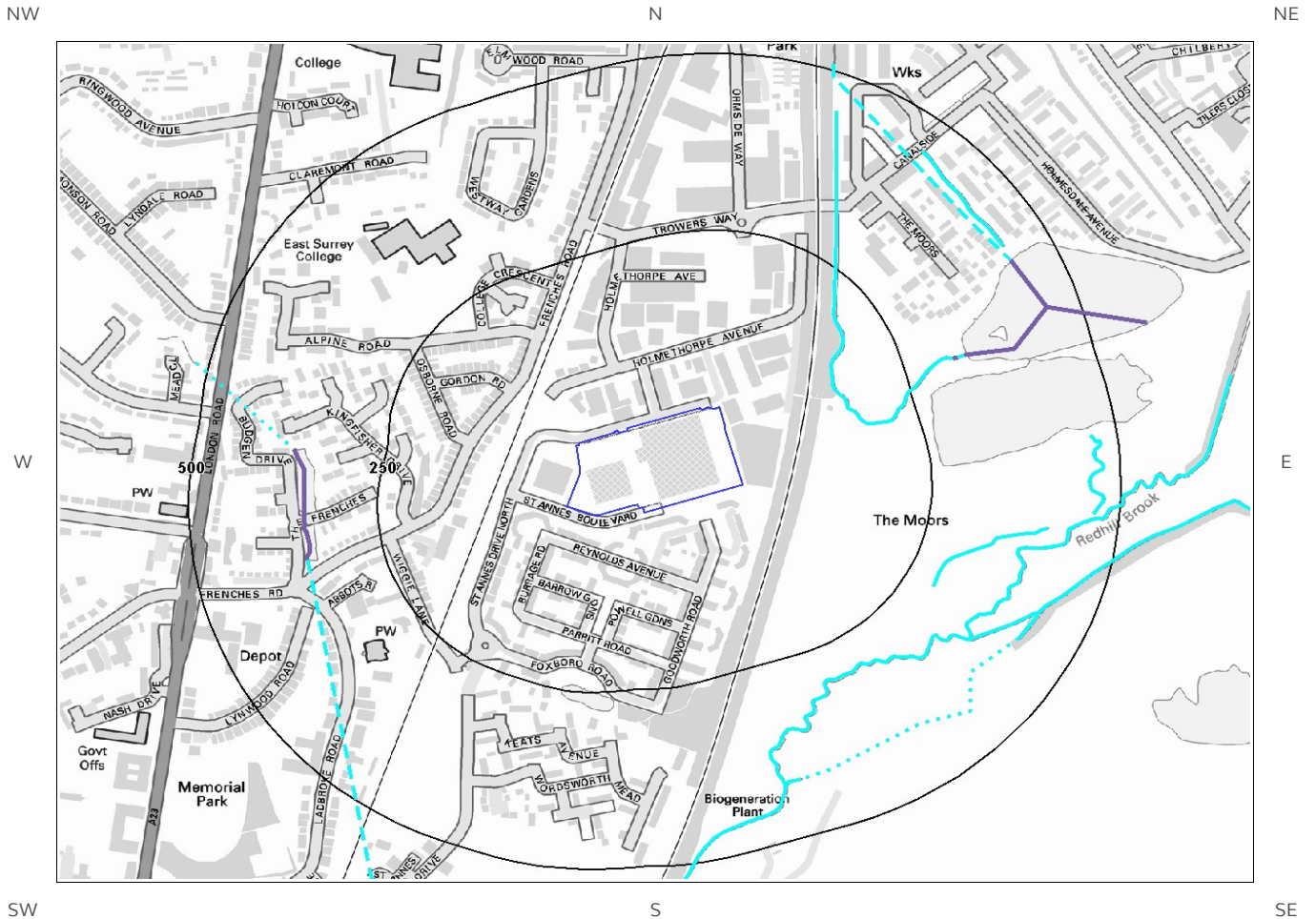
# 6d. Hydrogeology – Source Protection Zones within confined aquifer



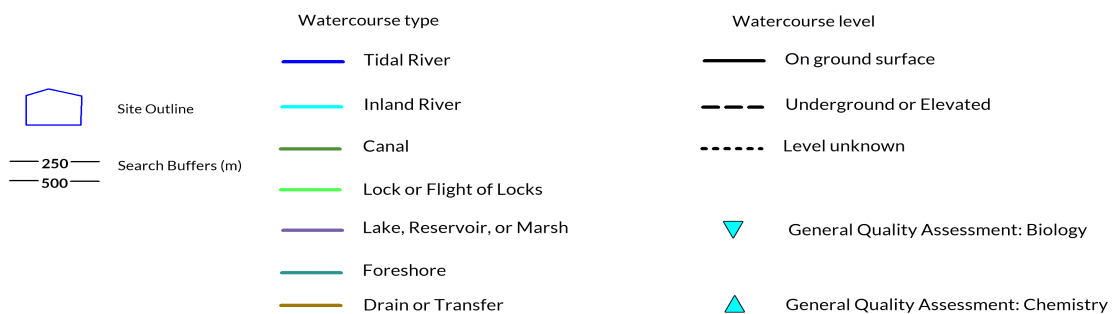
© Crown copyright and database rights 2019  
Ordnance Survey licence 100035207.



# 6e. Hydrology – Watercourse Network and River Quality



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





# 6. Hydrogeology and Hydrology

## 6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
2	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
1	204	SE	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
3	422	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

## 6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
3	338	NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	487	S	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

## 6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1589	NE	530100 152400	Status: Historical Licence No: 28/39/32/0100 Details: Mineral Washing Direct Source: THAMES GROUNDWATER Point: MERCERS EAST QUARRY, MERSTHAM, REDHILL - LAKE Data Type: Point Name: Sibelco UK Ltd Annual Volume (m <sup>3</sup> ): 1.2e+006 Max Daily Volume (m <sup>3</sup> ): 4800 Original Application No: - Original Start Date: 13/04/2005 Expiry Date: 31/03/2017 Issue No: 2 Version Start Date: 23/06/2009 Version End Date:
Not shown	1589	NE	530100 152400	Status: Active Licence No: 28/39/32/0100/R01 Details: Dust Suppression Direct Source: THAMES GROUNDWATER Point: MERCERS EAST QUARRY, MERSTHAM, REDHILL - LAKE Data Type: Point Name: Sibelco UK Ltd Annual Volume (m <sup>3</sup> ): 1.2e+006 Max Daily Volume (m <sup>3</sup> ): 4850 Original Application No: - Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 01/04/2017 Version End Date:
Not shown	1589	NE	530100 152400	Status: Active Licence No: 28/39/32/0100/R01 Details: Mineral Washing Direct Source: THAMES GROUNDWATER Point: MERCERS EAST QUARRY, MERSTHAM, REDHILL - LAKE Data Type: Point Name: Sibelco UK Ltd Annual Volume (m <sup>3</sup> ): 1.2e+006 Max Daily Volume (m <sup>3</sup> ): 4850 Original Application No: - Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 01/04/2017 Version End Date:
Not shown	1941	SE	530200 150100	Status: Historical Licence No: 28/39/32/0063 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: HYTHE BEDS AT PRIORY FARM, NUTFIELD, SURREY Data Type: Point Name: SHINNER Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 09/10/1972 Expiry Date: - Issue No: 100 Version Start Date: 09/10/1972 Version End Date:

## 6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

## 6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

## 6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

---

## 6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

---

## 6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

---

## 6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site

None identified

### 6.9.1 Biological Quality:

Database searched and no data found.

## 6.9.2 Chemical Quality:

Database searched and no data found.

## 6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	153 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.8
3	153 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.8
2	158 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
4	158 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
3	287 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	287 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	297 SE	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
6	297 SE	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				conditions) Average Width in Watercourse Section (m): 2.2
5	314 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	314 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	316 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
8	316 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
7	322 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	322 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	332 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 13.5
10	332 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 13.5
9	335 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
Not shown	335 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
10	345 W	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.1
Not shown	345 W	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.1



ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
11	350 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	350 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	354 SE	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.8
14	354 SE	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.8
13	370 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	370 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	372 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
16	372 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
15	400 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
17	400 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	419 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
Not shown	419 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
17	422	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	S			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
Not shown	422 S	Redhill Brook	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
18	423 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	423 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	424 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
Not shown	424 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
20	430 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
Not shown	430 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
21	432 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.5
23	432 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.5
22	438 NE	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 16.3
Not shown	438 NE	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 16.3
23	456 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 114.9
Not shown	456 E	-	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 114.9
24	459 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	459 E	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

## 6.11 Surface Water Features

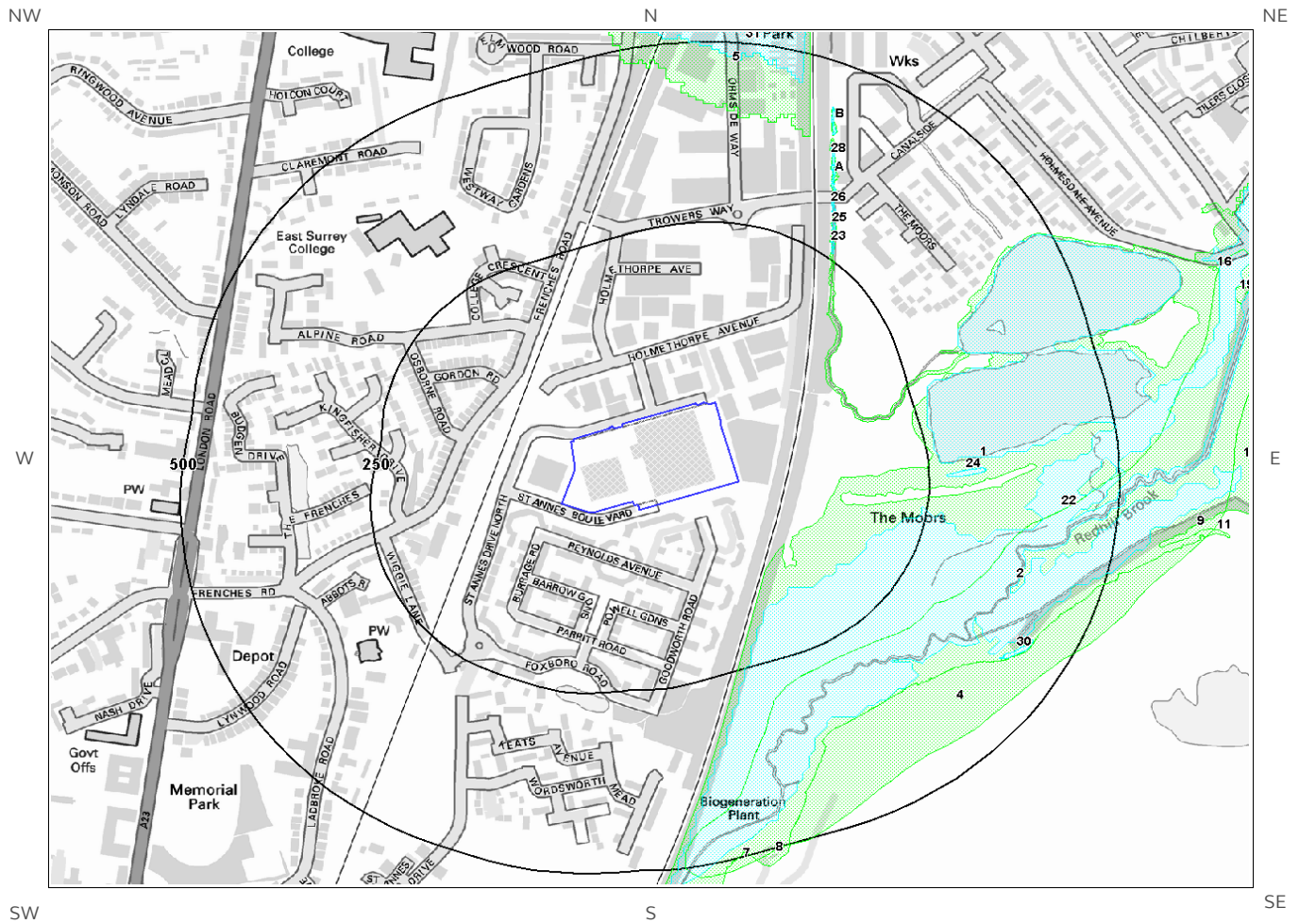
Surface water features within 250m of the study site

Identified

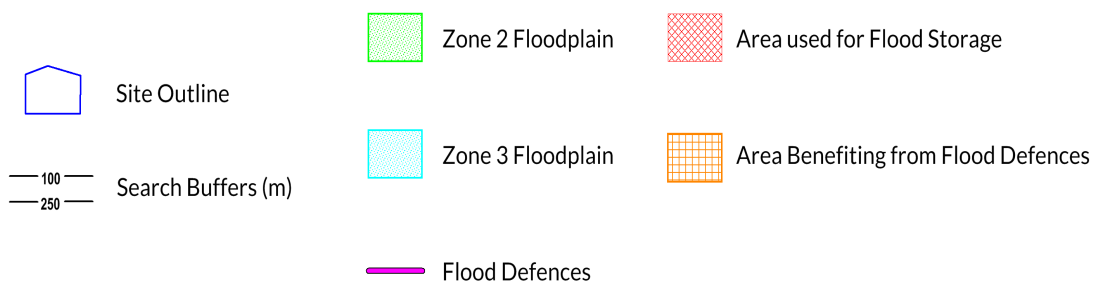
The following surface water records are not represented on mapping:

