highways england

Smart Motorways Programme

Jacobs Atkins JV

M56 Junction 6 to 8

Habitat Regulations Assessment (HRA)

Stage 1 Screening Report

February 2018

Notice

This document and its contents have been prepared and are intended solely for Highways England's information and use in relation to the Smart Motorways Programme.

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1. Introduction

1.1 The M56 Junction 6 - 8 Scheme

1.1.1 Highways England has commissioned the Jacobs Atkins Joint Venture (JAJV) to design and assess a proposed Smart Motorway (SM) All Lane Running (ALR) scheme on the M56 between Junction 6 and Junction 8, referred to in this report as the 'Proposed Scheme'. The M56 is the North Cheshire Motorway connecting Cheshire, North Wales and the West Midlands (via the M6 and A556) to the Greater Manchester Conurbation. It also serves Manchester Airport at Junction 5. Significant sections of this strategic route suffer from low peak hour speeds, poor journey time reliability and high traffic flows. Highways England expects to commence construction of the Proposed Scheme in 2020 and is expected to be completed by 2022, including commissioning.

1.1.2 The Proposed Scheme will provide a hardened central reserve with a new rigid concrete barrier (RCB) to replace the existing deformable metal vehicle restraint system (VRS). A widened RCB will be provided to the east of Sunbank Lane bridge to accommodate proposed lighting columns within the central reserve.

1.1.3 The Proposed Scheme comprises the design and construction of ALR between J6 and J8 in both directions, by installing 7 new gantries (9 existing gantries will be retained and upgraded where possible). The gantries will be fitted with Advanced Motorway Indicators (AMIs), New Message Signs and/or Advanced Directional Signs (ADS), strategic signs (MS3s), Variable Messaging Signs (MS4) and emergency refuge areas (ERAs), in accordance with the standards as set out in IAN 161/15.

1.1.4 The Proposed Scheme aims to relieve congestion and smooth traffic flow; improve journey times and journey time reliability; maintain safety levels for all road users; and support the economic development of the nation.

1.1.5 The Proposed Scheme length is approximately 6.5km. Currently the network in this area is dual 3-lane (D3M) with hard shoulder, although there is an extended parallel merge / diverge arrangement for the east facing slip roads at Junction 7. It is understood that the construction period is anticipated to start in 2020 and be completed in 2022.

1.1.6 All work during the Proposed Scheme would be confined to the Highways England network, requiring no new land.

1.2 Background to and Purpose of this Report

1.2.1 An Environmental Assessment Report (EAR) is being prepared by Jacobs Atkins Joint Venture (JAJV) as a Project Control Framework (PCF) deliverable to meet Highways England's requirements to identify manage and monitor the effects of all its major developments. Nationally protected site impacts are discussed in the EAR and not in this document.

1.2.2 Under the European Community Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC 1992a) (the Habitats Directive), all member states are required to implement a network of protected sites and maintain their ecological integrity. This network of sites is collectively termed 'Natura 2000 Sites'. The aim of the Natura 2000 network of sites is to maintain long-term survival of Europe's most valuable and threatened species and habitats.

1.2.3 The information in this report informs the HRA stage 1 screening, from which the Competent Authority (Highways England) makes the decision as to whether or not an Appropriate Assessment (AA) is necessary in compliance with Regulation 48 of the Habitat Regulations 1994, amended by the Habitat Regulations 2010 (regulations 60 to 67), implementing Article 6(3) of the Habitats Directive (92/43/EEC).

1.2.4 This document is a draft 'HRA stage 1 Screening Report', which will inform a decision as to whether or not a full AA is required. This report has been prepared in accordance with;

- the Design Manual for Roads and Bridges (DMRB), Volume 11, Section 4, 'Assessment of Implications on European Sites' (HD44/09; Highways Agency, 2009)
- DMRB, Volume 11, Section 3, 'Environmental Assessment Techniques' (HD 213/11; Highways Agency, 2011a)
- Interim Advice Note 141/11 'Assessment of Implications on European Sites' (Highways Agency, 2011b) and the requirements of the Habitat Regulations Assessment (HRA).

1.2.5 The Habitat Regulations require the Competent Authority, before deciding to give any consent, permission or other authorisation, to undertake an AA of the implications for the conservation objectives of a given European site or Ramsar site, where a project:

- is likely to have a significant effect on a European site or Ramsar site (either alone or in combination with other plans or projects)
- is not directly connected with or necessary to the management of the site.

1.2.6 Sufficient information has been provided to support this HRA Stage 1 Screening Report. Consultation will then be undertaken with the Statutory Environmental Body (SEB), which in this instance will be Natural England (NE). This draft report will be issued to NE for their comments and to seek agreement to the outcome.

1.2.7 The following designations fall within the definition of a European site:

- Special Protection Areas (SPAs), including potential SPAs (pSPAs)
- Special Areas of Conservation (SACs), including candidate or possible SACs (cSACs or pSACs)

1.2.8 Ramsar sites are international sites designated under the Ramsar Convention, but are still required to be considered in the HRA.

