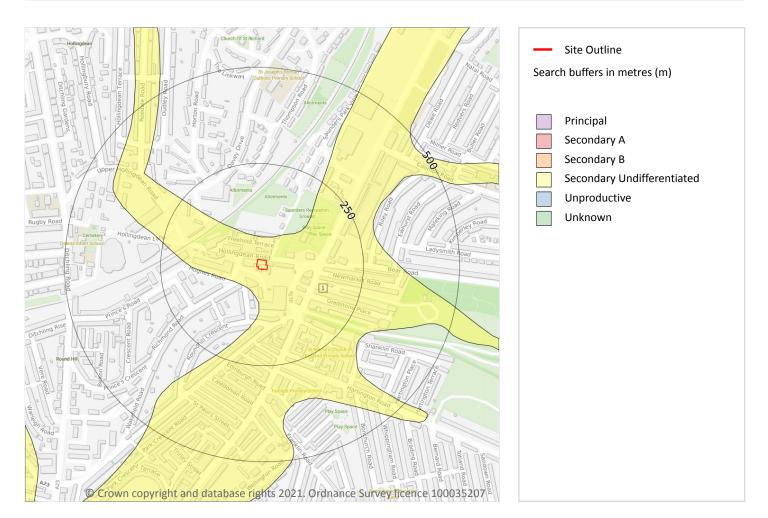


# **5 Hydrogeology - Superficial aquifer**



# **5.1 Superficial aquifer**

Records within 500m	1				
Aquifer status of groundwater held within superficial geology.					
Features are displayed on the Hydrogeology map on page 56					

ID	Location	Designation	Description
1	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

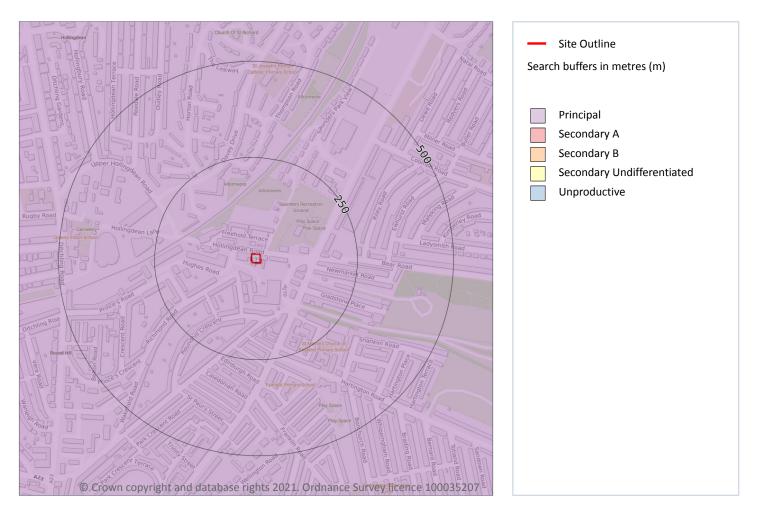
This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.







# **Bedrock aquifer**



# 5.2 Bedrock aquifer

Records within 500m						
Aquifer status of groundwater held within bedrock geology.						
Features are displayed on the Bedrock aquifer map on page 57						

ID	Location	Designation	Description
1	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

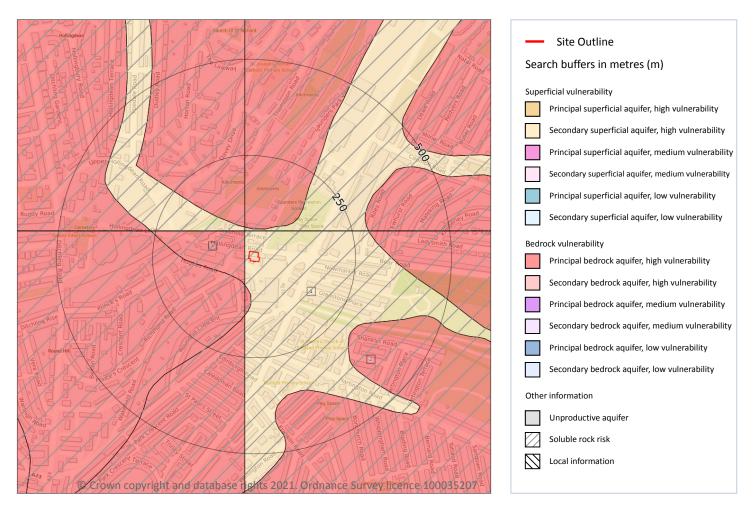
This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.







