Habitats Regulations Assessment of the City of York Council Local Plan

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SUMMARY

The role of a Habitats Regulations Assessment (HRA) is to assess the impact of the proposed policies and allocations on the internationally important wildlife sites in and around the City. Together, these Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites are known as European sites.

HRA asks very specific questions of a local plan. Firstly, it *screens* the plan to identify if there is a *risk* that certain policies or allocations may have a *likely significant effect on* a European site, *alone or* (if necessary) *in-combination* with other plans and projects. If the risk of likely significant effects can be ruled out, then the plan may be adopted but if they cannot, the plan must be subjected to the greater scrutiny of an *appropriate assessment* to find out if the plan will have *an adverse effect on the integrity* of the European sites. Typically, a Plan may only be adopted if an adverse effect on the integrity of the site can be ruled out. If necessary, a plan should be amended to *avoid* or *mitigate* any likely conflicts, which usually means that some policies or allocations will need to be modified or, more unusually, may have to be removed altogether.

This document takes full account of up to date policy and law. Where appropriate, this HRA also draws on draft HRAs completed in 2014 and 2017 and, in particular, those produced in 2018 and 2019 which accompanied formal submission of the Plan. It also refers to further evidence provided by the Defence Infrastructure Organisation in late 2019.

The City of York Council (the *Council*) formally submitted its Regulation 19 Publication Draft of its Local Plan in May 2018. This was accompanied by an HRA dated April 2018. Following advice by Natural England and the production of new evidence, the 2018 HRA was replaced by a new version in February 2019 which was subsequently presented during the initial stages of the Examination in Public in December 2019.

As the Plan and HRAs evolved, the outcomes changed. These changes are important and are summarised below.

The 2018 HRA concluded that the Plan would not have an adverse effect on the integrity of any European sites. However, Natural England challenged this outcome in terms of possible impacts from recreational pressure at the Strensall Common, Skipwith Common, Lower Derwent Valley and River Derwent European sites, and from air pollution on Strensall Common and the River Derwent. This prompted the production of visitor surveys and the re-evaluation of existing air quality data.

The changes required to take account of this new advice and evidence prompted production of the 2019 HRA which, importantly, recommended the deletion of policies SS19/ST35 and H59(A)[1] from the Plan.

These outcomes persist in this, the 2020 edition which not only includes greater scrutiny of relevant policies but, at the request of the Inspectors, also comprises changes to confirm compliance with case law. The findings of the current HRA are summarised below.

All policies and associated allocations within the Regulation 19 Publication Draft (and subsequently proposed modifications) of the Local Plan (2018) have been screened; the 'screening' results can be found in Table 5, Table 6 and Appendix B. Overall, this HRA found that likely significant effects could be ruled out for the vast majority of policies and allocations which meant they could be excluded from any further scrutiny.

However, it was not possible to rule out likely significant effects in respect of a number of policies for the reasons listed below:

[1] Note, to distinguish housing allocations from housing policies, all allocations are further identified with an '(A) and policies with a (P) where relevant

European site	Potential effect	Policies
Strensall Common	Recreational pressure and urban-edge effects	SS19/ST35, E18 & H59(A)
	Recreational pressure	SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A), SH1
	Windfall development	H1(P)
	Air pollution	SS19/ST35, E18 & H59(A)
	Wetland features	SS19/ST35, H59(A), E18
Lower Derwent Valley	Mobile species	SS13/ST15
	Recreational pressure	SS13/ST15 & SS18/ST33
River Derwent	Air pollution	SS13/ST15

Accordingly, an appropriate assessment was carried out. The outcome of this further scrutiny is described in Table 9 and Section 5 and is summarised below.

Site, issue and policies	Outcome
Strensall Common SAC Wet and dry heathland Wetland features SS19/ST35, E18 & H59(A)	Adverse effect on the integrity on the site will be avoided if mitigation in the form of modifications to the policy wording is adopted
Strensall Common SAC Wet and dry heathland Recreational pressure and urban-edge effects SS19/ST35 & H59(A)	Adverse effects on the integrity of the site avoided by removal of policies. SS19/ST35 and H59(A)
Strensall Common SAC Wet and dry heathland Recreational pressure and urban-edge effects E18	Adverse effect on the integrity on the site will be avoided if mitigation in the form of modifications to the policy wording is adopted
Strensall Common SAC Wet and dry heathland Recreational pressure SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14	Adverse effect on the integrity on the site will be avoided if mitigation in the form of modifications to the policy wording is adopted
Strensall Common SAC Wet and dry heathland Recreational pressure SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1	Adverse effect on the integrity of the site is avoided with no need for mitigation

Site, issue and policies	Outcome
Strensall Common Wet and dry heathland Air pollution SS19/ST35, E18 and H59	An adverse effect on the integrity of the site is avoided with no need for mitigation
Strensall Common Wet and dry heathland Windfall development H1(P)	Adverse effect on the integrity on the site will be avoided if mitigation in the form of a new policy is adopted
Lower Derwent Valley Breeding and non-breeding birds Recreational pressure SS18/ST33 & SS13/ST15	Adverse effect on the integrity of the site is avoided if mitigation in the form of modifications to the policy wording is adopted
Lower Derwent Valley Mobile species Non-breeding birds SS13/ST15	Adverse effect on the integrity of the site is avoided if mitigation in the form of modifications to the policy wording is adopted
River Derwent Air pollution Floating vegetation community and populations of river and sea lamprey, and bullhead SS13/ST15	Adverse effect on the integrity of the site is avoided with no need for mitigation

Provided that all the modifications suggested above are adopted, the Council would be sure that an adverse effect on the integrity of the European sites would be avoided. **However, in terms of Policies SS19/ST35 and H59(A)**, because of reasonable scientific doubt concerning the effectiveness of mitigation measures at locations in such close proximity to Strensall Common SAC, it was not possible to be certain that adverse effects could be avoided. Therefore, **this HRA recommends that both policies should be removed from the Plan.**

Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority and it must decide whether to accept this report or otherwise.

Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Where individual allocations are the subject of any planning application it will be necessary in due course to demonstrate compliance with the Conservation of Habitats and Species Regulations 2017 before permission is granted, in respect of the specific proposals before the Council at that time. This HRA may or may not be appropriate to determine the likely effects of a specific proposal when it eventually comes forward.

1 INTRODUCTION AND APPROACH

1.1 BACKGROUND

1.1.1 The City of York Council (the *Council*) submitted its Regulation 19 Publication Draft of the Local Plan in February 2018. This will deliver the strategic vision and objectives in York over a 20-year period. When adopted, the Local Plan will influence all future development within the Council's boundaries.

1.1.2 The Habitats Directive[2] requires local (or '*competent*') authorities to assess the impact of development plans on the Natura 2000 network of protected sites. The Directive is given domestic effect by the Conservation of Habitats and Species Regulations (the '*Habitats Regulations*'). In England, this requirement is implemented via a *Habitats Regulations Assessment* (*HRA*) which comprises a series of mandatory tests.

1.1.3 A draft HRA (Amec, 2014)[3] was prepared alongside a previous Local Plan Publication draft. However, consultation on this document and its supporting evidence base was halted following a decision by Full Council in October 2014 to undertake further work on the Local Plan evidence base in relation to housing numbers. Work continued to update the policies and portfolio of site allocations within the Plan until late 2017.

1.1.4 Subsequently, a further draft HRA was completed (Waterman, 2017)[4] to evaluate the impact of these changes to the Plan. However, this only comprised an initial 'screening assessment' (alone) and did not explore the 'in-combination' or 'appropriate assessment' stages.

1.1.5 In April 2018, a formal HRA (Waterman, 2018[5]) was submitted alongside the Local Plan as part of the Regulation 19 consultation exercise. It concluded, after carrying out an appropriate assessment that the Plan would not have an adverse effect on the integrity of any European site.

1.1.6 However, in its letter of 4 May 2018, when referring to the effects of recreational pressure, Natural England stated:

(it did) *not agree that adverse effects on integrity can be ruled out based on the evidence available*.

1.1.7 Natural England also raised concerns about the assessment of recreational pressure on Skipwith Common. Similar points were made regarding anticipated changes in air quality with regard to the River Derwent and Strensall Common.

1.1.8 In response to this advice, the Council carried out further analysis of nitrogen deposition on the River Derwent and Strensall Common from road traffic. In addition, visitor surveys of the Lower Derwent Valley, Skipwith Common and Strensall Common were commissioned which were published in February 2019. The outcome of both these exercises prompted production of a revised HRA in 2019.

1.1.9 This current HRA, the 2020 edition, was produced at the request of the Inspectors to confirm compliance with case law and following the discussion with counsel in the first week of the examination. It was also required to take account of revised and lower housing requirement of 822 dwellings per annum (dpa), calculated in in 2019, down from an original figure of 922 dpa (867 dpa requirement + shortfall) as assessed in the previous HRA (April 2018 and February 2019).

[2] Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (21 May 1992)

[3] City of York Council Habitats Regulations Assessment of the Local Plan. AMEC Environment & Infrastructure UK limited. September 2014 (DRAFT).

[4] HRA of Plan Allocations. Habitats Regulations Assessment of City of York Council Local Plan. Waterman Infrastructure & Environment Limited. September 2017

[5] Habitats Regulations Assessment of City of York Council Local Plan. Waterman Infrastructure & Environment Limited. April 2018.

1.1.10 Given the number of HRAs which have been prepared this HRA, the 2020 edition, is typically either referred to by the year of publication or as '*this HRA*' for clarity.

1.1.11 Defra guidance[6] (referenced in C12 of the Habitats Regulations Handbook[7]) allows competent authorities to reduce the duplication of effort by drawing on earlier conclusions where there has been no material change in circumstances. If there is any doubt that the earlier assessment is suitable for consideration at the later stage, the allocation or policy is assessed normally[8]. Consequently, this current HRA draws on the findings of all previous HRAs where possible but evaluates the Plan in the context of contemporary evidence and best practice.

1.2 HABITATS REGULATIONS ASSESSMENT OF LOCAL PLANS, NATURA 2000 AND EUROPEAN SITES

1.2.1 Natura 2000 is the cornerstone of European nature conservation policy; it is an EU-wide network of Special Protection Areas (SPA) classified under the 1979 Birds Directive and Special Areas of Conservation (SAC) designated under the 1992 Habitats Directive. Together, the network comprises over 27,000 sites[9] and safeguards the most valuable and threatened habitats and species across Europe; it represents the largest, coordinated network of protected areas in the world.

1.2.2. In the UK, these sites are commonly referred to as 'European sites' which, according to long-established Government policy[10], also comprise 'Wetlands of International Importance' (or Ramsar sites). Over 8.5% of the UK land area forms part of this network including, locally, sites such as Strensall Common, Skipwith Common, the Lower Derwent Valley and River Derwent. Further afield, it also incorporates sites in such well known places as the Yorkshire Dales and the North York Moors.

1.2.3 The Regulations apply a series of mandatory tests for HRA, derived from European and domestic case law that is explained further below and in the NPPF paragraphs 174-177 and PPG Section 65 "Appropriate Assessment".

1.2.4 In practical terms, experience has prompted the adoption of a screening process where it is possible to identify first of all policies which could not sensibly have any likely significant effect.

1.2.5 Whilst this can be seen as part of the formal screening stage under the regulations, it is nonetheless useful to deal first with cases that can be excluded on this basis.

1.2.6 If the plan cannot be ruled out of screening on this basis, the competent authority (ie the Council) continues the screening stage to identify whether it is '… likely to have a significant effect on a European Site … either alone or in-combination with other plans or projects'. If significant effects are found to be absent, the plan may be adopted without further scrutiny. The screening process is set out further below.

1.2.7 An in-combination assessment is required even where an impact is identified which would have an insignificant effect on its own ('a residual effect') but where likely significant effects arise cumulatively with other plans or projects. These tests, both *alone or in-combination*, are referred to as 'Screening'.

1.2.8 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook which provides advice regarding undertaking HRAs.

6 Habitats Directive – Guidance on competent authority coordination under the Habitats Regulations, Defra (July 2012).

7 Tyldesley, D., and Chapman, C., (2013) *The Habitats Regulations Assessment Handbook, December 2019 edition UK:* DTA Publications Ltd

8 The suitability of earlier, or higher level assessments is subject to the decision of the CJEU in *Cooperatie Mobilisation for the Environment UA v College van Gedeputeerde* (C-293/17) [2019] Env. L.R. 27 ("*Dutch Nitrogen*").

9 Natura 2000 Barometer https://view.officeapps.live.com/op/view.aspx?src=http://ec.europa.eu/environment/nature/natura2000/barometer/docs/Natura%202000%20barometer.xlsx accessed 8 July 2020

10 ODPM Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System (16 August 2005), to be read in conjunction with current NPPF and PPG guidance and the current version of the Regulations.

Subscribers to the Handbook include Natural England, the Environment Agency and the Planning Inspectorate.

1.3 DEFINITIONS, EVIDENCE, PRECAUTIONARY PRINCIPLE & CASE LAW

1.3.1 The overall approach to the two stages was helpfully summarised by Advocate General Sharpston in the *Sweetman* case:

"47. It follows that the possibility of there being a significant effect on the site will generate the need for an appropriate assessment for the purposes of article 6(3). An example of the type of confusion that this poorly-drafted piece of legislation can give rise to can, I suggest, be seen in the judgment in the *Landelijke Vereniging* case [2004] ECR I-7405. In para 41, the court talks of an appropriate assessment being required if there is a "mere probability" that there may be significant effects. In para 43, it refers to there being a "probability or a risk" of such effects. In para 44[11], it uses the term "in case of doubt". It is the last of these that seems to me best to express the position. The requirement at this stage that the plan or project be likely to have a significant effect is thus a trigger for the obligation to carry out an appropriate assessment. The requirement at this stage that the plan or project be likely to have a significant effect is thus a trigger for the obligation to carry out an appropriate assessment. There is no need to establish such an effect; it is, as *Ireland* observes, merely necessary to determine that there may be such an effect. …

49. The threshold at the first stage of article 6(3) is thus a very low one. It operates merely as a trigger, in order to determine whether an appropriate assessment must be undertaken of the implications of the plan or project for the conservation objectives of the site. The purpose of that assessment is that the plan or project in question should be considered thoroughly, on the basis of what the court has termed "the best scientific knowledge in the field". ...

50. The test which that expert assessment must determine is whether the plan or project in question has "an adverse effect on the integrity of the site", since that is the basis on which the competent national authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage. That is because the question (to use more simple terminology) is not "should we bother to check?" (the question at the first stage) but rather "what will happen to the site if this plan or project goes ahead; and is that consistent with 'maintaining or restoring the favourable conservation status' of the habitat or species concerned?."

Stage One - Screening

1.3.2 The screening test is defined in Regulation 105(1) which states:

Where a land use plan … (a) is likely to have a significant effect on a European site … (either alone or in-combination with other plans or projects) …

1.3.3 In this context (see *Sweetman*, above):

- *'Likely'* in the context of *'a likely significant effect'* is a low threshold and simply means that there is a *risk* or *doubt* regarding such an effect[12];
- *Significant'*, in the same context, means *'any effect that would undermine the conservation objectives for a European site …'*;[13]
- *'Objective', in this context, means clear verifiable fact rather than subjective opinion …*

1.3.4 This means the initial screening phase should not be exhaustive and should act as a trigger for further scrutiny, points clearly described by Advocate General Sharpston in *Sweetman*, quoted above. This was followed in the *Bagmoor Wind* case[14]:

[11] The CJEU in *Landelijke Vereniging tot Behoud van de Waddenzee v Staatssecretaris Van Landbouw, Natuurbeheer en Visserij* (C127-02) [2005] 2 CMLR 31 ("the *Waddenzee* case)"
[12] *Waddenzee* at para. 44 and *Sweetman*, above.
[13] *Waddenzee* at paras. 44, 47 and 48.
[14] *Bagmoor Wind Limited v The Scottish Ministers* [2012] CSIH 93

'If the absence of risk … can only be demonstrated after a detailed investigation, or expert opinion, that is an indicator that a risk exists and the authority must move from preliminary examination to appropriate assessment'.

1.3.5 An assessment of *in-combination* effects is required where an impact is identified which would have an insignificant effect on its own (a residual effect), but where likely significant effects may arise cumulatively with other plans or projects.

Stage Two – Appropriate Assessment & the Integrity Test

1.3.6 The Supreme Court in *Champion*[15] held that "appropriate" is not a technical term and indicates no more than that the assessment should be appropriate to the task in hand.

1.3.7 Fundamentally, the HRA process employs the precautionary principle and Regulation 105 ensures that where a plan is '*likely to have a significant effect'*, it can only be adopted if *the competent authority* can ascertain (following an *appropriate assessment*) that it '*will not adversely affect the integrity of the European site*'. It means that the absence of harm must be demonstrated before a plan can be adopted.

1.3.8 This is made clear in the *Waddenzee* judgement:

where doubt remains as to the absence of adverse effects … the competent authority will have to refuse authorisation (Para 57); and

That is the case where no reasonable scientific doubt remains as to the absence of such effects (Para 59, emphasis added).

1.3.9 In *Champion*, the Supreme Court found that the legislative context implies a high standard of investigation whilst referring to Advocate General Kokott in *Waddenzee* at para. 107 that "absolute certainty" is not required:

"*… the necessary certainty cannot be construed as meaning absolute certainty since that is almost impossible to attain. Instead, it is clear from the second sentence of article 6(3) of the Habitats Directive that the competent authorities must take a decision having assessed all the relevant information which is set out in particular in the appropriate assessment. The conclusion of this assessment is, of necessity, subjective in nature. Therefore, the competent authorities can, from their point of view, be certain that there will be no adverse effects even though, from an objective point of view, there is no absolute certainty".*

1.3.10 The above principles have recently been applied in the *Compton Parish Council* case.[16]

1.3.11 The fundamental test remains, therefore, as one of '*reasonable scientific doubt'* (or 'reasonable doubt'). Drawing this together, the Handbook (F.10.1) states:

Because the integrity test incorporates the application of the precautionary principle as a matter of law, and because plan assessments are, by their nature, less precise than project assessments, it is important for the assessment process to eliminate the prospect of adverse effects on site integrity in so far as that is possible at the level of specificity inherent in the nature and purpose of the particular plan.

1.3.12 The *integrity* of a European site was described in Planning Practice Guidance[17] as:

"the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated."

[15] *R (on the application of Champion) v. North Norfolk District Council* [2015] 1 WLR 3170 at para. 41
[16] *Compton Parish Council v. Guildford Borough Council* [2019] EWHC 3242 (Admin) at paragraph 207.
[17] Reference ID: 65-003-20190722

1.3.13 In *Sweetman*[18] the CJEU defined integrity as:

'*the lasting preservation of the constitutive characteristics of the site … whose preservation was the objective justifying the designation of that site*

1.3.14 Drawing on this, the European Commission[19] defined it more recently as follows:

The integrity of the site involves its constitutive characteristics and ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the habitats and species for which the site has been designated and the site's conservation objectives.

1.3.15 Further, in the *Holohan case*,[20] it was held that:

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site".

1.3.16 Specific issues relating to mitigation and HRA are covered in Section 1.4 below.

Stages Three and Four – The Derogations

1.3.17 If adverse effects on the integrity of the site can be avoided, the plan can be adopted. If not, derogations would have to be sought to allow the plan to continue; these are regarded as a '*last resort*' and considered only in exceptional circumstances. They are not considered further since the Council does not seek to rely upon them nor has any objector suggested it.

1.4 OVERALL APPROACH

1.4.1 The HRA of development plans was first made a requirement in the UK following a ruling by the European Court of Justice in EC v UK[21]. However, the judgement[22] recognised that any assessment had to reflect the actual stage in the strategic planning process and the level of evidence that might or might not be available. This was given expression in the High Court (*Feeney*[23]) which stated:

"*Each … assessment … cannot do more than the level of detail of the strategy at that stage permits*".

1.4.2 Because this is a strategic plan, the '*objective information*' required by the HRA is frequently (but not always) only available at a strategic or high level, without the detail that might be expected at the planning application stage.

Mitigation and recent case law

1.4.3 In *People Over Wind*[24] in April 2018 the CJEU set out clear guidance as to the role of mitigation measures in an HRA. In taking a different approach from decisions in the UK courts, the CJEU held that measures embedded within a plan or project specifically to avoid or reduce the magnitude of likely significant effects should not be taken into account at the screening stage but reserved for the appropriate assessment.

1.4.4 This HRA therefore restricts consideration of mitigation measures to the appropriate assessment.

[18] *Sweetman v An Bord Pleanála* (C 258-11) [2014] PTSR 1092 at paragraph 39
[19] "Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC", European Union. 2019.
[20] *Holohan v. An Bord Pleanála* (C-461/17) [2019] P.T.S.R. 104
[21] *Commission v UK* (C-6/04) [2005] ECR 1-9017
[22] *Commission of the European Communities v UK* Opinion of Advocate General Kokott
[23] *Feeney v Oxford City Council* [2011] EWHC 2699 Admin at paragraph 92
[24] *People Over Wind and Sweetman v Coillte Teoranta* (C 323/17) [2018] PTSR 1668

1.4.5 In *Grace & Sweetman*[25] the ECJ considered the approach to mitigation at the appropriate assessment stage and held that it is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm, guaranteeing beyond all reasonable doubt that the project will not adversely affect the integrity of the area, that such a measure may be taken into consideration".

1.4.6 In the *Dutch nitrogen* case,[26] the CJEU confirmed that an appropriate assessment is not to take into account the future benefits of mitigation measures if those benefits are uncertain, including where the procedures needed to accomplish them have not yet been carried out or because the level of scientific knowledge does not allow them to be identified or quantified with certainty. The same approach was applied to "autonomous" measures taken outside that plan.[27]

Evidence

1.4.7 The owner of land affected by Policies SS19/ST35, H59(A) and E18 at Strensall, DIO, has produced three Shadow HRAs (December 2017[28,29] and December 2019[30]) to inform their aspirations for development. Evidence provided by the DIO has been taken into account in this HRA, as appropriate, but it should be noted that these evaluated notably different schemes from that originally proposed by the Council in its Regulation 18 Draft Local Plan and the Council disagrees with some of the conclusions as explained further below.

1.4.8 Also, landowners affected by Policies SS13/ST15 have produced ecological information in support of their proposals and this is taken account of in the evaluation of those policies.

Brexit

1.4.9 The requirement for the HRA derives from the EU Habitats Directive and, notwithstanding the UK's withdrawal from the EU, UK law and policy remains currently largely unchanged, the need for HRA remains and until the end of the implementation period on 31st December 2020 ("IP Completion Day") the Conservation of Habitats and Species Regulations 2017 remain in force without amendment[31], following which amendments made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 will take effect.

Role of the competent authority

1.4.10 Lastly, although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority and it must decide whether to accept this report or otherwise. Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Individual allocations will need to be reviewed when they become the subject of an individual planning application, to ensure that if further assessment under the Conservation of Habitats and Species Regulations 2017 is necessary[32], it is undertaken in accordance with the requirements of appropriate assessment.

[25] *Grace & Sweetman v An Bord Pleanala* (C-164/17) [2019] PTSR 266 at paragraphs 51-53 and 57.
[26] *Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu* (C 293/17, C 294/17) [2019] Env. L.R. 27 at paragraph 30
[27] See too the *Compton Parish Council* case, referred to above, at paragraph 207.
[28] Amec Foster Wheeler Environment & Infrastructure Limited. December 2017. DIO York Sites: Queen Elizabeth Barracks (QEB). Information to support a Habitats Regulations Assessment.
[29] Amec Foster Wheeler Environment & Infrastructure Limited. December 2017. DIO York Sites: Towthorpe Lines. Information to support a Habitats Regulations Assessment.
[30] Shadow HRA. Information to support a Habitats Regulations Assessment. DIO York Sites: Queen Elizabeth Barracks (Wood, for DIO, November 2019) (Appendix II of DIO Hearing Statement).
[31] See the EU (Withdrawal Agreement) Act 2020 Sch. 5(1) para. 1(1) and section 39(1). The amending regulations come into force at the end of the implementation period they generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the EU, for example by amending references to the Natura 2000 network so that they are construed as references to the national site network: see regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.
[32] See *Dutch Nitrogen*, above, at paragraphs 100-104 and 120.

2. THE NEED FOR ASSESSMENT AND IDENTIFYING EUROPEAN SITES AT RISK

2.1 IDENTIFICATION OF EUROPEAN SITES AT RISK

2.1.1 The search was restricted to those European sites found within 20km of the district boundary as this was considered to be the maximum extent that policies and allocations could seriously be considered to generate measurable effects. This focuses the attention of this HRA on the River Derwent, Lower Derwent Valley and Strensall Common European sites, which are all found within the Council boundary and, Kirk Deighton, Skipwith Common, the Thorne and Hatfield Moor complex and the Humber Estuary which are all found in neighbouring local authorities[33].

2.1.2 It is important to note that although the outcomes of this site identification task will reflect the type and location of activities proposed within the plan and/or the ecological characteristics of the European sites, it does not represent the test for likely significant effect (which follows later).

[33] To encourage a consistent, reliable and repeatable process, the *Handbook* (Figure F4.4) identifies 16 generic criteria, listed below in Table 1 (Columns 1 & 2), that when evaluated generate a precautionary, 'long' list of European sites in Column 3 which might be affected by the Plan[33]. However, when considered further, using readily available information and local knowledge (Column 4) the list of plausible threats can be refined, and the list of affected sites reduced (Column 5).

Table 1: Potential mechanisms and initial list of European sites that could be affected

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
1. All plans (terrestrial, coastal and marine)	Sites within the geographic area covered by or intended to be relevant to the plan	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Strensall Common (SAC)	This 'test' simply identifies all the European sites in the Council's geographic area. All sites present are listed.	Lower Derwent Valley River Derwent Strensall Common
2. Plans that could affect wetland features[34]	Sites upstream or downstream of the plan area in the case of river or estuary sites	Humber Estuary (SPA, SAC, Ramsar) Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC)	Effects considered are those associated with the physical presence of built development and the *localised* effects on surface/groundwater resources and quality, resulting from changes in run-off, sedimentation, erosion etc. No development is proposed that could lead to such effects in the vicinity of any of the three European sites. Therefore, **effects on the wetland features of the Humber Estuary, the Lower Derwent Valley and the River Derwent can be ruled out, and can be ruled out of the need for further consideration in this HRA**. Note that the *indirect* effects of changes to wastewater disposal are assessed separately under '7b'.	None
	Open water, peatland, fen, marsh and other wetland sites with relevant hydrological links to land within the plan area, irrespective of distance from the plan area	Skipwith Common (SAC) Strensall Common (SAC)	Effects considered are those associated with the physical presence of built development and the *localised* effects on surface/groundwater resources and quality, resulting from changes in run-off, sedimentation, erosion etc.	Strensall Common

[34] Note this title has been amended from 'aquatic environment' in the Handbook to 'wetland features' here for greater clarity and to provide a better 'fit' with the features at risk

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
			No development is proposed that could lead to such effects in the vicinity of Skipwith Common. Therefore, **effects on the wetland features of Skipwith Common can be ruled out, and can be ruled out of the need for further consideration in this HRA**. However, this is not the case at Strensall Common where development immediately adjacent to this wetland site is proposed. Consequently, harmful effects cannot be ruled out here and so **impacts on the wetland features of Strensall Common will require further consideration in this HRA.** Note that the *indirect* effects of changes to wastewater disposal are assessed separately under '7b'.	
3. Plans that could affect the marine environment	Sites that could be affected by changes in water quality, currents or flows; or effects on the inter-tidal or sub-tidal areas or the seabed, or marine species	Humber Estuary (SPA, SAC, Ramsar)	Given the distance and lack of public access to the closest parts of the upper Humber Estuary, and the lack of built development proposed in its proximity, it is considered almost inconceivable that any aspect of the Plan could affect any of the physical and biological processes/features of the Humber Estuary. Consequently, **effects on the marine environment of the Humber Estuary can be ruled out of the need for further consideration in this HRA**	None

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
4. Plans that could affect the coast	Sites in the same coastal 'cell', or part of the same coastal ecosystem, or where there are interrelationships with or between different physical coastal processes	None	The Council area neither lies within a coastal cell nor proposes development that could influence the physical processes within one	None
5. Plans that could affect mobile species	Sites whose qualifying features include mobile species which may be affected by the plan irrespective of the location of the plan's proposals or whether the species would be in or out of the site when they might be affected	Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC) Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC)	This considers direct impacts of plan proposals on mobile species. Given that the great crested newts of Kirk Deighton SAC are will be restricted to the breeding pond and adjacent terrestrial habitat, and that no development is proposed nearby, then adverse effects can be ruled out. Therefore, effects on mobile species at **Kirk Deighton SAC can be ruled out of the need for further consideration in this HRA.** However**,** impacts on various bird, mammal and (migratory) fish populations of the Humber, River Derwent and Lower Derwent Valley **cannot be ruled out and so will require further consideration in this HRA**.	Humber Estuary Lower Derwent Valley River Derwent
6. Plans that could increase recreational pressure on European	(a) Such European sites in the plan area	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC)	Due to the proximity of several residential allocations, impacts on these three European sites	Lower Derwent Valley River Derwent

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
sites potentially vulnerable or sensitive to such pressure		Strensall Common (SAC)	**cannot be ruled out so will require further consideration in this HRA**.	Strensall Common
			Kirk Deighton SAC lies around 15km from the nearest allocation on private land with no public access and so effects from recreational pressure at **Kirk Deighton SAC can be ruled out of the need for further consideration in this HRA**	
	(b) Such European sites within an agreed zone of influence or other reasonable and evidence-based travel distance of the plan area boundaries that may be affected by local recreational or other visitor pressure from within the plan area	Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC) Thorne Moor (SAC) Hatfield Moor (SAC) Thorne & Hatfield Moors (SPA) Skipwith Common (SAC)	In terms of public pressure, the otherwise fragile sites of all the components of **the Thorne & Hatfield Moors complex**, display either restricted access and/or effective visitor management. Allied with the considerable distance to the nearest allocation, this strongly suggests that not only would visitor numbers would be low, but they are likely to be well managed and the sites (and associated mobile species) would be resilient to change brought about by this Plan. Therefore, effects of recreational pressure on the **Thorne and Hatfield Moor sites can be ruled out of the need for further consideration in this HRA.** Given the relative proximity of several allocations, impacts from recreational pressure on the Humber Estuary and Skipwith Common **cannot be ruled out at this stage and so will require further consideration in this HRA.**	Humber Estuary Skipwith Common

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
	(c) Such European sites within an agreed zone of influence or other evidence-based longer travel distance of the plan area, which are major (regional or national) visitor attractions such as European sites which are National Nature Reserves where public visiting is promoted, sites in National Parks, coastal sites and sites in other major tourist or visitor destinations	Hornsea Mere (SPA) North Pennine Moors (SPA, SAC) North York Moors (SPA, SAC) Flamborough and Filey Coast (SPA) Flamborough Head (SAC) South Pennine Moors (SPA, SAC)	The sites of the North and South Pennine Moors, North York Moors, Hornsea Mere and Flamborough Head etc are considered too distant (at 25km+) to be affected by any threats **and so can be ruled out of the need for any further consideration in this HRA.**	None
7. Plans that would increase the amount of development	(a) Sites in the plan area or beyond that are used for, or could be affected by, water abstraction irrespective of distance from the plan area	Kirk Deighton SAC Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Skipwith Common SAC Strensall Common (SAC)	The HRA of Yorkshire Water's Water Resources Management Plan found that there were unlikely to be any significant effects on European sites, either alone or in-combination with other plans or projects[35]. **All potentially affected sites can be ruled out of the need for further consideration in this HRA.**	None
	(b) Sites used for, or could be affected by, discharge of effluent from wastewater treatment works or other waste management streams serving the plan area, irrespective of distance from the plan area	Humber Estuary (SAC, Ramsar) Lower Derwent Valley (SAC, Ramsar) River Derwent (SAC)	Yorkshire Water has a legal duty to provide wastewater treatment for new dwellings. Policy GI2 (vii) effectively relates the construction of new development to the availability of capacity at wastewater treatment works across the area. Consequently, adverse effects on the receiving water bodies from the anticipated increase in wastewater disposal can be ruled out of this HRA.	None

[35] Water Resource Management Plan 2014 Strategic Environmental Assessment Post Adoption Statement Cascade/Yorkshire Water

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
			All potentially affected sites can be ruled out of the need for further consideration in this HRA.	
7. Plans that would increase the amount of development	(c) Sites that could be affected by the provision of new or extended transport or other infrastructure	None	No such infrastructure proposed	None
	(d) Sites that could be affected by increased deposition of air pollutants arising from the proposals, including emissions from significant increases in traffic	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Skipwith Common (SAC) Strensall Common (SAC)	Adverse impacts from increased air pollution can be possible on European sites that lie within 200m of roads. Components of all four listed European sites can be found within this threshold; features that could be particularly vulnerable include heathlands at Strensall and Skipwith, and the various habitats and species of the River Derwent/Lower Derwent Valley complex. **Harmful effects cannot be ruled out at this stage and so will require further consideration in this HRA**	Lower Derwent Valley River Derwent Skipwith Common Strensall Common
8 Plans for linear developments or infrastructure	Sites within a specified distance from the centre line of the proposed route (or alternative routes), the distance may be varied for differing types of site / qualifying features and in the absence of established good practice standards, distance(s) to be agreed by the statutory nature conservation body	None	No such infrastructure proposed	None

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
9. Plans that introduce new activities or new uses into the marine, coastal or terrestrial environment	Sites considered to have qualifying features potentially vulnerable or sensitive to the effects of the new activities proposed by the plan	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Strensall Common (SAC) Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC) Thorne Moor (SAC) Hatfield Moor (SAC) Thorne & Hatfield Moors (SPA) Skipwith Common (SAC)	This criterion could be interpreted to include recreational activities or 'urban-edge' effects. However, for the purposes of this HRA, it is considered that the effects of this category will be captured effectively via the application of criterion 6 (recreation). Therefore, this criterion **can be ruled out of the need for further consideration in this HRA.**	None
10. Plans that could change the nature, area, extent, intensity, density, timing or scale of existing activities or uses	Sites considered to have qualifying features potentially vulnerable or sensitive to the effects of the changes to existing activities proposed by the plan	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Strensall Common (SAC) Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC) Thorne Moor (SAC) Hatfield Moor (SAC)	This criterion could be interpreted to include recreational activities or 'urban-edge' effects. However, for the purposes of this HRA, it is considered that the effects of this category will be captured effectively via the application of criterion 6 (recreation). Therefore, this criterion **can be ruled out of the need for further consideration in this HRA.**	None

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
		Thorne & Hatfield Moors (SPA) Skipwith Common (SAC)		
11. Plans that could change the quantity, quality, timing, treatment or mitigation of emissions or discharges to air, water or soil	Sites considered to have qualifying features potentially vulnerable or sensitive to the changes in emissions or discharges that could arise as a result of the plan	Humber Estuary (SAC, Ramsar) Lower Derwent Valley (SAC, Ramsar) River Derwent (SAC) Skipwith Common (SAC) Strensall Common (SAC)	This criterion could potentially be interpreted to include water and air pollution. However, for the purposes of this HRA, it is considered that the effects of this category will be captured effectively via the application of criteria 7b & d respectively. Therefore, this criterion **can be ruled out of the need for further consideration in this HRA.**	None
12. Plans that could change the quantity, volume, timing, rate, or other characteristics of biological resources harvested, extracted or consumed	Sites whose qualifying features include the biological resources which the plan may affect, or whose qualifying features depend on the biological resources which the plan may affect, for example as prey species or supporting habitat or which may be disturbed by the harvesting, extraction or consumption	None	No such activities proposed	None
13. Plans that could change the quantity, volume, timing, rate,	Sites whose qualifying features rely on the non-biological resources which the plan may	None	No such activities proposed	None

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
or other characteristics of physical resources extracted or consumed	affect, for example, as habitat or a physical environment on which habitat may develop or which may be disturbed by the extraction or consumption			
14. Plans which could introduce or increase, or alter the timing, nature or location of disturbance to species	Sites whose qualifying features are considered to be potentially sensitive to disturbance, for example as a result of noise, activity or movement, or the presence of disturbing features that could be brought about by the plan	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Thorne & Hatfield Moors (SPA) Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC)	For the purposes of this HRA, it is considered that the effects of this category will be captured effectively via the application of criteria 5 (mobile species) and/or 6 (recreation). Therefore, this criterion **can be ruled out of the need for further consideration in this HRA.** **.**	None
15. Plans which could introduce or increase or change the timing, nature or location of light or noise pollution	Sites whose qualifying features are considered to be potentially sensitive to the effects of changes in light or noise that could be brought about by the plan	Lower Derwent Valley (SPA, SAC, Ramsar) River Derwent (SAC) Thorne & Hatfield Moors (SPA) Humber Estuary (SPA, SAC, Ramsar) Kirk Deighton (SAC)	Effects considered are those associated with the physical presence of built development and the *localised* effects on vulnerable species, resulting from changes in noise and lighting. No such activities proposed in close proximity to any European sites.	None
16. Plans which could introduce or increase	Sites whose qualifying features are considered to be potentially sensitive to the source of new or	None	No such activities proposed	None

Types of plan (or potential effects)	Sites to scan for and check	Initial list of potentially affected European sites	Additional context	European sites selected
a potential cause of mortality of species	increased mortality that could be brought about by the plan			

2.1.3 The outputs of the exercise carried out in Table 1 rule out any possibility of any likely significant effects from any aspect of the Plan on Kirk Deighton SAC, Thorne Moor SAC, Hatfield Moor SAC and Thorne & Hatfield Moors SPA. These sites will therefore be ruled out of any further consideration in this HRA.

2.1.4 In addition, the same exercise reduces the number of factors at play and begins to clarify the nature of potential impacts. Importantly, it confirms that the focus of this HRA should be restricted to only the following European sites and issues:

European sites	Feature
(2) Wetland features	Strensall Common SAC
(5) Mobile species	Humber Estuary SPA, SAC and Ramsar
	Lower Derwent Valley SPA, SAC and Ramsar
	River Derwent SAC
(6) Recreational pressure	Humber Estuary SPA and Ramsar
	Lower Derwent Valley SPA, SAC and Ramsar
	River Derwent
	Skipwith Common SAC
	Strensall Common SAC
(7d) Airborne pollution	Lower Derwent Valley SPA, SAC and Ramsar
	River Derwent SAC
	Skipwith Common SAC
	Strensall Common SAC

2.1.5 The net result, and benefit to the HRA, is that the list of issues and sites potentially affected is reduced, making for a shorter and more focused HRA than would otherwise be the case.

2.1.6 However, as harmful effects on a number of European sites cannot be ruled out, further ecological information needs to be gathered to inform subsequent scrutiny in the HRA. Drawing on the citations, conservation objectives, supplementary advice and site improvement plans (SIPs), the ecological characteristics of all five European sites that remain at risk are described in Table 2 and are accompanied by observations on their sensitivity to external factors. Qualifying features, conservation objectives, and threats and pressures extracted from the SIP are provided in full. Citations and qualifying features are provided in Appendix A[36].

2.1.7 For ease of reference, sources that influence Table 2 and inform much of the rest of the HRA are listed immediately below. Condition assessment data was drawn from Natural England websites on May 31, 2020.

References
Lower Derwent Valley SPA, SAC, Ramsar
Lower Derwent Valley SPA Citation. 1993
Conservation Objectives for Lower Derwent Valley SPA. Natural England. 30 June 2014. (Version 2)

[36] Given the large number of features that comprise the Humber Estuary European site, these are only provided in Appendix A

References
Supplementary advice on conserving and restoring features. Lower Derwent Valley SPA. Natural England. 21 March 2019
Lower Derwent Valley SAC Citation. 14 June 2005
Conservation Objectives for Lower Derwent Valley SAC. Natural England. 27 November 2018. (V 3)
Supplementary advice on conserving and restoring features. Lower Derwent Valley SAC. Natural England. 18 March 2019
Site Improvement Plan. Lower Derwent Valley. Natural England. 6 October 2014. V1.0
Ramsar Information Sheet Lower Derwent Valley. JNCC v3.0. 13 June 1993
River Derwent SAC
River Derwent SAC Citation. 14 June 2005
Conservation Objectives for River Derwent SAC. Natural England. 27 November 2018. (Version 3)
Supplementary advice on conserving and restoring features. River Derwent SAC. Natural England. 27 March 2017 (Version 2)
River Derwent SAC Site Improvement Plan. Natural England. V1.0. 8 October 2014.
Skipwith Common SAC
Skipwith Common SAC Citation. 14 June 2005
Conservation Objectives for Skipwith Common SAC. Natural England. 27 November 2018. (V 3)
Supplementary advice on conserving and restoring features. Skipwith Common SAC. Natural England. 14 March 2019
Skipwith Common Site Improvement Plan, Natural England, v1.0, 18 December 2014
Strensall Common SAC
Strensall Common SAC Citation. 14 June 2005
Conservation Objectives for Strensall Common SAC. Natural England. 27 November 2018. (V 3)
Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019
Strensall Common Site Improvement Plan, Natural England, v1.0, 18 December 2014
Site-Check - Strensall Common. Natural England. 5 July 2019
Humber Estuary SPA, SAC, Ramsar
Humber Estuary SPA Citation. 31 August 2007
Conservation Objectives for Humber Estuary SPA. Natural England. 21 February 2019. (Version 4)
Humber Estuary SAC Citation. 10 December 2009

References

Conservation Objectives for Humber Estuary SAC. Natural England. 27 November 2018. (Version 3)

Humber Estuary Site Improvement Plan, Natural England, v1.1. 8 July 2015

Humber Estuary Ramsar Information Sheet. 26 October 2007

Table 2: Description of European Sites

Description (including summary of qualifying features)	Qualifying features and Conservation objectives	Pressures and threats (P/T)
Lower Derwent Valley SPA, SAC, Ramsar		
The Lower Derwent Valley (LDV) supports the largest single expanse of wet, neutral (MG4) hay meadow in the UK. The site also hosts alluvial, alder woodland and internationally important populations of breeding and wintering waterbirds. The habitats are reliant in part on the maintenance of a favourable hydrological regime, including periodic inundation, whilst mobile species remain susceptible to development, public pressure and disturbance both within and on 'functionally-linked' land beyond the European site boundaries, sometimes several kilometres distant. In common with the River Derwent SAC, the qualifying features include otter which is similarly vulnerable. The Ramsar designation adds wetland invertebrates, passage birds, ruff and whimbrel on spring passage. Most of the site is privately owned and farmed with limited public access but all is managed for nature conservation with Natural England, as part of or alongside the LDV National Nature Reserve. Limited car parking and a formal arrangement of paths and hides effectively reduces the impact of existing recreational pressure although some 'informal' access or trespass occurs. Despite this, the site is relatively robust but large increases in visitors may be difficult to accommodate without adequate mitigation. The grassland and water bodies remain vulnerable to nutrient enrichment and so, for instance, the addition of inorganic nitrogen fertiliser by farmers is not allowed, but birds, mammals and the alluvial alder woodland are more resilient. There are five component SSSIs. Over 99% of both Derwent Ings SSSI and River Derwent SSSI are considered to be in 'favourable' or 'unfavourable recovering' condition. All of Newton Mask SSSI, Breighton Meadows SSSI and Melbourne and Thornton Ings SSSI are in favourable condition. All SSSIs carry a range of threats of varying severity. For the avoidance of doubt, the Lower Derwent Valley SAC and Ramsar site exclude the river (ie the River Derwent SAC); in contrast, it is included in the Lower Derwent Valley SPA. Given the overlap between the majority of Ramsar and SPA/SAC features, this HRA will restrict assessment to just the latter to reduce repetition. However, the 'unique' wetland invertebrate assemblage of the Ramsar site is not reflected in the corresponding SAC. This assemblage forms an integral component of the grassland, wetland and woodland complex of the Lower Derwent Valley and it is considered that the assessment of impacts on this group is fundamentally linked to those of its supporting habitats. Therefore, it is	**SPA features** A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding) A050 *Anas penelope*; Eurasian wigeon (Non-breeding) A052 *Anas crecca*; Eurasian teal (Non-breeding) A056 *Anas clypeata*; Northern shoveler (Breeding) A140 *Pluvialis apricaria*; European golden plover (Non-breeding) A151 *Philomachus pugnax*; Ruff (Non-breeding) Waterbird assemblage **SPA objectives** 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; The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The population of each of the qualifying features, and, The distribution of the qualifying features within the site. **SAC features** H6510. Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) H91E0. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains* S1355. *Lutra lutra*; Otter	1. Hydrological changes (P); 2. Drainage (P); 3. Public access/Disturbance (T); 4. Invasive species (T); 5. Undergrazing (T); 6. Inappropriate scrub control (T); 7. Air pollution; impact of atmospheric nitrogen deposition (T); 8. Invasive species (Himalayan balsam) (T); 9. Invasive species (others) (T)

Description (including summary of qualifying features)	Qualifying features and Conservation objectives	Pressures and threats (P/T)
not assessed independently and instead, reflecting the ecology of the species and habitats, an approach based on the evaluation of just the SAC habitats is considered adequate to embrace this feature. This approach is given weight by the fact that as a Ramsar feature it does not benefit from bespoke conservation objectives nor is it considered in Natural England's SIP or its Supplementary Advice.	S**AC objectives** 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; The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species, and, The distribution of qualifying species within the site.	
River Derwent SAC		
The River Derwent represents one of the best examples in England of a lowland river stretching from Ryemouth in the north to its confluence with the Ouse in the south of the District – a small section lies within the Lower Derwent Valley National Nature Reserve. It supports diverse communities of flora and fauna, notably floating vegetation dominated by water crowfoot and, river lamprey, sea lamprey, bullhead and otter. The mobile species utilise extensive stretches of water throughout the catchment both upstream and downstream and beyond the boundaries of the SAC, and are dependent on the maintenance of a favourable hydrological conditions throughout their range. Consequently, they remain vulnerable to pollution events and the creation of even temporary physical or chemical barriers; lamprey migrate to the open sea via the Derwent, Ouse and Humber Estuary providing an intimate link between both sites. The Derwent is meso/eutrophic with a high nutrient load providing a degree of resilience against nutrient enrichment from air pollution, and whilst otter can also be considered resilient, the floating vegetation communities and fish populations may be vulnerable. Overall, the site can be considered relatively robust but vulnerable to changes in water quality (especially inputs of phosphate) from wastewater disposal, for instance.	**SAC features** H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot S1095. *Petromyzon marinus*; Sea lamprey S1099. *Lampetra fluviatilis*; River lamprey S1163. *Cottus gobio*; Bullhead S1355. *Lutra lutra*; Otter **SAC objectives** 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:	1. Physical modification (P/T); 2. Water pollution (T); 3. Invasive species (T); 4. Change in land management (T); 5. Water abstraction (T).

