



Demeter Environmental Ltd

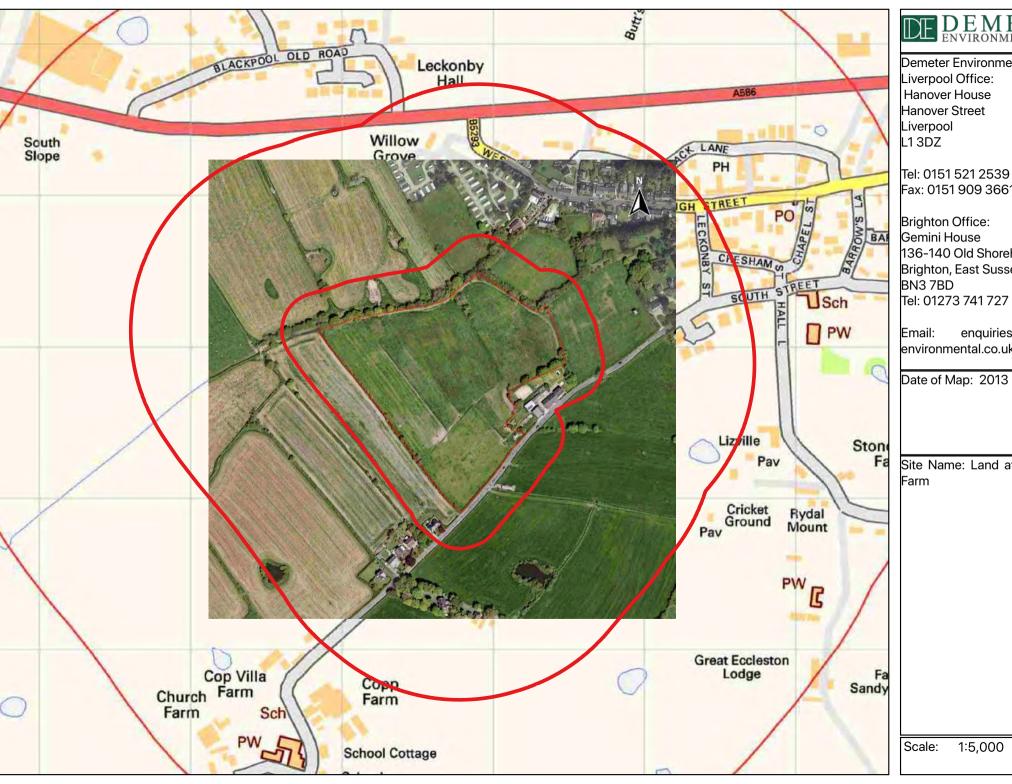
Fax: 0151 909 3661

136-140 Old Shoreham Road Brighton, East Sussex

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Site Name: Land at Gradwells

1:5,000 at A4





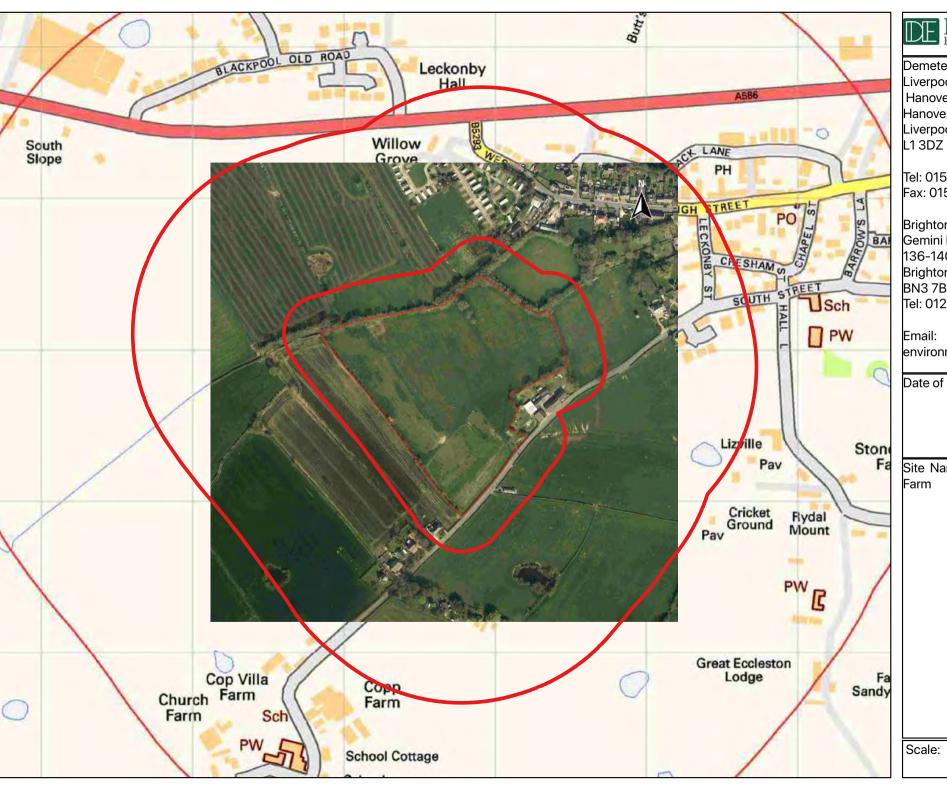
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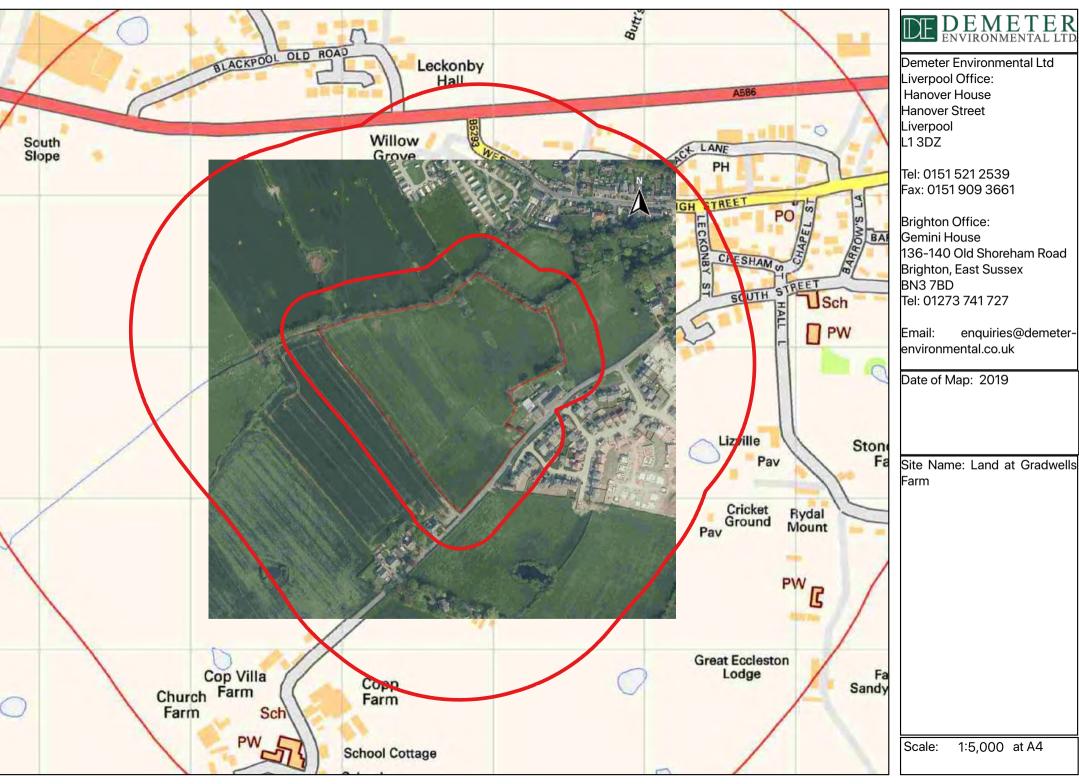
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Date of Map: 2017

