



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

Database searched and no data found.

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

5.3 Bedrock and Solid Geology

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

Lex Code	Description	Rock Type
ROSSE-MDSI	ROSSENDALE FORMATION	MUDSTONE AND SILTSTONE
HDW-SDST	HUDDERSFIELD WHITE ROCK	SANDSTONE

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



6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology

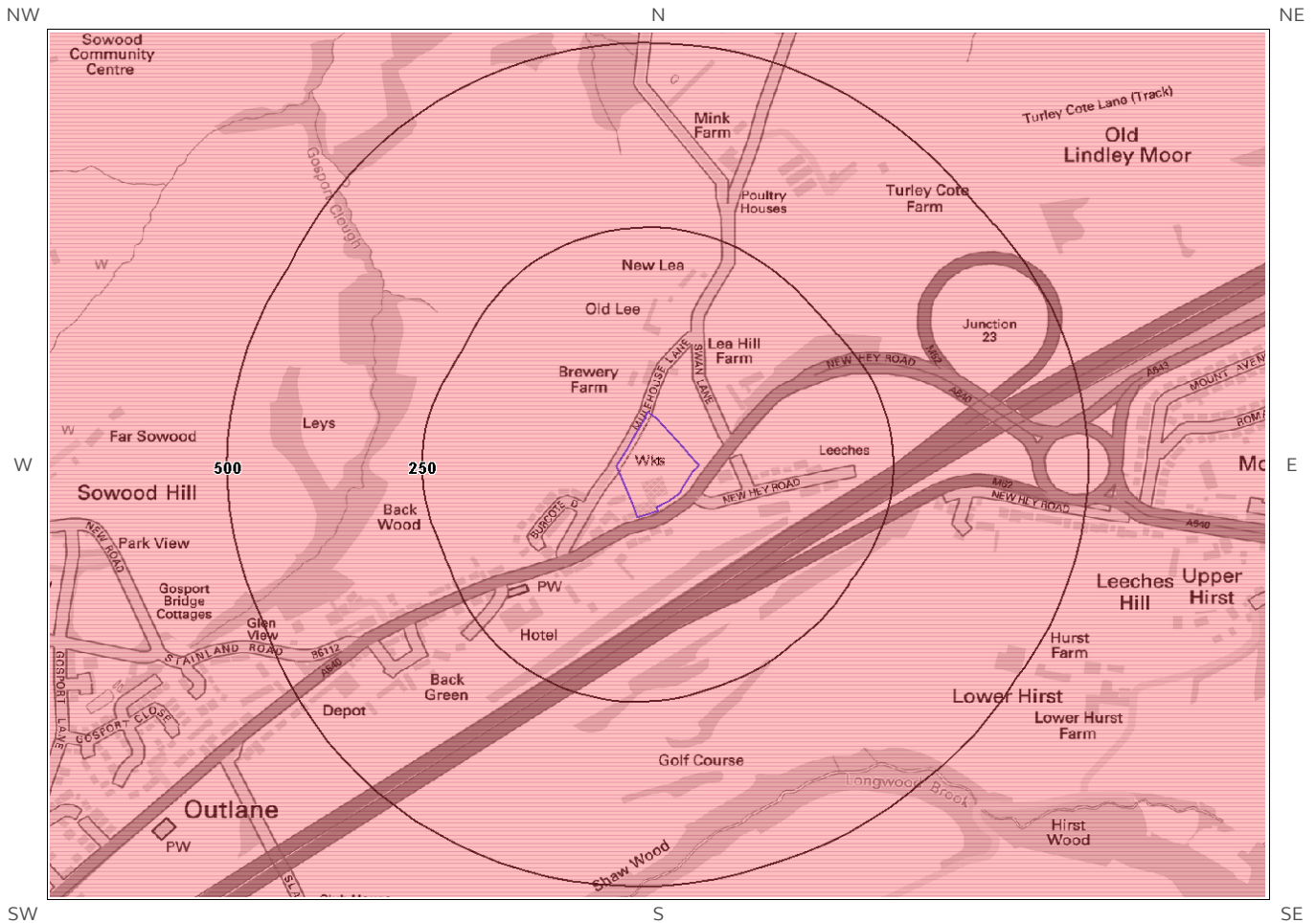


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6b. Aquifer Within Bedrock Geology and Abstraction Licences