Distance (m)	Direction
152	E
157	E
241	S

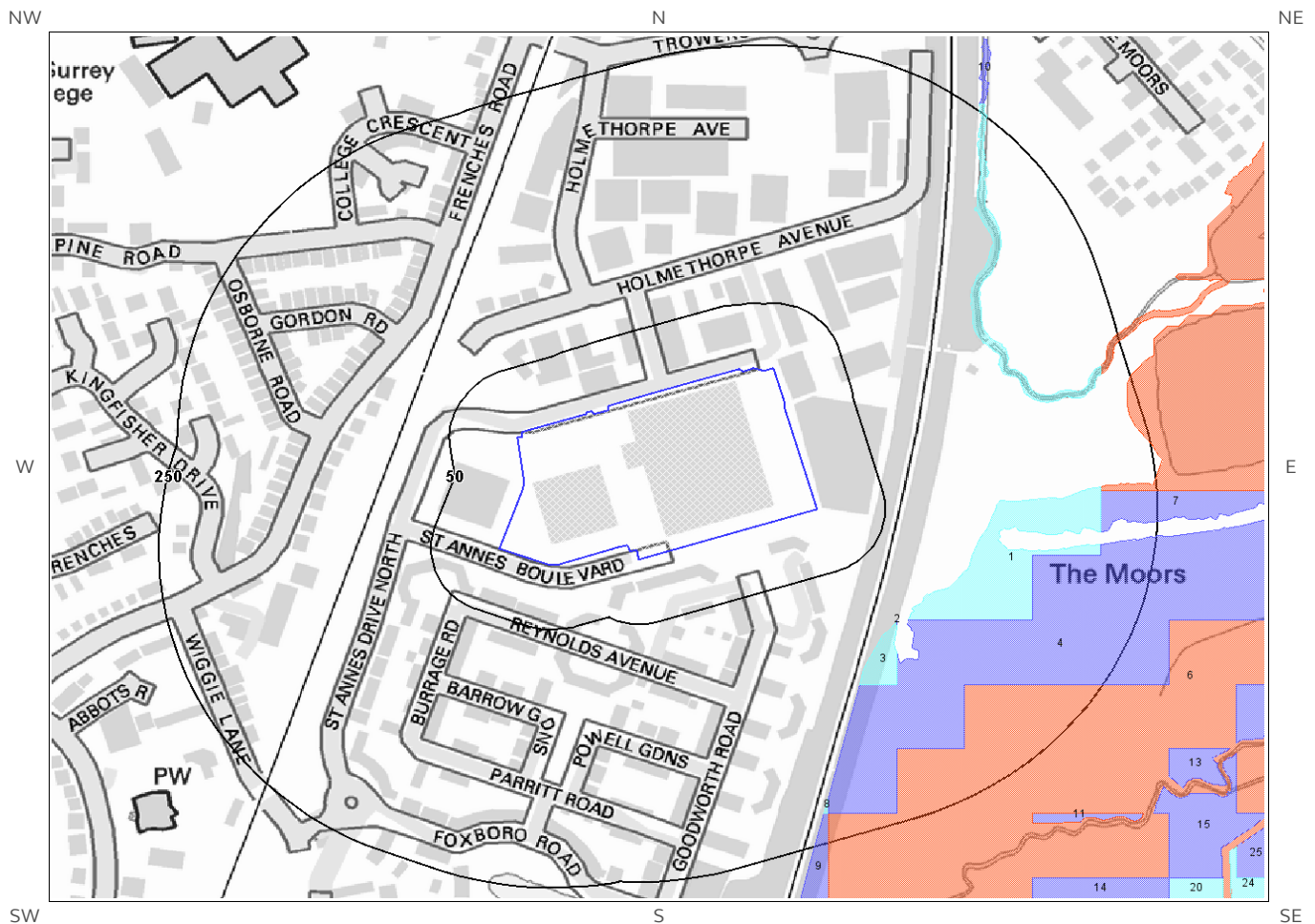
# 7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



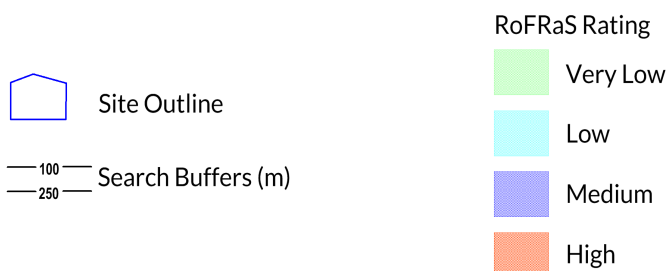
© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



© Crown copyright and database rights 2019.  
 Ordnance Survey licence 100035207.





# 7 Flooding

## 7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m Identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1	103	SE	21-Feb-2019	Zone 2 - (Fluvial /Tidal Models)

## 7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m Identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) 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. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1	159	SE	21-Feb-2019	Zone 3 - (Fluvial /Tidal Models)

## 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

## 7.4 Flood Defences

Flood Defences within 250m of the study site None identified  
Database searched and no data found.

---

## 7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site None identified

---

## 7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site None identified

---

## 7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site None identified

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

---

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

The area is not considered to be prone to groundwater flooding based on rock type. Not Prone

---

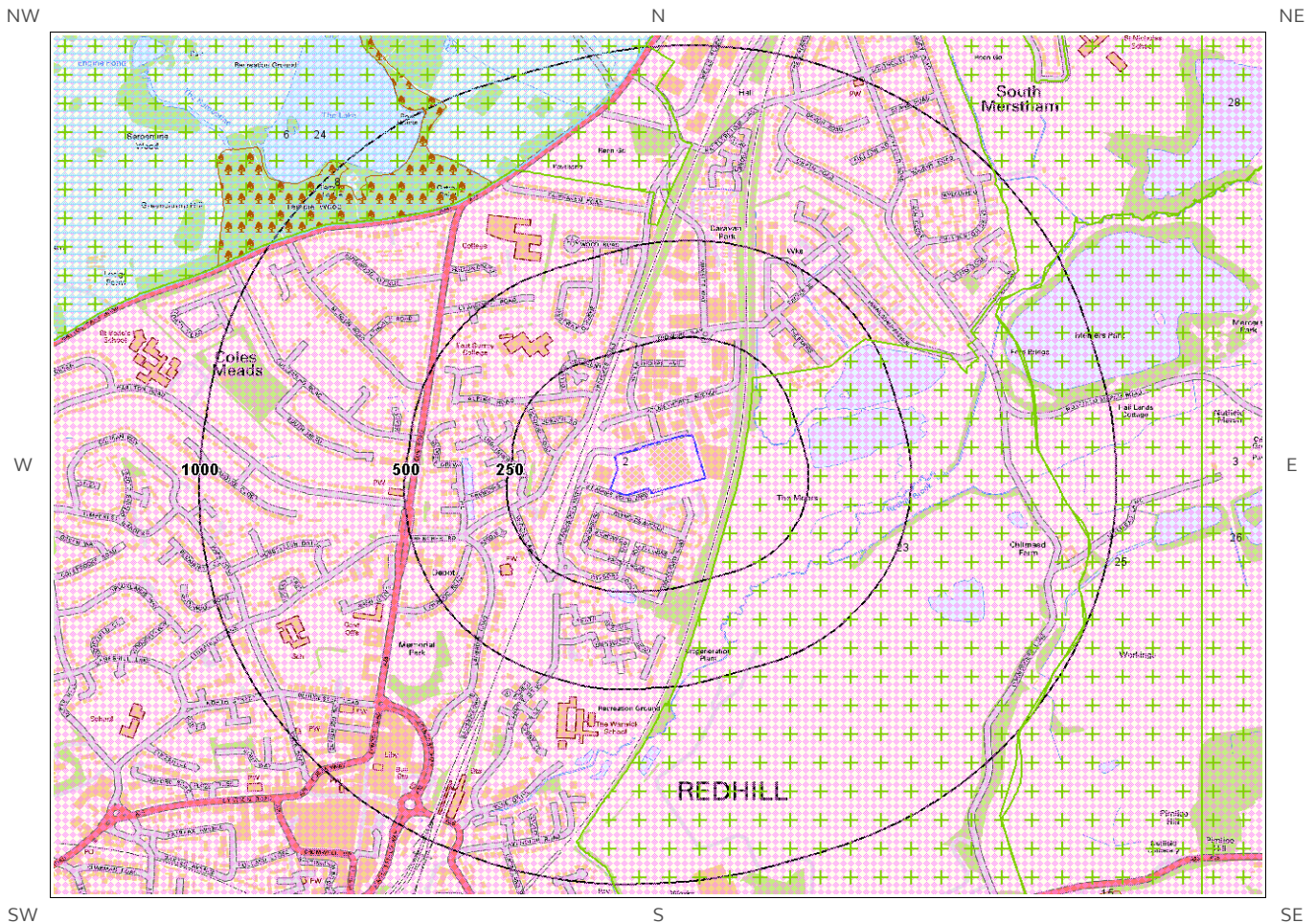
## 7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result Not Applicable

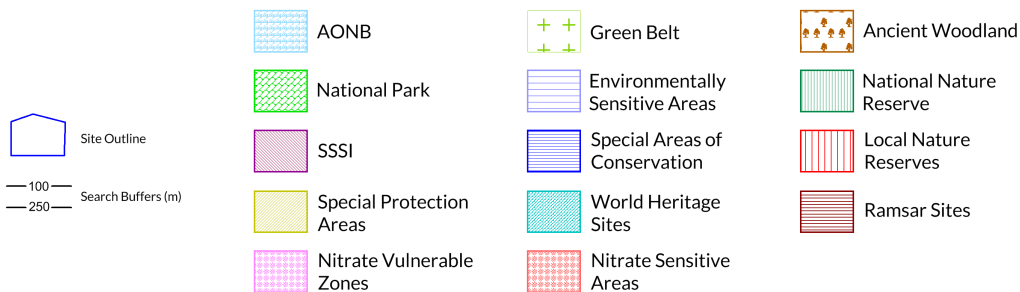
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

# 8. Designated Environmentally Sensitive Sites Map



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

## 8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

1

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
Not shown	1622	W	Mole Gap to Reigate Escarpment	Natural England

## 8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

## 8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

## 8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

## 8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

## 8.6 Records of Ancient Woodland within 2000m of the study site:

15

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
8	752	NW	UNKNOWN	Ancient Replanted Woodland
Not shown	1247	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1277	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1333	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1390	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1391	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1397	SE	UNKNOWN	Ancient and Semi-Natural Woodland
15	1419	SE	UNKNOWN	Ancient Replanted Woodland
Not shown	1464	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1470	SE	UNKNOWN	Ancient Replanted Woodland
Not shown	1544	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1645	W	UNKNOWN	Ancient Replanted Woodland
Not shown	1647	W	UNKNOWN	Ancient Replanted Woodland
Not shown	1679	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1722	SE	UNKNOWN	Ancient and Semi-Natural Woodland

## 8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

0

Database searched and no data found.

## 8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.



### 8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

### 8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

2

The following Area of Outstanding Natural Beauty (AONB) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	AONB/NSA Name	Data Source
6	750	NW	Surrey Hills	Natural England
Not shown	1832	E	Surrey Hills	Natural England

### 8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

### 8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

### 8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

4

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
2	0	On Site	Existing	DEFRA
3	1208	E	Existing	DEFRA
Not shown	1392	S	Existing	DEFRA
Not shown	1876	SE	Existing	DEFRA

---

## 8.14 Records of Green Belt land within 2000m of the study site:

11

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
23	79	E	London Area Greenbelt	Reigate and Banstead District (B)
24	544	N	London Area Greenbelt	Reigate and Banstead District (B)
25	801	NE	London Area Greenbelt	Tandridge
26	1208	E	London Area Greenbelt	Tandridge
Not shown	1343	S	London Area Greenbelt	Tandridge
28	1381	NE	London Area Greenbelt	Reigate and Banstead District (B)
Not shown	1392	S	London Area Greenbelt	Reigate and Banstead District (B)
Not shown	1452	S	London Area Greenbelt	Tandridge
Not shown	1526	S	London Area Greenbelt	Reigate and Banstead District (B)
Not shown	1788	SW	London Area Greenbelt	Reigate and Banstead District (B)
Not shown	1876	SE	London Area Greenbelt	Tandridge

---

# 9. Natural Hazards Findings

## 9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our [website](#). The following information has been found:

### 9.1.1 Shrink Swell

Maximum Shrink-Swell\*\* hazard rating identified on the study site Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

### 9.1.2 Landslides

Maximum Landslide\* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

### 9.1.3 Soluble Rocks

Maximum Soluble Rocks\* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

\* This indicates an automatically generated 50m buffer and site.

### 9.1.4 Compressible Ground

Maximum Compressible Ground\* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

---

**Hazard**

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

---

### 9.1.5 Collapsible Rocks

Maximum Collapsible Rocks\* hazard rating identified on the study site

Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

---

**Hazard**

Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

---

### 9.1.6 Running Sand

Maximum Running Sand\*\* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

---

**Hazard**

No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

---



---

\* This indicates an automatically generated 50m buffer and site.

## 9.2 Radon

### 9.2.1 Radon Affected Areas

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? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

---

### 9.2.2 Radon Protection

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? No radon protective measures are necessary.