1.2.9 This HRA Stage 1 Screening Report would contribute towards the Appropriate Assessment Report, should this be required.

1.3 Scope of the Assessment

1.3.1 This HRA Stage 1 Screening Report sets out the following:

- a list of the European sites or Ramsar sites to be included in the screening assessment, linked to a figure that shows their location (in Section 3 and Figure 1 in Appendix A)
- identification of potential pathways by which the Proposed Scheme may affect these European sites or Ramsar sites (Section 3)
- identification of possible impacts to these European sites or Ramsar sites and assessment of whether the effects are significant (Section 3)
- identification of possible effects in combination with other plans or projects in the area (Section 4)
- conclusion of the HRA Stage 1 Screening (in Section 5)
- a glossary of terms is provided in Appendix B
- DMRB Assessment of Implications on European Sites (HD44/09) Annex C Screening Matrix

2. Assessment Methodology

2.1 Summary of Methods

2.1.1 This assessment has been completed using stated in Highway's England's guidance (IAN 141/11, 2011 and SD44/09, 2009). A summary of these methods is provided in the sections below.

Determination of the European sites and Ramsar sites to be included in the HRA

2.1.2 The screening process in accordance with HD44/09 takes account of European sites or Ramsar sites within 2 km of the Proposed Scheme, or within 30 km if bats are one of the qualifying features, or where sites are hydrologically linked to the Proposed Scheme. As such, the MAGIC website (www.natureonthemap.naturalengland.org.uk) was used to locate such sites within 30 km of the Proposed Scheme.

2.1.3 This assessment has been completed using the methodology stated in Highway's England's guidance (IAN 141/11, 2011 and SD44/09, 2009). A summary of these methods is provided in the sections below.

Obtaining Information on the European Sites and Ramsar Sites

2.1.4 The JNCC website (www.jncc.defra.gov.uk) was used to obtain citations for the designated sites, particularly the Natura 2000 data form, where available.

2.1.5 Consultation on the HRA is a critical element of the process and early engagement with Natural England (NE) is of particular importance. This consultation draft will be issued to NE for their comment, following authorisation from Highways England, in order to seek agreement with the outcome of the HRA Stage 1 Screening Assessment. The final HRA Stage 1 Screening Report will be issued with the EAR.

Assessing the Impacts of the Proposed Scheme 'Alone'

2.1.6 Assessing the impacts of the Proposed Scheme 'alone' includes determination of whether the Proposed Scheme is directly connected with or necessary to the management of the site, and identifying the potential effects on any European or Ramsar site(s). The method applied has adopted the source-pathway-receptor model, whereby a source and a significant pathway need to be present before the receptor (i.e. the European or Ramsar site components) can be affected. This can briefly be described as an activity or action resulting from the Proposed Scheme (the source), through a medium such as air pollution (the pathway) to result in a negative effect at any European or Ramsar site(s) (the receptor).

2.1.7 The potential for these pathways and identified impacts to result in a likely significant effect on a European or Ramsar site has been identified and assessed by suitably qualified ecologists.

2.1.8 Potential impacts during the construction and operational phases specific to this HRA Screening include:

- habitat/species direct loss and/or damage within existing Highways England operational land
- indirect effects resulting from habitat loss and/or disturbance extending beyond the Highways England operational land
- habitat/species severance and/or severance of ecosystems/territories
- change in edaphic conditions (aspect, slopes, soil/nutrient conditions, water availability/quality etc.)
- change in air emissions (air and noise)
- change in surface water run-off (flow, volume and quality)

Assessing the Impacts of the Proposed Scheme 'In Combination'

2.1.9 The Habitat Regulations 2010 (as amended) require an assessment of the Proposed Scheme in-combination with other plans and projects. A desk study search was completed, which took into consideration both current and proposed developments likely to affect European or Ramsar site Proposed Scheme.

3. European Sites Potentially Affected by the Proposed Scheme and Assessment of Potential Impacts

3.1 Protected Sites

3.1.1 There are 13 European Sites or Ramsar sites identified within 30 km of the Proposed Scheme, namely four Ramsar sites; seven SACs and two SPAs. As none of the designated sites have bat species as a qualifying feature, Rostherne Mere Ramsar site, located within 2 km of the Proposed Scheme, is the only relevant site to be considered for the purpose of this HRA screening assessment (as illustrated in Figure 1).

Rostherne Mere Ramsar

3.1.2 Rostherne Mere Ramsar site is a wetland of international importance. It is 'the deepest, one of the largest and most northerly of the meres of the Shropshire-Cheshire Plain' (JNCC, 1981), this characteristic being the site's qualifying feature for Ramsar designation. The Ramsar site sits within a wider area designated at a National rather than European level, as a Site of Special Scientific Interest (SSSI) and a National Nature Reserve (NNR). This wider area lies approximately 250 m to the south of the Proposed Scheme, at its closest point.