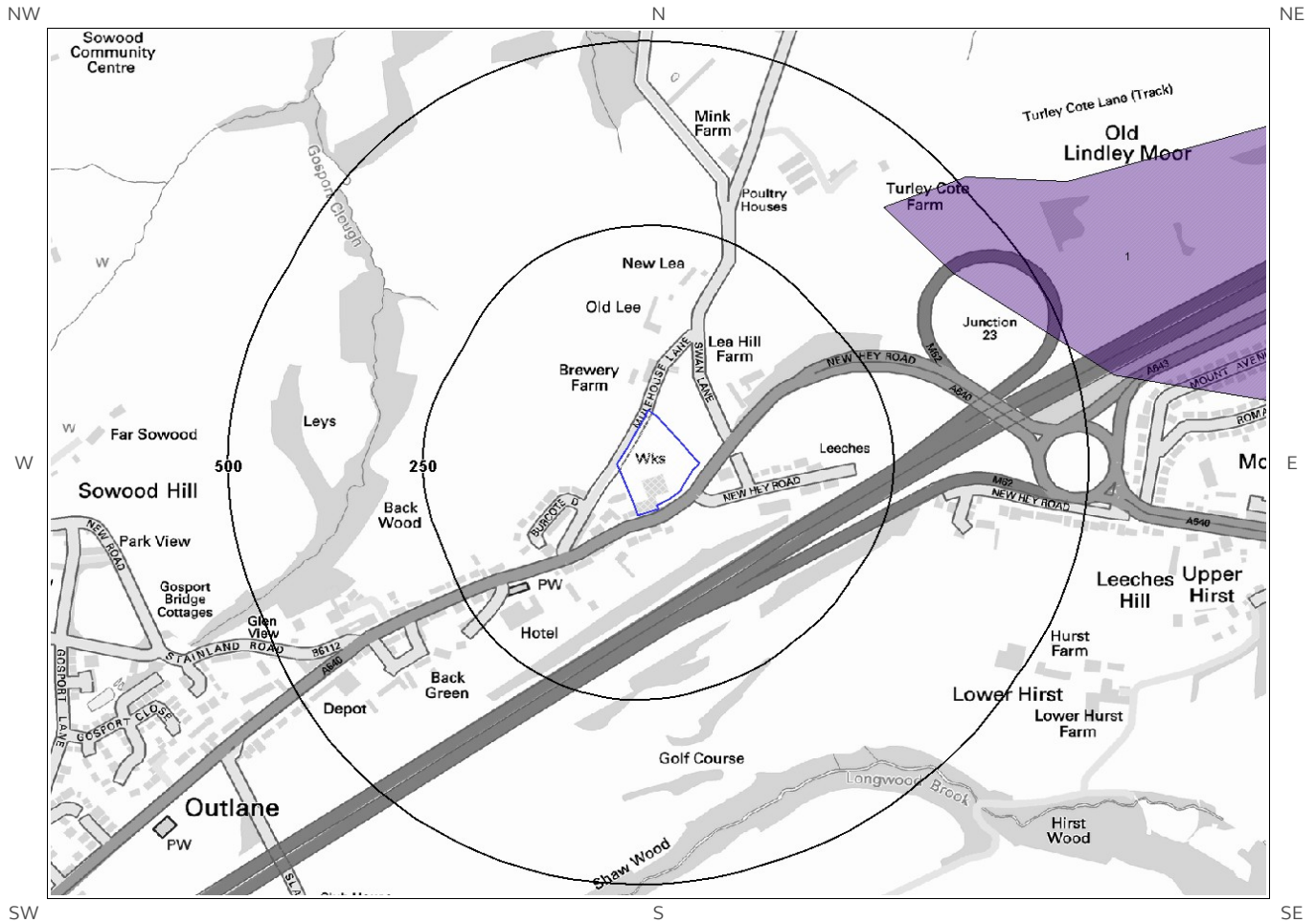


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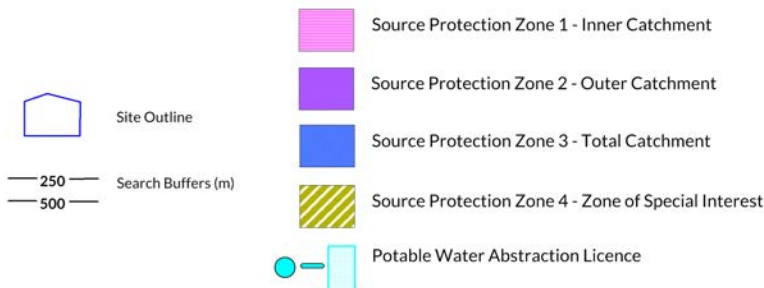




