

Enviro+Geo

CENTRE OF POND 421M FROM OLD STABLE COTTAGE 43M FROM UNNAMED ROAD, CHETWODE FOOTPATH 23, CHETWODE, MK18 4LF

Order Details

Date:26/04/2023Your ref:JFR3530_Chetwode_EmbankmentOur Ref:GS-SHN-L9F-OY6-TMI

Site Details

Location:464492 228554Area:2.76 haAuthority:Buckinghamshire Council 7



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



Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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> >	Historical industrial land uses >	0	0	8	3	-
<u>15</u> >	<u>1.2</u> >	Historical tanks >	0	0	1	0	-
<u>15</u> >	<u>1.3</u> >	Historical energy features >	0	0	0	0	-
<u>16</u> >	<u>1.4</u> >	Historical petrol stations >	0	0	0	0	-
<u>16</u> >	<u>1.5</u> >	Historical garages >	0	0	0	0	-
<u>16</u> >	<u>1.6</u> >	<u>Historical military land</u> >	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
<u>17</u> >	<u>2.1</u> >	Historical industrial land uses >	0	0	8	3	-
<u>18</u> >	<u>2.2</u> >	Historical tanks >	0	0	1	0	-
<u>18</u> >	<u>2.3</u> >	Historical energy features >	0	0	0	0	_
<u>19</u> >	<u>2.4</u> >	Historical petrol stations >	0	0	0	0	-
<u>19</u> >	<u>2.5</u> >	Historical garages >	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
<u>20</u> >	<u>3.1</u> >	Active or recent landfill >	0	0	0	0	_
<u>20</u> >	<u>3.2</u> >	Historical landfill (BGS records) >	0	0	0	0	_
<u>21</u> >	<u>3.3</u> >	Historical landfill (LA/mapping records) >	0	0	0	0	_
<u>21</u> >	<u>3.4</u> >	Historical landfill (EA/NRW records) >	0	0	0	0	_
<u>21</u> >	<u>3.5</u> >	Historical waste sites >	0	0	0	0	_
<u>21</u> >	<u>3.6</u> >	Licensed waste sites >	0	0	0	0	-
<u>21</u> >	<u>3.7</u> >	Waste exemptions >	0	4	0	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>23</u> >	<u>4.1</u> >	Recent industrial land uses >	0	0	0	-	-
<u>23</u> >	<u>4.2</u> >	<u>Current or recent petrol stations</u> >	0	0	0	0	-
<u>24</u> >	<u>4.3</u> >	Electricity cables >	0	0	0	0	-
<u>24</u> >	<u>4.4</u> >	Gas pipelines >	0	0	0	0	-
<u>24</u> >	<u>4.5</u> >	Sites determined as Contaminated Land >	0	0	0	0	-





