

**A38 Derby Junctions**  
**TR010022**  
**Volume 6**  
**6.10 Habitat Regulations Assessment**  
**Report**

Regulation 5(2)(g)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009

April 2019

## Infrastructure Planning

### Planning Act 2008

#### **The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009**

### A38 Derby Junctions Development Consent Order 202[ ]

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## **Habitat Regulations Assessment Report**

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<b>Planning Inspectorate Scheme Reference</b>	TR010022
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# **A38 Derby Junctions**

**Habitat Regulations Assessment – No  
Significant Effects Report (NSER)**

**Report Number: HE514503-ACM-EBD-A38\_SW\_PR\_ZZ-RP-EG-0017 P05 S4  
February 2019**

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# 1 INTRODUCTION

## 1.1 Background and scope

1.1.1 AECOM Infrastructure & Environment UK Limited (AECOM) has been commissioned by Highways England to provide design services with regards to the A38 Derby Junctions scheme (referred to herein as “the Scheme”). The Scheme concerns three junctions on the A38 in Derby as follows (refer to Figure 1, Appendix A):

- A38/ A5111 Kingsway junction
- A38/ A52 Markeaton junction
- A38/ A61 Little Eaton junction

1.1.2 These three junctions are spread over an approximate 5.5km distance along the A38 located west and north of Derby.

1.1.3 When preparing applications for Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008 (as amended), applicants need to consider the potential effects of the application on European Sites, without taking into account any specific impact avoidance, reduction or mitigation measures. It is a requirement of the Habitats Directive 92/43/EEC that the potential for proposed schemes to impact upon European Sites (also referred to as Natura 2000 sites) is investigated, where such sites are designated for their nature conservation interests. This process is referred to as a Habitats Regulations Assessment (HRA) and as an Assessment of Implications on European Sites (AIES) for Highways Schemes.

1.1.4 European Sites considered are:

- **Special Areas of Conservation (SACs)**<sup>1</sup> – strictly protected sites designated under the European Commission (EC) Habitats Directive. They have been adopted by the European Commission and formally designated by the government of each country in whose territory the site lies.
- **Candidate or possible Special Areas of Conservation (cSACs or pSACs)** – sites that have been submitted to the EC, but not yet formally adopted.
- **Special Protection Areas (SPA)**<sup>2</sup> – strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds, and for regularly occurring migratory species.
- **Potential Special Protection Areas (pSPA)** – sites that are approved by Government and currently in the process of being classified.
- **Ramsar**<sup>3</sup> – Wetlands of international importance designated under the Ramsar Convention.

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1 <http://jncc.defra.gov.uk/page-23> accessed 23/10/18

2 <http://jncc.defra.gov.uk/page-162> accessed 23/10/2018

3 <http://jncc.defra.gov.uk/page-161> accessed 23/10/2018

- **Sites of Community Importance (SCI)**<sup>4</sup> – These are sites that have been adopted by the European Commission, but not yet formally designated by the government of each country (pre-requisite step for establishing SACs). There are only two SCIs in England which are located offshore (Bristol Channel Approaches SCI and Southern North Sea SCI). SCIs are, therefore, not considered further within this assessment.

1.1.5 This document presents the results of the HRA screening exercise, in the absence of any impact avoidance, reduction or mitigation measures, whose purpose is to inform a decision as to whether or not a full Appropriate Assessment<sup>5</sup> is required. The Scheme is considered to have no likely significant effects on European Sites. Therefore, this report has taken the form of a No Significant Effects Report (NSER).

1.1.6 As there are two discrete sections to the Scheme and thus to aid contextualisation of the data geographically, the two areas are referred to as: i) Kingsway and Markeaton junctions, and ii) Little Eaton junction.

## 1.2 Scheme location

1.2.1 The Scheme under appraisal comprises Kingsway and Markeaton junctions, west of the City of Derby and Little Eaton junction north of Derby.

1.2.2 The A38 is an existing and busy arterial 'A' road carrying traffic around the west and north of the City of Derby. South of Kingsway junction, the road enters a cutting and is bordered by semi-improved grassland and scrub covered verges. The central reservation south of Kingsway junction and the junction island in this location support a mosaic of habitat types, including semi-improved neutral grassland and native broadleaved woodland. Bramble Brook flows from the west of the Scheme in this location, through culverts located under the north-bound carriageway and the central reservation before connecting with further culverts located between the junction islands. North of the Kingsway junction there is an area of mixed plantation represented by semi-mature trees on embankment.

1.2.3 Markeaton junction is bordered to the east by residential properties and to the west by parkland (Markeaton Park). The outfall from Markeaton Lake and Markeaton Brook flows through culverts beneath the existing A38 at the northern extent of the junction.

1.2.4 The western boundary of the Scheme at Little Eaton junction borders the road bridge over the River Derwent. The existing A38 is on embankment in this location, with the embankments themselves represented by areas of scrub and immature broadleaved plantation habitats. A variety of grassland habitats exist at the base of the embankments in this location.

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<sup>4</sup> <http://jncc.defra.gov.uk/page-1456> accessed 14.12.18

<sup>5</sup> in compliance with Regulations 60 to 67 of the Habitats Regulations 2010, implementing Article 6(3) of the Habitats Directive (92/43/EEC)

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### 1.3 Legislative context

- 1.3.1 European Union (EU) Directive 92/43/EEC on the conservation of habitats and of wild flora and fauna (known as the Habitats Directive) protects habitats and species of European nature conservation importance. Together with Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive), the Habitats Directive establishes a network of internationally important sites designated for their ecological status. Special Areas of Conservation (SACs) and Sites of Community Importance (SCIs) are designated under the Habitats Directive and promote the protection of flora, fauna and habitats. Special Protection Areas (SPAs) are designated under the Birds Directive in order to protect rare, vulnerable and migratory birds. These sites combine to create a Europe-wide Natura 2000 network of designated sites.
- 1.3.2 The protection given by the Habitats Directive and the Wild Birds Directive is transposed into the UK through the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations).
- 1.3.3 In addition to sites designated under European nature conservation legislation, UK Government policy states that internationally important wetlands designated under the Ramsar Convention 1971 (Ramsar sites) are afforded the same protection as SPAs and SACs for the purpose of considering development proposals that may affect them. Paragraph 176 of the National Planning Policy Framework (NPPF) makes it clear that potential SPAs, possible SACs and proposed Ramsar sites should be treated as if they were already designated.
- 1.3.4 Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 (as amended) states that:
- A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—*
- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and*
- (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.*
- 1.3.5 Regulation 63(5) states that:
- In the light of the conclusions of the assessment, and subject to Regulation 64 (considerations of overriding public interest), the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site.*
- 1.3.6 The Habitat Regulations require that the competent authority (in this case the Secretary of State) before authorising a project likely to have a significant effect on a European Site must make an appropriate assessment of the implications for that site in view of that site's conservation objectives. Anyone applying for development consent for an NSIP must provide the competent authority with such information as may reasonably be required 'for the purpose of the assessment' or 'to enable them to determine whether an appropriate assessment is required'. In regards to the Scheme, this information has taken the form of a NSER with applicable matrices included in Appendix C and D.

## 1.4 Assessment process

### Habitat Regulations Assessment

1.4.1 As outlined within Advice Note 10: Habitats Regulations Assessment relevant to NSIPs (The Planning Inspectorate, 2017), the European Commission Methodological guidance on the provision of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC recommends a four stage approach in carrying out a HRA as follows:

- **Screening (Stage 1):** This is the process of identifying the potential likely significant effects of a project upon a European site, either alone or in-combination with other plans and projects, within the context of the site's conservation objectives. If it can be demonstrated that significant effects are unlikely (in the absence of any impact avoidance, reduction or mitigation measures – see para 1.4.5), no further assessment is required. If the screening process does identify effects to be significant, potentially significant or uncertain, then the subsequent stage known as *Appropriate Assessment* (Stage 2) is required.
- **Appropriate Assessment (Stage 2):** This considers the effects on the integrity of European sites, either alone or in-combination with other plans and projects, with regard to the site's structure, function, and conservation objectives. Where there are adverse effects on the integrity of the European site, an assessment of the efficacy of mitigation measures is carried out. If those mitigation measures cannot avoid adverse effects then development consent can only be given if Stages 3 and 4 are then followed.
- **Assessment of Alternative Solutions (Stage 3):** This examines the alternative solutions to achieving the objectives of the project or plan that would avoid or have a lesser adverse effect on the European site.
- **Imperative Reasons of Overriding Public Interest (IROPI) (Stage 4):** This is the assessment undertaken where no alternative solution exists and where adverse effects remain. The process is to assess whether the development is necessary for IROPI and, if so, the potential compensatory measures needed to maintain the overall coherence of the site or integrity of the European site network. This is not considered to be a standard part of the process and would only be carried out in exceptional circumstances.

1.4.2 All four stages of the process are referred to as the HRA, to clearly distinguish the whole process from the stages within it.

1.4.3 Stage 1 is essentially a risk assessment, typically utilising existing data, records, and specialist knowledge. The process involves identifying the likely impacts of a project upon a European site, either alone or in combination with other plans and projects, and considers whether the impacts are likely to be significant. The purpose of the Stage 1 is to decide whether an Appropriate Assessment is required. The essential question is:

*"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*



- 
- 1.4.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites.
- 1.4.5 Recently, the 'People Over Wind and Sweetman' European Court of Justice ruling (Case C-323/17) has determined that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce the harmful effects of the project on European sites) should not be taken into account when forming a view on likely significant effects during Stage 1 Screening. This report therefore reflects the findings of that judgment.
- 1.4.6 In the event that Stage 2 (Appropriate Assessment) is required, the integrity of a European site is defined by the EC guidance as the coherence of the site's ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/ or populations of species for which the site has been designated. An adverse effect on integrity, therefore, is likely to be one which prevents the site from making the same contribution to favourable conservation status for the relevant feature as it did at the time of designation.
- 1.4.7 This report presents the findings of Stage 1 risk assessment only. No likely significant effects on European Sites are predicted, and therefore Stages 2 to 4 are not required; this report therefore takes the form of a No Significant Effects Report (NSER).

#### **Assessment of Implications on European Sites**

- 1.4.8 Highways England guidance on the preparation of a HRA, is included within the Design Manual for Roads and Bridges (DMRB), Volume 11 Section 4 Part 1 HD44/09. The assessment is referred to as an *Assessment of Implications on European Sites* (AIES). The guidance follows the same stages as the EC guidance for HRA (as detailed above).

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## **2 METHODOLOGY**

### **2.1 Background**

2.1.1 This Stage 1 assessment has been completed using the following guidance:

- DMRB Volume 11, Section 4, Part 1 HD44/09 Assessment of Implications (of Highways and/or Roads Projects) on European Sites (including Appropriate Assessment).
- PINS Advice Note 10: Habitat Regulations Assessment relevant to nationally significant infrastructure projects.
- The European Commission Managing Natura 2000 sites (the Provisions of Article 6 of the Habitats Directive 92/43/EEC).

### **2.2 Study area**

2.2.1 The study area for the assessment was defined reflecting the Scheme and the surrounding environment over which significant effects could reasonably be thought to have the potential to occur, both from the Scheme and also in combination with other projects.