6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



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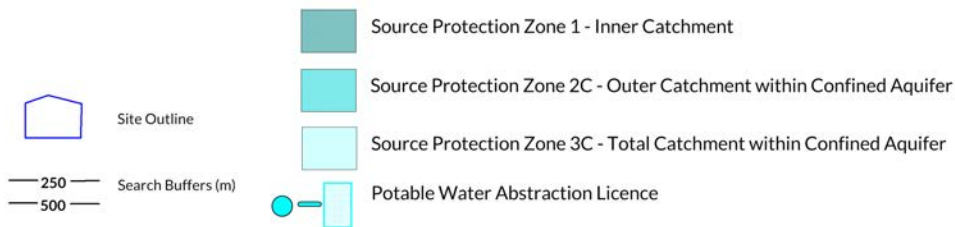




6d. Hydrogeology – Source Protection Zones within confined aquifer

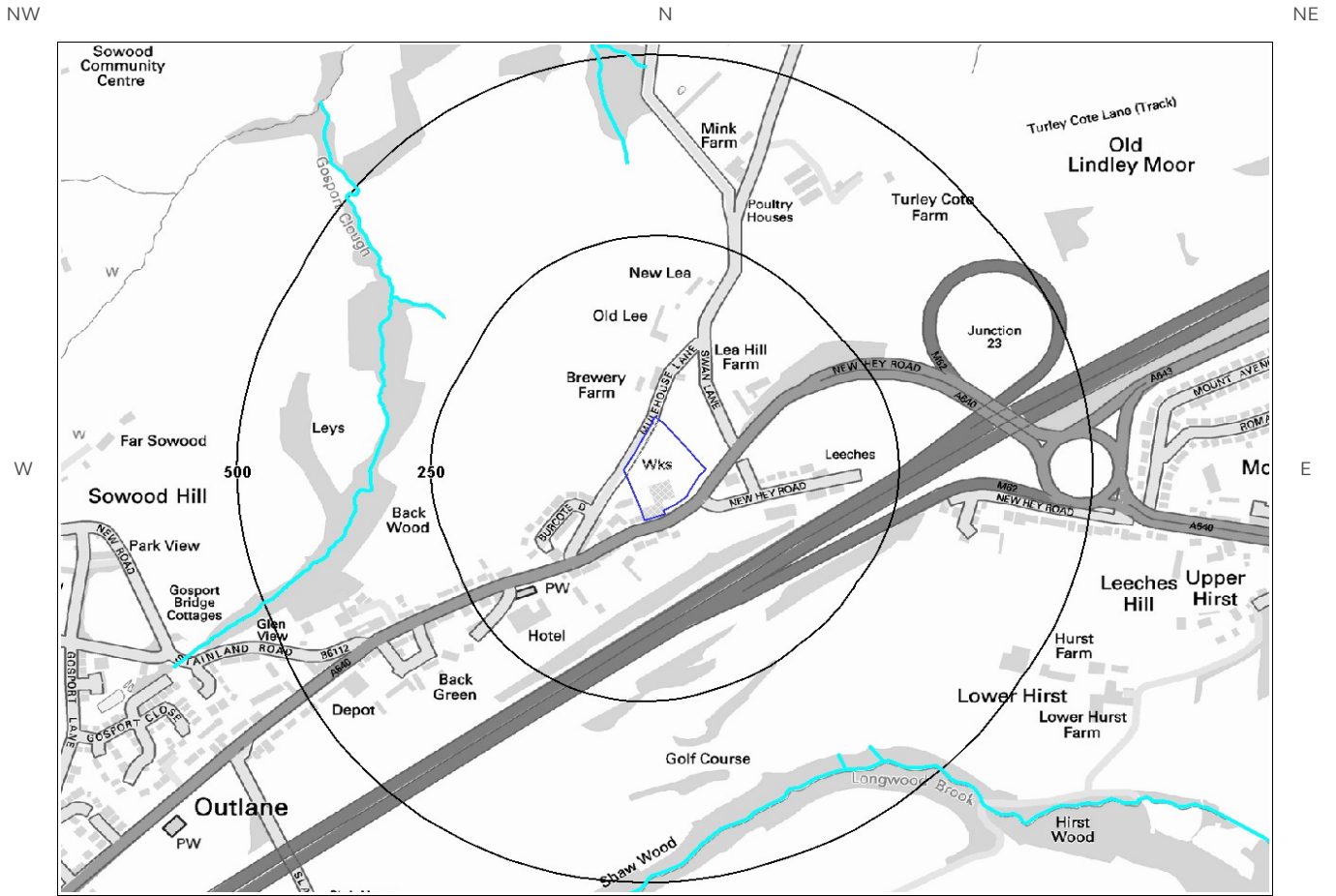


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6e. Hydrology – Watercourse Network and River Quality



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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 No

Database searched and no data found.

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.

