HAMPSHIRE COUNTY COUNCIL, NEW FOREST NATIONAL PARK AUTHORITY, PORTSMOUTH CITY COUNCIL, SOUTH DOWNS NATIONAL PARK AUTHORITY & SOUTHAMPTON CITY COUNCIL

Hampshire Minerals & Waste Plan: Partial Update

Habitats Regulations Assessment Appropriate Assessment

(Proposed Submission)

October 2023

Contents

Non-technical summary

1. The purpose of this report is to document the Appropriate Assessment process, undertaken as part of the Habitats Regulations Assessment (HRA) of the partial update of the Hampshire Minerals and Waste Plan (HMWP). A flowchart outlining the steps in the Appropriate Assessment process is provided in Figure 3.1 and the Appropriate Assessment process is documented in Section 3.

2. HRA is required by the Conservation of Habitats & Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations). The aim of the Regulations is to 'maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of community interest'.

3. The first stage of the HRA process is screening, a broad filter or 'likely significant effect' test, which determines whether the plan or individual element of the plan is likely to have a significant effect on International sites, either alone or in-combination with other projects and plans. This was undertaken in relation to the Proposed Submission Plan and resulted in one policy and four sites being screened in as having the potential to have significant effects on International sites alone or in-combination, requiring further consideration.

4. The aim of this stage of the HRA process is to assess the screened-in policy and site allocations in the Proposed Submission Plan against the conservation/network objectives of the International sites to demonstrate whether they would adversely affect the integrity of those sites.

5. This document should be read in conjunction with the Proposed Submission Plan, HRA Regulation 19 Screening Report and HRA Revised Baseline and Methodology Report, listed in Section 1 of this report.

6. The HRA has concluded that the Proposed Submission Plan is compliant with the Habitats Regulations and will not result in likely significant effects on any International sites, either alone or in-combination with other plans or projects. For development coming forward on either the allocated sites or non-allocated sites, it is considered that there are sufficient mitigation and other measures set out in the Plan, or elsewhere, such as via planning proposal HRA requirements, regulatory requirements and development management processes.

7. The assessment has been undertaken in consultation with Natural England and other relevant consultees. The assessment builds upon previous assessment stages and is part of an iterative process that has informed the preparation of the Proposed Submission Plan. This report is made available, alongside the Proposed Submission Plan, to the HMWP Partial Update Regulation 19 Consultation.

1. Introduction

Previous HRA Reports

1.1 This report (Appropriate Assessment) is part of a 'suite' of Habitats Regulations Assessment (HRA) documents prepared in support of the Hampshire Minerals and Waste Plan (HMWP): Partial Update (herein referred to as 'the Plan'), as it has been prepared. This report, therefore, builds upon the following reports:

- HRA Revised Baseline and Methodology Report (September 2021)[1] – Regulation 18 stage of Plan preparation;
- HRA Screening Report (August 2022)[2] - Regulation 18 stage of Plan preparation;
- HRA Screening Report (Proposed Submission) October 2023[3] – Regulation 19 stage of Plan preparation

This report should also be read in conjunction with the Proposed Submission Plan[4]. All the above documents are provided on the HMWP Partial Update webpages[5].

1.2 Natural England, as the Statutory Nature Conservation Body, was formally consulted on the Version 1 (June 2021) of the HRA Baseline and Methodology Report in June 2021 and their response is provided in Appendix 1. Subsequently, the HRA Revised Baseline and Methodology Report and the HRA Screening Report (August 2022) were provided as part of the Regulation 18 Draft Plan Consultation that ran for twelve weeks from 8 November 2022 to 31 January 2023. Natural England's response to that consultation is provided in Appendix 2. The Regulation 19 HRA Screening Report incorporates the outcome of the Regulation 18 consultation and subsequent policy and site allocation changes.

1.3 A summary of the HRA process together with all HRA related correspondence from Natural England will be published in the final 'Record of Assessment and Determination' on publication of the Plan.

Purpose

1.4 The purpose of this report is to document the 'Appropriate Assessment' of proposed policies and site allocations 'screened in' as part of the associated Habitats Regulations Assessment (HRA) screening process. The objective of the Appropriate Assessment is to assess the potential effects of screened-in policies and site allocations on 'National Site Network sites (NSN) sites' (formally known as 'European sites') and Ramsar sites. NSN sites and Ramsar sites will be referred to collectively as International sites in this

[1] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Revised Baseline and Methodology Report (September 2021)
[2] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (August 2022)
[3] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023
[4] HMWP Partial Update HRA Screening Report (Proposed Submission) October 2023
[5] https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

report. The objective of the HRA is to identify any aspects of the screened-in policies and site allocations that would have the potential to cause a likely significant effect on International sites either alone or in combination with other plans and projects, and thereby affect the integrity of those sites.

1.5 This report should be read in conjunction with the Proposed Submission Plan[6], as well as the documents listed in paragraph 1.1 that document earlier stages of the HRA process.

The Hampshire Minerals and Waste Plan - Partial Update

1.6 Hampshire County Council, New Forest National Park Authority, Portsmouth City Council, South Downs National Park Authority and Southampton City Council (the 'Hampshire Authorities') are working in partnership to undertake a partial update of the HMWP, which will guide minerals and waste decision-making in the Plan area.

1.7 The current HMWP was adopted in October 2013[7]. The National Planning Policy Framework (NPPF) requires that Local Plans should be reviewed to assess whether they require updating at least once every five years[8].

1.8 A review of the 2013 HMWP in 2020 concluded that a partial update of the HMWP was required to reflect national policy changes, the Hampshire 2050 Vision for the Future, and to ensure that the Plan is delivering a steady and adequate supply of minerals and enabling sustainable waste management provision. It was subsequently decided by all partners that the HMWP would be subject to a partial update.

1.9 This is important as out of date plans limit the ability for planning authorities to enable the right development, in the right location, at the right time, and may lead to a greater number of planning applications determined at appeal.

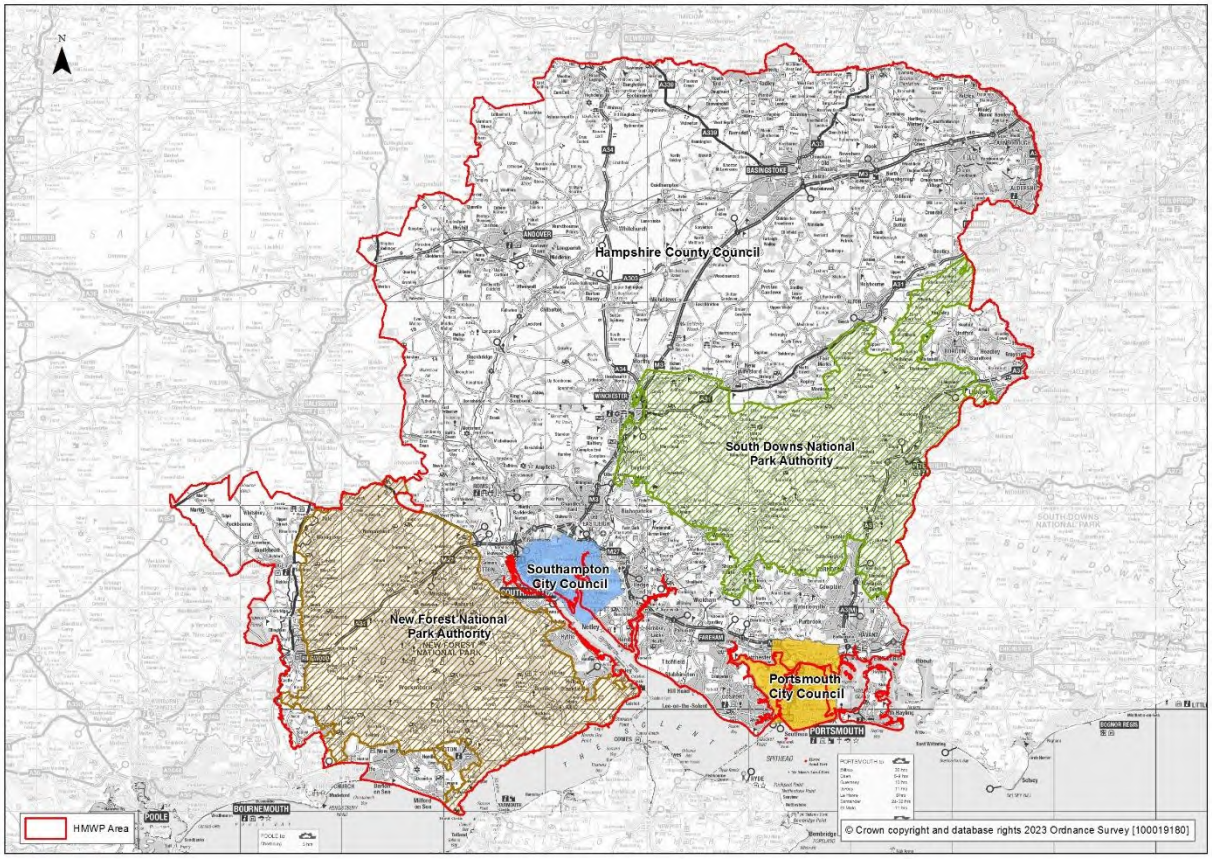
1.10 Minerals and waste planning issues are most appropriately addressed jointly so that strategic issues can be satisfactorily resolved. The HMWP Partial Update will cover those geographical parts of the Hampshire Authorities that are within the Plan boundary (see Figure 1.1).

[6] Hampshire Minerals and Waste Plan: Partial Update Proposed Submission Plan (October 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[7] Hampshire Minerals & Waste Plan (2013) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan

[8] National Planning Policy Framework (Para. 33) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.pdf

Figure 1.1: Hampshire Minerals and Waste Plan Area and Hampshire Authority boundaries



2. Requirement for HRA

2.1 The need for HRA is set out in the Conservation of Habitats & Species Regulations 2017 (as amended)[9], commonly referred to as the Habitats Regulations. The Regulations transposed two pieces of retained European law – Directive 2009/147/EC on the conservation of wild birds (the Birds Directive) and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna (the Habitats Directive) – into domestic law.

2.2 On 31st December 2020, the implementation Period following the UK's departure from the European Union in January 2020, came to a close. As such, the Conservation of Habitats and Species Regulations 2017 are now amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and collectively referred to as 'the Habitats Regulations'.

2.3 The Habitats Regulations requires that:

- any plan or project, which is not directly connected with or necessary to the management of a National Site Network (NSN) site,
- but would be likely to have a significant effect on such a site,
- either individually or in combination with other plans or projects,
- shall be subject to an 'Appropriate Assessment' of its implications for the NSN site,
- in view of the site's Network objectives[10].

2.4 Regulations 105 to 109 of the Habitats Regulations require competent authorities to assess the effects of 'land use plans' on International sites where the plans are not directly connected with or necessary to the management of those sites. This requirement applies to Local Development Documents (LDD) including Development Plan Documents (DPDs) and, as such, this requirement applies to the HMWP Partial Update.

2.5 Under Regulation 105, the assessment must determine whether or not a plan will adversely affect the integrity of the International site(s) concerned, either alone or in combination with other plans or projects. Plans can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question.