# **Groundwater vulnerability**



# 5.3 Groundwater vulnerability

#### **Records within 50m**

2

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

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

Features are displayed on the Groundwater vulnerability map on page 58







ID	ID Location Summary S		Soil / surface	Superficial geology	Bedrock geology
1	L On site Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer		Leaching class: High Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
4	9m W	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

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

# 5.4 Groundwater vulnerability- soluble rock risk

Records on site				
		dataset identifies areas where solution features that enable rapid move ent within a 1km grid square.	ment of a pollutant may be	
	ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk	

2 Significant soluble rocks are likely to be present. Low possibility of localised 12.0% subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.

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

# 5.5 Groundwater vulnerability- local information

# Records on site 0

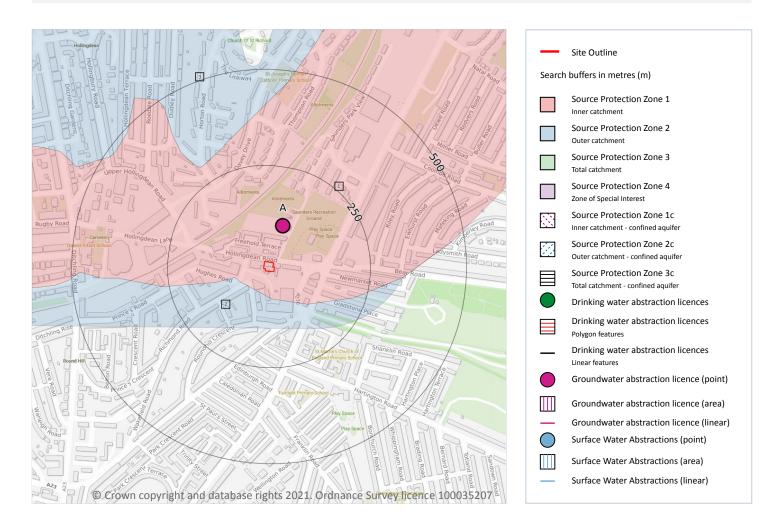
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506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

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





# **Abstractions and Source Protection Zones**



### 5.6 Groundwater abstractions

#### **Records within 2000m**

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

Features are displayed on the Abstractions and Source Protection Zones map on page 60







ID	Location	Details	
A	99m N	Status: Active Licence No: 10/41/260103 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LEWES ROAD PS WELL 1 Data Type: Point Name: Southern Water Services Ltd Easting: 532060 Northing: 106040	Annual Volume (m <sup>3</sup> ): 38,000,000 Max Daily Volume (m <sup>3</sup> ): 186,650 Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2015 Version End Date: -
-	837m NE	Status: Active Licence No: SO/041/0022/005 Details: Heat Pump Direct Source: Southern Region Groundwater Point: BOREHOLE B - UNIVERSITY OF BRIGHTON COCKROFT BUILDING Data Type: Point Name: University of Brighton Easting: 532437 Northing: 106678	Annual Volume (m <sup>3</sup> ): 525,600 Max Daily Volume (m <sup>3</sup> ): 2,376 Original Application No: - Original Start Date: 28/04/2015 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 28/04/2015 Version End Date: -
-	958m NE	Status: Active Licence No: SO/041/0022/005 Details: Heat Pump Direct Source: Southern Region Groundwater Point: BOREHOLE A - UNI OF BRIGHTON COCKROFT BUILDING Data Type: Point Name: University of Brighton Easting: 532553 Northing: 106750	Annual Volume (m <sup>3</sup> ): 525,600 Max Daily Volume (m <sup>3</sup> ): 2,376 Original Application No: - Original Start Date: 28/04/2015 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 28/04/2015 Version End Date: -
-	1368m W	Status: Active Licence No: 10/41/260104 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: PRESTON PARK BOREHOLE Data Type: Point Name: Brighton and Hove City Council Easting: 530650 Northing: 106080	Annual Volume (m <sup>3</sup> ): 27,276 Max Daily Volume (m <sup>3</sup> ): 57 Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 06/01/2012 Version End Date: -
-	1699m S	Status: Active Licence No: SO/041/0022/008 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: ABSTRACTION BOREHOLE - BRIGHTON COLLEGE Data Type: Point Name: Brighton College Easting: 532445 Northing: 104270	Annual Volume (m <sup>3</sup> ): 217,300 Max Daily Volume (m <sup>3</sup> ): 720 Original Application No: - Original Start Date: 25/06/2014 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 16/04/2019 Version End Date: -