2.2.2 A study area of up to 30km from the Scheme was defined based on DMRB guidance and details regarding the nearest European sites. In accordance with DMRB, detailed consideration was given to sites:

- Within 2km of the Scheme.
- Any SACs within 30km of the Scheme where bats are a qualifying feature.
- Where the Scheme crosses/ is adjacent to upstream of, or downstream of, watercourses designated in part or wholly as SACs, cSACs, pSACs, SPAs, pSPAs or Ramsar sites (applied also to cited SPA bird species where flight paths, feeding or roosting areas may occur outside the SPA boundary).

2.2.3 It is UK government policy that Ramsar sites are afforded the same level of protection as SACs and SPAs, and therefore they have also been considered in this assessment.

2.2.4 Natural England considers that relevant Sites of Special Scientific Interest (SSSI) impact risk zones (for the relevant European sites) can be used to screen sites in or out of assessment (where applicable). SSSI Impact Risk Zones (IRZ) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to: SSSIs, SACs, SPAs and Ramsar sites<sup>6</sup>. They define zones around each site 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. The IRZs can be used by local planning authorities (LPAs) to consider whether a proposed development is likely to affect a SSSI, SAC, SPA or Ramsar site and determine whether they will need to consult Natural England to seek advice on the nature of any potential impacts and how they might be avoided or mitigated.

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<sup>6</sup> <https://naturalengland-defra.opendata.arcgis.com/datasets/sssi-impact-risk-zones-england> accessed 15.2.19

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## **2.3 Description of tasks**

- 2.3.1 The Screening Assessment (Stage 1) presented in this report follows the process within Figure 4.1 Generic Screening Process for Assessment of the Implications on European Sites (DMRB Volume 11 HD 44/09, February 2009).
- 2.3.2 The Screening Assessment covers the construction and operation phases of the Scheme. It is highly unlikely that the Scheme would be decommissioned/ demolished after its design life as the road would have become an integral part of nationally important infrastructure. Decommissioning of the Scheme is not therefore considered further in this report.
- 2.3.3 No significant effects on European Sites are predicted therefore an Appropriate Assessment (Stage 2), Assessment of Alternative Solutions (Stage 3) and Imperative Reasons of Overriding Public Interest (IROPI) (Stage 4) are not required. The results are presented in this report and the report therefore takes the form of a NSER.
- 2.3.4 Consultation has also been made with Natural England on the findings of this report, as per Natural England Standard Habitats Regulations Assessment (HRA) Standard (Natural England 2017).

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### 3 SCREENING ASSESSMENT

3.1.1 The Assessment of Implications on European Sites follows the process within Figure 4.1 Generic Screening Process for Assessment of the Implications on European Sites (DMRB Volume 11 HD 44/09, February 2009).

#### 3.2 Step 1: Determination of connection with site management

3.2.1 The Scheme works are not connected with the management of European sites.

#### 3.3 Step 2: Examination of the nature of the work (emergency works)

3.3.1 The works associated with the Scheme are not emergency operations.

#### 3.4 Step 3: Consideration of whether works constitute projects

3.4.1 The Scheme works can be described as '*the execution of construction works or of other installations or schemes*'.

#### 3.5 Step 4: Identification of potential constraints on European sites

3.5.1 An assessment was carried out to assess the following Screening criteria:

1) *Is the geographical boundary or proposed route corridor of the scheme:*

- Within any SACs, cSACs, pSACs, SPAs, pSPAs or Ramsar sites:
  - The Scheme is not within any SAC, cSAC, pSAC, SPA, pSPA or Ramsar sites.
- <2km of any SACs, cSACs, pSACs, SPAs, pSPAs or Ramsar sites;
  - The Scheme is not within 2km of any SAC, cSAC, pSAC, SPA, pSPA or Ramsar sites.
- <30km of any SACs, cSACs or pSACs, where bats are one of the qualifying interests;
  - The Scheme is within 30km of six SACs as follows (locations of these European sites are shown on Figure 2 in Appendix A):
    - Gang Mine SAC (located approximately 19km north-west of Kingsway and Markeaton junctions; and approximately 16km north west of Little Eaton junction).
    - Bees Nest and Green Clay Pits SAC (located approximately 20km north-west of Kingsway and Markeaton junctions; and approximately 18km north-west of Little Eaton junction).
    - Peak District Dales SAC (a number of isolated stretches – the nearest located approximately 22km north-west of Kingsway and Markeaton junctions; and approximately 23km north-west of Little Eaton junction).
    - South Pennine Moors SAC and SPA (located approximately 29km north of Kingsway and Markeaton junctions; and approximately 25km north of Little Eaton junction).
    - River Mease SAC (located approximately 20km south of Kingsway and Markeaton junctions and approximately 25km south of Little Eaton junction).

- West Midlands Mosses SAC and Ramsar (located approximately 30km south-west of Kingsway and Markeaton junctions).
  - However, bats are not one of the qualifying interest of any of these SACs (refer to Appendix B for the designated site citation details).
  - *Crossing/ adjacent to upstream of, or downstream of, watercourses designated in part or wholly as SACs, cSACs, pSACs, SPAs, pSPAs or Ramsar sites.*
  - The Scheme does not cross or lie adjacent to any watercourses which are designated in part or wholly as a SAC, cSAC, pSAC, SPA, pSPA or Ramsar site.
  - The South Pennine Moors SAC/ SPA is the nearest SPA site (located approximately 29km to north of Kingsway and Markeaton junctions; and approximately 25km to the north of Little Eaton junction). However, no effective pathway (hydrological links) is considered to exist in regards to flight paths or feeding areas of birds from the Scheme to the SPA.
  - The West Midland Mosses Ramsar/ SAC is the nearest Ramsar site (located approximately 30km to south-west of Kingsway and Markeaton junctions). However, no effective pathway is considered to exist in regards to flight paths or feeding areas of birds from the Scheme to the Ramsar site.
- 3.5.2 The Scheme does not fall within the SSSI Risk Impact Zone of any European designated sites (online review <https://magic.defra.gov.uk/> - accessed 11.02.19).
- 3.5.3 This screening assessment has found that none of the Screening criteria are met by the Scheme. Refer to Appendix C for supporting screening matrices.
- 3.6 Step 5: Other potential constraints on European sites**
- 3.6.1 No other potential constraints on European sites were identified.
- 3.6.2 There are no likely significant effects of the Scheme on European sites (in the absence of any impact avoidance, reduction or mitigation measures). Therefore it is not considered to merit further assessment; no in-combination effects with other projects or plans are anticipated.
- 3.6.3 It is not anticipated that the construction and operation of the Scheme would have any other constraints on European sites.
- 3.6.4 Refer to Appendix C for supporting screening matrices.
- 3.7 Step 6: No significant effects report**
- 3.7.1 A No Significant Effects Report proforma has been completed.
- 3.7.2 The 'Finding of No Significant Effects Report Matrix' is provided in Appendix D. This provides a summary of the Screening Assessment (Step 4 to Step 6).
- 3.7.3 The report Matrix finds that the Scheme would have no significant effects on European sites, and therefore no European sites are required to be considered and taken forward to Appropriate Assessment.

- 
- 3.7.4 This report was submitted to Natural England for screening consultation. Natural England confirmed that they are satisfied with the conclusion of no likely significant effect on European sites (as detailed in para. 3.5.1). This is provided works are undertaken in strict accordance with the details submitted and industry good practice is applied regarding pollution prevention. Refer to the consultation response dated 13 December 2018 in Appendix E.

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## 4 REFERENCES

DMRB (2009). Volume 11 Environmental Assessment Section 4 Assessment of Implications on European Sites. Part 1. HD 44/09/ Assessment of Implications (of Highways and/or Roads Projects) on European Sites (including Appropriate Assessment).

JNCC UK Protected Sites: <http://jncc.defra.gov.uk/page-4> (accessed 12.10.18).

The European Commission (2000). Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC.

The Planning Inspectorate (2017). Advice Note 10 Habitats Regulations Assessment relevant to nationally significant infrastructure projects. Version 8.

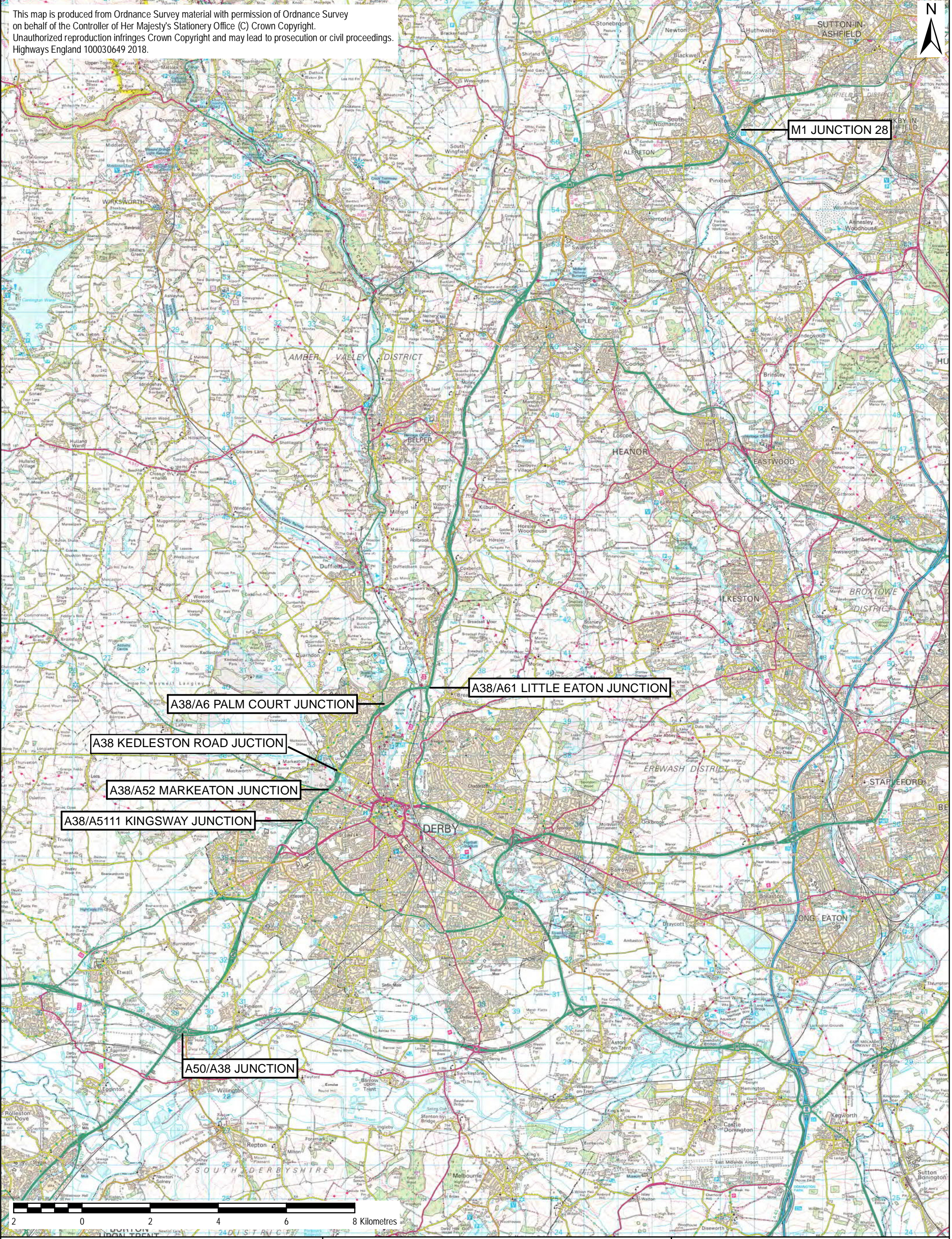
Natural England (2017) Natural England Standard Habitats Regulations Assessment (HRA) Standard.