Description (including summary of qualifying features)	Qualifying features and Conservation objectives	Pressures and threats (P/T)
Limited car parking and a formal arrangement of footpaths reduces the impact of existing recreational pressure and whilst informal access along both riverbanks occurs, this is largely restricted to local residents and the simple width of the channel reduces the frequency and magnitude of direct impacts. So, whilst bullhead and lamprey can be considered immune to recreational pressure, otter and the floating vegetation community remain vulnerable. There are two component SSSIs – the River Derwent and Newton Mask. Natural England has assessed 99.2% of the River Derwent SSSI to be in 'favourable' or 'unfavourable recovering' condition; 0.4% is 'unfavourable no change' but the threat level is considered to be 'high' across a much wider area. All of Newton Mask SSSI is considered to be in favourable condition but carries a 'medium' threat level. For the avoidance of doubt, the Lower Derwent Valley Ramsar site encompasses a similar area to the SPA but excludes the River Derwent SAC.	The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitat; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species, and, The distribution of qualifying species within the site.	
Skipwith Common SAC		
Skipwith Common supports extensive areas of both wet and dry heath, with rush pasture, mire, reedbed, open water and woodland. The entire European site is managed as a National Nature Reserve by Natural England, grazed with cattle and sheep and has been dedicated as open access land under the Countryside and Rights of Way Act 2000. The number of visitors is thought to be increasing causing some erosion and disturbance of grazing animals, and the heathland could be vulnerable to nitrogen deposition, given the proximity of neighbouring roads. The site remains both fragile and vulnerable. In 2014, all of Skipwith Common SSSI was assessed by Natural England to be in 'favourable' or 'unfavourable recovering' condition. The corresponding SIP for the European site identifies, *inter alia*, a number of threats including public pressure, air pollution and drainage.	**SAC features** H4010. Northern Atlantic wet heaths with *Erica tetralix*; wet heathland with cross-leaved heath (or 'wet heath'); H4030. European dry heaths (or 'dry heath'). **SAC objectives** 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 the qualifying natural habitats The structure and function (including typical species) of the qualifying natural habitats, and, The supporting processes on which the qualifying natural habitats rely	1. Public access/Disturbance (P); 2. Inappropriate scrub control (T); 3. Drainage (T); 4. Air pollution: impact of atmospheric nitrogen deposition (P).
Strensall Common SAC		
Strensall Common is managed by the Yorkshire Wildlife Trust and Ministry of Defence (MOD). The latter operate an extensive training facility and firing range within and adjacent to the European site. At over 570ha, it supports one of the largest areas of lowland heath in northern England. Extensive areas of both wet and dry heath occur and form a complex	**SAC features** H4010. Northern Atlantic wet heaths with Erica tetralix; wet heathland with cross-leaved heath;	1. Public access/Disturbance (P);

Description (including summary of qualifying features)	Qualifying features and Conservation objectives	Pressures and threats (P/T)
habitat mosaic with grassland, woodlands/scrub and ponds. Grazing, by sheep and cattle is the key management tool with stock typically present during summer and autumn. The heathland supports a diverse flora and fauna including such characteristic (and vulnerable) species as nightjar, woodlark, marsh gentian, pillwort, pond mud snail and dark bordered beauty moth, with Strensall Common representing the only site for this species in England. Footprint (2019) surveyed the status, extent and distribution of the main vegetation types and confirmed the importance of the management regime. Bisected by a road, it is vulnerable to nitrogen deposition from traffic. It is also subject to considerable recreational pressure from visitors, especially those with dogs although an established network of paths and periodic closures of part of the heath by the MOD (to facilitate training activities) can influence visitor behaviour. However, both the dry and wet heath habitats are particularly vulnerable to trampling, erosion and vandalism such as fire, fly-tipping, pollution and other activities associated with visitor pressure; there is existing evidence of unauthorised use of vehicles. Heathlands are also vulnerable to changes to the local hydrological regime and so construction nearby will require careful scrutiny. In 2011, all of Strensall Common SSSI was considered by Natural England to be in favourable or unfavourable-recovering condition. However, the corresponding SIP identifies a number of threats including, *inter alia*, public pressure and air pollution. The Supplementary Advice[37] highlights the threat posed to the maintenance of the grazing regime by the worrying and subsequent disturbance of livestock by dogs brought by visitors. It states (p15): '*any activity that threatened the viability of this management could pose a risk to heathland habitat*'. A 'Site Check, carried out in 2019 by Natural England raised concerns regarding the impact of recreational pressure (especially with dogs) on the condition of the heathland qualifying features. The MOD carries statutory obligations to have regard to conserving biodiversity under the NERC Act 2006[38] and operates a Conservation Group that includes Natural England and the Trust amongst others, and is a 'Section 28g (or public) body' under the Wildlife and Countryside Act 1981 (as amended)[39]. This means it must take reasonable steps to conserve and enhance the special features of SSSIs. Although identified as 'open access' land, it is also subject to restrictions from byelaws.	H4030. European dry heaths. **SAC objectives** 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 the qualifying natural habitats The structure and function (including typical species) of the qualifying natural habitats, and, The supporting processes on which the qualifying natural habitats rely	2. Inappropriate scrub control (T); 3. Air pollution: impact of atmospheric nitrogen deposition (P).

[37] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019
[38] HM Government (2006) Natural Environment and Rural Economies Act http://www.legislation.gov.uk/ukpga/2006/16/section/40
[39] HM Government (1981) Wildlife and Countryside Act

Description (including summary of qualifying features)	Qualifying features and Conservation objectives	Pressures and threats (P/T)
Humber Estuary SAC, SPA & Ramsar		
The Humber Estuary carries a high suspended sediment load which sustains a dynamic system of intertidal and subtidal mudflats, sandflats, saltmarsh and reedbeds extending to around 37,000ha. Other notable habitats include sand dunes, coastal lagoons and sub-tidal sandbanks. Qualifying (mobile) species include river and sea lamprey which migrate through the estuary to rivers in the Humber catchment. Importantly, the estuary regularly supports around 150,000 wintering and passage waterbirds. At high tide, large mixed flocks congregate in key roost sites often beyond the European site boundary due to the combined effects of extensive land claim, coastal squeeze and lack of grazing marsh and grassland on both banks of the estuary. In summer, the site supports important breeding populations of bittern, marsh harrier, avocet and little tern. All could be vulnerable to development or recreational pressure on functionally-linked land. Natural England has assessed that almost 99% of the underpinning Humber Estuary SSSI to be in 'favourable' or 'unfavourable recovering' condition. Only just over 1% of the site is assessed to be in 'unfavourable no change' or 'unfavourable declining' condition. However, the 'threat' level is considered to be 'medium' or 'high' across a much wider area. The corresponding SIP for the European site identifies, *inter alia*, a number of threats including water pollution and public pressure. Whilst therefore potentially vulnerable to a wide range of factors, its size, considerable distance from any point sources within the Council area and relative robustness of many of the features make the likelihood of harmful effects remote. The one possible exception to this is the population of lamprey which migrate from the sea, via the Humber to breeding grounds in the River Derwent. Physical or chemical barriers to migration may cause harm and so factors like wastewater disposal can require careful scrutiny if not addressed effectively in policy terms. Similarly, grey seals could also be vulnerable to similar factors. Given the similarity between Ramsar and SPA/SAC features, this HRA will restrict assessment to just the latter to avoid repetition.	**SPA objectives** 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; The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The population of each of the qualifying features; and, The distribution of the qualifying features within the site. **SAC objectives** 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; The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species; and, The distribution of qualifying species within the site.	1. Water pollution (P/T); 2. Coastal squeeze (T); 3. Changes in species distributions (T); 4. Undergrazing (P); 5. Invasive species (T); 6. Natural changes to site conditions (P/T); 7. Public access/Disturbance (P); 8. Fisheries: Fish stocking; (P) 9. Fisheries: Commercial marine and estuarine (P); 10. Fisheries: Commercial marine and estuarine (T); 11. Direct and take from development (T); 12. Air pollution: impact of atmospheric nitrogen deposition (P); 13. Shooting/scaring (P); 14. Direct impact from third party (T); 15. Inappropriate scrub control (P)

2.1.8 The outputs of Table 1 allow this HRA to focus solely on a restricted number of possible impacts on five European sites: the Humber Estuary, Lower Derwent Valley, the River Derwent and both Skipwith and Strensall Commons. However, by drawing on the additional information provided in Table 2, the HRA is able to further refine the possible impacts to specific features, habitats and species. These, the key issues for the next, formal stage of this screening exercise are presented in Table 3.

Table 3: Summarised, initial list of European sites, features and potential effects

European site	Potential effects	Qualifying features at risk
Lower Derwent Valley SPA, SAC & Ramsar	(5) Impacts on mobile species	Breeding, non-breeding birds and otter
	(6) Impacts from recreational pressure	Lowland hay meadows, alluvial alder woodland Breeding, non-breeding birds and otter
	(7d) Impacts from air pollution	Lowland hay meadows, alluvial alder woodland
River Derwent SAC	(5) Impacts on mobile species	Otter, bullhead and lamprey
	(6) Impacts from recreational pressure	Otter Floating vegetation dominated by water crowfoot
	(7d) Impacts from air pollution	Floating vegetation dominated by water crowfoot River and sea lamprey, and bullhead
Skipwith Common SAC	(6) Impacts from recreational pressure	Wet heath and Dry heath
	(7d) Impacts from air pollution	Wet heath and Dry heath
Strensall Common SAC	(2) Impacts on wetland features	Wet heath and Dry heath
	(6) Impacts from recreational pressure	Wet heath and Dry heath
	(7d) Impacts from air pollution	Wet heath and Dry heath
Humber Estuary SAC, SPA, Ramsar	(5) Impacts on mobile species	River and sea lamprey, grey seal and both breeding and non-breeding birds
	(6) Impacts from recreational pressure	Breeding and non-breeding birds

2.1.9 It is important to reiterate comments embedded in Table 2, regarding the assessment of Ramsar site features. The Humber Estuary Ramsar features are effectively duplicated by the SPA/SAC features. There is, therefore, no need for separate assessment and so further assessment in this HRA will focus entirely on the latter unless outcomes demand otherwise.

2.1.10 Whilst the same is true for the Lower Derwent Valley Ramsar and SPA bird communities, the relationship is not always so convenient. For instance, the wetland invertebrate assemblage in the Lower Derwent Valley Ramsar site is not represented in the corresponding SAC. However, there are strong reasons suggest that that assessment of the SAC habitats would be adequate to provide the necessary scrutiny to safeguard this assemblage.

2.1.11 This assemblage forms an integral component of the grassland, wetland and woodland complex of the Lower Derwent Valley and it is considered that the assessment of impacts on this group is fundamentally linked to those of its supporting habitats. Therefore, the wetland invertebrate assemblage is not assessed independently and instead, reflecting the ecology of the species and habitats, an approach based on the evaluation of just the SPA and SAC features is considered adequate to safeguard this feature and deliver the necessary scrutiny of Ramsar sites as required by current Government policy. Therefore, there will be no specific reference to Ramsar features in the following screening exercise unless it is required for clarity.

3. SCREENING THE POLICIES – PROCESS AND OUTCOMES

3.1 METHODOLOGY

3.1.1 Section 2 of this HRA confirmed that the Local Plan could not be excluded from scrutiny and identified which European sites and which features might be affected by it. Again, it is necessary to identify if there is a credible[40] risk that a proposal in the Local Plan may lead to a likely significant effect on a European site (by undermining its conservation objectives) and so result in the need for an appropriate assessment. The term "credible" risk is used here to mean the presence of a risk or doubt regarding a likely significant effect that triggers the need for an appropriate assessment, following the caselaw referred to above. The HRA achieves this by evaluating the proposals in the plan against the following criteria to identify if they can be:

- **Screened out from further scrutiny** (because the individual policies or allocations are considered not 'likely to have a significant effect on a European site, either alone or in-combination with other plans and projects');
- **Screened in for further scrutiny** (because the individual policies or allocations are considered 'likely to have a significant effect on a European site, either alone or in-combination with other plans and projects').

3.1.2 Mindful of the *People Over Wind* decision, section 6.3 of the Handbook describes a list of 'screening categories' (summarised in Table 4 below, itself adapted from an earlier edition of the Handbook) designed to evaluate both policy and site-based allocations to provide a rigorous and transparent approach to the screening process. Importantly, this process helps to provide a distinction between the *essential features and characteristics,* and *mitigation measures* of the Plan where relevant.

Table 4: Screening Categories[41]

Code	Category	Outcome
A	General statement of policy/general aspiration	Screened out
B	Policy listing general criteria for testing the acceptability/sustainability of the plan	Screened out
C	Proposal referred to but not proposed by the plan	Screened out
D	General plan-wide environmental protection/site safeguarding/threshold policies	Screened out
E	Policies or proposals which steer change in such a way as to protect European sites from adverse effects	Screened out
F	Policy that cannot lead to development or other change	Screened out
G	Policy or proposal that could not have any conceivable effect on a site	Screened out
H	Policy or proposal the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in-combination with other aspects of this or other plans or projects)	Screened out
I	Policy or proposal which may have a likely significant effect on a site alone	Screened in

[40] The term 'credible' is used in this context throughout the rest of this HRA
[41] From *The Habitats Regulations Assessment Handbook*, DTA Publications Limited (September 2013)

Code	Category	Outcome
J	Policy or proposal with an effect on a site but unlikely to be significant alone, so need to check for likely significant effects in-combination	Check
K	Policy or proposal unlikely to have a significant effect either alone or in-combination (screened out after the in-combination test)	Check
L	Policy or proposal which might be likely to have a significant effect in-combination (screened in after the in-combination test)	Check
M	Bespoke area, site or case-specific policies intended to avoid or reduce harmful effects on a European site. Excluded from formal screening but re-considered in appropriate assessment	Screened out

3.1.3 The impact of each potential effect is evaluated against the conservation objectives (Table 2) of the relevant features of the European sites (Table 3) and categorised according to criteria in Table 4 for every policy and/or allocation in the Plan. This provides a bespoke screening opinion for each and every policy and/or allocation in the Plan. The outcomes are summarised in Table 5 but given the large number of policies and allocations, the initial screening outcome for each policy and allocation is only presented in Appendix B. Where an effect is identified but it is unclear whether it would be significant alone or in-combination, the issue will be categorised as Category I as a precautionary measure, but any in-combination issues will still be considered below if necessary.

3.1.4 Issues of particular importance, arranged by potential effect, which influenced the outcome of this exercise, are discussed below taking each issue in turn. It should be noted that as a precautionary measure, all residential allocations found within a 7.5km radius from the boundary of Strensall Common SAC, were subjected to screening due to the perceived vulnerability of this site to recreational pressure. Reflecting their different circumstances, no threshold was adopted for other European sites in this regard.

3.1.5 Table 5 below summarises the outcomes of this initial screening exercise (contained in full in Appendix B). It lists all the policies in the Plan with the corresponding screening category. Mindful of relevant case law, the subsequent formal screening exercise draws on this and applies a suitable level of scrutiny to refine the outcomes which may, subsequently, change**.**

3.1.6 During this exercise, it became apparent that windfall development, catered for by Policy H1(P), in the vicinity of Strensall Common represented a potential risk to the European site but was not adequately captured in the standard criteria. Consequently, an additional category, 'Windfall development' was identified and can be seen under Category 'I" below.

Table 5 Summary of initial screening exercise

Screening outcome	Policies
A General statement of policy	DP1 SS2

Screening outcome	Policies
Screened out	ED1
B General criteria for testing acceptability of proposals Screened out	SS3 DP2, DP3, DP4, SS1 EC1, EC2 R1, R2, R3, R4 H2(P), H3(P), H4(P), H8(P), H9(P), H10(P) HW1, HW2, HW3, HW4, HW5, HW7 ED6, ED8 D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14 GI7, GB1, GB2, GB3 CC1, CC2, CC3, ENV3, ENV4, ENV5 T1, T7, T8 DM1
C Proposal referred to but not proposed by the Plan Screened out	WM1, WM2 T2
D Environmental protection policy Screened out	GI1, GI2, GI3, GI4, GI5, GI6 OS1, OS2, OS5, OS6, OS7, OS8, OS9,OS11 ENV1, ENV2
E Policies or proposals which steer change in such a way as to protect European sites Screened out	None
F Policy that cannot lead to development or other change Screened out	None
G No conceivable effect on a European site Screened out	SS4, SS5, SS6, SS7, SS8, SS14, SS16, SS20, SS21, SS22, SS23, SS24 E8, E9, E10, E11, E16 H3(A), H6(A), H8(A), H10(A), H20(A), H29(A), H38(A), H39(A), H52(A), H53(A) HW6 ED2, ED3, ED4, ED5, ED7 T3, T4,
H Policy or proposal with unspecified location which cannot undermine the conservation objectives (either alone or in-combination with other aspects of this or other plans or projects Screened out	H5(P), H6(P), H7(P) EC3, EC4, EC5 GB4, T5, T6, T9 C1

Screening outcome	Policies
I Likely significant effect alone cannot be ruled out Screened in	<u>Strensall Common:</u> recreational pressure and urban-edge effects - SS19/ST35, E18, H59(A); Recreational pressure only: SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1 wetland features: SS19/ST35, E18, H59(A); air pollution: SS19/ST35, E18, H59(A) Windfall: H1(P) <u>Lower Derwent Valley:</u> mobile species - SS13/ST15, SS18/ST33; recreational pressure - SS13/ST15, SS18/ST33 <u>River Derwent:</u> air pollution - SS13/ST15 mobile species – SS13/ST15, SS18/ST35 recreational pressure – SS13/ST15, SS18/ST33
J Likely significant effect in-combination cannot be ruled out Screened in	None
K Policy or proposal with no likely significant effect alone but which lead to in-combination effects Screened in	None
L Policy or proposal considered to have in-combination effects Screened in	None – no in-combination assessment has been shown to be necessary at this stage of the HRA. Note that the impacts of air pollution are considered in-combination as a matter of course and further scrutiny of the need for in-combination assessments across all issues will continue throughout the appropriate assessment.
M Policy or proposal to provide mitigation to avoid adverse effects on European sites – considered in appropriate assessment Screened out	OS10, OS12

3.2 SCREENING - WETLAND FEATURES

European site	Feature
Strensall Common SAC	Wet heath and Dry heath

Context

3.2.1 This potential effect is concerned with built development and its localised effects on surface and sub-surface flows both in terms of water quality and water resources resulting from changes in run-off, sedimentation, erosion etc. Table 3 shows that both the wet heath and dry heath communities of Strensall Common could be affected but as this criterion is restricted to localised threats, only three policies/allocations required evaluation.

3.2.2 The Council proposes development at three locations immediately adjacent or in close proximity to the Strensall Common European site (Policies SS19/ST35, E18 and H59(A)). Together these comprise the development of 545 dwellings (500 under SS19/ST35 and 45 under H59(A)) and a 4ha employment area (E18). Despite supporting extensive areas of wet heath, a threatened habitat with a restricted distribution in the UK and beyond, changes to the hydrological regime are not identified as a key pressure or threat in the Strensall Common SIP (Table 1).

Screening opinions

Strensall Common

3.2.3 Policies E18, SS19/ST35 and H59(A) were identified in the screening exercise (Appendix B) as having the potential to affect the wetland features at Strensall Common.

3.2.4 Wet and dry heath is found in the vicinity of all three proposed policies/allocations and extends across much of the European site. It is a fragile habitat, vulnerable to changes in the local surface or sub-surface hydrological regime. It is anticipated that construction of the proposed development, across all three allocations would be prolonged, extending over several years and would comprise substantial earthworks, the installation of drains and the storage of fuel and other potential contaminants, all with the potential to adversely affect the local hydrological regime.

3.2.5 Whilst it is not suggested that impacts from construction will adversely affect the entire site, it is possible that changes to drainage patterns could extend across localised but significant areas of the SAC. This would conflict with the conservation objective for Strensall Common to '*maintain … the extent and distribution … the structure and function … and the supporting processes … of the qualifying natural habitats.*'

3.2.6 Mindful of *People Over Wind*, mitigation embedded within these policies or proposed for amendment cannot be considered at this stage of the HRA.

Screening test – Wetland features – Strensall Common SAC
There is a credible risk that Policies SS19/ST35, E18 and H59(A) could undermine the conservation objectives of the wetland features of Strensall Common SAC and that a likely

significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.

Each policy is capable of resulting in a likely significant effect alone and, therefore, no residual effects are anticipated and there is no need for an in-combination assessment at this stage. This will be reviewed in the appropriate assessment.

3.3 SCREENING - MOBILE SPECIES

European sites	Feature
Lower Derwent Valley SPA and SAC	Breeding and non-breeding birds, and otter
River Derwent SAC	Otter, bullhead and lamprey
Humber Estuary SPA, SAC and Ramsar	River and sea lamprey, grey seals and both breeding and non-breeding birds

Context

3.3.1 Mobile Species are defined here as those that utilise ('functionally-linked') land or water beyond the European site boundary for some part of their life-cycle be it seasonally, diurnally or even intermittently. Consequently, they are vulnerable to a range of both localised and strategic effects away from protected areas. Therefore, in the case of fish and otter, effects on water quality and resources will have to be considered both up and downstream, and, in terms of bird populations, attention will have to be paid to land-take or disturbance on potentially wide areas of land.

3.3.2 Table 3 shows that a number of mobile species across three European sites (the Humber Estuary, River Derwent and Lower Derwent Valley) could be affected and potentially, a considerable number of policies/allocations could be implicated. All the potential European sites selected (except the River Derwent) identify 'disturbance' as a key pressure or threat in the relevant SIP (Table 1).

3.3.3 The individual features are considered in turn by site. Inevitably, because of some shared features, this introduces some repetition.

Screening opinions

Humber Estuary

3.3.4 No policies were identified in the initial screening exercise as having the potential to affect the mobile species of the Estuary, but the risk remains impacts could arise on functionally-linked land or water.

3.3.5 Given the absence of proposed development in close proximity to the estuary or known, functionally-linked land, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the breeding and non-breeding bird populations of the Humber Estuary SPA and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.

3.3.6 Similarly, and simply because of the distance between the Plan area and seal haul-out areas, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation**

objectives of the grey seal populations of the Humber Estuary SAC and so likely significant effects (alone) can be screened out. There would be no residual effects and no need for an in-combination assessment.

3.3.7 Furthermore, with the lack of proposals in the Plan for the creation of physical or other obstructions in watercourses**, it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the lamprey populations of the Humber Estuary SAC** (or River Derwent SAC) **and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.

Screening test – Mobile species – Humber Estuary European site
There is no credible risk that any policies in the Plan could undermine the conservation objectives of the mobile species of the Humber Estuary European site and likely significant effects can be ruled out (alone). No residual effects are anticipated and there is no need for an in-combination assessment.

River Derwent

3.3.8 Policies SS13/ST15, and SS18/ST35 were identified in the initial screening exercise (Appendix B) as having the potential to affect mobile species on the River Derwent.

3.3.9 Otters are associated with waterways throughout the region and, in common with experiences across much of lowland England, populations have been steadily increasing as water quality, in particular, has improved. Otters are typically nocturnal and elusive and although they will range widely in the rivers and adjacent riparian habitats to forage, holts and resting places are typically established away from human influence. As neither allocation promotes obstructions in the rivers nor is situated in close proximity to a water course or riparian land, no significant effects are anticipated.

3.3.10 Consequently, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the otter populations of the River Derwent** (or Lower Derwent Valley SAC) **SAC and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.

3.3.11 Given the absence of proposals for the creation of physical or other obstructions in watercourses, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the lamprey and bullhead populations of the River Derwent** (or Humber Estuary**) SAC and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.

Screening test – Mobile species – River Derwent SAC
There is no credible risk that Policies SS13/ST15 or SS18/ST35 or could undermine the conservation objectives of the mobile species of the River Derwent SAC and likely significant effects can be ruled out (alone). No residual effects are anticipated and there is no need for an in-combination assessment.

Lower Derwent Valley

3.3.12 Policies SS13/ST15, and SS18/ST35 were identified in the initial screening exercise (Appendix B) as having the potential to affect mobile species on the Lower Derwent Valley. Although the Lower Derwent Valley Visitor Survey (Appendix C) shows visitor rates drop markedly 5km from the site, both allocations lie within this threshold.

3.3.13 As with otters associated with the River Derwent (above**), it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the otter populations of the Lower Derwent Valley SAC** (and River Derwent SAC) **and so likely significant effects (alone) can be screened out**. There would be no residual effects and no need for an in-combination assessment.

3.3.14 The Lower Derwent Valley supports diverse, fragile breeding and non-breeding bird populations throughout the year, both within the SPA and on functionally-linked land beyond. All are equally vulnerable to disturbance from public pressure which could result in their disturbance or displacement.

3.3.15 However, only one policy is considered to affect the location of mobile species on functionally-linked land, the proposal for a new garden village at Elvington (SS13/ST15 – Land West of Elvington Lane). Evidence drawn from ecological reports prepared[42],[43] by two landowners associated with this proposal has confirmed the presence of significant numbers of non-breeding golden plover and lapwing associated with the Lower Derwent Valley SPA utilise land in and around this major new settlement.

3.3.16 The potential for the disturbance of these communities is clear and would conflict with the conservation objective for the Lower Derwent Valley SPA to:

'*ensure that the integrity of the site is maintained* by …*maintaining … the extent and distribution … the structure and function … the supporting processes on which the habitats of the qualifying features rely* … [and] *the population … and the distribution of the qualifying features ….*'

3.3.17 Therefore, **there is a credible risk that Policy SS13/ST15 could undermine the conservation objectives for the non-breeding birds of the Lower Derwent Valley SPA and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.** This policy is capable of resulting in a likely significant effect alone and, therefore, no residual effects are anticipated and there is no need for an in-combination assessment at this stage.

3.3.18 Likely significant effects from SS18/ST35 can be ruled out.

Screening test – Mobile species – Lower Derwent Valley
There is a credible risk that Policy SS13/ST15 could undermine the conservation objectives of the mobile non-breeding bird community of the Lower Derwent Valley SPA and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.

This policy is capable of resulting in a likely significant effect alone and, therefore, no residual effects are anticipated and there is no need for an in-combination assessment at this stage. This will be reviewed in the appropriate assessment.

3.3.19 It should be noted that this evaluation is only concerned with direct effects from new development. Indirect effects resulting from an increased number of visits to the site or land nearby are considered immediately below.

3.4 SCREENING - RECREATIONAL PRESSURE

European Sites	Feature
Humber Estuary SPA and Ramsar	Breeding and non-breeding birds
Lower Derwent Valley SPA, SAC and Ramsar	Lowland hay meadows, alluvial alder woodland Breeding and non-breeding birds, and otter
River Derwent SAC	Floating vegetation community Otter
Skipwith Common SAC	Wet and Dry heath
Strensall Common SAC	Wet and Dry heath

Context

3.4.1 For those European sites around York, adverse ecological effects from recreational pressure are largely limited to walking (frequently with dogs).

3.4.2 The most popular destinations can draw in visitors in great numbers from considerable distances and lead to erosion and disturbance. Less popular sites, or those with fewer facilities, frequently have a smaller catchment, fewer visitors and the issue is typically less problematic. Alternatively, sites managed specifically to encourage large numbers of visitors can tolerate these pressures without experiencing significant harm.

3.4.3 Excessive recreational pressure typically leads to the disturbance of qualifying species, and a reduction in habitat quality/extent from trampling. It can be particularly problematic on land with open or unauthorised access where the ability of visitors to range far and wide can compromise site management.

3.4.4 In addition, dogs can not only cause localised eutrophication but can also disturb grazing stock, reducing the effectiveness of traditional management and subsequently encourage a decline in the condition of features not normally considered vulnerable[44]. Dog ownership can also prompt an increase in the frequency of visits that typically start earlier and end later in the day than the general public might normally pursue, so further impeding stock management.

3.4.5 Distance or accessibility remain key factors and in general, where modest residential allocations are situated over 5km from a vulnerable European site, then likely significant effects (alone) can often (but not always) be ruled out. Of course, each site is different and other key factors will include the fragility of the feature, size of the development, the accessibility of alternative destinations, the availability of footpaths, public transport and so on.

3.4.6 Development that abuts or occurs in close proximity to semi-natural landscapes can also attract potentially harmful 'urban-edge' activities including fly-tipping, cat predation of ground-nesting birds, arson, vandalism and the creation of unauthorised entrances, including those made by householders on directly adjacent properties via their own gardens. Associated with this can be the unauthorised use of motorbikes and 4x4s although this can obviously involve users from further away. All have the potential to have a negative influence on site condition and can be particularly prevalent where development lies immediately adjacent or in very close proximity to European and other protected sites.

[44] English Nature Research Report 649 Dogs, Access and Nature Conservation. Taylor, K., Taylor, R., Anderson, P., Longden, K. & Fisher, P.

3.4.7 Of note, all purely employment allocations (except E18 which is situated immediately adjacent to Strensall Common SAC) are excluded from consideration in this category; given the reduced opportunities for employees to visit European sites nearby during the working day, any adverse impacts can be screened out, alone.

3.4.8 Table 3 shows that a number of features across five European sites (the Humber Estuary, River Derwent, Lower Derwent Valley and both Skipwith and Strensall Commons) and consequently, numerous policies/allocations could be affected. All the potential European sites selected identify 'disturbance/public access' as a key pressure or threat in the relevant SIP (Appendix A).

3.4.9 Following advice from Natural England, the Council in collaboration with its neighbour, Selby District Council (reflecting their common interests in the site as it lies within both administrative areas) commissioned Footprint Ecology (or *Footprint*) to carry out a visitor survey of the Lower Derwent Valley. Separately, Selby District Council commissioned Footprint to carry out the same task at Skipwith Common (which lies solely within its boundaries and far from any proposals in York's Plan). For presentational reasons both surveys were, however, submitted as one report[45] (see Appendix C). Independently, the City of York Council also commissioned the same company to perform a survey at Strensall Common[46] (Appendix D). In 2012, Footprint also carried out a visitor survey of the entire Humber Estuary[47]. The outcomes of these four surveys inform consideration of this issue below.

3.4.10 Drawing on the broad outcomes of this work, a precautionary 7.5km radius from the boundary of Strensall Common has been adopted to capture those allocations that could have an impact on the European site where the qualifying features are considered vulnerable. Use of the boundary effectively casts the net wider as it can be expected that most visitors from distance will typically arrive by car and will be drawn to more convenient but distant access points such as the Scott Moncrieff car park in the centre of the site; access via the actual site boundary, although closer, can be hindered by boundary features, private ownership and a lack of places to park safely. In contrast, reflecting their different circumstances, no threshold was adopted for Skipwith Common, the Lower Derwent Valley/River Derwent and the Humber Estuary.

3.4.11 As with 'mobile species' previously, this evaluation is presented by European site to provide clarity albeit with some repetition.

Screening Opinions

Humber Estuary

3.4.12 No policies were identified in the initial screening exercise as having the potential to directly increase recreational pressure on the Estuary but it is included here as it was identified by the 2012 Visitor Survey to be potentially vulnerable. This found that the median distance travelled by car to the estuary was 4.4km and the nearest allocation (ST33 at Wheldrake) lies around 20km distant. However, this issue was retained for further scrutiny given the potential for recreational pressure to indirectly affect functionally-linked land or water on which species associated with the estuary rely.

3.4.13 However, given the absence of proposed development nearby, limited access, compounded by private ownership of much of the hinterland and the distance to known, major high-tide roosts or feeding areas, such as at the former airfield at Brough, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the breeding and non-**

[45] Liley, D. (2018). Visitor surveys at the Lower Derwent SPA/SAC and Skipwith Common SAC. Unpublished report by Footprint Ecology for City of York Council and Selby District Council

[46] Liley, D. & Lake, S., (2019). Visitor surveys and impacts of recreation at Strensall Common SAC. Unpublished report by Footprint Ecology for City of York Council.

breeding bird communities of the Humber Estuary SPA and so likely significant effects alone can be <u>screened out</u>. There would be no residual effects and no need for an in-combination assessment.

Screening test – Recreational pressure – Humber Estuary European site
There is no credible risk that recreational pressure from any policies in the Plan could undermine the conservation objectives of the Humber Estuary European site and likely significant effects can be ruled out (alone). No residual effects are anticipated and there is no need for an in-combination assessment.

Lower Derwent Valley

3.4.14 Policies SS13/ST15, and SS18/ST35 were identified in the initial screening exercise (Appendix B) as having the potential to increase recreational pressure on the Lower Derwent Valley.

3.4.15 The evaluation of this issue is similar to that provided for 'mobile species' above. Otters are found along the waterways of the Lower Derwent Valley (and River Derwent) and populations have been steadily increasing as water quality, in particular, has improved. Otters are typically nocturnal and elusive, but will range widely in the rivers and adjacent riparian habitats to forage, and can display considerable tolerance of human disturbance whilst doing so. In contrast, holts and resting places are typically established away from human influence with the valley providing adequate opportunities for this. There is confidence that harmful effects can be ruled out, given the species' characteristics outlined above, taken with the fact that both allocations lie a considerable distance from the Lower Derwent and its riparian habitats and that access to the riverside is effectively (although not entirely) restricted by management measures and private ownership.

3.4.16 Consequently, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the otter populations of the Lower Derwent Valley** (or River Derwent) **SAC and so likely significant effects (alone) can be <u>screened out</u>.** There would be no residual effects and no need for an in-combination assessment

3.4.17 Similarly, the network of formal paths and effective field boundaries provides confidence that trampling, and erosion of the grassland, wetlands and woodlands will be avoided. Therefore, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the grassland, wetland and alluvial woodland habitats of the Lower Derwent Valley SAC and so likely significant effects (alone) can be <u>screened out</u>.** There would be no residual effects and no need for an in-combination assessment.

3.4.18 Such factors do not apply to the bird communities of the Lower Derwent Valley though. These comprise diverse, fragile breeding and non-breeding bird populations throughout the year, both within the SPA and, in terms of the latter, on functionally-linked land beyond which are vulnerable to disturbance and displacement (and predation by domestic cats). In addition, grazing animals, required to maintain the sward in a suitable condition, will also be vulnerable to disturbance.

3.4.19 Whilst access to much of the SPA is managed and/or restricted, it is not completely controlled. Furthermore, whilst the majority of functionally-linked land lies in private ownership, access here can also not be fully managed, and some trespass occurs (although this appears to be restricted to

existing, local residents from adjacent villages where no development is proposed). Consequently, given the location of the proposed large garden village at Elvington (Policy (SS13/ST15) within a few kilometres of the European site, and the more modest SS18/ST33 within 2km by road (and 1.4km as the crow flies), harmful effects cannot be ruled out if recreational pressure is to increase considerably. All other policies/allocations are considered to be far too distant to result in measurable effects and are ruled out of further scrutiny. Unlike Strensall Common, no formal threshold was adopted to screen proposals reflecting the lack of allocations in this more rural location, the restricted opportunities to gain access to much of the site and the visitor management measures already in evidence.

3.4.20 Both Policies SS13/ST15 and SS18/ST33 could therefore conflict with the conservation objective for the Lower Derwent Valley SPA to '*ensure that the integrity of the site is maintained by …maintaining … the extent and distribution … the structure and function … the supporting processes on which the habitats of the qualifying features rely ..* [and] *the population … and the distribution of the qualifying features ….*'

3.4.21 This observation is supported by the outcomes of the Visitor Survey (Appendix C) which, when considering the impacts of recreational pressure, states:

… there is the potential for Likely Significant Effects from development for …the Lower Derwent Valley SPA …

3.4.22 Therefore, **there is a credible risk that Policies SS13/ST15 and SS18/ST33 could undermine the conservation objectives for the breeding and non-breeding birds of the Lower Derwent Valley European site and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.** Each policy is capable of a likely significant effect alone and so there would be no residual effects and no need for an in-combination assessment[48].

3.4.23 It should be noted that despite its proximity to the Lower Derwent Valley, H39 was removed from the need for further assessment due to the lack of local access other than to a small section of the riverbank where harmful effects are highly unlikely.

Screening test – Recreational pressure – Lower Derwent Valley

There is a credible risk that recreational pressure from Policies SS13/ST15 and SS18/ST33 could undermine the conservation objectives of the breeding and non-breeding birds of the Lower Derwent Valley SPA and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.

These policies are capable of resulting in a likely significant effect alone and, therefore, no residual effects are anticipated and there is no need for an in-combination assessment at this stage. This will be reviewed in the appropriate assessment.

River Derwent

3.4.24 Policies SS13/ST15, and SS18/ST35 were identified in the initial screening exercise (Appendix B) as having the potential to increase recreational pressure on the River Derwent.

[48] It should be noted that a number of relatively modest allocations in both the existing and emerging Review of the Local Plan of the adjacent East Riding of Yorkshire lie in relatively close proximity of the Lower Derwent Valley at Bubwith (4), Melbourne (2) and Wilberfoss (3). However, as effects are considered 'alone' from ST15 and ST33, there is no need to consider effects in-combination at this stage of the HRA.

3.2.25 The relatively fragile floating vegetation communities could be considered vulnerable to recreational pressure but given its relative inaccessibility, (in this situation it is essentially restricted to the open water of the river channel) it can be assessed to be immune from such a risk.

3.2.26 Otters are also considered to avoid harm for the same reasons as expressed above for the Lower Derwent Valley.

3.2.27 Therefore, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the River Derwent SAC in terms of the floating vegetation community and otter populations, and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.

3.4.28 For the avoidance of doubt, although the River Derwent runs through the Lower Derwent Valley European site, and is subject to similar levels of access and possible threats, it is argued that the inaccessibility of the aquatic features of the River Derwent make it immune from harm and the need for appropriate assessment identified for the Lower Derwent Valley does not apply here.

3.4.29 As with the Lower Derwent Valley immediately above, H39 was removed at the screening stage from the need for further assessment due to the lack of local access allied with the intrinsic resilience of aquatic features to recreational pressure[49].

Screening test – Recreational pressure – River Derwent

There is no credible risk that recreational pressure from any policies in the Plan could undermine the conservation objectives of the River Derwent and likely significant effects can be ruled out (alone). No residual effects are anticipated and there is no need for an in-combination assessment.

Skipwith Common

3.4.30 No policies were identified in the initial screening exercise as having the potential to directly increase recreational pressure on Skipwith Common (situated in the neighbouring district of Selby), but it is included here as it was identified by the Visitor Survey to be potentially vulnerable.

3.4.31 The dry and wet heathland communities of Skipwith Common SAC represent examples of a restricted and highly threatened habitat in the UK and beyond, and one that is particularly vulnerable to recreational pressure. It is a popular site for (dog) walking with the small, local community but distance, limited public transport and restricted places to park appear to deter larger numbers from further afield. The site is carefully managed as a National Nature Reserve by Natural England and a mosaic of fenced grazing compartments effectively delineate a network of footpaths which largely prevent the damaging trampling of fragile habitats (although some erosion and widening of paths is evident). That said, even dogs on leads can have the subtle effect of driving grazing stock into cover reducing the effectiveness of the essential grazing management. These issues can only be expected to increase if the local population grows considerably.

3.4.32 However, there are no proposals for development of any scale in close proximity to the European site, with SS18/ST33 (Station Yard, Wheldrake) being 10km distant, and both SS20/ST36 (Imphal Barracks) and the garden village at Elvington (SS13/ST15) over 15km away by road, effectively ruling out the possibility of any harmful effects. Confidence in this assessment can be drawn from

[49] It should be noted that a number of allocations in both the existing and emerging Review of the Local Plan of the adjacent East Riding of Yorkshire lie in relatively close proximity of the River Derwent at Bubwith (4), Howden (2), Stamford Bridge (2) and Wilberfoss (3). However, as likely significant effects have been ruled out (alone) for ST15 and ST33 there is no need to consider effects in-combination.

the Skipwith Common Visitor Survey (Appendix C) which shows visitor rates drop markedly 5km from the site.

3.4.33 Yet, this observation is not supported by the outcomes of the Skipwith Common Visitor Survey (which, when considering the impacts of recreational pressure, states:

… there is the potential for Likely Significant Effects from development for both the Lower Derwent Valley SPA and Skipwith Common SAC.

3.4.34 However, it should be noted here that the reasons which prompted this particular exercise largely relate to proposed development in the emerging Local Plan of the neighbouring Selby District Council. At the time of writing, it is currently considering a cluster of development in closer proximity to the site. Whilst not explicitly stated in the report, it can safely be assumed that the above conclusion applies solely to proposed development in Selby and not York, Therefore, the threat of recreational pressure from the latter can be dismissed. Further confidence in this conclusion can be gained from the same report which went on to rule out an adverse effect on the integrity of Skipwith Common from recreational pressure.

3.4.35 The recent Issues and Options report for Selby's Local Plan stated:

provided the current settlement patterns are preserved, the inherent remoteness of these sites from large settlements will maintain a low number of overall visitors

3.4.36 Therefore, **it is considered highly unlikely that any proposals in the Plan could undermine the conservation objectives of the wet heath and dry heath at Skipton Common SAC and so likely significant effects (alone) can be screened out.** There would be no residual effects and no need for an in-combination assessment.[50]

Screening test – Recreational pressure – Skipwith Common
There is no credible risk that recreational pressure from any policies in the Plan could undermine the conservation objectives of Skipwith Common and likely significant effects can be ruled out (alone). No residual effects are anticipated and there is no need for an in-combination assessment.

Strensall Common

3.4.37 Policies SS19/ST35, H59(A) & E18 and SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1 were identified in the initial screening exercise (Appendix B) as having the potential to increase recreational pressure on the Common.

3.4.38 SS19/ST25, H59(A) & E18 were also identified as having the potential to increase urban-edge effects given their locations immediately adjacent to the Common.

3.4.39 Strensall Common supports similar habitats to Skipwith Common and currently experiences similar pressures. It too represents an important component of this important, once widespread but now fragmented habitat. This relatively large heathland attracts a greater number of visitors although behaviours are influenced by the presence of over 20km of footpaths and just two main car parks. Practical nature conservation management of the Common is undertaken by the Yorkshire Wildlife

[50] It should be noted that one allocation in both the existing and emerging Review of the Local Plan of the adjacent East Riding of Yorkshire lies in relatively close proximity of Skipwith Common at Bubwith. However, as likely significant effects were ruled out (alone) from the York Plan, there is no need to consider effects in-combination.

Trust across 42ha of land in the north, and the Ministry of Defence (MOD) across the bulk of the site (530ha). Regular closure of considerable parts of the latter to allow for training on the heath and firing practice on the adjacent ranges temporarily precludes public access across considerable areas of the SAC. However, this can have the effect of concentrating visitors on unrestricted areas. Despite management efforts, the wet and dry heathland communities are fragile and remain particularly vulnerable to increases in recreational and urban-edge pressures.

3.4.40 Of particular concern is the worrying of livestock by dogs, especially when off the lead. Given the importance of the grazing regime to heathland management and subsequent achievement of the conservation objectives, this represents a considerable risk should the number and frequency of visitors and dogs increase. Even when kept on a lead and under control, dogs can still displace sheep, reducing grazing intensity in well-visited areas and, conversely, overgrazing in those areas less popular.