Ref: GS-7639772 Your ref: P15063\_ Grid ref: 532025 105930

ID	Location	Details	
-	1699m S	Status: Active Licence No: SO/041/0022/008 Details: Heat Pump Direct Source: Southern Region Groundwater Point: ABSTRACTION BOREHOLE - BRIGHTON COLLEGE Data Type: Point Name: Brighton College Easting: 532445 Northing: 104270	Annual Volume (m <sup>3</sup> ): 217,300 Max Daily Volume (m <sup>3</sup> ): 720 Original Application No: - Original Start Date: 25/06/2014 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 16/04/2019 Version End Date: -
-	1914m S	Status: Active Licence No: 10/41/260104 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: PAVILLION GARDENS Data Type: Point Name: Brighton and Hove City Council Easting: 531290 Northing: 104150	Annual Volume (m <sup>3</sup> ): 27,276 Max Daily Volume (m <sup>3</sup> ): 57 Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 06/01/2012 Version End Date: -
-	1914m S	Status: Active Licence No: 10/41/260104 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: VICTORIA GARDENS Data Type: Point Name: Brighton and Hove City Council Easting: 531290 Northing: 104150	Annual Volume (m <sup>3</sup> ): 27,276 Max Daily Volume (m <sup>3</sup> ): 57 Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 06/01/2012 Version End Date: -

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

# 5.7 Surface water abstractions

#### Records within 2000m

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

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







### **5.8 Potable abstractions**

#### **Records within 2000m**

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

Features are displayed on the Abstractions and Source Protection Zones map on page 60

ID	Location	Details	
А	99m N	Status: Active Licence No: 10/41/260103 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: LEWES ROAD PS WELL 1 Data Type: Point Name: Southern Water Services Ltd Easting: 532060 Northing: 106040	Annual Volume (m <sup>3</sup> ): 38,000,000 Max Daily Volume (m <sup>3</sup> ): 186,650 Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2015 Version End Date: -

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

### **5.9 Source Protection Zones**

#### Records within 500m

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

#### Features are displayed on the Abstractions and Source Protection Zones map on page 60

ID	Location	Туре	Description
1	On site	1	Inner catchment
2	56m SW	2	Outer catchment
3	296m NW	2	Outer catchment

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

# 5.10 Source Protection Zones (confined aquifer)

#### Records within 500m

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

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



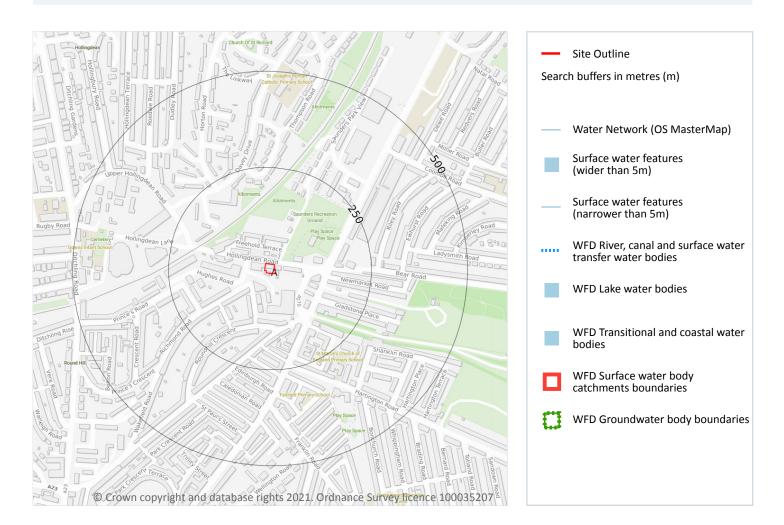


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# 6 Hydrology



# 6.1 Water Network (OS MasterMap)

#### **Records within 250m**

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

This data is sourced from the Ordnance Survey.

# 6.2 Surface water features

#### **Records within 250m**

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





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This data is sourced from the Ordnance Survey.

# 6.3 WFD Surface water body catchments

# Records on site

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

#### Features are displayed on the Hydrology map on page 64

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
Α	On site	Coastal Catchment	Not part of a river WB catchment	317	Upper Ouse	Adur and Ouse

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

# 6.4 WFD Surface water bodies

Records identified	0	

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

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

### 6.5 WFD Groundwater bodies

#### Records on site

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

Features are displayed on the Hydrology map on page 64

I	D	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	4	On site	Brighton Chalk Block	<u>GB40701G502500</u>	Poor	Poor	Poor	2015





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







# 7 River and coastal flooding

### 7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

#### **Records within 50m**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

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

# 7.2 Historical Flood Events

#### **Records within 250m**

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

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

# 7.3 Flood Defences

#### **Records within 250m**

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

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

# 7.4 Areas Benefiting from Flood Defences

#### Records within 250m

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

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





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### 7.5 Flood Storage Areas

#### Records within 250m

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

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







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# **River and coastal flooding - Flood Zones**