2.6 Where effects on ecological integrity are identified, plan-makers must first consider alternative ways of achieving the plan's objectives that avoid significant effects entirely. Where it is not possible to meet objectives through other means, mitigation measures that allow the plan to proceed by removing or reducing significant effects may be considered. If it is impossible to avoid or mitigate the adverse effect, the plan-makers must demonstrate, under the conditions of Regulation 107, that there are Imperative

[9] Conservation of Habitats and Species Regulations 2017 (as amended) - https://www.legislation.gov.uk/uksi/2017/1012/contents/made

[10] Management objectives for the national site network which contribute to the conservation of UK habitats and species that are also of pan-European importance, and to the achievement of their Favourable Conservation Status within the UK.

Reasons of Overriding Public Interest (IROPI) to continue with the proposal. In such cases, compensation would be necessary to ensure the overall integrity of the site network. This is widely perceived as an undesirable position and should be avoided if at all possible.

2.7 HRA is undertaken by the Competent Authority, which is the authority that has legally delegated powers of authority under Regulation 7 of the Habitats Regulations. In the case of the HMWP Partial Update, Hampshire County Council, New Forest National Park Authority, Portsmouth City Council, South Downs National Park Authority and Southampton City Council are the minerals and waste planning authorities (MWPA) for their respective parts of the Plan area, and as such are the Competent Authorities for this HRA.

2.8 Sites which are to be considered in the HRA process include Special Protection Areas (SPA) and Special Areas of Conservation (SAC) (both part of the NSN) originally designated under the European Birds Directive and Habitats Directive, respectively. 'Potential' or 'Possible' SACs (pSACs), 'Candidate' SACs (cSACs) and 'Potential' SPAs (pSPAs) (i.e., sites that have yet to be formally 'classified' as SPAs or 'designated' as SACs but are proposed as such) are also considered as NSN sites.

2.9 In addition, Ramsar sites (internationally important wetland habitats recognised under the Ramsar Convention) mostly overlayed by SPA classifications and SAC designations in the UK. The criteria for listing a site as a Ramsar site are different to those used for SPAs and SACs, but the Ramsar criteria are of equal importance for the ecological functioning and integrity of the relevant site. National planning policy[11] requires that Ramsar sites are also assessed within HRA in the same way as SPAs and SACs.

2.10 Taken together, SPAs, SACs (and pSACs, cSACs and pSPAs) form the National Sites Network (NSN), as defined and regulated under the Habitats Regulations. For the purposes of this report, the NSN sites considered in the assessment, together with Ramsar sites, are collectively referred to as 'International sites'. Additionally, while the terminology relating to the *designation*, *classification* or *listing* of an International site varies depending on whether it is an SPA, SAC or Ramsar site, for the purposes of this report, '*designations'* and '*designated'* will be used to refer collectively to these terms.

2.11 The first stage of the HRA process, 'screening', has been undertaken and the results of this process published in the HRA Regulation 19 Screening Report (Proposed Submission) October 2023[12]. This is the updated version of the HRA Screening Report prepared following the outcome of the Regulation 18 Draft Plan Consultation that ran for twelve weeks between 8 November 2022 and 31 January 2023.

[11] National Planning Policy Framework (NPPF) 2023 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.pdf

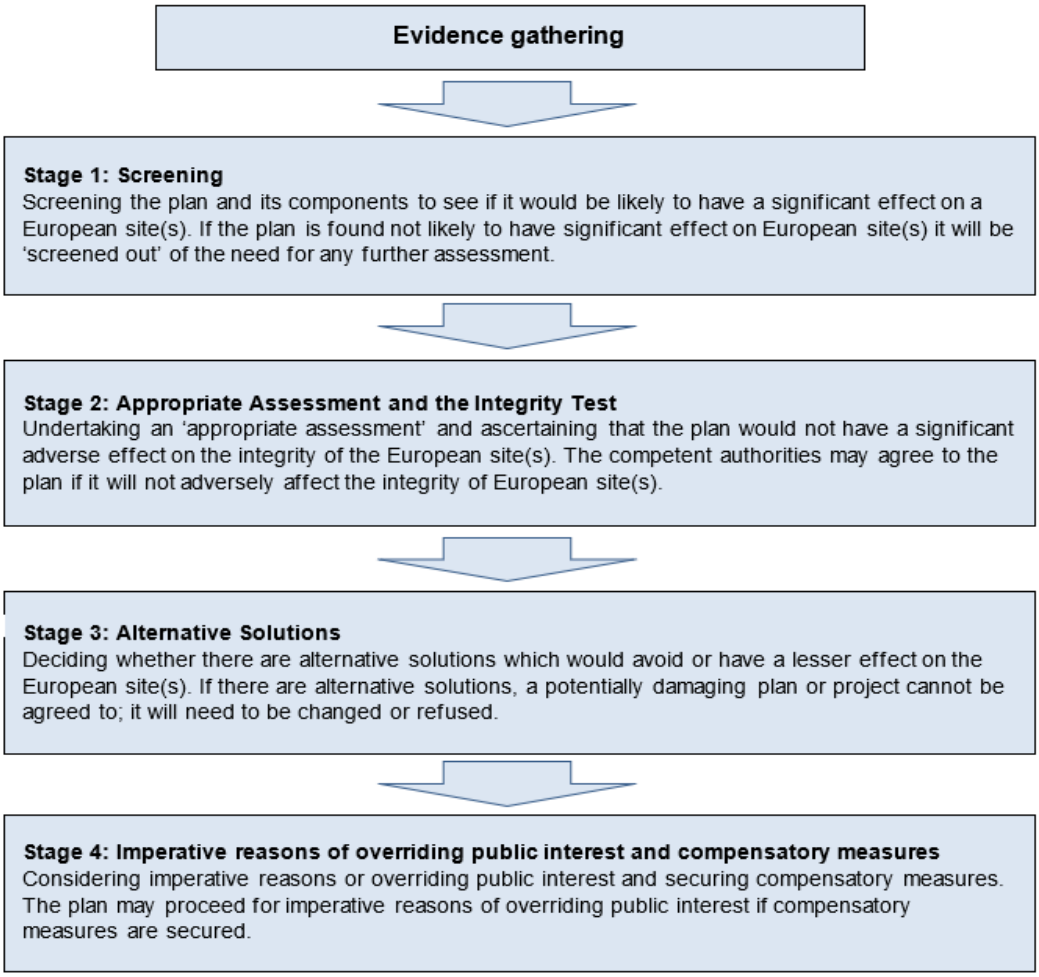
[12] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

2.12 The Appropriate Assessment is the second stage of the HRA process and is a more detailed assessment of those elements of the Proposed Submission Plan (policies and proposed site allocations) that have been 'screened in' through the screening process, to determine whether these Plan elements are likely to have a significant effect on International sites, either alone or in-combination with other projects and plans. Further information on the Appropriate Assessment process is provided in Section 3.

2.13 The Habitats Regulations Assessment Handbook[13] has been referred to during the preparation of this report. The handbook is updated regularly and provides the most up-to-date guidance on interpretation of the Habitats Regulations and the process of HRA, including Appropriate Assessment. This guidance is non-statutory, but '*based on experience, good practice and authoritative published guidance*'.

2.14 The four-stage approach to Habitats Regulations Assessment set out in 'The Habitats Regulations Assessment Handbook' is summarised in Figure 2.1 below.

Figure 2.1: Four stage approach to HRA



Adapted from The Habitats Regulations Assessment Handbook, www.dtapublications.co.uk

[13] Tyldesley, D. and Chapman, C., (2013) The Habitats Regulations Assessment Handbook, May 2018 edition (DTA Publications Ltd: Berkshire) - www.dtapublications.co.uk

3. Appropriate Assessment

3.1 Following the screening stage, if likely significant effects on International sites are unable to be ruled out, the plan-making authority is required under Regulation 63(1) of the Habitats Regulations 2017 (as amended) to make an 'Appropriate Assessment' of the implications of the plan for International sites, in view of their conservation objectives.

3.2 Policies and proposed site allocations screened-in as having the potential to have likely significant effects on International sites, which cannot be avoided by taking account of the measures described in paragraphs 3.27 and 3.28, below, need to be assessed against the International site Conservation/Network Objectives to identify whether they would adversely affect the integrity of those sites as part of an Appropriate Assessment.

3.3 Appropriate Assessment is not a technical term, but is defined as the '…*consideration of the impact on the integrity of the* [National Site Network] *site*…' The integrity of the site is described 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 classified*'[14]. For site integrity to be unaffected, there should be no impacts to a site's qualifying features that result in harm to the ecological structure and functioning of the site, its supporting processes and/or adversely affecting the site's ability to meet conservation objectives.

3.4 Appropriate Assessment should therefore consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of International sites with respect to their conservation objectives and to their structure and function. An outline of the steps in Appropriate Assessment is set out in Figure 3.1.

[14] Paragraph 20 of ODPM Circular 06/2005 on Biodiversity and Geological Conservation.

Figure 3.1: Outline of the steps in Appropriate Assessment

Adapted from The Habitats Regulations Assessment Handbook, www.dtapublications.co.uk

Conservation Objectives

3.5 Natural England is in the process of setting out detailed network objectives for all SACs and SPAs (National Site Network (NSN) sites). Progress towards these objectives can be taken as an indicator of 'favourable conservation status' at a site (i.e., the cited qualifying features (species and habitats) are in a suitable conservation status at the national, biogeographical or International level).

3.6 Ramsar sites do not have agreed conservation objectives, but in most instances overlap with SPA site boundaries and for the purposes of this assessment the network objectives for SPAs are applied to Ramsar sites. However, it should be noted that Ramsar qualifying features often include a range of habitats and non-bird species common to SAC designations, as well as bird species and assemblages and their supporting habitats which are common to SPAs.

3.7 The conservation objectives for International sites are broadly similar for SPAs and SACs and their purpose is to:

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/Habitats Directive, by maintaining or restoring:

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species;*
- *The structure and function of the habitats of the qualifying features;*
- *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;*
- *The population of each of the qualifying features; and,*
- *The distribution of the qualifying features within the site.*

3.8 In addition to these broad conservation objectives, Natural England has published Supplementary Advice on Conservation Objectives (SACO) for some International sites, providing a list of attributes for each qualifying feature which 'if safeguarded will enable achievement of the Conservation Objectives'. The SACO information also contains target thresholds for 'maintaining' or 'restoring' each attribute. It is important to note that 'the targets given for each attribute do not represent thresholds to assess the significance of any given impact in Habitats Regulation Assessments'. It follows that it is not necessary for the HRA of a project to ensure that these attribute targets are exceeded e.g., it would be unreasonable to require a particular project to ensure that a certain population level of a species was maintained or restored, when the range of factors acting on that population may include some outside the possible influence of a project.

Level of detail of Appropriate Assessment

3.9 It is recognised by the UK courts that the assessment of a plan may not be as precise and detailed as that of a project at application stage. The method and level of detail required of this HRA is dependent on the scale and geographic area of the Plan, the nature of its policies, and how International sites may be affected as a result. The competent authority is responsible for ensuring the assessment is appropriate and compliant.