Site Name: Land at Gradwells

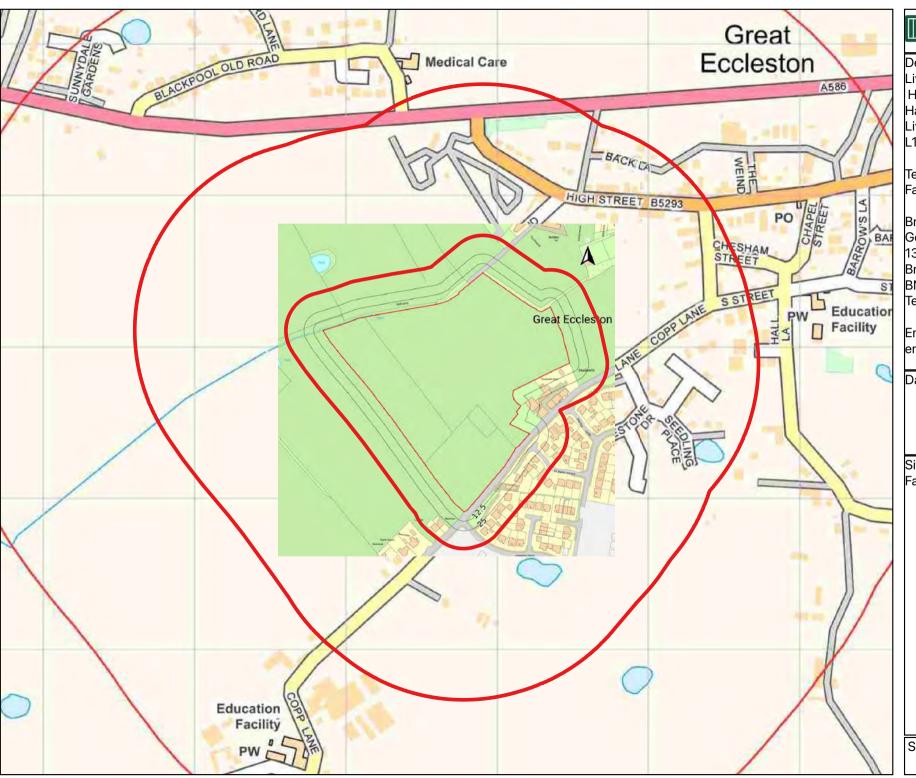




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Date of Map: 2021

Site Name: Land at Gradwells Farm



21-04-09 Revision 1 - July 2021

**APPENDIX G: GROUNDSURE REPORTS** 



21-06-06 -July 2021

**APPENDIX G: GROUNDSURE REPORTS** 





## and at Gradwells Farm, Copp Lane, Great Eccleston, PR3 0YN

#### **Order Details**

**Date:** 11/05/2021

Your ref: EMS 692235 907105

Our Ref: EMS-DE-692235\_907105

Client: Demeter Environmental Ltd

#### **Site Details**

**Location:** 342345 439959

**Area:** 5.1 ha

Authority: Wyre Council



**Summary of findings** 

p. 2 Aerial image

p. 8

OS MasterMap site plan

p.13 groundsure.com/insightuserguide



# **Summary of findings**

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>14</u>	<u>1.1</u>	<u>Historical industrial land uses</u>	0	0	5	8	-
15	1.2	Historical tanks	0	0	0	0	-
<u>15</u>	<u>1.3</u>	Historical energy features	0	0	0	2	-
16	1.4	Historical petrol stations	0	0	0	0	-
<u>16</u>	<u>1.5</u>	Historical garages	0	0	2	1	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
<u>18</u>	<u>2.1</u>	Historical industrial land uses	0	0	5	10	-
19	2.2	Historical tanks	0	0	0	0	-
<u>19</u>	2.3	Historical energy features	0	0	0	8	-
20	2.4	Historical petrol stations	0	0	0	0	-
<u>20</u>	<u>2.5</u>	Historical garages	0	0	3	2	-
Dago	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
Page	Section	Waste and landin	On site			230 300111	300 2000111
21	3.1	Active or recent landfill	0	0	0	0	-
							-
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.1	Active or recent landfill Historical landfill (BGS records)	0	0	0	0	
21 21 22	3.1 3.2 3.3	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)	0 0	0 0	0 0	0 0	
21 21 22 22	3.1 3.2 3.3 3.4	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)  Historical landfill (EA/NRW records)	0 0 0	0 0 0	0 0 0	0 0 0	
21 21 22 22 22	3.1 3.2 3.3 3.4 3.5	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)  Historical landfill (EA/NRW records)  Historical waste sites	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	
21 21 22 22 22 22	3.1 3.2 3.3 3.4 3.5 3.6	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)  Historical landfill (EA/NRW records)  Historical waste sites  Licensed waste sites	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	500-2000m
21 21 22 22 22 22 22 22	3.1 3.2 3.3 3.4 3.5 3.6	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites  Waste exemptions	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	- - - - -
21 21 22 22 22 22 22 Page	3.1 3.2 3.3 3.4 3.5 3.6 3.7 Section	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)  Historical landfill (EA/NRW records)  Historical waste sites  Licensed waste sites  Waste exemptions  Current industrial land use	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	- - - - -
21 21 22 22 22 22 Page	3.1 3.2 3.3 3.4 3.5 3.6 3.7 Section 4.1	Active or recent landfill  Historical landfill (BGS records)  Historical landfill (LA/mapping records)  Historical landfill (EA/NRW records)  Historical waste sites  Licensed waste sites  Waste exemptions  Current industrial land use  Recent industrial land uses	0 0 0 0 0 0 On site	0 0 0 0 0 0 0 0-50m	0 0 0 0 0 0 50-250m	0 0 0 0 0 0 87 250-500m	- - - - -
21 21 22 22 22 22 22 Page 31 32	3.1 3.2 3.3 3.4 3.5 3.6 3.7 Section 4.1 4.2	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites  Waste exemptions Current industrial land use  Recent industrial land uses Current or recent petrol stations	0 0 0 0 0 0 On site	0 0 0 0 0 0 0 0-50m	0 0 0 0 0 0 50-250m	0 0 0 0 0 87 250-500m	- - - - -





32	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
33	4.8	Hazardous substance storage/usage	0	0	0	0	-
33	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
33	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
33	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
34	4.12	Radioactive Substance Authorisations	0	0	0	0	-
34	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
34	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.15	Pollutant release to public sewer	0	0	0	0	-
34	4.16	List 1 Dangerous Substances	0	0	0	0	-
35	4.17	List 2 Dangerous Substances	0	0	0	0	-
35	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
35	4.19	Pollution inventory substances	0	0	0	0	-
35	4.20	Pollution inventory waste transfers	0	0	0	0	-
35	4.21	Pollution inventory radioactive waste	0	0	0	0	-
35 Page	4.21 Section	Pollution inventory radioactive waste  Hydrogeology	On site	0 0-50m	0 50-250m	0 250-500m	500-2000m
			On site		50-250m		- 500-2000m
Page	Section	Hydrogeology	On site	0-50m	50-250m		- 500-2000m
Page <u>36</u>	Section 5.1	Hydrogeology  Superficial aquifer	On site  Identified (	0-50m within 500m	50-250m		- 500-2000m
Page <u>36</u> <u>38</u>	Section <u>5.1</u> <u>5.2</u>	Hydrogeology  Superficial aquifer  Bedrock aquifer	On site  Identified (	0-50m within 500m within 500m within 50m)	50-250m		- 500-2000m
Page  36  38  40	Section <u>5.1</u> <u>5.2</u> <u>5.3</u>	Hydrogeology  Superficial aquifer  Bedrock aquifer  Groundwater vulnerability	On site  Identified (  Identified (	0-50m within 500m within 500m within 50m) in 0m)	50-250m		500-2000m
Page  36  38  40  41	Section  5.1  5.2  5.3  5.4	Hydrogeology  Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk	On site  Identified ( Identified ( Identified ( None (with	0-50m within 500m within 500m within 50m) in 0m)	50-250m		500-2000m
Page  36  38  40  41  41	<ul><li>Section</li><li>5.1</li><li>5.2</li><li>5.3</li><li>5.4</li><li>5.5</li></ul>	Hydrogeology  Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk  Groundwater vulnerability- local information	On site  Identified ( Identified ( Identified ( None (with	0-50m within 500m within 500m within 50m) in 0m)	50-250m )	250-500m	
Page  36  38  40  41  41  42	<ul> <li>Section</li> <li>5.1</li> <li>5.2</li> <li>5.3</li> <li>5.4</li> <li>5.5</li> <li>5.6</li> </ul>	Hydrogeology  Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk  Groundwater vulnerability- local information  Groundwater abstractions	On site  Identified ( Identified ( Identified ( None (with None (with	0-50m within 500m within 500m within 50m) in 0m) in 0m)	50-250m ) )	250-500m	0
Page  36 38 40 41 41 42 42	<ul> <li>Section</li> <li>5.1</li> <li>5.2</li> <li>5.3</li> <li>5.4</li> <li>5.5</li> <li>5.6</li> <li>5.7</li> </ul>	Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk  Groundwater vulnerability- local information  Groundwater abstractions  Surface water abstractions	On site  Identified ( Identified ( Identified ( None (with None (with 0	0-50m within 500m within 500m within 50m) in 0m) 0 0	50-250m ) ) 0	250-500m 0	0
Page  36 38 40 41 41 42 42 42	<ul> <li>Section</li> <li>5.1</li> <li>5.2</li> <li>5.3</li> <li>5.4</li> <li>5.5</li> <li>5.6</li> <li>5.7</li> <li>5.8</li> </ul>	Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk  Groundwater vulnerability- local information  Groundwater abstractions  Surface water abstractions  Potable abstractions	On site  Identified ( Identified ( Identified ( None (with None (with 0 0 0	0-50m within 500m within 500m within 50m) in 0m) 0 0 0	50-250m ) ) 0 0	250-500m 0 0	0
Page  36  38  40  41  41  42  42  42  42	<ul> <li>Section</li> <li>5.1</li> <li>5.2</li> <li>5.3</li> <li>5.4</li> <li>5.5</li> <li>5.6</li> <li>5.7</li> <li>5.8</li> <li>5.9</li> </ul>	Superficial aquifer  Bedrock aquifer  Groundwater vulnerability  Groundwater vulnerability- soluble rock risk  Groundwater vulnerability- local information  Groundwater abstractions  Surface water abstractions  Potable abstractions  Source Protection Zones	On site  Identified ( Identified ( Identified ( None (with None (with 0 0 0 0	0-50m within 500m within 500m within 50m) in 0m) 0 0 0 0	50-250m ) ) 0 0 0	250-500m 0 0 0	0





<u>45</u>	<u>6.2</u>	Surface water features	1	0	4	-	-
<u>45</u>	<u>6.3</u>	WFD Surface water body catchments	1	-	-	-	-
<u>46</u>	<u>6.4</u>	WFD Surface water bodies	0	0	0	-	-
<u>46</u>	<u>6.5</u>	WFD Groundwater bodies	1	_	-	-	_
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
47	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (with	in 50m)			
47	7.2	Historical Flood Events	0	0	0	-	-
47	7.3	Flood Defences	0	0	0	-	-
47	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
48	7.5	Flood Storage Areas	0	0	0	-	-
49	7.6	Flood Zone 2	None (with	in 50m)			
49	7.7	Flood Zone 3	None (with	in 50m)			
Page	Section	Surface water flooding					
<u>50</u>	<u>8.1</u>	Surface water flooding	1 in 30 yea	r, 0.3m - 1.0n	n (within 50	m)	
Page	Section	Groundwater flooding					
ruge	•••••	Groundwater mooding					
52	9.1	Groundwater flooding	Low (within	n 50m)			
			Low (within	n 50m) 0-50m	50-250m	250-500m	500-2000m
<u>52</u>	9.1	Groundwater flooding			50-250m	<b>250-500m</b>	500-2000m
52 Page	9.1 Section	Groundwater flooding  Environmental designations	On site	0-50m			
<b>52</b> Page	9.1 Section	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)	On site	0-50m	0	0	0
<b>52</b> Page 53	9.1 Section 10.1 10.2	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)	On site  0	0-50m 0	0	0	0
<b>52</b> Page 53 54	9.1 Section 10.1 10.2 10.3	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)	On site  0 0 0	0-50m 0 0	0 0	0 0	0 0
52 Page 53 54 54	9.1 Section 10.1 10.2 10.3 10.4	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)	On site  0 0 0 0	0-50m 0 0	0 0 0	0 0 0	0 0 0
<b>52</b> Page  53  54  54  54  54	9.1 Section 10.1 10.2 10.3 10.4 10.5	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)  National Nature Reserves (NNR)	On site  0 0 0 0 0	0-50m 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
<b>52</b> Page  53  54  54  54  54  55	9.1 Section 10.1 10.2 10.3 10.4 10.5 10.6	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)  National Nature Reserves (NNR)  Local Nature Reserves (LNR)	On site  0 0 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
<b>52 Page</b> 53  54  54  54  55  55	9.1 Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)  National Nature Reserves (NNR)  Local Nature Reserves (LNR)  Designated Ancient Woodland	On site  0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
<b>52</b> Page  53  54  54  54  55  55  55	9.1 Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)  National Nature Reserves (NNR)  Local Nature Reserves (LNR)  Designated Ancient Woodland  Biosphere Reserves	On site  0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
52 Page 53 54 54 54 55 55 55	9.1 Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 10.8 10.9	Groundwater flooding  Environmental designations  Sites of Special Scientific Interest (SSSI)  Conserved wetland sites (Ramsar sites)  Special Areas of Conservation (SAC)  Special Protection Areas (SPA)  National Nature Reserves (NNR)  Local Nature Reserves (LNR)  Designated Ancient Woodland  Biosphere Reserves  Forest Parks	On site  0 0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0