# 7.6 Flood Zone 2

Records within 50m

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

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

# 7.7 Flood Zone 3

Records within 50m

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

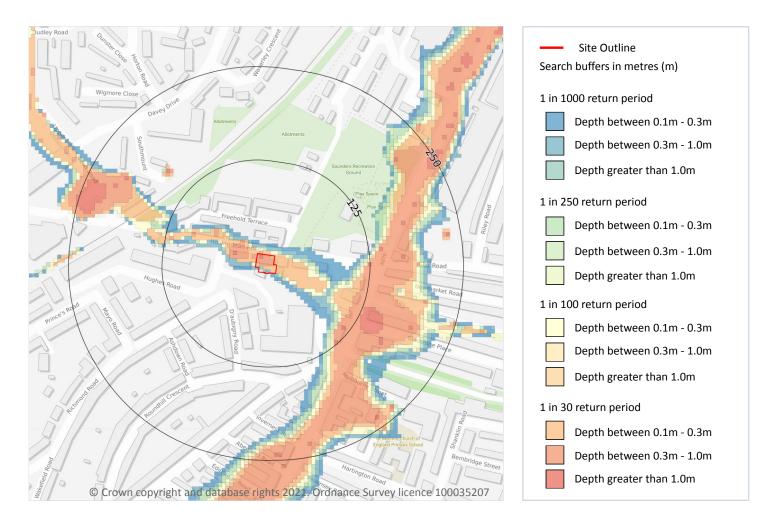
This data is sourced from the Environment Agency and Natural Resources Wales.







# 8 Surface water flooding



# 8.1 Surface water flooding

#### Highest risk on site

1 in 30 year, Greater than 1.0m

#### Highest risk within 50m

1 in 30 year, Greater than 1.0m

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

### Features are displayed on the Surface water flooding map on page 70

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







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

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

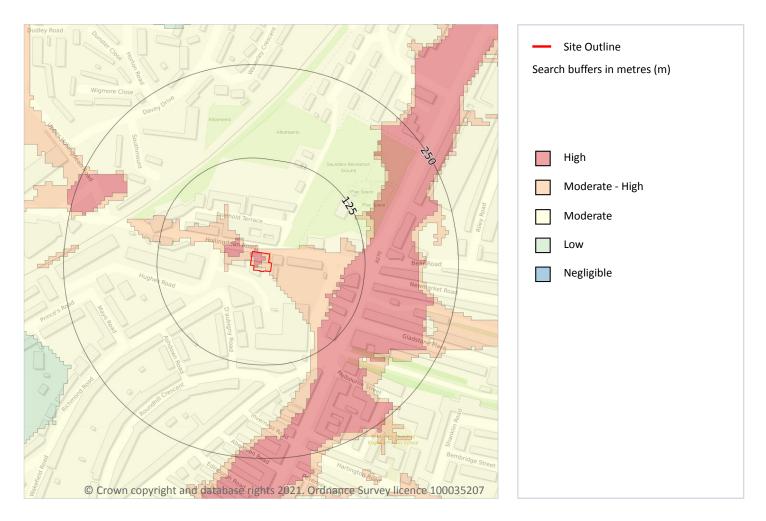
This data is sourced from Ambiental Risk Analytics.







# 9 Groundwater flooding



# 9.1 Groundwater flooding

Highest risk on site	High
Highest risk within 50m	High

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

### Features are displayed on the Groundwater flooding map on page 72

This data is sourced from Ambiental Risk Analytics.







# **10** Environmental designations



# **10.1 Sites of Special Scientific Interest (SSSI)**

#### **Records within 2000m**

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

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







#### **10.2 Conserved wetland sites (Ramsar sites)**

#### Records within 2000m

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

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

# **10.3 Special Areas of Conservation (SAC)**

#### Records within 2000m

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

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

### **10.4 Special Protection Areas (SPA)**

#### **Records within 2000m**

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

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

# **10.5 National Nature Reserves (NNR)**

#### **Records within 2000m**

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

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





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### **10.6 Local Nature Reserves (LNR)**

#### Records within 2000m

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

Features are displayed on the Environmental designations map on page 73

ID	Location	Name	Data source
2	765m NE	Bevendean Down	Natural England
3	951m N	Wild Park	Natural England
4	1168m E	Bevendean Down	Natural England
5	1172m E	Whitehawk/Race Hill	Natural England
6	1215m NE	Bevendean Down	Natural England
7	1350m SE	Whitehawk/Race Hill	Natural England
8	1368m SE	Whitehawk/Race Hill	Natural England
-	1441m E	Whitehawk/Race Hill	Natural England
-	1478m E	Whitehawk/Race Hill	Natural England
-	1966m N	Wild Park	Natural England

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

### **10.7 Designated Ancient Woodland**

#### **Records within 2000m**

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

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





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#### **10.8 Biosphere Reserves**

#### Records within 2000m

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

Features are displayed on the Environmental designations map on page 73

ID	Location	Name	Status
1	On site	Brighton and Lewes Downs	Declared

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

### **10.9 Forest Parks**

Records within 200	0m	0
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These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

### **10.10 Marine Conservation Zones**

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

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

### 10.11 Green Belt

Records within 2000m	0
Areas designated to prevent urban sprawl by keeping land permanently open.	