3.4.41 It is important to note that in Natural England's Supplementary Advice[51] it states:

Any activity that threatened the viability of this management could pose a risk to heathland habitat and so could undermine the conservation objectives of the site.

3.4.42 In addition, erosion from trampling can result in numerous small-scale losses of heathland habitat, especially where visitors spread out to avoid boggy areas. Elsewhere, dog-fouling causes localised nutrient enrichment of poor heathland soils, encouraging ruderal species at the expense of more typical and more fragile components of the heathland flora. This is typically concentrated around car parks and can have a noticeable effect where severe.

3.4.43 Activities associated with urban edge effects such as fires, vandalism, fly-tipping and the unauthorised use of vehicles amongst others is already apparent and exert a downward pressure on the condition of the heath.

3.4.44 A more thorough, evidence-based review of the impact of recreational pressure and urban-edge effects on heathlands is provided in Appendix D (pp 58-72) and informs the assessment of this issue, where necessary, throughout the rest of this document.

3.4.45 The Plan proposes development at three locations immediately adjacent to the Strensall Common European site (Policies SS19/ST35, E18 and H59(A)). Together these comprise the development of 545 dwellings (500 under SS19/ST35 and 45 under H59(A)) and a 4ha employment area.

3.4.46 Eighteen other residential allocations, SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1 lie further afield within a precautionary 7.5km radius of the site boundary and together provide for an additional several thousand dwellings**.** The visitor studies suggested that visit rates declined from around 5km distance from the Common and so the use of a 7.5km radius at this stage of the HRA is considered to be suitably precautionary.

3.4.47 There is a credible risk that all twenty-one policies will increase recreational pressure on the Common. Given their proximity, Policies SS19/ST35, E18 and H59(A) are also likely to increase the frequency and intensity of urban-edge effects.

3.4.48 Consequently, these policies could conflict with the conservation objective for Strensall Common SAC to:

'*maintaining or restoring… the extent and distribution … the structure and function (including typical species) of the qualifying natural habitats and the supporting processes on which the qualifying natural habitats rely.*'

[51] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

3.4.49 More specifically, there is a risk that these policies could lead to changes, for instance, in the extent, species composition and structure of the heathland communities and even the management processes which support them. This raises the potential for conflict with the more refined targets for this site described in the Supplementary Advice.

3.4.50 These observations are supported by the outcomes of the Strensall Common Visitor Survey (Appendix D) which although it did not address likely significant effects, moved directly to consider impacts on the integrity of the site, the test associated with the appropriate assessment stage. When considering the impacts of recreational pressure, it stated:

The most concerning impact is worrying of livestock by dogs, which is already resulting in loss of animals and may jeopardise future grazing [and]

[An] *adverse integrity on the SAC cannot be ruled out as a result of the quantum of development proposed.*

Screening test – Recreational pressure – Strensall Common
There is a credible risk that recreational pressure from Policies SS19/ST35, E18 & H59(A), and SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A), SH1 could undermine the conservation objectives of Strensall Common SAC and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.
These policies are capable of resulting in a likely significant effect alone and, therefore, no residual effects are anticipated and there is no need for an in-combination assessment at this stage. This will be reviewed in the appropriate assessment.

3.4.51 All other policies and/or allocations were screened out of the HRA in terms of this potential effect.

3.5 SCREENING – AIR POLLUTION

European sites	Feature
Lower Derwent Valley SAC and Ramsar	Lowland hay meadows, alluvial alder woodland
River Derwent SAC	Floating vegetation dominated by water crowfoot River lamprey, sea lamprey and bullhead
Skipwith Common SAC	Wet and dry heath
Strensall Common SAC	Wet and dry heath

Context

3.5.1 Development is typically associated with increased traffic and emissions which can increase the airborne concentration of nitrogen oxides (NO_x) and ammonia (NH_3), and the subsequent rate of nitrogen deposition from the atmosphere. This can lead to the nutrient enrichment and acidification of soils, encouraging more tolerant ruderal species at the expense of sensitive plant, lower plant and

invertebrate communities. In high concentrations, ammonia can result in direct toxic effects on vegetation, a factor which may also be true of NO_x. Larger animals, such as small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats. Furthermore, it can exacerbate the effects of other factors such as climate change or pathogens, for example.

3.5.2 However, levels of nitrogen deposition fall quickly in the first few metres from the roadside before gradually levelling out; beyond 200m, they become difficult to distinguish from background levels. In other words, impacts at 10m, 50m or 200m can be very different from those at the roadside.

3.5.3 Consequently, only those European sites found within 200m of a road are considered vulnerable.

3.5.4 Specific impacts are assessed by calculating the relative contribution of the Plan in relation to the relevant *critical level* for NO_x and the *critical loads* for nitrogen deposition.

3.5.5 The critical level for NO_x is 30 ugm^{-3}. It is a precautionary threshold below which there is confidence that adverse effects on vegetation will not arise. The critical loads for nitrogen deposition are specific to each individual feature and are expressed in (kilogrammes of nitrogen per hectare per year: $kgNha^{-1}yr^{-1}$). These are presented as a range of values (eg 10-20 $kgNha^{-1}yr^{-1}$) and, as a precautionary approach, only the lowest figures are used.

3.5.6 Drawing on Environment Agency guidance, best practice[52] considers emissions to be insignificant where the contribution of the Plan is less than 1% of either the critical level or load. This threshold has been widely adopted as in practice it is barely discernible from natural background fluctuations and at two orders of magnitude below where harm cannot be ruled out is considered suitably precautionary. Whilst exceedance of the 1% threshold means that significant effects cannot be ruled out, it does not necessarily mean that harm would arise. It would typically, however, prompt the need for further analysis in an appropriate assessment.

3.5.7 Importantly, drawing on recent case law in Sussex (the *Wealden* case)[53], values were automatically considered in-combination, not only with other policies in the Plan, but also with plans and projects in neighbouring authorities and further afield. Accordingly, the traffic studies which underpin this assessment took account of a range of trends and evidence.

3.5.8 Natural England[54] refers to evidence to show that a 1,000 increase in the Annual Average Daily Traffic (AADT) flow on roads is roughly equivalent to a 1% increase in the critical level or load allowing for rapid, initial assessments to be made. If flows exceed this threshold, further analysis is required.

3.5.9 It can be seen, therefore, that the additional contributions that might arise from increased traffic are only likely to be significant where a European site lies within 200m of a road which is expected to experience an increase of more than 1,000 AADT, where a feature is known to be sensitive to such effects. Such relatively simple tests essentially represent the scope of a screening assessment leaving more detailed analysis and its relationship to the ecological characteristics of the European sites at risk to the appropriate assessment.

3.5.10 Attention must also be paid as to whether critical loads and levels are already exceeded or not. Where exceeded, or approaching exceedance, further contributions of nitrogen could prompt the need for appropriate assessment. In contrast, where existing values lie far below these thresholds, modest additions could well be of little consequence. When determining ecological impacts,

[52] Holman et al (2019). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.0, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/airquality-impacts-on-nature-sites-2019.pdf

[53] *Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council*) [2017] EWHC 351 (Admin).

[54] Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018

however, this is not a simple mathematical relationship. Account must be taken of both the type of habitats, since some are more resilient than others, and also the distribution of the designated features, since not all are distributed evenly across sites. For example, roadside communities are often highly modified from roadworks, compaction, informal footpaths, litter, boundary features, salt spreading in winter and the need for roadside management such as the regular cutting of vegetation.

3.5.11 However, where there is strong ecological evidence that shows that significant effects are unlikely even where these values are exceeded, then it is reasonable for this to be considered during screening and so preclude the need for unnecessary appropriate assessment.

3.5.12 It should also be noted that employment allocations have the potential to generate specific, point-sourced emissions that may or may not adversely affect European sites. As no such processes are proposed this assessment focuses solely on road traffic emissions.

3.5.13 Reflecting these and other issues, the SIPs and Supplementary Advice (Table 1) for the Lower Derwent Valley, River Derwent, Skipwith Common and Strensall Common, all identified air pollution as a key pressure or threat.

3.5.14 Evidence in this HRA draws on the original air quality report from 2018. Its results have been applied in the context of the judgments that are required in this HRA.

Screening opinions

3.5.15 The site assessments below rely heavily on information drawn from the Air Pollution Information System (APIS)[55] and the Air Quality Report[56] (Appendix H) commissioned by the Council which evaluated data not only from across the City of York but also from neighbouring authorities so providing the cumulative or in-combination assessment required.

3.5.16 As before, each site is taken in turn.

River Derwent

3.5.17 Policy SS13/ST15 was identified in the initial screening exercise (Appendix B) as having the potential to increase air pollution on the River Derwent.

3.5.18 Table 6 of the Air Quality Report suggests a mean background NO_x concentration of 16.26 ugm^{-3} in the base year of 2015 across the entire site, falling over the Plan period to 10.40 ugm^{-3}. Despite being a mean value across an extensive catchment, it can be safely assumed that concentrations of NO_x are currently well below the annual Critical Level of 30 ugm^{-3} across the entire European site. Current values from APIS (accessed in June 2020) for the entire site suggest an ever lower average value of 9.88 ugm^{-3} lending weight to this opinion. The Air Quality report also predicts that nitrogen deposition will fall over the Plan period from 14.56 $kgNha^{-1}yr^{-1}$ to 9.32 $kgNha^{-1}yr^{-1}$ reflecting wider, anticipated improvements in air quality. Further exploration of the ecological characteristics of the site are explored below.

3.5.19 Reflecting its rural location, roads of any magnitude within 200m of the European site are few and far between and are restricted to three river crossings, at Stamford Bridge (A166), Kexby (A1079) and Elvington (B1228). These therefore represent the locations where emissions from road traffic would be at their highest. Here, Table 8 of the report suggests that the greatest increase in NO_x on the River Derwent from the Plan and other plans or project would be found at Kexby and equal 4.6%, well above the 1% threshold (although still well below the critical threshold of 30 ugm^{-3}). In contrast,

[55] Air Pollution Information System http://www.apis.ac.uk/
[56] Air Quality Assessment: Air Quality Modelling Assessment. Waterman Infrastructure & Environment Ltd, April 2018

the lowest increase would be at Elvington on the B1228 where the predicted increase would be just 0.1%.

3.5.20 This reflects traffic data presented in Table A1 of the Air Quality Report which suggests that traffic flows at these three points will increase by 1,173 (A166, Stamford Bridge), 2,872 (A1079, Kexby) and 965 AADT on the quieter B1228, with the 1,000 AADT threshold exceeded at two points.

3.5.21 Taken together, this suggests that harmful effects cannot be ruled out and the risk remains that nitrogen deposition from road traffic would conflict with the conservation objective for the River Derwent SAC to:

Ensure that the integrity of the site is maintained or restored by … maintaining or restoring … the extent and distribution … the structure and function (including typical species) of qualifying natural habitats [and] *habitats of qualifying species … the supporting processes* [on which these] *rely; the populations … and the distribution of qualifying species within the site.*

3.5.22 Consequently, further scrutiny of the site characteristics is required to thoroughly evaluate the level of risk.

3.5.23 Given the uncertainty associated with the assessment of air pollution impacts at this site, **there is a credible risk that emissions from road traffic associated with policies in the Plan could undermine the conservation objectives for the floating vegetation community and both lamprey and bullhead populations of the River Derwent European site and that a likely significant effect cannot be ruled out (alone and in-combination). Consequently, an appropriate assessment is required.**

3.5.24 Given the requirements of the Wealden decision, this opinion is expressed as alone and in-combination as traffic anticipated to be generated by the entire plan and wider plans and projects have been considered in the air quality assessment. However, given that there is only one, major allocation in close proximity to the river at Elvington (SS13/ST15) with others far distant, it is reasonable, at this stage of the HRA, to link this issue with this policy to maintain the overall structure of the HRA. Should the appropriate assessment identify adverse effects on the integrity of the river, then further air quality analysis would be required to identify the particular sources or policies contributing to this effect. Therefore, the subsequent appropriate assessment will evaluate it under Policy SS13/ST15 unless the outcomes demand otherwise.

Screening test – Air pollution – River Derwent

There is a credible risk that air pollution from Policy SS13/ST15 could undermine the conservation objectives of the River Derwent and that a likely significant effect cannot be ruled out. Consequently, an appropriate assessment is required.

Lower Derwent Valley

3.5.25 The lack of large allocations in close proximity to the Lower Derwent Valley precluded the identification in the initial screening exercise of any that could contribute to an increase air pollution on the River Derwent. However, it is included here as it remains a potential risk.

3.5.26 The Air Quality Report suggests a mean NO_x concentration of 17.18$u$gm^{-3} in 2015, falling over the Plan period to 11.00 $u$gm^{-3}. Despite being a mean value across a large site, it can be safely assumed that concentrations of NO_x are currently below the annual Critical Level of 30 $u$gm^3 across the entire European site and are expected to fall further. Current values from APIS (accessed in June 2020) for the entire site suggest an ever lower average value of 9.64 $u$gm^{-3} lending weight to this opinion.

3.5.27 Further analysis in the report showed that the maximum NO_x contributions from the Plan and other plans or projects would equate to just 0.1% (on the B1228 at Sutton Derwent), falling well below the 1% threshold and strongly suggesting an insignificant outcome, especially given that background concentrations are relatively low. This is supported by traffic data in Table A1 of the report which suggests an increase in flow of 965, below the threshold of 1,000 AADT. Together, these would normally be sufficient to rule out the need for an appropriate assessment, but the Lower Derwent Valley is dominated by nitrogen sensitive habitats, some without critical loads and so further evidence is considered below.

3.5.28 So although perhaps unnecessary, further confidence in this outcome can be drawn from an evaluation of the impact this would have on nitrogen deposition and the critical loads for the qualifying features of the European site. The Lower Derwent Valley is dominated by neutral hay meadows with a critical load range of 20-30 kgNha^{-1}yr^{-1}.

3.5.29 The Air Quality report predicts that nitrogen deposition will fall over the Plan period from 17.36 kgNha^{-1}yr^{-1} to 11.31 kgNha^{-1}yr^{-1} reflecting wider, anticipated improvements in air quality. Despite being a mean figure, it can be assumed that nitrogen deposition levels across the Lower Derwent Valley will also fall below the minimum critical loads of 20-30 kgNha^{-1}yr^{-1} both now and in the foreseeable future. Therefore, in terms of nitrogen deposition, the effect of the Plan (and other plans or projects) is again considered to be insignificant by the authors of the report. Further exploration of the ecological characteristics of the site are explored below.

3.5.30 The critical loads identified for the habitat of the qualifying breeding and wintering birds struggle to accommodate the habitats at the SPA as they tend to describe the more typically associated upland and coastal communities of these species. It is considered that reliance on these values would lead to a flawed outcome and they have been put to one side. However, by adopting figures for the low altitude hay meadows more typical of the Lower Derwent Valley SAC described immediately above, the same critical loads of 20-30 kgNha^{-1}yr^{-1} are found and are utilised.

3.5.31 Therefore, in terms of nitrogen deposition, this suggested that contributions would equate to effectively zero (0.0%) of the lowest critical load. Again, well below the 1% standards and also strongly indicating an insignificant outcome in terms of the breeding and non-breeding bird community.

3.5.32 Critical loads are similarly not available for the alluvial, alder woodland feature. Reflecting its typical waterside or waterlogged locations, this is a feature of highly eutrophic locations. Given the very small increases in nitrogen deposition for the accompanying hay meadows a similarly insignificant outcome can be confidently anticipated

3.5.33 As the European site occupies a component same geography to the River Derwent, this outcome is heavily influenced by the lack of major roads nearby. Although the site extends over a large area (1092ha), roads of any magnitude within 200m of the river are few and far between; these comprise an area to the west of the B1228 in Sutton-on-Derwent, a 500m stretch of the A163 that runs alongside the hay meadows just to the west of the river crossing at Bubwith, two locations found

south-east of Wheldrake: one in the vicinity of the NNR office at Bank Island off Church Lane, and one in the centre of Thorganby where relatively discrete parcels of the European site lie within 50m of Main Street. Given the low values anticipated, no detailed assessment was carried out for the three latter locations.

3.5.34 However, before dismissing impacts on the Lower Derwent Valley completely, it should be noted that these meadows are considered sensitive to nitrogen deposition and in order to maintain floristic diversity of the sward and to provide the vegetative structure to support the breeding and wintering birds of the SPA, the use of nitrogen-based inorganic fertiliser is not allowed.

3.5.35 Almost the entire European site is subject to regular, annual flooding. The River Derwent is described as meso/eutrophic, reflecting its high nutrient load, itself a function of the erosion of soil particles from within its extensive, rural and heavily farmed catchment. The nitrogen load of the river is therefore high, and in flood, is likely to add far more nitrogen to the meadows of the European site than contributions from road traffic ever could. Recent events suggest that flooding is affecting more land and is becoming more frequent and prolonged.

3.5.36 Furthermore, APIS data for the Lower Derwent Valley suggests only 4% of overall nitrogen deposition is caused by local road traffic. Although an approximation and often an underestimate, this strongly suggests the contribution from road traffic will be minor with other sources, such as livestock farming contributing an order of magnitude more.

3.5.37 When the impact of flooding is considered alongside the outputs of the air quality study and allied with just the handful of locations where air pollution could affect the site, harmful effects on the habitats of the European site from road traffic can be discounted. Further weight is given to this argument when the background and predicted levels for the Lower Derwent Valley can be seen to fall well below the critical level and critical loads that apply.

3.5.38 Given these circumstances, it is unlikely that nitrogen deposition from road traffic could conflict with the conservation objective for the Lower Derwent Valley SPA and SAC to, respectively:

Ensure that the integrity of the site is maintained or restored … by maintaining or restoring … the extent and distribution [and] *the structure and function of the habitats of the qualifying features … the supporting processes on which [these] rely* [and] *the population … and the distribution of the qualifying features within the site.*'

Ensure that the integrity of the site is maintained or restored by … maintaining or restoring … the extent and distribution … the structure and function (including typical species) of qualifying natural habitats [and] *habitats of qualifying species*; *the supporting processes* [on which these] *rely; the populations … and the distribution of qualifying species within the site.*

3.5.39 Therefore, **it is considered highly unlikely that any proposals in the Plan that would increase the volume of road traffic and air pollution could undermine the conservation objectives (alone and in-combination) of the habitats of the Lower Derwent Valley European site and so likely significant effects can be screened out.** There would be no need for any further in-combination assessment.

3.5.40 This outcome fully takes into account the requirements of the Wealden decision by considering the impact of air pollution from all components of the Plan alongside with those from neighbouring authorities.

There is no credible risk that air pollution from any policies in the Plan could undermine the conservation objectives of the Lower Derwent Valley and likely significant effects can be ruled out

Skipwith Common

3.5.41 Skipwith Common lies outside the boundary of York in Selby District Council and was not assessed in the Air Quality Report. Data referred to below is therefore drawn entirely from APIS.

3.5.42 Skipwith Common extends to almost 300ha across a rural landscape. It is, however, bordered by a minor road to the east and is even bisected by another (although the latter is impassable to most vehicles and so is disregarded by this HRA).

3.5.43 APIS identifies a current mean NO_x concentration of 10.34 *u*gm^{-3}, well below the 30 *u*gm^{-3} threshold. In contrast, the (minimum) critical load for the wet and dry heath qualifying features is already clearly exceeded with an average rate of 18.6 $kgNha^{-1}yr^{-1}$, almost exceeding the maximum value in the range. Both values are taken from APIS in June 2020.

3.5.44 APIS suggests that only 10% of overall nitrogen deposition is caused by local road traffic. Although an approximation and often an underestimate, this strongly suggests the contribution from road traffic will be minor with other sources, such as livestock contributing over four times as much. Further, the overall contribution from road traffic will reduce reflecting wider anticipated improvements in air quality from vehicle emissions.

3.5.45 Furthermore, the eastern boundary of the site, adjacent to the local road is dominated by dense scrub and woodland easily extending beyond 20m width even at its narrowest point. This is not representative of the designated heathland habitats and nutrient enrichment within this area would not undermine the conservation objectives for the European site. In addition, thick bets of scrub and woodland are acknowledged to provide an effective, physical barrier to the widespread dispersal of airborne nitrogen.

3.5.46 Meaningful increases in nitrogen deposition from the Plan are therefore unlikely. Confidence in this assessment can be drawn from the distance from the nearest allocation at Elvington which lies over 16km away by road.

3.5.47 Given these circumstances, it is unlikely that nitrogen deposition from road traffic could conflict with the conservation objective for the Skipwith Common SAC to:

Ensure that the integrity of the site is maintained or restored … by maintaining or restoring … the extent and distribution … the structure and function (including typical species) … and the supporting processes on which the qualifying natural habitats rely.'

3.5.48 Therefore, **it is considered highly unlikely that any proposals in the Plan that would increase the volume of road traffic and air pollution could undermine the conservation objectives (alone and in-combination) of the features of Skipwith Common SAC and so likely significant effects can be screened out.** There would be no need for any further in-combination assessment.

3.5.49 This outcome fully takes into account the requirements of the Wealden decision by considering the impact of air pollution from all components of the Plan alongside with those from neighbouring authorities.

Screening test – Air pollution – Skipwith Common

There is no credible risk that air pollution from any policies in the Plan could undermine the conservation objectives of Skipwith Common and likely significant effects can be ruled out.

Strensall Common

3.5.50 Policies SS19/ST35, E18 and H59(A) were identified in the initial screening exercise (Appendix B) as having the potential to increase air pollution on Strensall Common.

3.5.51 Strensall Common extends over 572ha and is dominated by both wet and dry heath. The northern component is bisected by a minor road that does, however, provide a route to the busy A64 and the southern boundary is delineated by Towthorpe Lane.

3.5.52 The Council proposes development at three locations immediately adjacent or in close proximity to Strensall Common European site (Policies SS19/ST35, E18 and H59(A)). Together these comprise development of 545 dwellings and a 4ha employment area. They will all contribute to higher traffic flows in the area as will other allocations across the city and, potentially, beyond.

3.5.53 The Air Quality report suggests a background mean NO_x concentration of 13.13*u*gm^{-3} in 2015, falling over the Plan period to 8.40 *u*gm^{-3}. This means that concentrations of NO_x are currently below the annual Critical Level of 30 *u*gm^{-3} across the entire European site and are expected to fall further reflecting wider anticipated improvements in air quality from vehicle emissions. Therefore, in terms of NO_x the effect of the Plan is considered to be insignificant. Further exploration of the ecological characteristics of the site are explored below.

3.5.54 In contrast, however, Table 8 of the Air Quality Report suggests that increased road traffic associated with the Plan would lead to a 6.5% increase in NO_x concentrations, well above the 1% threshold (although still well below the threshold of 30 *u*gm^{-3}). Correspondingly, nitrogen deposition was modelled to increase to 14.41 kgNha^{-1}yr^{-1} or 157% of the lowest critical load. This reflects traffic data (Table A1) in the Council's Air Quality Report that suggest an increase in traffic of 1,491 AADT on Flaxton Road which leads onto Lords Moor Lane/York Lane and which ultimately bisects the SAC.

3.5.55 Given these circumstances, it is likely significant effects on SAC cannot be ruled out, having regard to the conservation objectives for the SAC to:

Ensure that the integrity of the site is maintained or restored … by maintaining or restoring … the extent and distribution … the structure and function (including typical species) of the qualifying natural habitats and the supporting processes on which the qualifying natural habitats rely.'

3.5.56 Consequently, further scrutiny of the site characteristics is required to evaluate the level of risk.

3.5.57 Given the level of exceedance, a likely significant effect cannot be ruled out and **there is a credible risk that emissions from road traffic associated with Policies SS19/ST35, E18 and H59(A)**

could undermine the conservation objectives for Strensall Common SAC and that a likely significant effect cannot be ruled out (alone and in-combination). Consequently, an appropriate assessment is required.

3.5.58 Given the requirements of the Wealden decision, this opinion is expressed as alone and in-combination as traffic from the entire plan has been considered in the air quality assessment. However, only these three allocations lie in close proximity to the Common (SS19/ST35, H59(A) and E18) with others far distant it is reasonable, at this stage of the HRA, to link this issue with these policies to maintain the overall structure of the HRA. Should the appropriate assessment identify adverse effects on the integrity of the Common, then further air quality analysis would be required to identify the particular sources or policies contributing to this effect. Therefore, the subsequent appropriate assessment will evaluate it under these three policies unless the outcomes demand otherwise.

Screening test – Air pollution – Strensall Common

There is a credible risk that air pollution from Policies SS19/ST35, E18 and H59(A) could undermine the conservation objectives of Strensall Common and that a likely significant effect cannot be ruled out (alone). Consequently, an appropriate assessment is required.

3.6 SCREENING - WINDFALL DEVELOPMENT – POLICY H1(P)

3.6.1 Policy H1(P) makes provision for windfall development on unallocated sites. Windfall development would be judged against Policy GI2 'Biodiversity and Access to Nature'. The Council have proposed a modification to policy GI2 and consulted on this as part of the Proposed Modifications Consultation (2019) (references PM26 and PM27) [EiP ref: EXCYC20]. This policy modification is proposed to include reference to internationally and nationally designated nature conservation sites and how they will be considered through the planning process following Natural England's response to the policy in the Local Plan's Regulation 19 consultation (2018). As a result, whilst the policy intends to recognise the benefits to people provided from access to nature, it has made clear that, where necessary, development will be required to assess the impact of recreational disturbance on SSSIs, SACs and SPAs and, to the extent that impact is assessed to be likely, to require appropriate mitigation measures to prevent harm from arising.

3.6.2 Whilst reliance on Policy GI2 is considered adequate to secure the safeguard of European sites in most circumstances, there is concern that the levels of protection are not sufficiently explicit to account for the perceived vulnerability of Strensall Common SAC.

3.6.3 The Common supports extensive examples of wet and dry heath, habitats that are both nationally and internationally scarce and fragmented. They are also vulnerable to a range of pressures closely associated with urbanisation such as changes in hydrological regimes, air pollution and recreational pressure.

3.6.4 It is possible that inappropriate development could conflict with the conservation objective for Strensall Common to '*maintain … the extent and distribution … the structure and function … and the supporting processes … of the qualifying natural habitats.*' Therefore, a likely significant effect cannot be ruled out and an appropriate assessment is required.

3.6.5 For the avoidance of doubt, it is considered implausible that similar issues would arise along the Lower Derwent Valley/River Derwent corridor. This is because access to both European sites is either restricted and/or managed effectively within the Lower Derwent Valley National Nature Reserve. In addition, the potential for windfall development is limited by the extensive green belt and flood plain

Screening test – Windfall development - Policy H1
There is a credible risk that Policy H1 will not provide adequate levels of protection from windfall development so allowing the conservation objectives of Strensall Common to be undermined. A likely significant effect cannot be ruled out (alone). Consequently, this policy must be screened in and an appropriate assessment is required.

3.7 IN-COMBINATION ISSUES

3.7.1 Since production of the Air Quality Report, local plans in the area have continued to develop. Of particular interest are those in the East Riding of Yorkshire and Selby which both lie adjacent to York, to the east and south respectively, and have the potential to influence outcomes regarding both Skipwith Common and the Lower Derwent Valley/River Derwent.

3.7.2 In terms of the East Riding, proposals within the emerging Review of the adopted local plan are broadly consistent with its predecessor. Of greatest interest to this HRA is the proposal to effectively double the size of an allocation at Howden which lies around 4.5km east of the Lower Derwent/River Derwent. Impacts of this proposal in-combination on recreational pressure have been explained and dismissed (at this stage of the HRA) for reasons provided in footnotes on pages 43-44 above.

3.7.3 In terms of air pollution, the increased allocation will not have been assessed by the Council's Air Quality Report. However, this has to be seen in the overall context that the Review promotes a similar number of houses via a smaller annual housebuilding target over a longer period. This suggests the Review will have no material effect on either the outcomes of the Air Quality Report or this HRA. Furthermore, that report took account of a 922 dpa housing requirement and housing supply in the submitted plan, which has now been reduced to 822 dpa as well as the proposed removal of ST35 suggesting that overall effects in-combination will be less than anticipated.

3.7.4 Of further interest would be the outcomes of the HRA[57,58] of East Riding's existing local plan which did not identify air pollution as a threat to any European site. Whilst it should be borne in mind that both HRA documents pre-dated recent best practice and case law, there is no reason to consider that the outcomes would change given the similar housing numbers and that the effect of allocations within East Riding's existing Plan would have been accommodated within the Council's traffic study which informed this HRA.

3.7.5 In addition, given that the East Riding Review is at such an early stage of development and will be subject to its own HRA that will, by necessity explore in-combination issues in its own right, scrutiny of in-combination issues here is not considered feasible. No other aspects of the Review as it

[57] East Riding Local Plan Strategy Document Habitat Regulations Assessment Stage 1: Screening East Riding of Yorkshire Council. Atkins January 2013
[58] East Riding of Yorkshire Local Plan Strategy Document. Habitat Regulations Assessment Stage 2- Appropriate Assessment. East Riding of Yorkshire Council. Atkins January 2014

currently stands are considered to represent a material change to the outcomes of the Council's Air Quality Report.

3.7.6 Selby's local plan is also in development but as yet has not identified a set of preferred options with numerous possible allocations currently listed. Although modest proposals lie in closer proximity to Skipwith Common, the majority lie far distant and the settlement hierarchy proposed suggests that the majority of new housing will be located in and around Selby itself which is approaching 10km distant by car. The current Issues and Options report[59] for the Council concludes that:

Skipwith Common SAC is well over 200m from any significant road or through route likely to carry anything other than small volumes of traffic; as such, traffic arising from the Selby District Local Plan is unlikely to affect NOx concentrations or nitrogen deposition rates at this site

3.7.7 In terms of the Lower Derwent/River Derwent complex, Selby's Issues and Options report identifies this will require further scrutiny. -Whilst consistent with the outcome of this HRA, given that the Selby Plan is at such an early stage of development and will be subject to its own HRA that will, by necessity explore in-combination issues in its own right, scrutiny of in-combination issues here is not considered feasible. However, the Council's traffic report will have taken account of Selby's proposals at the time.

3.7.8 Note has also been taken of a potential windfall development adjacent to Askham Bog to the south of York and within the City Council area. This is not on land proposed in the Plan and comprises up to 516 dwellings and associated development. The application was refused by the Council, was assessed on appeal in November 2019 and refused in May 2020.

3.7.9 Overall, therefore, there are no outstanding in-combination issues remaining at this stage of this HRA.

3.8 SUMMARY OF THE SCREENING EXERCISE

3.8.1 The outcomes of this stage of the formal screening assessment are brought together in Table 6. This lists those sites, issues and policies where it has been found that the conservation objectives may be undermined and where likely significant effects cannot be ruled out (and appropriate assessment required); all other policies have been screened out of the need for further scrutiny.

3.8.2 The purpose of the screening test is defined in Regulation 105(1) to identify if likely significant effects will arise 'either alone or in-combination' (and not alone and in-combination). At present, each potential risk has been assessed to represent a likely significant effect alone. This precludes the need for an in-combination assessment at this stage, a position that is given weight via the exploration of emerging plans and projects in neighbouring authorities in s3.7. However, the possible need for the latter will be considered again in the appropriate assessment as required by the *Waddenzee* case. Exceptionally, air pollution which draws on cumulative data is considered in-combination in accordance with the *Wealden* decision.

[59] Habitat Regulations Assessment of the Selby Issues and Options Document Screening: Likely Significant Effects. AECOM January 2020

Table 6: Summary of the Screening of the Policies and Allocations

European site	Issue	Policies	Feature affected	Conservation objectives (abridged)	Credible risk objectives undermined	Residual effects?	In-combination effect?	Outcome
Strensall Common SAC	Wetland features	SS19/ST35, H59(A), E18	Wet and dry heath	Extent and distribution of qualifying habitats Structure and function of qualifying habitats Supporting processes for qualifying habitats	Yes	None	None	Likely significant effect and Appropriate assessment required
	Air pollution	SS19/ST35, H59(A), E18	Wet and dry heath		Yes	None	Uncertain	
	Recreational pressure	<u>Recreational pressure (including urban-edge effects):</u> SS19/ST35, E18 & H59(A) <u>Recreation only:</u> SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32 and, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A), SH1	Wet and dry heath		Yes	None	None	
Strensall Common SAC	Windfall development	H1	Wet and dry heath	Extent and distribution of qualifying habitats Structure and function of qualifying habitats Supporting processes for qualifying habitats	Yes	None	None	Likely significant effect and Appropriate assessment required

European site	Issue	Policies	Feature affected	Conservation objectives (abridged)	Credible risk objectives undermined	Residual effects?	In-combination effect?	Outcome
Lower Derwent Valley SPA	Mobile species	SS13/ST15	Non-breeding birds	Extent and distribution of habitats of qualifying features Structure and function of habitats of the qualifying features Supporting processes on which habitats rely Population of qualifying features Distribution of qualifying features	Yes	None	None	Likely significant effect and Appropriate assessment required
Lower Derwent Valley SPA	Recreational pressure	SS13/ST15 & SS18/ST33	Breeding and non-breeding birds	Extent and distribution of habitats of qualifying features Structure and function of habitats of the qualifying features Supporting processes on which habitats rely Population of qualifying features Distribution of qualifying features	Yes	None	None	Likely significant effect and Appropriate assessment required

European site	Issue	Policies	Feature affected	Conservation objectives (abridged)	Credible risk objectives undermined	Residual effects?	In-combination effect?	Outcome
River Derwent SAC	Air pollution	SS13/ST15	Floating vegetation communities & Bullhead, river and sea lamprey	Extent and distribution of qualifying habitats and those of qualifying species Structure and function of qualifying habitats Structure and function of habitats of qualifying species Supporting processes on which habitats rely Populations of qualifying species Distribution of qualifying species	Yes	None	Uncertain	Likely significant effect and Appropriate assessment required

3.9 Next Steps

3.9.1 Overall, this exercise found that it was not possible to screen out likely significant effects alone for Policies SS19/ST35, E18 & H59(A), and SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1 for a range of possible but credible impacts regarding air pollution, mobile species, recreational pressure and urban edge effects regarding three European sites: the Lower Derwent Valley, River Derwent and Strensall Common. In addition, Policy H1(P) could not be screened out due to the risk posed by windfall development on Strensall Common.

3.9.2 Consequently, an appropriate assessment is required to explore whether these policies will have an adverse effect on the integrity of the European sites. Policies can normally only be adopted if it is certain, beyond reasonable scientific doubt, that adverse effects can be ruled out. Drawing on the recent People Over Wind ruling, this will explore if embedded or additional mitigation measures can avoid a negative outcome. This is presented in Section 4 below.

3.9.3 All other policies and allocations were screened out of the need for further assessment in this HRA.

4 APPROPRIATE ASSESSMENT AND INTEGRITY TEST

4.1 PURPOSE AND APPROACH

4.1.1 The screening assessment has identified that likely significant effects have been ruled out for all policies except those listed below which require appropriate assessment.

European site	Policies	Issue	Feature affected
Strensall Common SAC	SS19/ST35, H59(A) & E18	Wetland features	Wet and dry heath
	SS19/ST35, H59 (A)& E18	Air pollution	
	SS19/ST35, H59(A) & E18,	Recreational pressure/urban-edge effects	
	SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1	Recreational pressure	
Lower Derwent Valley SPA	SS13/ST15	Mobile species	Non-breeding birds
	SS13/ST15 & SS18/ST33	Recreational pressure	Breeding/non-breeding birds
River Derwent SAC	SS13/ST15	Air pollution	Floating vegetation community River and sea lamprey, and bullhead
Strensall Common SAC	H1(P)	Windfall development	Wet and dry heath

4.1.2 The precautionary principle demands that where a plan is likely to have a significant effect, it can only be adopted if the competent authority can ascertain (following an appropriate assessment) that it *will not adversely affect the integrity of the European site*. This is the role of the appropriate assessment and represents the fundamental test of an HRA; competent authorities should not normally consent or adopt proposals unless they are certain that adverse effects can be ruled out.

4.1.3 Where it is not certain that an adverse effect can be avoided, and in line with the *People Over Wind* ruling, the appropriate assessment also considers whether any incorporated mitigation measures are sufficient to remove all reasonable scientific doubt about the risk of such an effect. Further explanation of the process is provided in Section 1.

4.1.4 Mitigation performs a different role to compensation; the former comprises measures intended to avoid, cancel or reduce adverse effects on European sites whereas the latter can only be considered under the derogations – where an adverse effect cannot be avoided. Criteria adopted here to satisfy this test are that any mitigation measures considered *should be effective, reliable, timely, guaranteed to be delivered, as long term as they need to be to achieve their objectives and legal*. Any doubt around any of these criteria would introduce unhelpful uncertainty into the decision-making process.

4.1.5 The Handbook highlights the meaning of integrity in contemporary planning policy and guidance as defined by the CJEU (*Sweetman*) and European Commission as *the lasting preservation of the constitutive characteristics of the site* before adding that for a plan-making body to conclude the absence of an adverse effect **it should be convinced that no reasonable scientific doubt remains** as expressed in the Waddenzee (para 59) ruling:

That is the case where no reasonable scientific doubt remains as to the absence of such effects (Para 59*) and where doubt remains as to the absence of adverse effects … the competent authority will have to refuse authorisation* (Para 57).

4.1.6 This should be read in the context of case law that shows "*where doubt remains as to the absence of adverse effects … the competent authority will have to refuse authorisation"* (Waddenzee, Para 57). This is described more fully in Section 1.

4.1.7 In addressing the burden of proof, the Handbook (F.10.1) states:

Because the integrity test incorporates the application of the precautionary principle as a matter of law, and because plan assessments are, by their nature, less precise than project assessments, it is important for the assessment process to eliminate the prospect of adverse effects on site integrity in so far as that is possible at the level of specificity inherent in the nature and purpose of the particular plan.

4.1.8 It should be noted however that considerable evidence does exist in relation to development proposals in the vicinity of Strensall Common. Consequently, this is used to inform this assessment.

4.1.9 Bearing this in mind, each European site is taken in turn and each issue dealt with accordingly. The effectiveness of any mitigation embedded in the policies is considered. If an adverse effect on the integrity of the site cannot be removed even when site-specific mitigation measures are considered, the appropriate assessment will consider if other restrictions are available that could secure a positive outcome. Each issue is concluded with a bespoke statement that represents the integrity test on that site. These individual outcomes are summarised in Table 8. The appropriate assessment concludes with a final statement that confirms the outcome of the HRA.

4.1.10 It should be noted that the appropriate assessment also explores if residual effects (as described in Section 1) remain. In this case, this refers to effects that would not result in an adverse effect on the integrity of the site alone but when considered with other residual effects identified elsewhere in the appropriate assessment could combine to harm the integrity of the site. If any arise, this could prompt the need for an in-combination assessment.

4.2 STRENSALL COMMON APPROPRIATE ASSESSMENT

European site	Policies	Issue	Feature affected
Strensall Common SAC	SS19/ST35, H59(A) & E18	Wetland features	Wet and dry heath
		Air pollution	
		Recreational pressure and urban-edge effects	
Strensall Common SAC	SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1	Recreational pressure only	Wet and dry heath
Strensall Common SAC	H1(P)	Windfall development	Wet and dry heath

4.2.1 The screening exercise has concluded that a likely significant effect cannot be ruled out alone for the following policies: SS19/ST35, H59(A) & E18. This is because of concern that:

- Works associated with construction would cause changes to the hydrological regime (or the wetland features) of the Common that could harm the wet and dry heath communities;
- The increase in recreational pressure and urban-edge effects would *inter alia* lead to trampling, erosion and eutrophication of the fragile heathland communities, an increase in the effects of urbanisation (such as fire, vandalism and fly-tipping) and interfere with the management of the site by the disturbance of grazing stock especially by dogs; and
- Increased road traffic pollution would lead to eutrophication of the dry and wet heathland communities.

4.2.2 These three allocations lie immediately adjacent to the European Site; SS19/ST35 provides for 500 new dwellings, H59(A) for 45 and E18 allows for a 4ha employment area.

4.2.3 In addition, likely significant effects could not be ruled out in terms of the following policies because of concerns regarding recreational pressure: SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) and SH1 which all lie between 2km and 7.5km distant as the crow flies from the SAC boundary. Each of these potential effects are taken in turn below. In all, 6.653 new dwellings are proposed within 7.5km of the SAC, an overall increase of 14% of the housing stock of the area.

Recreational pressure and urban-edge effects at Strensall Common

4.2.4 The screening exercise concluded that significant effects from recreational pressure and urban-edge effects on the dry and wet heathland communities at Strensall Common SAC cannot be ruled out alone.

4.2.5 The HRA submitted by the Council (April 2018) concluded that if *proposed amendments are adopted, then the Council can ascertain that Policies SS19/ST35, E18 and H59 will have no adverse effect on the integrity of Strensall Common European site in terms of recreational pressure.* However, Policies SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) and SH1 were not taken through to appropriate assessment in that HRA.

4.2.6 Since then, this issue has been the subject of considerable study and evaluation as follows:

- Visitor surveys and impacts of recreation at Strensall Common SAC (Footprint Ecology for the Council, 2019)[60] (Annex D to EX/CYC/16c)[61];
- Review of recreational use of the SAC and impacts of existing use (Wood, 2019 (but work carried out in 2017)), (Appendix D of DIO Hearing Statement) (EX HS M1 LR 4[57]);
- Strensall Common Visitor Survey Report (Pickersgill Consultancy and Planning (PCP) for DIO, October 2019) (Appendix E of DIO Hearing Statement) (EX HS M1 LR 4);
- Comparison of PCP and Footprint Ecology Visitor Survey of Strensall Common (Avison Young/Wood (AYW) for DIO, 2019), (Appendix E of DIO Hearing Statement) (EX HS M1 LR 4);
- Review of DIO Hearing Statement/PCP Study (Footprint Ecology for the Council, February 2020)[62] (Appendix F to this HRA);
- Shadow HRA. Information to support a Habitats Regulations Assessment. DIO York Sites: Queen Elizabeth Barracks (Wood, for DIO, November 2019) (Appendix II of DIO Hearing Statement) (EX HS M1 LR 4).

4.2.7 The production of this material has, in part, prompted the production of this new HRA for the Council. The findings of each are considered at length below but importantly, this section is not a comprehensive review of every single figure or opinion. It merely seeks to describe and ultimately evaluate the most significant outputs. Reference to each individual report is encouraged for the complete picture.

4.2.8 The location of each allocation is in relation to the distance (as the crow flies) from the SAC boundary is shown in Figure 3. This presents a precautionary approach. Access to the site from the boundary is restricted by MOD property, fences, dense scrub and/or limited car parking opportunities. The vast majority of visitors from further afield will be most likely to make use of the Scott Moncrieff and Galtres car parks which can lie a further 1km away or more by road. This approach though does ensure consistency with the majority of measurements adopted by both visitor surveys.

4.2.9 The amount of evidence makes for prolonged analysis in this HRA. To bring some order to the process, this particular section is arranged as follows:

[60] Liley, D. & Lake, S., (2019). Visitor surveys and impacts of recreation at Strensall Common SAC. Unpublished report by Footprint Ecology for City of York Council.
[61] See CYC Examination Library: https://www.york.gov.uk/downloads/file/1799/examination-library-v-39-06-03-20
[62] Liley, D., (2020). City of York Local Plan; review of Hearing Statement from DIO relating to Matter 1, Legal Compliance. Unpublished report by Footprint Ecology.

- A ‘Description of Evidence’ comprising:
    - Overview and brief descriptions of the visitor surveys carried out by Footprint Ecology, PCP and Wood;
    - Description of AYW and Footprint ‘rebuttals’;
    - Description of AYW Mitigation Report;
    - Description of DIO ‘Information to Support a Habitats Regulations Assessment’ (ISHRA);
- Review of all Footprint, AYW and Wood evidence by this HRA; comprising *inter alia*:
    - Review of Recreational pressure and urban-edge effects;
    - Review of AYWs ‘Information to Support an HRA’; and
    - Review of the mitigation proposed;
- Review of Policies/Allocations by this HRA; and
- Integrity tests for each allocation

Description of Evidence

Visitor surveys

4.2.10 The 2018 HRA concluded that the adoption of a suite of modifications to Policy SS19/ST35, H59(A) and E18 would be sufficient to avoid an adverse effect on the integrity of the SAC. These included, but were not limited to, the erection of a physical, permanent barrier between the allocation and the Common, the management of open space (OS12) within the policy area (of SS19/ST35) and the development of a funded warden service to influence public behaviour of existing visitors including future residents of these two allocations on the SAC. Bearing in mind the anticipated increases in visitor pressure from the new allocations at the time, it was believed that these mitigation measures would provide sufficient confidence to allow an adverse effect on the integrity of the site to be ruled out and, notwithstanding any other issues, to enable the policy to be adopted.

4.2.11 However, in its letter of 4 May 2018 (when referring to recreational pressure) Natural England stated, that:

[it did] *not agree that adverse effects on integrity can be ruled out based on the evidence available*.