<u>24</u> >	<u>4.6</u> >	Control of Major Accident Hazards (COMAH) >	0	0	0	0	-
<u>24</u> >	<u>4.7</u> >	Regulated explosive sites >	0	0	0	0	-
<u>25</u> >	<u>4.8</u> >	Hazardous substance storage/usage >	0	0	0	0	-
<u>25</u> >	<u>4.9</u> >	Historical licensed industrial activities (IPC) >	0	0	0	0	-
<u>25</u> >	<u>4.10</u> >	Licensed industrial activities (Part A(1)) >	0	0	0	0	-
<u>25</u> >	<u>4.11</u> >	Licensed pollutant release (Part A(2)/B) >	0	0	0	0	-
<u>25</u> >	<u>4.12</u> >	Radioactive Substance Authorisations >	0	0	0	0	-
<u>26</u> >	<u>4.13</u> >	Licensed Discharges to controlled waters >	0	0	1	2	-
<u>26</u> >	<u>4.14</u> >	Pollutant release to surface waters (Red List) >	0	0	0	0	-
<u>26</u> >	<u>4.15</u> >	Pollutant release to public sewer >	0	0	0	0	-
<u>27</u> >	<u>4.16</u> >	List 1 Dangerous Substances >	0	0	0	0	-
<u>27</u> >	<u>4.17</u> >	List 2 Dangerous Substances >	0	0	0	0	-
<u>27</u> >	<u>4.18</u> >	Pollution Incidents (EA/NRW) >	0	0	0	0	-
<u>27</u> >	<u>4.19</u> >	Pollution inventory substances >	0	0	0	0	-
27 >	<u>4.20</u> >	Pollution inventory waste transfers >	0	0	0	0	_
<u>27</u> >	4.20 >	Politici inventory waste transfers	0	0	0	0	
<u>27</u> > <u>28</u> >	<u>4.20</u> > <u>4.21</u> >	Pollution inventory radioactive waste >	0	0	0	0	-
							- 500-2000m
<u>28</u> >	<u>4.21</u> >	Pollution inventory radioactive waste >	0 On site	0	0 50-250m	0	- 500-2000m
<u>28</u> > Page	<u>4.21</u> > Section	Pollution inventory radioactive waste > <u>Hydrogeology</u> >	0 On site Identified (0 0-50m	0 50-250m	0	- 500-2000m
<u>28</u> > Page <u>29</u> >	<u>4.21</u> > Section <u>5.1</u> >	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer >	0 On site Identified (Identified (0 0-50m within 500m	0 50-250m	0	- 500-2000m
28 > Page 29 > 31 >	4.21 Section 5.1 5.2	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer > Bedrock aquifer >	0 On site Identified (Identified (0 0-50m within 500m within 500m within 50m)	0 50-250m	0	- 500-2000m
28 > Page 29 > 31 > 32 >	4.21 Section 5.1 5.2 5.3	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability >	0 On site Identified (Identified (Identified (0 0-50m within 500m within 500m within 50m) in 0m)	0 50-250m	0	- 500-2000m
28 > Page 29 > 31 > 32 > 33 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.3 > 5.4 >	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk >	0 On site Identified (Identified (Identified (None (with	0 0-50m within 500m within 500m within 50m) in 0m)	0 50-250m	0	- 500-2000m
28 Page 29 31 32 33 33 33	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 >	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information >	0 On site Identified (Identified (Identified (None (with None (with	0 0-50m within 500m within 500m within 50m) in 0m) in 0m)	0 50-250m)	0 250-500m	
28 Page 29 31 32 33 33 33 33 34	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.5 >	Pollution inventory radioactive waste > Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk > Groundwater vulnerability- local information > Groundwater abstractions >	0 On site Identified (Identified (Identified (None (with None (with 0	0 0-50m within 500m within 500m within 50m) in 0m) in 0m) 0	0 50-250m))	0 250-500m 0	8
28 Page 29 31 32 33 33 33 34 36	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 > 5.6 >	Pollution inventory radioactive waste >Hydrogeology >Superficial aquifer >Bedrock aquifer >Groundwater vulnerability >Groundwater vulnerability- soluble rock risk >Groundwater vulnerability- local information >Groundwater abstractions >Surface water abstractions >	0 On site Identified (Identified (Identified (None (with None (with 0 0	0 0-50m within 500m within 500m within 50m) in 0m) in 0m) 0 0	0 50-250m))) 2	0 250-500m 0 0	8 0
28 Page 29 31 32 33 33 34 36 37	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 > 5.6 > 5.7 > 5.8 >	Pollution inventory radioactive waste >Hydrogeology >Superficial aquifer >Bedrock aquifer >Groundwater vulnerability >Groundwater vulnerability- soluble rock risk >Groundwater vulnerability- local information >Groundwater abstractions >Surface water abstractions >Potable abstractions >	0 On site Identified (Identified (Identified (None (with None (with 0 0 0 0	0 0-50m within 500m within 500m within 50m) in 0m) in 0m) 0 0 0	0 50-250m)))) 2 0	0 250-500m 0 0 0	8 0
28 Page 29 31 32 33 33 34 36 37 37	4.21 Section 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.9	Pollution inventory radioactive waste >Hydrogeology >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 >	0 On site Identified (Identified (Identified (None (with None (with 0 0 0 0 0	0 0-50m within 500m within 500m within 50m) in 0m) in 0m) 0 0 0 0 0	0 50-250m)))) 2 0 0 0	0 250-500m 0 0 0 0	8 0



<u>39</u> >	<u>6.2</u> >	Surface water features >	1	2	7	-	-
<u>39</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	-	-	-	-
<u>40</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	0	1	-	-
<u>40</u> >	<u>6.5</u> >	WFD Groundwater bodies >	0	-	-	-	-
Page	Section	<u>River and coastal flooding</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>41</u> >	<u>7.1</u> >	<u>Risk of flooding from rivers and the sea</u> >	None (with	in 50m)			
<u>41</u> >	<u>7.2</u> >	Historical Flood Events >	0	0	0	_	-
<u>41</u> >	<u>7.3</u> >	Flood Defences >	0	0	0	_	-
<u>42</u> >	<u>7.4</u> >	Areas Benefiting from Flood Defences >	0	0	0	_	-
<u>42</u> >	<u>7.5</u> >	Flood Storage Areas >	0	0	0	-	-
<u>43</u> >	<u>7.6</u> >	Flood Zone 2 >	None (with	in 50m)			
<u>43</u> >	<u>7.7</u> >	Flood Zone 3 >	None (with	in 50m)			
Page	Section	Surface water flooding >					
<u>44</u> >	<u>8.1</u> >	Surface water flooding >	1 in 250 ye	ar, 0.1m - 0.3	3m (within 5	0m)	
	c						
Page	Section	Groundwater flooding >					
Page <u>46</u> >	<u>9.1</u> >	<u>Groundwater flooding</u> > <u>Groundwater flooding</u> >	Low (withir	n 50m)			
			Low (withir On site	n 50m) 0-50m	50-250m	250-500m	500-2000m
<u>46</u> >	<u>9.1</u> >	Groundwater flooding >			50-250m 0	250-500m 0	500-2000m 0
<u>46</u> > Page	<u>9.1</u> > Section	Groundwater flooding > Environmental designations >	On site	0-50m			
<u>46</u> > Page <u>47</u> >	9.1 > Section 10.1 >	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) >	On site	0-50m 0	0	0	0
<u>46</u> > Page <u>47</u> > <u>48</u> >	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	0-50m 0 0	0	0	0
46 > Page 47 > 48 > 48 >	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	0 0 0
46 > Page 47 > 48 > 48 > 48 > 48 >	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 0	0-50m 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
46 > Page 47 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 >	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 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 0 0 0 0 0 0
46 > Page 47 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 49 >	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) > Local Nature Reserves (LNR) >	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	
46 > Page 47 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 48 > 49 >	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) > Designated Ancient Woodland >	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 6
46 > Page 47 > 48 > 48 > 48 > 48 > 48 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 >	9.1 Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 10.8	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 6 0
46 > Page 47 > 48 > 48 > 48 > 48 > 48 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 > 49 >	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	0-50m 0 0 0 0 0 0 0 0 0 0 0 0 0			0 0 0 0 0 0 6 0 0 0 0