# 10. Mining

## 10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

## 10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Sand	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Past underground mine workings are uncommon, localised and of limited area. The rock types present in this area are such that minor mineral veins may be present within them on which it is possible that there have been attempts to work these by underground methods and/or it is possible that small scale underground extraction of other materials may have occurred. All such occurrences are likely to be restricted in size and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

## 10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

# Contact Details

**Groundsure Helpline**  
Telephone: 08444 159 000  
info@groundsure.com

## British Geological Survey Enquiries

Kingsley Dunham Centre  
Keyworth, Nottingham NG12 5GG  
Tel: 0115 936 3143.  
Fax: 0115 936 3276.  
Email:

Web: [www.bgs.ac.uk](http://www.bgs.ac.uk)

BGS Geological Hazards Reports and general geological enquiries:  
[enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)

## Environment Agency

National Customer Contact Centre, PO Box 544  
Rotherham, S60 1BY  
Tel: 03708 506 506

Web: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

## Public Health England

Public information access office  
Public Health England, Wellington House  
133-155 Waterloo Road, London, SE1 8UG  
[www.gov.uk/phe](http://www.gov.uk/phe)

Email: [enquiries@phe.gov.uk](mailto:enquiries@phe.gov.uk)  
Main switchboard: 020 7654 8000

## The Coal Authority

200 Lichfield Lane  
Mansfield  
Notts NG18 4RG  
Tel: 0345 7626 848  
DX 716176 Mansfield 5  
[www.coal.gov.uk](http://www.coal.gov.uk)

## Ordnance Survey

Adanac Drive, Southampton  
SO16 0AS  
Tel: 08456 050505

## Local Authority

Authority: Reigate and Banstead Borough Council  
Phone: 01737 276 000

Web: <http://www.reigate-banstead.gov.uk/>

Address: Reigate Town Hall, Castlefield Road, Reigate, Surrey, RH2

## Gemapping PLC

Virginia Villas, High Street, Hartley Witney,  
Hampshire RG27 8NW  
Tel: 01252 845444



Public Health  
England



The Coal  
Authority



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028].

This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

# Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

<https://www.groundsure.com/terms-and-conditions-feb11-2019>



# Groundsure

LOCATION INTELLIGENCE

Carbon Clear Limited  
70-78, York Way,  
London, N1 9AG

Groundsure Reference: GS-5932101

Your Reference: Redhill\_

Report Date 8 Apr 2019

Report Delivery Method: Email - pdf

## Geo Insight

Address: DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director  
Groundsure Limited

Enc.  
Groundsure Geo Insight



**Address:** DIGITAL REALTY, 3, ST ANNES BOULEVARD, REDHILL, RH1 1AX  
**Date:** 8 Apr 2019  
**Reference:** GS-5932101  
**Client:** Carbon Clear Limited

NW N NE



SW S SE

Aerial Photograph Capture date: 27-May-2012  
Grid Reference: 528670,151462  
Site Size: 2.4105ha

# Contents Page

Contents Page.....	3
Overview of Findings.....	5
1:10,000 Scale Availability.....	8
Availability of 1:10,000 Scale Geology Mapping.....	9
1 Geology (1:10,000 scale).....	10
1.1 Artificial Ground map (1:10,000 scale).....	10
1. Geology 1:10,000 scale.....	11
1.1 Artificial Ground.....	11
1.2 Superficial Deposits and Landslips map (1:10,000 scale).....	12
1.2 Superficial Deposits and Landslips.....	13
1.2.1 Superficial Deposits/ Drift Geology.....	13
1.2.2 Landslip.....	13
1.3 Bedrock and linear features map (1:10,000 scale).....	14
1.3 Bedrock and linear features.....	15
1.3.1 Bedrock/ Solid Geology.....	15
1.3.2 Linear features.....	15
2 Geology 1:50,000 Scale.....	16
2.1 Artificial Ground map.....	16
2. Geology 1:50,000 scale.....	17
2.1 Artificial Ground.....	17
2.1.1 Artificial/ Made Ground.....	17
2.1.2 Permeability of Artificial Ground.....	17
2.2 Superficial Deposits and Landslips map (1:50,000 scale).....	18
2.2 Superficial Deposits and Landslips.....	19
2.2.1 Superficial Deposits/ Drift Geology.....	19
2.2.2 Permeability of Superficial Ground.....	19
2.2.3 Landslip.....	19
2.2.4 Landslip Permeability.....	19
2.3 Bedrock and linear features map (1:50,000 scale).....	20
2.3 Bedrock, Solid Geology & linear features.....	21
2.3.1 Bedrock/Solid Geology.....	21
2.3.2 Permeability of Bedrock Ground.....	21
2.3.3 Linear features.....	21
3 Radon Data.....	22
3.1 Radon Affected Areas.....	22
3.2 Radon Protection.....	22
4 Ground Workings map.....	23
4 Ground Workings.....	24
4.1 Historical Surface Ground Working Features derived from Historical Mapping.....	24
4.2 Historical Underground Working Features derived from Historical Mapping.....	25
4.3 Current Ground Workings.....	26
5 Mining, Extraction & Natural Cavities.....	29
5.1 Historical Mining.....	29
5.2 Coal Mining.....	29
5.3 Johnson Poole and Bloomer.....	29
5.4 Non-Coal Mining.....	29
5.5 Non-Coal Mining Cavities.....	30
5.6 Natural Cavities.....	30
5.7 Brine Extraction.....	30
5.8 Gypsum Extraction.....	30
5.9 Tin Mining.....	30
5.10 Clay Mining.....	31
6 Natural Ground Subsidence.....	32
6.1 Shrink-Swell Clay map.....	32
6.2 Landslides map.....	33
6.3 Ground Dissolution of Soluble Rocks map.....	34
6.4 Compressible Deposits map.....	35
6.5 Collapsible Deposits map.....	36
6.6 Running Sand map.....	37

6 Natural Ground Subsidence.....	38
6.1 Shrink-Swell Clays.....	38
6.2 Landslides.....	38
6.3 Ground Dissolution of Soluble Rocks.....	39
6.4 Compressible Deposits.....	39
6.5 Collapsible Deposits.....	39
6.6 Running Sands.....	39
7 Borehole Records.....	41
8 Estimated Background Soil Chemistry.....	42
9 Railways and Tunnels map.....	43
9 Railways and Tunnels.....	44
9.1 Tunnels .....	44
9.2 Historical Railway and Tunnel Features .....	44
9.3 Historical Railways.....	45
9.4 Active Railways.....	46
9.5 Railway Projects.....	46

# Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Geology 1:10,000 Scale		
1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	No
Section 2: Geology 1:50,000 Scale		
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

## Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site\* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

Yes

## Section 3: Radon

3. Radon

3.1 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?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

## Section 4: Ground Workings

	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	30	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	5
4.3 Current Ground Workings	0	0	3	5	9

## Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	1	0	0	0	0
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0



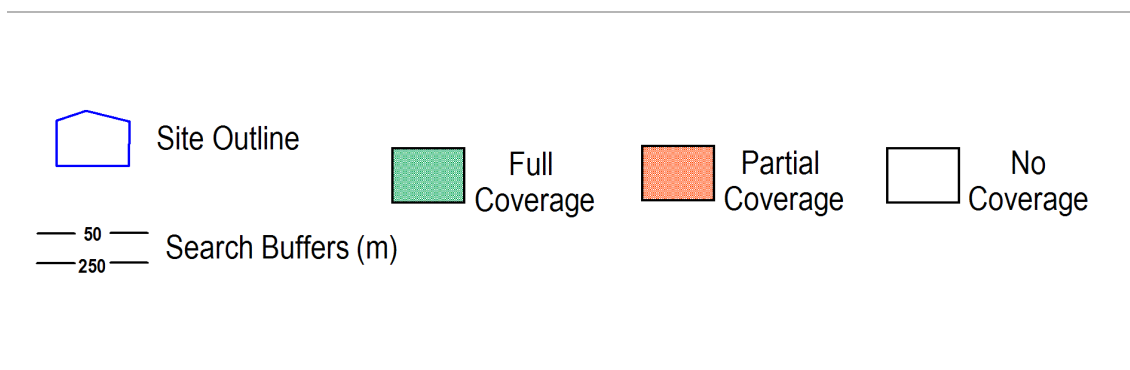
Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Low				
6.2 Landslides	Very Low				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Negligible				
6.5 Collapsible Deposits	Low				
6.5 Running Sand	Negligible				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	0	0	3		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	2	0	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	0	0	20	Not Searched	
9.3 Historical Railways	0	0	2	Not Searched	
9.4 Active Railways	0	0	16	Not Searched	
9.5 Railway Projects	0	0	0	0	

# 1:10,000 Scale Availability



1\_10,000 Availability Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	No deposits are mapped	No coverage	No coverage	No coverage
N2	1392.0	Some deposits are mapped	Full	Full	Some deposits are mapped

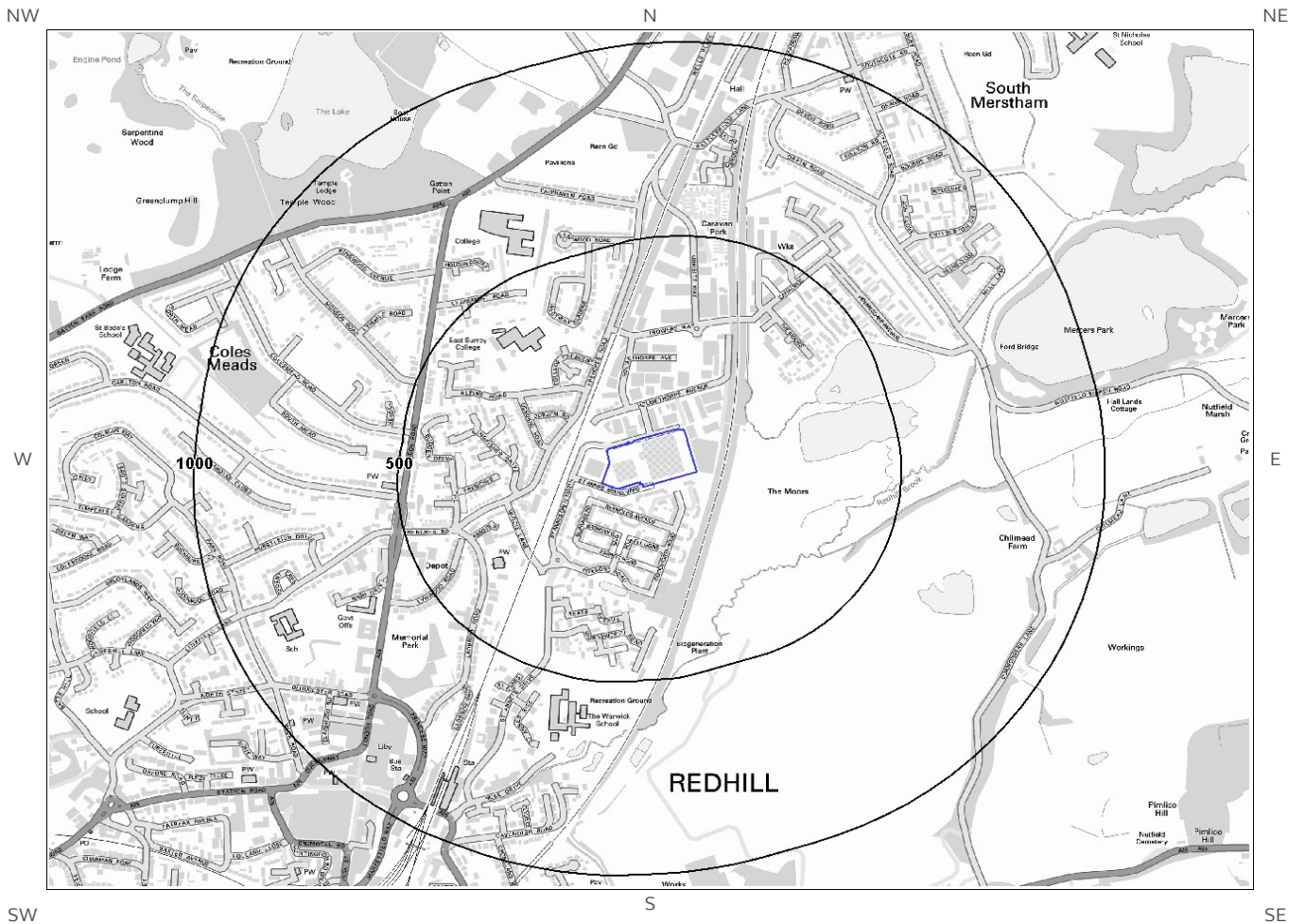
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

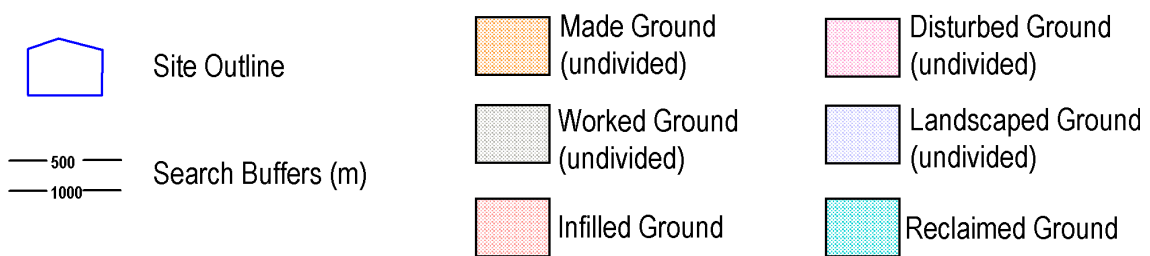
# 1 Geology (1:10,000 scale).