3.10 Where carrying out strategic level assessments, lower tier HRAs may be relied upon where the following three criteria are met:

- The higher tier plan assessment cannot reasonably predict the effects on an International site in a meaningful way; whereas
- The HRA of the lower tier plan or project, which will identify more precisely the nature, scale or location of development, and thus its potential effects, will be able to change the proposal if an adverse effect on site integrity cannot be ruled out, because the lower tier plan / project is free to change the nature, scale and/or location of the proposal in order to avoid adverse effects on the integrity of any International site; and
- The HRA of the plan or project at the lower tier is required as a matter of law or Government policy.

3.11 Indeed, as stated by Advocate General Kokott in her opinion on the UK v Commission[15]:

'*Many details are regularly not settled until the time of the final permission. It would also hardly be proper to require a greater level of detail in preceding plans or the abolition of multistage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure*.'

3.12 In addition, as stated by the High Court in the Feeney case[16]:

'*A core strategy is a high level strategic document and the detail falls to be worked out at a later stage. Subsequent appropriate assessment of specific proposals is plainly envisaged by, and indeed necessitated under, the regime. Each appropriate assessment must be commensurate to the relative precision of the plans at any particular stage and no more. There does have to be an appropriate assessment at the Core Strategy stage, but such an assessment cannot do more than the level of detail of the strategy at that stage permits*.'

3.13 Due to uncertainties regarding the exact detail of development that may be taken forward on each site allocation, each proposal will need its own development specific HRA, which must also take into account any cumulative and in-combination impacts which may occur as a result of other developments taken forward under the HMWP Partial Update, as well as any other relevant plans and projects.

3.14 The method selected for assessing the HMWP Partial Update is a judgement which may be limited or refined by the information available. Such limitations are outlined below. Natural England has been consulted in relation to the HRA baseline and methodology and the outcome of the screening process and are engaged throughout the stages of HRA with regard to appropriate method, scale and level of detail of the assessment. Any detailed minerals and waste development proposals that are brought forward as a result of the Plan, which may have a likely significant effect on International sites will, in addition, be subject to detailed project level HRA to ensure that their effects on those sites are fully assessed.

Limitations and Assumptions

3.15 There will usually be limitations on the prediction of effects, and the degree of risk that can then be forecast, for example, those relating to:

- the level of detail and stage of the Plan;
- the information available at the time about the qualifying features, including habitat composition, distribution or extent, or species' population, abundance, distribution, mobility or behaviour etc;

[15] UK v Commission, Case C-6/04 (Para 49)
[16] Feeney v Oxford City Council and SSCLG [2011] EWHC 2699 Admin (Para.92)

- the age, type or format of data;
- availability or accessibility of data;
- timescales and seasonal restrictions;
- scientific know-how or techniques;
- scientific understanding of natural processes and ecosystems;
- ecological understanding of likely responses;
- experience and prior knowledge about the particular effects;
- outcomes of trials or experiments; and
- the availability of information from monitoring the effects of past plans and projects.

3.16 These limitations may need to be overcome by additional surveys, investigations or research. It follows that there are likely to be differing levels of certainty or confidence in the predictions as to both the characteristics of the effects and the risk of them occurring. If assumptions, which strongly influence the outcome of the assessment, need to be made about the Plan or the qualifying features, or the effects of risks, they should be stated in the assessment record. In cases where effects on a sites' integrity are uncertain, the assessment should consider how adopting different assumptions might vary the outcome of the assessment. This will test the sensitivity of the assessment outcomes to the use of different assumptions.

Precautionary Principle

3.17 HRA is underpinned by the precautionary principle, which is embedded in the Habitats Regulations and supported in case law, whereby the competent authority acts to avoid potential harm in the face of scientific uncertainty. If it is not possible to rule out a risk of significant effect on an International site on the basis of available evidence, then it should be assumed a risk may exist and needs to be addressed. The precautionary approach should be exercised at all stages of the HRA process, including Appropriate Assessment.

3.18 Notwithstanding this, it is recognised that plans may have effects on International sites that are not sufficiently understood for any reasonable scientific judgement to be made. In some cases, a satisfactory assessment of effects may not be possible in light of the available information, technical know-how and ecological assessment techniques, and provided that it can be demonstrated that elements of the Plan can be implemented in one or more ways without impacts on the integrity of International sites, decisions with respect to the impacts can be devolved to a lower tier of decision making[17]. Where relevant and appropriate, any such effects on the International sites will be acknowledged throughout this assessment.

3.19 There is inherent uncertainty associated with Habitats Regulations Assessment and decisions can be made only on currently available and relevant information. This

[17] 15 Therivel, R,. & Levett, R. Principles for good practice Appropriate Assessment of plans - https://levetttherivel.wordpress.com/

concept is reinforced in the 7th September 2004 'Waddenzee' ruling[18]: '*However, 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*'.

3.20 This is because the effects of the Plan will not normally be as clear as those of a specific planning application. Where relevant and appropriate, aspects of potential uncertainty (and how these have been addressed) will be acknowledged throughout this assessment.

3.21 To determine if the proposals are likely to have any significant effects on International sites the following issues are considered:

- Could the proposals affect the qualifying interest of the International site (is the site sensitive to the effect)?
- The probability of the effect happening.
- The likely consequences for the site's Network/Conservation Objectives (as defined by Natural England) if the effect occurred.
- The magnitude, duration and reversibility of the effect.

Timing of HRA and integration with plan preparation

3.22 The HRA process is being undertaken in parallel with the partial update of the HMWP in order that the HRA can inform the development of the Plan. Regulation 105(1) provides that, where necessary, an Appropriate Assessment must be made 'before the plan is given effect' and Regulation 63(1) requires a competent authority to make an Appropriate Assessment before deciding to undertake or agree to a Plan that is likely to have a significant effect on an International site. Natural England and other relevant stakeholders are being consulted throughout the HRA process.

3.23 The HRA process is also being undertaken concurrently with the Sustainability Appraisal (SA), which incorporates Strategic Environment Assessment (SEA), of the HMWP Partial Update. Although this is a different process, the findings of the HRA can inform the SA/SEA process and its conclusions in relation to biodiversity. Natural England and the Environment Agency are key consultees for the SA process and will, therefore, be engaged as the policy options are generated and assessed under SA, and then assessed as part of the HRA process.

[18] EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107)

Amending the plan / option

3.24 As with the earlier screening stage, the Appropriate Assessment can be undertaken in an iterative way alongside the preparation and finalisation of the Plan. Potentially harmful policies and proposals should be removed from the Plan or modified to include measures (see below) to ensure that all development flowing from, or controlled by the Plan would not have an adverse effect on the integrity of an International site.

3.25 An International site's integrity depends on it being able to sustain its 'qualifying features' and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management.

In-combination effects and other plans and projects

3.26 It is a requirement of the Habitats Regulations that the potential for in-combination effects is considered. This may involve effects from proposed site allocations or policies within the Plan acting in combination with one another or effects of proposed site allocations or policies acting in-combination with other plans and projects. It is neither practical nor necessary to assess the 'in combination' effects of the Plan within the context of all other plans and projects within the region. Principal plans and projects, including relevant Nationally Significant Infrastructure Projects, have been considered as part of the screening of minerals and waste sites and are listed in Appendix 3.

Measures to ensure no adverse effects

3.27 The following measures may be necessary in order for the HRA to conclude no adverse effects on the integrity of an International site:

- Deletion of the policy or proposal that may cause the adverse effect;
- Reduction in the scale of the potentially damaging provision;
- Relocation or alteration of the spatial distribution of the potentially damaging provision;
- Introduction of counter-acting measures, especially of a strategic nature, including the addition of appropriate caveats to policies.

3.28 Further detail on such measures is provided in Table 3.1.

Table 3.1: Examples of measures that may be utilised in order to ascertain no adverse effects

Measures	Examples that may apply to the Minerals & Waste Plan Partial Update
Deletion of the policy or proposal that may cause the adverse effect.	• Excluding the identified policy from the plan.
Reduction in the scale of the potentially damaging provision.	• Restricting the amount of material to be extracted (depth or volume, surface area). • Caveat policies to prevent changes to hydrological regime.

	• Restrict number or location of lorry movements.
Relocation or alteration of the spatial distribution of the potentially damaging provision.	• Create zones within each Area of Search which restrict the type of development. • Allow for seasonal restrictions to the spatial development of projects i.e. phasing. • Restrict the area that can be developed. • Modify boundaries of allocated sites to avoid or restrict levels of impact.
Introduction of counter-acting measures (avoidance, cancellation and reduction) including addition of appropriate caveats and policies.	• Inclusion of development criteria to support any identified Areas of Search/ strategic sites. • Code of good practice to avoid or reduce intrusion and disturbance. • Biodiversity Opportunity Areas (BOA), Biodiversity Action Plans (BAP), conservation objectives etc, used to devise restoration proposals. • Allow for seasonal restriction to operating hours. • Allow for provision of off-site mitigation provision.

4. Appropriate Assessment and Effects on Site Integrity

Process undertaken to assess screened-in sites and policies

4.1 The Habitats Regulations require that the Appropriate Assessment stage of the HRA should consider the effects of the Plan (either alone or in-combination with other projects or plans) on the integrity of International sites in relation to their conservation/network objectives, structure and function.

4.2 An International site's integrity depends on it being able to sustain its 'qualifying features' (i.e., those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management. Further information on relevant International sites' Conservation Objectives, vulnerabilities and other key information can be found in Appendix 4.

4.3 HRA Screening was initially undertaken for all draft Development Management, Minerals and Waste policies, and all draft minerals and waste site allocations from the first Call for Sites (36 sites in total). A number of proposed minerals and waste site allocations were then removed from the Draft Plan Partial Update just prior to and following the Regulation 18 Draft Plan Consultation and are not, therefore, subject to Appropriate Assessment. The reason for their removal is provided in Tables 7.2 and 7.16 of the Regulation 19 HRA Screening Report[19], respectively.

4.4 One minerals policy in the Proposed Submission Plan was screened-in and subject to Appropriate Assessment, as follows (no development management or waste policies were screened-in):

- Policy 20: Local land-won aggregates.

The associated Regulation 19 screening table for the policy is provided in Appendix 5.

4.5 Four site allocations in the Proposed Submission Plan were screened-in and subject to Appropriate Assessment, as follows:

- Hamble Airfield (EAL02);
- Ashley Manor Farm (NFD01);
- Purple Haze (NFD03); and
- Midgham Farm (NFD04).

The associated Regulation 19 screening tables for the site allocations is provided in Appendix 6.

4.6 When trying to reach conclusions about adverse effects on the integrity of International sites, particular consideration has been given to the possible pathways through which effects may be derived. A risk-based approach involving application

[19] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

of the precautionary principle was adopted in the assessment of adverse effects, such that an assessment of 'no adverse effect on integrity' was only made where it was considered very unlikely, based on current knowledge and information available.

4.7 Boundary maps for each of the sites subject to Appropriate Assessment are provided in Appendix 7. Further detail about the proposed development of each of the sites is provided in Appendix 8.

4.8 An Appropriate Assessment has, therefore, been undertaken of the screened-in policy and site allocations listed in paragraphs 4.4 and 4.5, above. The policy and sites are set out against each potentially affected International site in Table 4.1, as identified in Table 8.2 of the Regulation 19 HRA Screening Report[20].