<u>50</u> >	<u>10.13</u> >	Possible Special Areas of Conservation (pSAC) >	0	0	0	0	0
<u>51</u> >	<u>10.14</u> >	Potential Special Protection Areas (pSPA) >	0	0	0	0	0
<u>51</u> >	<u>10.15</u> >	Nitrate Sensitive Areas >	0	0	0	0	0
<u>51</u> >	<u>10.16</u> >	<u>Nitrate Vulnerable Zones</u> >	1	0	1	0	0
<u>52</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	2	-	-	-	-
<u>53</u> >	<u>10.18</u> >	<u>SSSI Units</u> >	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>54</u> >	<u>11.1</u> >	World Heritage Sites >	0	0	0	-	-
<u>54</u> >	<u>11.2</u> >	Area of Outstanding Natural Beauty >	0	0	0	-	-
<u>54</u> >	<u>11.3</u> >	<u>National Parks</u> >	0	0	0	-	-
<u>54</u> >	<u>11.4</u> >	Listed Buildings >	0	0	0	-	-
<u>55</u> >	<u>11.5</u> >	<u>Conservation Areas</u> >	0	0	0	-	-
<u>55</u> >	<u>11.6</u> >	Scheduled Ancient Monuments >	0	0	0	-	-
<u>55</u> >	<u>11.7</u> >	Registered Parks and Gardens >	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>56</u> >	<u>12.1</u> >	Agricultural Land Classification >	Grade 4 (wi	ithin 250m)			
<u>56</u> > <u>57</u> >	<u>12.1</u> > <u>12.2</u> >	Agricultural Land Classification > Open Access Land >	Grade 4 (wi 0	0 0	0	-	-
					0	-	-
<u>57</u> >	<u>12.2</u> >	Open Access Land >	0	0		-	- -
<u>57</u> > <u>57</u> >	<u>12.2</u> > <u>12.3</u> >	Open Access Land > Tree Felling Licences >	0	0	0	-	- - -
<u>57</u> > <u>57</u> > <u>57</u> >	<u>12.2</u> > <u>12.3</u> > <u>12.4</u> >	Open Access Land > <u>Tree Felling Licences</u> > <u>Environmental Stewardship Schemes</u> >	0 0 1	0 0 0	0	- - - 250-500m	- - - 500-2000m
57 > 57 > 57 > 58 >	12.2 > 12.3 > 12.4 > 12.5 >	Open Access Land > Tree Felling Licences > Environmental Stewardship Schemes > Countryside Stewardship Schemes >	0 0 1 0	0 0 0	0 0 0	- - - 250-500m -	- - - 500-2000m
57 > 57 > 57 > 58 > Page	12.2 12.3 12.4 12.5 Section	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship SchemesHabitat designations	0 0 1 0 On site	0 0 0 0 0-50m	0 0 0 50-250m	- - - 250-500m -	- - - 500-2000m -
57 > 57 > 57 > 58 > Page 59 >	12.2 > 12.3 > 12.4 > 12.5 > Section 13.1	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship SchemesHabitat designationsPriority Habitat Inventory	0 0 1 0 On site 0	0 0 0 0 0-50m	0 0 0 50-250m 10	- - - 250-500m - -	- - - 500-2000m - -
57 > 57 > 57 > 58 > Page 59 > 60 >	12.2 > 12.3 > 12.4 > 12.5 > Section 13.1 > 13.2 >	Open Access Land >Tree Felling Licences >Environmental Stewardship Schemes >Countryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat Networks >	0 0 1 0 0 0 0	0 0 0 0 0-50m 0	0 0 0 50-250m 10 0	- - - 250-500m - - -	- - - 500-2000m - - -
57 > 57 > 57 > 58 > Page 59 > 60 > 60 >	12.2 > 12.3 > 12.4 > 12.5 > Section 13.1 > 13.2 > 13.3 >	Open Access Land >Tree Felling Licences >Environmental Stewardship Schemes >Countryside Stewardship Schemes >Habitat designations >Priority Habitat Inventory >Habitat Networks >Open Mosaic Habitat >	0 0 1 0 0 0 0 0	0 0 0 0 0 0-50m 0 0	0 0 0 50-250m 10 0 0	- - - 250-500m - - - - 250-500m	- - - 500-2000m - - - - - - - - -
57 > 57 > 57 > 58 > Page 59 > 60 > 60 > 60 >	12.2 > 12.3 > 12.4 > 12.5 > Section 13.1 > 13.2 > 13.3 > 13.4 >	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 >	0 0 1 0 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 10 0 0 0 50-250m		
57 > 57 > 57 > 58 > Page 59 > 60 > 60 > 60 > 60 > 60 > 700 >	12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4 Section	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 >	0 0 1 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 50-250m 10 0 0 0 50-250m		
57 > 57 > 57 > 58 > Page 59 > 60 > 60 > 60 > 60 > 61 >	12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4 Section	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 >10k Availability >	0 0 1 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 0 0 0 0 0 0 0 0	0 0 0 50-250m 10 0 0 0 50-250m	- - - 250-500m	