3.1.3 Rostherne Mere's distinguishing feature is its depth and size. Due to these characteristics, it is the last freshwater body in the area to freeze in winter and is consequently an important refuge for a number of noteworthy birds in severe weather. There is little submerged vegetation, with the immediate surrounding habitat consisting of a narrow band of common reed (Phragmites spp.) swamp. The catchment slopes consist of woodland and moderately intensively farmed grassland. Other notable habitats include the remains of a peat bog in the north and willow beds in the south (JNCC, 2008).

3.1.4 The factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects are eutrophication and introduction / invasion of non-native animal species[1].

3.2 Description of the Proposed Scheme Impacts in the Vicinity of Rostherne Mere Ramsar

Potential Construction Impacts

3.2.1 It is understood that the construction period is anticipated to start in 2020 and be completed in 2022. Potential impacts arising from construction on Rostherne Mere include:

- noise and vibration disturbance from plant machinery and construction activities;
- hydrological change and pollution events;
- air quality impacts from dust and construction debris; and
- temporary habitat loss for construction.

Potential Operational Impacts

3.2.2 Potential impacts arising during the operational phase include:

- noise disturbance from increased traffic flows;
- changes in air quality from increased traffic flows; and
- pollution events and increased surface water run-off into the highways drainage network.

[1] http://jncc.defra.gov.uk/pdf/RIS/UK11060.pdf

Habitat/Species

3.2.3 Rostherne Mere is designated as Ramsar criterion 1: Rostherne Mere is one of the deepest and largest of the meres of the Shropshire-Cheshire Plain. Its shoreline is fringed with common reed Phragmites australis. Noteworthy fauna include three bird species; Great cormorant (*Phalacrocorax carbo carbo*), Great Bittern (*Stellaris stellaris*) and water rail (*Rallus aquaticus*).

3.2.4 All proposed construction works will be isolated to the existing Highways England boundary. The closest point within the Ramsar site to the Proposed Scheme is in Gale Bog to the western end of the lake, lying approximately 350 m to the south of Junction 7-8 and separated by a buffer of farmed grassland. The habitats that will be directly impacted by the Proposed Scheme are only within the Highways England boundary. These habitats consist of poor semi-improved grassland, broadleaved woodland and scrub, all of which are unlikely to support the wetland bird species stated as noteworthy fauna for Rostherne Mere Ramsar site. As such, no adverse impacts upon Rostherne Mere Ramsar site, in respect of habitat and species, during the construction or operational phase are predicted to occur as a result of the Proposed Scheme.

3.2.5 There would be no likely significant effects upon Rostherne Mere Ramsar Site in respect of habitats and species.

Hydrological Change

3.2.6 Rostherne Mere Ramsar site has a single inflow to the south from Little Mere and The Mere via Rostherne Brook. The three meres drain a catchment of agricultural, urban and parkland and Rostherne Mere's single over-ground outflow is Blackburn's Brook to the east. Rostherne Mere's status as eutrophic indicates pre-existing high nutrient levels (JNCC, 1981). Rostherne Mere's low aquatic macrophyte diversity, together with non-native invasive species i.e. Canadian pondweed (Elodea canadensis) reflects high phosphorus loadings (Natural England, 2014) and a total phosphorus class of 'Bad' under the Water Framework Directive (WFD). Rostherne Mere is currently designated within a Nitrate Vulnerability Zone (NVZ) (Environment Agency, 2016). The key contributions of phosphorus pollution are listed as livestock 45% and septic tanks 20%. Highway contributions are <1% presenting a negligible influence on the lake's nutrient levels (Environment Agency, 2016).

3.2.7 The Proposed Scheme will avoid all discharge into Rostherne Mere's catchment. The closest waterbody receiving highways discharge is Birkin Brook, immediately to the south of Junction 7 and approximately 800m downstream of the Ramsar site. As such, there are no pathways for discharge pollution to reach Rostherne Mere during both the construction and operational phases. It is predicted that the Proposed Scheme will have no adverse effect on water quality and/or volume of Rostherne Mere Ramsar site, with potential localised improvements to watercourse downstream.

3.2.8 There would be no likely significant effects upon Rostherne Mere Ramsar Site in respect of hydrological change predicted to occur at this site.

Air Quality

3.2.9 Potential construction impacts such as dust and debris pollution has the potential to have an adverse impact within the immediate surroundings of the scheme and given the distance between Rostherne Mere and the Proposed Scheme, which is over 350m at its closest point, there are no anticipated impacts arising from the construction phase.

3.2.10 To quantify the air quality impact of the Proposed Scheme during the operational phase, the baseline concentrations of airborne Nitrogen Oxides (NOx) resulting from the emissions from the existing road traffic on the M56 have been compared to those resulting from predicted traffic emissions with the Proposed Scheme in place, and the predicted cumulative change when modelled in-combination with the additional Proposed Greater Manchester Schemes as detailed in Section 4.2. The Proposed Greater Manchester Schemes include M6 Junction 21a to 26, M60 Junctions 1 to 4 and Junctions 24 to 28 and M62 Junctions 10 to 12.