Table 4.1 International sites and relevant screened-in site allocations and policies

Dorset Heaths SAC
Sites allocations
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies
Policy 20: Local land-won aggregates (inclusion of NFD03 and NFD04)
River Avon SAC
Sites allocations
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies
Policy 20: Local land-won aggregates (inclusion of NFD03 and NFD04)
Solent Maritime SAC
Sites allocations
Hamble Airfield (EAL02)
Ashley Manor Farm (NFD01)
Policies
Policy 20: Local land-won aggregates (inclusion of EAL02 and NFD01)
The New Forest SAC
Sites allocations
Ashley Manor Farm (NFD01)
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies
Policy 20: Local land-won aggregates (inclusion of NFD01, NFD03 and NFD04)
Avon Valley SPA/Ramsar
Sites allocations
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies
Policy 20: Local land-won aggregates (inclusion of NFD03 and NFD04)
Dorset Heathlands SPA/Ramsar
Sites allocations
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies

[20] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

Policy 20: Local land-won aggregates (inclusion of NFD03 and NFD04)
New Forest SPA/Ramsar
Sites allocations
Ashley Manor Farm (NFD01)
Purple Haze (NFD03)
Midgham Farm (NFD04)
Policies
Policy 20: Local land-won aggregates (inclusion of NFD01, NFD03 and NFD04)
Solent and Dorset Coast SPA
Sites allocations
Hamble Airfield (EAL02)
Ashley Manor Farm (NFD01)
Policies
Policy 20: Local land-won aggregates (inclusion of EAL02 and NFD01)
Solent and Southampton Water SPA/Ramsar
Sites allocations
Hamble Airfield (EAL02)
Ashley Manor Farm (NFD01)
Policies
Policy 20: Local land-won aggregates (inclusion of EAL02 and NFD01)

4.9 Development Considerations have been prepared for each Proposed Submission site allocation and listed in the Proposed Submission Plan[21]. These Development Considerations have been reproduced in full in Appendix 9 of this report. These have been considered as part of the iterative HRA process and modified and added to, as necessary. Development Considerations relevant to the International sites have been listed in the assessment tables (Tables 4.2 – 4.5).

Assessing Effects on Site Integrity (Impact Pathways)

4.10 The Appropriate Assessment focuses on those impacts that are judged likely to have a significant effect on the integrity of an International site, or where uncertainty regarding this remained, following the Screening stage. A conclusion needs to be reached regarding whether or not the development of a screened-in allocated site or implementation of a screened-in Policy in the Proposed Submission Plan Partial Update would be likely to have a significant effect on the integrity of any International site.

4.11 In order to reach a conclusion, consideration is given to whether the predicted impacts of the allocated site proposals / policies (either alone or in combination) have the potential to:

- Delay the achievement of conservation objectives for the NSN site(s).
- Interrupt progress towards the achievement of conservation objectives for the NSN site(s).
- Disrupt factors that help to maintain the favourable conditions of the International site(s).

[21] Hampshire Minerals and Waste Plan: Partial Update – Proposed Submission Plan (October 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the International site(s).

In determining likely significant effect, both distance and impact pathway factors have been used.

4.12 The conservation objectives of each International site are generally to maintain the qualifying features in favourable condition (further information on Conservation Objectives can be found in Appendix 4 and the HRA Revised Baseline and Methodology Report[22]).

Data sources used

4.13 For this Appropriate Assessment, significant GIS data relating to nature conservation interests, hydrology, flooding, geology, topography, transport and recreation was collated to support the assessment. Distance / proximity was calculated using ArcGIS.

4.14 In addition, a number of other sources of information contributed to the assessment, including the Strategic Transport Assessment[23]; HRA Revised Baseline and Methodology Report[24]; HRA Regulation 19 Screening Report[25]; Sustainability Appraisal Updated Baseline Report[26]; UK Air Pollution Information System (APIS)[27]; Natural England Designated Sites View web pages[28]; JNCC UK Protected Areas web pages[29]; and Local Plans of relevant local planning authorities. More information about data sources used to inform judgements about each type of effect is provided below.

Assumptions used during Appropriate Assessment

Hydrological Impacts

[22] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Revised Baseline and Methodology Report (September 2021) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[23] Hampshire Minerals and Waste Plan: Partial Update – Strategic Transport Assessment (September 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[24] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Revised Baseline and Methodology Report (September 2021) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[25] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) (October 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[26] Hampshire Minerals and Waste Plan: Partial Update – SA/SEA Updated Baseline Report (May 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[27] http://www.apis.ac.uk/

[28] Natural England Designated Sites View - https://designatedsites.naturalengland.org.uk/

[29] JNCC UK Protected Areas - https://jncc.gov.uk/our-work/uk-protected-areas/

4.15 Hydrological impacts include changes to water quality and quantity, which can lead to impacts on terrestrial and aquatic habitats and associated species. Development can affect local (and wider) hydrology by changing the volume, flow rate or route of surface run-off as well as local surface and sub-surface drainage networks. This can lead to changes in vegetation communities within various habitats and adversely affect qualifying habitats and species. This may include changes in run-off resulting from new areas of hardstanding, dewatering (e.g. sand and gravel extraction), and drainage design.

4.16 Minerals and waste site construction and operation, together with associated road and rail schemes can result in the introduction of substances into the hydrological network such as leachate, nutrients, oils, fuels, road salts and other particulates which can contaminate habitats within International sites and have an adverse effect on species associated with these habitats.

4.17 The extent to which development could have adverse effects on the integrity of International sites will be dependent on the footprint of the proposals, distance from the International sites, the nature of potential impact pathways and whether there is a risk of any changes to surface water and ground water quality and quantity.

4.18 For minerals and waste developments, Defra guidelines[30] recommend a distance of 3km for any discharges upstream of an International site when released into a watercourse as representing the worst case scenario for any conceivable output of any facility developed within the Plan.

4.19 Sand and gravel extraction will be the main form of minerals working within the Plan area. 2km is a realistic maximum distance to use with regard to potential impacts of changes in groundwater flows or dewatering from mineral workings on habitats in their vicinity, following good practice guidelines[31].

Nutrient neutrality

4.20 Nutrient pollution is a particular problem for aquatic habitats. Increased levels of nutrients (especially nitrogen and phosphorus) can speed up the growth of certain plants, disrupting natural processes and impacting wildlife. This process damages water dependent sites, harming plants and wildlife, and affecting the oxygen carrying capacity of the water.

4.21 Following the European Court of Justice (CJEU) ruling in 2018 on Cooperation Mobilisation for the Environment v Vereniging Leefmilieu (*Dutch Nitrogen*), the Government has written to local authorities, including the Hampshire Authorities, following interim advice received from Natural England, advising that projects and

[30] Defra (2003) Applying the requirements of the Habitats Regulations and the Wildlife and Countryside Act to applications for PPC Permits - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611094/general-guidance-manual-a2-and-b-installations-part2.pdf

[31] Thompson, A. et al (1998) Reducing the effects of surface mineral workings on the water environment: a guide to good practice.

plans affecting protected sites in unfavourable condition due to nutrient pollution are required to provide mitigation, in order to meet the requirements of the Habitats Regulations.

4.22 For the Plan area, Natural England advise that the focus of nutrient neutrality consideration is on development within the catchments that flow into the Solent, which includes:

- Hampshire Avon Catchment;
- River Test Catchment;
- River Itchen Catchment (nitrates only);
- New Forest Catchment;
- East Hampshire Catchment; and
- Arun and Western Streams Catchment.

4.23 Relevant vulnerable International sites, therefore, include:

- River Avon SAC;
- River Itchen SAC;
- Solent & Isle of Wight Lagoons SAC;
- Solent Maritime SAC;
- South Wight Maritime SAC;
- The New Forest SAC;
- Avon Valley SPA/Ramsar;
- Chichester and Langstone Harbours SPA/Ramsar;
- New Forest SPA/Ramsar;
- Portsmouth Harbour SPA/Ramsar;
- Solent and Dorset Coast SPA; and
- Solent & Southampton Water SPA/Ramsar.

4.24 For minerals and waste plans the principle focus of nutrient neutrality is on waste water treatment facility development and the potential for nutrient discharge from waste management and minerals extraction activities. It should be noted that there are no waste water treatment proposals within this HMWP Partial Update.

4.25 Where proposed minerals and waste sites are screened in for Appropriate Assessment on the basis of likely significant effect from nutrient discharge, sufficient mitigation solutions will need to be proposed to demonstrate that the proposal would be nutrient neutral and, therefore, have no in-combination effect with other plans and projects.

4.26 The Environment Act 2021[32] proposes environmental targets include legally binding long-term targets to directly address nutrient pollution in the water environment from agriculture and wastewater:

- reduce nitrogen, phosphorus and sediment contribution from agriculture in the water environment by at least 40% by 2037 (against a 2018 baseline).

[32] Environment Act 2021 - https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

- reduce phosphorus loadings from treated wastewater by 80% by 2037 (against a 2020 baseline).

Air Pollution

4.27 There has been significant recent research and guidance on the effects of air pollutants, particularly NO_x on protected habitats.

4.28 Protected habitats can be particularly vulnerable to the effects of air pollutants such as nitrogen oxides (NO_x), ammonia (NH_3) and sulphur dioxide (SO_2). Adverse effects can occur when pollutants settle to ground (deposition) causing soil nutrient enrichment (eutrophication) or acidification (reduction in soil pH). These effects can reduce the ability of plant species to compete with other plant species and can hinder the inherent capacity for self-repair and self-renewal under natural conditions. Nitrogen can act as a fertiliser for plant species which thrive on high nitrogen levels, enabling such species to dominate communities, influencing vegetation composition and damaging the botanical interest features for which protected sites are notified, or which form the basis of notable habitats.

4.29 Increased road traffic results in associated emissions including nutrient nitrogen deposition, acid deposition, airborne oxides of nitrogen (NO_x) and airborne ammonia (NH_3).

4.30 The presence of airborne pollutants is often described in terms of critical levels and critical loads. Levels refer to the concentration of atmospheric pollutants above which harmful effects are considered likely. Load refers to the deposition rate of nutrients below which effects are considered unlikely to occur.

4.31 Any effects will be dependent not only on the proximity to the source of pollution, but also on the characteristics of the habitats present and the overall background levels and loads, and whether the existing levels and loads are in exceedance of identified critical levels and critical loads. The UK Air Pollution Information System (APIS)[33] provides critical loads for nitrogen deposition and critical levels for NO_x concentration for designated habitats and species within each NSN site, together with current background levels of nitrogen deposition and NO_x. Critical loads are a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge.

4.32 Natural England's mapping and site analysis report[34] provides a national overview of exposure to NO_x from road traffic (for SSSIs and SACs) and the potential risk of impacts to SACs posed by air pollution from road traffic. This report builds on a

[33] http://www.apis.ac.uk/

[34] Natural England (2016) Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200).

literature review[35] commissioned by Natural England looking at the ecological effects of air pollution from road transport. Targeted mitigation measures may be possible where minerals and waste road traffic poses an immediate threat to protected sites (mostly limited to sites in very close proximity to roads). Potential measures include the use of buffer zones or tree belts and traffic management measures such as diverting related traffic.

4.33 Natural England's Atmospheric Nitrogen Theme Plan[36] develops a strategic approach to the issue of atmospheric nitrogen impacts on NSN sites. This and associated 'Site Nitrogen Action Plans' (SNAPs) may help developers to ascertain what, how, where and when to target their efforts on sites of conservation importance and their environs.