<u>63</u> >	<u>14.4</u> >	Landslip (10k) >	0	0	0	0	-
<u>64</u> >	<u>14.5</u> >	Bedrock geology (10k) >	0	0	0	0	-
<u>64</u> >	<u>14.6</u> >	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>65</u> >	<u>15.1</u> >	<u>50k Availability</u> >	Identified (within 500m)		
<u>66</u> >	<u>15.2</u> >	Artificial and made ground (50k) >	0	0	2	1	-
<u>67</u> >	<u>15.3</u> >	Artificial ground permeability (50k) >	0	0	-	-	-
<u>68</u> >	<u>15.4</u> >	Superficial geology (50k) >	0	1	3	3	-
<u>69</u> >	<u>15.5</u> >	Superficial permeability (50k) >	Identified (within 50m)			
<u>69</u> >	<u>15.6</u> >	Landslip (50k) >	0	0	0	0	-
<u>69</u> >	<u>15.7</u> >	Landslip permeability (50k) >	None (with	in 50m)			
<u>70</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	0	-
<u>71</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)			
<u>71</u> >	<u>15.10</u> >	Bedrock faults and other linear features (50k) >	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
<u>72</u> >	<u>16.1</u> >	BGS Boreholes >	0	0	0	-	-
<u>72</u> > Page	<u>16.1</u> > Section	BGS Boreholes > <u>Natural ground subsidence</u> >	0	0	0	-	-
				0 within 50m)		-	
Page	Section	Natural ground subsidence >		within 50m)		-	
Page <u>73</u> >	Section <u>17.1</u> >	Natural ground subsidence > Shrink swell clays >	Moderate (Very low (w	within 50m)		-	
Page <u>73</u> > <u>74</u> >	Section <u>17.1</u> > <u>17.2</u> >	Natural ground subsidence > Shrink swell clays > Running sands >	Moderate (Very low (w	within 50m) vithin 50m) within 50m)		-	
Page <u>73</u> > <u>74</u> > <u>76</u> >	Section <u>17.1</u> > <u>17.2</u> > <u>17.3</u> >	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits >	Moderate (Very low (w Negligible (within 50m) vithin 50m) within 50m) vithin 50m)		-	-
Page 73 > 74 > 76 > 77 >	Section <u>17.1</u> > <u>17.2</u> > <u>17.3</u> > <u>17.4</u> >	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits >	Moderate (Very low (w Negligible (Very low (w Very low (w	within 50m) vithin 50m) within 50m) vithin 50m)		-	-
Page 73 > 74 > 76 > 77 > 77 > 78 >	Section <u>17.1</u> > <u>17.2</u> > <u>17.3</u> > <u>17.4</u> > <u>17.5</u> >	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits > Landslides >	Moderate (Very low (w Negligible (Very low (w Very low (w	within 50m) vithin 50m) within 50m) vithin 50m) vithin 50m)		- 250-500m	- 500-2000m
Page 73 > 74 > 76 > 77 > 78 > 79 >	Section 17.1 > 17.2 > 17.3 > 17.4 > 17.5 > 17.6 >	Natural ground subsidence > Shrink swell clays > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits > Landslides > Ground dissolution of soluble rocks > Mining, ground workings and natural cavities	Moderate (Very low (w Negligible (Very low (w Very low (w Negligible (within 50m) vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m)		- 250-500m	- 500-2000m
Page 73 > 74 > 76 > 77 > 78 > 79 > Page	Section 17.1 > 17.2 > 17.3 > 17.4 > 17.5 > 17.6 > Section	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits > Landslides > Ground dissolution of soluble rocks > Mining, ground workings and natural cavitiess >	Moderate (Very low (w Negligible (Very low (w Very low (w Negligible (On site	within 50m) vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m)	50-250m		- 500-2000m -
Page 73 > 74 > 76 > 77 > 78 > 79 > Page 81 >	Section 17.1 > 17.2 > 17.3 > 17.4 > 17.5 > 17.6 > Section 18.1 >	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits > Landslides > Ground dissolution of soluble rocks > Mining, ground workings and natural cavities > Natural cavities >	Moderate (Very low (w Negligible (Very low (w Very low (w Negligible (On site	within 50m) vithin 50m) within 50m) vithin 50m) within 50m) 0-50m	50-250m	0	- 500-2000m - - -
Page 73 > 74 > 76 > 77 > 78 > 79 > Page 81 > 82 >	Section 17.1 > 17.2 > 17.3 > 17.4 > 17.5 > 17.6 > Section 18.1 > 18.2 >	Natural ground subsidence > Shrink swell clays > Running sands > Compressible deposits > Collapsible deposits > Landslides > Ground dissolution of soluble rocks > Mining, ground workings and natural cavities > Natural cavities > BritPits >	Moderate (Very low (w Negligible (Very low (w Very low (w Negligible (On site 0 0	within 50m) vithin 50m) within 50m) vithin 50m) vithin 50m) within 50m) 0-50m 0	50-250m 0 0	0	- 500-2000m - - - 0