57	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
57	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
57	10.15	Nitrate Sensitive Areas	0	0	0	0	0
57	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
<u>58</u>	<u>10.17</u>	SSSI Impact Risk Zones	2	-	-	-	-
60	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
61	11.1	World Heritage Sites	0	0	0	-	-
62	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
62	11.3	National Parks	0	0	0	-	-
<u>62</u>	<u>11.4</u>	<u>Listed Buildings</u>	0	0	4	-	-
63	11.5	Conservation Areas	0	0	0	-	-
<u>63</u>	<u>11.6</u>	Scheduled Ancient Monuments	0	0	1	-	-
63	11.7	Registered Parks and Gardens	0	0	0	-	_
Dago	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
Page	Section	Agricultural designations	OII site	0-30111	30 230111	230 300111	300 2000111
64	12.1	Agricultural Land Classification		ithin 250m)	30 230111	230 300111	300 2000111
					0	-	-
64	<u>12.1</u>	Agricultural Land Classification	Grade 2 (w	ithin 250m)		-	-
<b>64</b> 65	<b>12.1</b> 12.2	Agricultural Land Classification  Open Access Land	Grade 2 (w	ithin <b>250m)</b> 0	0	-	- -
<b>64</b> 65	12.1 12.2 12.3	Agricultural Land Classification  Open Access Land  Tree Felling Licences	Grade 2 (w 0	0 0	0		- - -
<ul><li>64</li><li>65</li><li>65</li><li>66</li></ul>	12.1 12.2 12.3 12.4	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes	Grade 2 (w 0 0 0	0 0 0	0 0	- - - - 250-500m	- - - - 500-2000m
64 65 65 66 66	12.1 12.2 12.3 12.4 12.5	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes	Grade 2 (w 0 0 0 0	0 0 0 0	0 0 0	- - -	- - -
64 65 65 66 66 Page	12.1 12.2 12.3 12.4 12.5 Section	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations	Grade 2 (w  0  0  0  0  On site	0 0 0 0 0 0	0 0 0 0 50-250m	- - -	- - -
64 65 65 66 66 Page	12.1 12.2 12.3 12.4 12.5 Section 13.1	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations  Priority Habitat Inventory	Grade 2 (w  0  0  0  On site	0 0 0 0 0 0-50m	0 0 0 0 50-250m	- - -	- - -
64 65 65 66 66 Page 67 68	12.1 12.2 12.3 12.4 12.5 Section 13.1 13.2	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations  Priority Habitat Inventory  Habitat Networks	Grade 2 (w  0  0  0  0  On site	0 0 0 0 0 0-50m	0 0 0 0 50-250m	- - -	- - -
64 65 65 66 66 Page 67 68	12.1 12.2 12.3 12.4 12.5 Section 13.1 13.2	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations  Priority Habitat Inventory  Habitat Networks  Open Mosaic Habitat	Grade 2 (w  0  0  0  0  On site  0  0	0 0 0 0 0-50m 0	0 0 0 0 50-250m 1 1	- - -	- - -
64 65 65 66 66 Page 67 68 68	12.1 12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations  Priority Habitat Inventory  Habitat Networks  Open Mosaic Habitat  Limestone Pavement Orders	Grade 2 (w  0  0  0  0  On site  0  0  On site	0 0 0 0 0 0-50m 0	0 0 0 0 50-250m 1 1 0 0	- - - 250-500m - - -	- - - 500-2000m - - -
64 65 65 66 66 Page 67 68 68 68	12.1 12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4 Section	Agricultural Land Classification  Open Access Land  Tree Felling Licences  Environmental Stewardship Schemes  Countryside Stewardship Schemes  Habitat designations  Priority Habitat Inventory  Habitat Networks  Open Mosaic Habitat  Limestone Pavement Orders  Geology 1:10,000 scale	Grade 2 (w  0  0  0  0  On site  0  0  On site	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 50-250m 1 1 0 0	- - - 250-500m - - -	- - - 500-2000m - - -





71	14.4	Landslip (10k)	0	0	0	0	-
72	14.5	Bedrock geology (10k)	0	0	0	0	-
72	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
<u>73</u>	<u>15.1</u>	50k Availability	Identified (	within 500m	)	•	
74	15.2	Artificial and made ground (50k)	0	0	0	0	-
74	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>75</u>	<u>15.4</u>	Superficial geology (50k)	1	0	0	1	-
<u>76</u>	<u>15.5</u>	Superficial permeability (50k)	Identified (	within 50m)			
76	15.6	Landslip (50k)	0	0	0	0	-
76	15.7	Landslip permeability (50k)	None (with	in 50m)			
<u>77</u>	<u>15.8</u>	Bedrock geology (50k)	1	0	0	0	-
<u>78</u>	<u>15.9</u>	Bedrock permeability (50k)	Identified (	within 50m)			
78	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
79	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
<u>80</u>	<u>17.1</u>	Shrink swell clays	Very low (w	vithin 50m)			
81			very low (w	vicinii 30iii)			
01	<u>17.2</u>	Running sands	Very low (w				
82	17.2 17.3	Running sands  Compressible deposits	Very low (w				
			Very low (w	vithin 50m) within 50m)			
<u>82</u>	<u>17.3</u>	Compressible deposits	Very low (w	vithin 50m) within 50m) vithin 50m)			
<u>82</u> <u>83</u>	<u>17.3</u> <u>17.4</u>	Compressible deposits  Collapsible deposits	Very low (w Negligible ( Very low (w Very low (w	vithin 50m) within 50m) vithin 50m)			
82 83 84	17.3 17.4 17.5	Compressible deposits  Collapsible deposits  Landslides	Very low (w Negligible ( Very low (w Very low (w	vithin 50m) within 50m) vithin 50m) vithin 50m)	50-250m	250-500m	500-2000m
82 83 84 85	17.3 17.4 17.5 17.6	Compressible deposits  Collapsible deposits  Landslides  Ground dissolution of soluble rocks	Very low (w Negligible ( Very low (w Very low (w Negligible (	vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m)	50-250m	<b>250-500</b> m	500-2000m
82 83 84 85 Page	17.3 17.4 17.5 17.6	Compressible deposits  Collapsible deposits  Landslides  Ground dissolution of soluble rocks  Mining, ground workings and natural cavities	Very low (w Negligible ( Very low (w Very low (w Negligible (	vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m) 0-50m			500-2000m - -
82 83 84 85 Page	17.3 17.4 17.5 17.6 Section	Compressible deposits  Collapsible deposits  Landslides  Ground dissolution of soluble rocks  Mining, ground workings and natural cavities  Natural cavities	Very low (w Negligible ( Very low (w Very low (w Negligible ( On site	vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m) 0-50m	0	0	500-2000m - -
82 83 84 85 Page 86 87	17.3 17.4 17.5 17.6 Section 18.1	Compressible deposits  Collapsible deposits  Landslides  Ground dissolution of soluble rocks  Mining, ground workings and natural cavities  Natural cavities  BritPits	Very low (w Negligible ( Very low (w Very low (w Negligible ( On site	vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m) 0-50m 0	0	0	500-2000m - - - 0



#### and at Gradwells Farm,Copp Lane,Great Eccleston,PR3 0YN

Ref: EMS-DE-692235\_907105 Your ref: EMS\_692235\_907105 Grid ref: 342345 439959

88	18.6	Non-coal mining	0	0	0	0	0
89	18.7	Mining cavities	0	0	0	0	0
89	18.8	JPB mining areas	None (with	in 0m)			
89	18.9	Coal mining	None (with	in 0m)			
89	18.10	Brine areas	None (with	in 0m)			
89	18.11	Gypsum areas	None (with	in 0m)			
90	18.12	Tin mining	None (with	in 0m)			
90	18.13	Clay mining	None (with	in 0m)			
Page	Section	Radon					
91	<u>19.1</u>	Radon	Less than 1	% (within 0n	n)		
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
92	<u>20.1</u>	BGS Estimated Background Soil Chemistry	2	2	_	_	-
92	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
92	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
93	21.1	Underground railways (London)	0	0	0	-	-
93	21.2	Underground railways (Non-London)	0	0	0	-	-
93	21.3	Railway tunnels	0	0	0	-	-
93	21.4	Historical railway and tunnel features	0	0	0	-	-
93	21.5	Royal Mail tunnels	0	0	0	-	-
94	21.6	Historical railways	0	0	0	-	-
94	21.7	Railways	0	0	0	-	-
94	21.8	Crossrail 1	0	0	0	0	-
94	21.9	Crossrail 2	0	0	0	0	-
94	21.10	HS2	0	0	0	0	_



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## Recent aerial photograph



Capture Date: 22/04/2019

Site Area: 5.1ha





## Recent site history - 2017 aerial photograph



Capture Date: 08/04/2017

Site Area: 5.1ha



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## Recent site history - 2013 aerial photograph



Capture Date: 25/05/2013

Site Area: 5.1ha





## Recent site history - 2001 aerial photograph



Capture Date: 07/05/2001

Site Area: 5.1ha





## Recent site history - 2000 aerial photograph



Capture Date: 21/07/2000

Site Area: 5.1ha



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# OS MasterMap site plan



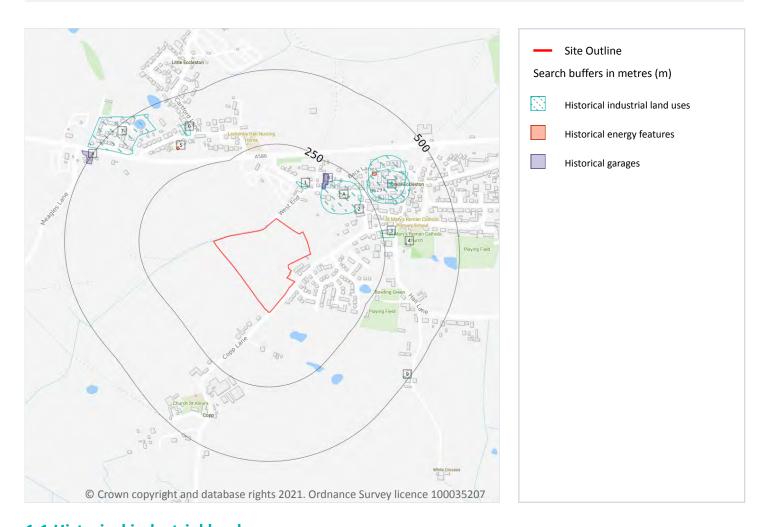
Site Area: 5.1ha



08444 159 000



### 1 Past land use



### 1.1 Historical industrial land uses

#### Records within 500m 13

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

Features are displayed on the Past land use map on page 14

ID	Location	Land use	Dates present	Group ID
Α	107m NE	Police Station	1910	680388





ID	Location	Land use	Dates present	Group ID
1	135m NE	Smithy	1910	692730
	133111111	Simility	1910	032730
2	188m NE	Unspecified Pump	1846	691986
Α	193m NE	Unspecified Pump	1846	691988
3	246m E	Gravel Yard	1846	682805
С	254m NE	Police Station	1930	707722
С	266m NE	Police Station	1951	754205
4	321m E	Unspecified Pump	1846	691985
С	327m NE	Police Station	1969 - 1993	731696
С	338m NE	Unspecified Pump	1846	691987
6	363m N	Police Station	1846	680387
7	401m NW	Nurseries	1969 - 1993	784512
9	484m SE	Unspecified Tank	1910	673305

This data is sourced from Ordnance Survey / Groundsure.