3.2.11 These values are presented in Table 1 below.

3.2.12 The following scenarios were modelled:

- Baseline (2015) modelled annual mean
- Future year (2020) Do-Minimum– without the Proposed Scheme
- Future year (2020) Do-Something – with the Proposed Scheme alone
- Future year (2020) Do-Something – with all Proposed Greater Manchester Schemes in place (in-combination).

3.2.13 The air quality modelling used receptors for human health; for this assessment the closest receptor is Cherry Tree Farm, located between the Proposed Scheme and the Ramsar site, approximately 100 m closer to the Proposed Scheme than Rostherne Mere. Therefore, although the modelled air quality values are not taken at the Ramsar site, they are closer to the Proposed Scheme than the Ramsar site and will be a reasonable worst case reflection of any likely significant effects on the site from air quality changes.

3.2.14 The annual mean NOx levels were compared to the Air Quality Objective (AQO) for vegetation which is 30ug/m3.

Table 1. Total NOx concentrations in each model scenario at the closest receptor to Rostherne Mere.

Baseline (2015)	Do-Minimum (2020)	M56 alone (2020)		Cumulative (2020)	
		Do-Something	Change	Do-Something	Change
42.2 ug/m^3	29.4 ug/m^3	29.6 ug/m^3	+ 0.2 ug/m^3	29.4 ug/m^3	0.0 ug/m^3

3.2.15 In both model scenarios the NOx AQO is not exceeded, although results are close to the AQO. However, even if the assumed values were above 30ug/m3, there is no discernible change in concentrations under either the cumulative case or the M56 alone; as any change of less than 0.5ug/m3 is "imperceptible" (Highways Agency, 2013).

3.2.16 There would be no likely significant effects upon Rostherne Mere Ramsar Site in respect of air quality.

Noise

3.2.17 There are no anticipated impacts arising in respect of noise on the Ramsar Site or the notable bird fauna during the construction phase due to the distance between Rostherne Mere and the Proposed Scheme. At its closest point the construction activity with the highest potential for generating increased noise and vibration levels (gantry installation) will be over 520m away from the Ramsar site.

3.2.18 During the operational phase the calculated increase in noise between the Do-Minimum scenario and Do-Something scenario (M56 Proposed Scheme alone and not cumulative assessment) is <1db, an imperceptible increase in noise levels at the site.

3.2.19 As such, no adverse noise impacts are anticipated to arise at Rostherne Mere Ramsar, consequently, there would be no likely significant effect on noteworthy fauna, namely bittern, great cormorant and water rail.

3.2.20 There would be no likely significant effects upon Rostherne Mere Ramsar Site in respect of noise.

4. Appraisal of Other Plans and Projects

4.1 Summary of Methods

4.1.1 This assessment has determined that when assessed in isolation, there are no likely significant effects on any European sites or Ramsar sites within 2 km of the Proposed Scheme, or for any such sites within 30 km of the Proposed Scheme where bats are a qualifying feature, or where sites are hydrologically linked to the Proposed Scheme. However, the Habitat Regulations 2010 (as amended), require an assessment of the Proposed Scheme both alone and in-combination with other plans and projects.

4.1.2 In line with the guidance contained in HD44/09, the in-combination assessment includes consideration of the following:

- trunk road and motorway plans or projects which have been confirmed
- development projects with valid planning permissions (including those under consideration by the planning authority)
- local plan commitments and indicative timescales for implementation.

4.1.3 Information identifying the possible effects of the Proposed Scheme 'in combination' with other plans or projects was gathered using a desk study search of information online. The following criteria have been used to identify developments:

- Schemes since August 2013
- Employment land (B1, B2 and B8 only): 3ha + within 2km of the Proposed Scheme
- Residential: 200 + dwellings within 2km of the Proposed Scheme
- Residential: any site area and any number of dwellings within 200m of the Proposed Scheme
- Major Minerals and Waste applications within 2km of the Proposed Scheme
- Nationally Significant Infrastructure Projects (NSIPs) within 2km of the Proposed Scheme
- Transport infrastructure proposals within 2km of the Proposed Scheme (trunk roads or motorways only)

4.2 Other Highway Developments

4.2.1 Current and planned highways projects, likely to influence the traffic volumes on the Proposed Scheme include:

- A556 Knutsford to Bowden: Improved the A556 trunk road between Knutsford and Bowdon by creating a modern dual carriageway road. The existing A556 became a single carriageway road with facilities for pedestrians, cyclists and horse riders
- A6 Manchester Airport Relief Road: 10 km of a new 2-lane dual carriageway on an east-west route from the A6 near Hazel Grove (south east Stockport), via the 4 km of existing A555 to Manchester Airport and the link road to the M56
- M56 new Junction 11a: Proposals for a new junction to link the M56 to the A533 at Runcorn, creating an improved link to the new Mersey Gateway Bridge from the south
- M6 Junction 21a to 26: Improving flows on the M6 by upgrading to a Smart Motorway between these junctions
- M60 Junctions 1 to 4 and Junctions 24 to 28: Improving flows on the M60 by upgrading to a Smart Motorway between these junctions
- M62 Junctions 10 to 12: improving flows on the M62 by upgrading to a Smart Motorway between these junctions.