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





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#### **10.12 Proposed Ramsar sites**

#### Records within 2000m

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

This data is sourced from Natural England.

# **10.13** Possible Special Areas of Conservation (pSAC)

#### **Records within 2000m**

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

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

# **10.14 Potential Special Protection Areas (pSPA)**

#### **Records within 2000m**

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

This data is sourced from Natural England.

### **10.15 Nitrate Sensitive Areas**

#### **Records within 2000m**

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

This data is sourced from Natural England.





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### **10.16 Nitrate Vulnerable Zones**

Records within 2	000m		2
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Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Туре	NVZ ID	Status
On site	Sussex Chalk	Groundwater	G56	Changed
36m NW	Sussex Chalk	Groundwater	G56	Changed

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







Ref: GS-7639772 Your ref: P15063\_ Grid ref: 532025 105930

# **SSSI Impact Zones and Units**



### **10.17 SSSI Impact Risk Zones**

#### **Records on site**

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

Features are displayed on the SSSI Impact Zones and Units map on page 79







10	D	Location	Type of developments requiring consultation
1		On site	Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m <sup>2</sup> , slurry lagoons > 750m <sup>2</sup> & manure stores > 3500t) Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion

This data is sourced from Natural England.

#### 10.18 SSSI Units

# Records within 2000m

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

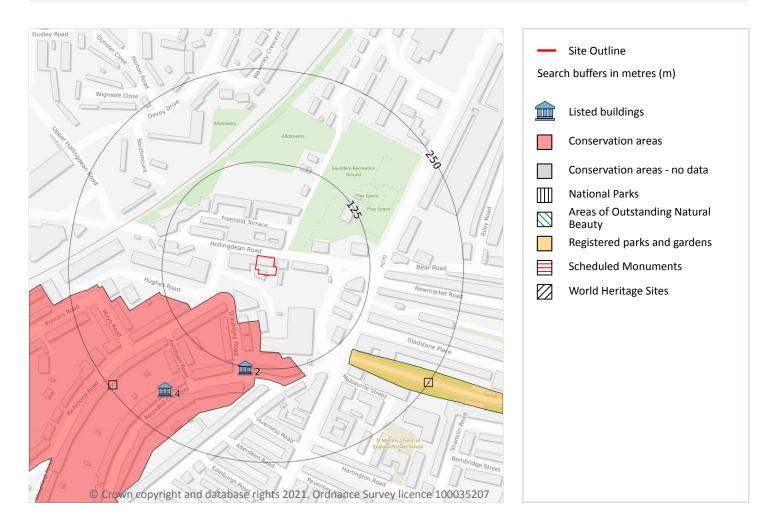
This data is sourced from Natural England and Natural Resources Wales.







# **11 Visual and cultural designations**



# **11.1 World Heritage Sites**

#### **Records within 250m**

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

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







### **11.2 Area of Outstanding Natural Beauty**

#### Records within 250m

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

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

### **11.3 National Parks**

#### Records within 250m

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

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

# **11.4 Listed Buildings**

#### Records within 250m

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

Features are displayed on the Visual and cultural designations map on page 81

ID	Location	Name	Grade	Reference Number	Listed date
2	127m S	Numbers 101-113 And Attached Railings, St. Peter's And North Laine, Brighton And Hove, BN2	II	1380837	02/03/1981
4	199m SW	Numbers 69 And 71 And Attached Railings, St. Peter's And North Laine, Brighton And Hove, BN2	II	1380836	02/03/1981

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





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### **11.5 Conservation Areas**

#### Records within 250m

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

Features are displayed on the Visual and cultural designations map on page 81

ID	Location	Name	District	Date of designation
1	46m SW	Round Hill	The City of Brighton and Hove	06/01/1977