#### 1.2 Historical tanks

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

### 1.3 Historical energy features

Records within 500m 2

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

Features are displayed on the Past land use map on page 14





ID	Location	Land use	Dates present	Group ID
С	300m NE	Electricity Substation	1972 - 1995	50338
5	329m N	Electricity Substation	1972 - 1995	50232

This data is sourced from Ordnance Survey / Groundsure.

#### 1.4 Historical petrol stations

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

#### 1.5 Historical garages

Records within 500m 3

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

Features are displayed on the Past land use map on page 14

ID	Location	Land use	Dates present	Group ID
В	157m NE	Garage	1986	15400
В	159m NE	Garage	1965 - 1972	17606
8	484m NW	Garage	1967 - 1987	17799

This data is sourced from Ordnance Survey / Groundsure.





### 1.6 Historical military land

Records within 500m 0

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

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





## 2 Past land use - un-grouped



#### 2.1 Historical industrial land uses

Records within 500m 15

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

Features are displayed on the Past land use - un-grouped map on page 18

ID	Location	Land Use	Date	Group ID
А	107m NE	Police Station	1910	680388
1	135m NE	Smithy	1910	692730
2	188m NE	Unspecified Pump	1846	691986





ID	Location	Land Use	Date	Group ID
А	193m NE	Unspecified Pump	1846	691988
3	246m E	Gravel Yard	1846	682805
С	254m NE	Police Station	1930	707722
С	266m NE	Police Station	1951	754205
4	321m E	Unspecified Pump	1846	691985
С	327m NE	Police Station	1993	731696
С	327m NE	Police Station	1969	731696
С	338m NE	Unspecified Pump	1846	691987
5	363m N	Police Station	1846	680387
Е	401m NW	Nurseries	1993	784512
Е	401m NW	Nurseries	1969	784512
6	484m SE	Unspecified Tank	1910	673305

This data is sourced from Ordnance Survey / Groundsure.

#### 2.2 Historical tanks

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

### 2.3 Historical energy features

Records within 500m 8

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

Features are displayed on the Past land use - un-grouped map on page 18

ID	Location	Land Use	Date	Group ID
С	300m NE	Electricity Substation	1986	50338





ID	Location	Land Use	Date	Group ID
С	300m NE	Electricity Substation	1991	50338
С	303m NE	Electricity Substation	1995	50338
С	303m NE	Electricity Substation	1972	50338
D	329m N	Electricity Substation	1986	50232
D	329m N	Electricity Substation	1991	50232
D	330m N	Electricity Substation	1972	50232
D	332m N	Electricity Substation	1995	50232

This data is sourced from Ordnance Survey / Groundsure.

#### 2.4 Historical petrol stations

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

### 2.5 Historical garages

Records within 500m 5

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

Features are displayed on the Past land use - un-grouped map on page 18

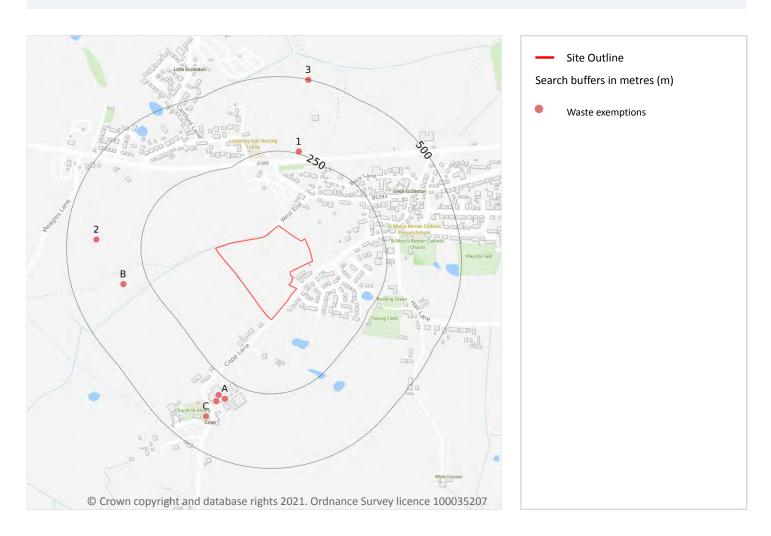
ID	Location	Land Use	Date	Group ID
В	157m NE	Garage	1986	15400
В	159m NE	Garage	1972	17606
В	159m NE	Garage	1965	17606
F	484m NW	Garage	1967	17799
F	494m NW	Garage	1987	17799

This data is sourced from Ordnance Survey / Groundsure.





## 3 Waste and landfill



#### 3.1 Active or recent landfill

Records within 500m 0

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

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

### 3.2 Historical landfill (BGS records)

Records within 500m 0

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

This data is sourced from the British Geological Survey.



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### 3.3 Historical landfill (LA/mapping records)

Records within 500m 0

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

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

#### 3.4 Historical landfill (EA/NRW records)

Records within 500m 0

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

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

#### 3.5 Historical waste sites

Records within 500m 0

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

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

#### 3.6 Licensed waste sites

Records within 500m 0

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

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

### 3.7 Waste exemptions

Records within 500m 87

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

Features are displayed on the Waste and landfill map on page 21

ID	Location	Site	Reference	Category	Sub-Category	Description
1	257m N	Malt Kiln Farm Thistleton Road Preston Lancashire PR4 3XA	EPR/WF0504 WD/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction



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ID	Location	Sito	Poforonco	Catagony	Sub Catagory	Description
ID	Location	Site	Reference	Category	Sub-Category	Description
А	309m SW	-	WEX204558	Storing waste exemption	On a Farm	Storage of waste in a secure place
Α	309m SW	-	WEX204558	Disposing of waste exemption	On a Farm	Burning waste in the open
Α	309m SW	-	WEX204558	Disposing of waste exemption	On a Farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
Α	309m SW	-	WEX204558	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
Α	309m SW	-	WEX204558	Treating waste exemption	On a Farm	Recovery of scrap metal
Α	309m SW	-	WEX204558	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
Α	309m SW	-	WEX204558	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
Α	309m SW	-	WEX204558	Using waste exemption	On a Farm	Use of mulch
А	309m SW	-	WEX204558	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
Α	309m SW	-	WEX204558	Using waste exemption	On a Farm	Use of waste for a specified purpose
Α	309m SW	-	WEX204558	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
Α	309m SW	-	WEX204558	Using waste exemption	On a Farm	Use of baled end-of-life tyres in construction
А	309m SW	-	WEX204558	Using waste exemption	On a Farm	Use of waste in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Storing waste exemption	On a farm	Storage of waste in a secure place
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Disposing of waste exemption	On a farm	Burning waste in the open





ID	Location	Site	Reference	Category	Sub-Category	Description
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Treating waste exemption	On a farm	Recovery of scrap metal
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Use of mulch
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Use of waste for a specified purpose
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX243914	Using waste exemption	On a farm	Use of waste in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice





ID	Location	Site	Reference	Category	Sub-Category	Description
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Disposing of waste exemption	On a farm	Burning waste in the open
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Storing waste exemption	On a farm	Storage of waste in a secure place
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Treating waste exemption	On a farm	Recovery of scrap metal
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Use of waste in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Use of mulch
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
Α	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX101676	Using waste exemption	On a farm	Use of waste for a specified purpose
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice





ID	Location	Site	Reference	Category	Sub-Category	Description
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Disposing of waste exemption	On a farm	Burning waste in the open
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Storing waste exemption	On a farm	Storage of waste in a secure place
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Treating waste exemption	On a farm	Recovery of scrap metal
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Use of waste in construction
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Use of waste for a specified purpose
А	309m SW	COPP FARM, COPP LANE, GREAT ECCLESTON, PRESTON, PR3 0ZN	WEX041201	Using waste exemption	On a farm	Use of waste to manufacture finished goods
А	309m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/PH0717D T/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Deposit of waste from dredging of inland waters
А	309m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/PH0717D T/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Disposal by incineration





ID	Location	Site	Reference	Category	Sub-Category	Description
А	309m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/PH0717D T/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Burning waste in the open
Α	309m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/PH0717D T/A001	Treating waste exemption	Both agricultural and non- agricultural waste	Cleaning, washing, spraying or coating relevant waste
Α	309m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/PH0717D T/A001	Treating waste exemption	Both agricultural and non- agricultural waste	Aerobic composting and associated prior treatment
А	309m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/PH0717D T/A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste in construction
А	309m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/PH0717D T/A001	Using waste exemption	Both agricultural and non- agricultural waste	Spreading waste on agricultural land to confer benefit
A	309m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/PH0717D T/A001	Using waste exemption	Both agricultural and non- agricultural waste	Burning of waste as a fuel in a small appliance
A	309m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/PH0717D T/A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste for a specified purpose
А	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
А	331m SW	Copp Farm Copp Lane PR3 OZN	EPR/VE5080M S/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Deposit of waste from dredging of inland waters



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ID	Location	Site	Reference	Category	Sub-Category	Description
А	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Burning waste in the open
Α	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Treating waste exemption	Both agricultural and non- agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
А	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste in construction
A	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Using waste exemption	Both agricultural and non- agricultural waste	Spreading waste on agricultural land to confer benefit
А	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Using waste exemption	Both agricultural and non- agricultural waste	Burning of waste as a fuel in a small appliance
A	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste for a specified purpose
A	331m SW	Copp Farm Copp Lane PR3 0ZN	EPR/VE5080M S/A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste to manufacture finished goods
В	333m W	Little Eccleston Hall Meagles Lane Little Eccleston With Larbeck Lancashire PR3 0YR	EPR/JE5748N W/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge
В	333m W	Little Eccleston Hall Meagles Lane Little Eccleston PR3 ORY	EPR/SE5747ZC /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge





ID	Location	Site	Reference	Category	Sub-Category	Description
В	333m W	Little Eccleston Hall Meagles Lane Little Eccleston With Larbeck Lancashire PR3 0YR	EPR/EE5548NK /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Deposit of waste from dredging of inland waters
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Burning waste in the open
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Treating waste exemption	Both agricultural and non- agricultural waste	Treatment of waste food
С	392m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/VF0139JF /A001	Treating waste exemption	Both agricultural and non- agricultural waste	Preparatory treatments (baling, sorting, shredding etc)
С	392m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/VF0139JF /A001	Treating waste exemption	Both agricultural and non- agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Treating waste exemption	Both agricultural and non- agricultural waste	Recovery of scrap metal
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste in construction
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Spreading waste on agricultural land to confer benefit



## and at Gradwells Farm,Copp Lane,Great Eccleston,PR3 0YN

**Ref**: EMS-DE-692235\_907105 **Your ref**: EMS\_692235\_907105 **Grid ref**: 342345 439959

ID	Location	Site	Reference	Category	Sub-Category	Description
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Spreading of plant matter to confer benefit
С	392m SW	Copp Farm Copp Lane PRESTON PR3 0ZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Incorporation of ash into soil
С	392m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste derived biodiesel as fuel
С	392m SW	Copp Farm Copp Lane PRESTON PR3 OZN	EPR/VF0139JF /A001	Using waste exemption	Both agricultural and non- agricultural waste	Use of waste for a specified purpose
2	401m W	Little Eccleston Hall Farm Meagles Lane PRESTON PR3 0YR	EPR/SE5941LN /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge
3	499m N	-	WEX071171	Using waste exemption	Not on a farm	Use of waste in construction

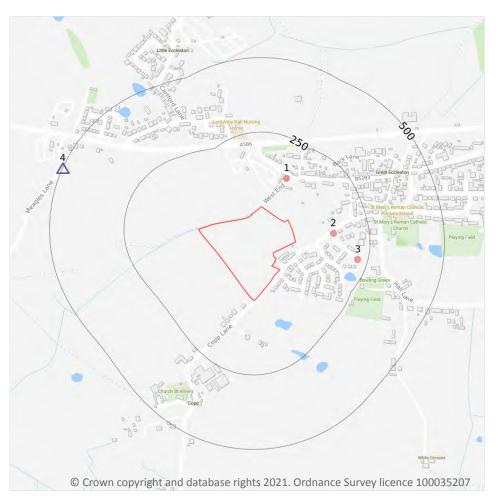
This data is sourced from the Environment Agency and Natural Resources Wales.

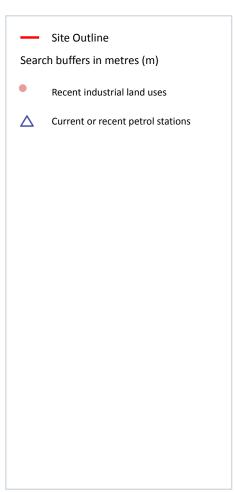


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## 4 Current industrial land use





#### 4.1 Recent industrial land uses

Records within 250m 3

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 31

ID	Location	Company	Address	Activity	Category
1	127m NE	West End Stores	Town View, West End, Great Eccleston, Preston, Lancashire, PR3 0ZL	General Construction Supplies	Industrial Products
2	130m E	Gas Governor	Lancashire, PR3	Gas Features	Infrastructure and Facilities
3	217m E	Pumping Station	Lancashire, PR3	Water Pumping Stations	Industrial Features





This data is sourced from Ordnance Survey.

## 4.2 Current or recent petrol stations

Records within 500m

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on page 31

ID	Location	Company	Address	LPG	Status
4	500m NW	OBSOLETE	Garstang Road, Little Eccleston, Preston, Lancashire, PR3 0ZQ	Not Applicable	Obsolete

This data is sourced from Experian.

## 4.3 Electricity cables

Records within 500m 0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

#### 4.4 Gas pipelines

Records within 500m 0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

#### 4.5 Sites determined as Contaminated Land

Records within 500m 0

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

This data is sourced from Local Authority records.

#### 4.6 Control of Major Accident Hazards (COMAH)

Records within 500m 0

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



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This data is sourced from the Health and Safety Executive.

#### 4.7 Regulated explosive sites

Records within 500m 0

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

This data is sourced from the Health and Safety Executive.

### 4.8 Hazardous substance storage/usage

Records within 500m 0

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

This data is sourced from Local Authority records.

#### 4.9 Historical licensed industrial activities (IPC)

Records within 500m 0

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

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

#### 4.10 Licensed industrial activities (Part A(1))

Records within 500m 0

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

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

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

Records within 500m 0

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

This data is sourced from Local Authority records.





#### 4.12 Radioactive Substance Authorisations

Records within 500m 0

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

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

### 4.13 Licensed Discharges to controlled waters

Records within 500m 0

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

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

## 4.14 Pollutant release to surface waters (Red List)

Records within 500m 0

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

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

#### 4.15 Pollutant release to public sewer

Records within 500m 0

Discharges of Special Category Effluents to the public sewer.

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

#### 4.16 List 1 Dangerous Substances

Records within 500m 0

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

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





#### **4.17 List 2 Dangerous Substances**

Records within 500m 0

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

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

## 4.18 Pollution Incidents (EA/NRW)

Records within 500m 0

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

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

## 4.19 Pollution inventory substances

Records within 500m 0

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

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

#### **4.20 Pollution inventory waste transfers**

Records within 500m 0

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

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

## **4.21** Pollution inventory radioactive waste

Records within 500m

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

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

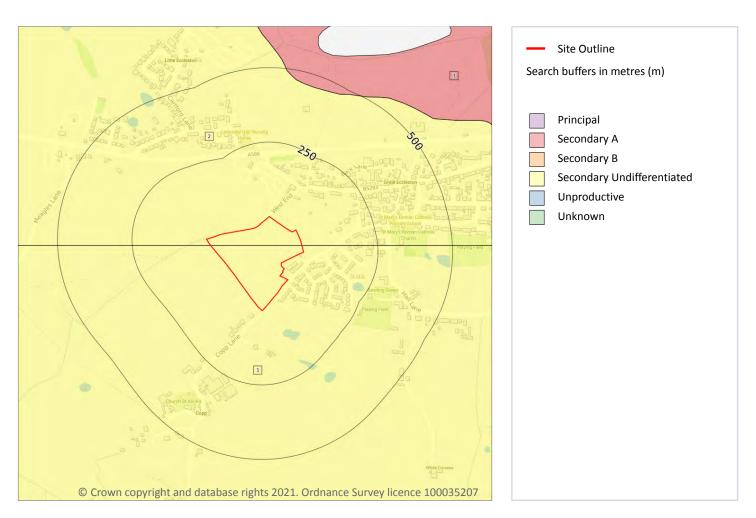


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# 5 Hydrogeology - Superficial aquifer



## **5.1 Superficial aquifer**

Records within 500m 3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 36

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
2	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





## and at Gradwells Farm,Copp Lane,Great Eccleston,PR3 0YN

**Ref**: EMS-DE-692235\_907105 **Your ref**: EMS\_692235\_907105 **Grid ref**: 342345 439959

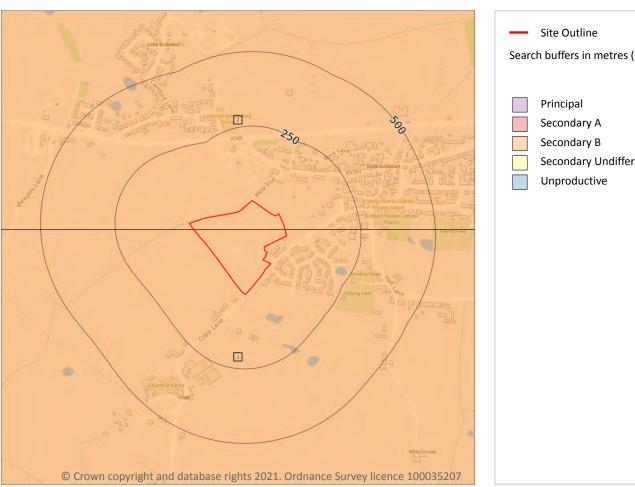
ID	Location	Designation	Description
3	459m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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





# **Bedrock aquifer**





## **5.2** Bedrock aquifer

**Records within 500m** 2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 38

ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers





## and at Gradwells Farm,Copp Lane,Great Eccleston,PR3 0YN

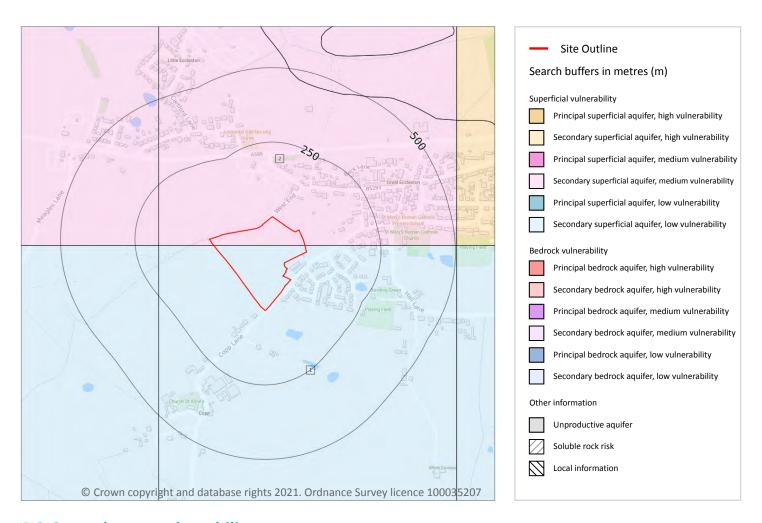
**Ref**: EMS-DE-692235\_907105 **Your ref**: EMS\_692235\_907105 **Grid ref**: 342345 439959

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 40





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: 300- 550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary 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 0

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

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

## 5.5 Groundwater vulnerability- local information

Records on site 0

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

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





## **Abstractions and Source Protection Zones**

#### 5.6 Groundwater abstractions

Records within 2000m 0

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.

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

#### 5.7 Surface water abstractions

Records within 2000m 0

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.