# 1.1 Artificial Ground map (1:10,000 scale)



**Artificial Ground Legend**

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 1. Geology 1:10,000 scale

## 1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

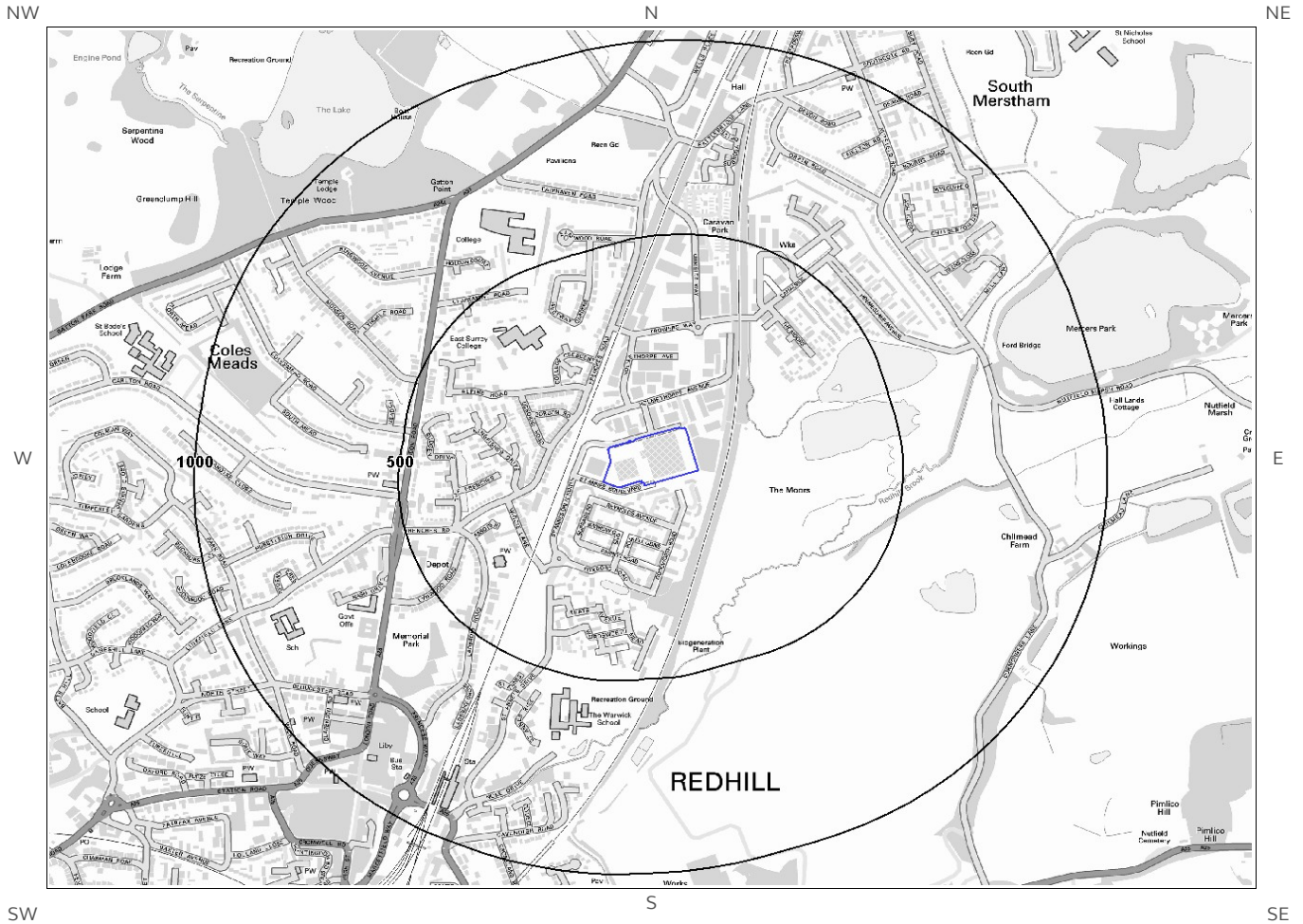
Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

---

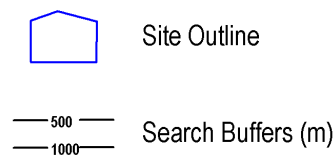


# 1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

## 1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

---

## 1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale? No

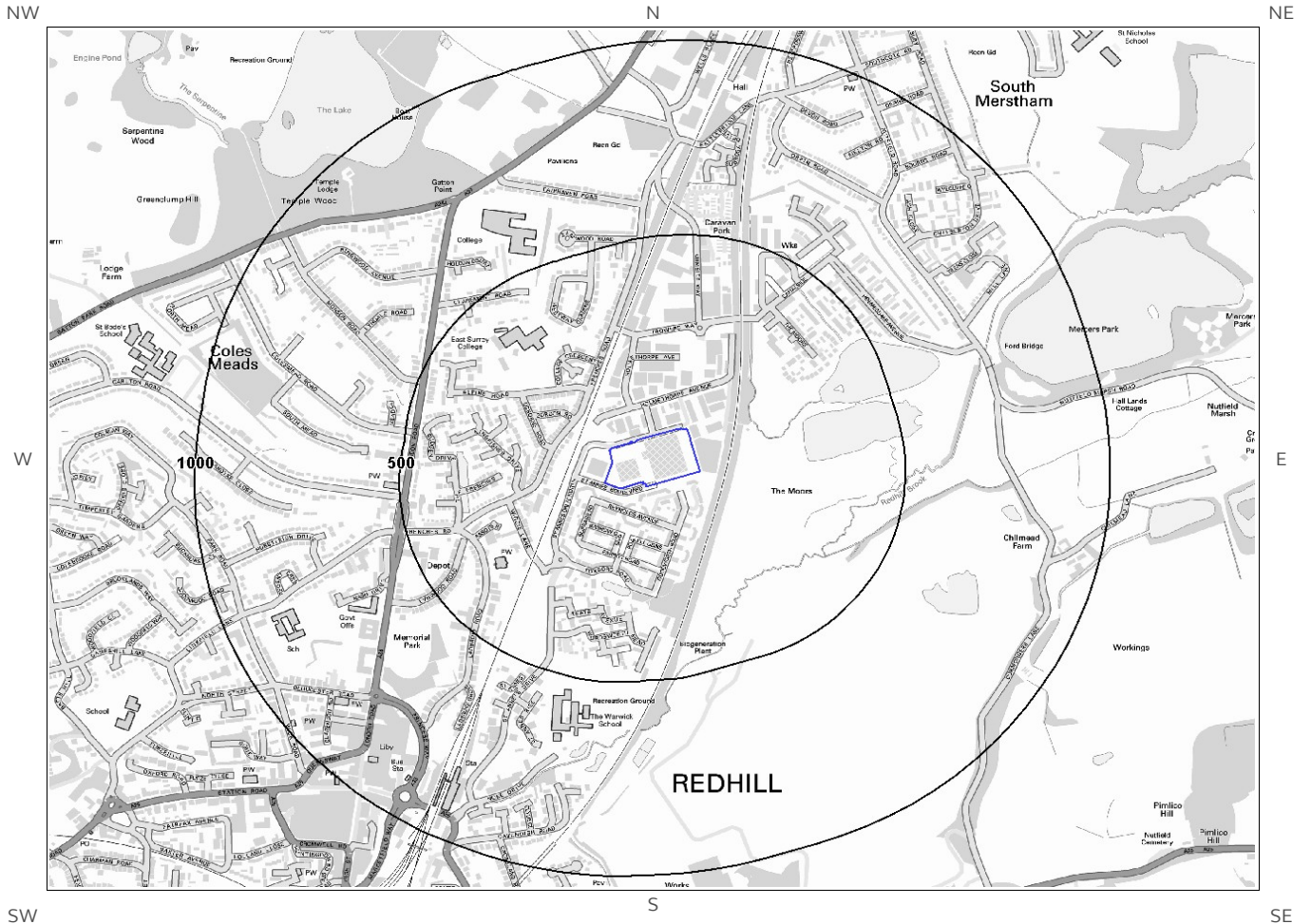
Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.




---

# 1.3 Bedrock and linear features map (1:10,000 scale)



**Bedrock and linear features Legend**

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.

-  Site Outline
  -  500
  -  1000
- Search Buffers (m)

# 1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

## 1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

Database searched and no data found at this scale.

---

## 1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

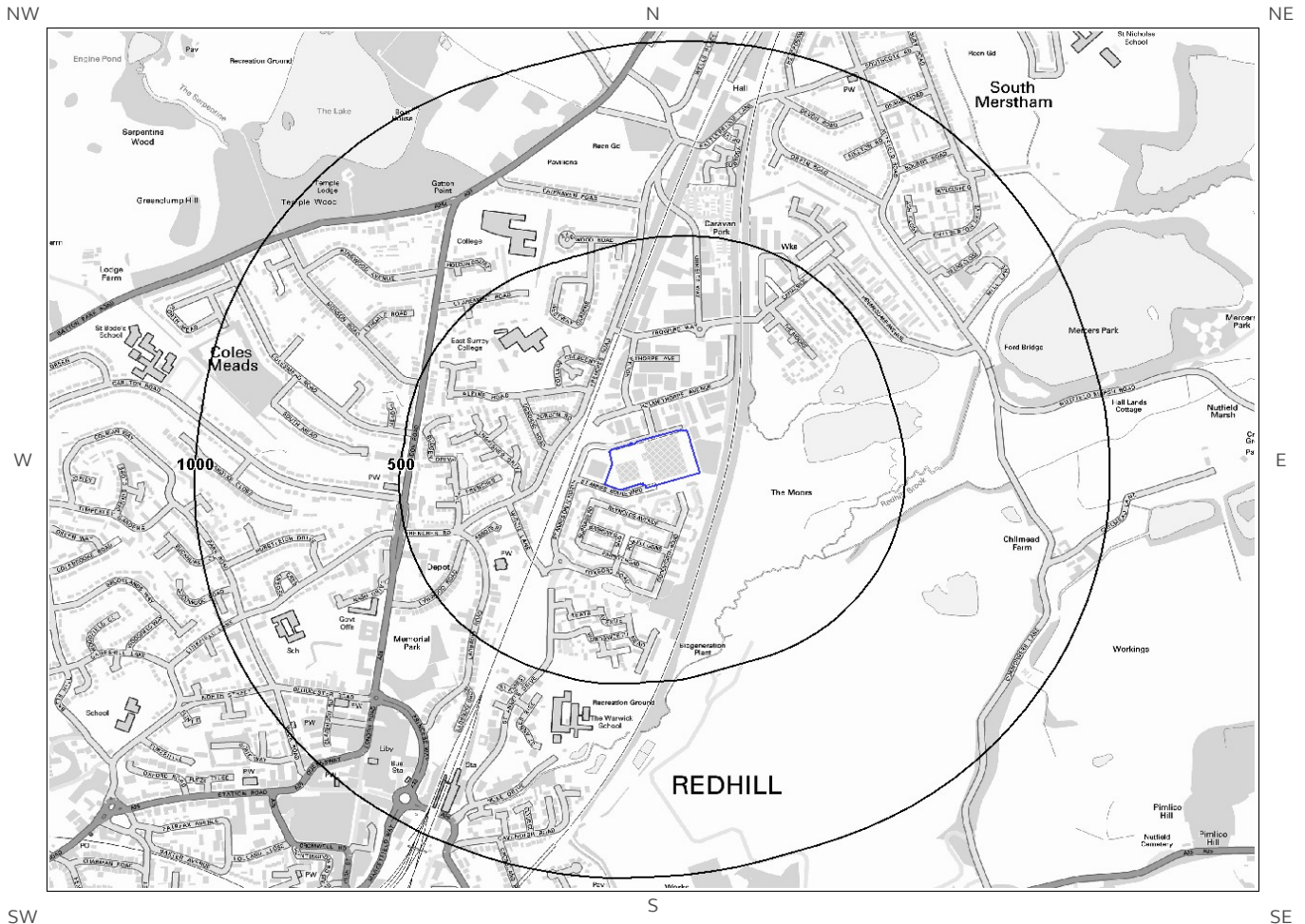
This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

---

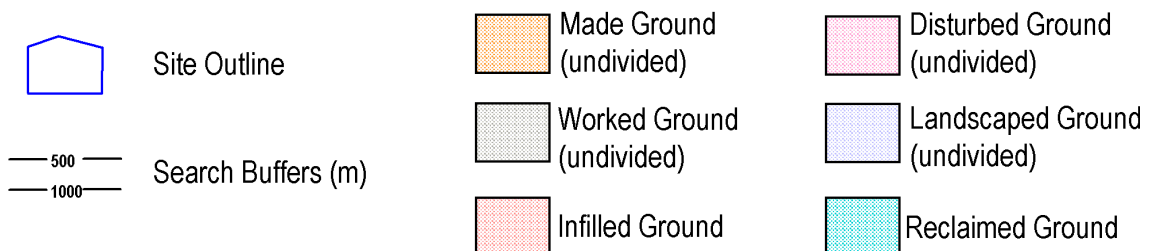


# 2 Geology 1:50,000 Scale

## 2.1 Artificial Ground map



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





## 2. Geology 1:50,000 scale

### 2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 286

#### 2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? No

Database searched and no data found.