<u>83</u> >	<u>18.6</u> >	Non-coal mining >	0	0	0	0	0
<u>83</u> >	<u>18.7</u> >	<u>Mining cavities</u> >	0	0	0	0	0
<u>83</u> >	<u>18.8</u> >	JPB mining areas >	None (with	in Om)			
<u>83</u> >	<u>18.9</u> >	Coal mining >	None (with	in Om)			
<u>84</u> >	<u>18.10</u> >	Brine areas >	None (with	in 0m)			
<u>84</u> >	<u>18.11</u> >	<u>Gypsum areas</u> >	None (with	in 0m)			
<u>84</u> >	<u>18.12</u> >	<u>Tin mining</u> >	None (with	in 0m)			
<u>84</u> >	<u>18.13</u> >	<u>Clay mining</u> >	None (with	in Om)			
Page	Section	<u>Radon</u> >					
<u>85</u> >	<u>19.1</u> >	<u>Radon</u> >	Less than 1	% (within On	n)		
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>87</u> >	<u>20.1</u> >	BGS Estimated Background Soil Chemistry >	4	2	-	-	-
<u>87</u> >	<u>20.2</u> >	BGS Estimated Urban Soil Chemistry >	0	0	-	-	-
<u>88</u> >	<u>20.3</u> >	BGS Measured Urban Soil Chemistry >	0	0	-	-	-
Page	Section	<u>Railway infrastructure and projects</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>89</u> >	<u>21.1</u> >	<u>Underground railways (London)</u> >	0	0	0	-	-
<u>89</u> >	<u>21.2</u> >	<u>Underground railways (Non-London)</u> >	0	0	0	-	-
<u>90</u> >	<u>21.3</u> >	<u>Railway tunnels</u> >	0	0	0	-	-
<u>90</u> >	<u>21.4</u> >	Historical railway and tunnel features >	0	0	0	-	-
<u>90</u> >	<u>21.5</u> >	Royal Mail tunnels >	0	0	0	-	-
<u>90</u> >	<u>21.6</u> >	<u>Historical railways</u> >	0	0	4	-	-
<u>91</u> >	<u>21.7</u> >	<u>Railways</u> >	0	0	0	-	-
<u>91</u> >	<u>21.8</u> >	<u>Crossrail 1</u> >	0	0	0	0	-
<u>91</u> >	<u>21.9</u> >	<u>Crossrail 2</u> >	0	0	0	0	-
<u>91</u> >	<u>21.10</u> >	<u>HS2</u> >	1	1	0	2	-







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Recent aerial photograph



Capture Date: 17/04/2021 Site Area: 2.76ha



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





Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Recent site history - 2018 aerial photograph



Capture Date: 29/10/2018 Site Area: 2.76ha



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



Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Recent site history - 2014 aerial photograph



Capture Date: 12/06/2014 Site Area: 2.76ha



Contact us with any questions at: info@groundsure.com 7 01273 257 755





Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Recent site history - 2009 aerial photograph



Capture Date: 09/09/2009 Site Area: 2.76ha



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





Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Recent site history - 1999 aerial photograph



Capture Date: 02/09/1999 Site Area: 2.76ha



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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

OS MasterMap site plan



Site Area: 2.76ha







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

1 Past land use



1.1 Historical industrial land uses

Records within 500m

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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
А	196m NW	Cuttings	1920	1793722







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

ID	Location	Land use	Dates present	Group ID
А	196m NW	Cuttings	1898	1808702
А	196m NW	Cuttings	1950	1847562
В	197m NW	Cuttings	1920	1807191
В	204m NW	Cuttings	1957	1799687
В	204m NW	Cuttings	1982	1827215
С	226m SE	Unspecified Mill	1880	1801874
С	227m SE	Unspecified Mill	1900	1818425
В	433m NW	Cuttings	1950	1793688
В	433m NW	Cuttings	1920	1812804
В	433m NW	Cuttings	1898	1848074

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

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'.