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

### **11.6 Scheduled Ancient Monuments**

#### Records within 250m

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

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

# **11.7 Registered Parks and Gardens**

#### **Records within 250m**

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

Features are displayed on the Visual and cultural designations map on page 81

ID	Location	Name	Grade
3	143m SE	Woodvale Cemetery	II

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



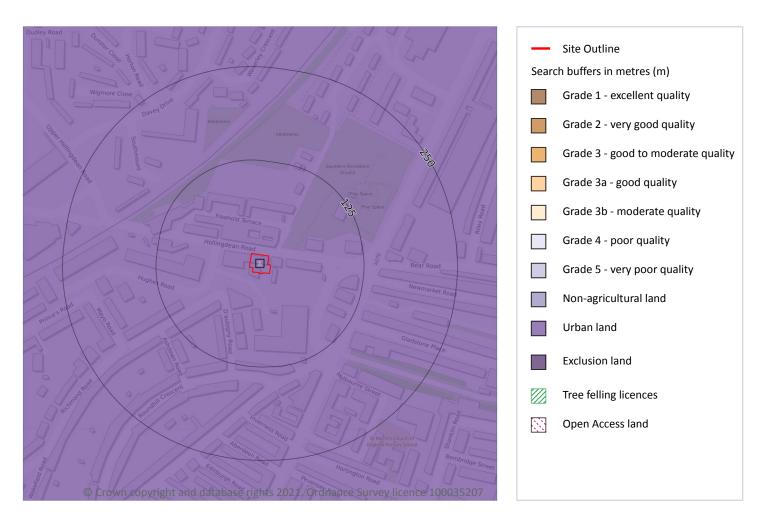


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# **12** Agricultural designations



# **12.1 Agricultural Land Classification**

#### Records within 250m

1

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

Features are displayed on the Agricultural designations map on page 84

ID	Location	Classification	Description
1	On site	Urban	-

This data is sourced from Natural England.







### 12.2 Open Access Land

#### Records within 250m

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

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

# **12.3 Tree Felling Licences**

#### Records within 250m

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

This data is sourced from the Forestry Commission.

### **12.4 Environmental Stewardship Schemes**

#### Records within 250m

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

# 12.5 Countryside Stewardship Schemes

#### Records within 250m

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

This data is sourced from Natural England.





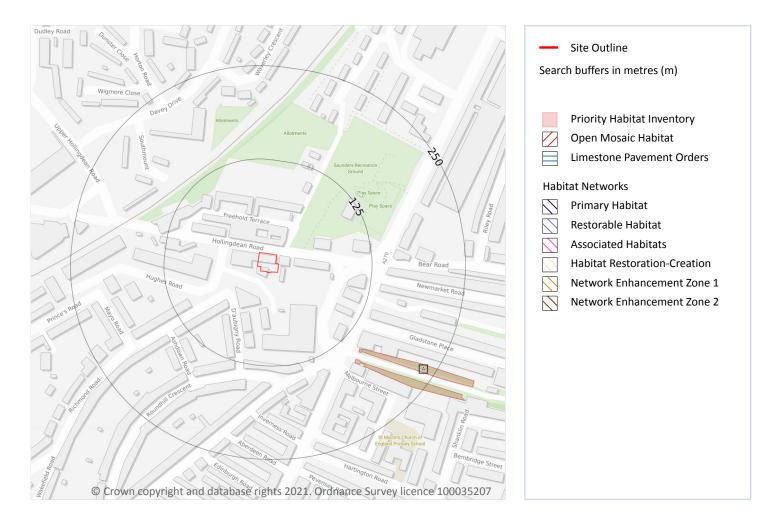
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# **13 Habitat designations**



# **13.1 Priority Habitat Inventory**

#### Records within 250m

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

Features are displayed on the Habitat designations map on page 86

ID	Location	Main Habitat	Other habitats
А	150m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
А	157m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.







### **13.2 Habitat Networks**

#### **Records within 250m**

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

This data is sourced from Natural England.

### **13.3 Open Mosaic Habitat**

#### **Records within 250m**

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

This data is sourced from Natural England.

#### **13.4 Limestone Pavement Orders**

#### Records within 250m

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

This data is sourced from Natural England.



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# 14 Geology 1:10,000 scale - Availability



# 14.1 10k Availability

#### Records within 500m

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

Features are displayed on the Geology 1:10,000 scale - Availability map on page 88

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TQ30NW

This data is sourced from the British Geological Survey.