4.34 Distance is a key factor in identifying potential significant effects on International sites. In accordance with the Design Manual for Roads and Bridges (DMRB) guidance[37], it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Indeed, according to the Department of Transport's Analysis Guidance, '*Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*'[38]. Natural England's literature review confirmed that the literature provided evidence that vegetation was being impacted by exposure to motor vehicle pollution at distances of up to 200m from roads, with the greatest impacts likely to occur within the first 50-100m.

4.35 According to a position statement published by the Institute for Air Quality Management (IAQM), 1% of critical level/load threshold '*was originally set at a level that was considered to be so low as to be unequivocally in the 'inconsequential' category. In other words, this can be reasonably taken to mean that an impact of this magnitude will have an insignificant effect. This would be determined as part of the HRA screening stage. Such a conclusion would eliminate the requirement to proceed to 'appropriate assessment.*'[39]

4.36 More recent IAQM guidance states that '*it is important to remember that a change of more than 1% does not necessarily indicate that a significant effect (or adverse effect on integrity) will occur; it simply means that the change in concentration or deposition rate cannot in itself be described as numerically inconsequential or imperceptible and therefore requires further consideration*.'[40] However, '*the*

[35] Natural England (2016) The ecological effects of air pollution from road transport: an updated review (NECR199).
[36] Natural England (2015) Atmospheric nitrogen theme plan: Developing a strategic approach for England's Natural 2000 sites - file:///C:/Users/envngpk/Downloads/Atmospheric%20nitrogen%20theme%20plan%20-%20final%20200515%20(1).pdf
[37] Highways England (2019) Design Manual for Roads and Bridges – LA 105 Air Quality.
[38] Transport Analysis Guidance Unit A3 – Environmental Impact Appraisal (Department for Transport, 2015) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/638648/TAG_unit_a3_envir_imp_app_dec_15.pdf
[39] Institute for Air Quality Management, "Position Statement: Effect of Air Quality Impacts on Sensitive Habitats," January 2016
[40] A guide to the assessment of air quality impacts on designated nature conservation sites, IAQM 2019 - https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2019.pdf

implication of the Wealden Judgement[41], means that it is no longer appropriate to scope out the need for a detailed assessment of an individual project or plan using, for example, the 1000 annual average daily traffic (AADT) increase in the Design Manual For Roads and Bridges (DMRB) or the 1% of the critical level or load used by Defra/Environment Agency without first considering the in-combination impact with other projects and plans. This position has been adopted by Natural England in its internal guidance for competent authorities assessing road traffic emissions under the Habitats Directive.'[42]

4.37 As outlined by Natural England[43] 80% of Special Areas of Conservation in England are estimated to receive amounts of atmospheric nitrogen above their critical loads. The pressure of nutrient loading can lead to loss of species and irreversible change.

4.38 Defra guidelines[44] consider that a distance of 2km represents the worst-case scenario for any conceivable output from incineration facilities when releasing emissions into the air.

Habitat Loss

4.39 This refers to the physical or functional loss of habitat either within an International site or habitat outside a site but supporting its qualifying features (e.g., habitat supporting key bird species). Functional loss can occur without direct physical impacts (e.g., through proximity of built development or through severance of connecting habitat) but the effect is analogous.

4.40 Habitat loss can also occur within designated sites and result in direct impacts to qualifying habitat features. For example, works may directly remove habitat or lead to changes in human activity which may result in habitat loss or damage elsewhere e.g., through trampling or incidental damage from vehicles.

4.41 For development schemes to result in habitat loss within International sites from development schemes is unusual and therefore large-scale impacts to site integrity are rare. Where minor (in extent or duration) losses are likely as a result of a project then that loss will need to be viewed within the context of the integrity of the whole site. There may be circumstances where a seemingly trivial loss may have more profound impacts e.g., the loss of an important roost/nesting site or a particularly notable vegetation community, or where small impacts to a larger dynamic system

[41] Judgment in Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority) [2017] EWHC 351 (Admin).
[42] Natural England, 2018, Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations.
[43] Natural England (2015) Atmospheric nitrogen theme plan: Developing a strategic approach for England's Natural 2000 sites - file:///C:/Users/envngpk/Downloads/Atmospheric%20nitrogen%20theme%20plan%20-%20final%20200515%20(1).pdf
[44] Defra (2003) Applying the requirements of the Habitats Regulations and the Wildlife and Countryside Act to applications for PPC Permits - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611094/general-guidance-manual-a2-and-b-installations-part2.pdf

may have unintended consequences. Conversely, a small loss may not necessarily result in impacts to site integrity.

Dust

4.42 Emissions of dust to air from minerals and waste sites can occur during the preparation of the land, extraction, materials processing, handling and transportation of materials, and can vary day to day. Dust arising from mineral extraction or waste management/landfilling and deposited on ground or water has the potential to smother plant species or contaminate the ground or receiving waters depending on the volume and/or frequency of dust deposition and any contaminants contained within it.

4.43 According to guidance on the assessment of mineral dust impacts for planning prepared by the IAQM[45], adverse dust impacts from sand and gravel sites are uncommon beyond 250m and from hard rock quarries, beyond 400m, measured from the nearest dust generating activities. If there are no relevant receptors within 1km of the operations, it is considered that irrespective of the nature, size and operation of the site, the risk of an impact is likely to be '*negligible*' and any resulting effects are likely to be '*not significant*'. For the purposes of this assessment, applying the precautionary principle, those proposed sites that are located beyond 1km from an International site will be considered unlikely to contribute to significant dust impacts.

Physical Infrastructure

4.44 Development of mineral and waste facilities may lead to enhancement, widening or construction of existing and new infrastructure such as roads. This may lead to direct land take, habitat fragmentation and increases in traffic and associated pollutants. Across the Plan area, road linkages are considered sufficient, such that it is unlikely that major road developments will be required to service new minerals and waste facilities. Any road development and improvement will be in most part localised.

Invasive Species

4.45 The spread of invasive non-native species (INNS) is an issue particularly associated with minerals extraction but could also result from compost waste sites where garden waste is being processed. Wetland sites are particularly vulnerable to the spread of invasive aquatic and terrestrial plants, such as Japanese knotweed. INNS may affect the habitat structure of International sites and thus the species for which the Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites are designated. It is considered that all the International sites included in this assessment are at risk of being significantly adversely affected from the spread of INNS. The strict management and control of INNS on minerals extraction and waste management sites is crucial to minimise the risk of spread.

[45] IAQM (2016) Guidance on the Assessment of Mineral Dust Impacts for Planning. Institute of Air Quality Management, London.

Noise and Visual Disturbance

4.46 Noise and visual impacts are most likely to take place within a short distance of International sites. The three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.

4.47 Noise generated during construction activities can result in changes in the presence and/or distribution of key qualifying features such as birds through e.g. degradation or fragmentation of habitat, acoustic interference (masking bird song or causing frequency or volume shifts in bird song), with effects including permanent or temporary displacement of birds from a site or area or a deterioration in physical condition or reproductive fitness. Noise can arise from construction of, or processing on, a site or from traffic movements to and from a site.

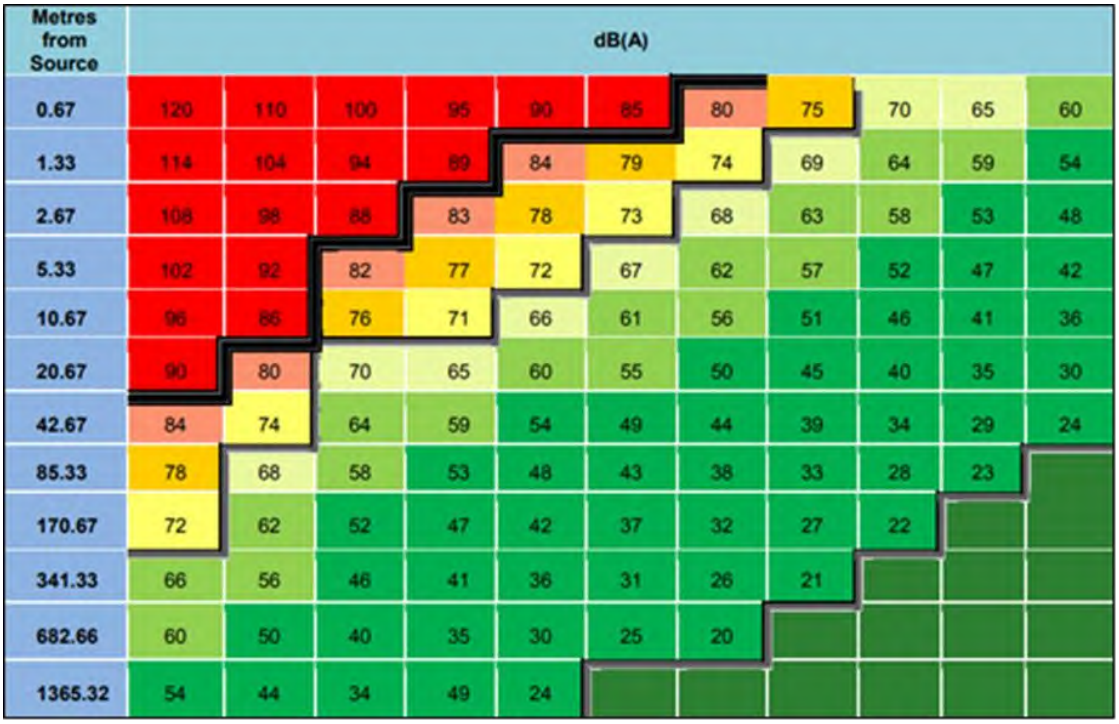
4.48 Common construction activities likely to result in novel disturbance events include excessive vehicle revving, reversing alarms, certain power tools and loud, percussive noises (e.g. via concrete breaking, piling). Most research on the effects of construction noise has focussed on birds and particularly on coastal or freshwater bird species (e.g. Elliot *et al*. (2014)[46]; Wright *et al*. (2010)[47]) and has shown that noise levels approaching 70 decibels (dB) at the receptor location result in the most profound responses from bird species (i.e. site abandonment), whereas general background construction noise below c.55dB is unlikely to result in disturbance. It appears that irregular yet frequent loud noise exceeding 70dB is the most likely to result in effects, and that impacts can be observed for distances up to 300m in some species. The effects of construction noise on woodland, heathland or grassland bird species are little known but it can be expected that they will be broadly similar.

4.49 The effects of operational road noise on bird species have been relatively well-studied and the literature appears to demonstrate that there is a negative correlation between road noise and the number, density and diversity of bird species - bird numbers, density and diversity increases with distance from a road. The effects of road noise will vary according to e.g., road surface, traffic volume, traffic speed, vehicle type, habitat and the bird species present.

4.50 There is published data[48] on the likely decay rate of source noise over certain distances to receptor, as shown in Figure 4.1. These data show that receptor noise levels at or below c.70dB (at the bird) are not likely to be significant.