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

ID	Location	Land use	Dates present	Group ID
1	211m N	Unspecified Tank	1922	284813

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

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'.





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This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

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

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'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

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.





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2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m

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 17 >

ID	Location	Land Use	Date	Group ID
А	196m NW	Cuttings	1950	1847562
А	196m NW	Cuttings	1920	1793722
А	196m NW	Cuttings	1898	1808702







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

ID	Location	Land Use	Date	Group ID
В	197m NW	Cuttings	1920	1807191
В	204m NW	Cuttings	1957	1799687
В	204m NW	Cuttings	1982	1827215
С	226m SE	Unspecified Mill	1880	1801874
С	227m SE	Unspecified Mill	1900	1818425
В	433m NW	Cuttings	1950	1793688
В	433m NW	Cuttings	1920	1812804
В	433m NW	Cuttings	1898	1848074

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

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'.

Features are displayed on the Past land use - un-grouped map on page 17 >

ID	Location	Land Use	Date	Group ID
1	211m N	Unspecified Tank	1922	284813

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Rec	ords with	nin 500m	า				0)
_	<i>c</i> .				~			

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

This data is sourced from Ordnance Survey / Groundsure.







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2.4 Historical petrol stations

Records within 500m

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

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

This data is sourced from Ordnance Survey / Groundsure.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

3 Waste and landfill



3.1 Active or recent landfill

Records within 500m

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

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

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

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

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

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

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 20 >





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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

ID	Location	Site	Reference	Category	Sub- Categ ory	Description
A	2m SE	-	WEX216695	Treating waste exemption	Not on a farm	Aerobic composting and associated prior treatment
A	2m SE	-	WEX216695	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	2m SE	-	WEX216695	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
A	2m SE	-	WEX216695	Using waste exemption	Not on a farm	Use of mulch

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



Current potentially contaminative industrial sites.

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.

This data is sourced from Experian.





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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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4.3 Electricity cables

Records within 500m 0 High voltage underground electricity transmission cables. 0 This data is sourced from National Grid. 4.4 Gas pipelines Records within 500m 0 High pressure underground gas transmission pipelines. 0 This data is sourced from National Grid. 1

4.5 Sites determined as Contaminated Land

Records within 500m

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

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

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.







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4.8 Hazardous substance storage/usage

Records within 500m

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

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

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

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

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.





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4.13 Licensed Discharges to controlled waters

Records within 500m

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991. Features are displayed on the Current industrial land use map on <u>page 23</u> >

ID	Location	Address	Details	
1	199m NW	ROSEHILL FARM, BUCKINGHAM., MK18 2HH	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR1NFG0981 Permit Version: 1 Receiving Water: Trib Godington Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 20/08/1962 Effective Date: 20/08/1962 Revocation Date: 20/02/1991
2	416m NW	SUNFLOWER COTTAGE, CHETWODE, BUCKINGHAM, BUCKS, MK18 4LD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1678 Permit Version: 1 Receiving Water: Trib Padbury Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 28/01/1985 Effective Date: 28/01/1985 Revocation Date: 10/02/1992
3	498m N	ROSEHILL COTTAGE NO.1, CHETWODE, BUCKINGHAM, BUCKS, MK18 4LF	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1676 Permit Version: 1 Receiving Water: Trib Padbury Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 28/01/1985 Effective Date: 28/01/1985 Revocation Date: 10/02/1992

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

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

Discharges of Special Category Effluents to the public sewer.

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

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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

4.16 List 1 Dangerous Substances

Records within 500m

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

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

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

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

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.





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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	
Aquifer status of groundwater held within superficial geology.	

Features are displayed on the Hydrogeology map on page 29 >

ID	Location	Designation	Description
1	9m NW	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	92m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers







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ID	Location	Designation	Description
3	140m NW	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
4	277m S	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
5	369m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
6	398m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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







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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 31 >				

ID	Location	Designation	Description		
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow		
2	369m E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow		

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







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Groundwater vulnerability





5.3 Groundwater vulnerability

Records within 50m

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 32 >







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ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	8m NW	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive 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

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

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 <u>enquiries@environment-agency.gov.uk</u> 7.