And went on to recommend:

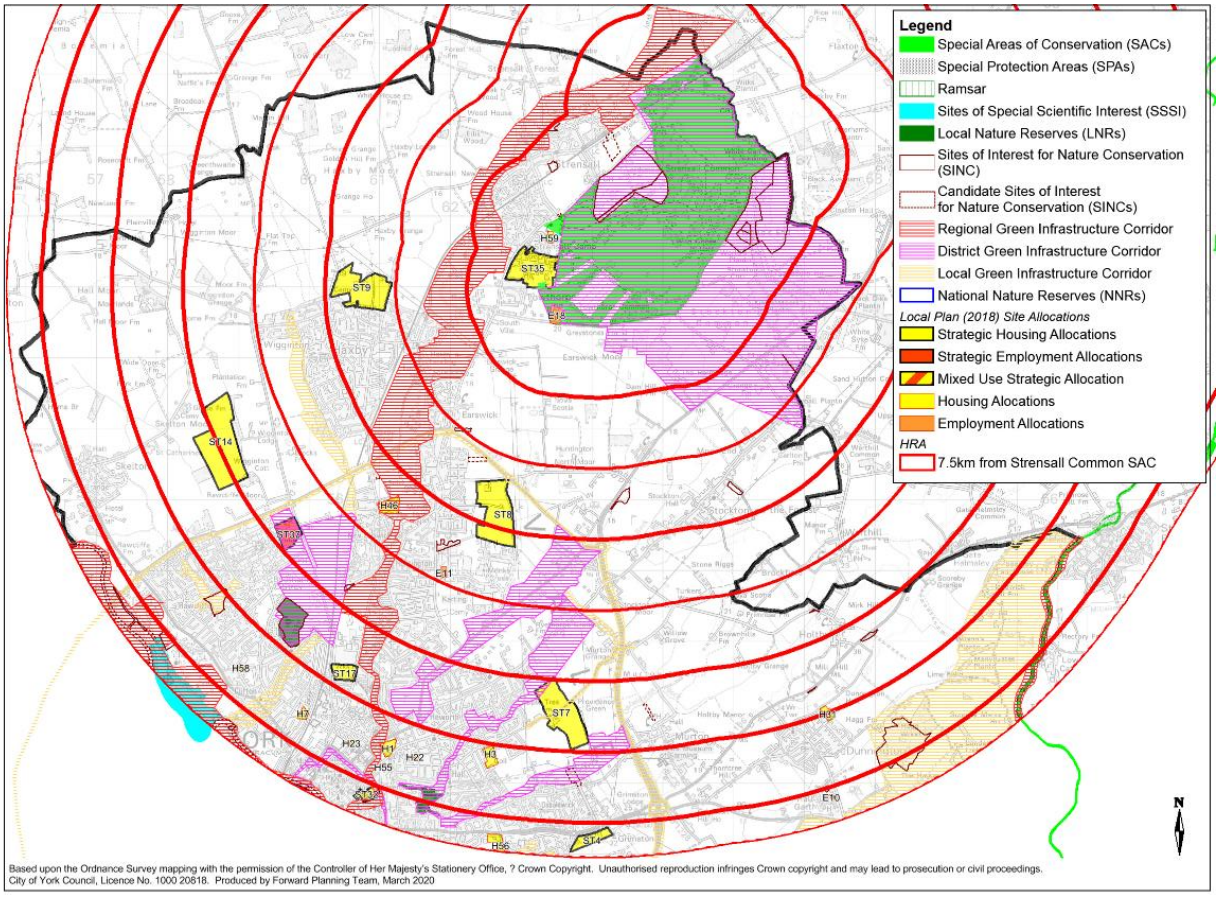
.... that robust and comprehensive visitor assessment will be necessary to determine whether the mitigation outlined in policy SS19 are adequate to offset the impact of the proposal and the wider impact of the plan and allocation H59 in particular.

4.2.12 Accordingly, the Council commissioned Footprint Ecology to undertake this research at Strensall and on other European sites, and a programme of monitoring activities were carried out in late summer 2018; the report was published in 2019. Independently, in 2019 DIO commissioned PCP to undertake a similar task. Key findings of both surveys are described in brief and in turn below, as is the brief report by Wood from 2017. Attention is drawn to the original, visitor survey reports for further important detail.

4.2.13 It should be noted that when combined with Footprint's further review in 2020, and the use of averaged, pooled data, this prompts three different sets of figures for the same issues which can become confusing. Consequently, figures used in the summaries of each report reflect their unique findings. Where confusion is possible, facts and figures are accompanied with the date and author.

4.2.14 Both Footprint and PCP draw attention to the number and distribution of allocations within a 7.5km radius of the SAC boundary. For ease of reference, these are shown below using Council data (Figure 1).

Figure 1 Location of proposed allocations with distance from SAC boundary



Footprint Visitor Survey 2018

4.2.15 This report contains the raw data collected in 2018 and also provides subsequent analysis. In brief, it identified that should all the proposed allocations be built out in full, a total of 6,653 new dwellings would be constructed within 7.5km of the SAC boundary representing a 14% increase in the housing stock overall. Together, SS19/ST35 and H59(A) would represent a 61% increase within 500m of the Common. These figures were adopted by PCP and are used as the baseline throughout this section.

4.2.16 Drawing on 199 interviews and automated photographs amongst other data, Footprint predicted that development of all allocations (and in increase in housing of 14%) would increase access on Strensall Common by 24%.

4.2.17 Of this, SS19/ST35 would account for 17% and H59(A) for 1% (or 18% in total). Accordingly, all the remaining allocations would comprise 6% of the increase in visitors. This disproportionate effect reflected the proximity of SS19/ST35 and H59(A) to the Common and the relative distance of the other allocations. In turn, ST8 comprised 2%, ST14 (1%) and ST9 (2%).

4.2.18 Importantly, perhaps, PCP calculated that according to Footprint's data, 15% of existing visitors travelled from more than 5km distance.

4.2.19 Footprint's statistical analysis (expressed visually in Figure 13 (p49 of its report)) showed that the curve flattened at 4km with more distant allocations, such as SS15/ST17 and SS9/ST7 barely contributing any. Table 18 (p48) shows that the number of interviewees per existing property was one order of magnitude less at 3km than those within 500m of the SAC boundary and two orders of magnitude less at 5.5km distance. The data suggested that 75% of all visitors travelled from within 5.5km of the SAC. Figure 14 (p51) provides a strong picture of this behaviour. The median distance travelled to the site from home was 2.4km. The median distance travelled by car was 4.6km. 51% of all visitors came from Strensall.

4.2.20 Within the SAC, observations of the behaviour of visitors included 45% of dogs were off the lead during interviews (suggesting the ratio would be much higher within the SAC), dog walking was the most popular activity (70%), 95% of visitors had travelled from home and a third visited daily although most spent an hour or less on site. 67% had travelled by car and half had been visiting for 10 years or more suggesting a well-used site that encouraged a strong degree of site faithfulness amongst the public; 52% suggested the main attraction or reason for visiting was the 'rural feel/wild landscape' of the Common. The median walk distance when on the site was 2.5km. The frequency of visits did not vary between seasons for the majority.

4.2.21 Between pp58-68, Footprint presents an evidence-based review of the impacts of public pressure on heathlands drawing on published research as appropriate to inform observations made at the Common. At Strensall, Footprint observed that there is only modest evidence of direct harm from visitor pressure at present with, for instance, trampling of the lesser-used paths unlikely to represent an adverse effect and can even be beneficial by maintaining bare ground for invertebrates. In contrast, it also observed that in wetter, more well-visited areas, trampling can be severe.

4.2.22 Similarly, there did not appear to be obvious harm to the established heather communities from trampling in either the dry or wet heath, where visitor pressure was slight, reflecting the difficulties in walking through such shrubby communities.

4.2.23 In contrast, it observed sheep-worrying and noted that cattle were concentrated in the centre of the site, distant from the more well-visited areas, a possible reflection of public pressure. It noted that cattle grazing is a vital component of heathland management ensuring, in part, that communities remain open.

4.2.24 In terms of urban-edge effects, examples of fire damage were noted, and Footprint noted research from other protected areas elsewhere that 61% of fires were a result of arson (Peak District) and 84% were found besides paths. Similarly, research was highlighted that suggested recovery of uncontrolled burns could take 15 years before representative heathland vegetation communities could become re-established before observing that invertebrate populations could also suffer.

Footprint made the comparison between uncontrolled and controlled burns, the latter being a necessary component of traditional heathland management, and noted that the former may pose a particular threat to the Dark Bordered Beauty Moth, one of the *typical species* of the SAC.

4.2.25 Similarly, although observations were hampered by the very dry weather, Footprint observed that another of the typical species, pillwort, could be vulnerable to dogs playing in ponds where it grows along the margins.

4.2.26 Elsewhere, it observed that control measures such as barriers do not appear to have been totally effective at reducing the unauthorised use of off-road vehicles. In contrast, it noted that again, at present, examples of eutrophication from uncollected dog faeces and fly-tipping was modest.

4.2.27 Overall, however, Footprint noted that an increase in housing numbers could make these issues worse.

4.2.28 It should be noted that in 2020, Footprint subsequently repeated the analysis (and provided further comment) based on the pooled data of both their own and PCPs evidence. This is provided later in this section.

4.2.29 Footprint also identified that mitigation would be problematic given the number of visitors predicted, especially those arising from within 500m of the site and the frequently adopted approach by other local authorities to preclude development within 400m of heathlands because of doubts surrounding the effectiveness of open greenspace in such close proximity to protected areas. In particular, it noted that to accommodate the behaviours and both existing and new visitors, any alternative greenspace would have to be targeted at dog owners with dogs able to run off the lead, with a 'wild' appearance and sufficiently large to replicate the average walking route of many visitors.

4.2.30 However, it did note that if new visitors, especially from those in SS19/ST35 could be encouraged to stay in close proximity to discrete areas, such as the car parks, certain mitigation measures, currently employed elsewhere, could have some effectiveness such as wardening, signs/education (perhaps allied with a social media presence), community events and the fencing of ponds, amongst others.

4.2.31 Sheep-worrying by dogs remained a key issue, however, and the maintenance of grazing was central to continued management. It concluded that there would need to be confidence that mitigation measures were feasible and achievable to rule out adverse effects on the integrity of the SAC. Footprint's report is provided in Appendix D of this HRA. Footprint also observed that:

- Recreational impacts, typically comprising trampling, fires, eutrophication from dog fouling etc were evident although these were mostly limited in extent and severity, and generally concentrated in fairly close proximity to the car parks;
- [the] … *worrying of livestock by dogs, which is already resulting in a loss of animals and may jeopardise future grazing. Appropriate grazing will be a vital tool in restoring the SAC to favourable condition*; and concluded that
- [in the absence of mitigation] …*Given the scale of increase in access predicted from the visitor surveys, the proximity of new development and concerns relating to current impacts from recreation, adverse* [effects on the] *integrity on the SAC cannot be ruled out as a result of the quantum of development proposed. In addition, for individual allocations that are adjacent to the site it will be difficult to rule out adverse effects on integrity.*

4.2.32 Table 7, below, provides a summary of these and other findings and compares with those from PCPs survey.

4.2.33 Figure 2, below, is taken from the Footprint 2020 report (hence the embedded 'Map 2' title) and is shown as it indicates the layout of the site and the survey points used by Footprint and PCP, including the two main car parks where much of the survey activity was carried out.

PCP Visitor Survey

4.2.34 PCP carried out 251 interviews on the Common during late summer 2019. This report accepted Footprint's figure of 6,653 dwellings within 7.5km of the SAC boundary. This formed the baseline for assessment.

4.2.35 Drawing on the interviews and automated photographs amongst other data, PCP found that development of all allocations would increase access on Strensall Common by 23.6%.

4.2.36 Of this, SS19/ST35 and H59(A) combined would account for 14%. Accordingly, all the remaining allocations would comprise 9.6% of the increase in visitors; the latter would comprise 6% from SS10/ST8, SS11/ST9 and SS12/ST14 (identified by Footprint) and 3.6% from other allocations. This reflected the proximity of SS19/ST35 and H59(A) to the Common and the relative distance of the other allocations.

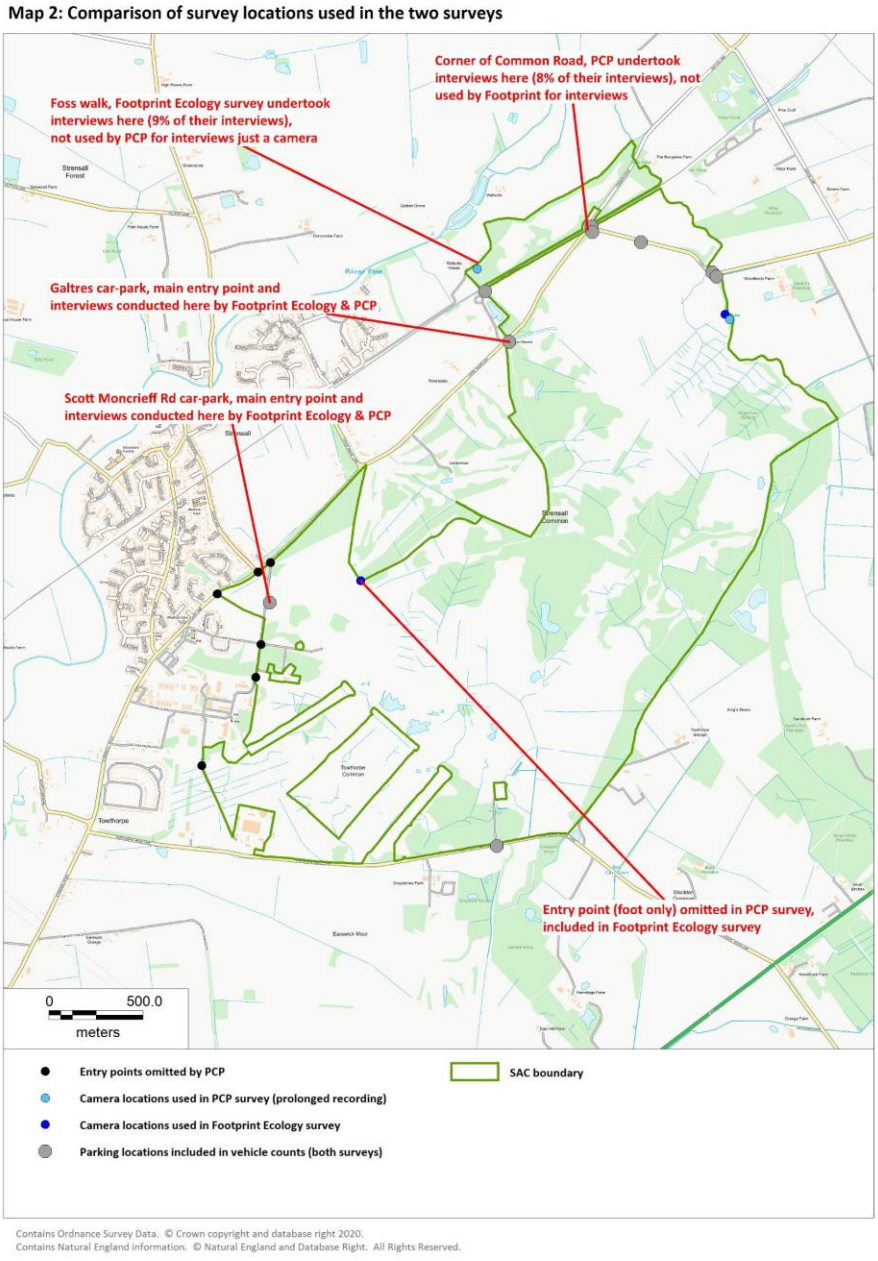
4.2.37 Importantly, perhaps, PCP calculated that 40.6% of existing visitors travelled from more than 5km distance. The median distance travelled to the site from home was 2.5km. The median distance travelled by car was 5.1km. 49% of all visitors came from Strensall.

4.2.38 Within the SAC, observations of the behaviour of visitors included 42% of dogs were off the lead during interviews (increasing to 74% on camera suggesting very different behaviours when away from public places), dog walking was the most popular activity (72%), 92% of visitors had travelled from home and a third visited daily (though this figure was 39% amongst dog-walkers) although most spent an hour or less on site. 68% had travelled by car and 42% had been visiting for 10 years or more suggesting a well-used site; 44% suggested the main attraction or reason for visiting was its proximity to home. The median walk distance when on the site was 3km. The frequency of visits did not vary between seasons for the majority.

4.2.39 PCP were not commissioned to review ecological evidence and made no comments on this subject. AYW undertook this task which is described below.

4.2.40 Table 7, provides a summary of these and Footprint's findings.

Figure 2 Map of Strensall Common with survey points



Survey by Wood (2017)

4.2.41 As part of its Hearing Statement[63] Avison Young (on behalf of DIO) submitted a separate review of recreational use at Strensall Common. This brief, two-day study was carried out in late 2017 but only came to light in the DIO Hearing Statement of 2019. It found evidence of the following:

- Litter and fly-tipping;

[63] City of York Local Plan Examination Hearing Statement on behalf of Defence Infrastructure Organisation (PM SID 345). Matter 1: Legal Compliance. November 2019

- Damage (faeces) and potential disturbance by dogs off the lead;
- Vandalism, Graffiti, barbeques;
- Theft and destruction of wildlife or properties; and
- Damage by vehicles (including informal car parks).

4.2.42 It reported that relatively few examples of each were found with the majority occurring in relatively close proximity to the car parks although disturbance by dogs, to ground nesting birds, sheep and in ponds, extended to over 1,000m from the same. The majority of dogs appeared to be off the lead despite information signs encouraging that they should be under control. Damage by unauthorised vehicles was also found at greater distances, such as the illegal access at Lord's Lane, and considerable erosion was noted elsewhere although some of this may be caused by the military and shepherd.

4.2.43 In addition, it reported that 100,000 military or other personnel make use of the training facilities at Strensall every year and equate this to an average of 273 people using either the Barracks or the Common every day of the year for military training purposes, alongside c500 permanent staff. Unfortunately, it did not identify how many actually use each or how many actually live within the Barracks.

4.2.44 When considering mitigation options, the report noted the resistance that can be encountered if the ability of the public to continue to carry out existing behaviours is restricted.

4.2.45 This report did not assess the impact of an increase in the number of visitors to the Common.

Comparison of PCP and Footprint Visitor Surveys by AYW

4.2.46 Overall, AYW concluded the findings were very similar, a point also acknowledged by PCP and, subsequently, by Footprint. The findings of the PCP survey are summarised in Table 7 below and are explored in this section, albeit in the context of a comparison with Footprint's outcomes.

4.2.47 AYW made the following comments about the Footprint survey:

- Very narrow survey window (10 days);
- Inconsistent survey durations without explanation;
- Not all locations surveyed on same day;
- Lack of clarity regarding whether dates surveyed were on firing or non-firing days, or weekdays/weekends;
- No consideration of school terms and holidays;
- No data on use by military staff;
- Car park counts carried out on different days to interviews and so do not correlate;
- Disproportionate number of weekends surveyed;
- No data on total number of visitors

4.2.48 AYW observed that PCPs survey had addressed all these perceived weaknesses by, for instance, encompassing a wider period, including both term-time and school holidays. In addition, equal effort

was expended on Locations 1, 2 and 3 across a range of firing and non-firing day, weekdays and weekends, and all were surveyed on the same day, along with vehicle counts.

4.2.49 AYW did though, acknowledge that the Footprint survey was:

Based on an established approach that has been used in the assessment of similar studies at other European sites across the UK

4.2.50 Furthermore, and despite the apparent shortcomings, AYW identified the following areas of agreement (which are largely accommodated in Table 7):

- The number of vehicles recorded by both PCP and Footprint was comparable, around 10 cars parked at any one time;
- Access via Scott Moncrieff Road and Galtres car park was similar: 51% (Footprint) versus 41% (PCP);
- Comparable numbers of visitors travelled from home: 95% (Footprint) versus 92% (PCP);
- Comparable numbers of those visitors with dogs: 1 dog per 1.5 people (Footprint) versus one dog to every 1.5-2 people (PCP);
- Comparable reason for most popular activity (dog-walking): 70% (Footprint) versus 72% (PCP);
- Comparable number of daily visitors: 32% for both Footprint and PCP;
- Comparable time spent on the Common (ie less than an hour): 73% (Footprint) versus 71% (PCP);
- Comparable numbers visited throughout the year: 78% (Footprint) versus 68% (PCP);
- Comparable numbers accessed the Common by car: 67% (Footprint) versus 69% (PCP);
- Comparable numbers of respondents chose 'close to home' as a main reason for visiting: 51% (Footprint) versus 57% (PCP);
- Comparable (median) distance travelled by those in cars: 4.6km (Footprint) versus 5.1km (PCP);
- Comparable (median) distance travelled by all visitors from home: 2.4km (Footprint) and 2.5km (PCP).

4.2.51 In their review of both visitor studies, AYW stated that: *It is notable that many of the results are comparable.*

4.2.52 However, AYW went on to draw attention to additional work they carried out including an estimation of total annual visitors (124,000) by extrapolating survey data albeit influenced by a number of assumptions. Furthermore, they note that 3% of visitors were military personnel using the site for recreation and pointed out that Footprint appeared to have taken no account of residents of the Queen Elizabeth Barracks. AYW suggested this may mean Footprint's work *will have overstated the 'additional' contribution* of visitors. AYW estimate that adoption of these figures would reduce visitor rates by 1.3%.

4.2.53 AYW subsequently analysed PCP data to estimate the increase in visitor numbers that could result from new development within 7.5km of the Common. In effect, they (attempt to) replicate Footprint's exercise although they utilise Excel to provide statistical analysis as opposed to any bespoke

software. Perhaps reflecting this, AYW acknowledge their trendline does not fit their data as well as Footprint's exercise. Reference is drawn to Section 4.6 of Footprint (2020) for a fuller explanation.

4.2.54 From this exercise, AYW predict an increase with QEB[64] and all other allocations within this sphere of 23.6%, very similar to Footprint's 24%. Combining the datasets produces a similar value. AYW observes that its analysis represents a conservative assessment.

4.2.55 AYW then repeated Footprint's analysis of the impact that could arise from other allocations within the 7.5km radius of the Common. In contrast to Footprint's estimate that all bar SS19/ST35 and H59(A) would lead to an increase of 6% in visitors, AYW calculate this to be 9.6%.

4.2.56 Drawing on the both sources of data, AYW put forward that if the SS19/ST35 and H59(A) were excluded, the remaining allocations within 7.5km of the Common would alone provide an additional 7,440 visits per annum (using Footprint data) or 11,998 based on PCPs figures. Should SS19/ST35 and H59(A) be included, then the figures would be 29,760/29,264 respectively.

4.2.57 Other differences identified by AYW include the following:

- PCP identified the median walk distance to be 3.0km whilst Footprint calculated this to be 2.5km;
- A **much greater proportion of PCP interviewees (40.6%) travelled more than 5km to visit the Common than suggested by Footprint (15.6%)**

4.2.58 Additional observations are made as follows:

- Visitor numbers for other European sites of a comparable size are provided[65], such as Shapwick Heath and Theddlethorpe Dunes which attract 75,000 and 290,000 visitors per annum. AYW observe that the latter is more than double the numbers predicted at Strensall;
- PCP observed considerable variation in visitor number throughout the day whereas Footprint did not assess this;
- PCP observed 74% of dogs were off the lead whereas Footprint recorded 45%;
- Footprint data led to a mean travel distance of 5.7km and a median of 2.9km, whereas PCP calculated these to be 7km and 2.5km respectively. Both reports acknowledge that mean values are skewed by occasional visitors from far away who rarely visit the site;
- Footprint identified 85% of interviewees travelled less than 5km whereas PCP found only 59.4%
- Overall, AYW suggest that Footprint's work over-estimates the impact of SS19/ST35.

AYW Mitigation Report

4.2.59 In an associated document[66] AYW draws on experience elsewhere and their knowledge of the site to identify a range of mitigation measures which *could* be applied and which, in their opinion, *are all deliverable and* would *prevent adverse effects from arising* and subsequently result in the Council being able to ascertain that adverse effects on the integrity of Strensall Common SAC could be avoided. These are listed and described briefly, below. Again, reference to the source document should be made for a full understanding.

[64] DIO/AYW make frequent use of the acronym 'QEB'. It is understood that this refers to SS19/ST35 and H59(A). This HRA assumes that this is the case. Where QEB appears in this HRA it reflects its usage by DIO/AYW.
[65] Natural England Commissioned Report NECR131. The economic impact of Natural England's National Nature Reserves. GHK Consulting. Natural England, 2013
[66] Queen Elizabeth Barracks, Strensall, York Strensall Common Special Area of Conservation Report on Mitigation Measures for the City of York Local Plan. Avison Young – Wood. November 2019

- Enhanced signage/information: comprising a gap-analysis of existing facilities and the design/implementation of enhanced provision including, potentially, the presentation of live information on the location of grazing animals via website or social media;
- Provision of additional car park barriers: comprising an assessment of existing structures to identify their use and effectiveness or otherwise, and the implementation of recommendations including, perhaps, the installation of new barriers or changes to the time of their operation;
- Wardening: the provision of a site warden who would *act as information / education provider; act as law enforcement agent and encourage desired behaviours; be responsible for general maintenance and upkeep: liaise with key stakeholders; and monitor and report*;
- Managed access: the creation of grazing zones within the Common by dog proof fences and provision of information *at any given point of the zones* to encourage avoidance by dogs and their owners;
- Information packs for new residents: to be provided to 'QEB' and all other new residents (presumably including the more distant allocations) that would describe the Common's military use and ecological value, and the need for responsible behaviours, with reference to the byelaws, the Warden, live-firing and highlighting other open spaces nearby;
- Public open space within SS19/ST35: the delivery of 15ha of open space including a single block of 7ha in the eastern half of the site with the suggestion that this exceeds other standards in the New Forest with the ability for dogs to be walked off the lead;
- Residential layout and boundary treatment: a requirement for housing to back onto the northern, eastern and southern boundaries of the allocation to lie adjacent to the SAC, supported by secure fencing, to discourage casual use of the Common by new residents;
- Additional fencing: an assessment of the condition of existing fencing along existing routes into the Common and its refurbishment where necessary, allied with explanatory information;
- Making of new byelaws (if required): the making of new byelaws if other measures, listed above, prove inadequate, including, potentially, making it illegal for dogs to be let off the lead;
- Alternative green space: consideration of the provision of additional open space should monitoring indicate that behaviours have not improved despite the measures listed above. Conspicuously, this measure is not regarded as feasible at present.

Review of AYW/PCP visitor survey and report by Footprint

4.2.60 Footprint had the advantage of not only being able to comment on the PCP survey, but also the AYW review of Footprint's original survey.

4.2.61 It made the following observations of the PCP/AYW reports:

- Overall, there was *little meaningful difference* between the results of both surveys with both confirming that the SAC is a popular destination especially for *those living close to the Common*. Many results were almost identical;
- For instance, both Footprint's and PCPs surveys identified almost identical scores of interviewees who originated from Strensall itself (48% and 49%, respectively) although those found within 500m differed slightly, if not statistically;

- Together, both reports provide evidence to confirm that Strensall Common is already well visited, especially by those living closest to it;
- Footprint commented on PCPs hourly figures finding that their range of 21.8 to 33.8 on firing and non-firing days equated broadly to Footprints estimate of 24.1 per hour. It also raised doubt over AYW's extrapolation of data to provide an annual number of visitors, stating that the work is complex and requires survey data from across the year – it noted that data collected form just two days in September were used to make this calculation;
- While acknowledging that AYW come to the same conclusion, Footprint adds that AYWs attempts to undermine Footprint's original survey *do not stand-up to scrutiny*. Differences in survey locations and timings for instance, were pursued to reduce the impact of one-off events. A focus on the car parks was an attempt to capture the catchment of the site and more attention to pedestrian access points would be likely to have increased the proportion of local visitors;
- In addition, the absence of military personnel from Footprint's work was noted but arguments are made to explain that military accommodation was included in calculations. Furthermore, it adds that military personnel are unlikely to access the site by car and so will frequently be missed by any survey at the car parks. As such, local use is likely to have been underestimated by both surveys;
- Footprint noted that PCP data identified a greater number of visitors who originated from beyond a distance of 7.5km from the Common. The Footprint Review found this difference statistically significant though suggested it could be explained by the use of a different survey point (adjacent to a car park) and the number of surveys carried out during school holidays when the number and range of visitors could be expected to increase;
- Footprint also questioned the statistical analysis carried out by AYW. Section 4.6 of Footprint's report (2020) provides explanation which goes on to suggest this explains the different curves fitted to the data (Figure 3). The shape of curve and the rate of decline plays an important role in determining the outcome of the exercises and is particularly questioned in those areas closest to the Common where AYW suggest a lower number/frequency of visits. Although the pattern is similar, the rate of decline differs markedly;
- Footprint averaged (or pooled) both sets of data **(**Table 2 of their rebuttal) and subjected it to statistical analysis. Including all allocations within 7.5km of the SAC boundary this combined data identified the following key changes:
    - *a 23.2% increase in recreational use of the Common* (comprising 13.4% from SS19/ST35 and 1.2% from H59(A));
    - Excluding SS19/ST35 and H59(A), the predicted increase from all other allocations would be 8.6%.
- **I**n other words, the 545 dwellings of SS19/ST35 and H59(A) alone *would therefore result in a predicted 14.6% increase in access* with the 6,148 dwellings in other allocations comprising the rest. The impact of SS19/ST35 would be over four times greater than any other single allocation in the Plan. It suggests that because of survey design, the impact of SS19/ST35 and H59(A) could be even greater.

- In response to assertions by AYW that there is no evidence that recreational use of the Common is having an adverse effect on the SAC, Footprint draw attention to Natural England's Site improvement Plan of 2014, extracts from the minutes of the Strensall Common Conservation Group (Appendix G) and the age and aim of Natural England's condition assessments to argue the opposite. Footprint draw attention to the need for competent authorities to be certain as to the absence of adverse effects rather than proving they exist;
- Footprint makes reference to its original report to identify that evidence of recreational pressure already exists and that AYW downplay these risks. It also challenges AYWs opinion regarding the effect of burning adding that increased recreation will exacerbate all these issues;
- Footprint provide evidence to question AYWs review of mitigation measures notably making the point that other SACs have 400m exclusion zones (and that these are not just restricted to SPAs). Footprint argues this is because of the risk presented by development in such close proximity to fragile landscapes and the effectiveness of wardening and alternative greenspace become less effective. Footprint identifies concerns with AYW's proposed mitigation measures in the context of their effectiveness close to the SAC (whist noting the overall similarity to those explored previously by Footprint and within the 2018 HRA). It notes that there is *not enough confidence that the measures proposed would be fully effective (to rule out adverse effects on integrity) in the long-term*;
- Footprint also challenges AYWs use of examples from elsewhere to justify the opinion that adverse effects can be avoided at Strensall even with QEB in place. In particular, it describes the examples provided as *selectively quoted, inaccurate in their description and in reality, do not support DIO's argument*;
- In more detail, Footprint point out that 400m exclusion zones already exist elsewhere for SACs (and not just for SPAs). Further, that policy provisions in local plans support this approach in Dorset and at Cannock Chase. Further sites that are both SPA and SAC also have 400m zones but not just for ground-nesting birds but also to protect their associated habitats, including those managed by DIO and used for military training, and the Thames Basin Heaths (in terms of urban-edge effects);
- It adds justification for the 400m threshold on the grounds that mitigation options (e.g wardening and alternative greenspace) are not as effective. This is because recreational use is higher from homes directly adjacent to sites and is difficult to intercept and deflect potential visitors (sometimes from unauthorised points of access such as back gardens) to alternative destinations. Urban-edge effects are also more acute. It reinforces the position that measures such as wardening and alternative greenspace are designed for development more than 400m distant;
- It notes AYWs observation regarding the effectiveness of these measures at Cannock before observing that this site benefits from a presumption against development within 400m;
- Footprint bring first-hand knowledge of all the examples put forward by AYW and use this to dismiss the New Forest example given its very different circumstances;
- Evidence is also provided form other local authorities that have embraced this approach e.g Rushmoor Borough Council in terms of the Thames Basin Heaths;

- Footprint adds that the level of predicted use at Strensall is even higher than at other sites and the approach adopted by the Council *is entirely in keeping with the approaches at other relevant heathland SACs around the country'*;
- Footprint concludes by challenging the effectiveness of other mitigation measures such as the use of fencing, byelaws, residential layout, information packs, barriers, wardening and more.

AYW - Information to Support an HRA (ISHRA)

4.2.62 AYW has submitted 'Information to Support a Habitats Regulations Assessment' for the Queen Elizabeth Barracks. This has not been reviewed by Footprint and so this is undertaken here, in brief. The thorough analysis of important issues follows.

4.2.63 Ultimately, this identifies that adverse effects on the integrity of Strensall Common would result from residential development as part of the Plan but concludes that the application of a range of mitigation measures, referred to previously, would allow these to be avoided, so allowing the allocations to be adopted.

4.2.64 For the most part, it represents a robust contribution to the evidence base. It follows good practice and draws on contemporary case law and guidance.

4.2.65 It introduces specific evidence in terms of air pollution and hydrology to justify its outcomes. This is in the form of two appendices dealing with air pollution and hydrology. Taking these in turn, the following applies.

4.2.66 The air quality appendix appears to be thorough, draws on valid evidence and produces clear outcomes. The assessment process is similar to that employed by the Council and although it leads to slightly different (lower) values, these can be explained by the different but justifiable use of a range of assumptions when validating the model. It is fit for purpose and the outcomes agree with this HRA. It appears to be the same document submitted in support of earlier 'shadow' HRAs put forward by DIO in 2017 and predates more recent case law and guidance but does not conflict with as, importantly, mitigation is not involved.

4.2.67 The hydrology appendix provides an abundance of evidence and explores areas beyond that necessary for an HRA. It identifies a range of potential likely significant effects that could arise during construction, operation and decommissioning and provides a range of mitigation measures, (comprising the use of SUDS, silt traps and best practice, with these and other measures to be delivered via a CEMP). These are reasonable, appropriate and deliver confidence that will would be successful. They are reliable, can be guaranteed and are likely to be effective in the long and short terms.

4.2.68 This though exposes a misconception of the HRA process. Importantly, it does not appear to have assessed whether the likely significant effects could lead to adverse effects on the integrity of the Common. Mitigating likely significant tests applies the wrong test. This is an important distinction, potentially falling foul of *People Over Wind*.

4.2.69 A reason for this could be that the report appears to be the same as that submitted with the previous HRA by DIO in 2017, prior to the *People Over Wind* decision. This same flaw was pointed out in previous editions of the Council's HRA and our conclusion remains the same now; it is clear from the evidence presented that even if the mitigation proposed had been subjected to the greater scrutiny of an appropriate assessment, that the same positive outcome would have been achieved.

4.2.70 In this respect, therefore, DIOs HRA is considered fit for purpose. It is also noteworthy that the DIOs assessment provides the same outcomes as that presented in this HRA. Harmful effects can be adequately and safely mitigated in relation to hydrology.

4.2.71 Elsewhere, gaps are apparent. There is no review of damage to heathlands caused by recreational pressure (as is provided by Footprint, for example, which is drawn upon by this HRA to justify its conclusions. Importantly, it appears to selectively quote from case law to derive an outcome based on '*probabilities and estimates*', not on '*reasonable scientific doubt*'. This is an important difference, shifting the focus of the test and in so doing, fails to embrace the precautionary principle.

4.2.72 Returning to the use of mitigation to avoid adverse effects from recreational pressure, the ISHRA explores the role of DIO is relation to its biodiversity duties under the NERC Act and Wildlife and Countryside Act. It goes on to suggest that the mitigation measures proposed would not be implemented if SS19/ST35 and H59(A) are not adopted which would make the impacts of more distant allocations more harmful and leading to an adverse effect on the integrity of the SAC. This could be taken to conflict with its duties as a public body and is explored further below.

4.2.73 Of fundamental importance, it fails to take account of any mitigation that could be adopted by the more distant, surrounding allocations to reduce or remove any risk that they could pose. Whilst such measures are not embedded within existing policy wording, it would be reasonable, and consistent with DIOs own approach at Queen Elizabeth Barracks to consider whether the provision of open space, for example, at other allocations could reduce recreational pressure on the Common. It therefore provides a worst case scenario.

Review of Footprint and AYW/PCP evidence by this HRA

4.2.74 **This section draws on all the evidence described, provides an independent review, and ultimately carries out the appropriate assessment, concluding with a series of bespoke integrity tests having regard to the legal requirements of certainty (see above)**.

4.2.75 Importantly, this comparison does not claim to explore every single issue. It merely seems to explore those of most importance which inevitably are those which most influence the different outcomes drawn. It is arranged by various themes that have arisen from the above outcomes but because so many are closely related it condenses it to a review of recreational pressure, the scope and analysis of data, and the suitability of mitigation; it inevitably flows between sources of data and issues. **Given that the Council's previous HRA concluded that AEOI cannot be ruled out (after mitigation was considered), as does the ISHRA (prior to mitigation), the fundamental issue that recreational pressure could lead to an adverse effect on the integrity of the Common is not in doubt.**

Recreational pressure

4.2.76 Overall, taking all three (Footprint, PCP and Wood) surveys into account, there was little difference between all points of reference. Whilst PCP/AYW took issue with Footprint's shorter survey, the similarity of results suggests both methodologies were fit for purpose.

4.2.77 Fundamentally, this review acknowledges that Footprint's methodology has been developed, refined and employed on several European sites across the country to explore recreational pressure and to inform local authorities and others on the site protection policies and actions. Its approach is widely accepted by statutory nature conservation bodies and by AYW/PCP to the extent that the latter modelled their approach on it.

4.2.78 None of the surveys provide anything more than a snapshot of recreational usage of the Common. Indeed, none claim anything more although AYW/PCP extrapolate to provide annual visitor numbers and, ultimately, their interpretations differ. Together, they capture and interpret data over several days, at roughly the same time of year in consecutive years. There are no reasons to doubt either of the approaches adopted, or the data obtained.

Areas of agreement between AYW/PCP and Footprint

4.2.79 This draws on Table 7 below, originally prepared by Footprint (2020) but adapted for its purpose here and so additional outcomes drawn from both reports of relevance to this HRA are presented in the bottom half of the table. It not only summarises key outputs from both surveys but also highlighting areas of agreement and disagreement.

Table 7 Comparison of Footprint and PCP visitor survey data

Metric	Footprint (2018)	PCP (2019)
Methods		
Parking locations counted	9	9
Number of vehicle counts undertaken	8	30

Metric	Footprint (2018)	PCP (2019)
Number of dates with vehicle count(s)	6	6
Locations used for visitor interviews	3	3
Months interviews took place	Aug & Sept	Jun, Jul, Aug
Total survey hours for interviews	64	144
Total interviews conducted	199	251
Results		
Mean number of vehicles per count	9	10.7
Estimate of total people entering site per hour	24.1	21.8-33.8
% of interviewees visiting from home on short visit	95	94 (or 92%)[67]
Average number of people in interviewed groups	1.5	1.5
% of interviewed groups with 1+ dogs	73	72
% of interviewees visiting daily	32	32
% interviewees arriving by car	67	69
% of interviewees stating 75% or more of their weekly visits took place at Strensall Common	51	57
Total number of interviewee postcodes generated	192	239
Postcodes within 500m	44 (23%)	42 (18%)
Postcodes within 7.5km	174 (90%)	185 (77%)
Median distance (km) for those on short visit from home	2.4	2.5
Median distance (km) for dog walkers on short visit from home	3.0	2.1
Additional outcomes		
Median route length on Strensall Common (km)	2.5km	3km
Median distance travelled by those in cars	4.6km	5.1km
% of dogs off the lead during interview (Footprint) and on camera (PCP). PCP noted this was less when near the car parks	45%	74%
% of visitors who accessed the site via Scott Moncrieff Road and Galtres Car Park	51%	41%
% of interviewees who visited regularly throughout the year	78%	68%
% of visitors travelling more than 5km	15%	40.6%
Calculated % increase in access from SS19/ST35 & H59(A)	18%	14%
Calculated % increase in access from other allocations within 7.5km	6%	9.6%
Calculated % increase in access from all allocations within 7.5km	24%	23.6%

[67] This and other uncertainties reflect slightly different expressions of data

Metric	Footprint (2018)	PCP (2019)
Contribution of SS19/ST35 to annual total	N/A	29,264
% of visitors spending around an hour on site	73%	71%
% of interviewees who chose 'close to home' as a reason for visiting	51%	57%

4.2.80 Broadly speaking, both provide similar results. Bearing in mind the common methodology, this is not surprising, but is reassuring. PCP did amend the approach to address perceived shortcomings, such as expending greater time on site, complete counts on single days and captured more data across term time and school holidays etc, but as the overall outputs were similar, this suggests the core methodology is robust and fit for purpose.

4.2.81 In simple terms, both show a similar pattern of a greater number and frequency of visits from those residents who currently live nearby; correspondingly, the number and frequency fall with increasing distance. For added context, reference to Natural England research[68] (highlighted by AYW) shows, over a range of sites and circumstances, that in 2018/19, 44% of visits to natural open spaces originated from within 1.6km, 24% from 1.6-3.2km and 17% from 4.8-8km. Both sets of data at Strensall reflect this broad pattern.

4.2.82 Although this may simply reflect sampling strategies, most visitors arrive via the two main car parks at Scott Moncrieff Road and Galtres. Over two-thirds arrive by car from a median distance of around 4.6-5.1km. The median distance of all visitors was around 2.5km. Almost all visitors travelled directly from home with a third visiting daily and many visiting frequently and consistently throughout the year.

4.2.83 Both identify the average distance walked on site is roughly 2.5-3.3km and most visits last around or just less than an hour; established paths are usually followed. Both confirm the most popular reason to visit is to walk dogs (>70%), and both suggest that, beyond the car park, the majority are allowed to run off the lead. Footprint and Wood also recorded evidence of disturbance of stock by such dogs, along with erosion (especially in wetter areas), fouling by dogs, arson, litter, unauthorised use by vehicles and other urban-edge effects.

4.2.84 This represents a very brief description areas of agreement between the surveys and attention is drawn to the individual reviews above or to the source documents for further information.

4.2.85 However, areas of disagreement arise, especially when the data is analysed and interpreted, and these are discussed in more detail below.

Areas of disagreement between, or doubt with, AYW and Footprint

4.2.86 A number of areas of disagreement arise but differ in their importance. For instance, the comparison with Theddlethorpe and Shapwick, and their apparent ability to support greater numbers of visitors, is dismissed by this HRA as meaningless. The sites are vastly different in terms of their locations, accessibility and more. The comparison adds nothing. The same document provides evidence that Wye Downs, a quarter of the size attracts only 5.6% of the visitors suggested at Strensall, and the Derbyshire Dales NNR, around two-thirds of the size attracts almost 50% more. Stiperstones, at 480ha, attracts 30,000. Consequently, this comparison is put to one side.

[68] Natural England Research Report. Monitoring Engagement with the Natural Environment (MENE). Headline report Natural England (2019)

4.2.87 Similarly, the estimate of 124,000 annual visitors to Strensall draws on just two days of data; the necessary extrapolation draws on too many assumptions and the analysis is not always clear. This too adds little to the outcome and is also dismissed along with the daily figures drawn from this.

4.2.88 Overall, this HRA concludes that much of the data from both surveys can be considered to be consistent even though both have their strengths and weaknesses, for example in the choice of survey locations. Both tended to focus on the major access points, such as the car parks, for valid reasons, but this will have the effect of maximising the number of visitors from afar. More effort by both teams to observe behaviour on pedestrian-only access points would probably have increased local usage; this is a potentially important point.

4.2.89 This HRA recognises that not all access points can be covered all the time and the point of a survey is to capture an overall picture. Both surveys have achieved this, and satisfaction with the suitability of the core methodology can be exemplified but the fact that both produced similar results; the expenditure of more than double the amount of time by PCP did not appear to have materially affected the raw data collected.

4.2.90 Indeed, the most notable difference between the two visitor surveys can be condensed into one statistic. AYW calculates that 40.6% of existing visitors originate from beyond 5km distance from the boundary of the SAC; Footprint makes no estimate of this specific measure but from their data, AYW appear to have calculated that Footprint's work suggest this would be 15%. Indeed, overall, PCP interviewed more people who originated more than 7.5km from the SAC; this was calculated to be a statistically significant difference.

4.2.91 This has knock-on effects in terms of those originating from closer to the SAC but the differences here are more modest (18% compared with 14%, Footprint/AYW respectively). The closest estimate presented and calculated by Footprint is its prediction that 75% of visitors currently reside within 5.5km of the boundary. The contrast in outcomes is clear and, ultimately, drives different outcomes for the HRA.

4.2.92 By putting the more minor issues to one side, a review of the data above and the source documents suggests that there are a handful of key areas that influence this disagreement which have the potential to influence the outcome of this HRA and, in turn, the Local Plan:

- The scope of and the tests employed in the ISHRA;
- Statistical analysis;
- The distribution of where visitors originate; and
- The effectiveness of mitigation.