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



# 14.2 Artificial and made ground (10k)

#### Records within 500m

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on page 89

ID	Location	LEX Code	Description	Rock description
1	8m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	104m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	133m N	WGR-VOID	Worked Ground (Undivided)	Void
4	308m W	WGR-VOID	Worked Ground (Undivided)	Void







ID	Location	LEX Code	Description	Rock description
5	367m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	378m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

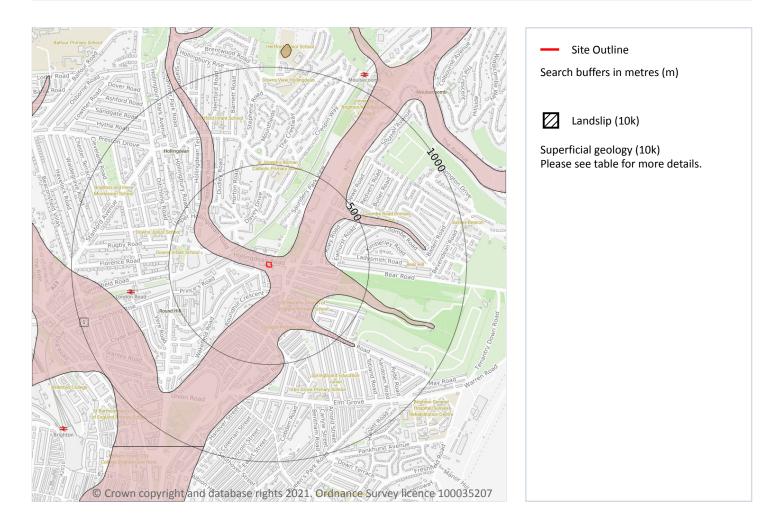
This data is sourced from the British Geological Survey.







# Geology 1:10,000 scale - Superficial



# 14.3 Superficial geology (10k)

#### Records within 500m

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

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

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD- DMTN	Head - Diamicton	Diamicton

This data is sourced from the British Geological Survey.







### 14.4 Landslip (10k)

#### **Records within 500m**

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

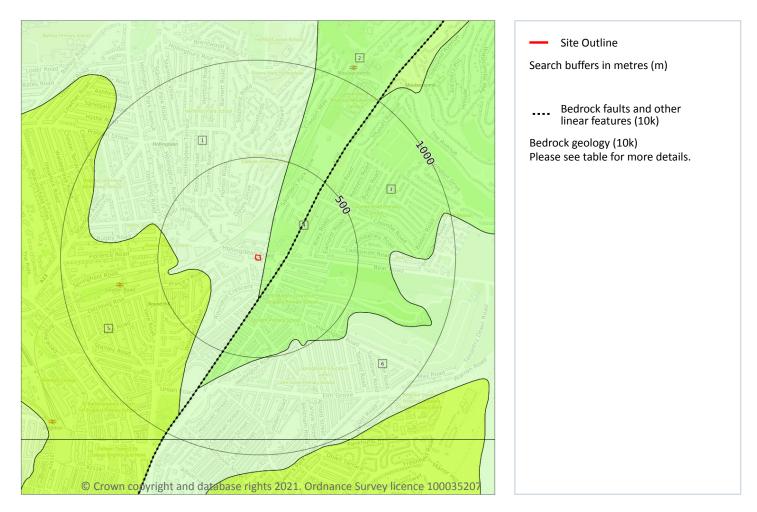
This data is sourced from the British Geological Survey.







# Geology 1:10,000 scale - Bedrock



# 14.5 Bedrock geology (10k)

#### Records within 500m

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 93

ID	Location	LEX Code	Description	Rock age
1	On site	SECK-CHLK	Seaford Chalk Formation - Chalk	Santonian Age - Coniacian Age
2	26m E	LECH-CHLK	Lewes Nodular Chalk Formation - Chalk	Coniacian Age - Turonian Age
3	104m SE	LECH-CHLK	Lewes Nodular Chalk Formation - Chalk	Coniacian Age - Turonian Age
5	255m SW	NCK-CHLK	Newhaven Chalk Formation - Chalk	Campanian Age - Santonian Age







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ID	Location	LEX Code	Description	Rock age
6	444m S	SECK-CHLK	Seaford Chalk Formation - Chalk	Santonian Age - Coniacian Age

This data is sourced from the British Geological Survey.