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

#### **5.9 Source Protection Zones**

Records within 500m 0

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





## **5.10 Source Protection Zones (confined aquifer)**

Records within 500m 0

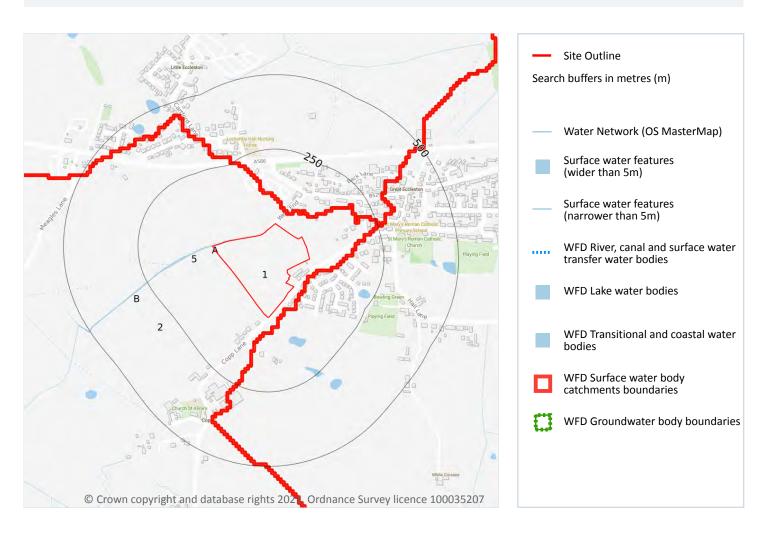
Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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





# **6 Hydrology**



## **6.1 Water Network (OS MasterMap)**

Records within 250m 3

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

Features are displayed on the Hydrology map on page 44

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





ID	Location	Type of water feature	Ground level	Permanence	Name
5	77m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
В	81m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

#### 6.2 Surface water features

Records within 250m 5

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

Features are displayed on the Hydrology map on page 44

This data is sourced from the Ordnance Survey.

### **6.3 WFD Surface water body catchments**

Records on site 1

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

Features are displayed on the Hydrology map on page 44

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
2	On site	River WB catchment	Thistleton Brook	GB112072066110	Fleetwood Peninsula Tributaries	Wyre





#### 6.4 WFD Surface water bodies

#### Records identified 1

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

Features are displayed on the Hydrology map on page 44

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1103m W	River	Thistleton Brook	GB112072066110	Moderate	Good	Moderate	2016

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

#### 6.5 WFD Groundwater bodies

Records on site 1

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

Features are displayed on the Hydrology map on page 44

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	West Lancashire Quaternary Sand and Gravel Aquifers	GB41202G912700	Good	Good	Good	2015

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## 7 River and coastal flooding

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

Records within 50m 0

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 0

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

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

#### 7.3 Flood Defences

Records within 250m 0

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

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

## 7.4 Areas Benefiting from Flood Defences

Records within 250m 0

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





## 7.5 Flood Storage Areas

Records within 250m 0

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





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

#### 7.6 Flood Zone 2

Records within 50m 0

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

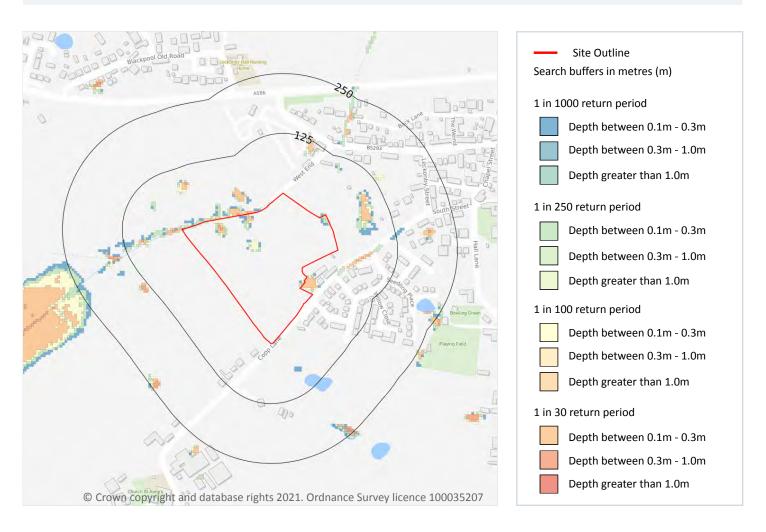
Records within 50m

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.





## 8 Surface water flooding



#### 8.1 Surface water flooding

Highest risk on site	1 in 30 year, 0.3m - 1.0m
Highest risk within 50m	1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on page 50

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.

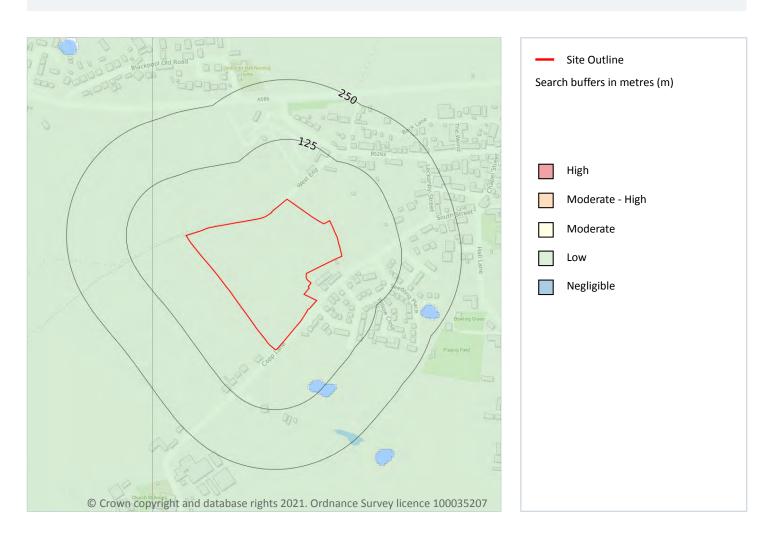
Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.





## 9 Groundwater flooding



## 9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

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).

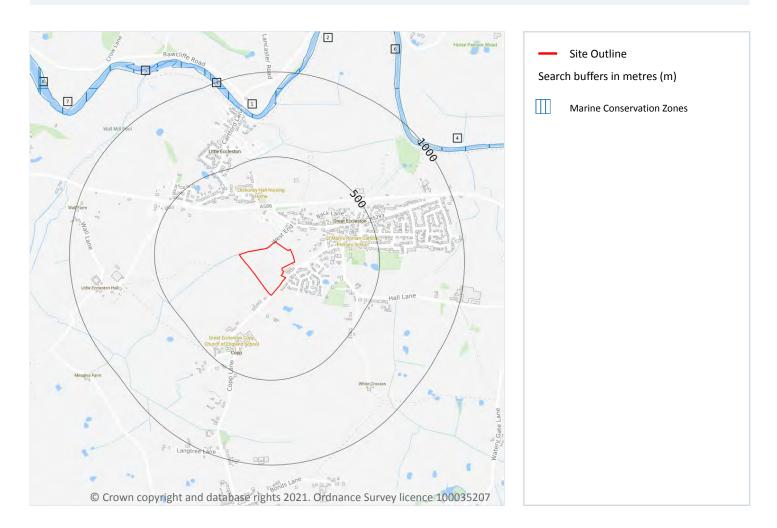
Features are displayed on the Groundwater flooding map on page 52

This data is sourced from Ambiental Risk Analytics.





## 10 Environmental designations



## 10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m 0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were 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 0

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

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

## 10.3 Special Areas of Conservation (SAC)

Records within 2000m 0

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

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

## 10.4 Special Protection Areas (SPA)

Records within 2000m 0

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

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

### 10.5 National Nature Reserves (NNR)

Records within 2000m 0

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

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





#### 10.6 Local Nature Reserves (LNR)

Records within 2000m 0

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

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

#### 10.7 Designated Ancient Woodland

Records within 2000m 0

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.

## 10.8 Biosphere Reserves

Records within 2000m 0

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

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

#### 10.9 Forest Parks

Records within 2000m 0

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

This data is sourced from the Forestry Commission.





#### **10.10 Marine Conservation Zones**

Records within 2000m 11

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.

Features are displayed on the Environmental designations map on page 53

ID	Location	Name	Status
1	730m N	Wyre-Lune	Designated
2	903m N	Wyre-Lune	Designated
3	948m N	Wyre-Lune	Designated
4	956m NE	Wyre-Lune	Designated
5	1026m N	Wyre-Lune	Designated
6	1130m NE	Wyre-Lune	Designated
7	1268m NW	Wyre-Lune	Designated
А	1491m NW	Wyre-Lune	Designated
А	1504m NW	Wyre-Lune	Designated
8	1526m NW	Wyre-Lune	Designated
-	1618m E	Wyre-Lune	Designated

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

#### 10.11 Green Belt

Records within 2000m 0

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

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

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

Records within 2000m 0

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

This data is sourced from Natural England.



ns at: **Date**: 11 May 2021



## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m 0

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

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

## 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m 0

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

This data is sourced from Natural England.

#### **10.15 Nitrate Sensitive Areas**

Records within 2000m 0

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

This data is sourced from Natural England.

#### 10.16 Nitrate Vulnerable Zones

Records within 2000m 0

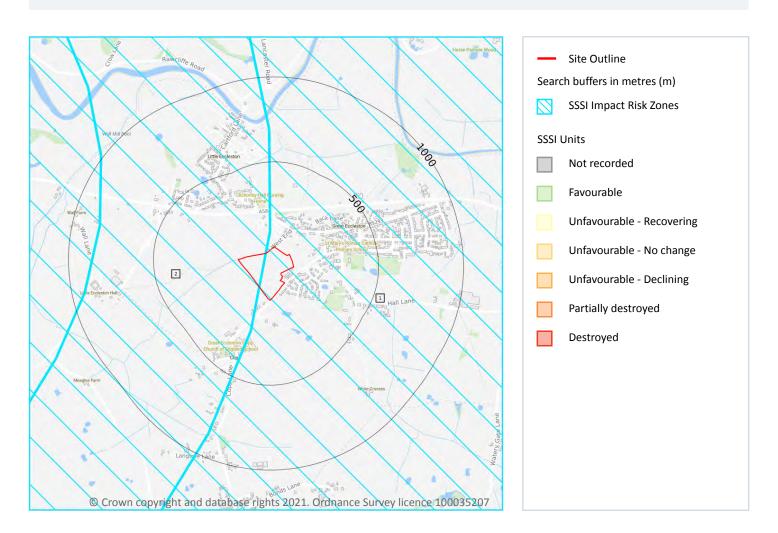
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

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





# **SSSI Impact Zones and Units**



### 10.17 SSSI Impact Risk Zones

Records on site 2

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

Features are displayed on the SSSI Impact Zones and Units map on page 58





ID Location Type of developments requiring consultation 1 On site All applications - All Planning Applications (Except Householder) Outside Or Extending Outside Existing Settlements/urban Areas Affecting Greenspace, Farmland, Semi Natural Habitats Or Landscape Features Such As Trees, Hedges, Streams, Rural Buildings/structures Infrastructure - Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m<sup>2</sup> or footprint exceeds 0.2ha Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units 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 > 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 Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location) Notes: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening. 2 On site All applications - All Planning Applications (Except Householder) Outside Or Extending Outside Existing Settlements/urban Areas Affecting Greenspace, Farmland, Semi Natural Habitats Or Landscape Features Such As Trees, Hedges, Streams, Rural Buildings/structures Infrastructure - Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m<sup>2</sup> or footprint exceeds 0.2ha Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units 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 Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste of more than 5m<sup>3</sup>/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are



coastal designated sites. Please consider this issue in the HRA screening.