## **Appendix A      Figures**

Figure 1: Markeaton, Kingsway, and Little Eaton Junctions – Location Map

Figure 2: Location of European Designated Sites – Proposed Scheme



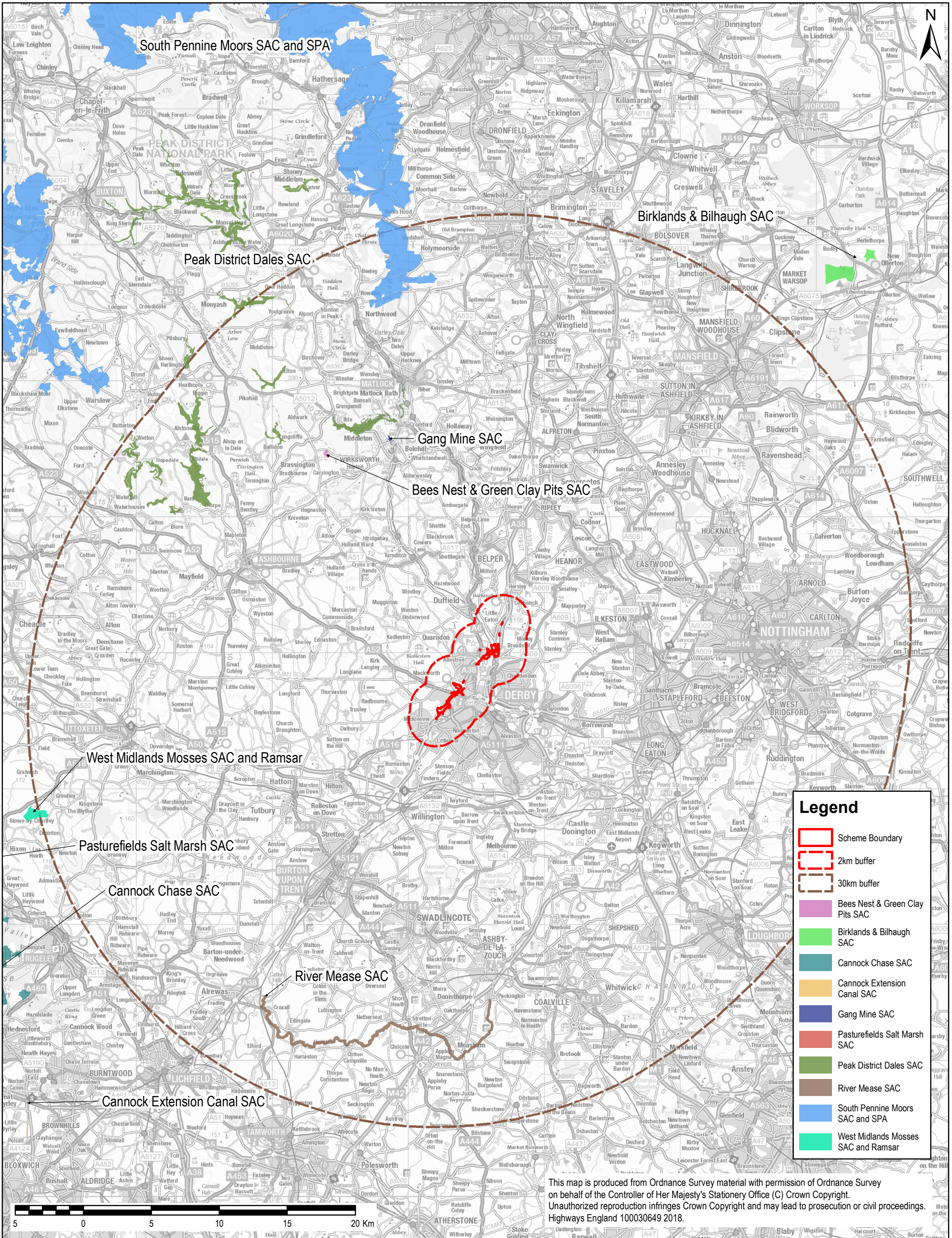


Project Title/Drawing Title			AECOM Internal Project Number		Highways England	
A38 DERBY JUNCTIONS SCHEME LOCATION PLAN			60533462		A38 Derby Junctions Project	
			Drawn	Checked	Highways England, Floor 5	
			GB	SR	2 Colmore Square	
			Date	Scale @ A3	38 Colmore Circus	
			01/10/2018	1:100,000	Birmingham	
			Purpose of issue		B4 6BN	
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File Name: \\ch-wip-001\CH\_Roads\A38 Derby Jns - PO133912 CAD\12.1 WIP\FIGURE 1.1 - LOCATION PLAN F1.mxd





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Drawing Number Figure 2		Rev 0

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## **Appendix B      Designated Site Citations**

JNCC site details for Gang Mine SAC

JNCC site details for Bee's Nest and Green Clay Pits SAC

JNCC site details for Peak District Dales SAC

JNCC site details for South Pennine Moors SAC

JNCC site details for South Pennine Moors SPA

JNCC site details for River Mease SAC

JNCC site details for West Midlands Mosses SAC

JNCC site details for West Midlands Mosses Ramsar

JNCC is a statutory adviser to UK Government and devolved administrations



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## Special Areas of Conservation (SAC)

[UK SAC summary](#)

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[Scotland](#)

[Wales](#)

[SAC selection](#)

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[Notes on nomenclature](#)

[Search for a SAC](#)

[Other designations on UK SACs](#)

[cSACs in NI which adjoin cSACs in the RoI](#)

[Annex I habitats and Annex II species occurring in the UK](#)

[Abbreviations and acronyms](#)

[Acknowledgements](#)

[References](#)

[Download spatial and summary data](#)

[Download GIS data](#)

[Marine SACs](#)

## Gang Mine

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Derbyshire and Nottinghamshire
<b>Centroid*</b>	SK286557
<b>Latitude</b>	53.09777778
<b>Longitude</b>	-1.5725
<b>SAC EU code</b>	UK0012817
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	8.26

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Dry grassland, Steppes (45%)  
Humid grassland, Mesophile grassland (49%)  
Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (6%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).



Location of Gang Mine SAC/SCI/cSAC

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

#### 6130 [Calaminarian grasslands of the \*Violetalia calaminariae\*](#)

Gang Mine is an example of **Calaminarian grasslands** in an anthropogenic context in northern England. Natural limestone outcrops supporting species typical of calaminarian grasslands are rare and small, with a very impoverished flora. This site is included to provide an example of the habitat type on sedimentary rocks; it has colonised the large area of mine workings and spoil heaps on limestone. These are notable for the wide variations in slope, aspect and soil toxicity. Floristically the site contains the richest anthropogenic Calaminarian grasslands in the UK, with abundant spring sandwort *Minuartia verna* and alpine penny-cress *Thlaspi caerulescens*. Other species of grassland vegetation present include early-purple orchid *Orchis mascula* and dyer's greenweed *Genista tinctoria*. Many of these species are likely to be distinct genotypes adapted to soils rich in heavy metals.

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

### Annex II species that are a primary reason for selection of this site

Not applicable.

### Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

*Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.*

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## Special Areas of Conservation (SAC)

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## Bee`s Nest and Green Clay Pits

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Derbyshire and Nottinghamshire
<b>Centroid*</b>	SK240545
<b>Latitude</b>	53.08666667
<b>Longitude</b>	-1.641388889
<b>SAC EU code</b>	UK0030087
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	14.7

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Inland water bodies (Standing water, Running water) (5%)  
 Heath, Scrub, Maquis and Garrigue, Phygrana (20%)  
 Dry grassland, Steppes (44%)  
 Humid grassland, Mesophile grassland (20%)  
 Inland rocks, Scree, Sands, Permanent Snow and ice (1%)  
 Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (10%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).



Location of Bee`s Nest and Green Clay Pits SAC/SCI/cSAC

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

Not applicable

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

**6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\*important orchid sites)**

### Annex II species that are a primary reason for selection of this site

**1166 Great crested newt** *Triturus cristatus*

The site encompasses a series of silica sand pits supporting a complex mosaic of acidic and calcareous grassland, with small areas of heathland communities. There are also areas of open water, flushes and communities of disturbed ground. **Great crested newts** *Triturus cristatus* occur in a number of ponds on site, which vary in size, profile and vegetation cover.

### Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

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## Special Areas of Conservation (SAC)

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## Peak District Dales

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Derbyshire and Nottinghamshire, Shropshire and Staffordshire
<b>Centroid*</b>	SK142550
<b>Latitude</b>	53.09138889
<b>Longitude</b>	-1.787777778
<b>SAC EU code</b>	UK0019859
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	2336.91

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Inland water bodies (Standing water, Running water) (0.3%)  
 Bogs, Marshes, Water fringed vegetation, Fens (0.1%)  
 Heath, Scrub, Maquis and Garrigue, Phygrana (4%)  
 Dry grassland, Steppes (43.7%)  
 Humid grassland, Mesophile grassland (13%)  
 Broad-leaved deciduous woodland (37.1%)  
 Inland rocks, Scree, Sands, Permanent Snow and ice (1.8%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).



Location of Peak District Dales SAC/SCI/cSAC

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

**6210 [Semi-natural dry grasslands and scrubland facies on calcareous substrates \(Festuco-Brometalia\) \(\\* important orchid sites\)](#)**

Peak District Dales is one of the most extensive surviving areas in England of CG2 *Festuca ovina* – *Avenula pratensis* grassland. Grasslands at this site range from hard-grazed short turf through to tall herb-rich vegetation, with transitions through to calcareous scrub and **9180 *Tilio-Acerion* forests** – a diversity of structural types unparalleled in the UK. There is also a great physical diversity due to rock outcrops, cliffs, scree and a variety of slope gradients and aspects. In contrast to examples of *Festuca* – *Avenula* grassland on chalk to the south, these grasslands are less at risk from the threat of invasion by upright brome *Bromopsis erecta* and tor-grass *Brachypodium pinnatum*, which are at the edge of their range here and have limited vigour. The relatively cold oceanic nature of the climate means that there is enrichment with northern floristic elements, such as limestone bedstraw *Galium sternerii* and globeflower *Trollius europaeus*.

**9180 [Tilio-Acerion forests of slopes, scree and ravines](#)** \* Priority feature

Representing the north-central part of its UK range, this site in the English Midlands contains a large area of *Tilio-Acerion*, dominated by ash *Fraxinus excelsior*. Locally, sycamore *Acer pseudoplatanus* is abundant. The Dales provide good examples of woodland-scrub-grassland transitions, with associated rich invertebrate populations and plant communities. Among the uncommon plants present in the woods are mezereon *Daphne mezereum* and green hellebore *Helleborus viridis*, as well as whitebeams *Sorbus* spp. on the crags.