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	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	677	SW	408421 417494	Status: Active Licence No: NE/027/0011/003 Details: Spray Irrigation - Direct Direct Source: Groundwaters Point: Borehole - Millstone Grit - Huddersfield Data Type: Point Name: OUTLANE GOLF CLUB LTD Annual Volume (m ³): 6750 Max Daily Volume (m ³): 45 Original Application No: NPSWR004044 Original Start Date: 23/8/2010 Expiry Date: 31/3/2027 Issue No: 1 Version Start Date: 23/8/2010 Version End Date:



ID	Distance (m)	Direction	NGR	Details	
Not shown	684	SW	408400 417500	Status: Historical Licence No: 2/27/11/185 Details: Spray Irrigation - Direct Direct Source: Groundwaters Point: Borehole - Outlane Golf Club - Millstone Grit Data Type: Point Name: OUTLANE GOLF CLUB LTD	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 06946 Original Start Date: 3/4/2000 Expiry Date: 31/10/2009 Issue No: 1 Version Start Date: 3/4/2000 Version End Date:
Not shown	684	SW	408400 417500	Status: Historical Licence No: 2/27/11/185 Details: Spray Irrigation - Direct Direct Source: Groundwaters Point: Borehole - Millstone Grit - Huddersfield Data Type: Point Name: OUTLANE GOLF CLUB LTD	Annual Volume (m ³): 6750 Max Daily Volume (m ³): 45 Original Application No: 6946 Original Start Date: 3/4/2000 Expiry Date: 31/10/2009 Issue No: 1 Version Start Date: 3/4/2000 Version End Date:
Not shown	1317	NW	407600 418700	Status: Historical Licence No: 2/27/12/170 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring Data Type: Point Name: FORD	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 02412 Original Start Date: 17/3/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/3/1966 Version End Date:
Not shown	1411	N	408900 419600	Status: Historical Licence No: 2/27/12/273 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Groundwaters Point: Borehole Data Type: Point Name: CLARIANT UK LIMITED	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 5246 Original Start Date: 19/9/1973 Expiry Date: - Issue No: 100 Version Start Date: 22/1/1999 Version End Date:
Not shown	1411	N	408900 419600	Status: Active Licence No: 2/27/12/273 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Groundwaters Point: Borehole - Millstone Grit - Stainland Data Type: Point Name: RHODIA UK LTD	Annual Volume (m ³): 182000 Max Daily Volume (m ³): 818 Original Application No: NPS/WR/007655 Original Start Date: 19/9/1973 Expiry Date: - Issue No: 104 Version Start Date: 15/8/2011 Version End Date:
Not shown	1433	W	407400 418500	Status: Historical Licence No: 2/27/12/270 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring - Millstone Grit Data Type: Point Name: J M & A P DARWENT	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 05158 Original Start Date: 28/6/1972 Expiry Date: - Issue No: 101 Version Start Date: 15/5/2003 Version End Date:
Not shown	1433	W	407400 418500	Status: Active Licence No: 2/27/12/270 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring - Millstone Grit - Stainland Data Type: Point Name: J M & A P DARWENT	Annual Volume (m ³): 9150 Max Daily Volume (m ³): 27.3 Original Application No: 5158 Original Start Date: 28/6/1972 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2008 Version End Date:
Not shown	1556	NE	410250 418870	Status: Historical Licence No: 2/27/12/191 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring Data Type: Point Name: BAIRSTOW	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 798 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1556	NE	410250 418870	Status: Historical Licence No: 2/27/12/191 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring - Holywell Green Data Type: Point Name: BAIRSTOW Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 00798 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:
Not shown	1712	SE	410100 416900	Status: Historical Licence No: 2/27/11/117 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring Data Type: Point Name: SHEARD Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 1444 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:
Not shown	1712	SE	410100 416900	Status: Historical Licence No: 2/27/11/117 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring - Longwood Data Type: Point Name: SHEARD Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 01444 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:
Not shown	1885	W	406900 418000	Status: Historical Licence No: 2/27/12/224 Details: General Farming & Domestic Direct Source: Groundwaters Point: Gravity Data Type: Point Name: FAIRBANK Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 4027 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:
Not shown	1885	W	406900 418000	Status: Historical Licence No: 2/27/12/224 Details: General Farming & Domestic Direct Source: Groundwaters Point: Spring - Barkisland Data Type: Point Name: FAIRBANK Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 04027 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/4/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water 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	1367	SE	409700 417000	Status: Historical Licence No: 2/27/11/066 Details: Potable Water Supply - Direct Direct Source: Surface Water Point: Longwood Upper And Lower Reservoirs Data Type: Line Name: YORKSHIRE WATER SERVICES LTD Annual Volume (m ³): 818297.12 Max Daily Volume (m ³): 2241.91 Application No: 2249 Original Start Date: 27/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/1/1966 Version End Date:
Not shown	1411	N	408900 419600	Status: Active Licence No: 2/27/12/125 Annual Volume (m ³): 182000 Max Daily Volume (m ³): 818