---

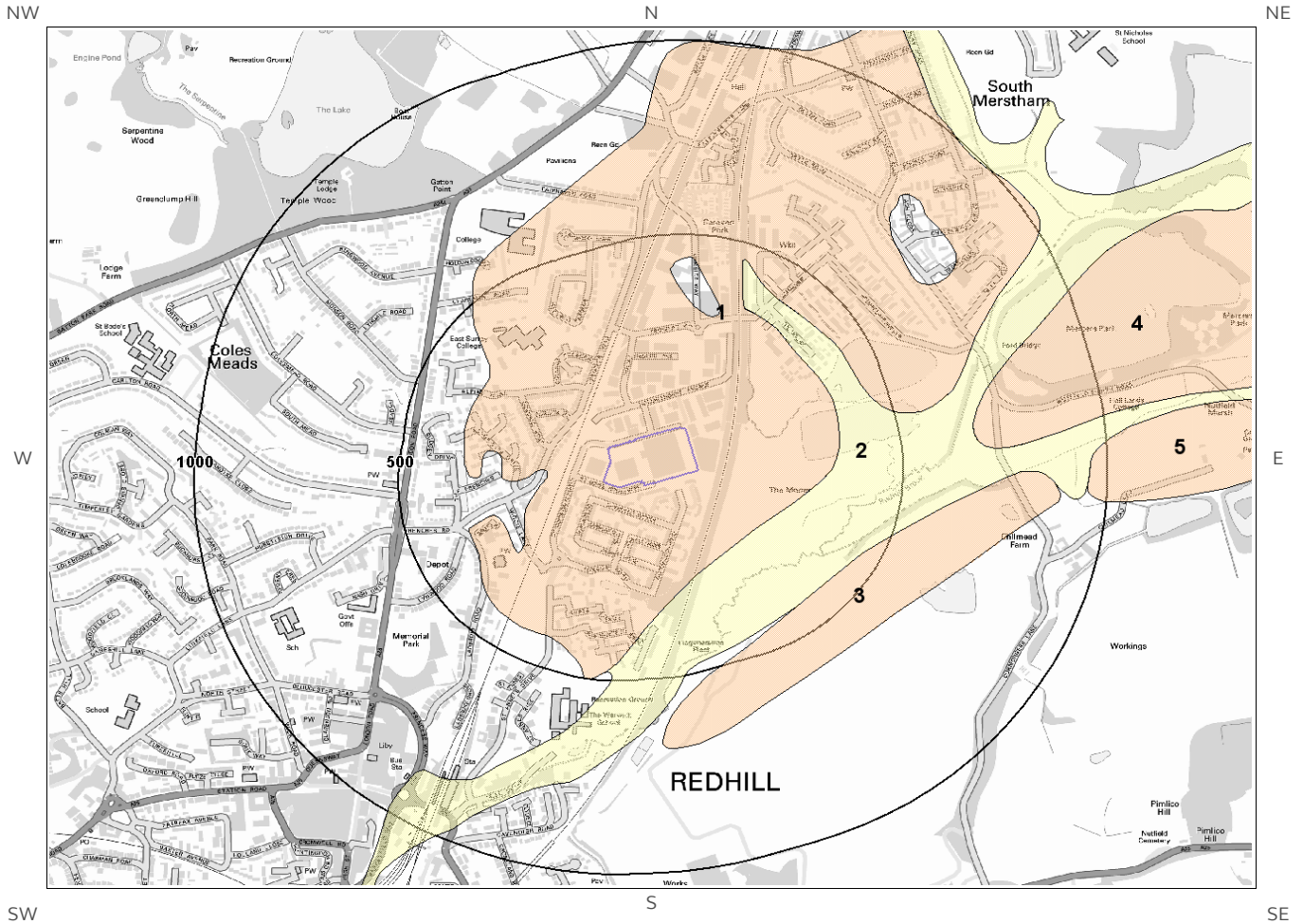
#### 2.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

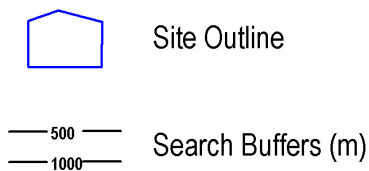
Database searched and no data found.

---

# 2.2 Superficial Deposits and Landslips map (1:50,000 scale)



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



## 2.2 Superficial Deposits and Landslips

### 2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	RTDU-XCZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	CLAY AND SILT
2	204.0	SE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	422.0	SE	RTDU-XCZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	CLAY AND SILT

### 2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Low	Very Low

### 2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

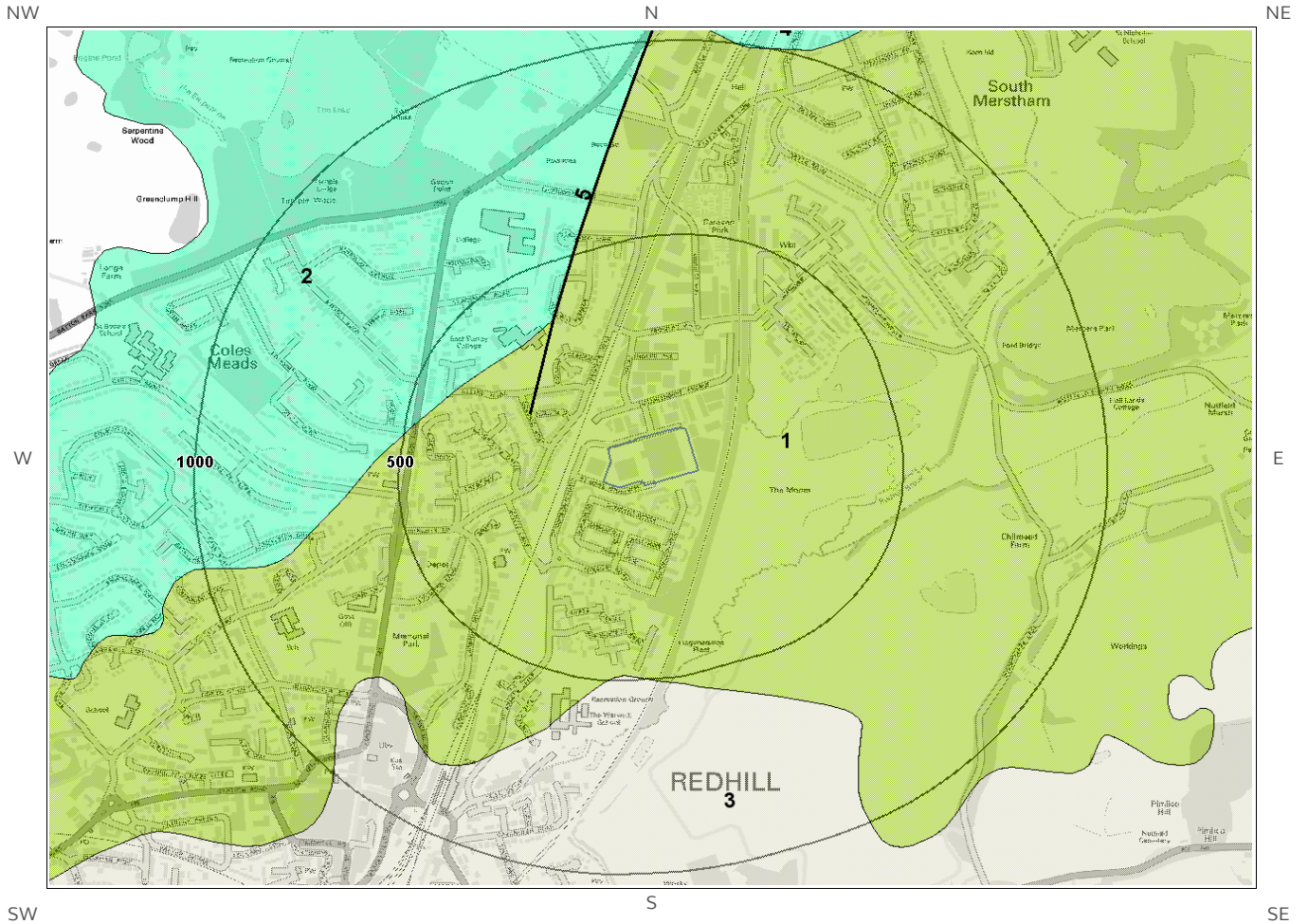
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

### 2.2.4 Landslip Permeability

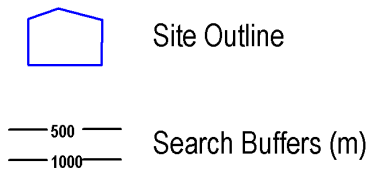
Are there any records relating to permeability of landslips within the study site boundary? No

Database searched and no data found.

# 2.3 Bedrock and linear features map (1:50,000 scale)



© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





## 2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 286

### 2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	FO-SDST	FOLKESTONE FORMATION - SANDSTONE	APTIAN
2	338.0	NW	GLT-MDST	GAULT FORMATION - MUDSTONE	ALBIAN
3	487.0	S	SAB-STMD	SANDGATE FORMATION - SANDSTONE AND MUDSTONE	APTIAN

### 2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	High	High

### 2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? Yes

ID	Distance	Direction	Category Description	Feature Description
5	211.0	NW	FAULT	Fault, inferred, displacement unknown

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.



# 3 Radon Data

## 3.1 Radon Affected Areas

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?      The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

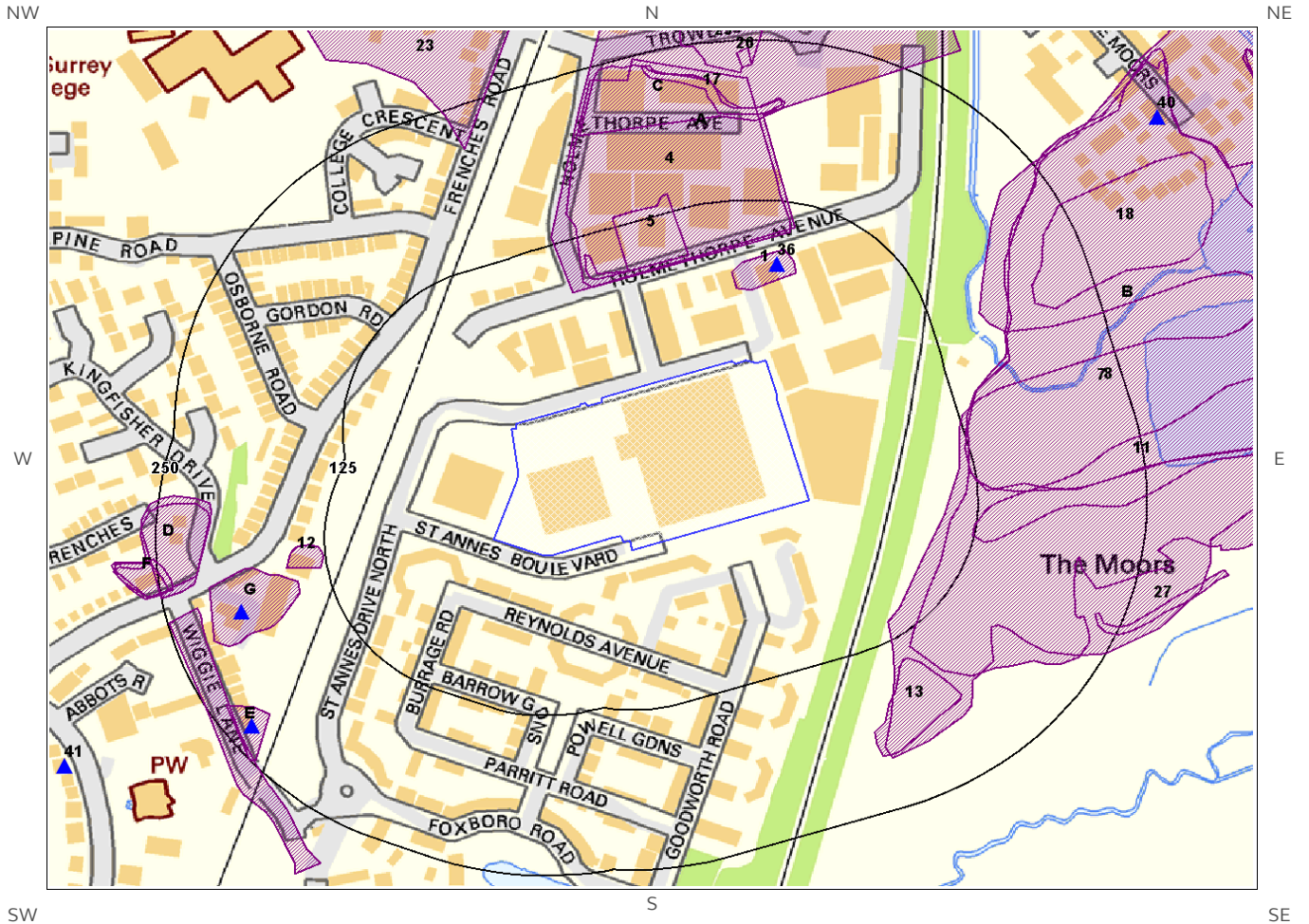
---

## 3.2 Radon Protection

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?      No radon protective measures are necessary.





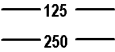
---

# 4 Ground Workings map



Ground Workings Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.