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

**4030 [European dry heaths](#)**

**6130 [Calaminarian grasslands of the \*Violetalia calaminariae\*](#)**

**7230 [Alkaline fens](#)**

**8120 [Calcareous and calcshist scree of the montane to alpine levels \(\*Thlaspietea rotundifolii\*\)](#)**

**8210 [Calcareous rocky slopes with chasmophytic vegetation](#)**

### Annex II species that are a primary reason for selection of this site

**1092 [White-clawed \(or Atlantic stream\) crayfish](#) *Austropotamobius pallipes***

The River Dove represents **white-clawed crayfish *Austropotamobius pallipes*** in a high-quality, upland limestone river, in the north-east of the species' UK range.

**Annex II species present as a qualifying feature, but not a primary reason for site selection**

1096 [Brook lamprey](#) *Lampetra planeri*

1163 [Bullhead](#) *Cottus gobio*

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## South Pennine Moors

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Cheshire, Derbyshire and Nottinghamshire, Greater Manchester, Lancashire, North Yorkshire, Shropshire and Staffordshire, South Yorkshire, West Yorkshire
<b>Centroid*</b>	SK144960
<b>Latitude</b>	53.46027778
<b>Longitude</b>	-1.783055556
<b>SAC EU code</b>	UK0030280
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	65024.32

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Inland water bodies (Standing water, Running water) (1%)  
 Bogs, Marshes, Water fringed vegetation, Fens (42.7%)  
 Heath, Scrub, Maquis and Garrigue, Phytana (45.5%)  
 Dry grassland, Steppes (4.8%)  
 Humid grassland, Mesophile grassland (4.8%)  
 Broad-leaved deciduous woodland (1%)  
 Mixed woodland (0.1%)  
 Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas) (0.1%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

#### 4030 [European dry heaths](#)

The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath covers extensive areas, occupies the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and **7130 blanket bogs**. The upland heath of the South Pennines is strongly dominated by heather *Calluna vulgaris*. Its main NVC types are H9 *Calluna vulgaris* – *Deschampsia flexuosa* heath and H12 *Calluna vulgaris* – *Vaccinium myrtillus* heath. More rarely H8 *Calluna vulgaris* – *Ulex gallii* heath and H10 *Calluna vulgaris* – *Erica cinerea* heath are found. On the higher, more exposed ground H18 *Vaccinium myrtillus* – *Deschampsia flexuosa* heath becomes more prominent. In the cloughs, or valleys, which extend into the heather moorlands, a greater mix of dwarf shrubs can be found together with more lichens and mosses. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.

#### 7130 [Blanket bogs](#) (\* if active bog) \* Priority feature

This site represents **blanket bog** in the south Pennines, the most south-easterly occurrence of the habitat in Europe. The bog vegetation communities are botanically poor. Hare's-tail cottongrass *Eriophorum vaginatum* is often overwhelmingly dominant and the usual bog-building *Sphagnum* mosses are scarce. Where the blanket peats are slightly drier, heather *Calluna vulgaris*, crowberry *Empetrum nigrum* and bilberry *Vaccinium myrtillus* become more prominent. The uncommon cloudberry *Rubus chamaemorus* is locally abundant in bog vegetation. Bog pools provide diversity and are often characterised by common cottongrass *E. angustifolium*. Substantial areas of the bog surface are eroding, and there are extensive areas of bare peat. In some areas erosion may be a natural process reflecting the great age (9000 years) of the south Pennine peats.

#### 91A0 [Old sessile oak woods with Ilex and Blechnum in the British Isles](#)

Around the fringes of the upland heath and bog of the south Pennines are blocks of **old sessile oak woods**, usually on slopes. These tend to be dryer than those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19th century air pollution). Other components of the ground flora such as grasses, dwarf shrubs and ferns are common. Small areas of alder woodland along stream-sides add to the overall richness of the woods.

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site



Location of South Pennine Moors SAC/SCI/cSAC



**4010** [Northern Atlantic wet heaths with Erica tetralix](#)

**7140** [Transition mires and quaking bogs](#)

### **Annex II species that are a primary reason for selection of this site**

Not applicable.

### **Annex II species present as a qualifying feature, but not a primary reason for site selection**

Not applicable.

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# NATURA 2000 – STANDARD DATA FORM

## Special Protection Areas under the EC Birds Directive.

Each Natura 2000 site in the United Kingdom has its own Standard Data Form containing site-specific information. The data form for this site has been generated from the Natura 2000 Database submitted to the European Commission on the following date:

22/12/2015

The information provided here, follows the officially agreed site information format for Natura 2000 sites, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011](#) (2011/484/EU).

The Standard Data Forms are generated automatically for all of the UK's Natura 2000 sites using the European Environment Agency's Natura 2000 software. The structure and format of these forms is exactly as produced by the EEA's Natura 2000 software (except for the addition of this coversheet and the end notes). The content matches exactly the data submitted to the European Commission.

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

Further technical documentation may be found here  
[http://bd.eionet.europa.eu/activities/Natura\\_2000/reference\\_portal](http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal)

As part of the December 2015 submission, several sections of the UK's previously published Standard Data Forms have been updated. For details of the approach taken by the UK in this submission please refer to the following document:  
[http://jncc.defra.gov.uk/pdf/Natura2000\\_StandardDataForm\\_UKApproach\\_Dec2015.pdf](http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf)

More general information on Special Protection Areas (SPAs) in the United Kingdom is available from the [SPA home page on the JNCC website](#). This webpage also provides links to Standard Data Forms for all SPAs in the UK.

Date form generated by the Joint Nature Conservation Committee  
25 January 2016.



# NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),  
Proposed Sites for Community Importance (pSCI),  
Sites of Community Importance (SCI) and  
for Special Areas of Conservation (SAC)

SITE UK9007021

SITENAME Peak District Moors (South Pennine Moors Phase 1)

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## 1. SITE IDENTIFICATION

<b>1.1 Type</b> A	<b>1.2 Site code</b> UK9007021	<a href="#">Back to top</a>
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### 1.3 Site name

Peak District Moors (South Pennine Moors Phase 1)

<b>1.4 First Compilation date</b> 1996-03	<b>1.5 Update date</b> 2015-12
--	-----------------------------------

### 1.6 Respondent:

**Name/Organisation:** Joint Nature Conservation Committee

**Address:** Joint Nature Conservation Committee Monkstone House City Road Peterborough  
PE1 1JY

**Email:**

### 1.7 Site indication and designation / classification dates

<b>Date site classified as SPA:</b>	1996-03
<b>National legal reference of SPA designation</b>	Regulations 12A and 13-15 of the Conservation Habitats and Species Regulations 2010, ( <a href="http://www.legislation.gov.uk/ukxi/2010/490/contents/made">http://www.legislation.gov.uk/ukxi/2010/490/contents/made</a> ) as amended by The Conservation of Habitats and Species (Amendment) Regulations 2011 ( <a href="http://www.legislation.gov.uk/ukxi/2011/625/contents/made">http://www.legislation.gov.uk/ukxi/2011/625/contents/made</a> ).

## 2. SITE LOCATION

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## 2.1 Site-centre location [decimal degrees]:

### Longitude

-1.764166667

### Latitude

53.4675

## 2.2 Area [ha]:

45300.54

## 2.3 Marine area [%]

0.0

## 2.4 Sitelength [km]:

0.0

## 2.5 Administrative region code and name

### NUTS level 2 code

### Region Name

UKD2	Cheshire
UKE3	South Yorkshire
UKG2	Shropshire and Staffordshire
UKD3	Greater Manchester
UKE4	West Yorkshire
UKF1	Derbyshire and Nottinghamshire

## 2.6 Biogeographical Region(s)

Atlantic (100.0  
%)

## 3. ECOLOGICAL INFORMATION

### 3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

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Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
B	A222	<a href="#">Asio flammeus</a>			r	22	22	p		G	C		C	
B	A098	<a href="#">Falco columbarius</a>			r	30	30	p		G	C		B	
B	A140	<a href="#">Pluvialis apricaria</a>			r	435	435	p		M	C		C	

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory)

- species use permanent)
- Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

## 4. SITE DESCRIPTION

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### 4.1 General site character

Habitat class	% Cover
N08	40.0
N07	35.0
N09	16.0
N22	1.0
N06	1.0
N16	1.0
N10	6.0
<b>Total Habitat Cover</b>	<b>100</b>

### Other Site Characteristics

1 Terrestrial: Soil & Geology: sandstone,peat,sedimentary,acidic,nutrient-poor 2 Terrestrial: Geomorphology and landscape: hilly,escarpment,upland,valley,crag/ledges

### 4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: *Asio flammeus* at least 2.2% of the GB breeding population Count, as at 1990 and 1998 *Falco columbarius* at least 2.3% of the GB breeding population Count as at 1990 and 1998 *Pluvialis apricaria* [North-western Europe - breeding] at least 1.9% of the GB breeding population Count, as at 1990 and 1998

### 4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	J01		I
H	J02		B
H	K05		I
H	G01		I
H	F03		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	A04		I
H	A03		I
H	D05		I
H	A02		I
H	B02		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

## 4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <http://publications.naturalengland.org.uk/category/3212324>  
[http://jncc.defra.gov.uk/pdf/Natura2000\\_StandardDataForm\\_UKApproach\\_Dec2015.pdf](http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf)  
<http://publications.naturalengland.org.uk/category/6490068894089216>

## 5. SITE PROTECTION STATUS (optional)

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### 5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	99.9				

## 6. SITE MANAGEMENT

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### 6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

### 6.2 Management Plan(s):

An actual management plan does exist:

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No, but in preparation
<input checked="" type="checkbox"/>	No

### 6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

## EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

The codes in the table below are also explained in the [official European Union guidelines for the Standard Data Form](#). The relevant page is shown in the table below.

### 1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	Designated Special Protection Area	53
B	SAC (includes candidates Special Areas of Conservation, Sites of Community Importance and designated SAC)	53
C	SAC area the same as SPA. Note in the UK Natura 2000 submission this is only used for Gibraltar	53

### 3.1 Habitat representativity

CODE	DESCRIPTION	PAGE NO
A	Excellent	57
B	Good	57
C	Significant	57
D	Non-significant presence	57

### 3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophila rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion roburi-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57



### 3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	15%-100%	58
B	2%-15%	58
C	< 2%	58

### 3.1 Conservation status habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

### 3.1 Global grade habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

### 3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	15%-100%	62
B	2%-15%	62
C	< 2%	62
D	Non-significant population	62

### 3.2 Conservation status species (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

### 3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

### 3.2 Global Grade (abbreviated to 'Glo.' Or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

### 3.3 Assemblages types

CODE	DESCRIPTION	PAGE NO
WATR	Non breeding waterfowl assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code
BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code

#### 4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

#### 4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

### 5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK02	Marine Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67

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## Special Areas of Conservation (SAC)

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## River Mease

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Derbyshire and Nottinghamshire, Leicestershire, Rutland and Northamptonshire, Shropshire and Staffordshire
<b>Centroid*</b>	SK260114
<b>Latitude</b>	52.69972222
<b>Longitude</b>	-1.615555556
<b>SAC EU code</b>	UK0030258
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	23.03

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Inland water bodies (Standing water, Running water) (100%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).