# 14.6 Bedrock faults and other linear features (10k)

#### **Records within 500m**

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 93

ID	Location	Category	Description
4	104m SE	FAULT	Normal fault, inferred

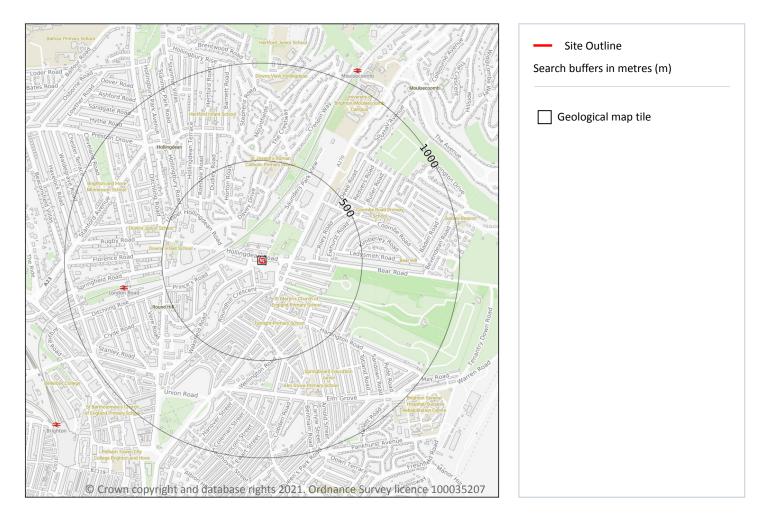
This data is sourced from the British Geological Survey.







# 15 Geology 1:50,000 scale - Availability



# 15.1 50k Availability

#### Records within 500m

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 95

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW318_333_brighton_and_worthing_v4

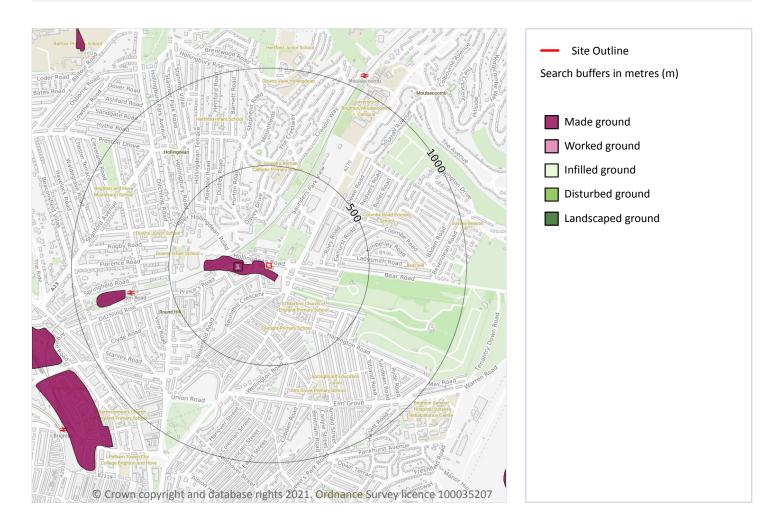
This data is sourced from the British Geological Survey.







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



# 15.2 Artificial and made ground (50k)

#### **Records within 500m**

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on page 96

ID	Location	LEX Code	Description	Rock description
1	8m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.







# 15.3 Artificial ground permeability (50k)

Records within 50m	1
A gualitative classification of estimated rates of vertical movement of water from the ground surface	through

the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).LocationFlow typeMaximum permeabilityMinimum permeability

8m W	Mixed	Very High	Low	

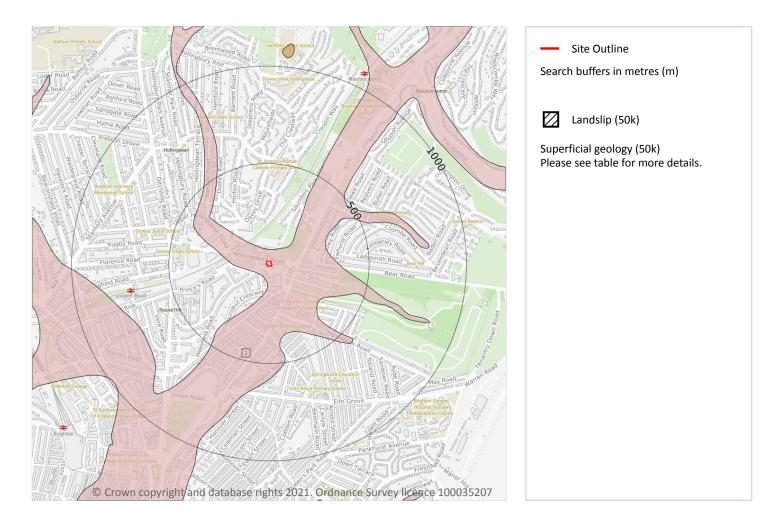
This data is sourced from the British Geological Survey.







# Geology 1:50,000 scale - Superficial



# 15.4 Superficial geology (50k)

#### Records within 500m

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

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

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

This data is sourced from the British Geological Survey.







### 15.5 Superficial permeability (50k)

Records within 5	0m							1	
				_	_		_		

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

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

This data is sourced from the British Geological Survey.

# 15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

# 15.7 Landslip permeability (50k)

Records within 50m	0
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A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