[46] Elliot, M., Cutts, N.D., and Trono, A. (2014) A typology of marine and estuarine hazards and risks as vectors of change: A review for vulnerable coasts and their management. *Ocean and Coastal Management* 93: 88-99.
[47] Wright, M.D., Goodman, P., and Cameron, T.C. (2010) Exploring behavioural responses of shorebirds to impulsive noise. *Wildfowl* 60: 150-167.
[48] Waterbird Disturbance Mitigation Toolkit, 2018 – https://www.tide-toolbox.eu/tidetools/waterbird_disturbance_mitigation_toolkit/

Figure 4.1: Estimated noise decay rates and likely effect on waterbirds. Red: High impact. Orange: Moderate impact. Green: Acceptable impact



Metres from Source	dB(A)										
0.67	120	110	100	95	90	85	80	75	70	65	60
1.33	114	104	94	89	84	79	74	69	64	59	54
2.67	108	98	88	83	78	73	68	63	58	53	48
5.33	102	92	82	77	72	67	62	57	52	47	42
10.67	96	86	76	71	66	61	56	51	46	41	36
20.67	90	80	70	65	60	55	50	45	40	35	30
42.67	84	74	64	59	54	49	44	39	34	29	24
85.33	78	68	58	53	48	43	38	33	28	23	
170.67	72	62	52	47	42	37	32	27	22		
341.33	66	56	46	41	36	31	26	21			
682.66	60	50	40	35	30	25	20				
1365.32	54	44	34	49	24						

4.51 In terms of visual disturbance, novel incidents such as increased human presence, vehicles or plant could result in the displacement of species from a site with the same potential effects as for construction noise.

Lighting

4.52 Increases in artificial lighting at night (e.g. from flood lighting and security lights) has the potential for adverse effects on species associated with the NSN sites, in particular nocturnal species including bats and nightjar. Impacts can arise from direct disturbance of foraging and roosting habitat through introduction of new artificial lighting, which can lead to abandonment of roost sites or foraging areas, or a delay in emergence, resulting in reduced time for foraging. Lighting can also cause fragmentation of habitat as it creates barriers which bats may not cross. Artificial lighting, and particularly the UV component, can draw insect prey towards the new lighting, and away from foraging habitat, leading to a reduction in prey availability.

4.53 International sites that are particularly vulnerable to artificial lighting impacts within the Plan area include:

- Mottisfont Bats SAC; and
- Thames Basin Heaths SPA (Nightjar).

Increased Recreational Pressure

4.54 Minerals and waste development may lead to recreation related effects depending on the proximity of such sites to Public Rights of Way (PRoW) and other recreation-related assets. For example, where there are one or more PRoWs or recreation-related assets, running through or adjacent to a proposed minerals or waste site, recreational users may be displaced, which could lead to increased visitor pressure on nearby International sites, with consequent short to medium term adverse effects.

4.55 Recreational impacts include disturbance through noise and visual disturbance from increased presence of walkers and cyclists and by flushing of birds by dogs, with potential impacts on qualifying species within SPA and Ramsar sites. Other recreational impacts include habitat damage through recreational trampling and erosion. Recreational disturbance also increases the risk of fire (resulting in direct mortality, removal of breeding habitat and long-term changes to vegetation structure) and increased contamination (including litter; nutrient enrichment through dog fouling; pollution from dogs entering water courses; and spread of alien species and pathogens). This has potential to adversely affect SAC's SPA's and Ramsar sites through damage to habitats. With regards to the New Forest sites, disturbance of grazing animals which help maintain the habitats present could also result in habitat degradation.

In-combination effects

4.56 If there is more than one existing minerals or waste site as well as the newly allocated site, or an area allocated for housing or employment land in a local plan within proximity of an International site, it is considered likely that an in-combination effect could occur with respect to physical loss/damage to habitat, non-physical disturbance, changes to hydrology, air pollution, dust and/or soil contamination.

Assessment of effects of policies and site allocations alone

4.57 The potential effects of screened-in proposed site allocations on the integrity of International sites, together with associated mitigation/measures, are set out in Tables 4.2 to 4.5, below. The potential effects of the screened-in policy are set out in paragraph 4.58 onwards.

Table 4.2: Hamble Airfield (EAL02)

Extraction of 1.5 million tonnes of sharp sand and gravel from 2024+. Restoration to a combination of grazing, nature conservation, open space, public access and woodland.

International sites potentially affected and qualifying features	Potential impacts identified at Reg 19 Screening stage	Could the development have an adverse effect on any International site integrity either alone or in combination with other plans or projects?	Mitigation / measures	If mitigation / measures are implemented, can adverse effects on the International site from the Plan Partial Update be ruled out?
Solent Maritime SAC • 1130 Estuaries • 1320 Spartina swards (*Spartinion maritimae*) • 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • 1110 Sandbanks which are slightly covered by sea water all the time • 1140 Mudflats and sandflats not covered by seawater at low tide • 1150 Coastal lagoons • 1210 Annual vegetation of drift lines • 1220 Perennial vegetation of stony banks • 1310 *Salicornia* and other annuals colonizing mud and sand	**Noise; dust; vibration** Noise and vibration effects can be caused by activities associated with the operation of machinery and / or extra traffic movements to and from the facility. Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites.	The qualifying features could be vulnerable to the effects of noise, dust and vibration at this distance.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse noise, dust, vibration'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Solent and Southampton Water SPA and Ramsar, Solent and Dorset Coast SPA and Solent Maritime SAC*. • A Hydrological assessment is required to consider whether proposed works will affect adjacent National Site Network, Ramsars and SSSIs, especially with regards to any changes to freshwater flows into the Hythe to Calshot Marshes SSSI and Solent & Southampton Water SPA/SAC/Ramsar and the issue of nutrient enrichment*.	**YES**

• 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* (""white dunes"")" • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* *Former Hamble Airfield (EAL02) is 0.29 km from the Solent Maritime SAC.*			• The impact on all roosting, foraging and breeding areas used by qualifying bird species of nearby SPAs and Ramsar, and on their functional linkage*. Mitigation and possible compensation likely to be required. • Protection of the Lee on Solent to Itchen Valley Estuary Site of Special Scientific Interest*. • Dust, noise and lighting management plan and monitoring is required*. • The impact on Badnam Copse and West Wood Site of Importance for Nature Conservation. • Early habitats creation through progressive restoration and/or edge buffer zones is required and a range of suitable habitats as the site provides a network opportunity. This should include provision of woodland (and wet woodland) habitat linkages. • Protection of mature trees around the site boundary. • Large areas for mitigation, either as buffer around site, a single large area, or several smaller areas should be provided. This will need to tie in with the long-term aims for the site (housing development) and will need liaison with Local Planning Authority. • Soil testing, handling and management is required including for the potential for associated impact on groundwater and to determine soil quality. If PFAS are found to be present at any location on the site, then affected material would need careful management/remediation. • Protection and enhancement of adjacent public rights of way (Footpath Hamble-le-Rice 103/1) and connectivity to the wider network. • Maintain and manage existing informal recreational use of the site and provision of enhanced public recreational after-use. • Phasing programme and working to protect local businesses and the amenity and well-being of local residents. • Hydrological/Hydrogeological Assessment is required to ensure protection of the water quality and recharge of the groundwater and surface water*. • A Transport Assessment or Statement is required. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Protection of existing sewer pipelines. • The testing of the soil for contaminates and the potential impact on groundwater requires assessment. If contaminates are found to be present at any location on the site, then affected material would need careful management/remediation. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* **Environment Agency permitting** requirements will provide strict control over site operations and emissions. **Dust:**	

			• **Environment Agency permitting** requirements will provide strict control over site operations and emissions. • Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. • Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[49] **Noise:** Where noise has the potential to effect the integrity of an International site, a noise assessment can be required as part of a planning proposal and **planning conditions** would be imposed to assess and monitor levels, and provide necessary mitigation. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Water pollution Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	The qualifying features of the SAC are vulnerable to the effects of changes in water quality from a range of pollution sources at this proximity. There is uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere,	**YES**

[49] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

			land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna.	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is only 0.29 km from the SAC, mineral extraction operations could have a significant negative effect on the International site. The qualifying features of the SAC are vulnerable to the effects of changes in local hydrology. There is uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above)	**YES**

	Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.		Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
Solent and Dorset Coast SPA • A191 *Sterna sandvicensis*; Sandwich tern (Breeding) • A193 *Sterna hirundo*; Common tern (Breeding) • A195 *Sternula albifrons*; Little tern (Breeding) *Former Hamble Airfield (EAL02) is 0.30 km from the Solent and Dorset Coast SPA.*	**Removal of supporting habitat** New/extended minerals and waste sites can lead to loss of, or impact on, habitat that provides functional support to International sites, such as grassland that provides roosting and foraging sites for qualifying bird species.	The main issue is the proximity of the proposed site to the SPA and the potential for the site to provide supporting SPA habitat for qualifying feature bird species, particularly breeding birds. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Solent and Southampton Water SPA and Ramsar, Solent and Dorset Coast SPA and Solent Maritime SAC*.	**YES**

			• A Hydrological assessment is required to consider whether proposed works will affect adjacent National Site Network, Ramsars and SSSIs, especially with regards to any changes to freshwater flows into the Hythe to Calshot Marshes SSSI and Solent & Southampton Water SPA/SAC/Ramsar and the issue of nutrient enrichment*. • The impact on all roosting, foraging and breeding areas used by qualifying bird species of nearby SPAs and Ramsar, and on their functional linkage*. Mitigation and possible compensation likely to be required. • Protection of the Lee on Solent to Itchen Valley Estuary Site of Special Scientific Interest*. • Dust, noise and lighting management plan and monitoring is required*. • The impact on Badnam Copse and West Wood Site of Importance for Nature Conservation. • Early habitats creation through progressive restoration and/or edge buffer zones is required and a range of suitable habitats as the site provides a network opportunity. This should include provision of woodland (and wet woodland) habitat linkages. • Protection of mature trees around the site boundary. • Large areas for mitigation, either as buffer around site, a single large area, or several smaller areas should be provided. This will need to tie in with the long-term aims for the site (housing development) and will need liaison with Local Planning Authority. • Soil testing, handling and management is required including for the potential for associated impact on groundwater and to determine soil quality. If PFAS are found to be present at any location on the site, then affected material would need careful management/remediation. • Protection and enhancement of adjacent public rights of way (Footpath Hamble-le-Rice 103/1) and connectivity to the wider network. • Maintain and manage existing informal recreational use of the site and provision of enhanced public recreational after-use. • Phasing programme and working to protect local businesses and the amenity and well-being of local residents. • Hydrological/Hydrogeological Assessment is required to ensure protection of the water quality and recharge of the groundwater and surface water*. • A Transport Assessment or Statement is required. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Protection of existing sewer pipelines. • The testing of the soil for contaminates and the potential impact on groundwater requires assessment. If contaminates are found to be present at any location on the site, then affected material would need careful management/remediation. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')*	

			Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Noise; dust; lighting; vibration Noise and vibration effects can be caused by activities associated with the operation of machinery and / or extra traffic movements to and from the facility. Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites. Light pollution can be caused by artificial lighting on site as well as vehicle traffic movements to and from and within the site.	The qualifying features could be vulnerable to the effects of noise, dust, light pollution and vibration at this proximity.	**Policy 3: Protection of habitats and species** *(see text above)* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse noise, dust, lighting, vibration…' *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Dust:** • **Environment Agency permitting** requirements will provide strict control over site operations and emissions. • Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. • Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[50] **Noise:** • Where noise has the potential to affect the integrity of an International site, a noise assessment can be required as part of a planning proposal and **planning conditions** would be imposed to assess and monitor levels, and provide necessary mitigation. **Lighting:** • The potential for lighting impacts on International sites can be avoided/mitigated through the imposition of **planning conditions** to limit hours of operation, specify types and extent of lighting used and use of screening, to reduce light pollution. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Water pollution	The qualifying features of the SPA are vulnerable to the effects of changes in water quality from a	**Policy 3: Protection of habitats and species** (see text above)	**YES**