-  Site Outline
-  Historic Surface Ground Workings
-  Historic Underground Workings
-  Current Ground Workings
-  Search Buffers (m)

# 4 Ground Workings

## 4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1	55.0	N	528758 151616	Clay Pit	1895
2A	85.0	N	528752 151785	Brick Works	1912
3A	85.0	N	528752 151785	Brick Works	1895
4	85.0	N	528695 151691	Brick Yard	1869
5	89.0	N	528674 151645	Unspecified Pit	1869
6	89.0	N	528629 151618	Unspecified Ground Workings	1869
7	96.0	SE	528969 151586	Refuse Heaps	1955
8	105.0	E	529128 151571	Ponds	1974
9B	120.0	E	529128 151571	Ponds	1988
10B	121.0	E	529166 151616	Water Bodies	1979
11	124.0	E	529034 151467	Pond	1955
12	127.0	W	528419 151392	Unspecified Pit	1912
13	143.0	SE	528873 151274	Unspecified Pit	1974
14G	148.0	W	528381 151352	Sand Pits	1895
15C	187.0	N	528698 151748	Unspecified Heap	1938
16C	187.0	N	528698 151748	Unspecified Heap	1938
17	192.0	N	528720 151756	Unspecified Ground Workings	1955
18	203.0	E	529024 151647	Pond	1955
19D	210.0	W	528313 151399	Unspecified Ground Workings	1938
20D	210.0	W	528323 151396	Unspecified Pit	1912
21D	210.0	W	528323 151396	Unspecified Pit	1895

ID	Distance (m)	Direction	NGR	Use	Date
22E	215.0	SW	528376 151254	Sand Pits	1895
23	217.0	N	528507 151842	Brick and Tile Yard	1869
24E	224.0	W	528364 151248	Cuttings	1869
25	225.0	N	528730 151798	Unspecified Pit	1869
26	229.0	N	528744 151782	Brick Kiln	1869
27	230.0	SE	529064 151356	Unspecified Ground Workings	1974
28F	240.0	W	528299 151375	Unspecified Heap	1938
29F	240.0	W	528299 151375	Unspecified Heap	1938
30F	244.0	W	528297 151372	Unspecified Heap	1955

## 4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary?  Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	930.0	S	528239 150258	Tunnel	1912
Not shown	930.0	S	528239 150258	Tunnel	1938
Not shown	932.0	S	528238 150253	Tunnel	1955
Not shown	932.0	S	528238 150253	Tunnel	1974
Not shown	932.0	S	528238 150253	Tunnel	1979

### 4.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

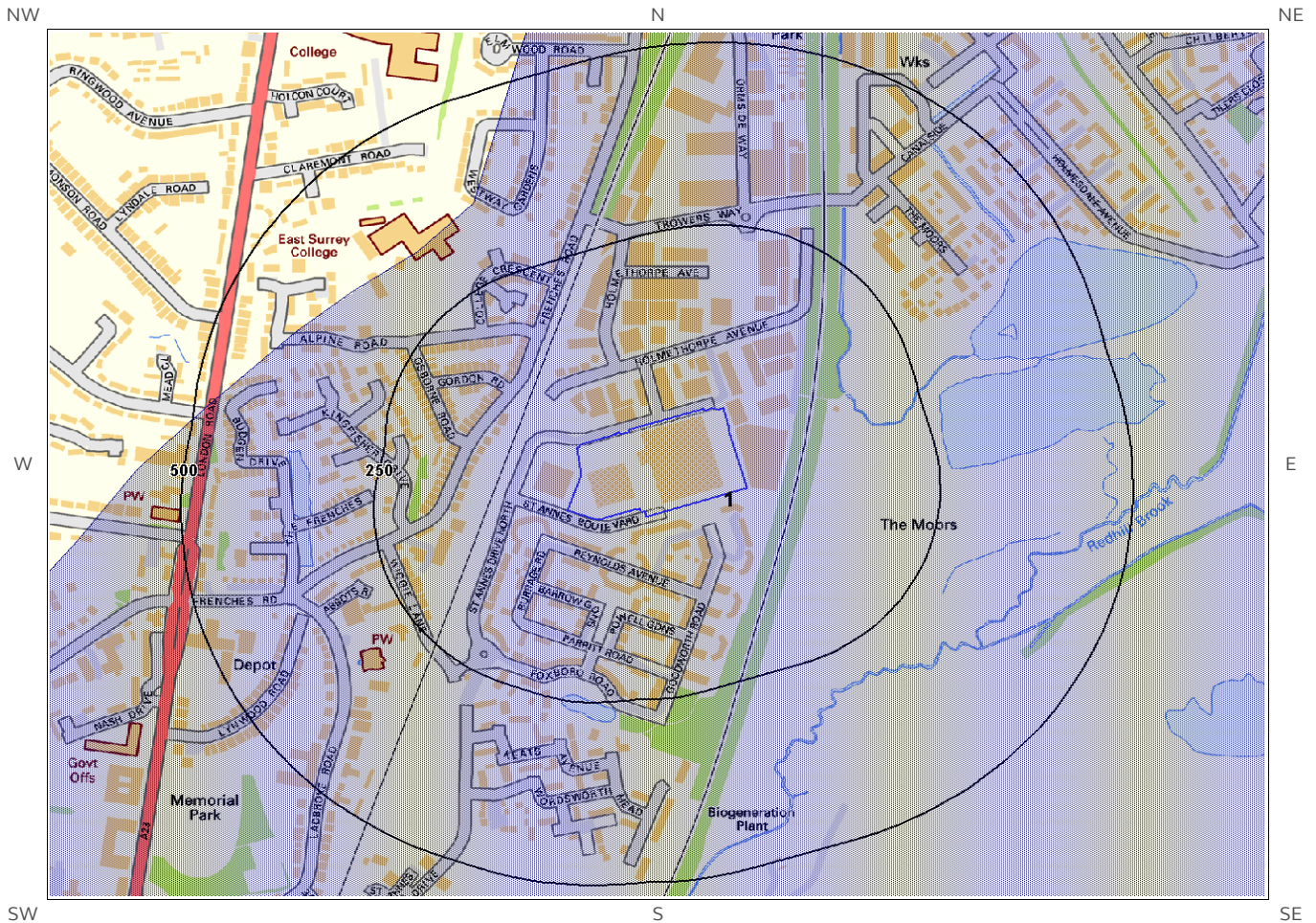
The following Current Ground Workings information is provided by British Geological Survey:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
36	75.0	N	528768 151620	Clay & Shale	Holmethorpe Clay Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
37G	196.0	W	528371 151348	Sand	Holmethorpe Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
38E	231.0	SW	528379 151259	Sand	Holmethorpe Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	308.0	N	528854 151838	Clay & Shale	Siding Brick Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
40	346.0	NE	529049 151735	Silica Sand	Ornside Silica Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
41	364.0	SW	528240 151228	Sand	Holmethorpe Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	449.0	N	528453 151928	Clay & Shale	Battlebridge Brick and Tile Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	457.0	NE	529100 151850	Silica Sand	Holmethorpe	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	567.0	N	528445 152049	Clay & Shale	Battlebridge Brick Field	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	726.0	SE	529240 150865	Fullers Earth	Patterson Court	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	778.0	N	528637 152316	Clay & Shale	Battlebridge Brick and Tile Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	787.0	S	528804 150623	Fullers Earth	Copyhold Farm Fullers Earth Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	790.0	NE	529350 152070	Sand	South Merstham	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	836.0	NE	529476 151977	Clay & Shale	The Moors Brick Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	843.0	N	528865 152382	Mineral	Battlebridge Lane Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	971.0	S	528846 150443	Fullers Earth	Copyhold	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased



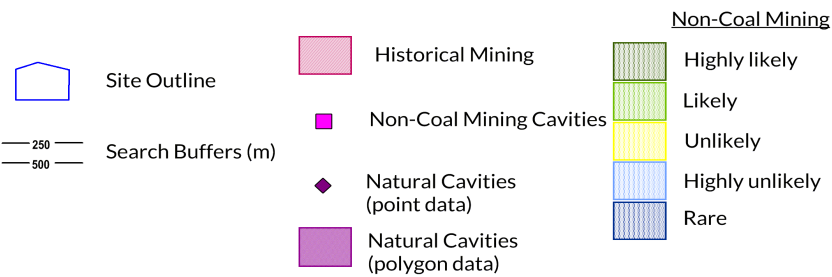
ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	997.0	N	529094 152484	Sand	Sargents Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

# 5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 5 Mining, Extraction & Natural Cavities

## 5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

---

## 5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? Yes

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Not available	Sand	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

---

## 5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level..

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

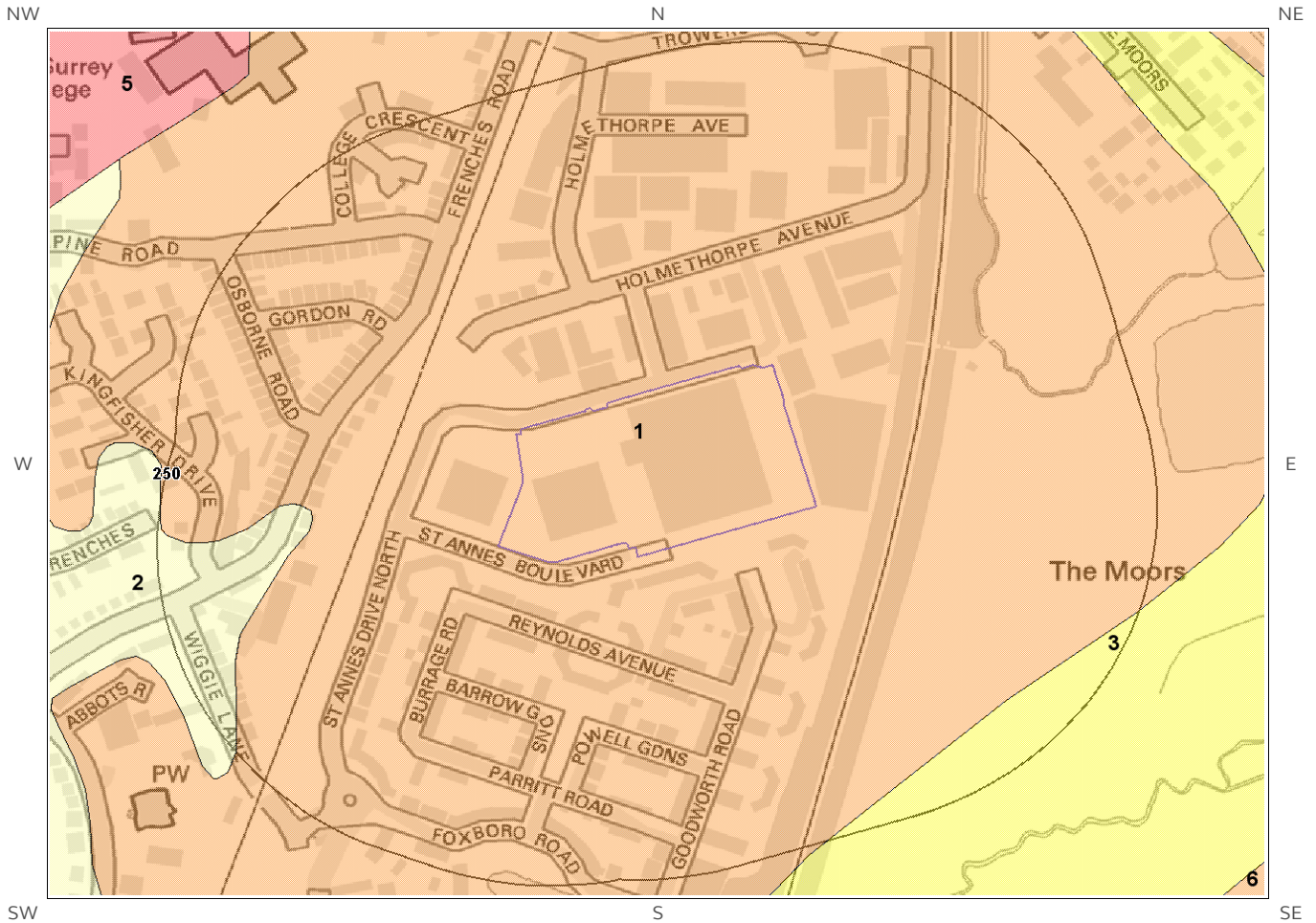
Database searched and no data found.