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Notes: New residential developments in this area should consider recreational disturbance impacts on the

**Date**: 11 May 2021

unlikely to pose a risk at this location).

#### and at Gradwells Farm, Copp Lane, Great Eccleston, PR3 0YN

**Ref**: EMS-DE-692235\_907105 **Your ref**: EMS\_692235\_907105 **Grid ref**: 342345 439959

This data is sourced from Natural England.

#### 10.18 SSSI Units

Records within 2000m 0

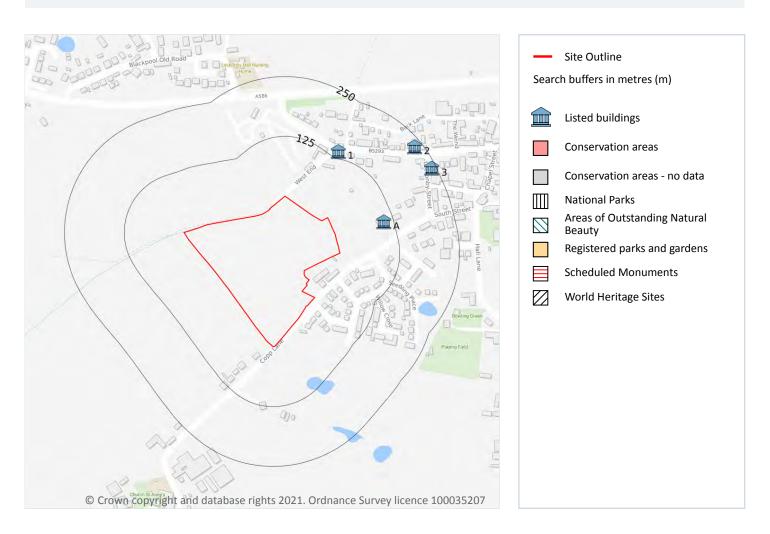
Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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





# 11 Visual and cultural designations



## 11.1 World Heritage Sites

Records within 250m 0

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

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





## 11.2 Area of Outstanding Natural Beauty

Records within 250m 0

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

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

#### 11.3 National Parks

Records within 250m 0

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

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

## 11.4 Listed Buildings

Records within 250m 4

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 61

ID	Location	Name	Grade	Reference Number	Listed date
А	105m E	Dovecote, Great Eccleston, Wyre, Lancashire, PR3	П	1323717	27/04/1998
1	140m N	Pinfold, Great Eccleston, Wyre, Lancashire, PR3	П	1073068	03/10/1984
2	234m NE	Willow Cottage Restaurant, Great Eccleston, Wyre, Lancashire, PR3	II	1073067	03/10/1984
3	241m NE	Western House On Southern Side Of The Square, Great Eccleston, Wyre, Lancashire, PR3	II	1073070	03/10/1984

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





#### 11.5 Conservation Areas

Records within 250m 0

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

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

#### 11.6 Scheduled Ancient Monuments

Records within 250m

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.

Features are displayed on the Visual and cultural designations map on page 61

ID	Location	Ancient monument name	Reference number
Α	89m E	Dovecote at Great Eccleston, 150m north east of Gradwells	1016757

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

## 11.7 Registered Parks and Gardens

Records within 250m

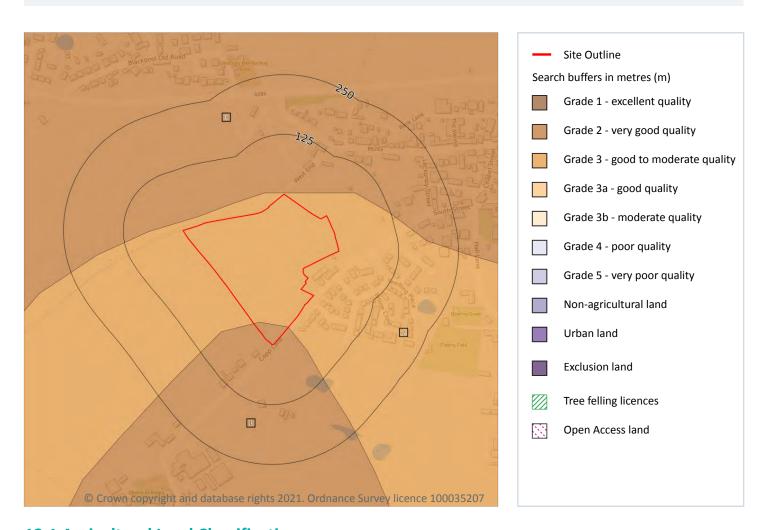
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the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

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





# 12 Agricultural designations



### 12.1 Agricultural Land Classification

Records within 250m 3

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 64





ID	Location	Classification	Description
1	On site	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
2	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	3m N	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade

This data is sourced from Natural England.

### 12.2 Open Access Land

Records within 250m 0

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

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

### **12.3 Tree Felling Licences**

Records within 250m 0

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

This data is sourced from the Forestry Commission.





#### 12.4 Environmental Stewardship Schemes

Records within 250m 0

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

This data is sourced from Natural England.

### 12.5 Countryside Stewardship Schemes

Records within 250m 0

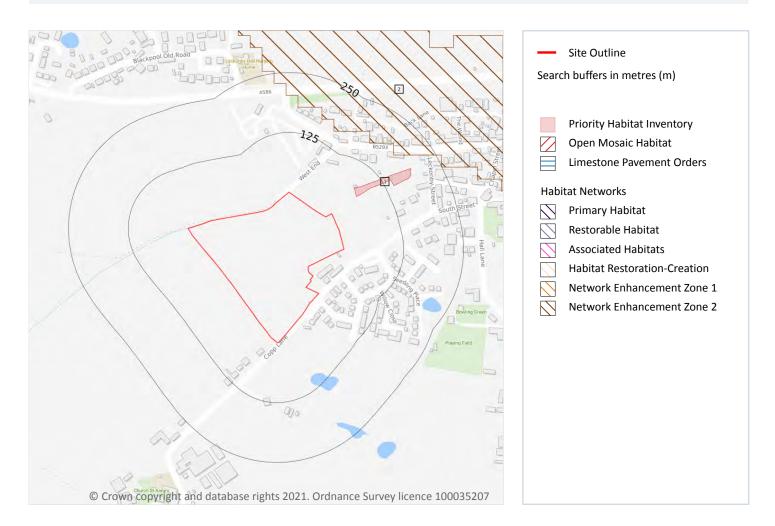
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.





# 13 Habitat designations



## **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 67

ID	Location	Main Habitat	Other habitats
1	63m NE	Traditional orchard	Main habitat: TORCH (INV > 50%)

This data is sourced from Natural England.





#### 13.2 Habitat Networks

Records within 250m 1

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.

Features are displayed on the Habitat designations map on page 67

ID	Location	Туре	Habitat
2	158m NE	Network Enhancement Zone 2	Not specified

This data is sourced from Natural England.

#### 13.3 Open Mosaic Habitat

Records within 250m 0

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 0

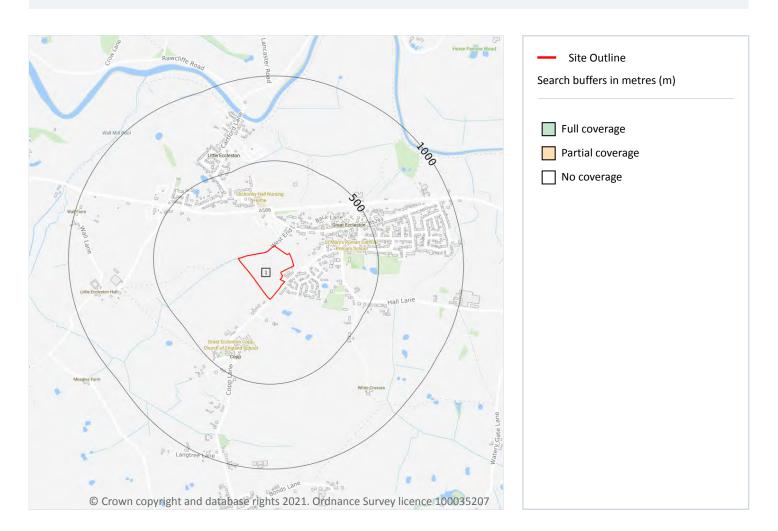
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened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

This data is sourced from Natural England.





# 14 Geology 1:10,000 scale - Availability



## 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 69

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov





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

## 14.2 Artificial and made ground (10k)

Records within 500m 0

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.





# Geology 1:10,000 scale - Superficial

### 14.3 Superficial geology (10k)

Records within 500m 0

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.

This data is sourced from the British Geological Survey.

#### 14.4 Landslip (10k)

Records within 500m 0

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

This data is sourced from the British Geological Survey.



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# Geology 1:10,000 scale - Bedrock

#### 14.5 Bedrock geology (10k)

Records within 500m 0

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.

This data is sourced from the British Geological Survey.

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

Records within 500m 0

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

This data is sourced from the British Geological Survey.





# 15 Geology 1:50,000 scale - Availability



## 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 73

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW067_garstang_v4

This data is sourced from the British Geological Survey.



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

### 15.2 Artificial and made ground (50k)

Records within 500m 0

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.

This data is sourced from the British Geological Survey.

## 15.3 Artificial ground permeability (50k)

Records within 50m 0

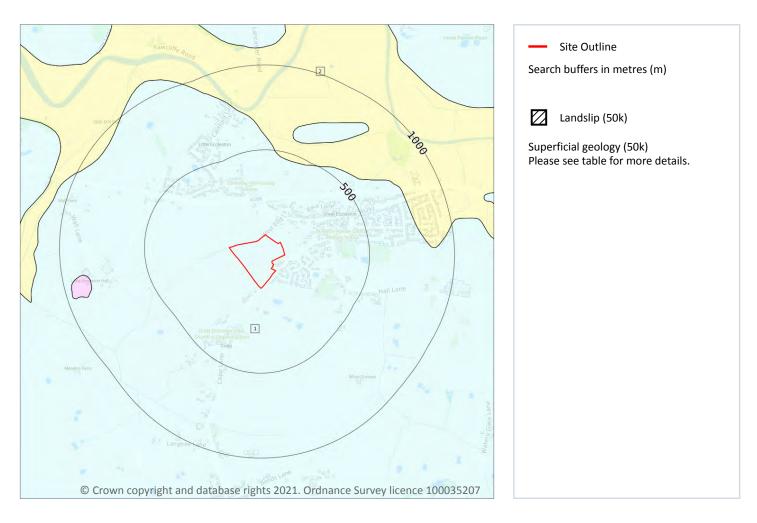
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





# Geology 1:50,000 scale - Superficial



## 15.4 Superficial geology (50k)

#### Records within 500m 2

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 75

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD- DMTN	TILL, DEVENSIAN	DIAMICTON
2	459m N	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL





2

#### 15.5 Superficial permeability (50k)

#### Records within 50m

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	Low
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

#### 15.6 Landslip (50k)

Records within 500m 0

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

This data is sourced from the British Geological Survey.