[50] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

	Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA.	**Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above)	

			Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is only 0.30 km from the SPA, mineral extraction operations could have a significant negative effect on the International site. The qualifying features of the SPA are vulnerable to the effects of changes in local hydrology. There is uncertainty in relation to hydrological connectivity between the allocated site and the SPA.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Air quality / Traffic Air pollution can result from emissions from on-site activities on minerals and waste sites and associated vehicle movements.	Based on the potential for the proposed site to provide supporting habitat for SPA qualifying bird species, the interest features are vulnerable to this hazard.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'have a significant adverse impact on air quality'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above)	**YES**

			Environment Agency permitting requirements will provide strict control over site operations and emissions. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SPA.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
Solent and Southampton Water SPA/Ramsar • A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose • A052(NB) *Anas crecca*: Eurasian teal • A156(NB) *Limosa limosa islandica*: Black-tailed godwit • Waterbird assemblage • A176(B) *Larus melanocephalus*: Mediterranean gull • A191(B) *Sterna sandvicensis*: Sandwich tern	**Removal of supporting habitat** New/extended minerals and waste sites can lead to loss of, or impact on, habitat that provides functional support to International sites, such as grassland that provides roosting and foraging sites for qualifying bird species.	The main issue is the proximity of the proposed site to the SPA/Ramsar and the potential for the site to provide supporting SPA/Ramsar habitat for qualifying feature bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Solent and Southampton Water SPA and Ramsar, Solent and Dorset Coast SPA and Solent Maritime SAC*. • A Hydrological assessment is required to consider whether proposed works will affect adjacent National Site Network, Ramsars and SSSIs, especially with regards to any changes to freshwater flows into the Hythe to Calshot Marshes SSSI and Solent & Southampton Water SPA/SAC/Ramsar and the issue of nutrient enrichment*.	**YES**

• A192(B) *Sterna dougallii*: Roseate tern • A193(B) *Sterna hirundo*: Common tern • A195(B) *Sterna albifrons*: Little tern • A137(NB) *Charadrius hiaticula*: Ringed plover *Former Hamble Airfield (EAL02) is 0.29 km from the Solent and Dorset Coast SPA.*			• The impact on all roosting, foraging and breeding areas used by qualifying bird species of nearby SPAs and Ramsar, and on their functional linkage*. Mitigation and possible compensation likely to be required. • Protection of the Lee on Solent to Itchen Valley Estuary Site of Special Scientific Interest*. • Dust, noise and lighting management plan and monitoring is required*. • The impact on Badnam Copse and West Wood Site of Importance for Nature Conservation. • Early habitats creation through progressive restoration and/or edge buffer zones is required and a range of suitable habitats as the site provides a network opportunity. This should include provision of woodland (and wet woodland) habitat linkages. • Protection of mature trees around the site boundary. • Large areas for mitigation, either as buffer around site, a single large area, or several smaller areas should be provided. This will need to tie in with the long-term aims for the site (housing development) and will need liaison with Local Planning Authority. • Soil testing, handling and management is required including for the potential for associated impact on groundwater and to determine soil quality. If PFAS are found to be present at any location on the site, then affected material would need careful management/remediation. • Protection and enhancement of adjacent public rights of way (Footpath Hamble-le-Rice 103/1) and connectivity to the wider network. • Maintain and manage existing informal recreational use of the site and provision of enhanced public recreational after-use. • Phasing programme and working to protect local businesses and the amenity and well-being of local residents. • Hydrological/Hydrogeological Assessment is required to ensure protection of the water quality and recharge of the groundwater and surface water*. • A Transport Assessment or Statement is required. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Protection of existing sewer pipelines. • The testing of the soil for contaminates and the potential impact on groundwater requires assessment. If contaminates are found to be present at any location on the site, then affected material would need careful management/remediation. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	

	Noise; dust; lighting; vibration Noise and vibration effects can be caused by activities associated with the operation of machinery and / or extra traffic movements to and from the facility. Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites. Light pollution can be caused by artificial lighting on site as well as vehicle traffic movements to and from and within the site.	The qualifying features could be vulnerable to the effects of noise, dust, light pollution and vibration at this proximity.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse noise, dust, lighting, vibration…'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Dust:** • **Environment Agency permitting** requirements will provide strict control over site operations and emissions. • Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. • Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[51] **Noise:** • Where noise has the potential to affect the integrity of an International site, a noise assessment can be required as part of a planning proposal and **planning conditions** would be imposed to assess and monitor levels, and provide necessary mitigation. **Lighting:** • The potential for lighting impacts on International sites can be avoided/mitigated through the imposition of **planning conditions** to limit hours of operation, specify types and extent of lighting used and use of screening, to reduce light pollution. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Water pollution Water pollution can result in a number of detrimental impacts on flora	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in water quality from a range of pollution sources. There is uncertainty in relation to hydrological connectivity between	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant	**YES**

[51] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

	and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	the allocated site and the SPA/Ramsar.	adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	

	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is only 0.29 km from the SPA/Ramsar, mineral extraction operations could have a significant negative effect on the International site. The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in local hydrology. There is uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Air quality / Traffic Air pollution can result from emissions from on-site activities on minerals and waste sites and associated vehicle movements.	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'have a significant adverse impact on air quality'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Environment Agency permitting** requirements will provide strict control over site operations and emissions.	**YES**

			Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**

Table 4.3: Ashley Manor Farm (NFD01)

Excavation of 1.5 million tonnes of sharp sand and gravel from 2024. Restoration to agriculture with species rich meadow, ditches/ponds and extra hedgerows, utilising approximately 1.5 million tonnes of inert material.

International sites potentially affected and qualifying features	Potential impacts identified at Screening stage	Could the development have an adverse effect on any International site integrity either alone or in combination with other plans or projects?	Mitigation / measures	If mitigation / measures are implemented, can adverse effects on the International site from the Plan Partial Update be ruled out?
Solent and Dorset Coast SPA • A191 *Sterna sandvicensis*; Sandwich tern (Breeding) • A193 *Sterna hirundo*; Common tern (Breeding) • A195 *Sternula albifrons*; Little tern (Breeding) *Ashley Manor Farm (NFD01) is 1.27 km from the Solent and Dorset Coast SPA*	**Water Pollution** Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	There is the potential for a water pollution impact on the SPA from the development of this site, which includes nutrient enrichment. Further consideration needs to be given to the presence of impact pathways between the proposed site and the SPA. The qualifying features of the SPA are vulnerable to the effects of changes in water quality from a range of pollution sources. There is uncertainty in relation to hydrological connectivity between the allocated site and the SPA.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere,	**YES**

			land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Solent and Southampton Water SPA/Ramsar and the Solent and Dorset Coast SPA*. • Ecological and hydrological assessment of all watercourses, ditches and aquatic habitats will be required including an understanding of the hydrological regime and interaction between and importance of any functional connection to offsite habitats and features including the nearby SINCs, SSSIs, SPAs and Ramsar*. • The impact on all roosting, foraging and breeding areas used by qualifying bird species of the nearby SPAs and Ramsar, and on their functional linkage*. • Mitigation should comply with the Solent Waders and Brent Goose Strategy262. • Early establishment of replacement and enhanced hedgerows bounding the site with an ecological receptor for reptiles and other species is required. • Long term management of species-rich meadows, ponds and other habitats is required. • Dust management plan and monitoring is required. • Restoration should be to existing ground levels and should include Crooked Lane replacing the double hedgerow feature along the whole route.	

			Restoration should provide a suitable setting for the Listed Buildings and respect their significance. • The site is Best and Most Versatile (Grade 2 and 3). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • The new planting around the site should be managed to allow it to reach maturity. • Footpaths New Milton 168/721 and 168/720 will require protection and enhancement with greater connectivity to wider network. • A Transport Assessment or Statement is required. • Hydrological/Hydrogeological Assessment and monitoring is required, taking into account the adjacent Historic Landfill, to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Protection of existing sewer pipelines is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
Solent and Southampton Water SPA/Ramsar • A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose • A052(NB) *Anas crecca*: Eurasian teal • A156(NB) *Limosa limosa islandica*: Black-tailed godwit • Waterbird assemblage • A176(B) *Larus melanocephalus*: Mediterranean gull	**Removal of supporting habitat** New/extended minerals and waste sites can lead to loss of, or impact on, habitat that provides functional support to International sites, such as grassland that provides roosting and foraging sites for qualifying bird species.	The proposed development in this location could have potential significant effects on the Solent and Southampton Water Special Protection Area (SPA) in relation to potential SPA bird use of the site at high tide for foraging/roosting. It is recognised that the allocation site lies outside of the current mapped Solent Wader and Brent Goose network, which aims to identify, maintain and protect a network of sites within the Solent area that are regularly used by the designated overwintering birds of the Solent Special Protection Areas (SPAs). However, given the development size, its proximity to the Solent coastline and the mobile nature of the designated species, it is recommended that evidence is	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites.]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Solent and Southampton Water SPA/Ramsar and the Solent and Dorset Coast SPA*. • Ecological and hydrological assessment of all watercourses, ditches and aquatic habitats will be required including an understanding of the hydrological	**YES**

• A191(B) *Sterna sandvicensis*: Sandwich tern • A192(B) *Sterna dougallii*: Roseate tern • A193(B) *Sterna hirundo*: Common tern • A195(B) *Sterna albifrons*: Little tern • A137(NB) *Charadrius hiaticula*: Ringed plover *Rookery Farm (FAR03) is 1.25 km from the Solent and Southampton Water SPA/Ramsar*		gathered at this site to determine any usage by overwintering bird species.	regime and interaction between and importance of any functional connection to offsite habitats and features including the nearby SINCs, SSSIs, SPAs and Ramsar*. • The impact on all roosting, foraging and breeding areas used by qualifying bird species of the nearby SPAs and Ramsar, and on their functional linkage*. • Mitigation should comply with the Solent Waders and Brent Goose Strategy262. • Early establishment of replacement and enhanced hedgerows bounding the site with an ecological receptor for reptiles and other species is required. • Long term management of species-rich meadows, ponds and other habitats is required. • Dust management plan and monitoring is required. • Restoration should be to existing ground levels and should include Crooked Lane replacing the double hedgerow feature along the whole route. Restoration should provide a suitable setting for the Listed Buildings and respect their significance. • The site is Best and Most Versatile (Grade 2 and 3). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • The new planting around the site should be managed to allow it to reach maturity. • Footpaths New Milton 168/721 and 168/720 will require protection and enhancement with greater connectivity to wider network. • A Transport Assessment or Statement is required. • Hydrological/Hydrogeological Assessment and monitoring is required, taking into account the adjacent Historic Landfill, to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Protection of existing sewer pipelines is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	

Table 4.4: Purple Haze (NFD03)

Extraction of 7.25 million tonnes of soft sand and 0.75 million tonnes of sharp sand and gravel (3.4 million tonnes will be available in the Plan period), from 2024+. If the site is not used for non-hazardous landfill, inert fill will be used to restore the site to agreed levels. The site will eventually be used for a combination of deciduous woodland planting, heathland, nature conservation areas, enhanced recreational areas and public open space, linked to the Moors Valley Country Park.