---



# 6 Natural Ground Subsidence

## 6.1 Shrink-Swell Clay map

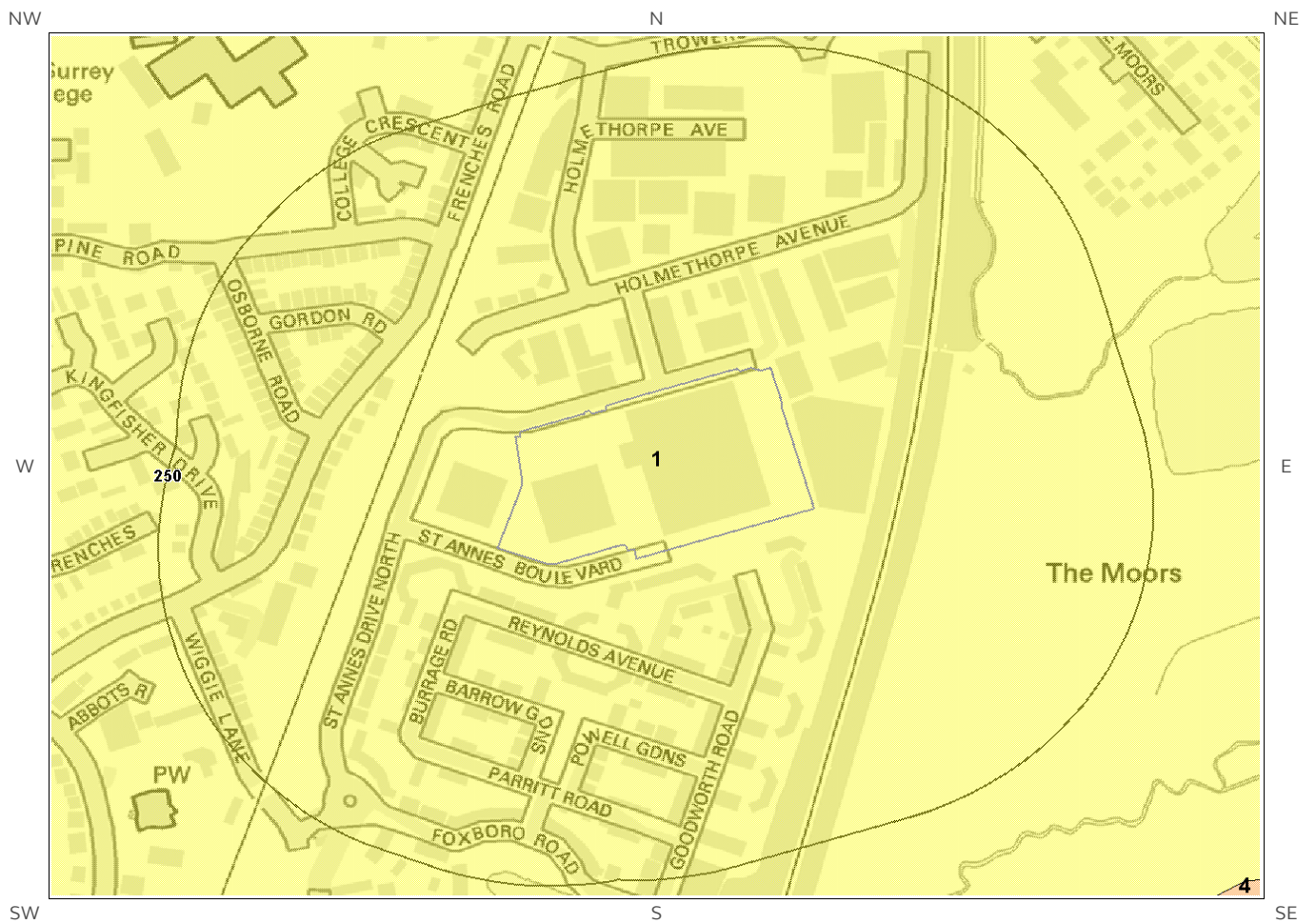


Shrink Swell Clay Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 6.2 Landslides map



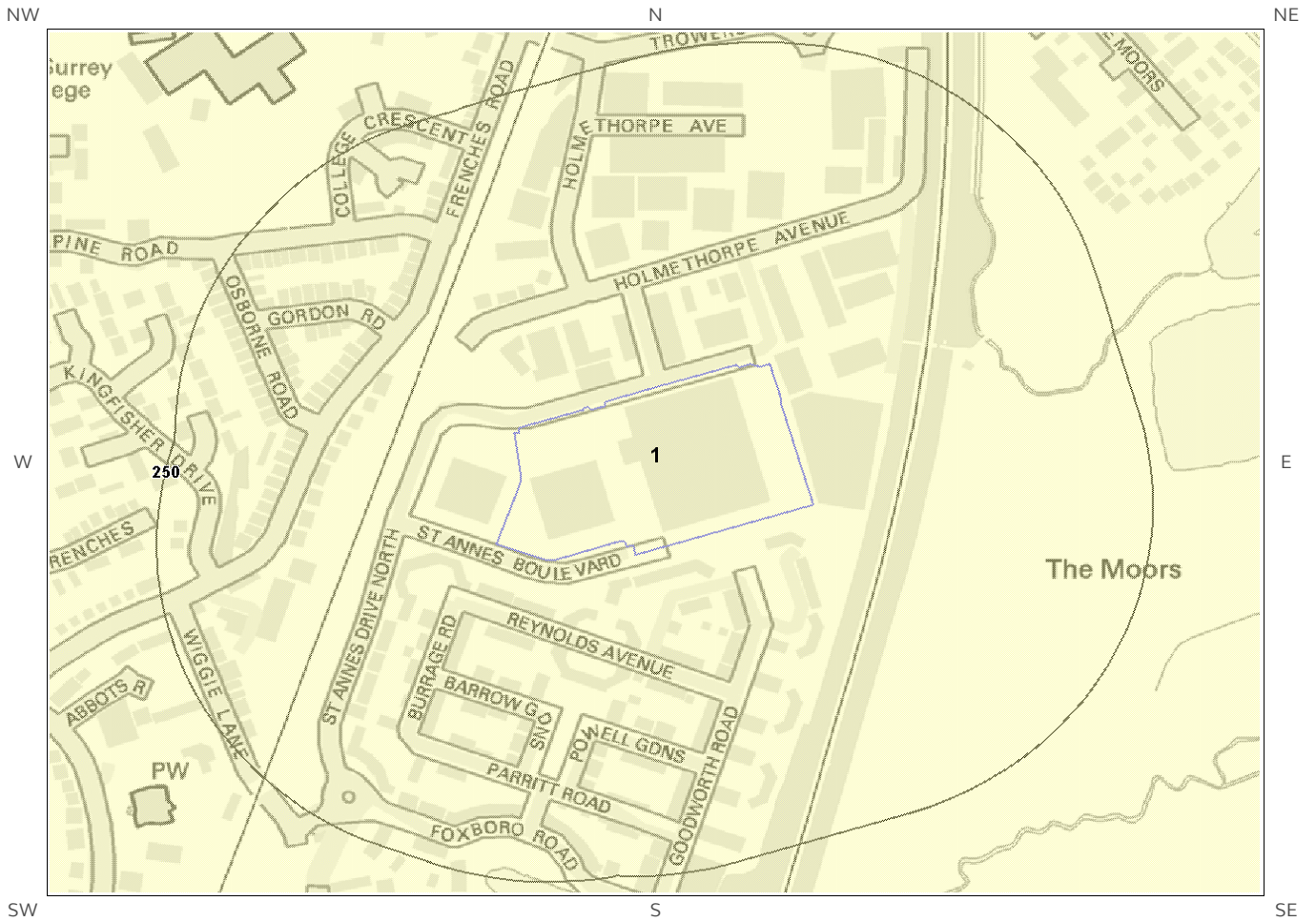
Landslides Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





# 6.3 Ground Dissolution of Soluble Rocks map

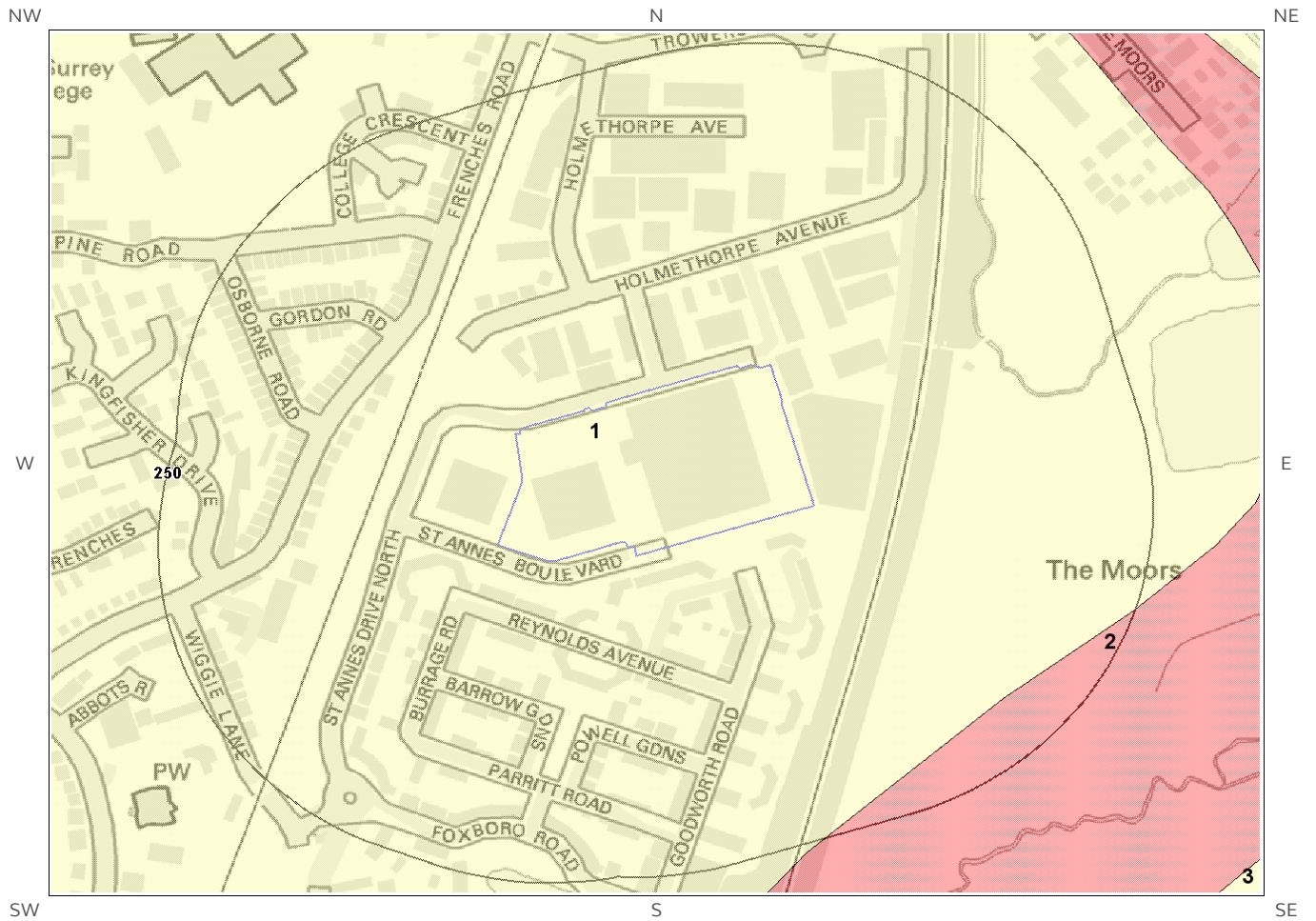


**Ground Dissolution Soluble Rocks Legend**

© Crown copyright and database rights 2019. Ordnance Survey licence 100035207.



# 6.4 Compressible Deposits map



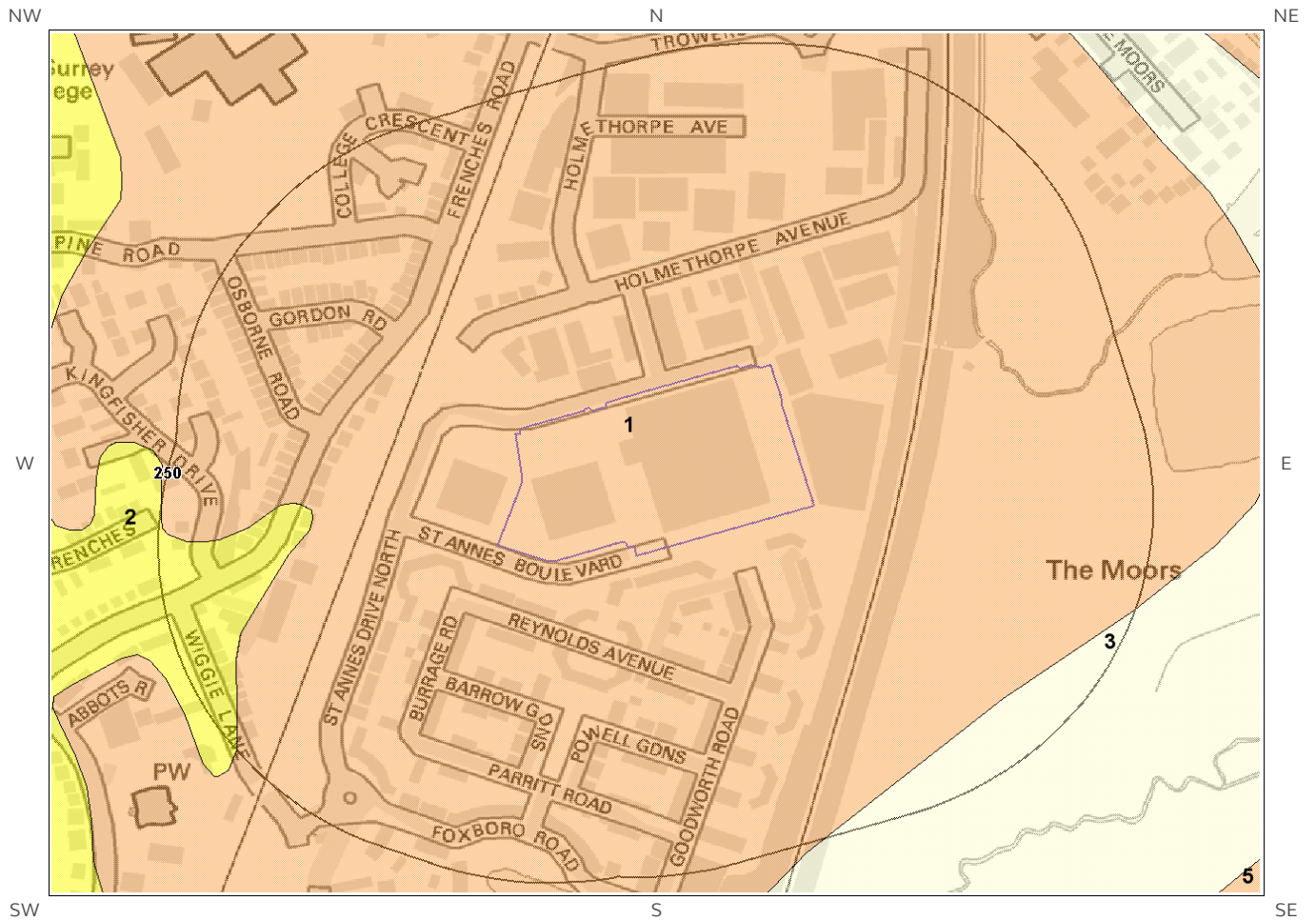
Compressible Deposits Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