## 15.7 Landslip permeability (50k)

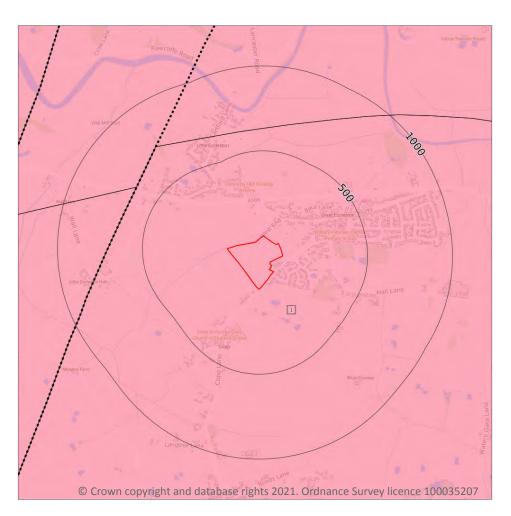
Records within 50m 0

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





# Geology 1:50,000 scale - Bedrock



Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)

Please see table for more details.

## 15.8 Bedrock geology (50k)

#### Records within 500m

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 77

ID	Location	LEX Code	Description	Rock age
1	On site	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN

This data is sourced from the British Geological Survey.



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2

### 15.9 Bedrock permeability (50k)

#### Records within 50m

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

## 15.10 Bedrock faults and other linear features (50k)

Records within 500m 0

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

This data is sourced from the British Geological Survey.





## **16 Boreholes**

#### 16.1 BGS Boreholes

Records within 250m 0

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

This data is sourced from the British Geological Survey.





# 17 Natural ground subsidence - Shrink swell clays



## 17.1 Shrink swell clays

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 80

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.





# Natural ground subsidence - Running sands



### **17.2** Running sands

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Running sands map on page 81

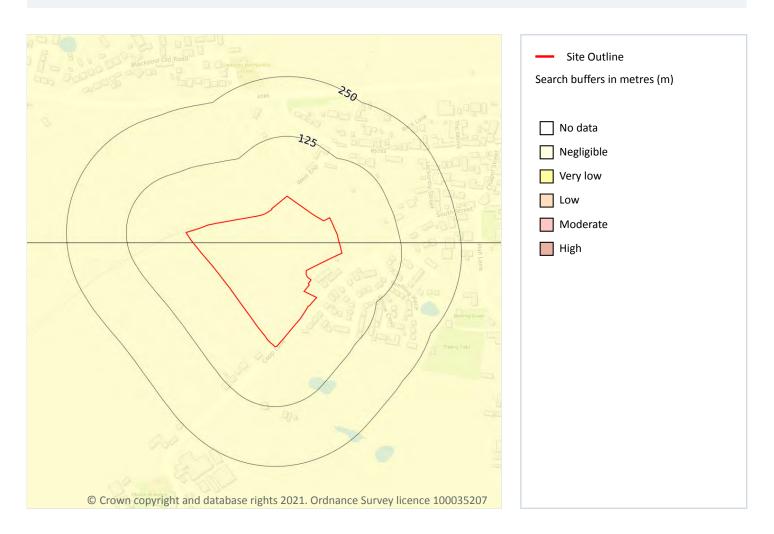
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.





# Natural ground subsidence - Compressible deposits



### 17.3 Compressible deposits

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 82

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.





# Natural ground subsidence - Collapsible deposits



## 17.4 Collapsible deposits

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 83

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.





# **Natural ground subsidence - Landslides**



#### 17.5 Landslides

Records within 50m 1

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

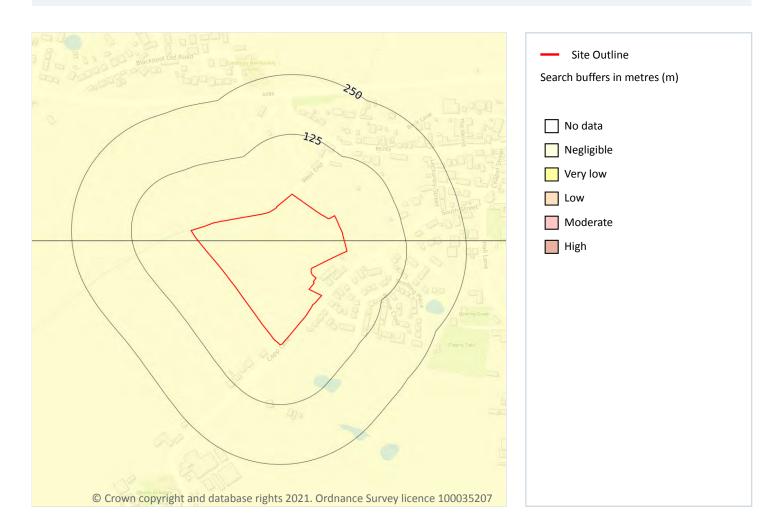
Features are displayed on the Natural ground subsidence - Landslides map on page 84

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





# Natural ground subsidence - Ground dissolution of soluble rocks



#### 17.6 Ground dissolution of soluble rocks

Records within 50m 1

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

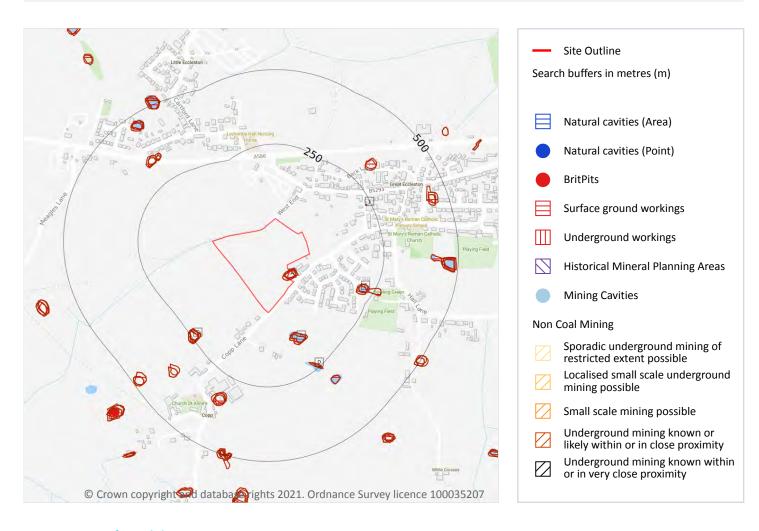
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 85

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





# 18 Mining, ground workings and natural cavities



#### 18.1 Natural cavities

Records within 500m 0

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

This data is sourced from Stantec UK Ltd.



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#### 18.2 BritPits

Records within 500m

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

This data is sourced from the British Geological Survey.

### 18.3 Surface ground workings

Records within 250m 27

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

Features are displayed on the Mining, ground workings and natural cavities map on page 86

ID	Location	Land Use	Year of mapping	Mapping scale	
Α	On site	Pond	1930	1:10560	
Α	On site	Pond	1910	1:10560	
Α	On site	Pond	1892	1:10560	
Α	On site	Pond	1951	1:10560	
Α	On site	Pond	1846	1:10560	
В	106m SE	Pond	1892	1:10560	
В	108m SE	Pond	1930	1:10560	
В	108m SE	Pond	1910	1:10560	
В	111m SE	Pond	1989	1:10000	
В	111m SE	Pond	1967	1:10560	
В	111m SE	Pond	1951	1:10560	
С	194m SE	Pond	1892	1:10560	
С	197m SE	Pond	1930	1:10560	
С	197m SE	Pond	1910	1:10560	
С	201m SE	Ponds	1989	1:10000	
С	201m SE	Ponds	1967	1:10560	
С	201m SE	Pond	1951	1:10560	

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ID	Location	Land Use	Year of mapping	Mapping scale
D	217m SE	Pond	1892	1:10560
Е	219m SW	Pond	1951	1:10560
Е	221m SW	Pond	1989	1:10000
Е	221m SW	Pond	1967	1:10560
D	221m SE	Pond	1951	1:10560
Е	224m SW	Pond	1892	1:10560
Е	229m SW	Pond	1930	1:10560
Е	229m SW	Pond	1910	1:10560
Е	232m SW	Pond	1846	1:10560
1	233m NE	Pond	1846	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

### 18.4 Underground workings

Records within 1000m 0

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

This is data is sourced from Ordnance Survey/Groundsure.

## **18.5 Historical Mineral Planning Areas**

Records within 500m 0

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

This data is sourced from the British Geological Survey.

#### 18.6 Non-coal mining

Records within 1000m 0

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





This data is sourced from the British Geological Survey.

#### **18.7 Mining cavities**

Records within 1000m 0

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

This data is sourced from Stantec UK Ltd.

#### 18.8 JPB mining areas

Records on site 0

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

This data is sourced from Johnson Poole and Bloomer.

#### 18.9 Coal mining

Records on site 0

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

This data is sourced from the Coal Authority.

#### 18.10 Brine areas

Records on site 0

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

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

#### 18.11 Gypsum areas

Records on site

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.





## 18.12 Tin mining

Records on site 0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

### 18.13 Clay mining

Records on site 0

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

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





## 19 Radon



#### **19.1** Radon

Records on site 1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on page 91

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

This data is sourced from the British Geological Survey and Public Health England.





## 20 Soil chemistry

#### 20.1 BGS Estimated Background Soil Chemistry

Records within 50m 4

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
4m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
9m NE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

#### 20.2 BGS Estimated Urban Soil Chemistry

Records within 50m 0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

### 20.3 BGS Measured Urban Soil Chemistry

Records within 50m

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

This data is sourced from the British Geological Survey.





## 21 Railway infrastructure and projects

### 21.1 Underground railways (London)

Records within 250m 0

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

This data is sourced from publicly available information by Groundsure.

#### 21.2 Underground railways (Non-London)

Records within 250m 0

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

This data is sourced from publicly available information by Groundsure.

#### 21.3 Railway tunnels

Records within 250m

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

#### 21.4 Historical railway and tunnel features

Records within 250m 0

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

This data is sourced from Ordnance Survey/Groundsure.

#### 21.5 Royal Mail tunnels

Records within 250m 0

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





This data is sourced from Groundsure/the Postal Museum.

#### 21.6 Historical railways

Records within 250m 0

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

This data is sourced from OpenStreetMap.

#### 21.7 Railways

Records within 250m 0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

#### 21.8 Crossrail 1

Records within 500m 0

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

This data is sourced from publicly available information by Groundsure.

#### 21.9 Crossrail 2

Records within 500m 0

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

This data is sourced from publicly available information by Groundsure.

#### 21.10 HS2

Records within 500m 0

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

This data is sourced from HS2 ltd.





# **Data providers**

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

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