4.2.2 Of the schemes listed above, the A556 Knutsford to Bowden is the only project of close proximity to Rostherne Mere Ramsar site. The HRA report for the A556 stated that there would be no adverse effects on the Ramsar site alone or in-combination with any plans or projects (Jacobs, 2013). This was not assessed in-combination with any Smart Motorway Schemes as there were no schemes under construction or in planning at that time but other adjacent highway schemes were reviewed.

4.2.3 The air quality modelling indicates that the in-combination effects of all Greater Manchester Schemes will have a favourable impact on air quality at Rostherne Mere compared to construction of the Proposed Scheme alone.

4.2.4 There are limited viable pathways between the Proposed Scheme and other highway developments. Therefore, it is anticipated that in-combination with other highways projects, the Proposed Scheme would not result in any likely significant adverse effects on European sites or Ramsar sites.

4.3 Other Non-Highways Developments

4.3.1 Using the criteria described above, additional non-highways developments were identified (Appendix D). The other non-highway developments are either small scale or geographically distant from Rostherne Mere. On this basis it is considered that there are limited viable pathways between the Proposed Scheme and other development projects (sources) jointly on Rostherne Mere (receptor). There would therefore be no likely significant effects in combination on Rostherne Mere.

5. Conclusions

5.1.1 The Rostherne Mere Ramsar site is the only designated European/international site that is relevant to this HRA. The HRA Stage 1 Screening Report has identified that there is sufficient information to conclude that both in isolation and in-combination with other projects and plans, the Proposed Scheme would not have a likely significant effect on Rostherne Mere Ramsar site and no further stages of the HRA will be considered necessary.

5.1.2 The distance of the Proposed Scheme from Rostherne Mere Ramsar site, lack of pathways and improvement of source impacts means that effects from construction and operation of the Proposed Scheme will be negligible. Discharge points for the Proposed Scheme are downstream of Rostherne Mere Ramsar site where there will be localised benefits to water through improved drainage design features; such as pollution filters. Although, both airborne emissions and disturbance through noise are predicted to increase during the construction phase of the Proposed Scheme, it is not considered to result in any likely significant effects on Rostherne Mere. The distance separating the Proposed Scheme from the Ramsar site is considered a significant buffer to mitigate the effects of disturbance and emissions. Consequently, the nature conservation objectives of the site would not be compromised by the Proposed Scheme as there are no viable source-pathways.

6. References

English Nature (1999). Habitats Regulation Guidance Note 3: The Determination of Likely Significant Effect under The Conservation (Natural Habitats &c) Regulations 1994.

Environmental Agency (June 2016) Nitrate Vulnerable Zone (NVZ) Designation 2017 Eutrophication (Lakes). *Rostherne Mere and The Mere at Mere NVZ (Rostherne Mere)* http://apps.environment-agency.gov.uk/static/documents/nvz/NVZ2017_EL115_Rostherne_Mere_and_the_Mere_at_Mere_Datasheet.pdf- (Accessed 13th June 2017)