4.2.93 The AYW/PCP reports directly influence the outcomes of the ISHRA. Consequently, these areas of disagreement are carried forward into that. Therefore, the debate below can be taken as comment on the ISHRA.

Scope of the ISHRA

4.2.94 Contemporary guidance is clear that the appropriate assessment should explore the impact of proposals in view of the site's conservation objectives. In the case of Strensall Common, this highlights two features, wet and dry heath. However, case law makes it clear that other features on a European site should also be considered where they represent, for instance, *typical species*.

4.2.95 This encourages consideration of the Dark Bordered Beauty Moth at Strensall which is reliant on stands of creeping willow (*Salix repens*) within the wet heath. Although not listed as a qualifying feature, the moth is listed on the SAC citation and the maintenance of its abundance is a target of Natural England's Supplementary Advice[69] which describes it as a '*key structural, influential and/or distinctive species*'. In the *Holohan* case[70] the Court stated:

'*the conservation objective pursued by the Habitats Directive, … entails that typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area.*' (para 39).

'Article 6(3) of the Habitats Directive must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, … provided that those implications are liable to affect the conservation objectives of the site.'

4.2.96 Given the inclusion of targets for the Dark Bordered Beauty Moth in Natural England's Supplementary Advice (which help define the conservation objectives for the SAC), it is reasonable to conclude that it comprises a 'typical species' and one that should be considered in an HRA. The Supplementary Advice makes it clear that: *targets given for each attribute do not represent thresholds to assess the significance of any given impact in Habitats Regulations Assessments* [although this can be assessed] *on a case-by-case basis* [71]. In other words, it could be wrong to consider the wet and dry heath as simply the presence of the dwarf-shrub communities which predominate.

4.2.97 Strensall Common is the only known location with recent records of the Dark Bordered Beauty Moth in England. Once widespread across the site and elsewhere, it is now known from just a number of discrete areas and regarded as vulnerable to uncontrolled fires and overgrazing (from difficulties in managing stock)[72]. Its extinction cannot be ruled out.

4.2.98 Exploring *typical species* further, the citation and supplementary guidance both refer to the presence of marsh gentian, pillwort and pond mud snail on the Common. These represent key components of the main heathland communities (although the latter two are more likely to be found associated with the various water bodies). All are fragile, vulnerable features easily trampled and vulnerable to loss of the wider habitat by fire or, in the case of the snail, by disturbance from dogs playing in ponds; the subject of a specific observation by Footprint in their first report. Whilst not defining the outcome of this HRA, they lend further weight to any concerns relating to impacts on the main heathland communities and the effectiveness of mitigation proposed.

4.2.99 The presence of the Dark Bordered Beauty Moth is highlighted in the ISHRA, but it then states:

However, the Moth is not a qualifying feature of the SAC and, for HRA purposes, is not a relevant consideration.

4.2.100 Therefore, the ISHRA fails to consider the effects of recreational pressure and urban-edge effects on the targets described in Natural England's Supplementary Advice. Ultimately, this has the potential to compromise the conclusions of the ISHRA. AYW make no mention of pillwort or other listed species in its actual assessment.

[69] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019
[70] *Holohan v. An Bord Pleanála* (C-461/17) [2019] P.T.S.R. 104
[71] Supplementary advice on conserving and restoring features. Strensall Common SAC. Natural England 15 March 2019
[72] Baker, D., Barrett, S., Beale, C.M., Crawford, T.J., Ellis, S., Gullett, T., Mayhew, P.J., Parsons, M.S., Relf, P., Robertson, P., Small, J. & Wainwright, D. (2016) Decline of a Rare Moth at Its Last Known English Site: Causes and Lessons for Conservation. *PLOS ONE*, 11, e0157423.

4.2.101 Furthermore, the Supplementary Advice states that the list of typical species is not exhaustive and, consequently, a case could be made for the inclusion of breeding woodlark, nightjar and curlew. These threatened, ground-nesting Annex I birds all represent characteristic features of Strensall Common and would be particularly vulnerable to recreational pressure and, for instance, cat predation and fire. However, as Strensall Common is not listed in the SPA Review as a future Special Protection Area for any of these species, this HRA has decided there is insufficient evidence to consider them as typical species in this case.

Tests applied – certainty and reasonable scientific doubt

4.2.102 The *Waddenzee* and following judgements make clear that the fundamental test of any appropriate assessment is to ascertain the absence of an adverse effect on the integrity of a European site. *Waddenzee* states:

"where doubt remains as to the absence of adverse effects … the competent authority will have to refuse authorisation" (Para 57); and

"That is the case where no reasonable scientific doubt remains as to the absence of such effects" (Para 59, emphasis added).

4.2.103 See *Champion*, also, at paragraph 41 and recent restatement of the principle in *Holohan* at paragraphs 33-37.

4.2.104 This is explained in more detail in this HRA in, most notably under 'Stage Two' in Section 1.3, and 'Purpose and Approach' at the beginning of Section 4. The rationale is not repeated here but the absence of any meaningful reference to this test in the decision-making element of the ISHRA compromises the assessment of the data collected by PCP (which is considered, on the whole, to be valid). Indeed, AYW make reference to key passages of the *Waddenzee* case where this test originates but fail to employ it.

4.2.105 By instead basing its outcomes on the basis of *probabilities and estimates* case, AYW risk failing to apply a fundamental test to the assessment process. **This has the potential to fundamentally compromise the findings of the ISHRA** and is returned to, where necessary, in the remaining sections of this HRA.

Statistical analysis

4.2.106 Footprint questions AYWs statistical analysis on the grounds that it is relatively unsophisticated being based on tools provided only in Excel. In contrast, Footprint employ a more elaborate tool. The differences in analysis are acknowledged by AYW.

4.2.107 The statistical methodology is of fundamental importance as it determines the shape of the curve that describes the proportion of visitors over distance. Graphs are presented by both, but it is apparent that AYWs analysis represents a poor fit and, as Footprint observe, the visit rate from the nearest distance band would be off the scale if shown. Although apparently declining more steeply at first, AYWs graph has the effect of enhancing the number of visits from further afield.

4.2.108 In contrast, the curve identified by the software employed by Footprint provides a much better fit to the data points, suggesting, overall, the presence of proportionately more visitors from housing in close proximity to the site and fewer from further afield.

4.2.109 Footprint's subsequent analysis of pooled data (drawn from both their own and PCPs results) is compelling, as it draws on a wider dataset and provides an opportunity to iron-out minor differences. Assisted by more sophisticated software the curve presents a better fit. This has the effect of reducing the influence of SS19/ST35 and H59(A) on visitor numbers and frequency of visits to the Common, and enhancing those form further away, when compared with Footprint's original outcomes, and the opposite for AYWs.

4.2.110 Whilst the PCP and Footprint data remain sound, the analysis by AYW cannot be wholly relied on. Footprint's analysis has been employed and accepted on several other visitor studies suggesting it has the greater validity and should be given greater weight.

Origin of visitors

4.2.111 The statistical analysis plays a fundamental role in the prediction of where visitors can be expected to originate. The different methodologies above suggested different outcomes. Importantly, AYW own analysis suggests that the development of SS19/ST35 and H59(A) would lead to an additional 14% in visitor numbers with 9.6% from all other allocations within 7.5km.

4.2.112 These represent considerable differences to those suggested originally by Footprint original analysis (a 24% increase overall, comprising 18% from SS19/ST35 and H59(A), and 6% from all others) and have direct implications for the effectiveness of mitigation (see below). Essentially, AYW suggest that because fewer visitors will originate from QEB, mitigation measures will be easier to deliver and be more effective.

4.2.113 Given the uncertainty (identified above) regarding AYWs statistical analysis, appropriate caution has to be placed on AYWs figures. In contrast, using pooled data and more sophisticated analysis, Footprint confirms the majority of visitors will originate from SS19/ST35 and H59(A) and so highlights the corresponding decrease in the deliverability and effectiveness of any mitigation proposed, given its proximity and shared boundary. The pooled data analysed by Footprint suggested an overall increase of 23.2% comprising 13.4% of SS19/ST35 and 1.2% from H59(A), and 8.6% from the 6,148 dwellings beyond. SS10/ST8 comprises 3%, SS11/ST9 3% and SS12/ST14 1%. This would appear to reflect well the 61% increase in housing within 500m of the site boundary should SS19/ST35 and H59(A) proceed (as opposed to the 14% increase overall in housing within a 7.5km radius).

4.2.114 It is noted that the revised (pooled) statistics (presented by Footprint in Table 2 of their second report) leave 1.6% of visitors unaccounted for. This is not dissimilar to the 3.6% unattributed to any particular allocation in AYWs original analysis. Although data is therefore not presented by either Footprint or AYW, it is assumed for the purposes of this HRA that this will arise from the next closest allocations: SS9/ST7 (895 dwellings and 4.8km distant) and SS15/ST17 (483 dwellings and 5.5km distant).

4.2.115 The next most proximate allocation is H1(A) with 271 dwellings, which is 6km distant; this is already consented, and is close to completion. Further allocations all lie (slightly) more distant and are considerably smaller.

4.2.116 It is considered unlikely that H1(A) or any of the remaining allocations could contribute in a measurable way to visitor pressure on the Common given the outcomes of this further analysis.

4.2.117 In all this analysis, the presence of the 104 dwellings of H46(A) just 3.5km as the crow flies from the site and closer than the strategic allocation for 1,348 dwellings at SS12/ST14, appears to have been

overlooked. This is taken to be a reflection of its relatively modest size. Therefore, it too is included the additional allocations that could contribute to the 1.6% of visitors referred to above.

4.2.118 Given all of the above, this HRA will utilise the outcomes suggested by the pooled data as analysed by Footprint. This has the benefit of using both datasets and embraces the precautionary principle by putting AYWs analysis to one side and relying on the methodology employed by Footprint that has successfully informed several other visitor studies on other European sites and been found acceptable by Natural England and others. These outcomes, which incorporate SS9/ST7, SS15/ST17 and H46(A), are listed below for clarity:

List of allocations contributing to increase in visitor pressure at Strensall Common showing distance, number of dwellings and % contribution (arranged in order of proximity)			
SS19/ST35	Adjacent	500	13.4%
H59(A)	Adjacent	45	1.2%
SS11/ST9	2.1km	735	3%
SS10/ST8	2.5km	968	3%
H46(A)	3.5km	104	Part of 1.6%
SS12/ST14	4.6km	1,348	1%
SS9/ST7	4.8km	895	Part of 1.6%
SS15/ST17	5.5km	863	Part of 1.6%

4.2.119 **It should be noted at this point that both Footprint's survey and AYWs ISHRA conclude that increases in recreational pressure in the volumes anticipated will result in an adverse effect on the integrity of Strensall Common.**

4.2.120 Where they differ is that AYW, by drawing on experiences elsewhere, concludes that mitigation measures can be implemented to remove this risk. In contrast, Footprint (in its second report) draws on these same cases (many of which it was involved in) to cast doubt on the effectiveness of these measures at Strensall (see below) where development is proposed immediately adjacent to the SAC. **This has the potential to compromise the findings of the ISHRA.**

Effectiveness of Mitigation Proposed by AYW

4.2.121 The authorities emphasise that for mitigation measures to be taken into account they should be sufficient to ensure the required certainty of outcome to the assessment: see [1.43-1.46], above. If the outcome of future measures cannot be predicted with certainty, then the proposals will fail appropriate assessment.

4.2.122 To achieve the necessary certainty, this HRA adopts the following criteria: 'Effectiveness' (which is taken as its ability to reduce or remove the particular issue),'Timeliness' (can it be implemented promptly and 'effectively' when needed), 'Guarantee' (can it be secured in planning or enforceable), 'Long-term' (can it be secured in perpetuity if necessary) and 'Legality' (whether the proposed measure would comply with the Habitats Directive or other laws).

4.2.123 A range of mitigation measures have been considered and put forward over time to reduce the impact of recreational pressure on the Common. The initial SS19/ST35 policy consulted on in the Pre-submission Local Plan (Regulation 18) (2017) [SD021] was amended to include further mitigation and consulted on as part of the Local Plan Publication draft (Regulation 19) consultation (2018) [CD001], which was submitted for examination in May 2018. Further measures were suggested subsequently, in the 2019 Footprint report (Annex D, EX/CYC/16c) and the 2019 AYW report.

4.2.124 Although differences are apparent (such as the use of byelaws proposed by AYW and re-wetting suggested by Footprint 2019) the majority are similar if not identical, and most if not all will have been employed to greater or lesser effect at other locations. In the revised HRA of 2019, it found those presented in Policy SS19/ST35 could not be relied upon to provide the degree of certainty required (ie beyond reasonable scientific doubt) to conclude the absence of an adverse effect from recreational pressure.

4.2.125 Following a brief description of each mitigation measure proposed by AYW (and others), the criteria from the Handbook are applied to each in turn. AYW's approach is potentially compromised from the beginning. Its description of the magnitude of the existing evidence, some of it compiled by their own advisors (Wood, 2017) could be considered to diminish or (as suggested by Footprint, 2020) 'downplay' its importance.

4.2.126 Taking the effects of fire as an example, Footprint highlights the harm that can arise from uncontrolled burns, those caused by accident or vandalism. There is evidence of this at the Common today as highlighted by Wood (2017) and Natural England's Site Check (2019). AYWs response is to compare this with controlled burning on the Common agreed as part of the Higher Level Stewardship (HLS) Scheme and rather dismiss this as an issue.

4.2.127 This approach appears to overlook that the controlled burning of heathland is a traditional management tool and carried out properly can help to achieve the conservation objectives. In contrast, uncontrolled fires from accidents (eg barbeques) or vandalism can result in serious harm to both wet and dry heath and their assemblage of characteristic or typical species. This, in turn, raises further issues.

4.2.128 For instance, Footprint highlights the effect that uncontrolled fires (in particular, though trampling is similar) could have on the population of Dark Bordered Beauty Moth, given its reliance on stands of creeping willow (*Salix repens*) within the wet heath. Whereas the dwarf-shrub communities can be considered to have some modest resilience to occasional, uncontrolled burns (hence its use as a management tool) and as observed in the Site Check, the same cannot be said of the Dark Bordered Beauty Moth. These effects are only likely to increase with as the number of visitors arrive and AYWs response lacks weight in its appreciation of heathland ecology and management.

4.2.129 Further doubt on AYWs assessment can be drawn from their use of a 'conservative worst-case figure' in terms of visitor pressure; this is only what the precautionary principle demands and the attempt to suggest the reality will be less damaging is flawed. It should be remembered that both sets of figures are largely similar. Given that both surveys focused on car parks and often omitted pedestrian access points, it could be argued that both underestimate local visits and neither represent a worst-case scenario.

4.2.130 AYW also appears to suggest that the condition of the Common will decline if the more distant allocations are allowed but SS19/ST35, H59(A) and E18 are prevented. This is because the

mitigation they propose on the Common will not be implemented and so will not be available to further ameliorate the impact of the more distant allocations on the SAC – AYW predicts an increase of 9.6% in visitors from these other allocations although Footprint calculate it to be 6% (and the pooled data suggests 8.6%).

4.2.131 Given the application of more appropriate software in Footprint's original work, allied with its greater experience of its use and interpretation on European sites around the country, their data and assessment remains more compelling. However, the pooled data on more distant sites suggests little difference and very modest effects given the presence of the MOD and their legal duties, or otherwise.

4.2.132 However, in coming to this opinion, AYW fails to consider MOD's statutory duty to have regard to conserving biodiversity as part of its policy or decision making as described in s40 of the NERC Act 2006. Conserving biodiversity can include restoring or enhancing a population or habitat. Furthermore, it is a 'Section 28g (or public) body' under the Wildlife and Countryside Act 1981 (as amended). This means it must take reasonable steps to conserve and enhance the special features of SSSIs it may consent to or propose.

4.2.133 In other words, MOD has an obligation to manage the Common even when the pressures may arise from elsewhere. Doubt would only arise were the MOD to dispose of the Common.

4.2.134 For the sake of simplicity, this next section takes all the measures proposed by AYW in their report and explores them one by one.

Information/education

4.2.135 AYW proposes improvement in the use of signs and information (electronic and otherwise) providing accurate, and in some cases 'live' information about the site to promote good behaviours. Traditional signs are frequently employed in many countryside destinations and can be effective. It would be difficult to imagine an information programme without their presence.

4.2.136 These are already employed at Strensall and evidence suggests that some, at least, are well maintained and provide both useful and interesting information including reminders to keep dogs under control, avoid the use of fires, remove litter and dog faeces. However, evidence collated by Footprint (2019), PCP (2019) and Wood in 2017 suggest these are clearly not wholly effective with dogs running off the lead, trespass, unauthorised use of vehicles, littering and fires. The arrival of new residents from SS19/ST35 and H59(A), situated immediately adjacent to the SAC, can only be expected to make these pressures more acute.

4.2.137 The use of social media to supplement traditional signs may resonate with some users but shares the same advantages and disadvantages of more traditional measures.

4.2.138 Whilst their use inevitably has a role to play, evidence suggests little confidence can be placed on this alone. It is acknowledged though, that it is not proposed as a stand-alone measure and would be supported by the presence of a site warden and other measures. However, whilst signs and information can be easily (and promptly) provided, maintained in perpetuity (though there is evidence this is not achieved at present) and their presence guaranteed, **reasonable doubts remain regarding their effectiveness and reliability in the short and long term**. Too much emphasis should not be placed on this even as part of a multi-faceted approach.

4.2.139 This was put forward in the 2018 HRA as a plausible mitigation measure but further consideration of recreational pressure and urban-edge effects justified a change in opinion in the 2019 HRA and here for the reasons explained above.

Car park barriers

4.2.140 This measure has not been proposed or considered previously. The aim would be to prevent access by cars at unsocial hours to the two main car parks on the boundary of the SAC. There can be considerable confidence that this would reduce anti-social activity in this specific area late at night and perhaps reduce incidences of fly-tipping and maybe even arson, for example. In contrast, it could displace such activity to less secure areas of the Common and would do little to influence the existing use of unauthorised off-road vehicles in these more remote locations. Given that the Common represents the nearest, most easily accessible area of remote open space, the location of SS19/ST35 and H59(A), immediately adjacent to the SAC, it is reasonable to anticipate that the scale and frequency of unsociable activities will only increase and challenge the effectiveness of the barriers. Some new residents may be able to by-pass the barriers at night without the need for vehicles. This is currently the case at Galtres car park where although new barriers have already been installed, are well maintained and will prevent access by cars, gaps around the side still allow pedestrians and, perhaps, motorbikes around the side.

4.2.141 However, the proposal stops short of making a firm commitment to the installation of barriers suggesting that the outcome of a review would be implemented; the review may not recommend their installation. Correspondingly, great weight cannot be placed on this.

4.2.142 If barriers are installed, there is no reasonable doubt that they will have a limited, positive effect on visitor pressure and urban-edge effects but only where installed and could become a target for vandalism and require frequent maintenance; they would not influence activities anywhere else on site.

4.2.143 Overall, therefore**,** whilst car park barriers can be easily secured, promptly provided and readily maintained in perpetuity (though there is evidence this is not achieved at present), **reasonable doubts remain regarding their future effectiveness and reliability in both the short and long term** (because they would only influence behaviour in one part of the site). Too much emphasis should not be placed on this even as part of a multi-faceted approach.

Wardening

4.2.144 As with other suggested mitigation measures, wardening can be an effective tool for managing recreational pressure and is widely employed across the country, including the sites identified by AYW and elsewhere, especially when paired with other measures such as education, websites and signage alongside other physical measures as proposed. As suggested in previous HRAs and in Natural England's SIP, it probably represents the most effective means of influencing visitor behaviour when adequately resourced.

4.2.145 There can be some confidence that the provision of these services could reduce the impact of a modest increase in recreational pressure by reducing vandalism, and the frequency and severity of fires by encouraging responsible use of barbeques, for instance. Similarly, ensuring barriers are secure, steering public pressure away from fragile areas, maintaining grazing zones (see below) and, importantly, securing more appropriate behaviours from dog-walkers and their dogs will all reduce the impact of recreational pressure and urban-edge effects.

4.2.146 However, the list of duties is long as suggested above and confirmed by AYW and would be challenging to deliver in terms of the resources required. It is estimated here that the sum of £40,000 per annum suggested would be sufficient for just one, full-time member of staff.

4.2.147 Typically, wardening proves most effective where residential development does not lie immediately adjacent to protected areas and where the resources employed match the number of visitors, their behaviours (including times of activity, areas visited, and threat posed) and the size of the site. With SS19/ST35 and H59(A) located immediately adjacent to the SAC, influencing the behaviour of new residents can be expected to be a constant challenge, above and beyond current usage and make this pressure more acute.

4.2.148 Strensall is a relatively large site for northern lowland England and whilst access is typically focused around a handful of discrete points, entry (including unauthorised) is possible from several locations. Furthermore, visitors frequently walk relatively long distances, often with dogs running off the lead at all times of the day; automated cameras observed joggers, dog-walkers and others from 6am to 9pm or so. Unauthorised activities such as the use of cars and motorbikes, and vandalism, often take place very late in the day or at night, often, and unsurprisingly, far from the busiest areas but can cause considerable damage from erosion, loss of habitat and disturbance of stock.

4.2.149 Providing an effective wardening service to match this use could be challenging in terms of providing geographic, diurnal and seasonal cover, amongst others. Strensall Common is well used with little variation throughout the year and so the demands will be considerable and constant, and the financial cost high if it is to be effective would have to be maintained and guaranteed in perpetuity. Importantly, AYW makes no comment on how long funding for the warden would last.

4.2.150 Furthermore, evidence suggests that the impact of SS19/ST35 and H59(A) immediately adjacent to the Common would have a disproportionate effect on visitor numbers. Although analysis differs, Footprint was able to show by drawing on interview results that given the proximity of SS19/ST35 and H59(A) to the Common, new residents would probably make frequent visits, often with dogs, resulting in a likely increase of 13.6% in access from properties within 500m of the site boundary. Effectively influencing this increase in visits (or even the smaller numbers suggested by AYW) will pose a considerable challenge.

4.2.151 This could be particularly relevant in terms of managing the risk posed by dogs off the lead and the subsequent worrying or disturbance of livestock. The importance of an effective grazing regime should not be underestimated[73,74]. Heathlands are best managed by extensive sheep and/or cattle grazing where the location, intensity and duration are carefully controlled to ensure the floristic and faunal diversity can be maintained and, where appropriate, restored. The Common is managed in partnership by Natural England, Yorkshire Wildlife Trust and the MOD and the grazing regime a requirement of the HLS agreement. This is particularly important in terms of the conservation of the *typical* species.

4.2.152 The worrying of livestock is not simply restricted to the death of animals, though this has occurred, but more importantly, from a management point of view, is that dogs, especially those off the lead, can displace stock, effectively driving them into scrub where they can find cover or to those areas less visited by the public. The consequence is that grazing pressure becomes concentrated in more remote parts of the site and, correspondingly, those areas where people and dogs are frequent can become undergrazed. Both scenarios exert a downward pressure on the condition of the heath, its typical species and the European site.

[73] Grazing management of heathlands. English Nature 2005. http://publications.naturalengland.org.uk/publication/72034
[74] https://www.buglife.org.uk/advice-and-publications/advice-on-managing-bap-habitats/lowland-heathland

4.2.153 This pressure already exists and is identified in both Natural England's SIP, Supplementary Advice[75] and recent Site Check for the site and it is unclear how one individual Warden, as proposed, would be able to influence the behaviour of dog owners during the appropriate seasons. For instance, the current behaviour of dog-owners would not seem to be the result of ignorance that could, in principle, be addressed by a warden and with suitable education. Evidence captured since 2017 shows that many owners keep their dogs on the lead upon arrival before releasing them when further onto the Common. This suggests awareness of the need but a general disregard when out of sight; this is not unique to Strensall and is repeated frequently, elsewhere. The ability of a single Warden to meaningfully influence this behaviour would be a challenge.

4.2.154 Whilst the presence of a warden at the car parks or random patrols across the site would no doubt modify the behaviour of some visitors, it is doubtful this could be guaranteed to be successful given the anticipated increase in visitor numbers. He or she would, after all, only be able to work a normal working day and would require holidays, training, attendance at meetings off-site and so on. Even if supplemented by short-term staff to cover holidays and so on, this would still not provide a constant presence.

4.2.155 Over time, greater awareness may grow within the visiting community but given the disregard for existing rules, it is perhaps just as likely that dogs will be controlled when the warden is present and released when again out of sight. It is relevant that the presence of a shepherd with the most direct interest in this matter does not appear to have significantly altered behaviours so far. The minutes of the Conservation Group (Appendix G) make numerous references to the need to address this matter, but little concrete progress on this matter appears to have been achieved.

4.2.156 Similarly, it cannot be guaranteed that a warden could noticeably reduce unauthorised use of vehicles and vandalism or arson in more far flung corners of the site. In contrast, a regular presence could be expected to reduce the frequency and occurrence of fly-tipping over garden fences into the SAC. This would be an important task as beyond being unsightly, garden waste can introduce invasive, non-native species into protected areas.

4.2.157 Overall, **it is concluded that, whilst a warden service could be established promptly, no guarantee is given that it will be funded in perpetuity and in any event reasonable doubts remain as to its effectiveness in both the short and long terms given the scale of the tasks faced.**

4.2.158 This was put forward in the 2018 HRA as a plausible mitigation measure but further consideration of recreational pressure and urban-edge effects justified a change in opinion in the 2019 HRA and here for the reasons explained above.

Managed access

4.2.159 AYW propose to reduce the frequency of sheep-worrying, manage access and facilitate more effective grazing by erecting dog-proof fences across the site. Again, this could prove effective but to be successful fences will have to be both high (to stop dogs jumping over) and robust (to withstand vandalism). Wood (2017) addressed a similar issue and highlighted the potential for the public to react negatively to such restrictions making reference to a protest by 150 people against previous restrictions on access.

4.2.160 From what appears to be proposed so far, walkers without dogs would be similarly constrained. Consequently, it is reasonable to consider they would be unsightly, restrict the ability to roam of many and prove unpopular. There is evidence from around the country of public opposition when access to open spaces is restricted. Furthermore, it is not known how these work alongside the need to allow military manoeuvres and training on the Common.

[75] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

4.2.161 Whilst they could be removed outside the grazing season, the cost of such a task (if they are sufficiently robust) could be prohibitive with the risk they could become a permanent feature. Such permanent restrictions are likely to encourage considerable discord.

4.2.162 With education via the warden and signs etc, dog owners could, over time, come to understand the reasons why and adapt to these restrictions, but more responsible dog owners may become disenchanted. Conversely, enclosures could encourage owners to let their dogs off the lead and as again noted by Wood in 2017, worrying of livestock can still occur with the respective animals on opposite sides of a fence. Further, if large areas are effectively of bounds to visitors, trampling and other pressures may well increase across other areas of the Common. The location of SS19/ST35 and H59(A), immediately adjacent to the SAC, and its many new residents who can be expected to make considerable use of the Common, can only be expected to make these pressures more acute.

4.2.163 Management of land within the SAC to mitigate for recreational pressure could be interpreted as compensation rather than mitigation and thus fail to meet the requirements of appropriate assessment in conflict with case law:[76]

> "52. As a general rule, any positive effects of the future creation of a new habitat, which is aimed at compensating for the loss of area and quality of that habitat type in a protected area, are highly difficult to forecast with any degree of certainty or will be visible only in the future: see *Orleans'* case, paras 52 and 56 and the case law cited.
>
> 53. … uncertainty is the result of the identification of adverse effects, certain or potential, on the integrity of the area concerned as a habitat and foraging area and, therefore, on one of the constitutive characteristics of that area, and of the inclusion in the assessment of the implications of future benefits to be derived from the adoption of measures which, at the time that assessment is made, are only potential, as the measures have not yet been implemented. Accordingly, and subject to verifications to be carried out by the referring court, it was not possible for those benefits to be foreseen with the requisite degree of certainty when the authorities approved the contested development.
>
> …
>
> 55. Lastly, it should be noted that, in accordance with article 6(4) of the Habitats Directive, in the event that, in spite of the fact that the assessment conducted in accordance with the first sentence of article 6(3) of that Directive is negative, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, and where there are no alternative solutions, the member state concerned is to take all compensatory measures necessary to ensure that "the overall coherence of Natura 2000" is protected.
>
> 56. Therefore, in such a situation, the competent national authorities may grant an authorisation under article 6(4) of the Habitats Directive only in so far as the conditions set out therein are satisfied: *Orleans'* case [2017] Env LR 12, para 63 and the case law cited.'"

4.2.164 Whilst the relevance of this case law at Strensall Common is uncertain, and so does not form the basis of the outcome of this HRA, it does cast additional doubt on the suitability of managed access as a valid mitigation measure.

4.2.165 Mitigation is regarded as '*measures intended to avoid or reduce the harmful effects of a plan or project*' and, as explained above, must give rise to certainty of no adverse effect. Compensation measures can only be considered as part of the derogations when alternative solutions have been ruled out and imperative reasons of overriding public interest have been confirmed. The pursuit of

[76] *Grace & Sweetman* (above) at paragraphs 52-56.

this measure therefore introduces considerable doubt as to whether it can be taken into account lawfully at the appropriate assessment stage.

4.2.166 Even if this can be shown to avoid conflict with case law, considerable doubt remains that it will provide effective mitigation. Current grazing management aims to deliver low-intensity grazing pressure across the entire Common.

4.2.167 This introduces a dilemma. Compartments would have to be large enough to reduce sheep worrying around the perimeter and allow low-intensity grazing for a considerable period. If so, large areas of the Common would be taken out of public access with the risk this would prompt public disquiet.

4.2.168 If smaller, there could be few areas stock could retreat to if disturbed by dogs around the perimeter and grazing pressure could increase in the centre of each compartment. Whilst perhaps providing a better chance of avoiding an adverse public reaction, it is not known how the change in grazing pressure would affect the conservation objectives to maintain or enhance the qualifying features.

4.2.169 Both regimes could have particular implications for the typical species associated with the heathland. And, of course, either regime would have to ensure that all areas of the Common are grazed at a suitable intensity each season. The logistics would appear to be challenging. It is not known where similar measures are employed successfully leaving considerable doubt that this would be successful; grazing remains the fundamental management tool across the Common and its continuation is essential to achieving a favourable condition.

4.2.170 Although there is little doubt that such fences could be erected and their presence secured in the long-term, given that grazing management could be compromised, the anticipated public reaction to such measures and the risk that sheep worrying may continue and public pressure will grow elsewhere**, reasonable doubts remain about its effectiveness, reliability and, potentially, whether it can lawfully be considered as part of the appropriate assessment process.**

Information packs

4.2.171 These are widely promoted by developers in proximity to sensitive landscapes. They are affordable and readily deliverable but there is no evidence as far as is known that good behaviours have been secured as a consequence of their production and distribution. One can imagine that the same information provided is, in theory, available on signs or on websites. Importantly, there are no reliable means to ensure these are passed on by houseowners to new residents when a property is sold or let.

4.2.172 Whilst undeniably helpful, it is concluded that **reasonable doubts exist regarding their effectiveness, reliability (in the long term)** and little weight can be placed on them.

Public open space within QEB

4.2.173 AYWs masterplan suggests the creation of 10.44ha of alternative greenspace within the confines of SS19/ST35, comprising a single block of 7ha and other, apparently discrete components including SuDS, and, presumably, much smaller amenity areas. It states that the main block will satisfy a number of functions and comprise not only semi-natural open space but also ‘parks/ amenity/ outdoor sports space’. Of note is that this is smaller than the 12ha of open space originally proposed by the Council (OS12).

4.2.174 Elsewhere, AYW suggest this will be sufficient to attract residents, including those with dogs to use this in preference to visiting the Common; it suggests that dogs will be able to be let off the lead. It draws on evidence from other sites to conclude this will be effective.

4.2.175 In both of their reports, Footprint cast doubt on the effectiveness of this in terms of its ability to achieve this and provides, as an example, its inability to provide a circular walk of 2.5km or 3.3km (that represented the median distance walked by visitors to the Common as recorded by Footprint and PCP respectively). In terms of their own research, Footprint calculated that to create a perimeter walk of similar distance would require the establishment of a single block of land some 30-40ha in extent.

4.2.176 Furthermore, whilst a more meandering route of similar length could be designed to achieve a route of this length in a smaller area, play areas and sports pitches, for instance, could hinder this. Similarly, the multi-functional use of even the core 7ha area may restrict the ability of dog-owners to release their pets if other users, such as young children, are present. Furthermore, the proximity of new housing and the existing main road would detract from the natural setting (highlighted by 52% of Footprint's interviewees as one of the main reasons to visit the SAC), especially in the short-term whilst suitable vegetation took time to establish.

4.2.177 This casts doubt on the anticipated attractiveness and effectiveness of the open space suggested and that new residents would still seek access to the Common regardless although it would satisfy the requirement of 57% of visitors identified by PCP who chose 'close to home' as a prime reason for visiting.

4.2.178 There is now a widespread understanding that the attractiveness or function of alternative greenspace is reduced when situated in such close proximity to the main destination. The use of alternative greenspace to deflect visitors from more fragile locations is widespread and can be successful but this is invariably found where development is more distant (beyond 400m) and where the greenspace can 'intercept' people and provide shorter journeys/easier access.

4.2.179 The contrast with the attractiveness of the *de facto* open space of the Common itself, almost literally on the doorstep of new residents is clear. It is doubtful that the scale, design and location of the greenspace proposed will be sufficiently attractive to dissuade residents from walking a few hundred metres further to the Common itself (should the perimeter barrier prove effective) bringing with them a range of urban-edge effects. The evidence presented by AYW fails to accurately address the importance of the 400m threshold.

4.2.180 There is no doubt that the greenspace could be created, maintained and sustained in the long-term, and would attract some users. However, it would take time to establish as an 'alternative' greenspace to mimic the attractiveness that the Common provides (see Footprint's research) and this would be compromised by its multi-functional use. Despite fencing impeding access, there is doubt that residents would not make the longer walk to access the Common, or even create unauthorised access points of their own.

4.2.181 Whilst mindful of AYWs suggestions that this should operate in conjunction with a permanent barrier separating QEB from the Common, it is concluded that, whilst it would be effective in attracting a modest number of residents away from the Common**, reasonable doubts remain that it would prove effective or reliable in attracting a significant proportion of new residents in the short and long terms.** It is acknowledged, however, that it could be delivered reasonably promptly and could be secured in perpetuity. Overall, though, little weight can be attached to this.

4.2.182 This was put forward in the 2018 HRA as a plausible mitigation measure but further consideration of recreational pressure and urban-edge effects justified a change in opinion in the 2019 HRA and here for the reasons expressed above.

Residential layout and boundary treatment

4.2.183 As referred to above, AYW promotes the erection of a permanent barrier (or fence) to restrict direct access from QEB to the Common by requiring new residents to walk several hundred metres and most likely gaining access to the SAC in the vicinity of the car park on Scott Moncrieff Road.

4.2.184 It is recognised (as it is in the Footprint reports) that a permanent barrier is likely to influence the behaviour of some residents and encourage them to remain within the allocation and make use of the public open space provided. Examples could include short walks with a dog or children playing. AYW draw confidence that a permanent barrier allied with houses and gardens backed up against the fence would preclude direct access to the adjacent Common.

4.2.185 This raises a number of issues. Experience from around the country provides examples of where fenced gardens adjacent to open landscapes provides no effective barrier. Evidence suggests it will attract the dumping of garden waste and other debris over fences. Whilst unsightly, this can, more importantly, promote the eutrophication of soils and although this would be highly localised, garden waste can be a frequent source of invasive non-native species which can have effects much further afield.

4.2.186 Further, it is reasonable to presume the availability of an attractive, large open space adjacent to a property with no formal access to it will encourage some residents to create their own gates in the boundary fence; this behaviour too can be observed around many protected sites and even if restricted by condition or similar, it is unclear how this can be effectively enforced. Similarly, it is not possible that over time, residents will, as a group press for such restrictions to be lifted and for more convenient, formal access points to be provided.

4.2.187 Restricting this behaviour will be reliant on regular and effective monitoring, liaison and repair and whilst the current presence of the military presents more confidence that this could be achieved than most situations, some doubt inevitably remains that monitoring will be sufficiently thorough, regular and long-lasting enough, with repairs carried out sufficiently promptly to effectively influence behaviour especially over time. Similarly, concern exists about how robust the fence will be. One that provides sufficient security and durability may not align with housebuilder and householder aspirations even if it may blend in with existing military structures. This too may prompt change over time.

4.2.188 Footprint rightly acknowledges that the MODs presence at Strensall provides greater confidence that a barrier could be maintained, potentially in perpetuity, but questions how long this can be guaranteed. The long-term future of the MOD training complex is a matter of public debate and evidence of this uncertainty is perhaps provided by the proposed disposal of this land for private housing. Should the MOD depart at some point in the future, legal agreements could be put in place to secure the same level of observation and maintenance but whether this could be secured and practiced in perpetuity is open to question. Few private companies can be expected to have the same level of diligence as the military.

4.2.189 Furthermore, as observed by Footprint, two existing access points in the north-east and south-east edges of the current layout do not appear to be proposed for closure. Should these remain, access

to the Common would appear to be much easier than suggested further diminishing the effectiveness of the proposed approach.

4.2.190 In this context, attention is drawn to a case with some similarities at Talbot Heath in Dorset. In that case, the Secretary of State questioned the effectiveness of a barrier to reduce access to the adjacent SAC/SPA because its permanency could not be guaranteed and refused the application. The circumstances are somewhat different to Strensall Common, but the implications are clear.

4.2.191 There is no doubt that the use of a barrier, allied with the suggested housing layout could be delivered, maintained and sustained in the short-term, and would promote some use of the open space to be provided within SS19/ST35. However, reasonable doubt remains that it will be sustainable in the long-term and could be prone to the creation of unauthorised access points. There is also a reasonable probability that it will facilitate fly-tipping, especially of garden waste.

4.2.192 Furthermore, there appear to be no measures to influence the behaviour of the (much smaller number of) residents at H59(A) who would have unfettered access to the Common. For context, this allocation is predicted to contribute a 1.2% increase in access (which is greater than that anticipated from the 1,348 dwellings SS12/ST14, 4.6km distant).

4.2.193 **It is concluded, therefore, that, whilst its delivery and maintenance can be guaranteed in the short-term, reasonable doubts remain about its effectiveness in the short term and its long-term reliability.**

4.2.194 This was put forward in the 2018 HRA as a plausible mitigation measure but further consideration of recreational pressure and urban-edge effects justified a change in opinion in the 2019 HRA and here for the reasons expressed above.

Additional fencing

4.2.195 This refers to a proposed assessment of the condition of existing fencing 'into the Common' and the replacement/reinforcement where necessary. There is no doubt that well-maintained fences can be erected swiftly and secured in planning, and can influence public behaviour in suitable locations and when combined with other mechanisms. Where these criteria aren't met, their success cannot be guaranteed; despite considerable amounts of fencing on the Common at present, there are still many examples of the public bypassing these even to gain access to the live firing ranges. Here, the proposed location is unclear even whether off- or on-site. If the latter, the same issues as discussed above regarding 'managed access' will apply. The introduction of many new residents from SS19/ST35 and H59(A), located immediately adjacent to the SAC, is likely to provide a constant test of the effectiveness of the any new fencing. Given this uncertainty, little weight can be placed on this, it would appear to the vaguest of all the proposals.

4.2.196 Furthermore, installation and location are dependent on a review, which introduces more uncertainty if they ever will be implemented. **Therefore, the proposed measures cannot be considered to be effective, reliable, timely, guaranteed and permanent, beyond reasonable doubt.**

Byelaws

4.2.197 These are proposed as a means to allow enforcement of good behaviours by visitors to the Common. Several are already in use for a range of purposes including the protection of land and features and yet, given current behaviours, do not appear to be completely effective.

4.2.198 Signs with reference to these are already visible at Strensall and whilst nominally observed, for instance dogs are often on leads in the car park but are released shortly afterwards, it is doubtful that a byelaw could make a measurable difference to behaviours on the Common. Trespass within the firing zones on firing days is also not uncommon despite the appointment of a Range Warden. Indeed, they could have the opposite effect and prompt disquiet amongst regular visitors especially on open access land. Resistance could be expected (as suggested by Wood, 2017), or they could simply be ignored. The arrival of a considerable number of new residents from the adjacent SS19/ST35 and H59(A), can only be expected to make these pressures more acute.

4.2.199 To be effective, they would also have to be put in place promptly, yet it is suggested they would only be employed if monitoring considered it necessary.

4.2.200 The Handbook makes clear the distinction between 'validation' and 'early-warning' monitoring. The former simply observes and records change and does not represent mitigation. The latter, as the name suggests, is designed to identify harmful effects promptly and, crucially, lead directly to the implementation of additional mitigation measures to prevent that harm arising before an adverse effect on the integrity of the site can result. If it can achieve this, it can be considered as mitigation, otherwise, it cannot.

4.2.201 Much depends on the identification of thresholds and trigger levels to inform a monitoring scheme in perpetuity yet there is little to suggest what could be employed and what would give sufficient 'early-warning'; reliance on incidents of sheep-worrying, may not be adequate.

4.2.202 If byelaws are considered necessary and are to be considered as mitigation, it is imperative that they can be 'made' promptly and efficiently – and enforced. Given the resistance to other restrictions in the past, the former is not guaranteed, they can take years to pursue, and it is unclear how they would change behaviours that are already discouraged by non-statutory means. In contrast, they would, if implemented, have potential benefits across the entire site and could be secured in perpetuity. The desire for new byelaws has frequently been raised at the Conservation Group (Appendix G) but, perhaps reflecting the difficulty in pursing them little concrete progress appears to have been made so far.

4.2.203 Overall, given anticipated resistance and concern regarding the speed of response, **reasonable doubts remain regarding their effectiveness, reliability and timeliness.** Consequently, little weight is given to their value.

Alternative greenspace

4.2.204 AYW suggest that additional land elsewhere could be brought into play to supplement the open space proposed within SS19/ST35 yet this struggles to meet the rationale behind the reason for the provision of this facility. This is to provide an attractive, easily accessible area that would be used in preference to the Common.

4.2.205 The land proposed appears to comprise discrete blocks separate to SS19/ST35 and could only be accessed by new residents via a short walk. How this would be preferable from the need to walk to access the Common itself is unclear. Further, one of the suggested blocks is currently used by the shepherd for holding stock and attracting the public, possibly with dogs, would be likely to compromise grazing management of the SAC. It is presumed farming activities would have to be displaced elsewhere but again, this is not clear; any impact on the ability of the grazing regime to be maintained would render this unacceptable. The other suggested block incorporates an existing area

of CRoW Act open access land already used by the public; it is doubtful this could be regarded as mitigation.

4.2.206 Importantly, the use of this as mitigation is presented in AYWs report as being driven by the outcomes of monitoring. No information is given about what form such monitoring would take such as how frequent and what would its targets, triggers and thresholds would be. Whilst this could be refined subsequently, the use of monitoring to drive additional mitigation measures is of critical importance.

4.2.207 As with byelaws above, for this to be considered as mitigation that can be relied upon by this HRA, it must be certain that the monitoring programme can identify harm and that mitigation can be implemented, promptly. The proposals do not suggest that this is the case yet and, therefore, it is not considered compelling. Furthermore, a guarantee that this proposal is currently feasible is conspicuous by its absence although further information was to be provided.

4.2.208 Despite this, as the proposal cannot be guaranteed (at present) **there are reasonable doubts that this can be considered as mitigation. Assuming further information changes this view, reasonable doubts still remain regarding its effectiveness, reliability and timeliness** though it is anticipated that once established it could be secured in the long-term**.** Consequently, little weight is given to its value.

Overall conclusions on the proposed mitigation

4.2.209 Each proposed elements of mitigation has been considered in turn. However, this is not the best way to consider their overall effect. They are, after all, suggested as a package of measures and as the debate above shows, many are interlinked.

4.2.210 Each has the potential to contribute benefits of varying magnitude but all have flaws, when considered separately. However, even if all were implemented (and it is not clear that they would), it remains doubtful that they would provide the level of certainty required to allow the Council to conclude the absence of adverse effects, even though they have been employed successfully, in different circumstances elsewhere.

4.2.211 This is primarily because the location of both SS19/ST35 and H59(A) immediately adjacent to the Common not only increases the potential for urban-edge effects but also markedly increases the number of visits that will be made even when taking into account the differing analyses provided. Generalisations from measures used elsewhere cannot be employed to avoid consideration of these important specific characteristics of the sites here.

4.3.212 Where mitigation measures such as those proposed have proved to be effective are in relation to new development distant from the protected area (eg the Dorset Heaths and Cannock Chase). From experience around the country, a 400m distance has become accepted as a suitable threshold to restrict new development, one which is supported by appropriate policies in land use plans (e.g Breckland, East Devon, Cannock and Wealden amongst others). It is notable that the 23.2% (Footprint 2020) predicted increase in use at Strensall (using pooled data) would be higher than the 15% predicted at Cannock which has adopted a policy requiring use of the 400m threshold.