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





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5.6 Groundwater abstractions

Records within 2000m

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

Features are displayed on the Abstractions and Source Protection Zones map on page 34 >







ID	Location	Details	
-	970m E	Status: Historical Licence No: 6/33/02/*G/0041 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT CASEMORE FARM Data Type: Point Name: GULLIVER Easting: 465600 Northing: 228500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1966 Version End Date: -
-	1569m NW	Status: Historical Licence No: 6/33/02/*G/0035 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT BARTON HILL FARM Data Type: Point Name: SPIERS Easting: 463200 Northing: 229800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1966 Version End Date: -
-	1604m E	Status: Historical Licence No: 6/33/02/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FIRST WELL AT COWLEY FARM Data Type: Point Name: KING Easting: 466100 Northing: 227900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1968 Version End Date: -
-	1639m NE	Status: Historical Licence No: 6/33/02/*G/0058 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT PRESTON BISSETT Data Type: Point Name: JAMES Easting: 465800 Northing: 229700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1966 Version End Date: -
-	1663m E	Status: Historical Licence No: 6/33/02/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SECOND WELL AT COWLEY FARM Data Type: Point Name: KING Easting: 466200 Northing: 228000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1968 Version End Date: -







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ID	Location	Details	
-	1663m E	Status: Historical Licence No: 6/33/02/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: THIRD WELL AT COWLEY FARM Data Type: Point Name: KING Easting: 466200 Northing: 228000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1968 Version End Date: -
-	1729m E	Status: Historical Licence No: 6/33/02/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FOURTH WELL AT COWLEY FARM Data Type: Point Name: KING Easting: 466300 Northing: 228100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1968 Version End Date: -
-	1901m E	Status: Historical Licence No: 6/33/02/*G/0044 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FIFTH WELL AT COWLEY FARM Data Type: Point Name: KING Easting: 466500 Northing: 228200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1968 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

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

Features are displayed on the Abstractions and Source Protection Zones map on page 34 >






Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

ID	Location	Details	
1	116m W	Status: Historical Licence No: 6/33/02/*S/0125 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN AT CHETWOLD 'B' Data Type: Line Name: TAYLOR Easting: 464250 Northing: 228600	Annual Volume (m ³): 4550 Max Daily Volume (m ³): 436.4 Original Application No: - Original Start Date: 01/03/1992 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1992 Version End Date: -
2	174m S	Status: Historical Licence No: 6/33/02/*S/0125 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BROOK AT CHETWOLD 'A' Data Type: Line Name: TAYLOR Easting: 463300 Northing: 228100	Annual Volume (m ³): 4550 Max Daily Volume (m ³): 436.4 Original Application No: - Original Start Date: 01/03/1992 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1992 Version End Date: -

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

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

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

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





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6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m

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

Features are displayed on the Hydrology map on page 38 >

ID	Location	Type of water feature	Ground level	Permanence	Name
В	76m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-







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ID	Location	Type of water feature	Ground level	Permanence	Name
С	94m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
С	101m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	115m W	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
D	127m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	133m S	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
7	142m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	197m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Padbury Brook

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

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

Features are displayed on the Hydrology map on page 38 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

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



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Features are displayed on the Hydrology map on page 38 >

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Padbury Brook	GB105033038210	Great Ouse Upper	Ouse Upper and Bedford

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

6.4 WFD Surface water bodies

Records identified

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 38 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
10	198m SE	River	Padbury Brook	<u>GB105033038210</u> 7	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site

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

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







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7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance). The risk categories for FRAW for the sea are; Very low (less than 0 requal to 1 in 30 but greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 200 chance in any given year), Low (less than 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m

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

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

7.3 Flood Defences

Records within 250m

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

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





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7.4 Areas Benefiting from Flood Defences

Records within 250m

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

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

7.5 Flood Storage Areas

Records within 250m

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

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







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River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

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

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

7.7 Flood Zone 3

Records within 50m

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

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





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8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

1 in 250 year, 0.1m - 0.3m

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 44 >

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.







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9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site	Negligible
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 46 >

This data is sourced from Ambiental Risk Analytics.







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10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

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

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







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10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m

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

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





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10.6 Local Nature Reserves (LNR)

Records within 2000m

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

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

10.7 Designated Ancient Woodland

Records within 2000m

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

Features are displayed on the Environmental designations map on page 47 >

ID	Location	Name	Woodland Type
-	1293m N	Unknown	Ancient & Semi-Natural Woodland
-	1488m N	Unknown	Ancient & Semi-Natural Woodland
-	1636m W	Oldfields Copse	Ancient & Semi-Natural Woodland
-	1723m N	Unknown	Ancient & Semi-Natural Woodland
-	1804m N	Unknown	Ancient & Semi-Natural Woodland
-	1969m W	Oldfields Copse	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0
Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance con	servation

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.





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10.9 Forest Parks

Records within 2000m

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

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

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

10.11 Green Belt

Records within 2000m

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

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

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

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





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10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

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

Location	Name	Туре	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
229m W	Great Ouse NVZ	Surface Water	391	Existing

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







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SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

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

Features are displayed on the SSSI Impact Zones and Units map on page 52 >







I	D	Location	Type of developments requiring consultation
1	L	On site	Infrastructure - Airports, helipads and other aviation proposals. 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 footprint exceeds 1ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas. Air pollution - Livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 750m ² , manure stores > 3500t.
2	2	On site	Infrastructure - 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 footprint exceeds 1ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas. Air pollution - Livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 750m ² , manure stores > 3500t. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill.

This data is sourced from Natural England.