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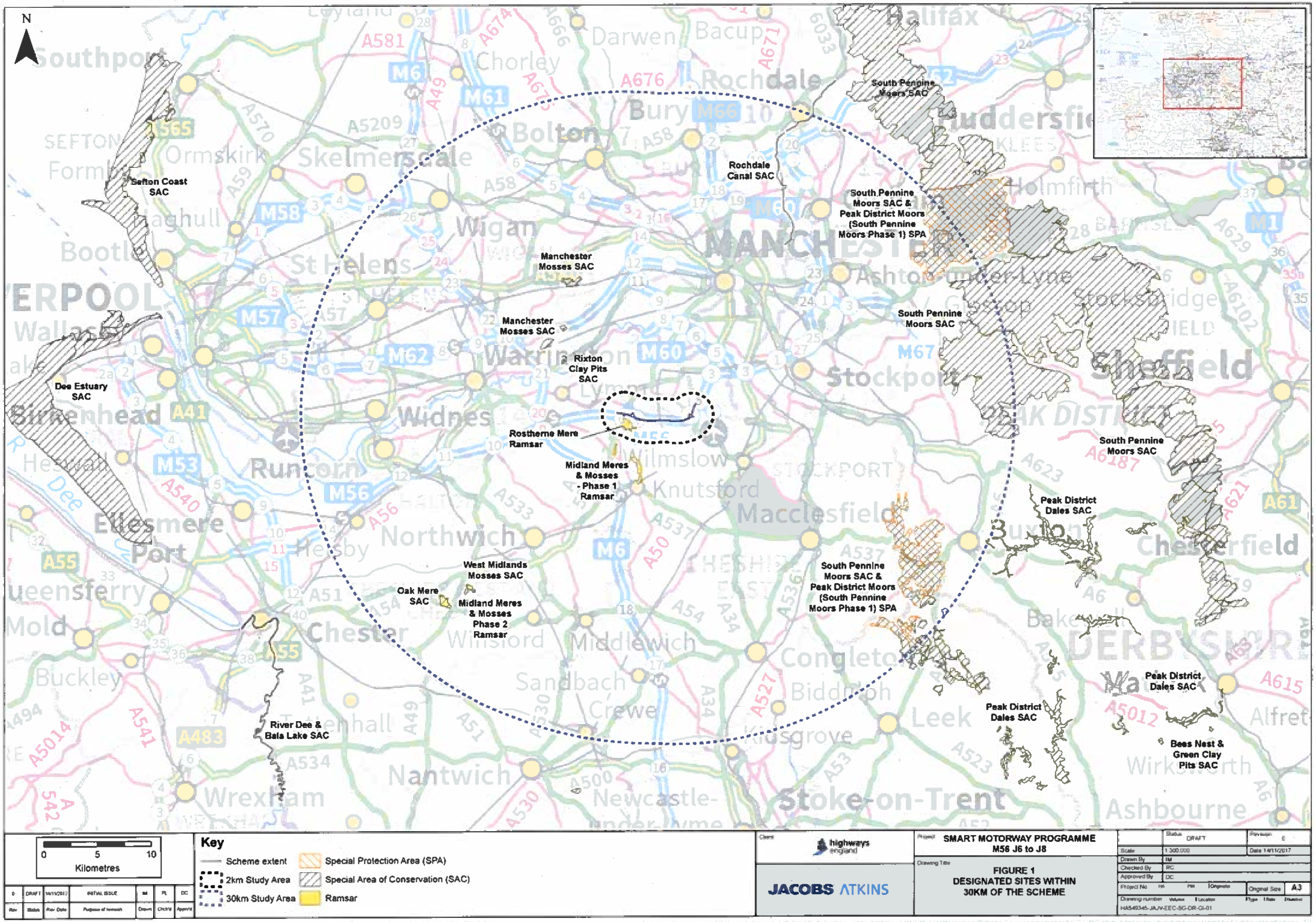
Ramsar, Iran (1971). The Ramsar Sites Criteria – *The nine criteria for identifying Wetlands of International Importance.* http://www.ramsar.org/sites/default/files/documents/library/ramsarsites_criteria_eng.pdf (Accessed 13th June 2017)

Appendix A. Figure

Figure 1: European Designated Sites within 30 km of the Proposed Scheme



Rev	Status	Rev Date	Purpose of revision	Drawn	Check'd	Apprv'd
0	DRAFT	14/11/2017	INITIAL ISSUE	IM	PL	DC

Client: highways england

JACOBS ATKINS

Project: SMART MOTORWAY PROGRAMME
M56 J6 to J8

Drawing Title: FIGURE 1
DESIGNATED SITES WITHIN 30KM OF THE SCHEME

Status	DRAFT	Revision	0
Scale	1:300,000	Date	14/11/2017
Drawn By	IM		
Checked By	RC		
Approved By	DC		
Project No	HA	Original Size	A3
Drawing number	HA549345-JAJV-EEC-SG-DR-GI-01		

Appendix B. Glossary

Conservation of Natural Habitats, Flora and Fauna

The main aim of the Council Directive 92/43/EEC is to promote the maintenance of biodiversity. This is achieved through measures which include establishment of a European ecological network of designated sites, with the intention of maintenance or, restoration, at a favourable conservation status of a range of habitats and species in their natural range.

European (Designated) Sites

For the purpose of the advice consideration should be given to assessment of the implications on those sites making up the European ecological network, also referred to as Natura 2000 sites. These should be taken as including:

1. Sites of Community Importance (SCIs);
2. Special Protection Areas (SPAs), and potential SPAs (pSPAs);
3. Special Areas of Conservation (SACs) and candidate or possible SACs (cSACs or pSACs); and

Ramsar

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty whose mission is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".

Objectivity

A high standard of proof is required at all stages of any assessment of the implications of projects. During the screening stage objective evidence should be provided to justify the outcome. During the remaining HRA stages (including Appropriate Assessment) if they are required, it will be necessary to provide sufficient evidence to prove any conclusions beyond any reasonable scientific doubt.

Significant Effects

For the purposes of this assessment, the definition from Habitat Regulations Note 3. The Determination of Likely Significant Effect under the Habitat Regulations 1994, (English Nature 1999), has been adopted as follows: "*any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated, but excluding trivial or inconsequential effects.*"