Location of River Mease SAC/SCI/cSAC

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

Not applicable

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

**3260** [Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachion vegetation](#)

### Annex II species that are a primary reason for selection of this site

**1149** [Spined loach](#) *Cobitis taenia*

The River Mease is a good example of a riverine population of **spined loach** *Cobitis taenia*. It is a small tributary of the River Trent and has retained a reasonable degree of channel diversity compared to other similar rivers containing spined loach populations. It has extensive beds of submerged plants along much of its length which, together with its relatively sandy sediments (as opposed to cohesive mud) provides good habitat opportunities for the species.

**1163** [Bullhead](#) *Cottus gobio*

The Mease is an example of **bullhead** *Cottus gobio* populations in the rivers of central England. Bed sediments are generally not as coarse as other sites selected for the species, reflecting the nature of many rivers in this geographical area, but are suitable in patches due to the river's retained sinuosity. The patchy cover from submerged macrophytes is also important for the species.

### Annex II species present as a qualifying feature, but not a primary reason for site selection

**1092** [White-clawed \(or Atlantic stream\) crayfish](#) *Austropotamobius pallipes*

**1355** [Otter](#) *Lutra lutra*

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

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## Special Areas of Conservation (SAC)

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[Marine SACs](#)

## West Midlands Mosses

### Site details

<b>Country</b>	England
<b>Unitary Authority</b>	Cheshire, Shropshire and Staffordshire
<b>Centroid*</b>	SK026282
<b>Latitude</b>	52.85111111
<b>Longitude</b>	-1.961111111
<b>SAC EU code</b>	UK0013595
<b>Status</b>	Designated Special Area of Conservation (SAC)
<b>Area (ha)</b>	184.62

\* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

### General site character

Inland water bodies (Standing water, Running water) (2.3%)  
 Bogs, Marshes, Water fringed vegetation, Fens (35.5%)  
 Heath, Scrub, Maquis and Garrigue, Phygrana (5.5%)  
 Humid grassland, Mesophile grassland (3.3%)  
 Improved grassland (20.5%)  
 Broad-leaved deciduous woodland (22.5%)  
 Coniferous woodland (4.9%)  
 Mixed woodland (3.3%)  
 Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (2.2%)

[Natura 2000 standard data form](#) for this site as submitted to Europe (PDF, < 100kb).

[Interactive map](#) from MAGIC (Multi-Agency Geographic Information for the Countryside).



Location of West Midlands Mosses SAC/SCI/cSAC

### Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

### Annex I habitats that are a primary reason for selection of this site

#### 3160 Natural dystrophic lakes and ponds

West Midlands Mosses contains three pools, one at Clarepool Moss and two at Abbots Moss, that are examples of **dystrophic lakes and ponds** in the lowlands of England and Wales, where this habitat type is rare. The lake at Clarepool Moss is unusual as a dystrophic type on account of its relatively base-rich character, which is reflected in the presence of a diverse fauna and flora. The two at Abbots Moss are more typical, base-poor examples. The dystrophic lakes and ponds at this site are associated with Schwingmoor development, a characteristic of this habitat type in the West Midlands. Schwingmoor is an advancing floating raft of bog-moss *Sphagnum*, often containing NVC type M3 *Eriophorum angustifolium* bog pool community, which grows from the edge of the pool and can completely cover over the pool; the site has also been selected for this Annex I feature (**7140 Transition mires and quaking bogs**).

#### 7140 Transition mires and quaking bogs

West Midlands Mosses represents Schwingmoor vegetation. Floating rafts of *Sphagnum*-dominated vegetation have developed over semi-liquid substrates within basins. In the UK this type of *Sphagnum*-dominated vegetation with a scatter of sedges *Carex* species and cranberry *Vaccinium oxycoccos* is confined to this part of England and mid-Wales.

### Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

### Annex II species that are a primary reason for selection of this site

Not applicable.

### Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

*Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.*

# Information Sheet on Ramsar Wetlands (RIS)

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

---

## 1. Name and address of the compiler of this form:

### Joint Nature Conservation Committee

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FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

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## 2. Date this sheet was completed/updated:

Designated: 09 May 1994

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## 3. Country:

UK (England)

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## 4. Name of the Ramsar site:

Midland Meres and Mosses Phase 1

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## 5. Designation of new Ramsar site or update of existing site:

**This RIS is for:** Updated information on an existing Ramsar site

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## 6. **For RIS updates only**, changes to the site since its designation or earlier update:

### a) Site boundary and area:

**\*\* Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

**7. Map of site included:**

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

**8. Geographical coordinates (latitude/longitude):**

52 54 11 N                      02 50 25 W

**9. General location:**

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Chester, Shrewsbury, Stafford

16 component sites are located in the Shropshire/Cheshire Plain, south-west of Manchester and north-west of Birmingham.

**Administrative region:** Cheshire; Shropshire; Staffordshire

**10. Elevation** (average and/or max. & min.) (metres):    **11. Area** (hectares): 510.88

Min.      43  
Max.      120  
Mean      73

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Meres & Mosses form a geographically discrete series of lowland open water and peatland sites in the north-west Midlands of England. These have developed in natural depressions in the glacial drift left by receding ice sheets which formerly covered the Cheshire/Shropshire Plain. The 16 component sites include open water bodies (meres), the majority of which are nutrient-rich with associated fringing habitats; reed swamps, fen, carr & damp pasture. Peat accumulation has resulted in nutrient poor peat bogs (mosses) forming in some sites in the fringes of meres or completely infilling basins. In a few cases the result is a floating quaking bog or schwingmoor. The wide range of resulting habitats support nationally important flora & fauna.

**13. Ramsar Criteria:**

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

**1, 2**

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

The site comprises a diverse range of habitats from open water to raised bog.

## Ramsar criterion 2

Supports a number of rare species of plants associated with wetlands including five nationally scarce species together with an assemblage of rare wetland invertebrates (three endangered insects and five other British Red Data Book species of invertebrates).

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**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

Atlantic

**b) biogeographic regionalisation scheme** (include reference citation):

Council Directive 92/43/EEC

---

**16. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, basic, sand, clay, alluvium, peat, nutrient-rich, nutrient-poor, sandstone, sandstone/mudstone, gravel
Geomorphology and landscape	lowland, hilly, floodplain, escarpment
Nutrient status	eutrophic, mesotrophic, oligotrophic
pH	acidic, circumneutral, strongly acidic
Salinity	fresh
Soil	mainly mineral, mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Shawbury, 1971–2000) ( <a href="http://www.metoffice.com/climate/uk/averages/19712000/sites/shawbury.html">www.metoffice.com/climate/uk/averages/19712000/sites/shawbury.html</a> ) Max. daily temperature: 13.4° C Min. daily temperature: 5.2° C Days of air frost: 61.8 Rainfall: 655.7 mm Hrs. of sunshine: 1398.1

**General description of the Physical Features:**

The Meres and Mosses of the north-west Midlands comprise a series of open water and peatland sites, most of which developed in natural depressions left by the retreating ice sheets at the end of the last Ice Age. There are over 60 open water sites, or 'meres', as well as a smaller number of peatland sites, known as 'mosses'.

---

**17. Physical features of the catchment area:**

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Meres and Mosses of the north-west Midlands comprise a series of open water and peatland sites, most of which developed in natural depressions left by the retreating ice sheets at the end of



the last Ice Age. There are over 60 open water sites, or 'meres', as well as a smaller number of peatland sites, known as 'mosses'.

---

### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Sediment trapping, Recharge and discharge of groundwater, Flood water storage /  
desynchronisation of flood peaks

---

### 19. Wetland types:

Inland wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	36.2
O	Freshwater lakes: permanent	35
Other	Other	13
Tp	Freshwater marshes / pools: permanent	7.7
W	Shrub-dominated wetlands	6.1
Ts	Freshwater marshes / pools: seasonal / intermittent	2

---

### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The site's primary interest is its wide range of lowland wetland types and successional stages within a distinct biogeographical area. Waters are generally circumneutral or acidic depending on the component site's soil type, catchment size and usage. Substantial areas of open water remain in some sites, and in many cases this is fringed by extensive and varied swamp, fen and carr communities. Some basins have become peat-filled, leading in some circumstances to development of ombrotrophic conditions; of particular importance are the quaking bogs or schwingmoors.

Ecosystem services

---

### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

#### Nationally important species occurring on the site.

##### Higher Plants.

*Elatine hexandra, Eleocharis acicularis, Cicuta virosa, Thelypteris palustris, Carex elongata*

---

### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

#### Birds

#### Species Information

#### Nationally important species occurring on the site.

#### Invertebrates.

*Hagenella clathrata, Limnophila fasciata, Cararita limnaea, Lathrobium rufipenne, Donacia aquatica, Prionocera pubescens, Gonomyia abbreviata, Sitticus floricola*

### 23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic  
Archaeological/historical site  
Environmental education/ interpretation  
Livestock grazing  
Non-consumptive recreation  
Scientific research  
Sport fishing

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

### 24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+

### 25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Recreation	+	+
Current scientific research	+	+
Commercial forestry		+
Fishing: recreational/sport	+	+
Arable agriculture (unspecified)		+
Grazing (unspecified)	+	+
Hay meadows	+	

Hunting: recreational/sport	+	+
Sewage treatment/disposal		+
Irrigation (incl. agricultural water supply)		+
Mineral exploration (excl. hydrocarbons)		+
Transport route		+
Urban development		+
Non-urbanised settlements		+

## 26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

*Explanation of reporting category:*

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Eutrophication	1		+	+	+
Introduction/invasion of non-native plant species	1		+		+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

## 27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
National Nature Reserve (NNR)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	+
Site management statement/plan implemented	+	
Other		+

Special Area of Conservation (SAC)	+	
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**b) Describe any other current management practices:**

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

**29. Current scientific research and facilities:**

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

**Habitat.**

Catchment management planning

Peatland restoration & monitoring

Fen rehabilitation.

Limnology.

Hydrology.

**Environment.**

Water chemistry.

Trophic status / nutrient budgets.

Peat palaeo-ecology.

Impacts of fish.

**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Areas owned by the Local Authority and National Nature Reserves are used by schools and universities for site-base projects and individual dissertations.

National Nature Reserves are used as sites to demonstrate management-practice and use of machinery.

**31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

**Activities, Facilities provided and Seasonality.**

Variable use of sites depending on their accessibility to the general public. No major tourism or recreational use apart from some angling and boating and motor sports (water-skiing) in one or two cases. Many sites are accessible through a network of public footpaths.