4.2.213 Importantly they are not restricted to the protection of ground-nesting birds as suggested by AYW. They are equally applicable to the protection of habitats in SACs (eg the Kinson Common (SAC) component of the Dorset Heaths).

4.2.214 Relevant text from the Dorset Heaths Planning Framework[77] states:

[77] Paras 3.3 and 3.4 in https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/joint-planning-policy-work/pdfs/heathlands/dorset-heathlands-planning-framework-supplementary-planning-document-2015-2020.pdf

"Natural England locally is concerned at the intensification of residential development in South East Dorset and the resultant pressures placed upon protected heathland by new occupants of these developments living in close proximity to the heathlands. These are similar to the impacts being observed within the Thames Basin Heaths Special Protection Area. Various studies have found that public access to lowland heathland, from nearby development, has led to an increase in wild fires, damaging recreational uses, the introduction of incompatible plants and animals, loss of vegetation and soil erosion and disturbance by humans and their pets amongst other factors have an adverse effect on the heathland ecology.

These effects are most marked for development within 400m of heathland where Natural England advise that additional residential development is likely to have a significant adverse effect upon the designated site, either alone or in combination with other developments."

4.2.215 Fundamentally this is because traditional approaches utilising wardening and open space struggle to provide and effectively influence behaviours with development adjacent to the site which in turn is driven by the increased number of visits and the potential for increased urban-edge effects. Where development is proposed 400m away and beyond, the establishment of alternative greenspace can be strategically located and be of a sufficient size to genuinely represent an alternative destination for new residents, one that might have fewer restrictions than the protected area at risk; for instance, dogs may be permitted off the lead. Footprint did observe that any new open space would have to be geared towards the needs of dog owners if it was to be successful. One example can be found at Skipwith Common where visitors are allowed to let dogs run off the lead on an area of wooded heathland where grazing is not practiced and no livestock are present.

4.2.216 Within SS19/ST35, the open space proposed is restricted in size (and is smaller than the area proposed and rejected by the previous HRA) and by the multiple interests it will have to serve (e.g sports and play areas) and is unlikely to represent an alternative destination other than occasional visits. It is reasonable to assume that most residents will choose to access the common to jog, walk their dogs, play or explore. A further risk is that residents may create their own entrances through their back gardens or press to have formal access improved. It is also noteworthy that access points in the north east and south east appear to remain open potentially providing easy access to the common even with the construction of a barrier.

4.2.217 This difficulty is recognised in the Rushmoor Plan which encompasses the Thames Basin Heaths SPA. Here, recreational pressure has been studied intensively and residential development is precluded within 400m of the heathlands to reduce the magnitude of recreational pressure and urban-edge effects. The plan states (with emphasis added):

'*development … is unlikely to be permitted within this* [400m] *zone, as no effective avoidance and mitigation measures are considered to be available which could avoid it*.

4.2.218 Experience from the New Forest provides a different set of circumstances. Here there is no 400m threshold, but it extends to 28,000ha and is a National Park that washes over a number of sizeable settlements. A 400m buffer in these circumstances would include most of these where development is already highly constrained, and all development was considered necessary to be scrutinised whether within a 400m threshold or not. It was for these reasons that a buffer wasn't suitable, not for the reasons implied by AYW. A full description of the rationale of the 400m threshold and its use from many examples from around the country is provided in the second Footprint report (2020) (Appendix F) and is not repeated here.

4.2.219 This review of the effectiveness of the measures proposed by AYW in terms of the tests laid out in section 4.1.4 is summarised below in Table 8. It can be seen that none meet all the criteria suggesting that none can be relied upon wholly to meet the test laid out above and in case law. Even when considered together, there is reasonable scientific doubt they could deliver the required levels of certainty.

Table 8 Summary of mitigation measures for recreational pressure

Mitigation measure	Effective	Reliable	Timely	Guaranteed	Long term	Legality	Can reasonable doubt be removed?
Signage/Information	✗	✗	✓	✓	✓	✓	✗
Car park barriers	✗	✗	✓	✓	✓	✓	✗
Wardening	✗	✗	✓	✓	✗	✓	✗
Managed access	✗	✗	✓	✓	✓	**uncertain**	✗
Information packs	✗	✗	✓	✓	✗	✓	✗
Public open space in QEB	✗	✗	✓	✓	✓	✓	✗
Residential layout and boundary treatment	✗	✗	✓	✓	✓	✓	✗
Additional fencing	✗	✗	✓	✓	✓	**uncertain**	✗
Byelaws	✗	✗	✗	✓	✓	✓	✗
Alternative greenspace	✗	✗	✗	✗	✓	✓	✗

Other possible mitigation on Strensall Common

4.2.220 A number of the measures suggested by AYW were already put forward by the Council. However, in the 2019 HRA the use of habitat management was considered as this had been suggested in Footprint in their report of 2019.

4.2.221 This suggested that areas of the Common could be re-wetted and, allied with the use of boardwalks, could encourage visitors to utilise the relatively more robust, drier areas of the site. Significantly, it was suggested, this would have the potential to expand the extent of the wet heath community (one of the two qualifying features of the SAC) without diminishing the area of dry heath. Whilst the report justifiably identifies that this would influence visitor behaviour and reduces the risk of fire, the report is relatively silent on its overall effectiveness.

4.2.222 Whilst relatively simple to block drains, ensuring this would not compromise the condition of both wet and dry heath communities could be problematic in practice. Exploring this further, the hot, dry summer of 2018 (when the surveys were conducted) caused many of the existing wetland habitats

to dry out and allowed visitors easy access to much of the site. Although not explored in the Footprint report, it is considered that this response to current weather patterns suggests that the permanent establishment of wet heath cannot be guaranteed and could not be relied upon to effectively influence visitor behaviour especially given the uncertainties posed by climate change. Furthermore, it should be noted that the summer of 2018 was an exception and much of Strensall Common is actually wet for much of the year casting doubt on the suitability for this as a management tool. There is also the possibility that it could fall foul of European case law (eg Briels, New Orleans cases) and could be interpreted as providing compensation not mitigation.

4.2.223 For these reasons, this suggestion was dismissed. No other reasonable mitigation measures are known that could be applied at Strensall Common.

Condition and resilience of Strensall Common

4.2.224 Whilst the condition assessment for the SSSI confirms that the Common is recovering towards or is in favourable condition, and therefore can reasonably considered to be more robust and resilient to harm, this cannot be employed as a reason to allocate development where adverse effects cannot be ruled out in terms of the site's conservation objectives. Furthermore, the condition assessment was completed in 2011 and so exceeds the established need for these to be performed every six years. Consequently, this cannot be relied upon to provide a contemporary assessment of the site.

4.2.225 Of greater relevance is Natural England's 'Site Check' of 2019. Although not as comprehensive as a formal condition assessment, this does provide useful observation of current issues and identified concerns regarding the impact of recreational pressure (especially with dogs) and urban-edge effects (fire) on the condition of the heathland qualifying features.

4.2.226 Footprint's 2019 report concludes by reminding us that:

At plan-level HRA it will be necessary to have confidence that the above mitigation measures are feasible and achievable in order to rule out adverse effects on integrity on Strensall Common SAC as a result of increases in recreation there needs to be confidence that the measures will be successful.

Overall outcome of review of evidence provided by Footprint and AYW

4.2.227 **Importantly, it can be seen that Footprint's reports suggest, and AYWs ISHRA conclude that adverse effects on the integrity of Strensall Common cannot be ruled out.** This shared position provides confidence in the methodologies employed and the subsequent interpretation of data; these outcomes provide considerable influence on the outcome of this HRA. Ultimately, the ISHRA goes onto conclude that these effects can be mitigated to remove this negative outcome.

4.2.228 This is where differences arise. It has been shown above that issues surrounding the scope, statistical analysis, the distribution of visitors, the tests applied, and the effectiveness of mitigation proposed all introduce doubt regarding its ultimate conclusion.

4.2.229 AYW relies on *probabilities and estimates* and presents information to suggest that the mitigation proposed will be sufficient to rule out adverse effects. In contrast, Footprint provides comment and evidence to suggest the examples relied on by AYW are flawed and when scrutinised could even be considered to contradict AYWs position. Importantly, AYW draws on experiences from around the country, the New Forest, Cannock Chase, the Dorset Heaths and others to show why a 400m

threshold is not necessary at Strensall. In their second report Footprint provides compelling evidence, much from first-hand knowledge gained from visitor studies on these same sites, to challenge this approach.

4.2.230 Examples from around the country indicate that all the proposed mitigation measures suggested in Policy SS19/ST35 could contribute potentially to a reduction in harmful impacts from increased recreational pressure and urban-edge effects. However, the authorities emphasise that for mitigation measures to be taken into account they should sufficient to ensure the required certainty of outcome to the assessment which in this case is taken to mean that they should be effective, reliable, timely, guaranteed to be delivered, as long term as they need to be and legal.

4.2.231 The analysis above, informed by documents from both Footprint and DIO/Wood/AYW provides evidence that the effectiveness of the measures proposed to adequately address the effects of visitor pressure of this scale are likely to be of varying success and the long-term implementation of such measures would be challenging. The individual outcomes are summarised in Table 8 above.

4.2.232 Drawing on the test of *reasonable scientific doubt*, this HRA considers that Footprint's analysis provides strong evidence (or *objective information*) that the mitigation proposed by AYW cannot be completely relied upon. It is considered that these flaws potentially comprise the overall outcome of the ISHRA. Reliance on these would not be consistent with use of the precautionary principle.

4.2.233 This assessment of the impact of recreational pressure (and urban-edge effects) draws on evidence provided by two visitor surveys and associated reports, which explore the impact of a number of discrete allocations in the vicinity of the European site. Discrete policies, or groups of policies, are taken in turn reflecting the particular issues that apply.

4.2.234 In the screening exercise, likely significant effects were identified 'alone', but without prejudicing the outcomes of this appropriate assessment, it is clear from the analysis above that cumulative or in-combination effects could arise in terms of recreational pressure given the number of allocations in play and their declining influence on visitor numbers over distance. Therefore, each discrete section below concludes with a statement that explores whether the need or otherwise for in-combination assessment is required.

Policies SS19/ST35 and H59(A)

4.2.235 These two policies make provision for 500 and 45 dwellings respectively on land immediately adjacent to Strensall Common. Evidence provided by the analysis of pooled data suggests that SS19/ST35 will contribute 13.4% and H59(A) 1.2% of the predicted increase in visitor pressure. Given their proximity they also introduce the risk of increased urban-edge effects.

4.2.236 The debate above has explored the impacts posed by each of these factors and the challenges faced to mitigate these effects. This is not repeated here**.**

4.2.237 Fundamentally though, this scale of increase, the uncertainty surrounding the effectiveness of mitigation and in particular, the predicted increase in the worrying of livestock allied with urban-edge effects, ensures that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site could be assured beyond reasonable scientific doubt; this would also compromise the conservation objectives to *maintain or restore* the qualifying features.

4.2.238 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice for Strensall Common[78] (see Tables 1 and 2), conflicts with targets to maintain the extent, composition, spatial distribution, structure and function of the heathland communities (including their typical species), cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others, cannot be ruled out. This would include the target to maintain the abundance of typical species.

4.2.239 **Therefore, an adverse effect on the integrity of the European site cannot be ruled out**. This calls into question the suitability of SS19/ST35 and H59(A) for residential development.

4.2.240 The Handbook (F.10.1.6) states:

To include proposals that would be potentially doomed or vulnerable to failure under the Habitats Regulations at project assessment stage was regarded by the European Court's Advocate General as 'faulty planning'.

Consequently, if at appropriate assessment …, a plan-making body considers that an adverse effect on site integrity is a real possibility, and would create problems for the delivery of the proposal, the proposal should be deleted from the plan or otherwise modified to enable the plan-making body to ascertain there would not be an adverse effect on the integrity of the site.

[78] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

4.2.241 Between the previous HRAs and AYW report, all reasonable mitigation measures have been explored but found to be unreliable.

4.2.242 Should alternative measures be proposed, they would have to satisfy the requirements described above to merit consideration. Mindful of this and given the absence of further mitigation at this stage, **the only course of action remaining is to remove both policies from the Plan**.

Integrity Test for the effects of recreational pressure and urban-edge effects on Strensall Common – Policies SS19/ST35 and H59(A)

Given the doubts concerning the effectiveness of mitigation measures, the Council is unable to ascertain the absence of an adverse effect on the integrity of Strensall Common SAC. Consequently, there is no option other than to remove both ST19/ST35 and H59(A) from the Plan. Should the Plan be amended as suggested (i.e the policies are deleted), the Council would be able to ascertain no adverse effect on the integrity of Strensall Common SAC from these policies.

Allocation E18

4.2.243 This policy makes provision for a 4ha employment site on Towthorpe Lane immediately adjacent to Strensall Common SAC**.** This introduces different aspects associated with recreational pressure. As discussed in the screening exercise, a marked increase in the number of visits from the workforce is not anticipated given that most would be restricted to occasional lunchtime excursions. Confidence in this assumption can be drawn from PCPs interviews that found 2% of interviewees were on a break from work. In contrast, the threat is posed not by employees but by the public utilising the area as a *de facto* public car park, both during and outside normal working hours.

4.2.244 Given that a considerable number of visitors to the Common arrive by car, one effective, limiting factor remains the size and location of car parks. Furthermore, access to the southern part of the Common is not easy, requiring a long walk from more popular access points to the west; it therefore remains relatively quiet and less exposed to recreational pressure. Should the employment area have no access restrictions, the site could quickly provide extensive new parking facilities and increase the number of visitors or allow existing users with easier access to a greater area of the European site.

4.2.245 Allocation E18 does not currently have any restrictions on access embedded within the policy wording other than a cross reference to SS19/ST35. However, the introduction of a requirement to effectively, reliably and permanently restrict access to employees and *bona fide* business visitors allied with the creation of a suitable, robust, permanent barrier further restricting access from within the site then the risk of an adverse effect could be removed. It is noted that the effectiveness of a barrier at SS19/ST35 was doubted but given the behavioural differences between visitors to the Common and employees, it is believed this could be considered to be effective here when considered alongside parking controls and the smaller number of visitors (and their likely behaviours) it would have to influence. Employees and visitors are not anticipated to prompt urban-edge activities either.

4.2.246 These modifications (as outlined above) have now been proposed via changes to Policy EC1 and GI2 which will strengthen the Plan's approach to dealing with applications relating to internationally and nationally important sites. See proposed modifications PM16/PM17 for Policy EC1 and PM26/PM27 for Policy GI2 in Appendix E to this HRA.

4.2.247 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[79] (see Tables 1 and 2), conflicts with, for example, targets to maintain the extent, composition, spatial distribution, structure and function of the heathland communities (including their typical species), cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others, can be ruled out.

4.2.248 Therefore, in terms of Policy E18, there are adequate safeguards available to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of its ecological structure and function* of the site would be affected. This would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects. In this regard, this HRA agrees with the outcomes of the ISHRA.

Integrity Test for the effects of recreational pressure and urban-edge effects on Strensall Common – Policy E18
In terms of recreational pressure and urban-edge effects, the Council can ascertain that providing Policies EC1 and GI2 are amended as suggested above, Policy E18 will have no adverse effect on the integrity of Strensall Common SAC. There would be no residual effects.

Policies: SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17, SS17/ST32, H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1

4.2.249 Excluding the three policies SS19/ST35, E18 and H59(A) which are found adjacent to the SAC, left eighteen discrete allocations though Phase 1 and 2 of H1(A) both occupy the same site. All lie between 2km and 7.5km from the Common.

4.2.250 It can be seen Policies SS10/ST8 and SS11/ST9 are the closest and amongst the largest but all enjoy relatively good access to the SAC by car. Distance and number of dwellings are listed below. This list below provides information on their distance from the SAC, the number of dwellings proposed and their stage in the planning process.

Allocation	Distance	Dwellings	Consented	Started	Completed
SS9/ST7	4.8km	895	✗	✗	✗
SS10/ST8	2.5km	968	✗	✗	✗
SS11/ST9	2.1km	735	✗	✗	✗

[79] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

Allocation	Distance	Dwellings	Consented	Started	Completed
SS12/ST14	4.6km	1,348	✗	✗	✗
SS15/ST17	5.5km	863	✗	✗	✗
SS17/ST32	7.0km	483	✓	✓	✗
H1(A) Phase 1	6.0km	271	✓	✓	✗
H1(A) Phase 2	6.0km	65	✓	✓	✗
H3(A)	6.1km	72	✓	✓	✓
H7(A)	6.6km	86	✗	✗	✗
H22(A)	6.4km	15	✗	✗	✗
H23(A)	7.0km	11	✓	✓	✓
H31(A)	6.0km	76	✗	✗	✗
H46(A)	3.5km	104	✗	✗	✗
H55(A)	6.0km	20	✗	✗	✗
H56(A)	7.3km	70	✓	✗	✗
H58(A)	6.6km	25	✗	✗	✗
SH1	6.0km	unknown	✗	✗	✗

4.2.251 These sites were identified in the initial screening exercise (Appendix B) on the basis of a precautionary 7.5km threshold from the SAC boundary; experience suggests this is a reasonable distance to adopt as an initial screening measure.

4.2.252 This threshold was maintained in the formal screening exercise, and so none were screened out as all were considered to pose a credible risk of contributing to increased recreational pressure on the Common, alone. The screening exercises had already screened out any allocations beyond this threshold. The evidence provided by the two visitor studies has shown that there is no need to cast the net wider than 7.5km in this case.

4.2.253 It can be seen that two allocations have already been, or are the verge of completion – H3(A) and H23(A). Consequently, these can be ruled out of any further scrutiny, once completed and occupied,

they are effectively beyond individual evaluation though their contribution to overall visitor numbers is accounted for in all the visitor survey reports.

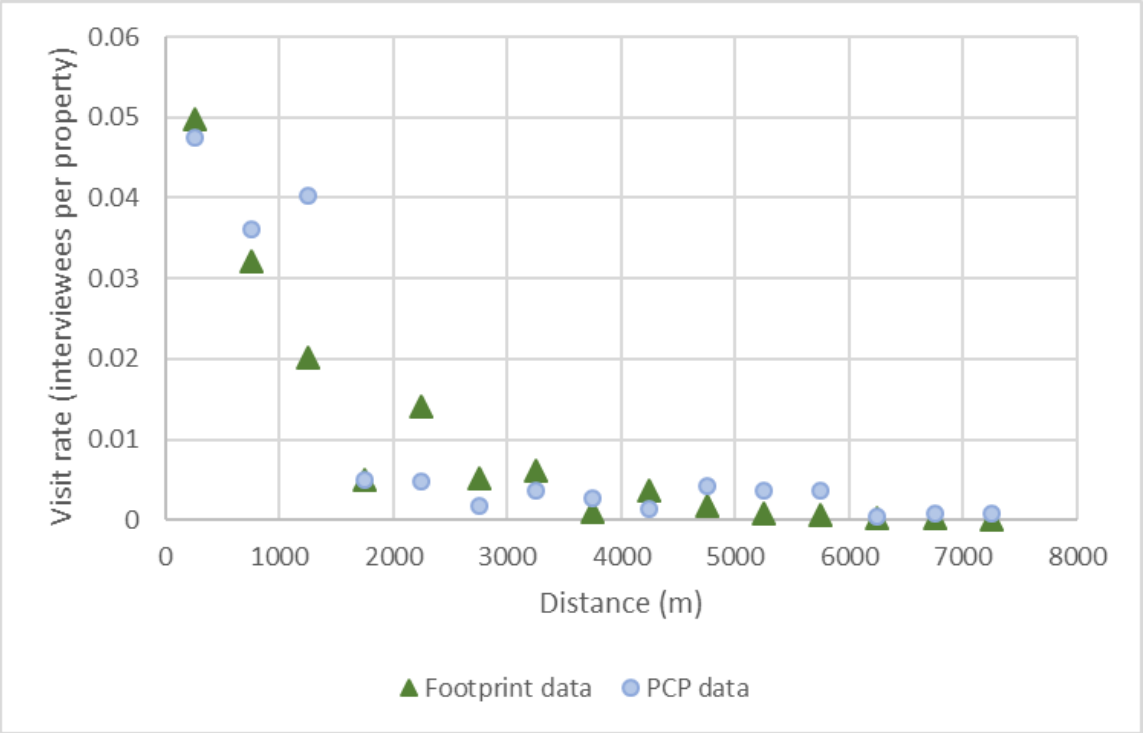
4.2.254 Several other developments have also been consented and work has started on some of these: SS17/ST32, H1(A) and H56(A). However, as none are yet complete, they are retained for further assessment.

4.2.255 Drawing on both of Footprint's reports, and their analysis of pooled data, there is strong evidence that all allocations within 7.5km of the SAC would together, contribute to a 23.2% increase in visitor pressure. SS19/ST35 and H59(A), already assessed above, would comprise 14.6% of this.

4.2.256 Whilst the same evidence also indicates the number of visitors decline markedly beyond 5.5km (as the crow flies) from the boundary of the SAC (see Figure 3 below), this would still raise doubts that Policies SS10/ST8, SS11/ST9 and SS12/ST14, all of which lie within this 5.5km threshold (comprising 3%, 3% & 1%, respectively), could avoid conflicts with the conservation objectives for the SAC. However, further analysis suggested that three other policies, SS9/ST7, SS15/ST17 and H46(A) should also be considered as they could contribute to the remaining 1.6% increase in visitor pressure. All of the latter three lie within the 7.5km threshold.

4.2.257 This position is mindful of core PCP data and analysis that suggests a different scenario and calculated that almost 41% of visitors travelled from beyond 5km. Arguments put forward by Footprint suggest that although statistically significant, this difference could be a consequence of the analytical methods used and surveys being carried out in school holidays when more visitors could reasonably be expected to travel longer distances, allied with the choice of a survey point beside a car park on the main road which could, perhaps, emphasise this effect. Despite this, Figure 3 provides a powerful visual indication of visitor behaviour (using both sets of data) and so the six allocations identified are regarded as valid and robust and that all allocations beyond this threshold could be dismissed.

Figure 3 Combined plot showing Footprint and PCP visitor data (Footprint 2020)



4.2.258 For the avoidance of doubt, this necessitated the exclusion of the following Policies SS17/ST32, H1(A) (Phase 1 & 2), H3(A), H7(A), H22(A), H23(A), H31(A), H55(A), H56(A), H58(A) and SH1. Coincidentally, two of these, H3(A) and H23(A) had already been ruled out as they are completed.

4.2.259 In this context, exclusion means that it can be ascertained, beyond reasonable scientific doubt, that the low numbers of visitors from settlements beyond 5.5km (the distance where allocation SS15/ST17 is found) will not result in an adverse effect on the integrity of the SAC. All distances were taken from those calculated in Appendix B.

4.2.260 Principle C11.1(11) of the Handbook explains how outcomes that lie close to a threshold should be considered (with emphasis added):

If suitably conservative assumptions are built into the calculation of scientifically sound 'integrity' thresholds, related to the site conservation objectives and targets, then the fact that the outcome of predictive modelling or calculations in a particular case is close to the threshold, does not mean that the competent authority ought to conclude that there must be reasonable scientific doubt about the absence of adverse effects on integrity. A further layer of precaution is unnecessary.

4.2.261 Here, the 'conservative assumptions' are represented by the evidence-based data from the visitor survey.

4.2.262 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[80] (see Tables 1 and 2), conflicts with, for example, targets to maintain the extent, composition, spatial distribution, structure and function of the heathland communities (including their typical species), cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others, can be ruled out.

4.2.263 This is on the basis that there is sufficient evidence available to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of*

[80] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, adverse effects from recreational pressure from new settlements beyond 5.5km as the crow flies from the Strensall Common SAC boundary were ruled out**.** There would be no need for mitigation and no residual effects.

Integrity Test for the effects of recreational pressure on Strensall Common – Policies SS17/ST32, H1(A) (Phase 1 & 2), H3(A), H7(A), H22(A), H23(A), H31(A), H55(A), H56(A), H58(A) and SH1.

In terms of recreational pressure, the Council can ascertain that Policies SS17/ST32, H1(A) (Phase 1 & 2), H3(A), H7(A), H22(A), H23(A), H31(A), H55(A), H56(A), H58(A) and SH1 will have no adverse effect on the integrity of Strensall Common SAC. There would be no need for mitigation and no residual effects.

4.2.264 This outcome leaves only six policies requiring further scrutiny: SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 and H46(A). These are considered below.

Policies: SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 and H46(A)

4.2.265 Table 2 of Footprint's second report (2020) identifies the contributions made by a range of allocations in the area of search (though SS9/ST7, SS15/ST17 and H46(A) are not represented as the report focused on the closest strategic allocations). Whilst reference should be made to the original report, the data is applied to the following list:

Scenario	Distance	Overall number of dwellings	% change in access	Change in access attributable to given development
All allocations		6653	23.2%	23.2%
With SS19/ST35 removed	Adjacent	6153	9.8%	13.4%
With H59(A) removed	Adjacent	6608	22%	1.2%
With SS10/ST8 removed	2.5km	5685	20.2%	3%
With SS11/ST9 removed	2.1km	5918	20.2%	3%
With SS12/ST14 removed	4.6km	5305	22.2%	1%
With SS9/ST7 removed	4.8km	895	21.6%	Part of 1.6%

With S15/ST17 removed	5.5km	863
With H46(A) removed	3.5km	104

4.2.266 This shows that SS19/ST35 and H59(A) combined, would contribute 14.6% of the total 23.2% uplift in access anticipated. The remaining allocations SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 and H46(A) would contribute 8.6%.

4.2.267 Of the latter, it can be drawn that both SS10/ST8 and SS11/ST9 would contribute 3% each, and SS12/ST14 would contribute 1%. SS9/ST7, SS15/ST17 and H46(A) would contribute 1.6% between them.

4.2.268 Reflecting the importance of proximity, another way of considering this data is to note that the 45 dwellings of H59(A), which lie adjacent to the Common, are expected to contribute a larger increase in access than the 1,348 dwellings of SS12/ST14, 4.6km away (1.2% compared with 1%) or that SS19/ST35 is anticipated to contribute a greater uplift in access than all other allocations combined.

4.2.269 Together, this provides a compelling picture of the relative contributions made each allocation, not only the disproportionate effect of those adjacent to the Common but also the lack of influence on numbers provided by those that lie beyond 5.5km.

4.2.270 Putting the two allocations at Strensall Barracks to one side for a moment, three of the remaining allocations benefit from association with separate, bespoke policies within the Spatial Strategy (Section 3 of the Plan). As part of the policy principles for development, the majority of these policies require the establishment of new open space as shown on the Proposals Map: OS7 for SS9/ST7, OS8 for SS10/ST8 and OS9 for SS11/ST9. In addition, H46(A) is required to maintain a modest area of existing open space. Although Policy SS12/ST14 is also expected to provide new and suitable open space (whilst one of the more distant allocations considered, it is also the largest within the area of search) the size and location has yet to be defined. In contrast, SS15/ST17 does not have any associated open space.

4.2.271 Footprint's analysis of the pooled data suggests that recreational pressure as a result of the more distant allocations would still see an uplift in recreational pressure of 8.6%. This still represents a considerable increase even if SS19/ST35 and H59(A) are omitted from the Plan, reflecting the relative ease of access for car owners from further afield. An adverse effect from these policies may still arise.

4.2.272 However, Footprint's analysis was unable to consider the impact the open space associated with these allocations could have on visits to the Common. Because they lie well over 400m from the SAC boundary, the potential for open space to successfully attract users who might consider visiting the Common increases.

4.2.273 Although they cannot be expected to replicate precisely the openness and naturalness of the Common, not least for a considerable time, they will reduce the frequency of visits that could otherwise be anticipated. Importantly, they can be expected to attract a proportion of dog-walkers, and, in particular, as the presumed absence of grazing stock will allow dogs to be let off the lead (notwithstanding any local restrictions) can be expected to represent an attractive destination. This is because of the proximity of the new open space and the greater distance to Strensall Common.

However, multi-functional open spaces would compromise effectiveness in this regard if dog owners were required to share land with sports pitches etc (as would be the case at SS19/ST35).

4.2.274 All except H46(A) and OS7 will be larger than that proposed at SS19/ST35 but all, as currently worded in the policies, will be expected to accommodate a range of uses. Furthermore, none specifically identify a role as mitigation for an increase in recreational pressure on Strensall Common; this will reduce their effectiveness.

4.2.275 However, it should be noted that SS9/ST7**,** SS10/ST8, SS11/ST9, SS12/ST14 & H46(A) all lie on the edge of built development and/or have a degree of access to the countryside. In some cases, they also lie in close proximity to existing open space as follows (Appendix I):

- SS9/ST7 – This allocation straddles Bad Bargain Lane, a public bridleway that connects south via a Public Right of Way (PRoW) to the Sustrans Route 66 (Foss Island dismantled railway) and onwards west to St Nicholas Fields Local Nature Reserve a few hundred metres away. All comprise part of the Millennium Way, a 37 kilometre walking route linking the historic open strays of York;
- SS12/ST14 – This allocation is a short drive (4km) from Rawcliffe Country Park (compared with c7.5km to Strensall Common) which is located adjacent to the Park+Ride site off the A19/A1237. The country park connects to the York & Selby long distance path which runs through Clifton Ings and Rawcliffe Meadows; a significant area of natural/semi-natural space;
- H46(A) – This allocation is located within New Earswick garden village which encompasses a network of well-established footpaths and greenspaces, associated with the Foss Walk and Centenary Way long distance paths alongside the River Foss, and directly connecting to Bootham Stray an area of c40ha natural/semi-natural land open to public access which lie to the south. The existing open space which will be maintained will provide direct access to the areas described above;
- SS15/ST17 – This allocation lies south of H46(A) and benefits from the same links to the sites described above via a strategic pedestrian/cycle corridor, though they would lie to the north-east, rather than to the south. It also lies in proximity to Rawcliffe Country Park to the north-west.

4.2.276 In terms of SS15/ST17 and H46(A), these links with existing semi-natural open space provide confidence that adequate recreational opportunities already exist to accommodate the modest impact these allocations can be expected to have on Strensall Common. Further confidence can be drawn from the fact that although H46(A) lies only 3.5km distant, it only comprises 104 units. Similarly, confidence can be drawn for SS15/ST17 because although substantially larger, it lies 5.5km distant and so represents the most distant allocation where measurable impacts could be identified.

4.2.277 It should be noted that together, both allocations add up to less than 1.6% of the anticipated uplift in recreational pressure at Strensall (the remaining component being provided by SS7/ST9). Drawing on PCPs research, who estimated an average of 340 people would visit the Common every day, these three allocations would together, represent only a handful of people. Consequently, the risk of an adverse effect can be ruled out for both.

4.2.278 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[81] (see Tables 1 and 2), conflicts with, for example, targets to maintain the extent, composition, spatial distribution, structure and function of the heathland communities (including their typical species),

[81] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others, can be ruled out.

4.2.279 This evidence provides certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

Integrity Test for the effects of recreational pressure on Strensall Common – Policies SS15/ST17 and H46(A)

In terms of recreational pressure, the Council can ascertain that Policies SS15/ST17 and H46(A) will have no adverse effect on the integrity of Strensall Common SAC. There would be no need for mitigation and no residual effects.

4.2.280 Whilst both the proposed and existing open space can be expected to attract a proportion of new residents from SS9/ST7, SS10/ST8, SS11/ST9 and SS12/ST14, the lack of an overt mitigation role and criteria to influence the scale and scope of the open space required ensures that prior to any mitigation, there is insufficient confidence to rule out an adverse effect on the integrity of Strensall Common.

4.2.281 However, the introduction of suitable and effective policy requirements to ensure the delivery and management in perpetuity of open space, including suitable alternative greenspace to mitigate the possible effects of recreational pressure on Strensall Common, in conjunction with existing Policy GI6 'New Openspace', would be sufficient to provide, beyond reasonable scientific doubt, the necessary confidence to avoid an adverse effect. This would ensure that development proposals on these sites must demonstrate that appropriate amenity requirements for the population of new residents and mitigation requirements for effects on the SAC are evidenced and masterplanned into the scheme in order to satisfy and be in conformity with this policy. Demonstration of this must include suitable alternative greenspace that is natural or semi-natural in form and of sufficient quality to attract new residents in preference to visiting Strensall Common.

4.2.282 There can be confidence this would reduce the anticipated increase in visitors to the SAC predicted in both the Footprint and PCP surveys given the low numbers already anticipated.

4.2.283 For policies SS9/ST7, SS10/ST8 and SS11/ST9, this necessitates an amendment to existing policy principles. However, in terms of SS12/ST14 this would also require the creation of a new open space policy principle. The following wording is suggested:

SS9/ST7 – Land East of Metcalfe Lane

Amend bullet point ix to:

xi. Provide a detailed site wide recreation and open space strategy and demonstrate its application in site masterplanning. This must include:

- ~~Create~~ **Creation of** a new open space (as shown on ~~proposals~~ **policies** map **as allocation OS7**) to protect the setting of the Millennium Way that runs through the site. Millennium Way is a historic footpath which follows Bad Bargain Lane and is a

footpath linking York's strays and should be kept open. A 50m green buffer has been included along the route of the Millennium Way that runs through the site to provide protection to this Public Right of Way and a suitable setting for the new development.

- **Open space provision that satisfies policies GI2a and GI6**

SS10/ST8 – Land to the North of Monks Cross (ST8)

Amend bullet point vi to:

vi. Provide a detailed site wide recreation and open space strategy and demonstrate its application in site masterplanning. This must include:

- ~~Create~~ **Creation of a** new open space on additional land to the east of the Monks Cross Link Road (as shown on the ~~proposals~~ **policies** map **as allocation OS8**). This land remains in the Green Belt. ~~Open space provision should still be provided to the required quantum within the main allocation boundary and traffic~~Traffic calming measures should be provided along Monks Cross Link Road alongside the provision of pedestrian footways and safe crossing points. Ecological mitigation is also required on land to the east of the Link Road.
- **Open space provision that satisfies policies GI2a and GI6**

SS11/ST9 – Land to the North of Haxby

Amend bullet point iii to:

iii. Provide a detailed site wide recreation and open space strategy and demonstrate its application in site masterplanning. This must include:

- ~~Create~~ **Creation of a** new open space to the south of the site (as shown on the ~~proposals~~ **policies** map **as allocation OS9**) to reflect the needs of the Haxby and Wigginton ward including formal pitch provisions, informal amenity greenspace, play provision, cemeteries and allotments. The openspace needs of the area should be assessed in detail, liaising with Haxby Town Council and Wigginton Parish Council, the neighbourhood plan group and local residents
- **Open space provision that satisfies policies GI2a and GI6**

SS12/ST14 – Land to the West of Wigginton Road (ST14)

New bullet point:

xiv. Provide a detailed site wide recreation and open space strategy and demonstrate its application in site masterplanning. Open space provision must satisfy policies GI2a and GI6.

4.2.284 The authorities emphasise that for mitigation measures to be taken into account they should sufficient to ensure the required certainty of outcome to the assessment. On the basis of the evidence presented here and elsewhere in this HRA, all examples can be considered to meet these criteria. There is no reasonable doubt that they will be effective.

4.2.285 No new delineation of open space is recommended for SS12/ST14 as it is acknowledged that there are a number of locations wherein open space and mitigation could be situated. The proposed policy principle allows for the consideration of this through strategy development and masterplanning both within and adjacent to the development boundary.

4.2.286 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[82] (see Tables 1 and 2), conflicts with, for example, targets to maintain the extent, composition, spatial

[82] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

distribution, structure and function of the heathland communities (including their typical species), cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others, can be ruled out.

4.2.287 Should these amendments be made, there would be adequate safeguards available to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

Integrity Test for the effects of recreational pressure on Strensall Common – Policies SSS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14

In terms of recreational pressure, the Council can ascertain that providing the above policies are amended as suggested, Policies SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14 will have no adverse effect on the integrity of Strensall Common SAC. There would be no need for any further mitigation and no residual effects.

Wetland features at Strensall Common – SS19/ST35, H59(A) and E18

4.2.288 The screening exercise concluded that significant effects on the wetland features from built development adjacent to Strensall Common SAC cannot be ruled out alone. All three policies are considered together.

4.2.289 This issue has been addressed in previous iterations of this HRA and in the (unadopted) HRAs prepared by Amec Foster Wheeler (Amec) in 2017[83] and the Shadow HRA prepared by Wood Environment & Infrastructure Solutions (Wood) in 2019[84]. Both were informed by a separate hydrological study[85] that though now over two years old is considered to remain valid.

4.2.290 All have concluded that (further to site-specific assessment as part of any future planning application) that none of the three allocations would result in adverse effects on the SAC given the ability to design and employ a range of standard mitigation measures. These would typically include the incorporation of detailed survey of existing surface water drainage, flood risk assessment, and the probable implementation of Sustainable Drainage Systems, use of silt fencing to trap sediment, and the adoption of best practice measures for pollution management embedded within a Construction Environment Management Plan or similar.

4.2.291 These views are shared by this HRA, the measures are considered to be reasonable, proportionate, robust, would be implemented prior to either an application or construction and bring with them a high degree of confidence that they will be successful in the long term.

4.2.292 The need for these and a number of other mitigation measures are embedded, if not specifically, in Policy SS19/ST35 that require hydrological and related studies to be completed and used to inform the development of effective, deliverable, mitigation measures prior to any consent.

4.2.293 It should be noted here that Amec's HRA was completed before the People Over Wind ruling. Consequently, it is based on the use of mitigation at the screening stage not the appropriate assessment. Whilst mindful of the different tests employed at these two stages, this does not compromise the outcome below because there can be confidence the same results would have been resulted in an appropriate assessment if it had been carried through to that stage at the time.

4.2.294 In terms of SS19/ST35, therefore, the submitted policy wording in May 2018 provides adequate mitigation to provide certainty, beyond reasonable doubt that adverse effects can be ruled out and there would be no residual effects.

4.2.295 There is, however, no such requirement that relates directly to Policies E18 and H59(A). However, other policies in the plan pertaining to 'Flood Risk' (ENV4) and 'Sustainable Drainage' (ENV5) will be applicable should these sites be brought forward. Therefore, the recommendations made in this and previous HRAs simply require the implementation of evaluation, pollution control and construction techniques which are commonplace and in line with these policy requirements. It is considered reasonable to expect that the measures will be employed and enforced as a matter of course should development proposals be submitted for E18 and H59(A). Further, for allocation E18, a proposed modification has been consulted on (PM16 and PM17; see Annex E) to ensure that development of this allocation appropriately considers impacts in relation to Strensall Common.

[83] Amec Foster Wheeler Environment & Infrastructure Limited. December 2017. DIO York Sites: Queen Elizabeth Barracks (QEB). Information to support a Habitats Regulations Assessment.
[84] DIO York Sites: Queen Elizabeth Barracks. Information to Support a Habitats Regulations Assessment. Wood Environment & Infrastructure Solutions UK Limited. November 2019.
[85] Hydrology assessment to support the Habitats Regulations Assessment. Amec Foster Wheeler. December 2017.

4.2.296 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[86] (see Tables 1 and 2), conflicts can be ruled out, for example, with targets to maintain the extent, composition, spatial distribution, structure and function of the heathland communities (including their typical species), cover of dwarf shrubs, extent of invasive species and the supporting conservation processes, amongst others.

4.2.297 Therefore, in terms of E18 and H59(A), there are adequate safeguards available to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects; the conservation objectives, to maintain or restore the qualifying features, would not be compromised by any of these policies.

Integrity test for the effects on the wetland features on Strensall Common – Policies SS19/ST35, H59(A) and E18

In terms of the impact on wetland features, the Council can ascertain that providing that policies are amended as suggested above, Policies SS19/ST35, E18 and H59(A) will have no adverse effect on the integrity of Strensall Common SAC. There would be no residual effects, and no need for an in-combination assessment.

[86] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

Air pollution at Strensall Common – SS19/ST35, H59(A) and E18

4.2.298 The screening exercise concluded that significant effects from air pollution on the dry and wet heathland at Strensall Common SPA cannot be ruled out. Given that they lie in such close proximity, they were assessed and are considered here together. Importantly, the effects of air pollution are evaluated in-combination but for the purposes of this stage of the HRA, this has been considered in relation to just these three allocations as they represent the most likely sources of any increase in traffic.

4.2.299 Table 6 of the Council's Air Quality report predicts that NO_x concentrations will rise by 6.5% as a consequence of the Plan and clearly exceed the 1% threshold. Overall, however, they are expected to fall from 13.13 to 8.40 ugm^{-3} over the Plan period reflecting anticipated improvements in air quality. Consequently, the critical level of 30 ugm^{-3} is not exceeded at any time which strongly suggests an insignificant outcome.

4.2.300 Table 6 of the same report also shows that overall nitrogen deposition will fall over the Plan period from 24.08 to 15.41 $kgNha^{-1}yr^{-1}$, again reflecting the same anticipated improvements in air quality despite a maximum increased contribution of 2.8 $kgNha^{-1}yr^{-1}$ at the kerbside from development promoted by the Plan. However, this shows that both existing and predicted nitrogen deposition at Strensall Common clearly exceed the minimum critical loads of 10-20 $kgNha^{-1}yr^{-1}$.

4.2.301 These figures are not dissimilar to those figures presented in the Air Quality Assessment provided by DIO (Appendix B of DIOs HRA) which identifies background NO_x concentrations of 10.16 – 11.50 ugm^{-3}. In turn, it suggested background nitrogen deposition to be 22 $kgNha^{-1}yr^{-1}$ at the time of the report (November 2019) and a maximum elevation in nitrogen deposition of 2 $kgNha^{-1}yr^{-1}$ (at the kerbside).

4.2.302 Importantly, DIO evaluated a scenario with 635 dwellings which can reasonably be expected to exaggerate its findings in comparison with the 545 dwellings evaluated by the Council's Air Quality Report. In the event, the figures were slightly lower however this could be explained by a range of reasonable assumptions adopted in both. There is no reason to doubt the findings of either report.

4.2.303 However, the two reports display slightly greater divergence when transect data is compared.

4.2.304 Along Towthorpe Moor Lane, the Council's Air Quality report suggests road traffic will decline in real terms across the Plan period so resulting in a corresponding reduction in nitrogen deposition; in contrast, DIOs report believes it will grow.

4.2.305 Taking the latter first, further analysis shows that this is manifested in a single occurrence, at the kerbside, where additional nitrogen deposition will, at 2%, exceed the 1% threshold. However, the increase was less than 1% at all other points. No transect was modelled for the Council given the anticipated fall in traffic.

4.2.306 The 1% threshold represents a figure below which, harmful effects can be ruled out. However, exceedance of the threshold does not necessarily mean that adverse effects will occur, and other characteristics of the site and its qualifying features should be taken into account. Given that the SAC boundary along Towthorpe Lane is dominated by extensive scrub and bracken (ie not representative of the qualifying heathland habitats) extending several metres into the European site,

it is inconceivable that the 2% value encountered at the kerbside would represent an adverse effect on the SAC.

4.2.307 Furthermore, values immediately descend below 1% from the kerb ruling out the possibility of harmful effects on more distant heathland communities. This will be a function of the relatively low levels of traffic on Towthorpe Lane but also a consequence of the 'surface' roughness' of the scrub which provides an effective barrier to the widespread dispersal of airborne nitrogen; this is a known factor in air quality analysis . Consequently, adverse effects on Strensall Common from traffic along this road can be ruled out.

4.2.308 Such factors do not apply to the north along Lords Moor Lane/York Lane that bisects the site in the north. Here, the road runs (for around 1.5km) through open heathland with wet and dry heath present beyond a few metres distance of the kerbside and traffic levels are predicted to increase throughout the Plan period.

4.2.309 Transects carried out for the Council's Air Quality report identify (Table 9) that roadside nitrogen deposition increases at the kerbside by 2.8% (or almost three times the threshold) declining to 1% at 10m suggesting that nitrogen deposition quickly returns to near-background levels. Levels fall to zero somewhere between 50 and 100m from the kerb[87].

4.2.310 Given the expected increases in traffic, harmful effects on the vegetation in closest proximity to the road cannot be ruled out. However, these roadside communities like most others are considerably modified by the effects of road maintenance, salt-spreading, pollution, ditches, eutrophication from horses and litter, and erosion/compaction from vehicles which encourages the development of scrub or ruderal vegetation. Beyond this strip, which at Strensall frequently extends from the kerb for an estimated 2m-5m along both sides of the carriageway, the more characteristic (qualifying) heathland communities gradually regain dominance. Despite this, Natural England has assessed heathland here to be in favourable or recovering condition, which can suggest a degree of enhanced resilience though this shouldn't be relied upon unduly.

4.2.311 It is important to realise that exceedance of the 1% threshold does not indicate that harm will arise but rather a figure below which the change in concentration or deposition can be confidently described as negligible. It also represents a figure below which it becomes increasingly difficult to measure or model.