Appendix C. Rostherne Mere Ramsar HD 44/09 Screening Matrix

Table C.1. Rostherne Mere Screening Matrix

Project Name:	M56 J6 – 8 SM Scheme	
Natura 2000 Site under Consideration:	Rostherne Mere Ramsar Site	
Date:	**Author(Name/Organisation):**	**Verified (Name/Organisation):**
October 2017		
Description of Project: *Describe any likely direct, indirect or secondary impacts of the Proposed Scheme (either alone or in combination with other plans or projects) on the European Site by virtue of:*		
Size and scale	Upgrading a 6.5 km stretch of the M56 to a Smart Motorway Scheme.	
Land-take	n/a	
Distance from the European site or key features of the site	Lies approximately 350 m to the south of the Smart Motorway Scheme	
Resource requirements	None predicted from Ramsar	
Emissions	No adverse impacts predicted	
Excavation requirements	None predicted from Ramsar	
Transportation requirements	None predicted in Ramsar boundary	
Duration of construction, operation, etc.	Construction period of approximately 3 years total.	
Other	n/a	
Description of Avoidance and/or Mitigation Measures: *Describe any assumed (plainly established and uncontroversial) mitigation measures, including information on:*		
No mitigation measures specific to the Rostherne Mere Ramsar site have been identified. Pollution control features are part of the detailed drainage design for the Proposed Scheme and will be implemented as part of the Environmental Management Plan.		
Characteristics of European Site(s): *A brief description of the European Site should be produced, including information on:*		
Name of European Site and EU Code	Rostherne Mere Ramsar Site UK11060	
Location and distance of the European Site from the proposed works	Rostherne Mere lies approximately 350m to the south of the Proposed Scheme at its nearest point	
European Site size	79.76 ha	
Key features of the European Site including the primary reasons for selection and any other qualifying interests	Rostherne Mere is the deepest and one of the largest meres of the Shropshire-Cheshire Plain and is fringed with common reed *Phragmites australis – NVC S4* (Rodwell 1995) Additional noteworthy fauna includes:	

	Great cormorant, *Phalacrocorax carbo*, NW Europe, representing an average of 1.1% of the GB population (5-year peak mean 1998/9-2002/3) Great bittern, *Botaurus stellaris*, representing an average of 1% of the GB population (5-year peak mean 1998/9-2002/3) Water rail, *Rallus aquaticus*, representing an average of 1.3% of the GB population (5-year peak mean 1998/9-2002/3)
Vulnerability of the European Site	The site is vulnerable to eutrophication on-site and off-site, lying within a Nitrogen Vulnerability Zone and stated as having a total phosphorus class of 'Bad' by the WFD. The introduction of invasive/non-native species are a further potential major impact.
European Site conservation objectives	Not applicable as this is a Ramsar site under criterion 1. However, threats to the favourable status of the site (identified above) are a) eutrophication and b) introduction/invasion by non-native species. Therefore, it is essential that the water quality and quantity is not adversely affected and that control measures are in place to prevent introduction/invasion by non-native species.
Initial Assessment *Describe any likely changes to the site arising as a result of:*	
Reduction of habitat area	There will be no reduction in habitat area.
Disturbance to key species	No key species (birds) will be disturbed.
Habitat or species fragmentation	Fragmentation will not occur.
Reduction in species density	There will be no reduction in species density.
Changes in key indicators of conservation value	No changes in key indicators are anticipated.
Climate change	n/a
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with the key relationships that define the structure of the site	None – the Proposed Scheme will not affect key relationships of the site as there is sufficient distance and existing barriers between the site and the Proposed Scheme. Therefore, there are no effective pathways.
Interference with the key relationships that define the function of the site	None – the Proposed Scheme will not affect key relationships of the site as there will be no significant changes with the hydrological interactions between the site and the Proposed Scheme.
Indicate the significance as a result of the identification of impacts set out above in terms of:	
Reduction of habitat area	Not significant
Disturbance to key species	Not significant
Habitat or species fragmentation	Not significant
Loss	Not significant
Fragmentation	Not significant
Disruption	Not significant
Disturbance	Not significant
Change to key elements of the site	Not significant
Describe from the above those elements of the Proposed Scheme, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	

Outcome of screening stage (delete as appropriate).	~~Significant Effects Are Likely/ Sufficient Uncertainty Remains/~~ Not Likely to be Significant Effects
Are the appropriate statutory environmental bodies in agreement with this conclusion (delete as appropriate and attach relevant correspondence).	**YES**

From:
Sent: 11 January 2018 13:23
To:
Subject: [EXTERNAL] Smart Motorways M56 J6 to J8: HRA Consultation
Attachments: HE549345-JAJV-EGN-SG_MULTI-RP-LE-0003.pdf

Thank you for the consultation below

We have reviewed the attached Habitat Regulations screening assessment. Based on the information provided, we agree with the conclusion of no likely significant effect

Kind regards

Cheshire, Greater Manchester, Merseyside and Lancashire Area Team
Natural England

www.naturalengland.org.uk

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected an landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings web conferencing.

CUSTOMER SERVICE EXCELLENCE

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From:
Sent: 04 December 2017 12:40

Smart Motorways Programme M56 6-8
Jacobs Atkins JV

Dear Natural England,

We are writing to you as part of our Habitat Regulations Assessment for Smart Motorway proposals between Junction 6 (Manchester Airport) and Junction 8 (A556) of the M56.

Please find attached the Habitat Regulations Assessment Stage 1 Screening Report for your comment.