# 6.5 Collapsible Deposits map



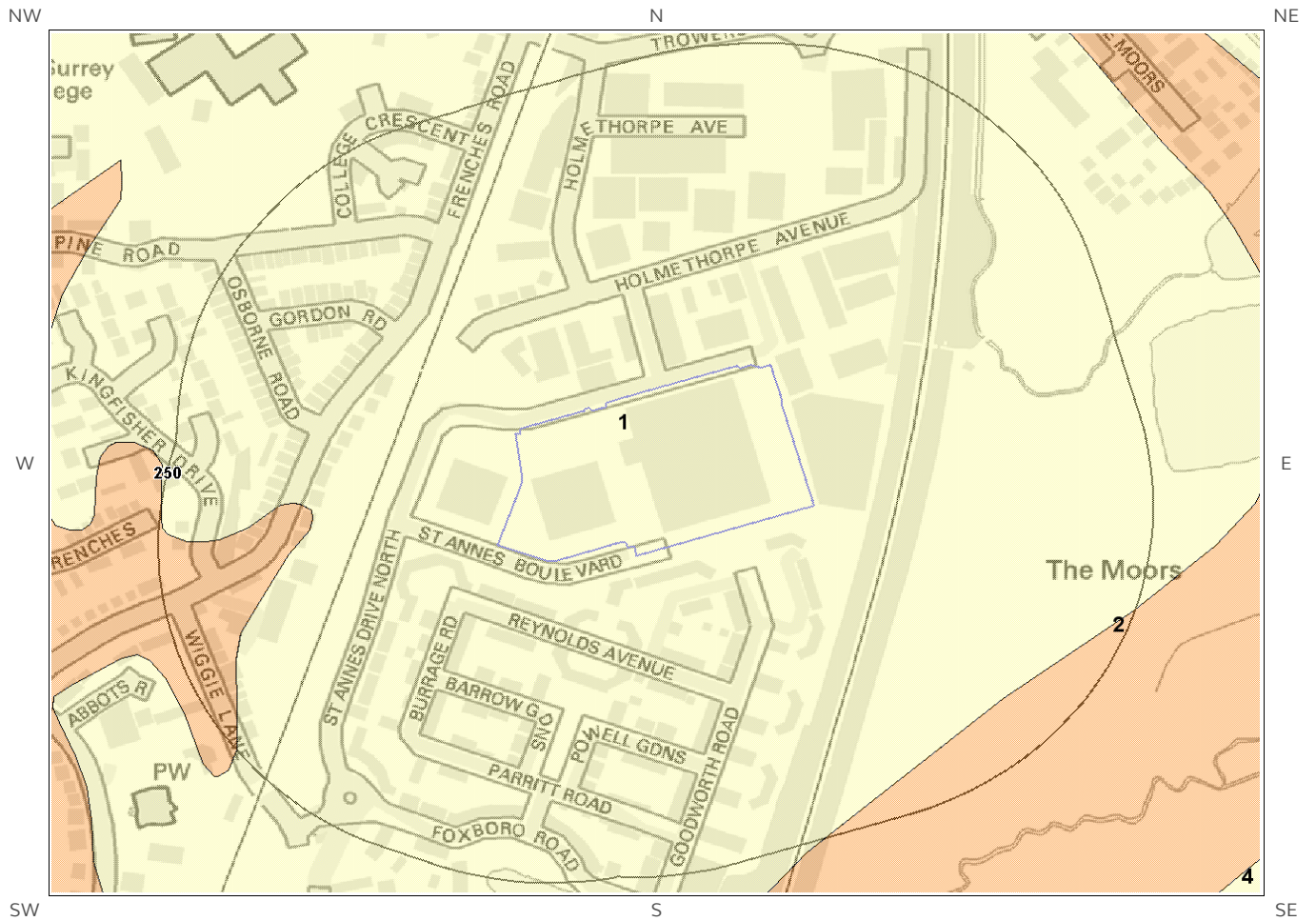
Collapsible Deposits Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.





# 6.6 Running Sand map



Running Sand Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



# 6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site\*\* boundary? Low

## 6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

## 6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

\* This includes an automatically generated 50m buffer zone around the site

## 6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

## 6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

## 6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

## 6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

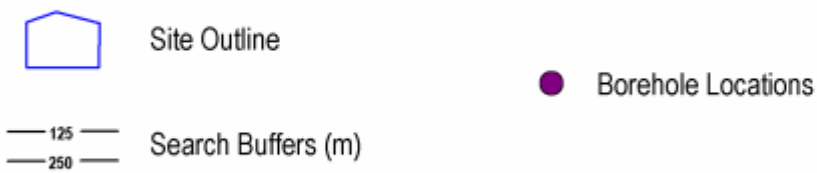
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

# 7 Borehole Records map



Borehole Records Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.



## 7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

3

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	186.0	E	528950 151560	TQ25SE230	7.62	FRENCHES ROAD REDHILL
2	209.0	N	528700 151750	TQ25SE374	10.0	HOLMETHORPE ESTATE 2
3	223.0	N	528680 151760	TQ25SE373	10.0	HOLMETHORPE ESTATE 1

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: [scans.bgs.ac.uk/sobi\\_scans/boreholes/585834](https://scans.bgs.ac.uk/sobi_scans/boreholes/585834)

#2: [scans.bgs.ac.uk/sobi\\_scans/boreholes/17101740](https://scans.bgs.ac.uk/sobi_scans/boreholes/17101740)

#3: [scans.bgs.ac.uk/sobi\\_scans/boreholes/17101737](https://scans.bgs.ac.uk/sobi_scans/boreholes/17101737)



# 8 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

2

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	100 - 200 mg/kg
0.0	On Site	Sediment	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	100 - 200 mg/kg

\*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.












---

# 9 Railways and Tunnels map



Railways and Tunnels Legend

© Crown copyright and database rights 2019.  
Ordnance Survey licence 100035207.  
© OpenStreetMapContributors

- |                                                                                     |                    |                                                                                     |                                                              |                                                                                     |                                                       |
|-------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------|
|  | Site Outline       |  | Underground or Partially Underground Railway / Subway System |  | Railway Track (OpenStreetMap)                         |
|  | Search Buffers (m) |  | Railway Tunnel (OS Mapping)                                  |  | High Speed 2                                          |
|                                                                                     |                    |  | Abandoned or Dismantled Railway (OpenStreetMap)              |  | High Speed 2 Revised Proposed Route                   |
|                                                                                     |                    |  | Railway Track (OS Mapping)                                   |  | Crossrail 1                                           |
|                                                                                     |                    |                                                                                     |                                                              |  | Railway and/or Tunnel Feature from Historical Mapping |

# 9 Railways and Tunnels

## 9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

*Any records that have been identified are represented on the Railways and Tunnels map.*

---

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

*Any records that have been identified are represented on the Railways and Tunnels map.*

---

## 9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
1	87	NW	528696 151772	Railway Sidings	1938
2	87	NW	528565 151711	Railway Sidings	1955
3	87	NW	528737 151794	Railway Sidings	1920
10A	88	NW	528815 151811	Railway Sidings	1965
11B	89	NW	528579 151708	Railway Sidings	1972
12B	89	NW	528579 151708	Railway Sidings	1963

ID	Distance (m)	Direction	NGR	Details	Date
4D	91	NW	528617 151769	Railway Sidings	1938
5	92	NW	528557 151679	Railway Sidings	1869
13	94	NW	528563 151679	Railway Sidings	1896
14C	95	NW	528556 151664	Railway Sidings	1913
15	95	NW	528580 151712	Railway Sidings	1995
16C	95	NW	528556 151666	Railway Sidings	1874
17C	95	NW	528556 151666	Railway Sidings	1871
6	97	NW	528571 151692	Railway Sidings	1895
18D	102	NW	528617 151769	Railway Sidings	1933
7A	112	N	528589 151736	Railway Sidings	1988
8A	112	N	528589 151736	Railway Sidings	1974
9	125	N	528591 151739	Railway Sidings	1979
19	201	N	528788 151781	Railway Sidings	1982
20	220	N	528632 151796	Tramway Sidings	1913

*Any records that have been identified are represented on the Railways and Tunnels map.*

### 9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Status
93	NW	Razed
93	NW	Abandoned

Multiple sections of the same track may be listed in the detail above  
*Any records that have been identified are represented on the Railways and Tunnels map.*

## 9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
57	E	Brighton Main Line (Quarry Line)	rail
57	E	Brighton Main Line (Quarry Line)	rail
59	E	Not given	Multi Track
59	E	Not given	Multi Track
60	E	Brighton Main Line (Quarry Line)	rail
60	E	Brighton Main Line (Quarry Line)	rail
80	W	Not given	rail
80	W	Not given	rail
82	W	Not given	Multi Track
82	W	Not given	Multi Track
83	W	Brighton Main Line	rail
83	W	Brighton Main Line	rail
124	W	Not given	rail
124	W	Not given	rail
249	SW	Not given	rail
249	SW	Not given	rail

Multiple sections of the same track may be listed in the detail above  
Any records that have been identified are represented on the Railways and Tunnels map.

## 9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

*Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.*

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.



# Contact Details

Groundsure Helpline  
Telephone: 08444 159 000  
info@groundsure.com



## British Geological Survey Enquiries

Kingsley Dunham Centre  
Keyworth, Nottingham NG12 5GG  
Tel: 0115 936 3143.  
Fax: 0115 936 3276.  
Email: [enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)  
Web: [www.bgs.ac.uk](http://www.bgs.ac.uk)



BGS Geological Hazards Reports and general geological enquiries

## British Gypsum

British Gypsum Ltd  
East Leake  
Loughborough  
Leicestershire  
LE12 6HX



## The Coal Authority

200 Lichfield Lane  
Mansfield  
Notts NG18 4RG  
Tel: 0345 7626 848  
DX 716176 Mansfield 5  
[www.coal.gov.uk](http://www.coal.gov.uk)



## Public Health England

Public information access office  
Public Health England, Wellington House  
133-155 Waterloo Road, London, SE1 8UG  
<https://www.gov.uk/government/organisations/public-health-england>  
Email: [enquiries@phe.gov.uk](mailto:enquiries@phe.gov.uk)  
Main switchboard: 020 7654 8000



## Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane  
Brierley Hill, West Midlands  
DY5 3LH  
Tel: +44 (0) 1384 262 000  
Email: [enquiries.gs@jpb.co.uk](mailto:enquiries.gs@jpb.co.uk)  
Website: [www.jpb.co.uk](http://www.jpb.co.uk)



## Ordnance Survey

Adanac Drive, Southampton  
SO16 0AS  
Tel: 08456 050505  
Website: <http://www.ordnancesurvey.co.uk/>



## Getmapping PLC

Virginia Villas, High Street, Hartley Witney,  
Hampshire RG27 8NW  
Tel: 01252 845444  
Website: <http://www.1.getmapping.com/>



---

**Peter Brett Associates**  
Caversham Bridge House  
Waterman Place  
Reading  
Berkshire RG1 8DN  
Tel: +44 (0)118 950 0761 E-mail: [reading@pba.co.uk](mailto:reading@pba.co.uk)  
Website: <http://www.peterbrett.com/home>



---

Acknowledgements: Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028]. This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

# Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:  
<https://www.groundsure.com/terms-and-conditions-feb11-2019>

---

## About EcoAct

Together with our clients, we act to put climate and nature centre stage to drive sustainable corporate transformation within planetary boundaries.

EcoAct is an international sustainability consultancy and project developer with 18+ years of industry experience and 360+ climate experts globally. Founded in France in 2005, the company now spans three continents with offices in Paris, London, Barcelona, New York, Montreal, Munich, Milan and Kenya.

EcoAct's core purpose is to lead the way in developing sustainable business solutions that deliver true value for both climate and client. Data is the cornerstone of our consulting practice, supported by our dedicated Climate Data Analytics and Research & Innovation teams.

At EcoAct we are driven by a shared purpose to make a difference. To help businesses implement positive change in response to climate and environmental sustainability challenges, whilst also driving commercial performance.

### **EcoAct UK**

+44 (0) 203 635 0001  
ukoffice@eco-act.com

### **EcoAct France**

+33 (0)1 83 64 08 70  
contact@eco-act.com

### **EcoAct North America**

+1 917 744 9660  
NAoffice@eco-act.com

### **EcoAct Spain**

+34 935 851 122  
contacta@eco-act.com

### **EcoAct Central Europe**

+4921139990999  
netzerotransformation@atos.net

### **EcoAct Italy**

+39- 334-603 1139  
nzt.italia@atos.net

### **EcoAct Kenya**

+254 708 066 725  
info@climatepal.com

The EcoAct logo is positioned in the bottom right corner of the page. It features the word "ecoact" in a bold, lowercase, blue sans-serif font. The background of the page includes a large, light blue circular graphic that partially overlaps the logo, and a faint image of a white wind turbine is visible in the lower-left quadrant.