ID	Distance (m)	Direction	NGR	Details
				Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface Water Point: Stream - Stainland Data Type: Point Name: RHODIA UK LTD Application No: NPS WR/007654 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 104 Version Start Date: 15/8/2011 Version End Date: -
Not shown	1411	N	408900 419600	Status: Historical Licence No: 2/27/12/125 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface Water Point: Stream Data Type: Point Name: CLARIANT UK LIMITED Annual Volume (m ³): - Max Daily Volume (m ³): - Application No: 853 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 22/1/1999 Version End Date: -
Not shown	1714	SE	410000 416800	Status: Historical Licence No: 2/27/11/123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface Water Point: Claywood Brook Data Type: Point Name: PARKWOOD MILLS CO LTD Annual Volume (m ³): - Max Daily Volume (m ³): - Application No: 158902 Original Start Date: 26/5/1966 Expiry Date: - Issue No: 100 Version Start Date: 26/5/1966 Version End Date: -
Not shown	1878	SE	410330 416910	Status: Historical Licence No: 2/27/11/123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface Water Point: Clay Wood Brook-parkwood Road-longwood Data Type: Point Name: PARKWOOD MILLS CO LTD Annual Volume (m ³): - Max Daily Volume (m ³): - Application No: 0158902 Original Start Date: 26/5/1966 Expiry Date: - Issue No: 102 Version Start Date: 30/8/2002 Version End Date: -
Not shown	1940	SE	410400 416900	Status: Historical Licence No: 2/27/11/115 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface Water Point: Clay Wood Brook/oakscar Reservoir Data Type: Point Name: PARKWOOD MILLS CO LTD Annual Volume (m ³): - Max Daily Volume (m ³): - Application No: 01588 Original Start Date: 28/4/1966 Expiry Date: - Issue No: 101 Version Start Date: 22/4/2002 Version End Date: -

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
Not shown	1367	SE	409700 417000	Status: Historical Licence No: 2/27/11/066 Details: Potable Water Supply - Direct Direct Source: Surface Water Point: Longwood Upper And Lower Reservoirs Data Type: Line Name: YORKSHIRE WATER SERVICES LTD Annual Volume (m ³): 818297.12 Max Daily Volume (m ³): 2241.91 Original Application No: 2249 Original Start Date: 27/1/1966 Expiry Date: - Issue No: 100 Version Start Date: - Version End Date: -



6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

Identified

The following Source Protection Zones records are represented on the SPZ and Potable Water Abstraction Map (6c):

ID	Distance (m)	Direction	Zone	Description
1	406	NE	2	Outer catchment

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	Minor Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.
92	E	Minor 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

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	304 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
6	304 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
2	312 W	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
7	312 W	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
3	350 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	350 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
4	378 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
9	378	-	Inland river not influenced	Catchment Area: Aire and Calder



ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	NW	Alternative Name: -	by normal tidal action.	Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
5	400 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	400 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
6	413 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.9
Not shown	413 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.9
7	414 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	414 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
8	422 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.1
Not shown	422 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.1
9	443 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.6
Not shown	443 SE	Longwood Brook Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.6
10	483 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	483 N	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided



Groundsure

LOCATION INTELLIGENCE

6.11 Surface Water Features

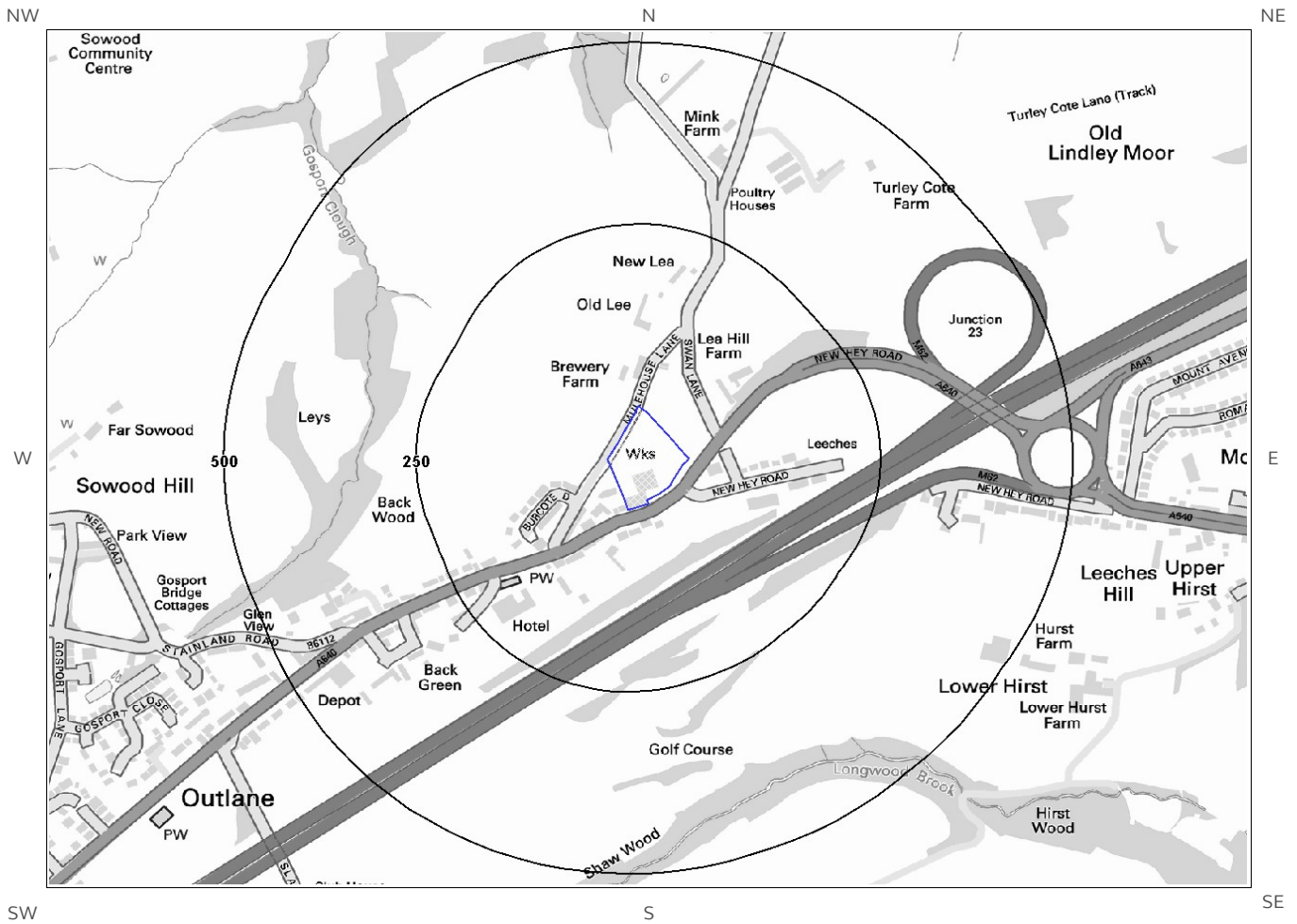
Surface water features within 250m of the study site

None identified

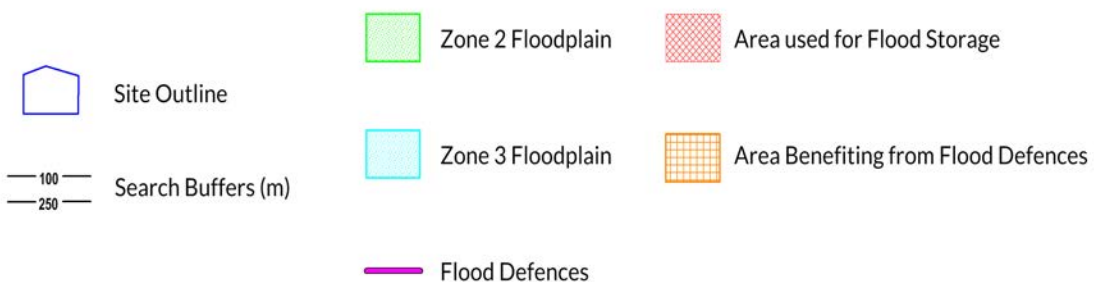
Database searched and no data found.