We have concluded that the Rostherne Mere Ramsar site is the only designated European/international site that is relevant
to this HRA and that there is sufficient information to conclude that both in isolation and in-combination with other projects and plans, the Proposed Scheme would not have a likely significant effect on Rostherne Mere Ramsar site and no further stages of the HRA will be considered necessary.

We acknowledge that the Christmas period is fast approaching, please can you advise of a date comments can be returned?

Regards

Appendix D. In Combination Projects

Table D.1. 'In Combination' Projects

Location	Development Description	Distance to Scheme (m)	Development Type	Planning Application Id	Local Planning Authority	Planning Status	Plan or Application Submission Date	Predominant Use Class	Number of Housing Units	Employment Area (ha)
	Erection of a 82,395m² extension to the north-west elevation of Terminal 2 to provide extended passenger processing facilities; erection of extension to upper level Terminal 2 forecourt and re-configuration of the Terminal 2 multi-storey car park top deck for departures traffic; erection of extension to lower level Terminal 2 forecourt and reconfiguration of existing forecourt for arrivals traffic and dedicated coach set down; creation of an elevated access road to Terminal 2 direct from the elevated roundabout on M56 spur; erection of a 7 storey extension to the existing Terminal 2 multi-storey car park to provide 2,592 additional car parking spaces and erection of a new 7 storey multi-storey car park for	630	Transport	110720/FO/2015/S2	Manchester City Council	Planning Consent	42341	Sui generais	0	0

Location	Development Description	Distance to Scheme (m)	Development Type	Planning Application Id	Local Planning Authority	Planning Status	Plan or Application Submission Date	Predominant Use Class	Number of Housing Units	Employment Area (ha)
	4,236 vehicles (providing a net increase of 2,553 car parking spaces); re-alignment of internal roads at the northwest corner of Terminal 2; with associated landscape works and the demolition of Terminal 1 and the associated multi-storey car park (a loss of 2,006 spaces).									
	Construction of the A6 to Manchester Airport Relief Road, incorporating within the City of Manchester one new road junction; one new rail bridge crossing; one balancing pond for drainage purposes; a pedestrian and cycle route and associated landscaping, lighting, engineering and infrastructure works	2500	Transport	13/4355M (CEC), DC053678 (SMBC), 104094/FO/2013/S2 (MCC)	Stockport Council, Cheshire East Council, Manchester City Council	Planning Consent	Nov-13	N/A	0	0
	Erection of five, two-storey dwelling houses with vehicular accesses, landscaping and boundary treatment	161	Housing	114493/FO/2016	Manchester City Council	Planning Consent	Jan-17	C3	5	0

Location	Development Description	Distance to Scheme (m)	Development Type	Planning Application Id	Local Planning Authority	Planning Status	Plan or Application Submission Date	Predominant Use Class	Number of Housing Units	Employment Area (ha)
	Erection of a new detached dwelling following demolition of existing.	200	Housing	89634/FUL/16	Trafford Council	Planning Consent	Oct-16	C3	1	0
	Erection of 52 x 2 storey dwelling houses and 6 blocks of 3 storey apartments to create 78 apartments, together with new access roads, landscaping and parking.	30	Housing	109394/FO/2015/S2	Manchester City Council	Planning Consent	Aug-15	C3	52	0

Location	Development Description	Distance to Scheme (m)	Development Type	Planning Application Id	Local Planning Authority	Planning Status	Plan or Application Submission Date	Predominant Use Class	Number of Housing Units	Employment Area (ha)
	Insertion of mezzanine floors and erection of a 4 storey extension to a Class B8 warehouse building (approved under ref. 107568/MO/2014/S2) to provide an additional 60,750 sq. m of Class B8 floor space and 3,980sq. m. of ancillary Class B1(a) office accommodation; erection of a part 2/part 5 storey decked parking facility to provide 580 car parking spaces; alterations to the north-western elevation to form an additional 9 external docking doors; erection of 8 external staircases, formation of a 14 space overflow/visitor car park and provision of a new vehicular exit to the rear of the building.	190	Employment	110694/FO/2015/S2	Manchester City Council	Planning Consent	Nov-15	B8	0	4.8

Location	Development Description	Distance to Scheme (m)	Development Type	Planning Application Id	Local Planning Authority	Planning Status	Plan or Application Submission Date	Predominant Use Class	Number of Housing Units	Employment Area (ha)
	Reserved Matters application (appearance, landscaping, layout and scale) for the erection of warehouse and distribution (Use Class B8) units with ancillary offices (Use Class B1), totalling 12,659m² (gross internal area), with associated car parking and servicing	190	Employment	107275/MO/2014/S2	Manchester City Council	Planning Consent	Oct-14	B8	0	4.8

References

Cheshire East Council, (2017. Cheshire East Local Plan: *Local Plan Strategy 2010-2030, July 2017.*

JBA Consulting (2013). Cheshire East Council, *Cheshire East Development Strategy and Emerging Policy Principles Habitats Regulation Assessment, January 2013*