**32. Jurisdiction:**

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,

European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

**33. Management authority:**

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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## **Appendix C      Supporting Screening Matrices**

Assessment of Implications on European Sites:

- Annex B Information Checklists Screening/ Appropriate Assessment
- Annex C Screening Matrix

Planning Inspectorate Advice Note 10 Habitat Regulations Assessment:

- Appendix 1 Template for Screening Matrices

## ANNEX B INFORMATION CHECKLISTS - SCREENING/ APPROPRIATE ASSESSMENT

Screening	
Project Reference: <b>A38 Derby Junctions</b>	
Date of Completion: <b>16.10.2018</b>	
Author: <b>Freya McCarthy / Hannah Procter</b>	
Verified: <b>James Riley</b>	
Have these features of the project been identified? <b>Refer to A38 Derby Junctions Environmental Statement for details.</b>	Delete as appropriate
Size, scale, area, land-take, etc	✓
Physical and Biological characteristics of area affected by the project	✓
Physical changes that will flow from the project (from excavation, piling, dredging, etc)	✓
Resource requirements (water abstraction etc)	✓
Emissions and waste (disposal to land, water or air)	✓
Transportation requirements	✓
Duration of construction, operation, etc	✓
Project programme	✓
Distance from European Site	✓
Information on qualifying interests of the European Site	✓
Cumulative impacts with other projects or plans ( <i>with indication of assumptions</i> )	✓
Sources of Information	
<i>A range of information sources may need to be consulted, these include:</i>	
<ul style="list-style-type: none"> <li>• <b>The Natura 2000 standard data form from the JNCC website</b></li> <li>• <b>Multi-Agency Geographic Information System for the Countryside (MAGIC)</b></li> <li>• <b>Data search and consultation with Derbyshire Wildlife Trust, Derby County Council, Derby City Council, Environment Agency, Highways England Area 7 (2015-2018)</b></li> <li>• <b>AECOM (2016). A38 Derby Junctions PCF Stage 2 Assessment of Implications on European Sites Report</b></li> <li>• <b>AECOM (2018). A38 Derby Junctions PCF Stage 3 Scoping Report</b></li> <li>• <b>AECOM (2018). A38 Derby Junctions PCF Stage 3 Preliminary Environmental Information Report</b></li> <li>• <b>AECOM (2018). A38 Derby Junctions Environmental Statement</b></li> </ul>	
Appropriate Assessment	
N/A	



## ANNEX C SCREENING MATRIX

Author Name:		Verified by:	
Freya McCarthy / Hannah Procter		James Riley	
Date:	16.10.18		
Natura 2000 Site under Consideration:	Gang Mine SAC; Bees Nest and Green Clay Pits SAC; Peak District Dales SAC; South Pennine Moors SAC and SPA; River Mease SAC; and West Midlands Mosses SAC and Ramsar		
Description of the project:			
<p><b>Development of the proposed A38 Derby Junctions Scheme concerns four junctions over a distance of approximately 5.5 km (A38/ A5111 Kingsway junction; A38/ A52 Markeaton junction; and A38/ A61 Little Eaton junction). The proposed scheme involves the replacement of the three roundabouts with grade-separated interchanges.</b></p>			
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European Sites by virtue of:			
Land take		None.	
Distance from the European Site or key features of the site ( <i>from edge of the project assessment corridor</i> )		<ul style="list-style-type: none"> <li>• <b>Gang Mine SAC (located approximately 19 km to the north-west of the Kingsway and Markeaton junctions; and approximately 16km to the north west of Little Eaton junction);</b></li> <li>• <b>Bees Nest and Green Clay Pits SAC (located approximately 20km to the north-west of the Kingsway and Markeaton junctions; and approximately 18km to the north-west of Little Eaton junction);</b></li> <li>• <b>Peak District Dales SAC (a number of isolated stretches – the nearest located approximately 22km to the north-west of the Kingsway and Markeaton junctions; and approximately 23 km to the north-west of Little Eaton junction);</b></li> <li>• <b>South Pennine Moors SAC and SPA (located approximately 29km to the north of the Kingsway and Markeaton junctions; and approximately 25km to the north of Little Eaton junction);</b></li> <li>• <b>River Mease SAC (located approximately 20km to the south of the Kingsway and Markeaton junctions and approximately 25km to the south of Little Eaton junction); and</b></li> <li>• <b>West Midlands Mosses SAC and Ramsar (located approximately 30km to the south-west of the Kingsway and Markeaton junctions).</b></li> </ul>	
Resource requirements ( <i>from the European Site or</i>		None.	

<i>from areas in proximity to the site, where of relevance to consideration of impacts)</i>	
Emissions (e.g. polluted surface water runoff – both soluble and insoluble pollutants, atmospheric pollution)	<b>None.</b>
Excavation requirements (e.g. impacts of local hydrogeology)	<b>None.</b>
Transportation requirements	<b>None.</b>
Duration of construction, operation, etc	<b>2021-2023 (2 years)</b>
Other	
<b>Description of avoidance and/or mitigation measures</b>	
<i>Describe any assumed (plainly established and uncontroversial) mitigation measures, including information on:</i>	
Nature of proposal	<b>N/A – refer to A38 Derby Junctions Environmental Statement for avoidance and / or mitigation measures for the proposed scheme.</b>
Location	
Evidence for effectiveness	
<i>Mechanism for delivery (legal conditions, restrictions or other legally enforceable obligations)</i>	

Characteristics of European Site(s)	
A brief description of the European Site should be produced, including information on:	
Name of European Site and its EU code	<ul style="list-style-type: none"> <li>• <b>Gang Mine SAC - UK0012817</b></li> <li>• <b>Bee's Nest and Green Clay Pits SAC- UK0030087</b></li> <li>• <b>Peak District Dales SAC- UK0019859</b></li> <li>• <b>South Pennine Moors SAC - UK0030280</b></li> <li>• <b>South Pennine Moors SPA- UK9007021</b></li> <li>• <b>River Mease SAC - UK0030258</b></li> <li>• <b>West Midlands Mosses SAC - UK0013595</b></li> <li>• <b>West Midlands Mosses Ramsar- UK11043</b></li> </ul>
Location and distance of the European Site from the proposed works	<p><b>Gang Mine SAC (located approximately 19km to the north-west of the Kingsway and Markeaton junctions; and approximately 16 km to the north west of Little Eaton junction);</b></p> <p><b>Bees Nest and Green Clay Pits SAC (located approximately 20 km to the north-west of the Kingsway and Markeaton junctions; and approximately 18 km to the north-west of Little Eaton junction);</b></p> <p><b>Peak District Dales SAC (a number of isolated stretches – the nearest located approximately 22km to the north-west of the Kingsway and Markeaton junctions; and approximately 23km to the north-west of Little Eaton junction);</b></p> <p><b>South Pennine Moors SAC and SPA (located approximately 29km to the north of the Kingsway and Markeaton junctions; and approximately 25 km to the north of Little Eaton junction);</b></p> <p><b>River Mease SAC (located approximately 20km to the south of the Kingsway and Markeaton junctions and approximately 25km to the south of Little Eaton junction); and</b></p> <p><b>West Midlands Mosses SAC and Ramsar (located approximately 30km to the south-west of the Kingsway and Markeaton junctions).</b></p>
European Site size	<ul style="list-style-type: none"> <li>• <b>Gang Mine SAC - 8.26 ha</b></li> <li>• <b>Bee's Nest and Green Clay Pits SAC- 14.7 ha</b></li> <li>• <b>Peak District Dales SAC - 2336.91 ha</b></li> <li>• <b>South Pennine Moors SAC – 65024.32 ha</b></li> <li>• <b>South Pennine Moors SPA- 45300.54 ha</b></li> <li>• <b>River Mease SAC – 23.03 ha</b></li> <li>• <b>West Midlands Mosses SAC – 184.62 ha</b></li> <li>• <b>West Midlands Mosses Ramsar- 510.88 ha</b></li> </ul>
Key features of the European Site including the primary reasons for selection and any other qualifying interests	<ul style="list-style-type: none"> <li>• <b>Gang Mine SAC- The site is an example of Calaminarian grassland, a rare and small area of natural limestone which supports important floral species such as sandwort <i>Minuartia verna</i>, early-purple orchid <i>Orchis mascula</i> and alpine penny-cress <i>Thlaspi caerulescens</i>.</b></li> <li>• <b>Bee's Nest and Green Clay Pits SAC- The site consists of a complex mosaic of acidic and calcareous grassland provides an area of silica sand pits which have created open water habitats for Great crested newts <i>Triturus cristatus</i>.</b></li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Peak District Dales SAC-</b> This site is the most extensive surviving grassland habitat which comprises of hard-grazed short turf through to tall-herb rich vegetation. The site also transitions into calcareous scrub and Tilio-Acerion forests which are physically diverse comprising of rocky outcrop, cliffs, screes and a range of slope gradients.</li> <li>• <b>South Pennine Moors SPA-</b> The site is inhabited by a breeding population of Merlin <i>Falco columbarius</i>, Short-eared Owl <i>Asio flammeus</i> and European Golden Plover <i>Pluvialis apricaria</i>.</li> <li>• <b>South Pennine Moors SAC –</b> The site comprises of European dry heaths, blanket bogs and old sessile oak woodland.</li> <li>• <b>River Mease SAC –</b> The watercourse is a small tributary of the River Trent and supplies a channel diversity. The site consists of a riverine population of spine loach <i>Cobitis taenia</i> and bullhead <i>Cottus gobio</i>.</li> <li>• <b>West Midlands Mosses Ramsar-</b> The site comprises a diverse range of habitats from open water to raised bog. The site supports a number of rare species of plants associated with wetlands including five nationally scarce species together with an assemblage of rare wetland invertebrates (three endangered insects and five other British Red Data Book species of invertebrates).</li> <li>• <b>West Midlands Mosses SAC –</b> The site contains three ponds which are prime examples of dystrophic lakes and ponds in lowland habitat. This type of habitat is rare and its dystrophic feature has provided a base-rich character which reflects in the presence of diverse fauna and flora.</li> </ul>
<p>Vulnerability of the European Site – any information available from the standard data forms on potential effect pathways</p>	<p><b>Prioritised issues / vulnerabilities for the European site(s) from the Natural England Site Improvement Plans are detailed below:</b></p> <ul style="list-style-type: none"> <li>• <b>Gang Mine SAC –</b> Air pollution; impact of atmospheric nitrogen deposition affecting grasslands on soils rich in heavy metals.</li> <li>• <b>Bee's Nest and Green Clay Pits SAC –</b> Air pollution; impact of atmospheric nitrogen deposition affecting dry grasslands and scrublands in chalk or limestone (important orchid site).</li> <li>• <b>Peak District Dales SAC –</b> inappropriate scrub control, fertiliser use, water pollution, inappropriate weirs dams and other structures, overgrazing, undergrazing, inappropriate water levels, disease, invasive species, climate change, air pollution impact of atmospheric nitrogen deposition, vehicles, forestry and woodland management, direct impact from third party e.g. flytipping, feature location / extent / condition unknown of some unmapped interest features and public access / disturbance - affecting habitats, White-clawed crayfish,</li> </ul>