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

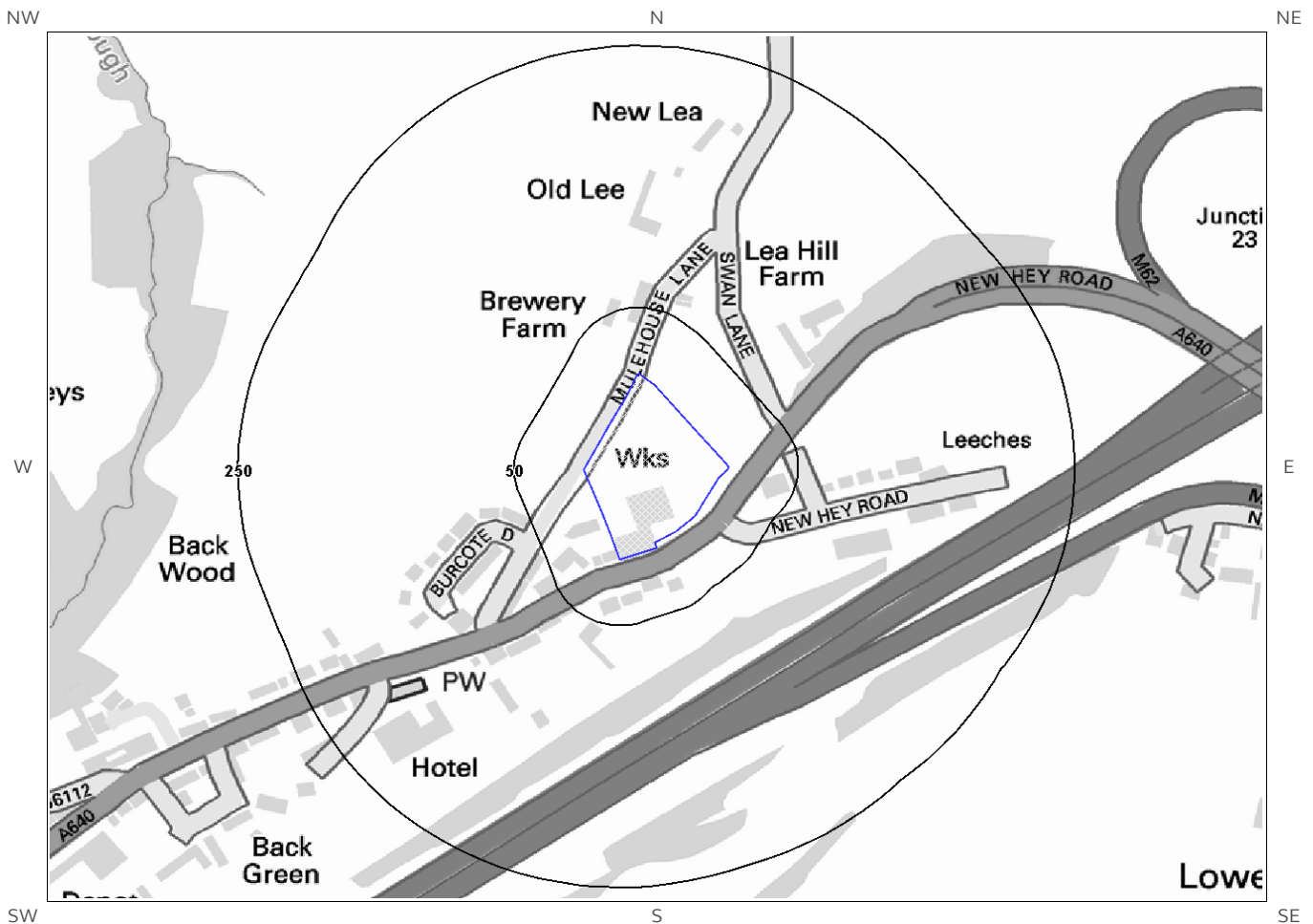


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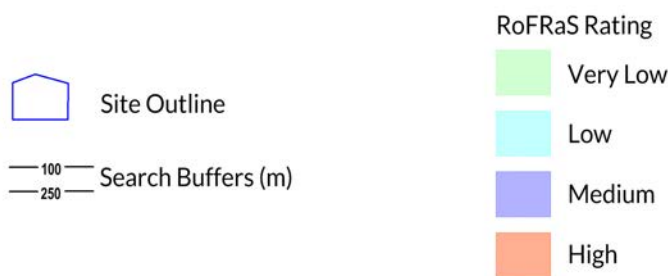




7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m None 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:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None 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.

Database searched and no data found.