10.18 SSSI Units

Records	within	2000m
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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.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

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

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

11.3 National Parks

Records within 250m

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

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

11.4 Listed Buildings

Records within 250m

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





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

11.5 Conservation Areas

Records within 250m

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

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.

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.







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12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m

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 56 >

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





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ID	Location	Classification	Description
2	199m SE	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

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

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

12.3 Tree Felling Licences

Records within 250m

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m 1

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.

Location	Reference	Scheme	Start Date	End date
On site	AG00298725	Entry Level plus Higher Level Stewardship	01/04/2010	31/03/2020

This data is sourced from Natural England.







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12.5 Countryside Stewardship Schemes

Records within 250m

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

This data is sourced from Natural England.







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13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m

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

Features are displayed on the Habitat designations map on page 59 >

ID	Location	Main Habitat	Other habitats
А	62m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
А	85m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
1	99m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
В	105m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

ID	Location	Main Habitat	Other habitats
2	112m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	122m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	128m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	194m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	196m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
В	196m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0
Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority	y habitat

inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

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

This data is sourced from Natural England.





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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m	1
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset p	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 61 >

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







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

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







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

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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

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.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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 65 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW219_buckingham_v4

This data is sourced from the British Geological Survey.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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



15.2 Artificial and made ground (50k)

Records within 500m

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on page 66 >

ID	Location	LEX Code	Description	Rock description
1	79m SE	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND
2	97m SW	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND
3	347m S	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND

This data is sourced from the British Geological Survey.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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15.3 Artificial ground 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 artificial deposits (the zone between the land surface and the water table).







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Geology 1:50,000 scale - Superficial



15.4 Superficial geology (50k)

Records within 500m

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 68 >

ID	Location	LEX Code	Description	Rock description
1	9m NW	TILMP- DMTN	TILL, MID PLEISTOCENE	DIAMICTON
2	92m SE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	121m E	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL







ID	Location	LEX Code	Description	Rock description
4	140m NW	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL
5	276m SE	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
6	277m S	TILMP- DMTN	TILL, MID PLEISTOCENE	DIAMICTON
7	398m W	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

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
9m NW	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records wit	hin 500	Dm			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).







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

Geology 1:50,000 scale - Bedrock



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 70 >

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

This data is sourced from the British Geological Survey.







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

15.9 Bedrock permeability (50k)

Records within 50m 1	
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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	Very Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 0	
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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.







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16 Boreholes

16.1 BGS Boreholes

Records within 250m

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.






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17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

	Records within 50m	1
٦	The potential hazard presented by soils that absorb water when wet (making them swell), and lose κ	water as
t	hey dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of (lav in the

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 73 >

Location	Hazard rating	Details
On site	Moderate	Ground conditions predominantly high plasticity.







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Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

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 74 >

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.





Location	Hazard rating	Details
9m NW	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.







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Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

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 76 >

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

This data is sourced from the British Geological Survey.







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Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

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 77 >

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.







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Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

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 78 >

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

This data is sourced from the British Geological Survey.







Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

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 79 >

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.







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18.1 Natural cavities

Records within 500m

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

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 81 >

ID	Location	Land Use	Year of mapping	Mapping scale
А	196m NW	Cuttings	1950	1:10560
А	196m NW	Cuttings	1920	1:10560
А	196m NW	Cuttings	1898	1:10560
В	197m NW	Cuttings	1920	1:10560
В	204m NW	Cuttings	1982	1:10000
В	204m NW	Cuttings	1957	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

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.





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18.5 Historical Mineral Planning Areas

Records within 500m

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

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

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

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

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

This data is sourced from the Coal Authority.





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18.10 Brine areas

Records on site

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

Records on site

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

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





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19 Radon



19.1 Radon

Records on site

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

Features are displayed on the Radon map on page 85 >

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







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







20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

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	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
9m NW	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

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.





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Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

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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 km².







Ref: GS-SHN-L9F-OY6-TMI Your ref: JFR3530_Chetwode_Embankment Grid ref: 464492 228554

21 Railway infrastructure and projects



21.1 Underground railways (London)

Records within 250m

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

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.





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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

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

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

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

Features are displayed on the Railway infrastructure and projects map on page 89 >

Location	Description
82m S	Abandoned
115m S	Abandoned
123m S	Abandoned
221m SE	Abandoned

This data is sourced from OpenStreetMap.





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21.7 Railways

Records within 250m

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

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

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

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.

Features are displayed on the Railway infrastructure and projects map on page 89 >

Location	Track Type	Speed (mph)	Speed (km/h)	Status
On site	Surface Running Track	249mph	400kph	Current preferred consultation route
36m N	Surface Running Track	249mph	400kph	Current preferred consultation route
252m SE	Bridge/Viaduct	249mph	400kph	Current preferred consultation route
324m SE	Surface Running Track	249mph	400kph	Current preferred consultation route

This data is sourced from HS2 ltd.





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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 <u>https://www.groundsure.com/sources-reference</u> \nearrow .

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