	<p><b>Brook lamprey, Bullhead.</b></p> <ul style="list-style-type: none"> <li>• <b>South Pennine Moors SAC and SPA</b> – hydrological changes, managed rotational burning, low breeding success / poor recruitment, inappropriate management practices, public access / disturbance, air pollution impact of atmospheric nitrogen deposition, wildfire / arson, vehicles, overgrazing, forestry and woodland management, changes in species distributions, disease, undergrazing, invasive species and planning permission (general) affecting habitats and birds.</li> <li>• <b>River Mease SAC</b> – water pollution, drainage, inappropriate weirs dams and other structures, invasive species, siltation, water abstraction affecting rivers with floating vegetation and White-clawed crayfish, Spined loach, Bullhead and Otter.</li> <li>• <b>West Midlands Mosses SAC and Ramsar</b> – water pollution, hydrological changes, air pollution impact of atmospheric nitrogen deposition, inappropriate scrub control, game management pheasant rearing, forestry and woodland management, and fragmentation affecting acid peat-stained lakes and ponds and wet mires.</li> </ul>
<p>European site conservation objectives- where these are readily available</p>	<p><b>The Gang Mine SAC, Bee's Nest and Green Clay Pits SAC, South Pennine Moors and West Midland Mosses SAC sites state the same conservation objectives as follows:</b></p> <p><b>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</b></p> <ul style="list-style-type: none"> <li>• The extent and distribution of qualifying natural habitats</li> <li>• The structure and function (including typical species) of qualifying natural habitats, and</li> <li>• The supporting processes on which qualifying natural habitats rely.</li> </ul> <p><b>River Mease SAC and the Peak District Dales SAC states the following conservation objectives:</b></p> <p><b>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats and habitats of qualifying species</b></p> <ul style="list-style-type: none"> <li>• The structure and function (including typical species) of qualifying natural habitats</li> <li>• The structure and function of the habitats of qualifying species</li> <li>• The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely</li> <li>• The populations of qualifying species, and,</li> <li>• The distribution of qualifying species within the site.</li> </ul> <p><b>South Pennine Moors SPA site states the following conservation objectives:</b></p>

	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> <li>• The extent and distribution of the habitats of the qualifying features</li> <li>• The structure and function of the habitats of the qualifying features</li> <li>• The supporting processes on which the habitats of the qualifying features rely</li> <li>• The population of each of the qualifying features, and,</li> <li>• The distribution of the qualifying features within the site.</li> </ul>
<p><b>Assessment Criteria</b></p> <p>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Site.</p>	
<p><b>None.</b></p>	
<p><b>Initial Assessment</b></p> <p>The key characteristics of the site and the details of the European Site should be considered in identifying potential impacts.</p> <p><i>Describe any likely changes to the site arising as a result of:</i></p>	
Reduction of habitat area	<p><b>None.</b></p> <p><b>No potential impacts on European sites were identified.</b></p> <p><b>It is not anticipated that the construction and operation of the proposed A38 Derby Junctions Scheme will have any impacts on European sites.</b></p> <ul style="list-style-type: none"> <li>• No European sites are within 2km of the proposed scheme.</li> <li>• Bats are not a qualifying interest for any of the European sites within 30km of the proposed scheme.</li> <li>• The proposed scheme does not cross or lie adjacent to any watercourses which are designated in part or wholly as a SAC, cSAC, pSAC, SPA, pSPA or Ramsar site.</li> <li>• South Pennine Moors SAC/ SPA is the nearest SPA site (and the only SPA site within 30km). However, no effective pathway is considered to exist in regards to flight paths or feeding areas of birds from the proposed scheme to the SPA.</li> <li>• The West Midland Mosses Ramsar/ SAC is the nearest Ramsar site (and the only Ramsar site within 30km). However, no effective pathway is considered to exist in regards to flight paths or feeding areas of birds from the proposed scheme to the</li> </ul>
Disturbance to key species	
Habitat or species fragmentation	
Reduction in species density	
Changes in key indicators of conservation value (water quality, etc)	
Climate change	

	<b>Ramsar site.</b>
<i>Describe any likely impacts on the European Site as a whole in terms of:</i>	
Interference with the key relationships that define the structure of the site	<b>None.</b>
Interference with the key relationships that define the function of the site	<b>None.</b>
<i>Indicate the significance as a result of the identification of impacts set out above in terms of:</i>	
Reduction of habitat area	<b>None.</b>
Disturbance of key species	<b>None.</b>
Habitat or species fragmentation	<b>None.</b>
Loss	<b>None.</b>
Fragmentation	<b>None.</b>
Disruption	<b>None.</b>
Disturbance	<b>None.</b>
Changes to key elements of the site (e.g water quality, hydrological regime etc)	<b>None.</b>

Describe from the above those elements of the project, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	
<b>None.</b>	
<i>Outcome of screening stage</i>	<b>Not Likely to be Significant Effects</b>
<i>Are the appropriate statutory environmental bodies in agreement with this conclusion</i>	<b>YES</b> <b>(See Appendix E of HRA-No Significant Effects Report for consultation response received from Natural England 13.12.18)</b>

## **HRA Screening Matrices for A38 Derby Junctions Scheme**

### **Potential Effects**

Potential effects upon the European site(s) which are considered within the submitted HRA report (HE514503-ACM-EBD-A38\_SW\_PR\_ZZ-RP-EG-0017) are provided in the table below.

### **Effects considered within the screening matrices**

<b>Designation</b>	<b>Effects described in submission information</b>	<b>Presented in screening matrices as</b>
Gang Mine SAC Bee's Nest and Green Clay Pits SAC Peak District Dales SAC South Pennine Moors SAC South Pennine Moors SPA River Mease SAC West Midlands Mosses SAC West Midlands Mosses Ramsar	<ul style="list-style-type: none"><li>• Reduction of habitat area</li><li>• Disturbance of key species</li><li>• Habitat or species fragmentation</li><li>• Reduction of species density</li><li>• Changes in key indicators of conservation value (e.g. water quality)</li><li>• Climate change</li></ul>	<ul style="list-style-type: none"><li>• Habitat loss</li><li>• Loss of species</li><li>• Disturbance to key habitats or species during construction and/or operation e.g. as a result of noise, changes in water and / or air quality, climate change, fragmentation.</li></ul>



## STAGE 1: SCREENING MATRICES

The European sites included within the screening assessment are:

- Gang Mine SAC
- Bee's Nest and Green Clay Pits SAC
- Peak District Dales SAC
- South Pennine Moors SAC
- South Pennine Moors SPA
- River Mease SAC
- West Midlands Mosses SAC
- West Midlands Mosses Ramsar

Evidence for, or against, likely significant effects on the European site(s) and its qualifying feature(s) is detailed within the footnotes to the screening matrices below.

### Matrix Key:

✓ = Likely significant effect **cannot** be excluded

✗ = Likely significant effect **can** be excluded

C = construction

O = operation

D = decommissioning

Where effects are not relevant to a particular feature the matrix cell is formatted as follows:



Note:

The HRA covers the construction and operation phases of the Scheme. The Scheme is not considered to have a decommissioning stage as it is expected to be in place in perpetuity. Therefore no decommissioning impacts are discussed and greyed out in the matrix (see Section 2.3; page 5).

## HRA Screening Matrix 1: Gang Mine SAC

Name of European site and designation: Gang Mine SAC												
EU Code: UK0012817												
Distance to NSIP: Located approximately 19 km to the north-west of the Kingsway and Markeaton junctions; and approximately 16 km to the north west of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Calaminarian grasslands of the <i>Violetalia calaminariae</i>	*a						*b	*b		*c	*c	

- a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).
- b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).
- c** There are no effects of the Scheme on Gang Mine SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).

## HRA Screening Matrix 2: Bee's Nest and Green Clay Pits SAC

Name of European site and designation: Bee's Nest and Green Clay Pits SAC												
EU Code: UK0030087												
Distance to NSIP: Located approximately 20 km to the north-west of the Kingsway and Markeaton junctions; and approximately 18 km to the north-west of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Semi-natural dry grassland and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (important orchid site)	<b>✖a</b>						<b>✖b</b>	<b>✖b</b>		<b>✖c</b>	<b>✖c</b>	
Great crested newt ( <i>Triturus cristatus</i> )	<b>✖a</b>			<b>✖d</b>	<b>✖d</b>		<b>✖b</b>	<b>✖b</b>		<b>✖c</b>	<b>✖c</b>	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

**b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km), and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

**c** There are no effects of the Scheme on Bee's Nest and Green Clay Pits SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).

**d** Site is vulnerable to loss of species during construction and/or operation; however no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

### HRA Screening Matrix 3: Peak District Dales SAC

Name of European site and designation: Peak District Dales SAC												
EU Code: UK0012817												
Distance to NSIP: Located approximately 19 km to the north-west of the Kingsway and Markeaton junctions; and approximately 16 km to the north west of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Semi-natural dry grassland and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (important orchid site).	*a						*b	*b		*c	*c	
<i>Tilio-Acerion</i> foresta of slopes, screes and ravines	*a						*b	*b		*c	*c	
European dry heaths	*a						*b	*b		*c	*c	
Calaminarian grasslands of the <i>Violetalia calaminariae</i>	*a						*b	*b		*c	*c	
Alkaline fens	*a						*b	*b		*c	*c	
Calcareous and calcshist screes of the montane to alpine	*a						*b	*b		*c	*c	

Name of European site and designation: Peak District Dales SAC												
EU Code: UK0012817												
Distance to NSIP: Located approximately 19 km to the north-west of the Kingsway and Markeaton junctions; and approximately 16 km to the north west of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
levels ( <i>Thlaspietea rotundifolii</i> )												
Calcareous rocky slopes with chasmophytic vegetation	*a						*b	*b		*c	*c	
White-clawed (or Atlantic stream) crayfish ( <i>Austropotamobius pallipes</i> )	*a			*d	*d		*b	*b		*c	*c	
Brook lamprey ( <i>Lampetra planeri</i> )	*a			*d	*d		*b	*b		*c	*c	
Bullhead ( <i>Cottus gobio</i> )	*a			*d	*d		*b	*b		*c	*c	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

**b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

- c** There are no effects of the Scheme on Peak District Dales SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).
- d** Site is vulnerable to loss of species during construction and/or operation; however no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

# HRA Screening Matrix 4: South Pennine Moors SAC

Name of European site and designation: South Pennine Moors SAC												
EU Code: UK0030280												
Distance to NSIP: Located approximately 29 km to the north of the Kingsway and Markeaton junctions; and approximately 25 km to the north of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
European dry heaths	*a						*b	*b		*c	*c	
Blanket bogs	*a						*b	*b		*c	*c	
Old sessile oak woods with Ilex and Blechnum in the British Isles	*a						*b	*b		*c	*c	
Northern Atlantic wet heaths with Erica tetralix	*a						*b	*b		*c	*c	
Transition mires and quaking bogs	*a						*b	*b		*c	*c	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

**b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

**c** There are no effects of the Scheme on South Pennine Moors SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).



## HRA Screening Matrix 5: South Pennine Moors SPA

Name of European site and designation: South Pennine Moors SPA												
EU Code: UK9007021												
Distance to NSIP: Located approximately 29 km to the north of the Kingsway and Markeaton junctions; and approximately 25 km to the north of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Short-eared owl ( <i>Asio flammeus</i> ) at least 2.2% of the GB breeding population Count, as at 1990 and 1998.	*a			*d	*d		*b	*b		*c	*c	
Merlin ( <i>Falco columbarius</i> ) at least 2.3% of the GB breeding population Count as at 1990 and 1998.	*a			*d	*d		*b	*b		*c	*c	
The European Golden Plover ( <i>Pluvialis apricaria</i> ) at least 1.9% of the GB breeding population Count, as at 1990 and 1998.	*a			*d	*d		*b	*b		*c	*c	