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 Identified

Clearwater Flooding or Superficial Deposits Flooding Clearwater Flooding

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

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

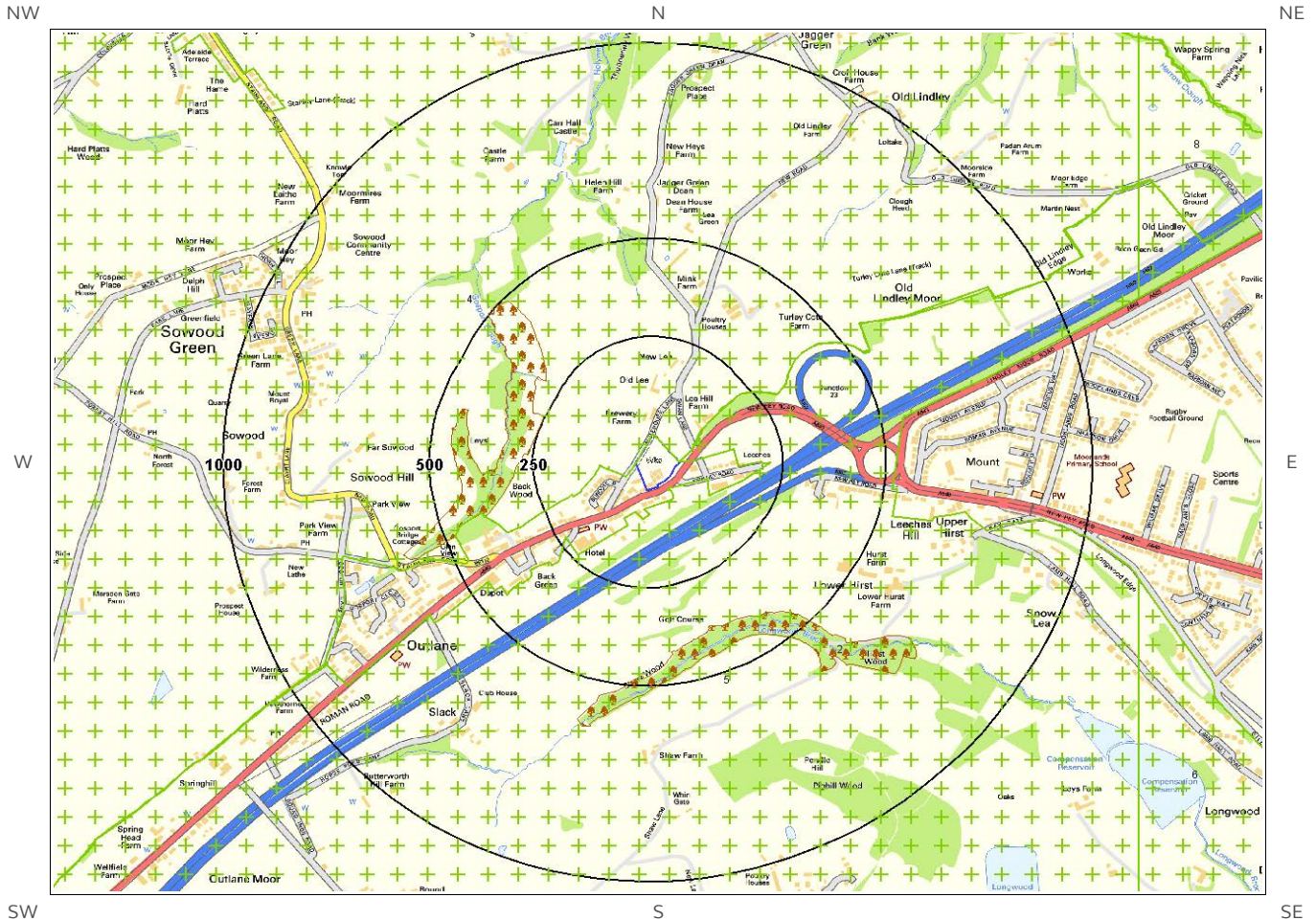
British Geological Survey confidence rating in this result Low

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



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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:

0

Database searched and no data found.

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:

3

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
1	252	W	UNKNOWN	Ancient and Semi-Natural Woodland
2	377	S	UNKNOWN	Ancient Replanted Woodland
Not shown	1953	NW	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:

0

Database searched and no data found.

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:

0

Database searched and no data found.

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

8

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

ID	Distance	Direction	Green Belt Name	Local Authority Name
4	0	On Site	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)
5	1	NE	Liverpool, Manchester and West Yorks Greenbelt	Kirklees District (B)
6	1153	E	Liverpool, Manchester and West Yorks Greenbelt	Kirklees District (B)
7	1190	E	Liverpool, Manchester and West Yorks Greenbelt	Kirklees District (B)
8	1322	NE	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)
9	1532	NE	Liverpool, Manchester and West Yorks Greenbelt	Kirklees District (B)
Not shown	1809	N	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)
Not shown	1825	NE	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)

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 Very Low

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

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* 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
Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property no significant increase in insurance risk due to natural slope instability problems.

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.



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

Very Low

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

Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

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.



9.2.1 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 in a Radon Affected Area, as between 3 and 5% 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? Basic radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

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	Vein Mineral	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

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British Geological Survey Enquiries

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Fax: 0115 936 3276.
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BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk



Environment Agency

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The Coal Authority

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Local Authority

Authority: Calderdale Metropolitan Borough Council
Phone: 01422 288001

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Groundsure

LOCATION INTELLIGENCE

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.

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