4.2.312 If it is accepted that the 1% increase in nitrogen deposition represents an almost imperceptible increase over background levels, then rates above this are restricted to a strip 10m wide, on each side of the carriageway for a 1500m stretch of the European site where vegetation could be measurably affected. It should be noted that the Council's traffic model seems to suggest that vehicle numbers decline significantly part-way along Lords Moor Lane/York Lane, but this is discounted as what appears to be erroneous data. Together, this scenario suggests a total area potentially affected along Lords Moor Lane/York Lane would be limited to 3.0ha or 0.53% of the area of the European site; this would comprise both highly modified vegetation near the kerbside and examples of qualifying heathland habitat.

4.2.313 Alone this is not sufficient to conclude that an adverse effect on the integrity of the European site would result but it does demand further scrutiny. The effect of incremental increases in nitrogen deposition on the species richness of lowland heath (the 'dose-response' relationship) is addressed in NERC 210[88]. Table 21 of NERC 210 shows that for species richness to decline by one (species) would require an increase in nitrogen deposition of 1.3 $kgNha^{-1}yr^{-1}$. Yet, even the highest rate of

[87] Unpublished supporting data

[88] CAPORN, S., FIELD, C., PAYNE, R., DISE, N., BRITTON, A., EMMETT, B., JONES, L., PHOENIX, G., S POWER, S., SHEPPARD, L. & STEVENS, C. 2016. *Assessing the effects of small increments of atmospheric nitrogen deposition (above the critical load) on semi-natural habitats of conservation importance*. Natural England Commissioned Reports, Number 210.

deposition attributed to development of 0.281 $kgNha^{-1}yr^{-1}$ (found at the roadside) at the end of the Plan period would be an order of magnitude below this threshold (when overall deposition would also have declined to c15 $kgNha^{-1}yr^{-1}$), The impact on the heathland communities further away from the roadside would be correspondingly less as nitrogen deposition declines with distance.

4.2.314 Therefore, this suggests that increases in nitrogen deposition caused by development proposed in the Plan would not result in a decline in species richness and can be interpreted to mean that an adverse effect on the integrity of the European site is avoided.

4.2.315 It should be remembered that dose-response relationships represent a fairly blunt instrument that do not identify, for instance, which species would be lost nor sub-lethal effects at the community scale. They should not, therefore, be solely relied on to justify the outcome of an appropriate assessment.

4.2.316 However, further confidence can be drawn from the DIOs Air Quality report. This suggests that nitrogen deposition will also increase but by just 1.02% at the kerbside along Lords Moor Lane/York Lane, and falling below this at all other points along the transect. This suggests insignificant effects at all points apart from the kerbside. As stated previously, there is no reason to doubt the outcome of either report and any differences can probably be explained by reasonable assumptions made when populating the models.

4.2.317 Overall, therefore, it can be seen that the Council's report predicts that at worst, marginal increases in nitrogen deposition within 10m of the road whereas the DIO report restricts these to just the kerbside. Dose-response relationships suggest that the deposition predicted even from the higher levels encountered in the Council's air quality report would not result in any decrease in species richness.

4.2.318 Given the modified nature of vegetation in close proximity to the road, even this conclusion is considered to be a worst-case scenario. Furthermore, it could be suggested that any harm is also reversible as deposition will continue to decline into the future. However, this is not expected to result in rapid improvement as existing elevated levels of soil nitrogen will persist for many years and other adverse factors, listed above, are not expected to diminish. Fundamentally, though, any increases in nitrogen deposition can be considered to be marginal.

4.2.319 Furthermore, APIS data for Strensall Common suggests that only 7% of overall nitrogen deposition is caused by local road traffic. Although an approximation and often an underestimate, this strongly suggests the contribution from road traffic will be relatively minor with other sources, such as agriculture representing almost half (41%) of the total contribution.

4.2.320 In addition, these observations should be considered in the context that overall, nitrogen deposition is expected to fall over the Plan period reflecting wider, anticipated improvements in air quality.

4.2.321 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[89] (see Tables 1 and 2), this evidence suggests conflicts with, for example, targets to maintain the extent, composition, spatial distribution, structure and function of the communities, can be ruled out.

4.2.322 Given that both air quality reports assessed higher numbers of dwellings than proposed now, the (at worst) marginal increases in nitrogen deposition, the size of the European site, the modest area that could potentially be affected allied with the existing management of the site for nature conservation, its favourable or recovering condition and, not least, that air quality is predicted to be better at the end of the Plan period than today, it is concluded that there is certainty, beyond reasonable scientific doubt, that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the

[89] Supplementary advice on conserving and restoring features. Natural England. Strensall Common SAC. 15 March 2019

conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out.

4.2.323 No evidence of any compelling threat to Strensall Common that could act cumulatively with this impact was found in the emerging or adopted local plans of Selby, Harrogate, East Riding, North Yorkshire, North York Moors and Scarborough; at worst Ryedale's was rather ambivalent. Therefore, in-combination issues can be ruled out with considerable confidence. Given the use of air quality data from within and beyond the Plan area, this outcome can be also considered to have taken account of possible in-combination effects as required by the Wealden case.

4.2.324 For the purpose of this HRA it has assumed, with some confidence, that the proximity of Policies SS19/ST35, E18 and H59(A) will ensure they will be responsible for the vast majority of traffic along Lords Moor Lane/York Lane. However, these outcomes can now be applied to the entire Plan.

4.2.325 Should Policies SS19/ST35 and H59(A) be removed from the Plan as recommended above, the threat of nitrogen deposition to Strensall Common would be removed.

Integrity Test for the effects of air pollution on Strensall Common – Policies SS19/ST35, H59(A) and E18

In terms of air pollution, the Council can ascertain that Policies SS19/ST35, H59(A) and E18 will have no adverse effect on the integrity of Strensall Common SAC. There would be no need for mitigation, no residual effects, and no further need for an in-combination assessment.

As this issue has been considered in-combination, this outcome can be extended to the entire Plan.

Should Policies SS19/ST35 and H59(A) be removed from the Plan as recommended previously, it would be reasonable to expect that potential effects from air pollution to this site would be removed entirely.

Windfall development at Strensall Common – H1(P)

4.2.326 When identifying sources of housing supply, the Council has included a windfall allowance of 169 dpa (from year 3 in their housing trajectory) which contributes to the overall supply of residential development over the plan period. The location of windfall sites is inherently unknown.

4.2.327 Policy H1(P) makes provision for windfall development on unallocated sites. Whilst reliance on Policy GI2 is considered adequate to secure the safeguard of European sites in most circumstances, this HRA considers potential risks to Strensall Common SAC arising to Strensall Common from such development.

4.2.328 The Common supports extensive examples of wet and dry heath, habitats that are both nationally and internationally scarce and fragmented. As with many other heathlands, Strensall Common is also vulnerable to a range of external pressures closely associated with urbanisation such as changes in hydrological regimes, air pollution and recreational pressure (and urban-edge effects).

4.2.329 Air pollution issues have been accommodated in the Council's Air Quality report which assessed an annual housing requirement of 922 dwellings per annum and the supply of proposed allocations to

meet this need. The housing requirement has now reduced to 822dpa but the supply of sites remains the same with the exception of the proposed removal of SS19/T35 and H59(A) (545 dwellings), as set out above. Furthermore, policy GI2a will ensure that any further development is subject to assessment in accordance with the Habitats Regulations prior to the grant of permission.

4.2.330 However, for reasons explained above, recreational pressure is difficult to manage and mitigate when residential development is proposed adjacent to or in very close proximity to vulnerable European sites. Whilst the River Derwent and Lower Derwent Valley can be considered more resilient to recreational pressure, Strensall Common remains vulnerable given that it provides open access all year round and the qualifying features are susceptible to harm from increased public pressure and associated urban-edge effects.

4.2.331 Whilst the impact of individual allocations has been addressed above, it remains that unallocated development, provided for by Policy H1(P) may be proposed in close proximity that could conflict with the conservation objectives.

4.2.332 Reflecting this, elsewhere in the country, e.g Cannock, Dorset and in the Thames Basin, local authorities frequently identify a 400m zone around such sites where residential development, in particular, is precluded. Such policies remove direct effects of urban-edge pressures and, importantly, provide opportunities for the establishment of alternative green spaces and other mitigation at a distance from the European site where their impact can be more effective. The absence of this requirement in policies within the Plan potentially allows inappropriate development in close proximity and increase the risk of adverse effects arising. Therefore, without adequate policy protection, adverse effects cannot be ruled out in terms of Policy H1(P).

4.2.333 Analysis by Footprint suggests that the likelihood of adverse effects occurring at Strensall Common from major residential development declines markedly at 5.5km distance from the boundary and beyond, but becomes more intense with increasing proximity.

4.2.334 Therefore, to remove this risk, it is recommended that the same mitigation measure is adopted at Strensall.

4.2.335 Mindful of the visitor study evidence, the creation of a new policy, as an addition to policy GI2, to both preclude residential development within 400m of the boundary of Strensall Common SAC and ensure that mitigation is provided to prevent adverse effects arising from windfall residential development on land within the 5.5km threshold, would allow the risk of adverse effects on the integrity of the SAC to be avoided or mitigated. The suggested wording is as follows:

New policy as follows:

GI2a: Strensall Common Special Area of Conservation (SAC)

Development not directly connected with or necessary to the management of the SAC will only be permitted where it will not adversely affect the integrity of the Strensall Common SAC, either alone or in combination with other plans or projects. Proposals will be determined in accordance with the following principles:

a) There is an 'exclusion zone' set at 400m linear distance from the SAC boundary. Permission will not be granted for development that results in a net increase in residential units within this zone. Proposals for non-residential development within this zone must undertake Habitats Regulation Assessment to demonstrate that they will not harm the integrity of the SAC.

b) There is a 'zone of influence' between 400m and 5.5km linear distance from the SAC boundary.
   i. Where new residential development is proposed within the zone of influence on allocated housing sites SS9/ST7, SS10/ST8, SS11/ST9 and SS12/ST14, provision of openspace must include or secure access to areas of suitable natural greenspace secured by way of mitigation prior to any occupation of new dwellings and secured in perpetuity.
   ii. Proposals for other housing development which are not within plan allocations will not be permitted unless it can be demonstrated that they will have no adverse effects on the integrity of the SAC, either alone or in combination with other plans or projects. Any necessary mitigation measures may be sought through planning contributions and must be secured prior to the occupation of any new dwellings and secured in perpetuity. Open space provision must also satisfy policy GI6.

4.3.336 Should this amendment be made, extensive new areas of suitable open space, comprising semi-natural habitats sustained by appropriate management would be established which would be of sufficient quality to attract new residents in preference to visiting Strensall Common. This would to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

Integrity Test for the effects of windfall development on Strensall Common – Policy H1(P)

In terms of windfall development, the Council can ascertain that providing Policy GI2 is amended as suggested, Policy H1(P) will have no adverse effect on the integrity of Strensall Common SAC. There would be no need for any further mitigation and no residual effects

4.3.337 The appropriate assessment of the effects on wetland features, recreational pressure and windfall development at Strensall Common was required because likely significant effects could not be screened out alone meaning there was no need for an in-combination assessment at that stage of the HRA. However, the screening test indicated that this opinion would be reviewed in the appropriate assessment.

4.2.338 Of these issues, it is clear that adverse effects on wetland features and windfall can be removed beyond reasonable scientific doubt via mitigation leaving no residual effects. There is, therefore, no need for an in-combination assessment.

4.2.339 In terms of recreational pressure, the visitor studies effectively assessed the impact from the allocations alone and in-combination. Whilst this suggested that those in closest proximity, notably ST35 and H59(A), and SS9/ST7, SS10/ST8, SS11/ST9 and SS12/ST14 represented adverse effects alone, the declining influence of those allocations further afield (SS15/ST17 and H46(A)) suggested that their cumulative effect was of more concern; those beyond 5.5km distance contributed no appreciable effect.

4.2.340 Data drawn from the visitor study allowed the appropriate assessment to conclude that mitigation proposed is sufficient to remove all reasonable scientific doubt about the risk of such an effect from Policies SS9/ST7, SS10/ST8, SS11/ST9 and SS12/ST14 alone. There is, therefore, no need for any further in-combination assessment. This also applies to Policy E18.

4.2.341 Policies SS15/ST17 and H46(A) were assessed in-combination but considered, beyond all reasonable scientific doubt, not to represent a risk of an adverse effect without the need for mitigation. There is, therefore, no need for further assessment.

4.2.342 Policies SS19/ST35 and H59(A) were assessed alone and recommended for removal. There is, therefore, no need for further assessment.

4.2.343 For the avoidance of doubt, because the cumulative effects of air pollution are assessed as a matter of course throughout the HRA, there is no need for any further assessment.

4.3 Lower Derwent Valley SPA Appropriate Assessment

European site	Policies	Issue	Feature affected
Lower Derwent Valley SPA	SS13/ST15	Mobile species	Non-breeding birds
		Recreational pressure	Breeding/non-breeding birds
	SS18/ST33	Recreational pressure	Breeding/non-breeding birds

4.3.1 The screening assessment has concluded that a likely significant effect cannot be ruled out alone for two policies, the 147 new dwellings at Wheldrake provided for by SS13/ST15 and the new garden village at Elvington, SS18/ST33. This is because of concern that:

- Increased recreational pressure from SS13/ST15 and SS18/ST33 will lead to disturbance of breeding and non-breeding bird populations of the Lower Derwent Valley;
- Development at SS13/ST15 will affect functionally-linked land currently supporting non-breeding bird communities from the Lower Derwent Valley SPA

Recreational pressure at the Lower Derwent Valley – SS18/ST33

4.3.2 This policy encourages the construction of 147 new dwellings within just 2km of the most convenient access point to the SPA by public right of way (and 1.4km as the crow flies**)** including 'Bank Island', the most important site for breeding birds across the entire European site. Given that the SPA would be perhaps be one of the most obvious destinations for outdoor recreation, the impact of increased public pressure (frequently allied with dog walking) ensured that LSE alone cannot be ruled out.

4.3.3 Policy SS18/ST33 already comprises mitigation that seeks to take account of recreational pressure on the SPA but in isolation this was not considered to provide effective safeguards. The 2018 HRA recommended modifications to require any developer to enhance awareness of and access to other, more resilient semi-natural habitats nearby eg Wheldrake Woods. When allied with the resilience of the SPA, in terms of its careful management of visitors, it was considered that this modification would provide confidence that new residents would have a greater choice of destinations for informal countryside recreation and would effectively remove entirely any threat from this policy.

4.3.4 The effectiveness of this approach at this location contrasts with that at Strensall Common above. There, the effectiveness of some similar measures could not be guaranteed. The reason behind this contrast is that SS18/ST33 lies 1.4km as the crow flies from the nearest access point to the SPA, well beyond the 400m threshold within which experience elsewhere shows that the effectiveness of mitigation becomes ever harder to guarantee. Furthermore, the European site is not open access with carefully managed access provision evident. Each European site presents a very different set of circumstances.

4.3.5 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[90,91], this evidence suggests conflicts with, for example, targets to maintain the population abundance of the qualifying species, and the extent, structure and function of the supporting habitats, can be ruled out.

4.3.6 Criteria adopted in this HRA require that for mitigation measures to be taken into account they should be effective, reliable, timely, guaranteed to be delivered, as long term as they need to be and legal.

[90] Supplementary advice on conserving and restoring features. Lower Derwent Valley SPA. Natural England. 21 March 2019
[91] Supplementary advice on conserving and restoring features. Lower Derwent Valley SAC. Natural England. 18 March 2019

On the basis of the evidence presented here and elsewhere in this HRA, all examples can be considered to meet these criteria. There is no reasonable doubt that they will be effective.

4.3.7 This modification has subsequently been made and is laid out in the Schedule of Minor Modifications (25 May 2018) (CD003). Therefore, it can be concluded there are adequate safeguards to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

Integrity test for the effects of recreational pressure on the Lower Derwent Valley – Policy SS18/ST33

In terms of recreational pressure, the Council can ascertain that providing the Policy is amended as suggested above, Policy SS18/ST35 will have no adverse effect on the integrity of the Lower Derwent Valley. There would be no need for mitigation, no residual effects, and no need for an in-combination assessment.

Recreational pressure at the Lower Derwent Valley – SS13/ST15

4.3.8 Policy SS13/ST15 encourages the development of 3,399 dwellings and around 2,200 units in a new garden village near Elvington. It lies just a few kilometres to the west of the Lower Derwent Valley on land that is functionally-linked to the bird populations of the European site. Furthermore, the Lower Derwent Valley will provide an attractive countryside destination for new residents which could provide a threat to various features of the European site.

4.3.9 Comprehensive requirements for mitigation are already embedded in the existing policy that anticipates the establishment of extensive areas of wet grassland and public open space. Together, these would provide enhanced areas of functionally-linked land for bird populations from the European site and provide alternative appropriate opportunities for new residents as well as links to existing countryside routes. However, there are insufficient opportunities within SS13/ST15 to deliver all aspects of the built development alongside the measures to provide public open space and ecological mitigation.

4.3.10 The opportunity to implement these mitigation measures is provided by Policy/Allocation OS10 which is situated immediately adjacent to the west of SS13/ST15. The purpose of OS10 is described as the provision of '*significant areas of open space … in connection with a strategic site'* designed to '*mitigate … for ecological impacts'* and, as a '*New Area for Nature Conservation on land to the South of the A64 in association with ST15'*. However, there is no formal policy mechanism in SS13/ST15 that ensures both it and OS10 must be pursued together to secure sustainable development.

4.3.11 The screening exercise therefore concluded that likely significant effects could not be ruled out for SS13/ST15 because of uncertainty surrounding the deliverability of (extensive) mitigation proposed in OS10.

4.3.12 The 2018 HRA identified that to provide certainty that the embedded mitigation and open space requirements described in Policy SS13/ST15 can be delivered, it recommended that the Plan was modified to provide a formal link in policy terms with OS10.

4.3.13 It suggested deleting the phrase '**(as shown on the proposals map)**' in sub-section (iv) of Policy SS13 as submitted and amending sub-section (vi) to read as follows: **'**Incorporation of a new nature conservation area (as shown on the policies map **as allocation OS10 and included within Policy GI6 New Open Space Provision**).

4.3.14 Delivery of SS13/ST15 would also need to ensure the delivery and management in perpetuity of recreational open space in conjunction with provisions in Policy GI6 'New Openspace' in addition to the allocation OS10 identified for nature conservation. This would ensure that development proposals on this site must demonstrate that appropriate amenity requirements for the population of new residents are evidenced and masterplanned into the scheme in order to satisfy and be in conformity with this policy. Point vi of Policy SS13 currently requires that "*a detailed site wide recreation and access strategy to minimise indirect recreational disturbance resulting from development and complement the wetland habitat buffer area which will be retained and monitored in perpetuity. A full understanding of the proposed recreational routes is required at an early stage".* **This point should be clarified to cross-reference policy GI6** and the requirements for new development to deliver open space as well as differentiate from the mitigation to be provided. This modification would ensure clarity between OS10 and the delivery of recreational open space such that the identified allocation OS10 would enable delivery of the ecological mitigation whilst public open space can be secured within the footprint of SS13/ST15 or, in line with the policy, off-site where accessible provision is made beyond the site boundaries through strategic masterplanning agreements.

4.3.15 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[92,93], this evidence suggests conflicts with, for example, targets to population abundance of the qualifying species, and the extent, structure and function of the supporting habitats, can be ruled out.

4.3.16 Criteria adopted in this HRA require that for mitigation measures to be taken into account they should be effective, reliable, timely and deliverable. On the basis of the evidence presented here and elsewhere in this HRA, all examples can be considered to meet these criteria. There is no reasonable doubt that they will be effective.

4.3.17 Modifications for linking OS10 and SS13 are set out in the Schedule of Minor Modifications (25 May 2018) (CD003) which were submitted alongside the Local Plan and consulted on as part of the Proposed Modifications Consultation (2019). A further **modification to clarify provision of recreational open space in policy GI6 should be made in point vi of policy SS13 for clarity.**

4.3.18 Therefore, it can be concluded there are adequate safeguards to provide certainty, beyond reasonable scientific doubt that neither *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

[92] Supplementary advice on conserving and restoring features. Lower Derwent Valley SPA. Natural England. 21 March 2019
[93] Supplementary advice on conserving and restoring features. Lower Derwent Valley SAC. Natural England. 18 March 2019

Integrity test for the effects of recreational pressure at the Lower Derwent Valley – Policies SS13/ST15

In terms of recreational pressure, the Council can ascertain that providing the Policy is amended as suggested above, Policy SS13/ST15 will have no adverse effect on the integrity of the Lower Derwent Valley European site. There would be no need for any further mitigation, no residual effects and no need for an in-combination assessment.

Mobile species at the Lower Derwent Valley – SS13/ST15

4.3.19 This issue relates solely to Policy SS13/ST15 and is closely related to 'Recreational pressure' discussed immediately above. Again, a likely significant effect could not be ruled out because of uncertainty surrounding the deliverability of SS13/ST15 and OS10.

4.3.20 Avoiding unnecessary repetition, the modifications proposed under Recreational pressure also accommodate impacts on mobile species and the same outcome is secured. That is, the adoption of a modification to the policy wording recommended in the 2018 HRA would enable the Policy to avoid an adverse effect.

4.3.21 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice[94,95], this evidence suggests conflicts with, for example, targets to maintain the population abundance of the qualifying species, and the extent, structure and function of the supporting habitats, can be ruled out.

4.3.22 Criteria adopted in this HRA require that for mitigation measures to be taken into account they should be effective, reliable, timely, guaranteed to be delivered, as long term as they need to be and legal. On the basis of the evidence presented here and elsewhere in this HRA, all examples can be considered to meet these criteria. There is no reasonable doubt that they will be effective.

4.3.23 These modifications are set out in the Schedule of Minor Modifications (25 May 2018) (CD003). Therefore, it can be concluded there are adequate safeguards to provide certainty, beyond reasonable scientific doubt that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out. There would be no residual effects.

Integrity test for the effects on mobile species at the Lower Derwent Valley – Policy SS13/ST15

In terms of the impact on mobile species, the Council can ascertain that providing the Policy is amended as suggested above, Policy SS13/ST5 will have no adverse effect on the integrity of the Lower Derwent Valley. There would be no need for any further mitigation, no residual effects, and no need for an in-combination assessment.

4.3.24 The appropriate assessment of the effects of recreational pressure and on mobile species at the Lower Derwent Valley was required because likely significant effects could not be screened out alone meaning there was no need for an in-combination assessment at that stage of the HRA.

[94] Supplementary advice on conserving and restoring features. Lower Derwent Valley SPA. Natural England. 21 March 2019
[95] Supplementary advice on conserving and restoring features. Lower Derwent Valley SAC. Natural England. 18 March 2019

However, the screening test indicated that this opinion would be reviewed in the appropriate assessment.

4.3.24 In terms of both recreational pressure and mobile species, data drawn from the visitor study allowed the appropriate assessment to conclude that that the mitigation proposed is sufficient to remove all reasonable scientific doubt about the risk of such an effect. There is, therefore, no need for any further in-combination assessment.

4.4 RIVER DERWENT SAC Appropriate Assessment

European site	Policies	Issue	Feature affected
River Derwent SAC	SS13/ST15	Air pollution	Floating vegetation community River and sea lamprey, and bullhead

4.1.1 The screening assessment has concluded that a likely significant effect cannot be ruled out alone for SS13/ST15. This is because of concern that:

- Increased road traffic pollution would lead to eutrophication of the River Derwent and harm the floating vegetation community and the populations of river and sea lamprey, and bullhead.

Air pollution at the River Derwent – SS13/ST15

4.4.2 The screening assessment concluded that a likely significant effect cannot be ruled out in terms of Policy SS13/ST15 (and/or other aspects of the Plan in-combination) which lies 3km by road from the Elvington river crossing due to uncertainty regarding the scale of nitrogen deposition within the River Derwent and its impacts on the floating vegetation community. This was largely because this feature does not benefit from critical loads which typically inform the evaluation process. Although data is available on APIS for the SSSI features, these are not directly comparable to the European site features and so are not relied upon here. Ultimately, it is the complex relationship between biology and nitrogen that prevents the identification of critical loads for many aquatic features. Consequently, as recommended by APIS, assessments have to be made on a case by case basis.

4.4.3 However, reliance can be placed on generic background data. Drawing on the screening exercise, the Air Quality Report suggested a mean NO_x concentration of 16.26 *u*gm^{-3} in 2015, falling over the Plan period to 10.40. Despite being a mean value, it can be safely assumed that concentrations of NO_x are currently below the annual Critical Level of 30 *u*gm^{-3} across the entire European site and are expected to fall further. Current NO_x concentration is shown as 9.88 *u*gm^{-3} in on APIS.

4.4.4 Further analysis at various crossing points along the river where emissions from road traffic would be at their highest showed that in terms of NO_x, concentrations would increase by a maximum of 4.6%, above the 1% threshold.

4.4.5 In terms of nitrogen deposition, the report predicts that nitrogen deposition will fall over the Plan period from 17.36 to 11.11 $kgNha^{-1}yr^{-1}$ reflecting wider, anticipated improvements in air quality despite an increased contribution from development promoted by the Plan.

4.4.6 When employing the most sensitive fen, marsh and swamp habitat (with critical loads for nitrogen deposition of 10-20 $kgNha^{-1}yr^{-1}$) as a proxy for the standing water community, the report suggested (Table 9 of the report) that the maximum possible contributions of 0.20 $kgNha^{-1}yr^{-1}$ (at Kexby) would equate to 2% of the lowest critical load; it would also mean that the minimum critical load would also be exceeded.

4.4.7 Transects at three crossings over the river, Stamford Bridge (A166), Kexby (A1079) and Elvington (B1228), again using fen, marsh and swamp as a proxy suggested that nitrogen would rapidly disperse at all sites, failing to register a figure (or 0% or below measurable accuracy) at any point at Stamford Bridge, and, at Elvington (closest to SS13/ST15) not exceeding 1% for the first 10m before

again effectively falling to 0%. At Kexby, the highest value, at the kerbside, was 2% of the minimum critical load for the proxy habitat before falling to 1% at 3m and 0% between 15-20m.

4.4.8 At Stamford and Elvington this means predicted nitrogen deposition is indistinguishable from background readings at the end of the Plan period when traffic could be considered to be at its highest and background levels at their lowest so exacerbating any problems. At Kexby, the figures were effectively double those at Elvington but still modest in the context of the whole river. Given these modest values it was not considered necessary to explore river crossings further afield.

4.4.9 Of course, these outcomes all depend on the sensitivity of the proxy chosen but even if the minimum critical load was reduced to 5kgNha^{-1}yr^{-1}, the values would still not exceed 4% at Kexby, 2% at Elvington and less at Stamford bridge although it would be measurable at greater distances along the transect. It must be stressed, however, that this is an extreme example and does not reflect the characteristics of the river. For instance, and to provide some perspective, the maximum critical load for oligotrophic lakes is only 10 kgNha^{-1}yr^{-1}.

4.4.10 What is certain, however, is that this degree of nitrogen deposition will not been added to the whole site but only to a handful of point sources at river crossings and minor roads that occasionally, come within 200m of the river; the total contribution from road traffic will therefore be dwarfed by nutrient enrichment of the river by drainage from farmland throughout its extensive catchment. Whilst it is acknowledged that contributions from these point sources will be transported downstream it is evident that these will quickly be diluted and form no measurable component of overall nutrient levels. In summary, they represent isolated point sources across a large river system that occupies over 400ha in area, extends over 86km in length and sits within a catchment of over 2,000sqkm.

4.4.11 This is reflected again by APIS which is able to clarify that only 6% of overall, current nitrogen deposition is currently caused by road traffic. Although an approximation and often an underestimate, this strongly suggests the contribution from road traffic will be minor in comparison with other sources, with livestock farming, for example, contributing an order of magnitude more.

4.4.12 Furthermore, the River Derwent is described as meso/eutrophic, a reflection of its existing high nitrogen load, itself a consequence of the erosion and transport of soil and nutrients from its extensive, rural catchment. Like most similar systems, it is also phosphate and not nitrogen limited. This means that nitrogen deposition is usually a less important consideration than on land (where nitrogen is relatively scarce). Consequently, the control of eutrophication usually concentrates on the removal of phosphorus inputs, for example by wastewater treatment facilities.

4.4.13 Indeed, phosphorus has generally been considered more important than nitrogen in determining the biomass of phytoplankton and the actual trophic state of a river system and APIS goes onto note (when describing eutrophic *standing* waters) that:

Deposition of … nitrogen from the atmosphere is unlikely to be the largest source of this nutrient to eutrophic standing waters and, therefore, in general nitrogen deposition is unlikely to be very harmful … even when close to sources

4.4.14 The system, and by extrapolation, its features, can therefore be considered to be relatively resilient to nitrogen deposition, a factor borne out to some degree by Natural England's assessment that over 99% of the river is meeting or (the majority) progressing towards favourable condition.

4.4.15 Moreover, any possible impact has to be assessed in the context that nitrogen deposition is expected to fall over the Plan period, reflecting wider, anticipated improvements in air quality.

4.4.16 In this context, otter (which has already been screened out) can be regarded as effectively immune to harm. Whilst the floating vegetation community is considered vulnerable to air pollution in the Supplementary Advice[96], it should be noted that it permanently occupies the existing, high nutrient water column which again suggests existing resilience to such loads. The fish populations can therefore also be considered to be resilient to existing high nutrient loads and it is perhaps relevant that Natural England's Supplementary Advice for the river does not identify 'air quality' as a threat to fish.

4.4.17 Furthermore, all river crossings bear at least some evidence of existing barriers within the river (ie the bridge foundations), considerable shading (and leaf litter) from the bridge and overhanging trees, and pleasure boats. All will have potential to influence the distribution of both fauna and flora perhaps more significantly than the modest addition of nitrogen from vehicles.

4.4.18 Whilst the lack of quantifiable evidence is lacking, the use of a proxy habitat provided strong indications that harm would not arise.

4.4.19 Despite the lack of critical loads for the features in question, it is clear that the sources are restricted to a handful or locations, the contributions small and disperse rapidly within a system that carries a high nutrient load with an inherent resilience to nitrogen deposition (shared by its features). It is, therefore, simply not credible that such small, isolated contributions could adversely affect the constitutive characteristics of the European site. Overall, they can safely be regarded as essentially indistinguishable from background variations.

4.4.20 Drawing on the more detailed objectives contained within Natural England's Supplementary Advice, this evidence suggests conflicts with, for example, targets to maintain the population abundance and/or extent, composition, structure and function of the (supporting) communities, can be ruled out.

4.4.21 Given the modest inputs of nitrogen predicted, the size of the European site, the modest area that could potentially be affected allied with the existing management of the site for nature conservation, its favourable or recovering condition and, not least, that air quality is predicted to be better at the end of the Plan period than today, it is concluded that there is certainty, beyond reasonable scientific doubt, that neither the *preservation of* the *constitutive characteristics* nor *the coherence of* the *ecological structure and function* of the site would be affected; this would also ensure that the conservation objectives to *maintain or restore* the qualifying features would not be compromised. Therefore, an adverse effect on the integrity of the European site can be ruled out.

4.4.22 Given the use of air quality data from within and beyond the Plan area, this outcome can be also considered to have taken account of possible in-combination effects as required by the Wealden case. Therefore, in-combination issues can be ruled out.

4.4.23 For the purpose of this HRA it has assumed, with some confidence, that the proximity of Policy SS13/ST15 would be responsible for the vast majority of traffic that would cross the River Derwent. However, these outcomes can now be applied to the entire Plan.

Integrity Test for the effects of air pollution on the River Derwent – Policy SS13/ST15

In terms of air pollution, the Council can ascertain that Policy SS13/ST15 will have no adverse effect on the integrity of the River Derwent SAC. There would be no residual effects, and no need for any further in-combination assessment.

[96] Supplementary advice on conserving and restoring features. River Derwent SAC. Natural England. 27 March 2017 (Version 2)

As this issue has been considered in-combination, this outcome can be extended to the entire Plan.

4.4.24 The appropriate assessment of the effects of air pollution on the Derwent was required because likely significant effects could not be screened out at that stage of the HRA. The screening test indicated that this opinion would be reviewed in the appropriate assessment. However, because the cumulative effects of air pollution are assessed as a matter of course throughout the HRA, there is no need for any further assessment.

4.5 Summary of Appropriate Assessment and Integrity Tests

4.5.1 The outcomes of the appropriate assessment are summarised in Table 9 below.

Table 9 Summary of the Appropriate Assessment

Issue	Recommended mitigation measures	Outcome
Strensall Common SAC Wet and dry heathland Wetland features SS19/ST35, E18 & H59(A)	Mitigation must be added to Policy EC1 To reduce risk of changes to the hydrological regime	Adverse effect on the integrity on the site will be avoided if mitigation is adopted.
Strensall Common SAC Wet and dry heathland Recreational pressure and urban-edge effects SS19/ST35 & H59(A)	**Remove policies SS19/ST35 and H59(A) from the Plan.**	Adverse effects on the integrity of the site avoided by removal of policies
Strensall Common SAC Wet and dry heathland Recreational pressure and urban-edge effects E18	Mitigation must be added to Policy EC1. To restrict public access, proposed modifications PM16/17 for Policy EC1 and PM26/27 for Policy GI2 must be adopted	Adverse effect on the integrity on the site will be avoided if mitigation is adopted.
Strensall Common SAC Wet and dry heathland Recreational pressure SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14	Mitigation must be added to all Policies listed. To require suitable open space to be provided.	Adverse effect on the integrity on the site will be avoided if mitigation is adopted.
Strensall Common SAC Wet and dry heathland Recreational pressure SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1	None required	Adverse effect on the integrity of the site is avoided
Strensall Common Wet and dry heathland Air pollution SS19/ST35, E18 and H59	None required.	An adverse effect on the integrity of the site is avoided with no need for mitigation.
Strensall Common Wet and dry heathland Windfall development H1(P)	Mitigation must be added to Policy GI2. New policy to prevent development within 400m of Strensall Common and mitigation of any impacts as a result of residential development within 5.5km	Adverse effect on the integrity on the site will be avoided if mitigation is adopted

Issue	Recommended mitigation measures	Outcome
Lower Derwent Valley Breeding and non-breeding birds Recreational pressure SS18/ST33 & SS13/ST15	Mitigation must be added to Policy Mitigation added by schedule of modifications (CD003) and consulted on in Proposed Modifications (2019) (PM10) adequate to remove threat of adverse effects. Additional modifications to point vi of Policy SS13 to clarify recreation strategy requirements for mitigation	Adverse effect on the integrity of the site is avoided
Lower Derwent Valley Mobile species Non-breeding birds SS13/ST15	Mitigation must be added to Policy Mitigation added by schedule of modifications (CD003) and consulted on in Proposed Modifications (2019) (PM10) adequate to remove threat of adverse effects	Adverse effect on the integrity of the site is avoided
River Derwent Air pollution Floating vegetation community and populations of river and sea lamprey, and bullhead SS13/ST15	None required	Adverse effect on the integrity of the site is avoided

4.5.2 Table 9 confirms that should the recommended measures be adopted in full, the Council would be able to ascertain that there would be no adverse effect on the integrity of any of the European sites; there would be no residual effects.

5. APPLICATION OF THE EFFECT ON INTEGRITY TEST

5.1.1 This HRA subjected the potential effects of the City of York Local Plan to an appropriate assessment and integrity test. It ascertained that:

5.1.2 **Strensall Common – wetland features - Policies SS19/ST35, H59(A) and E18:** Initially, adverse effects on the integrity of the heathland communities of Strensall Common SAC could not be ruled out. However, **when mitigation in the form of changes to policy wording was considered, adverse effects on the integrity of the European site could be avoided beyond reasonable doubt.** There would be no residual effects and, therefore, no need for an in-combination assessment. This conclusion would apply irrespective of the proposed removal of Policies SS19/ST35 and H59(A).

5.1.3 **Strensall Common - recreational pressure and urban-edge effects - Policies SS19/ST35 and H59(A):** Initially, **adverse effects on the integrity of the heathland communities (and their typical species) could not be ruled out**. Even when mitigation measures (both proposed and others) were considered, this conclusion didn't change. **Consequently, it recommended that both policies should be removed from the Plan.** Because of this, there would be no need for it to be considered in any in-combination assessment.

5.1.4 **Strensall Common - recreational pressure and urban-edge effects - Policy EC1/ AllocationE18:** Initially, **adverse effects on the integrity of the heathland communities (and their typical species) could not be ruled out**. However, **when mitigation in the form of changes to policy wording was considered, adverse effects on the integrity of the European site could be avoided beyond reasonable doubt.** There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.5 **Strensall Common - recreational pressure - Policies SS9/ST7, SS10/ST8, SS11/ST9 & SS12/ST14:** Initially, **adverse effects on the integrity of the heathland communities (and their typical species) could not be ruled out**. However, **when mitigation in the form of changes to policy wording was considered, adverse effects on the integrity of the European site could be avoided beyond reasonable doubt.** There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.6 **Strensall Common - recreational pressure – Policies SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) & SH1**: The appropriate assessment was able to conclude that **adverse effects on the integrity of the European site could be avoided beyond reasonable doubt without the need for mitigation.** There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.7 **Strensall Common - air pollution (nitrogen deposition) - Policies SS19/ST35, H59(A) & E18:** The appropriate assessment was able to conclude that **adverse effects on the integrity of the European site could be avoided beyond reasonable doubt without the need for mitigation.** In-combination issues had already been addressed in the analysis so removing the need for further assessment. This conclusion would apply irrespective of the proposed removal of Policies SS19/ST35 and H59(A).

5.1.8 **Strensall Common – windfall development – Policy H1:** Initially, **adverse effects on the integrity of the heathland communities (and their typical species) could not be ruled out**. However, **when mitigation in the form of changes to policy wording was considered, adverse**

effects on the integrity of the European site could be avoided beyond reasonable doubt. There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.9 **Lower Derwent Valley - recreational pressure - Policies SS13/ST15 & SS18/ST33:** Initially, **adverse effects on the integrity of the breeding and non-breeding birds could not be ruled out**. However, **when mitigation in the form of changes to policy wording was considered, adverse effects on the integrity of the European site could be avoided beyond reasonable doubt.** There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.10 **Lower Derwent Valley - mobile species - Policy SS13/ST15:** Initially, **adverse effects on the integrity of the non-breeding birds could not be ruled out**. However, **when mitigation in the form of changes to policy wording was considered, adverse effects on the integrity of the European site could be avoided beyond reasonable doubt.** There would be no residual effects and, therefore, no need for an in-combination assessment.

5.1.11 **River Derwent – air pollution (nitrogen deposition) - Policy SS13/ST15:** The appropriate assessment was able to conclude that **adverse effects on the integrity of the European site could be avoided beyond reasonable doubt without the need for mitigation.** In-combination issues had already been addressed in the analysis so removing the need for further assessment.

5.1.12 All other possible effects were removed from the need for consideration within the appropriate assessment.

6. OVERALL CONCLUSION OF THE HRA

6.1.1 During early 2020, the City of York Local Plan was subjected to an HRA according to the statutory procedures laid out in the Habitats Regulations 2017 as amended, the principles of European and domestic case law and guidance laid out in the Habitats Regulations Assessment Handbook.

6.1.2 The qualifying features of the European sites, along with their typical species have been described and placed in an appropriate context. The reliance of each site on a range of physical and ecological processes (including management regimes) has been clarified.

6.1.3 Furthermore, the conservation objectives of each have been identified and utilised to explore a broad range of potential impacts. These have subjected to suitable levels of scrutiny at the screening and appropriate assessment stages as required to ultimately determine if the competent authority can ascertain that it *will not adversely affect the integrity of the European site.* In line with established authority, the appropriate assessment also considers whether mitigation measures are sufficient to remove all reasonable scientific doubt about the risk of such an effect.

6.1.4 Correspondingly, all policies and allocations were screened for likely significant effects; the individual outcomes of (without the benefit of mitigation) can be found in Tables 5 & 6, and in Appendix B.

6.1.5 Overall, this HRA found that likely significant effects could be ruled out alone for the vast majority of policies which could therefore be excluded from any further scrutiny. However, likely significant effects could not be ruled out alone for the following policies: SS13/ST15, SS18/ST33, SS19/ST35, E18, H59(A), SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A), SH1 and H1 in terms of a range of effects on one or more of Strensall Common, Skipwith Common, the Lower Derwent Valley and the River Derwent.

6.1.6 Regarding Policies SS19/ST35, E18 and H59(A), likely significant effects could not be ruled out because of anticipated increases in recreational pressure (including urban-edge effects), effects on wetland features from construction and the effect of air pollution on the adjacent Strensall Common SAC.

6.1.7 Also, likely significant effects could not be ruled out alone for Policies SS9/ST7, SS10/ST8, SS11/ST9, SS12/ST14, SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A), SH1 and H1 because of anticipated increases in recreational pressure on Strensall Common SAC.

6.1.8 Again, because of anticipated increases in recreational pressure, likely significant effects could also not be ruled out alone for Policy SS18/ST33 on the Lower Derwent Valley European site. Finally, even though situated several kilometres from the Lower Derwent Valley, likely significant effects could not be ruled out alone for Policy SS13/ST15 for two reasons: again because of anticipated increases in recreational pressure but also for impacts on the bird communities of the European site that utilised land beyond the European site boundary.

6.1.9 Likely significant effects could also not be ruled out in terms of air pollution on the River Derwent SAC from Policy SS13/ST15.

6.1.10 Possible effects from windfall development (Policy H1) also ensured that a likely significant effect on Strensall Common could not be ruled out.

6.1.11 Consequently, an appropriate assessment was required.

6.1.12 Upon further scrutiny or by the addition of mitigation measures, the appropriate assessment found that adverse effects on the integrity of all the European sites could be ruled out for all of these issues except one - the impact of recreational pressure and urban-edge effects at Strensall Common SAC.

6.1.13 In doing so, the appropriate assessment found that the addition of mitigation measures to E18, SS9/ST7, SS10/ST8, SS11/ST9 and SS12/ST14 would be sufficient to remove the threat of an adverse effect on the integrity of the site from these policies.

6.1.14 In terms of SS15/ST17 & SS17/ST32, and H1a(A), H1b(A), H3(A), H7(A), H22(A), H23(A), H31(A), H46(A), H55(A), H56(A), H58(A) and SH1, adverse effects could be ruled out without the need for mitigation.

6.1.15 This was not the case with Policies SS19/ST35 and H59(A). Given reasonable scientific doubt concerning the effectiveness of possible mitigation measures at locations in such close proximity to the SAC, it was not possible to be certain that adverse effects could be avoided. **The only remaining option, therefore, is to remove Policies SS19/SS19/ST35 and H59(A) from the Plan.**

6.1.16 At the Lower Derwent Valley, mitigation was required to avoid adverse effects on mobile species from Policy SS13/ST15, and from Policies SS13/ST15 and SS18/ST33 in terms of recreational pressure.

6.1.17 Adverse effects on the River Derwent from air pollution could be ruled out without the need for mitigation.

6.1.18 In terms of Policy H1(P), mitigation in the form of amendments to the wording of Policy GI2 were considered adequate to avoid an adverse effect on the integrity of Strensall Common.

6.1.19 **Should these measures be adopted in full, the Council would be able to ascertain that adverse effects on the integrity of the European sites can be avoided.**

6.1.20 Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, it must decide whether to adopt the conclusions and recommendations of this report, or otherwise, for the purpose of their own assessment. If accepted, consultation with the Natural England is required and the Council must have regard to the representations it makes.

6.1.21 Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Where individual allocations become the subject of any planning application they will need to demonstrate compliance with the Conservation of Habitats and Species Regulations 2017 before any consent is granted.

6.1.22 It is relevant to note that all bar the final outcome resonate closely with the conclusions of a separate HRA produced by the DIO. Whilst it agreed that recreational pressure from SS19/ST35 and H59(A) could lead to an adverse effect on the integrity of Strensall Common, it concluded that these effects could be mitigated so allowing the policies to be adopted. However, following scrutiny in this report, this HRA concluded that uncertainty around the effectiveness of the mitigation proposed could not remove the risk beyond reasonable scientific doubt. The conclusion of this HRA therefore remains unchanged.

APPENDICES

A. Citations and Qualifying Features

Lower Derwent Valley SPA

SPA Citation

EC Directive 79/049 on the Conservation of Wild Birds: Special Protection Area

THE LOWER DERWENT VALLEY

The Lower Derwent Valley covers an area of 1,089.4 hectares, draining a catchment of some 1,362 km² before entering the Humber system. It consists of extensive areas of traditionally managed species rich, alluvial flood-meadow, of a kind now highly restricted in the UK.

The boundaries of the proposed Special Protection Area are coincident with those of the existing Derwent Ings SSSI, Melbourne and Thornton Ings SSSI, River Derwent SSSI, Newton Mask SSSI and Breighton Meadows SSSI, apart from the exclusion of the sections of the River Derwent SSSI north of Newton Mask SSSI and south of Breighton Meadows SSSI.