- a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).
- b** Site is vulnerable to disturbance e.g. from changes in water and air quality, noise; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).
- c** There are no effects of the Scheme on South Pennine Moors SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).
- d** Site is vulnerable to loss of species during construction and/or operation; however no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

## HRA Screening Matrix 6: River Mease SAC

Name of European site and designation: River Mease SAC												
EU Code: UK0030258												
Distance to NSIP: Located approximately 20 km to the south of the Kingsway and Markeaton junctions and approximately 25 km to the south of Little Eaton junction.												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Watercourses of plain to montane levels with the <i>Ranunculation fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	*a						*b	*b		*c	*c	
Spined loach ( <i>Cobitis taenia</i> )	*a			*d	*d		*b	*b		*c	*c	
Bullhead ( <i>Cottus gobio</i> )	*a			*d	*d		*b	*b		*c	*c	
White-clawed (or Atlantic stream) crayfish ( <i>Austropotamobius pallipes</i> )	*a			*d	*d		*b	*b		*c	*c	
Otter ( <i>Lutra lutra</i> )	*a			*d	*d		*b	*b		*c	*c	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

- b** Site is vulnerable to disturbance e.g. from changes in water and air quality, noise; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).
- c** There are no effects of the Scheme on River Mease SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).
- d** Site is vulnerable to loss of species during construction and/or operation; however no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

## HRA Screening Matrix 7: West Midlands Mosses SAC

Name of European site and designation: West Midlands Mosses SAC												
EU Code: UK0013595												
Distance to NSIP: Located approximately 30km to the south-west of the Kingsway and Markeaton junctions												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Natural dystrophic lakes and ponds	*a						*b	*b		*c	*c	
Transition mires and quaking bogs	*a						*b	*b		*c	*c	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

**b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

**c** There are no effects of the Scheme on West Midlands SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).

## HRA Screening Matrix 8: West Midlands Mosses Ramsar

Name of European site and designation: West Midlands Mosses Ramsar												
EU Code: UK11043												
Distance to NSIP: Located approximately 30km to the south-west of the Kingsway and Markeaton junctions												
European site features	Likely effects of NSIP / No Significant Effects of NSIP											
Effect	Habitat loss			Loss of species			Disturbance to key habitats or species			In combination effects		
Stage of Development	C	O	D	C	O	D	C	O	D	C	O	D
Diverse range of habitats from open water to raised bogs.	*a						*b	*b		*c	*c	
Supports a number of rare species of plants associated with wetlands including five nationally scarce species together with an assemblage of rare wetland invertebrates (three endangered insects and five other British Red Data Book species of invertebrates).	*a			*d	*d		*b	*b		*c	*c	

**a** Site is vulnerable to direct habitat loss during construction; however it is located too far from the Scheme (>2km) for this to be a realistic impact pathway (see Section 3.5; page 8).

**b** Site is vulnerable to disturbance e.g. from changes in water and air quality; however it is located too far from the Scheme (>2km) and no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

- c** There are no effects of the Scheme on West Midlands SAC therefore it is not considered to merit further consideration; no in-combination effects with other projects or plans are anticipated (see Section 3.6; page 9).
- d** Site is vulnerable to loss of species during construction and/or operation; however no habitat or hydrological links from the Site to the Scheme exists for there to be a realistic impact pathway (see Section 3.5; page 8).

## Appendix D Finding of No Significant Effects Report (screening)

<b>Project Name:</b>	A38 Derby Junctions (the Scheme)	
<b>European Site(s) under Consideration:</b>	Six European sites identified within 30km of the Scheme (see details below).	
<b>Date:</b>	<b>Author(Name/ Organisation):</b>	<b>Verified (Name/ Organisation):</b>
01.11.18	Hannah Procter - AECOM	James Riley - AECOM
<b>Name and location of European Site(s):</b> <ul style="list-style-type: none"> <li>• <b>Gang Mine SAC</b> (located approximately 19km north-west of Kingsway and Markeaton junctions; and approximately 16km north-west of Little Eaton junction);</li> <li>• <b>Bees Nest and Green Clay Pits SAC</b> (located approximately 20km north-west of Kingsway and Markeaton junctions; and approximately 18km north-west of Little Eaton junction);</li> <li>• <b>Peak District Dales SAC</b> (a number of isolated stretches – the nearest located approximately 22km north-west of Kingsway and Markeaton junctions; and approximately 23km north-west of the Little Eaton junction);</li> <li>• <b>South Pennine Moors SAC and SPA</b> (located approximately 29 km north of Kingsway and Markeaton junctions; and approximately 25km to the north of the Little Eaton junction);</li> <li>• <b>River Mease SAC</b> (located approximately 20km south of Kingsway and Markeaton junctions; and approximately 25km to the south of Little Eaton junction);</li> <li>• <b>West Midlands Mosses SAC and Ramsar</b> (located approximately 30km south-west of Kingsway and Markeaton junctions).</li> </ul>		
<b>Description of the project:</b> The A38 Derby Junctions scheme comprises improvement to three at grade junctions located west and north of Derby along the A38. The junctions cover a distance of approximately 5.5km (A38/ A5111 Kingsway junction; A38/ A52 Markeaton junction; and A38/ A61 Little Eaton junction). The Scheme involves the replacement of the three roundabouts with grade-separated interchanges.		
<b>Is the project directly connected with or necessary to the management of the site (provide details)?</b> No		
<b>Are there other projects or plans that together with the project being assessed could affect the site (provide details)?</b> No		
<b>The Assessment of Significance of Effects</b>		
<b>Describe how the project (alone or in combination) is likely to affect the European Site.</b> No impacts.		
<b>Explain why these effects are not considered significant.</b> <ul style="list-style-type: none"> <li>• No European sites are within 2km of the Scheme.</li> <li>• Bats are not a qualifying interest for any of the European sites within 30km of the Scheme.</li> </ul>		



- The Scheme does not cross or lie adjacent to any watercourses which are designated in part or wholly as a SAC, cSAC, pSAC, SPA, pSPA or Ramsar site.
- South Pennine Moors SAC/ SPA is the nearest SPA site (and only SPA site within 30km). However, no effective pathway is considered to exist in regards to flight paths or feeding areas of birds from the Scheme to the SPA.
- The West Midland Mosses Ramsar/ SAC is the nearest Ramsar site (and only Ramsar within 30km). However, no effective pathway is considered to exist in regards to flight paths or feeding areas of birds from the Scheme to the Ramsar site.

**List of agencies consulted: provide contact name and telephone or e-mail address.**

Internet data search on JNCC and MAGIC websites.

Andy Stubbs

Lead Adviser at Natural England

Planning and Licensing

Area Delivery - East Midlands Area Team

Natural England

Apex Court

City Link

Nottingham

NG2 4LA

Tel: 02080261978

Mobile: 07785716811

**Response to consultation.**

Natural England confirmed that they are satisfied with the conclusion of no likely significant effect on European sites (Gang Mine SAC; Bees Nest and Green Clay Pits SAC; Peak District Dales SAC; South Pennine Moors SAC and the Peak District Moors (South Pennine Moors Phase 1) SPA; the River Mease SAC; and West Midlands Mosses SAC). This is provided works are undertaken in strict accordance with the details submitted and industry good practice is applied regarding pollution prevention. Refer to Natural England consultation letter dated 13.12.18 provided in Appendix E.

**Data Collected to carry out the Assessment**

**Who carried out the assessment?**

AECOM Infrastructure & Environment UK Ltd

**Authors:**

**Hannah Procter**

Hannah Procter is a Principal Consultant (Ecology) with over 10 years' experience in environmental consultancy. She is a Full Member of the Chartered Institute of Ecology and Environmental Management (MIEEM) and Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA). She holds a Natural England survey license for great crested newts and bats. She has experience in undertaking AIES on major road infrastructure schemes within the last 3 years; including the A46 Coventry and PCF Stage 0 preliminary screening studies for RIS2.

**Dr James Riley**

Dr James Riley is a Technical Director in the AECOM Ecology Department who leads the UK Habitat Regulations Assessment. He has been undertaking HRA and AIES since 2003 and has undertaken hundreds of HRAs for plans and projects, including for Highways England. He has given evidence on HRA to planning inspectors, lectured on HRA at Imperial College, provided HRA training to the Royal

Town Planning Institute and contributed articles to the Habitat Regulations Assessment Journal. He is a Chartered Environmentalist and member of the Chartered Institute of Ecology and Environmental Management.
<b>Sources of data:</b>
Internet data search on JNCC and MAGIC websites.
<b>Level of assessment completed:</b>
Screening (Stage 1).
<b>Where can the full results of the assessment be accessed and viewed?</b>
Refer to Figures and Designated Site Citation Information within this report.

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# Appendix E

Natural	England	Screening	Consultation
Response			

Date: 13 December 2018  
Our ref: 241554  
Your ref: AIES SCREENING DAS PRE APP - THREE JUNCTION  
IMPROVEMENTS, A38 DERBY JUNCTIONS = A38/A511 KINGSWAY  
JUNCTION



Hannah Proctor

Hornbeam House  
Crewe Business Park  
Electra Way  
Crewe  
Cheshire  
CW1 6GJ

**BY EMAIL ONLY**

T 0300 060 3900

Dear Hannah

**Assessment of the Implications (of Highways and/or road projects) on European Sites (AIES):  
Screening Consultation  
DAS PRE APP - THREE JUNCTION IMPROVEMENTS, A38 DERBY JUNCTIONS = A38/A511  
KINGSWAY JUNCTION**

Thank you for your consultation dated 11 December 2018.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Whilst not a statutory requirement under The Conservation of Habitats and Species Regulations 2017, competent authorities are encouraged to seek the advice of Natural England early in the process when considering whether projects would be likely to have a significant effect on a European site.

The screening consultation submitted to us does not predict any likely significant effects on Gang Mine SAC, Bee's Nest and Green Clay Pits SAC, Peak District Dales SAC, South Pennine Moors SAC and the Peak District Moors (South Pennine Moors Phase 1) SPA, the River Mease SAC and West Midlands Mosses SAC. Natural England advises that, if undertaken in strict accordance with the details submitted, and provided that the good practice listed below is applied, we are satisfied with the conclusion of no likely significant effect on these sites.

Industry good practice should be followed regarding pollution prevention.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

These works may provide opportunities to incorporate features which are beneficial to wildlife. Highways England should consider securing measures to enhance the biodiversity of the site. This is in accordance with Paragraph 118 of the NPPF. Additionally, we would draw your attention to Section 40 of the Natural Environment and Rural Communities Act (2006) which states that '*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity*'. Section 40(3) of the same Act also states that '*conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat*'.

Should you wish to discuss this response please do not hesitate to contact us at [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours sincerely

Andy Stubbs  
Lead Adviser  
Planning and Licensing  
Area Delivery  
East Midlands Area Team