The site qualifies under Article 4.1. by regularly supporting nationally important winter numbers of the following Annex 1 species: 70 Bewick's swan *Cygnus columbianus bewickii* (1% of the UK wintering population), 4,120 Golden plover *Pluvialis apricaria* (2% of the UK wintering population) and 50 Ruff *Philomachus pugnax* (3.5% of the UK wintering population). The site also qualifies under Article 4.1. for holding a mean peak number of 100 Ruff during spring migration.

The site qualifies under Article 4.2. by regularly supporting a breeding population of 50 pairs of Shoveler *Anas clypeata* (3.5% of the UK breeding population).

The site also qualifies under Article 4.2. as an area of international importance to waterfowl by regularly supporting over 20,000 waterfowl in winter. In the five-winter period of 1986/87-1990/91 the site held a mean peak of 27,580 waterfowl, comprising means of 17,415 wildfowl and 10,165 waders. Within this number, the site qualifies under Article 4.2. by holding internationally important numbers of Teal *Anas crecca* and Wigeon *Anas penelope* (4,040 Teal - 4% of UK, 1% of NW Europe, 7,790 Wigeon - 3% of UK, 1% of NW Europe). The site also supports nationally important numbers of the following migratory species: 110 Shoveler *Anas clypeata* (>1% of UK wintering numbers), 740 Pochard *Aythya ferina* (>1% of the British wintering population), 100 Whimbrel *Numenius phaeopus* (2% of the UK passage numbers) and 100 Ruff *Philomachus pugnax* (7% of UK passage numbers).

As well as its importance for the individual species listed above, the site is also of strong scientific interest for its exceptionally diverse assemblage of wintering waterfowl.

SPA citation
ABL
January 1993

This citation / map relates to a site entered in the Register of European sites for Great Britain.
Register reference number UK000 6091
Date of registration 4 APRIL 1994
Signed .....
on behalf of the Secretary of State for the Environment

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Lower Derwent Valley SAC	
SAC citation including qualifying features	**EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora** **Citation for Special Area of Conservation (SAC)** **Name:** Lower Derwent Valley **Unitary Authority/County:** East Riding of Yorkshire, North Yorkshire, York **SAC status:** Designated on 1 April 2005 **Grid reference:** SE703441 **SAC EU code:** UK0012844 **Area (ha):** 915.91 **Component SSSI:** Breighton Meadows SSSI, Derwent Ings SSSI, Melbourne Ings and Thornton Ings SSSI, Newton Mask SSSI **Site description:** The Lower Derwent Valley contains a greater area of high-quality examples of lowland hay meadows than any other UK site and encompasses the majority of this habitat type occurring in the Vale of York. The abundance of the rare narrow-leaved water-dropwort *Oenanthe silaifolia* is a notable feature. Traditional management has ensured that ecological variation is well-developed, particularly in the transitions between this grassland type and other types of wet and dry grassland, swamp and fen vegetation. Additionally there is an area of damp alder woodland at Thornton Ellers adjoining marsh and tall fen communities. **Qualifying habitats:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: □ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). (Alder woodland on floodplains)* □ Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*). **Qualifying species:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: □ Otter *Lutra lutra* Annex I priority habitats are denoted by an asterisk (*).

Lower Derwent Valley Ramsar	
SAC Qualifying features	• Criterion 2 - Assemblage of wetland invertebrates. • Criterion 4 – Nationally important populations of ruff *Philomachus pugnax* and whimbrel *Numenius phaeopus* on passage • Criterion 5 – Internationally important assemblage of wintering birds • Criterion 6 – Internationally important populations of wigeon *Anas penelope* and teal *Anas crecca*

River Derwent SAC	
SAC Citation including qualifying features	**EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora** **Citation for Special Area of Conservation (SAC)** **Name:** River Derwent **Unitary Authority/County:** East Riding of Yorkshire, North Yorkshire, York **SAC status:** Designated on 1 April 2005 **Grid reference:** SE704474 **SAC EU code:** UK0030253 **Area (ha):** 411.23 **Component SSSI:** River Derwent SSSI **Site description:** The Yorkshire Derwent is considered to represent one of the best British examples of the classic river profile. This lowland section, stretching from Ryemouth to the confluence with the Ouse, supports diverse communities of aquatic flora and fauna. Fed from an extensive upland catchment, the lowland course of the Derwent has been considerably diverted and extended as a result of glacial action in the Vale of Pickering. The river supports an aquatic flora uncommon in Northern Britain. Several species, including river water-dropwort *Oenanthe fluviatilis*, flowering rush *Butomus umbellatus*, shining pondweed *Potamogeton lucens*, arrowhead *Sagittaria sagittifolia*, opposite-leaved pondweed *Groenlandia densa* and narrow-leaved water-parsnip *Berula erecta* are more typically found in lowland rivers in southern England. The Derwent is noted for the diversity of its fish communities, which include river *Lampetra fluviatilis* and sea lampreys *Petromyzon marinus* populations that spawn in the lower reaches, as well as bullhead *Cottus gobio*. The diverse habitats also support otters *Lutra lutra*. **Qualifying habitats:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: □ Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. (Rivers with floating vegetation often dominated by water-crowfoot) **Qualifying species:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: □ Bullhead *Cottus gobio* □ River lamprey *Lampetra fluviatilis* □ Otter *Lutra lutra* □ Sea lamprey *Petromyzon marinus*

Skipwith Common SAC	
SAC citation including qualifying features	**EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora** **Citation for Special Area of Conservation (SAC)** **Name:** Skipwith Common **Unitary Authority/County:** North Yorkshire **SAC status:** Designated on 1 April 2005 **Grid reference:** SE668362 **SAC EU code:** UK0030276 **Area (ha):** 295.20 **Component SSSI:** Skipwith Common SSSI **Site description:** The wet heath at Skipwith Common is the most extensive of its type in the north of England. The *Erica tetralix – Sphagnum compactum* community is dominated by cross-leaved heath *Erica tetralix* and purple moor-grass *Molinia caerulea*. There is a small population of marsh gentian *Gentiana pneumonanthe*. The wet heath is part of transitions from open water, fen, reed and swamp to dry heaths and other habitats. The dry heath element is a representative of *Calluna vulgaris – Deschampsia flexuosa* heath dominated by heather *Calluna vulgaris*. **Qualifying habitats:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: □ European dry heaths □ Northern Atlantic wet heaths with *Erica tetralix*. (Wet heathland with cross-leaved heath)
Strensall Common SAC	
SAC citation and qualifying features	**EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora** **Citation for Special Area of Conservation (SAC)** **Name:** Strensall Common **Unitary Authority/County:** York **SAC status:** Designated on 1 April 2005 **Grid reference:** SE651598 **SAC EU code:** UK0030284 **Area (ha):** 569.63 **Component SSSI:** Strensall Common SSSI **Site description:** Strensall Common is an example of acidic lowland heath represented predominantly by *Erica tetralix – Sphagnum compactum* wet heath, although its extent has been reduced by drainage. It is a noted locality for marsh gentian *Gentiana pneumonanthe*, narrow buckler-fern *Dryopteris carthusiana* and the dark-bordered beauty moth *Epione vespertaria* as it is associated with creeping willow *Salix repens* on the wet heath. There is also a complex mosaic of wet heaths with *Erica tetralix* and dry heath elements. The *Calluna vulgaris – Deschampsia flexuosa* dry heath is noted for petty whin *Genista anglica* and bird's-foot *Ornithopus perpusillus*. **Qualifying habitats:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: □ European dry heaths. □ Northern Atlantic wet heaths with *Erica tetralix* (wet heathland with cross-leaved heath).

Humber Estuary SPA	
SPA Citation (summarised)	**EC Directive 79/409 on the Conservation of Wild Birds** **Special Protection Area (SPA)** **Name:** Humber Estuary **Unitary Authorities/Counties:** City of Kingston-upon-Hull, East Riding of Yorkshire, Lincolnshire, North East Lincolnshire, North Lincolnshire **Component SSSIs:** The SPA encompasses all or parts of the following Sites of Special Scientific Interest (SSSIs): Humber Estuary SSSI, North Killingholme Haven Pits SSSI, Saltfleetby-Theddlethorpe Dunes SSSI, and The Lagoons SSSI. **Site description:** The Humber Estuary is located on the east coast of England, and comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. Parts of the estuary are owned and managed by conservation organisations. The estuary supports important numbers of waterbirds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of bittern *Botaurus stellaris*, marsh harrier *Circus aeruginosus*, avocet *Recurvirostra avosetta* and little tern *Sterna albifrons*. **Size of SPA:** The SPA covers an area of 37,630.24 ha. **Qualifying species:** The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season: **Assemblage qualification:** The site qualifies under **article 4.2** of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season: In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five year peak mean 1996/97 – 2000/01), including dark-bellied brent goose *Branta bernicla bernicla*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern *Botaurus stellaris*, oystercatcher *Haematopus ostralegus*, avocet *Recurvirostra avosetta*, ringed plover *Charadrius hiaticula*, golden plover *Pluvialis apricaria*, grey plover *P. squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus*, sanderling *C. alba*, dunlin *C. alpina*, ruff *Philomachus pugnax*, black-tailed godwit *Limosa limosa*, bar-tailed godwit *L. lapponica*, whimbrel *Numenius phaeopus*, curlew *N. arquata*, redshank *Tringa totanus*, greenshank *T. nebularia* and turnstone *Arenaria interpres*. **Non-qualifying species of interest:** The SPA is used by non-breeding merlin *Falco columbarius*, peregrine *F. peregrinus* and short-eared owl *Asio flammeus*, and breeding common tern *Sterna hirundo* and kingfisher *Alcedo atthis* (all species listed in Annex I to the EC Birds Directive) in numbers of less than European importance (less than 1% of the GB population). **Status of SPA:** 1) Humber Flats, Marshes and Coast (Phase 1) SPA was classified on 28 July 1994. 2) The extended and renamed Humber Estuary SPA was classified on 31 August 2007.

Humber Estuary SAC

SAC citation

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Humber Estuary

Unitary Authority/County: City of Kingston upon Hull, East Riding of Yorkshire, Lincolnshire, North East Lincolnshire, North Lincolnshire

SAC status: Designated on 10 December 2009

Grid reference: TA345110

SAC EU code: UK0030170

Area (ha): 36657.15

Component SSSI: Humber Estuary

Site description:

The Humber is the second largest coastal plain **Estuary** in the UK, and the largest coastal plain estuary on the east coast of Britain. The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ouse and Trent. The range of salinity, substrate and exposure to wave action influences the estuarine habitats and the range of species that utilise them; these include a breeding bird assemblage, winter and passage waterfowl, river and sea lamprey, grey seals, vascular plants and invertebrates.

The Humber is a muddy, macro-tidal estuary, fed by a number of rivers including the Rivers Ouse, Trent and Hull. Suspended sediment concentrations are high, and are derived from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines. The extensive mud and sand flats support a range of benthic communities, which in turn are an important feeding resource for birds and fish. Wave exposed sandy shores are found in the outer/open coast areas of the estuary. These change to the more moderately exposed sandy shores and then to sheltered muddy shores within the main body of the estuary and up into the tidal rivers.

Habitats within the Humber Estuary include **Atlantic salt meadows** and a range of sand dune types in the outer estuary, together with **Sandbanks which are slightly covered by sea water all the time**, extensive intertidal mudflats, ***Salicornia* and other annuals colonising mud and sand**, and **Coastal lagoons**. As salinity declines upstream, reedbeds and brackish saltmarsh communities fringe the estuary. These are best-represented at the confluence of the Rivers Ouse and Trent at Blacktoft Sands.

Upstream from the Humber Bridge, the navigation channel undergoes major shifts from north to south banks, for reasons that have yet to be fully explained. This section of the estuary is also noteworthy for extensive mud and sand bars, which in places form semi-permanent islands. The sand dunes are features of the outer estuary on both the north and south banks particularly on Spurn peninsula and along the Lincolnshire coast south of Cleethorpes. Examples of both **Fixed dunes with herbaceous vegetation (`grey dunes`)** and **Shifting dunes along the shoreline with *Ammophila arenaria* (`white dunes)** occur on both banks of the estuary and along the coast. Native sea buckthorn **Dunes with *Hippophae rhamnoides*** also occurs on both sides of the estuary.

Significant fish species include **river lamprey** *Lampetra fluviatilis* and **sea lamprey** *Petromyzon marinus* which breed in the River Derwent, a tributary of the River Ouse. **Grey seals** *Halichoerus grypus* come ashore in autumn to form breeding colonies on the sandy shores of the south bank at Donna Nook. Humber Estuary SAC UK0030170 Compilation date: November 2009 Version: 2 *Designation citation* Page 2 of 2

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

Humber Estuary SAC

- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Coastal lagoons*
- Dunes with *Hippophae rhamnoides*
- Embryonic shifting dunes
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Fixed dunes with herbaceous vegetation (`grey dunes`)*
- *Salicornia* and other annuals colonising mud and sand
- Sandbanks which are slightly covered by sea water all the time
- Shifting dunes along the shoreline with *Ammophila arenaria* (`white dunes')

Qualifying species: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Grey seal *Halichoerus grypus*
- River lamprey *Lampetra fluviatilis*
- Sea lamprey *Petromyzon marinus*

Annex I priority habitats are denoted by an asterisk (*)

B. Record of initial screening of proposed policies

Policy	Rationale	Screening outcome
DP1 York Sub Area	This policy represents a vision or aspirations for the City. It does not directly lead to development and so can have no effects on European sites.	A – Screened out
DP2 Sustainable Development	This policy draws on the NPPF to describe the presumption in favour of sustainable development before identifying broad principles for development. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
DP3 Sustainable communities	This policy identifies broad social criteria for evaluating development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
DP4 Approach to Development management	This policy again refers to the presumption in favour of sustainable development before identifying tests for proposals that apply if the proposals lie outside the Plan. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
SS1 Delivering Sustainable Growth	This policy identifies high level housing and employment targets but does not identify development sites, instead identifying broad principles for development. It does not directly lead development and so can have no effects on European sites. Individual housing and employment allocations are considered under their specific, respective policies.	B – Screened out
SS2 Green Belt	This policy identifies the extent and role of the Green Belt without adding criteria for development proposals. It does not directly lead to development and so can have no effects on European sites.	A – Screened out
SS3 York City Centre	This policy identifies high level housing and other targets, identifying broad principles for development. It does not directly lead development and so can have no effects on European sites. Individual housing and other allocations are considered under their specific, respective policies below.	B – Screened out
SS4/ST5 York Central[97]	These policies make provision for development in York City Centre which ,at its closest, lies just over 7.5km distant, as the crow flies, from the boundary of Strensall Common SAC, and 11km by road to Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie far more distant. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS5/ST20 Castle Gateway	This policy makes provision for development in York City Centre which at their closest lie over 7km distant, as the crow flies, from the boundary of Strensall Common SAC and 11km by road to Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie even more distant.	G - Screened out

[97] For this and other affected allocations below, all those found within a precautionary 7.5km radius (as the crow flies) from the boundary of Strensall Common SAC, have been 'screened in' due, for example, to the vulnerability of this site to recreational pressure. In contrast, reflecting greater resilience and less access, no such threshold is employed for the River Derwent and Lower Derwent Valley.

Policy	Rationale	Screening outcome
	At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	
SS6/ST1 British Sugar/Manor School	This policy makes provision for development of this urban site at British Sugar/Manor School, which is situated almost 8km distant, as the crow flies from the boundary of Strensall Common SAC and 10km by road to Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie even more distant. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G - Screened out
SS7/ST2 Civil Service Sports Ground	This policy makes provision for development of this urban site at the Civil Service Sports Ground, which is situated 9km distant, as the crow flies, from Strensall Common SAC and 10.5km by road from Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie even more distant. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G - Screened out
SS8/ST4 Land adjacent to Hull Road	This policy makes provision for development of 211 dwellings on this urban extension site on Land adjacent to Hull Road. This is situated 6.3km as the crow flies (to the closest point) and over 10km by road from the closest (access point) to the nearest European site, the Lower Derwent Valley/River Derwent complex. It also lies 8.5 km as the crow flies and almost 12km by road from Scott Moncrieff car park, the most convenient access point to the Strensall Common SAC. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS9/ST7 East of Metcalfe Lane	This policy makes provision for 895 dwellings in this garden village on Land East of Metcalfe Lane. This is situated 6.3km as the crow flies (to the closest point) and over 15km by road from the closest (access point) to the nearest European site, the River Derwent/Lower Derwent Valley complex. It also lies around 4.8km as the crow flies, from the boundary of Strensall Common SAC and 8.4km by road from Scott Moncrieff car park, the most convenient access point. At such distances from the River Derwent/Lower Derwent Valley, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. In contrast, given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. In contrast, Consequently, formal screening will be required.	I – Screened in

Policy	Rationale	Screening outcome
SS10/ST8 Land North of Monks Cross	This policy makes provision for 968 dwellings in this urban extension site on Land North of Monks Cross. This is situated 7.5km as the crow flies (to the closest point) and over 15km by road from the closest (access point) to the nearest European site, the River Derwent/Lower Derwent Valley complex. It also lies 2.5km, as the crow flies, from the boundary of Strensall Common, and less than 5km by road from Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. In contrast, given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in
SS11/ST9 Land North of Haxby	This policy makes provision for 735 dwellings on this urban extension site on Land North of Haxby. This is situated 2.1km, as the crow flies, from the boundary of Strensall Common SAC, and less than 5km by road from Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. However given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in
SS12/ST14 Land West of Wigginton Road	This policy makes provision of 1,348 dwellings within this new garden village on Land West of Wigginton Road. This is situated around 4.6km, as the crow flies, from the boundary of Strensall Common SAC, and approximately 7.5km by road from Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. However given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational	I – Screened in

Policy	Rationale	Screening outcome
	pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	
SS13/ST15 Land West of Elvington Lane	This policy makes provision for the development of 3,339 dwellings (2,200 in the Plan period) in this new settlement on Land West of Elvington Lane. This is situated 2.5km as the crow flies (to the closest point) and approximately 7km by road from the most convenient access point to the nearest European site, the River Derwent/Lower Derwent Valley complex. Strensall and Skipwith Commons lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. However given the relatively modest distance to the Lower Derwent Valley/River Derwent, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. This development may also directly affect numbers of the non-breeding golden plover and lapwing populations of the Lower Derwent Valley SPA which utilise 'functionally-linked' land far beyond the boundaries of the designated site. Similarly, given proximity to the SAC, effects on other mobile species of the River Derwent may be possible, as could effects on the otters of the LDV. Again, harmful effects cannot be ruled out. Increases in traffic associated with this development and others may increases nitrogen deposition in the Lower River Derwent Valley and River Derwent complex of sites. Consequently, formal screening will be required.	I – Screened in
SS14/ST16 Terry's Extension Sites	This policy makes provision for 111 dwellings at this urban development site (ST16) at Terry's Extension Sites. This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS15/ST17 Nestle South	This policy makes provision for 863 dwellings at this urban development site at Nestle South. This is situated around 5.5km, as the crow flies, from the boundary of Strensall Common SAC, and 8.6km by road from Scott Moncrieff car park, the most convenient access point. The River Derwent, Lower Derwent Valley and Skipwith Common lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. In contrast, given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational	I - Screened in

Policy	Rationale	Screening outcome
	pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	
SS16/ST31 Land at Tadcaster Road, Copmanthorpe	This policy makes provision for the development of this urban extension site (ST31) on Land at Tadcaster Road, Copmanthorpe. This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS17/ST32 Hungate	This policy makes provision for the development of this urban development site at Hungate. Other European sites lie far distant. This is situated 7km, as the crow flies and 10.7km by road from Scott Moncrieff car park, the most convenient access point to Strensall Common SAC. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required. It should be noted that consent for this development has already been granted for 483 dwellings. Construction has commenced, is ongoing with part completed. No consultee made comment regarding European sites.	I – Screened in
SS18/ST33 Station Yard Wheldrake	This policy makes provision for the development of this village extension site at Station Yard Wheldrake. This is situated just 2km from the most convenient access point to the nearest European site, the Lower Derwent Valley/River Derwent. Other European sites lie far distant. Given the modest distance to the River Derwent/Lower Derwent Valley, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Similarly, given proximity to the SAC, effects on other mobile species of the River Derwent may be possible, as could effects on the otters of the LDV. Again, harmful effects cannot be ruled out. Consequently, formal screening will be required.	I – Screened in
SS19/ST35 Queen Elizabeth Barracks, Strensall	This policy makes provision for the development of Queen Elizabeth Barracks which is situated adjacent to Strensall Common SAC. At such close proximity, harmful effects from increases in recreational pressure and urban-edge activities, and changes to the local hydrological regime, cannot be ruled out. Similarly, nitrogen deposition from anticipated increases in road traffic and the impact of construction on the hydrological regime of the European site will also require further scrutiny. Consequently, formal screening will be required.	I – Screened in LSE alone

Policy	Rationale	Screening outcome
SS20/ST36 Imphal Barracks, Fulford Road	This policy makes provision for the development of Imphal Barracks in York at Imphal Barracks, Fulford Road. This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS21/ST26 Land South of Airfield Business Park, Elvington	This policy makes provision for the establishment of this business park on Land South of the Airfield Business Park, Elvington. This is situated approximately 7km by road from the most convenient access point to the nearest European site, the Lower Derwent Valley. Strensall and Skipwith Commons lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. Similarly, the risk of harmful effects from recreational pressure on the River Derwent/Lower Derwent Valley can also be ruled out, despite its relative proximity, by the business use of the site which will ensure that the modest workforce will have limited opportunities to visit the European site.	G – Screened out
SS22/ST27 University of York Expansion	This policy makes provision for the expansion of the University. This is situated around 13km by road from the most convenient access point to the nearest European site, the Lower Derwent Valley. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS23/ST19 Land at Northminster Business Park	This policy makes provision for the establishment of this business park on Land at Northminster Business Park. This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
SS24/ST37 Whitehall Grange, Wiggington Road	This policy makes provision for the establishment of this business park at Whitehall Grange, Wiggington Road. This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. It should be noted that this development was consented in November 2019.	G – Screened out consented
EC1 Provision of Employment land	This policy brings together a range of employment allocations together providing a brief description. Given the lack of detail this policy cannot directly lead to development and so can have no effect on European sites. The individual allocations ST5, ST19, ST26, ST27 & ST37 are evaluated under the relevant Spatial Strategy (SS) Policy	B – Screened out

Policy	Rationale	Screening outcome
	above, whilst E8, E9, E10, E11, E16 & E18 are evaluated in turn below.	
E8 Wheldrake Industrial Estate	This policy makes provision for light industrial development and research within Wheldrake (E8). This is situated only around 2km from a convenient access point to the Lower Derwent Valley/River Derwent. Strensall and Skipwith Commons lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. Similarly, the risk of harmful effects from recreational pressure on the River Derwent/Lower Derwent Valley can also be ruled out, despite its relative proximity, by the business use of the site which will ensure that the modest workforce will have limited opportunities to visit the European site.	G – Screened out
E9 Elvington industrial Estate	This policy makes provision for light industrial development and research within Elvington. This is situated only around 2km from the River Derwent/Lower Derwent Valley complex. Strensall and Skipwith Commons lie far more distant. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out. At such distances from the River Derwent/Lower Derwent Valley, localised effects associated with the proximity of development can be ruled out. Similarly, the risk of harmful effects from recreational pressure on the River Derwent/Lower Derwent Valley can also be ruled out, despite its relative proximity, by the business use of the site which will ensure that the modest workforce will have limited opportunities to visit the European site.	G – Screened out
E10 Chessingham Park, Dunnington	This policy makes provision for light industrial development within Dunnington. This is situated around 6.8km, as the crow flies, from the boundary of Strensall Common SAC, and 15km by car from the Scott Moncrieff car park, the closest main access point. It also lies within 2.75km or so as the crow flies, and less than 4km by road from the River Derwent/Lower Derwent Valley complex. At such distances, localised effects associated with the proximity of development can be ruled out. Similarly, the risk of harmful effects from recreational pressure, for example, can also be ruled out. Despite its relative proximity, the business use of the site will ensure that the modest workforce will have limited opportunities to visit the European sites.	G – Screened out
E11	This policy makes provision for light industrial development and research within Monks Cross.	G – Screened out

Policy	Rationale	Screening outcome
Annamine Nurseries, Jockey Lane	This is situated around 4km, as the crow flies, from the boundary of Strensall Common SAC, and 6km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Similarly, the risk of harmful effects from recreational pressure, for example, can also be ruled out. Despite its relative proximity, the business use of the site will ensure that the modest workforce will have limited opportunities to visit the European site.	
E16 Poppleton Garden Centre	This policy makes provision for light industrial development which is situated far from the nearest European site. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
E18 Towthorpe Lines, Strensall	This policy makes provision for unspecified employment development on a 4ha site immediately adjacent to Strensall Common SAC. At such close proximity, harmful effects from increases in recreational pressure (even from the workforce) and urban-edge activities cannot be ruled out. Similarly, nitrogen deposition from anticipated increases in road traffic and the impact of construction on the hydrological regime of the European site will also require further scrutiny. Consequently, formal screening will be required.	I – Screened in LSE alone
EC2 Loss of employment land	This policy aims to safeguard employment land before identifying criteria to evaluate development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
EC3 Business within Residential Areas	This policy encourages development in unknown locations. The scale and nature of this type of development make it highly unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H – Screened out
EC4 Tourism	This policy encourages development in unknown locations. The scale and nature of this type of development make it highly unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H – Screened out
EC5 Rural economy	This policy encourages development in unknown locations. The scale and nature of this type of development make it highly unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H – Screened out

Policy	Rationale	Screening outcome
R1 Retail hierarchy	This policy seeks to safeguard retail provision in the city centre before identifying criteria to evaluate development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
R2 District and Local Centres and Neighbourhood Parades	This policy seeks to safeguard retail provision in the local centres before identifying criteria to evaluate development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
R3 York City Centre Retail	This policy seeks to support retail provision in the city centre before identifying criteria to evaluate development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
R4 Out of Centre Retail	This policy seeks to influence out of town retail provision by identifying criteria to evaluate development proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H1(P) Housing Allocations	This policy simply makes provision and sets out criteria for the development of a number of housing allocations. The individual housing allocations: H1(P1), H1(P2), H3, H5, H6, H7, H8, H10, H20, H22, H23, H29, H31, H38, H39, H46, H52, H53, H55, H56, H58, H59 are dealt with individually below. The individual strategic housing allocations ST1, 2, 4, 5, 7, 8, 9, 14, 15, 16, 17, 31, 32, 33, 35 & 36 are considered under their associated spatial strategy (SS) policies above. Given that individual allocations are assessed separately, this element of the Policy is not considered to have an effect on any European site. Whilst, the policy also makes provision for windfall sites at unknown locations, Policy GI2 can normally be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites. Whilst much of this policy could fall under Category 'B' the reliance on Policy GI2 encourages use of Category 'H'. However, given the perceived vulnerability of Strensall Common SAC to development in close proximity, it is uncertain if this is adequate. Therefore, this policy is screened in under Category 'I'.	I – Screened in
H1 (Phases 1&2) (A)	This policy makes provision for 336 dwellings (271 H1Phase 1 & 65 Phase 2) at the former Gas Works site at Heworth Green. This is situated just over 6km, as the crow flies, from the boundary of Strensall Common SAC, and 9.9km by road from the Scott Moncrieff car park, the closest main access point. Other European sites lie far distant. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in

Policy	Rationale	Screening outcome
	It should be noted that outline consent for this development was granted in March 2020 No consultee made comment regarding European sites.	
H3(A)	This policy makes provision for 72 dwellings at Burnholme School. This is situated 6.1km, as the crow flies, from the boundary of Strensall Common SAC, and 10km from Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required. Although equidistant to the River Derwent SAC, localised effects associated with the proximity of development can be ruled out, as can recreational pressure, given the restricted access to the river channel and banks. Consequently, formal screening will be required. It should be noted that consent for the development of an 80 bedroom care home was granted in October 2017. Work has started and is due to complete by October 2020. No consultee made comment regarding European sites.	I – Screened in
H5(A)	This policy makes provision for 162 dwellings at Lowfield School.] This is situated far from the nearest European site. At such distances, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H6(A)	This policy makes provision for development at The Square on Tadcaster Road. This is situated far from the nearest European site. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H7(A)	This policy makes provision for 86 dwellings at Bootham Crescent. This is situated around 6.6km as the crow flies and 10.2km by road from the Scott Moncrieff car park, the closest main access point to Strensall Common SAC. At such distances localised effects associated with the proximity of development can be ruled out. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in

Policy	Rationale	Screening outcome
H8(A)	This policy makes provision for 80 dwellings at Askham Bar Park and Ride. This is situated far from the nearest European site. At such distances from the latter sites, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H10(A)	This policy makes provision for 187 dwellings at The Barbican in York city centre which is situated 7.7km, as the crow flies, and around 11km by road from the Scott Moncrieff car park, the closest main access point. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H20(A)	This policy makes provision for 56 dwellings at the Former Oakhaven EPH. This is situated far from the nearest European site. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H22(A)	This policy makes provision for 15 dwellings at the Former Heworth Lighthouse. This is situated 6.4km, as the crow flies, from the boundary of Strensall Common SAC and 10.0km by car from Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I– Screened in
H23(A)	This policy makes provision for 11 dwellings at the Former Grove House EPH. This is situated 7km as the crow flies from the boundary of Strensall Common SAC and 9.3km by car from Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required. It should be noted that this development has been consented and was completed in September 2019. No consultees commented regarding European sites.	I– Screened in
H29(A)	This policy makes provision for 88 dwellings at Land at Moor Lane, Copmanthorpe. This is situated far from the nearest European site.	G – Screened out

Policy	Rationale	Screening outcome
	At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	
H31(A)	This policy makes provision for 76 dwellings at Eastfield Lane, Dunnington This is situated 6km, as the crow flies, from the boundary of Strensall Common SAC, and 14km by car from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required. Although less than 3km to the River Derwent SAC, harmful effects are ruled out given the restricted access to the river channel and banks.	I – Screened in
H38(A)	This policy makes provision for 33 dwellings at Rufforth Primary School. This is situated far from the nearest European site. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H39(A)	This policy makes provision for 32 dwellings at North of Church Lane, Elvington. This is situated just a few hundred meters from the River Derwent and Lower Derwent Valley European sites, albeit over 5km from the most convenient access point at Wheldrake. Even in such close proximity, localised effects associated with the proximity of development can be ruled out. Given the lack of access locally, the proximity of the allocation is considered to be largely inconsequential. Even where access can be gained, the European site is largely confined to the channel and regarded as relatively resilient to public pressure.	G – Screened out
H46(A)	This policy makes provision for 104 new dwellings at New Earswick. This is situated less than 3.5km, as the crow flies, from the boundary of Strensall Common, and 5.8km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in
H52(A)	This policy makes provision for 15 dwellings at Willow House EPH which is situated 7.6km, as the crow flies, from the boundary of Strensall Common SAC and around 11km by	G – Screened out

Policy	Rationale	Screening outcome
	road from the Scott Moncrieff car park, the closest main access point. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	
H53(A)	This policy makes provision for 4 dwellings at Knapton Village. This is situated far from the nearest European site. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
H55(A)	This policy makes provision for 20 dwellings on Land at Layerthorpe. This is situated just over 6km, as the crow flies, from the boundary of Strensall Common SAC and 10.0km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	I – Screened in
H56(A)	This policy makes provision for 70 dwellings on Land at Hull Road. This is situated 6.3km as the crow flies (to the closest point) and over 10km by road (from the closest access point) of the nearest European site, the Lower Derwent Valley/River Derwent complex. Given this distance and relative resilience of the site. harmful effects are ruled out. It also lies 7.3km as the crow flies, to the boundary of Strensall Common SAC, and almost 12km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required. It should be noted that this development has been consented with construction due to begin in Spring 2020. No consultees commented regarding European sites.	I – Screened in
H58(A)	This policy makes provision for 25 dwellings at Clifton Without Primary School. This is situated 6.6km, as the crow flies, from the boundary of Strensall Common SAC, and 9.4km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development are unlikely.	I – Screened in

Policy	Rationale	Screening outcome
	Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	
H59(A)	This policy makes provision for the development of 45 dwellings on land immediately adjacent to Strensall Common SAC. At such close proximity, harmful effects from increases in recreational pressure and urban-edge activities cannot be ruled out. Similarly, nitrogen deposition from anticipated increases in road traffic and the impact of construction on the hydrological regime of the European site will also require further scrutiny. Consequently, formal screening will be required.	I – Screened in
H2(P) Density of Residential Development	This policy seeks to influence the density of housing by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H3(P) Balancing the Housing Market	This policy seeks to balance the housing market by identifying criteria to influence the housing mix. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H4(P) Promoting Self-build and Custom House Building	This policy seeks to influence the types and design of housing by identifying criteria to encourage self-build proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H5(P) Gypsies & Travellers	This policy encourages development in unknown locations. The scale and nature of this type of development make it unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H – Screened out
H6(P) Travelling Showpeople	This policy encourages development in unknown locations. The scale and nature of this type of development make it unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H – Screened out
H7(P) Student Housing	This policy encourages development in unknown locations. The scale and nature of this type of development make it unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites. The named allocation, SH1, is evaluated as a single allocation elsewhere in this table.	H – Screened out
SH1 Student housing	This policy makes provision for the development of student housing at Heweth Croft.	I – Screened in

Policy	Rationale	Screening outcome
	This is situated just over 6km, as the crow flies, to the boundary of Strensall Common SAC, and 8km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development can be ruled out. Given the relatively modest distance to Strensall Common, the risk of harmful effects from recreational pressure, for example, cannot be ruled out at this stage of the HRA. Consequently, formal screening will be required.	
H8(P) Houses in Multiple Occupation	This policy seeks to influence the occupancy of student housing by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H9(P) Older Persons Specialist Housing	This policy seeks to influence the provision of specialist housing for older persons by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
H10(P) Affordable housing	This policy seeks to influence the provision of affordable housing for older persons by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW1 Community facilities	This policy seeks to secure the retention of existing community facilities by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW2 New community facilities	This policy seeks to influence the provision of new community facilities by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW3 Built sport facilities	This policy seeks to influence the availability of sports facilities by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW4 Childcare provision	This policy seeks to influence the availability of childcare provision by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW5 Healthcare services	This policy seeks to influence the availability of healthcare services by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
HW6 Emergency Services	This policy seeks to influence the provision of a handful of modest buildings in existing allocations to provide parking facilities for vehicles of the emergency services. Although it does promote development, it is inconceivable that this would result in harmful impacts on European sites.	G– Screened out
HW7 Healthy places	This policy seeks to influence the adoption of healthy places by identifying criteria to evaluate proposals. It does not	B – Screened out

Policy	Rationale	Screening outcome
	directly lead to development and so can have no effects on European sites.	
ED1 York University	This policy represents a vision or aspirations for the University. It does not directly lead to development and so can have no effects on European sites.	A – Screened out
ED2 Campus West	This policy makes provision for the expansion of Campus West although no increase in accommodation is proposed. This is situated 6km as the crow flies (to the closest point) and over 12km by road (from the closest access point) of the nearest European site, the Lower Derwent Valley/River Derwent complex. Elements of this also lie between 7-7.5km, as the crow flies, from the boundary of Strensall Common SAC, and 12.5km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development are unlikely. Similarly, given that the expansion will mainly comprise facilities and workforce, increases in, for example, recreational pressure are ruled out on all European sites.	G – Screened out
ED3 Campus East	This policy makes provision for the expansion of Campus East and includes an expansion in student accommodation. This is situated 6km as the crow flies (to the closest point) and over 12km by road (from the closest access point) of the nearest European site, the Lower Derwent Valley/River Derwent complex. Given this distance and relative resilience of the site. harmful effects are ruled out. The site proposed lies 8km and more, as the crow flies, from the boundary of Strensall Common SAC, and 12.5km by road from the Scott Moncrieff car park, the closest main access point. At such distance, it is almost inconceivable that development here could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
ED4 York St John University Lord Mayor's Walk Campus	This policy makes provision for the expansion of York St John University Lord Mayor's Walk Campus . This is situated 6.7km as the crow flies, from the boundary of Strensall Common SAC, and 9km by road from the Scott Moncrieff car park, the closest main access point. At such distances localised effects associated with the proximity of development are unlikely. Similarly, given that the expansion will mainly comprise facilities, increases in, for example, recreational pressure are ruled out.	G – Screened out
ED5 York St John University Further Expansion	This policy makes provision for the further expansion of York St John University in terms of sports facilities and student housing (Policy SH1). The latter is assessed separately and it is almost inconceivable that the former could result in measurable	G – Screened out

Policy	Rationale	Screening outcome
	effects on any European site and the need for further scrutiny is ruled out.	
ED6 Preschool, Primary and Secondary Education	This policy seeks to influence the provision of pre-, primary and secondary schools by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
ED7 York and Askham Bryan Colleges	This policy makes provision for the further expansion of York College and Askham Bryan College which is situated far from the nearest European site. Increases in accommodation are proposed but where these are off site, they have been assessed separately in Policy H7. It is almost inconceivable that this policy could result in measurable effects on any European site and the need for further scrutiny is ruled out.	G – Screened out
ED8 Access to facilities on education sites	This policy seeks to influence the provision for community access to sport and cultural facilities on educational sites by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D1 Placemaking	This policy seeks to improve poor urban and natural environments by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D2 Landscape and Setting	This policy seeks to promote appreciation of the wider landscape character in design by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D3 Cultural provision	This policy seeks to promote York's cultural character by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D4 Conservation areas	This policy seeks to promote development that enhances the special character of the area by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D5 Listed buildings	This policy seeks to promote development that preserves the significance and heritage values of buildings by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D6 Archaeology	This policy seeks to influence development that affects archaeological features by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D7 Non-designated Heritage Assets	This policy seeks to influence development that affects non-designated heritage assets by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D8	This policy seeks to influence development that affects historic parks and gardens by identifying criteria to evaluate	B – Screened out

Policy	Rationale	Screening outcome
Historic Parks and Gardens	proposals. It does not directly lead to development and so can have no effects on European sites.	
D9 Historic Environment Record	This policy seeks to ensure that the historic record remains accurate and available by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D10 City walls	This policy seeks to conserve and enhance the value of the City Walls by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D11 Alterations to Existing buildings	This policy seeks to promote high quality design for proposals affecting listed buildings by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D12 Shopfronts	This policy seeks to influence the design of shopfronts by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D13 Advertisements	This policy seeks to influence the display of advertisements by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
D14 Shutters	This policy seeks to influence the use of security shutters by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
GI1 Green infrastructure	This policy seeks to conserve and enhance the natural environment. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
GI2 Biodiversity	This policy also seeks to conserve and enhance York's biodiversity resource. It establishes criteria, provides safeguards, facilitates mitigation and promotes environmental benefits. It cannot result in any harmful effects on European sites.	D – Screened out
GI3 Green infrastructure network	This policy also seeks to conserve and enhance York's green infrastructure. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
GI4 Trees and hedgerows	This policy also seeks to conserve and enhance York's trees and hedgerows. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
GI5 Open space and playing fields	This policy seeks to protect existing open space of recreational or environmental importance. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
GI6 New open space provision	This policy seeks to safeguard protected areas for nature conservation and secure the establishment of new open space for both recreational and environmental reasons. It provides	D – Screened out

Policy	Rationale	Screening outcome
	environmental benefits and will not result in any harmful effects on European sites	
OS1	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
OS2	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
OS5	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
OS6	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
OS7	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites	D – Screened out
OS8	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites	D – Screened out
OS9	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites	D – Screened out
OS10	This policy seeks to establish wet grassland for breeding and non-breeding birds of, and provide new alternative greenspace and other recreational uses to reduce the frequency and intensity of public pressure on, the Lower Derwent complex of European sites for Policy SS13/ST15. As it is designed to mitigate harmful effects on the European sites, it is excluded from formal screening to comply with the People Over Wind decision but would be considered in an appropriate assessment if necessary.	M – excluded from formal screening
OS11	This policy seeks to provide new open space for recreation and amenity. It provides environmental benefits and will not result in any harmful effects on European sites.	D – Screened out
OS12	This policy seeks to provide new alternative greenspace within Policy SS19/ST35 to reduce the frequency and intensity of public pressure on Strensall Common SAC. As it is designed to mitigate harmful effects on the SAC, it is excluded from formal screening to comply with the People Over Wind decision but would be considered in an appropriate assessment if necessary.	M – excluded from formal screening
GI7 Burial and Memorial Grounds	This policy seeks to establish new open space for recreational and environmental purposes including the provision of mitigation for certain developments. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
GB1 Development in the Green belt	This policy seeks to influence new development in the Green Belt by identifying criteria to evaluate proposals. It does not	B – Screened out

Policy	Rationale	Screening outcome
	directly lead to development and so can have no effects on European sites.	
GB2 Development in Settlements within the Green Belt	This policy seeks to influence new development in settlements 'washed-over' by the Green Belt by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
GB3 Re-use of buildings	This policy seeks to influence the reuse of existing buildings within the Green Belt by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
GB4 Exception sites for Affordable Housing in the Green Belt	This policy encourages development in unknown locations. The scale and nature of this type of development make it highly unlikely that direct impacts on European sites would result. Policy GI2 can be relied upon to ensure that proposals brought forward under this general policy avoid harmful effects on European sites.	H - Screened out
CC1 Renewable and Low Carbon Energy Generation and Storage	This policy seeks to influence the reduction in carbon emissions from new development alongside renewable power generation by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no harmful effects on European sites.	B – Screened out
CC2 Sustainable design and Construction of New Development	This policy seeks to promote a reduction in carbon emissions and the adoption of climate change adaptation techniques in new development by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no harmful effects on European sites.	B – Screened out
CC3 District Heating and Combined Heat and Power	This policy seeks to promote more sustainable heating and power sources in new development by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
ENV1 Air Quality	This policy seeks to safeguard human health but will also benefit biodiversity and will not result in any harmful effects on European sites.	D – Screened out
ENV2 Environmental Quality	This policy seeks to influence a wide range of environmental pollutants but will also benefit biodiversity and will not result in any harmful effects on European sites.	D – Screened out
ENV 3 Land Contamination	This policy seeks to reduce the environmental effects of contaminated land by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
ENV4 Flood Risk	This policy seeks to reduce the level of risk associated with floods by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out

Policy	Rationale	Screening outcome
ENV5 Sustainable Drainage	This policy seeks to reduce excessive surface water drainage from new developments by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
WM1 Sustainable Waste Management	This policy refers to measures contained within and to be delivered by the Minerals and Waste joint Plan established by the Council along with North Yorkshire County Council.	C – Screened out
WM2 Sustainable Minerals Management	This policy refers to measures contained within and to be delivered by the Minerals and Waste joint Plan established by the Council along with North Yorkshire County Council.	C – Screened out
T1 Sustainable Access	This policy seeks to promote sustainable travel by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
T2 Strategic Public Transport Improvements	This policy refers to measures contained within and to be delivered by the Local Transport Plan but also promotes local infrastructure improvements. None threaten European sites.	C – Screened out
T3 York Station and Associated Facilities	This policy promotes development in and around York Station and it is inconceivable that this would result in any adverse impacts on European sites.	G – Screened out
T4 Strategic Highway Network Improvements	This policy promotes local infrastructure improvements across the City including the junction of Strensall Road and the A1237. However, this lies far distant from Strensall Common SAC and it is inconceivable that this would result in any adverse impacts on the European site.	G – Screened out
T5 Strategic Cycle and Pedestrian Networks	This policy promotes improvements to the cycling and pedestrian network. However, it is inconceivable that this would result in any adverse impacts on European sites.	H – Screened out
T6 Development at or Near Public Transport Corridors and Interchanges	This policy encourages development in unknown locations. The scale and nature of this type of development make it highly unlikely that direct impacts on European sites would result and strategic issues, such as the disposal of wastewater are effectively ruled out by Policy GI2.	H – Screened out
T7 Minimising and Accommodating Generated Trips	This policy seeks to reduce traffic and promote sustainable travel by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
T8 Demand Management	This policy seeks to reduce traffic and promote sustainable travel by identifying criteria to evaluate proposals. It does not directly lead to development and so can have no effects on European sites.	B – Screened out
T9	This policy encourages development in unknown locations. The scale and nature of this type of development make it	H – Screened out

Policy	Rationale	Screening outcome
Alternative Fuels and Freight Centres	highly unlikely that direct impacts on European sites would result and strategic issues, such as the disposal of wastewater are effectively ruled out by Policy GI2.	
C1 – Communications Infrastructure	This policy encourages communications infrastructure, but it is inconceivable this will adversely affect European sites.	H – Screened out
DM1 – Infrastructure and Developer Contributions	This policy seeks to ensure the provision of appropriate infrastructure alongside new development. It does not directly lead to development and so can have no effects on European sites.	B – Screened out

UK and Ireland Office Locations