International sites potentially affected and qualifying features	Potential impacts identified at Screening stage	Could the development have an adverse effect on any International site integrity either alone or in combination with other plans or projects?	Mitigation / measures	If mitigation / measures are implemented, can adverse effects on the International site from the Plan Partial Update be ruled out?
Dorset Heaths SAC • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 7150 Depressions on peat substrates of the Rhynchosporion • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae** • 7230 Alkaline fens • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 1044 Southern damselfly	**Removal of supporting habitat (functionally linked land)**	Functional linkages are possible between the proposed allocation site and the Dorset Heaths SAC relating to typical species of the SAC, such as rare reptiles and invertebrates.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, Avon Valley SPA and Ramsar, and the River Avon SAC (and the New Forest SAC/SPA/Ramsar in relation to recreational displacement)*. • The impact on the offsite roosting, foraging, and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological/hydrogeological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment, and including the protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the ecohydrological regimes of Ebblake Bog and Moors River Sites of Special Scientific Interest*. • The impact on Ringwood Forest and Home Wood Site of Importance for Nature Conservation.	**YES**

Coenagrion mercuriale • 1166 Great crested newt *Triturus cristatus* *Purple Haze (NFD03) is 0.21 km from the Dorset Heaths SAC*			• Protection of populations and conservation status of rare and notable species including Smooth Snake, Sand Lizard and Coral Necklace*. • Restoration must include habitats to expand those within the designated sites and relate to the wider landscape and enhance ecological networks*. • Dust, noise and lighting management plan and monitoring is required*. • Protection and enhancement of the amenity and users of the Moors Valley Country Park and other local residents. • Maintenance and management of levels of permissive access and recreational use of the Moors Valley Country Park via the B3081*. • Protection of the nearby cycle paths, bridleways, and footpaths. • Recreational displacement must be carefully managed. Management arrangements to secure short and long term objectives for amenity and biodiversity including heathland, woodland, acid grassland and protected species. • Associated legal agreements must ensure no further irreversible habitat loss or risk to the conservation status of species. • Phasing programme and working to protect the amenity of local residents and permissive access to the site. • Protection of the amenity and well-being of Verwood residents, other residents in the vicinity and local businesses. Exclusion from extraction and buffer of the northern end of the site to protect the amenity of local residents*. • Soil handling, management and monitoring is required. • Importation of material as part of the restoration would need appropriate supporting investigations and risk assessment. • A Transport Assessment or Statement is required. • A Routeing Agreement is required. Routeing to the SRN (A31) will be along the B3081, which is a suitable route for HGV traffic. The SRN is located some 1.4 miles south from the site. A new priority junction will be required to the B3801 to ensure provision for people walking, cycling and horse-riding and the impact on peak flows is managed. • Traffic issues including cumulative impact with other mineral and waste operations and the protection of Verwood from minerals traffic. • Protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the hydrological regime of Ebblake Bog Site of Special Scientific Interest*. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrogeological Assessment is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	

	Dust Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites.	The qualifying features could be vulnerable to the effects of dust at this proximity.	**Policy 3: Protection of habitats and species** *(See text above)* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse dust'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Environment Agency permitting** requirements will provide strict control over site operations and emissions. Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[52] Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Water pollution Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance	The qualifying features of the SAC are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk	**YES**

[52] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

	(potentially increasing flood risk).		Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites,	The qualifying features of the SAC are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'.	**YES**

	changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.		*[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	Based on the proximity of the SAC and the presence of a bridleway to the north west boundary of the site, there is the potential of impact on the SAC from recreational displacement.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
Dorset Heathlands SPA/Ramsar • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark	**Removal of supporting habitat** New/extended minerals and waste sites can lead to loss of, or impact on, habitat that provides functional support to International sites, such as grassland	There is the potential for the site to provide supporting habitat for SPA/Ramsar qualifying bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]*	**YES**

• A302(B) *Sylvia undata*: Dartford warbler • A082(NB) *Circus cyaneus*: Hen harrier • A098(NB) *Falco columbarius*: Merlin *Purple Haze (NFD03) is 0.21 km from the Dorset Heathlands SPA/Ramsar*	that provides roosting and foraging sites for qualifying bird species.		**Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, Avon Valley SPA and Ramsar, and the River Avon SAC (and the New Forest SAC/SPA/Ramsar in relation to recreational displacement)*. • The impact on the offsite roosting, foraging, and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological/hydrogeological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment, and including the protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the ecohydrological regimes of Ebblake Bog and Moors River Sites of Special Scientific Interest*. • The impact on Ringwood Forest and Home Wood Site of Importance for Nature Conservation. • Protection of populations and conservation status of rare and notable species including Smooth Snake, Sand Lizard and Coral Necklace*. • Restoration must include habitats to expand those within the designated sites and relate to the wider landscape and enhance ecological networks*. • Dust, noise and lighting management plan and monitoring is required*. • Protection and enhancement of the amenity and users of the Moors Valley Country Park and other local residents. • Maintenance and management of levels of permissive access and recreational use of the Moors Valley Country Park via the B3081*. • Protection of the nearby cycle paths, bridleways, and footpaths. • Recreational displacement must be carefully managed. Management arrangements to secure short and long term objectives for amenity and biodiversity including heathland, woodland, acid grassland and protected species. • Associated legal agreements must ensure no further irreversible habitat loss or risk to the conservation status of species. • Phasing programme and working to protect the amenity of local residents and permissive access to the site. • Protection of the amenity and well-being of Verwood residents, other residents in the vicinity and local businesses. Exclusion from extraction and buffer of the northern end of the site to protect the amenity of local residents*. • Soil handling, management and monitoring is required. • Importation of material as part of the restoration would need appropriate supporting investigations and risk assessment. • A Transport Assessment or Statement is required.	

			• A Routeing Agreement is required. Routeing to the SRN (A31) will be along the B3081, which is a suitable route for HGV traffic. The SRN is located some 1.4 miles south from the site. A new priority junction will be required to the B3801 to ensure provision for people walking, cycling and horse-riding and the impact on peak flows is managed. • Traffic issues including cumulative impact with other mineral and waste operations and the protection of Verwood from minerals traffic. • Protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the hydrological regime of Ebblake Bog Site of Special Scientific Interest*. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrogeological Assessment is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Noise; dust; lighting; vibration Noise and vibration effects can be caused by activities associated with the operation of machinery and / or extra traffic movements to and from the facility. Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites. Light pollution can be caused by	The qualifying features could be vulnerable to the effects of noise, dust, light pollution and vibration at this proximity.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse noise, dust, lighting, vibration…'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Dust:** • **Environment Agency permitting** requirements will provide strict control over site operations and emissions. • Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. • Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[53]	**YES**

[53] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

	artificial lighting on site as well as vehicle traffic movements to and from and within the site.		**Noise:** • Where noise has the potential to affect the integrity of an International site, a noise assessment can be required as part of a planning proposal and **planning conditions** would be imposed to assess and monitor levels, and provide necessary mitigation. **Lighting:** • The potential for lighting impacts on International sites can be avoided/mitigated through the imposition of **planning conditions** to limit hours of operation, specify types and extent of lighting used and use of screening, to reduce light pollution. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Water pollution Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test	

			to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**

	chemistry, which similarly can affect habitat and species composition.			
	Air quality / Traffic Air pollution can result from emissions from on-site activities on minerals and waste sites and associated vehicle movements.	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'have a significant adverse impact on air quality'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Environment Agency permitting** requirements will provide strict control over site operations and emissions. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	Based on the proximity of the SPA/Ramsar and the presence of a bridleway to the north west boundary of the site, there is the potential of impact on the SPA/Ramsar from recreational displacement.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
River Avon SAC • 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-	**Water pollution** Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication,	The qualifying features of the SAC are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally*	**YES**

Batrachion vegetation • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* • 1095 Sea lamprey *Petromyzon marinus* • 1096 Brook lamprey *Lampetra planeri* • 1106 Atlantic salmon *Salmo salar* • 1163 Bullhead *Cottus gobio* *Purple Haze (NFD03) is 1.26 km from the River Avon SAC*	sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).		*designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]*	

			Development Considerations for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, Avon Valley SPA and Ramsar, and the River Avon SAC (and the New Forest SAC/SPA/Ramsar in relation to recreational displacement)*. • The impact on the offsite roosting, foraging, and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological/hydrogeological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment, and including the protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the ecohydrological regimes of Ebblake Bog and Moors River Sites of Special Scientific Interest*. • The impact on Ringwood Forest and Home Wood Site of Importance for Nature Conservation. • Protection of populations and conservation status of rare and notable species including Smooth Snake, Sand Lizard and Coral Necklace*. • Restoration must include habitats to expand those within the designated sites and relate to the wider landscape and enhance ecological networks*. • Dust, noise and lighting management plan and monitoring is required*. • Protection and enhancement of the amenity and users of the Moors Valley Country Park and other local residents. • Maintenance and management of levels of permissive access and recreational use of the Moors Valley Country Park via the B3081*. • Protection of the nearby cycle paths, bridleways, and footpaths. • Recreational displacement must be carefully managed. Management arrangements to secure short and long term objectives for amenity and biodiversity including heathland, woodland, acid grassland and protected species. • Associated legal agreements must ensure no further irreversible habitat loss or risk to the conservation status of species. • Phasing programme and working to protect the amenity of local residents and permissive access to the site. • Protection of the amenity and well-being of Verwood residents, other residents in the vicinity and local businesses. Exclusion from extraction and buffer of the northern end of the site to protect the amenity of local residents*. • Soil handling, management and monitoring is required. • Importation of material as part of the restoration would need appropriate supporting investigations and risk assessment. • A Transport Assessment or Statement is required.	

			• A Routeing Agreement is required. Routeing to the SRN (A31) will be along the B3081, which is a suitable route for HGV traffic. The SRN is located some 1.4 miles south from the site. A new priority junction will be required to the B3801 to ensure provision for people walking, cycling and horse-riding and the impact on peak flows is managed. • Traffic issues including cumulative impact with other mineral and waste operations and the protection of Verwood from minerals traffic. • Protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the hydrological regime of Ebblake Bog Site of Special Scientific Interest*. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrogeological Assessment is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or	The qualifying features of the SAC are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**

	changes in water chemistry, which similarly can affect habitat and species composition.			
Avon Valley SPA/Ramsar • A037(NB) *Cygnus columbianus bewickii*: Bewick swan • A051(NB) *Anas strepera*: Gadwall *Purple Haze (NFD03) is 1.33 km from the Avon Valley SPA/Ramsar*	**Water pollution** Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water resources** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a	**YES**

			Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, Avon Valley SPA and Ramsar, and the River Avon SAC (and the New Forest SAC/SPA/Ramsar in relation to recreational displacement)*. • The impact on the offsite roosting, foraging, and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological/hydrogeological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment, and including the protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the ecohydrological regimes of Ebblake Bog and Moors River Sites of Special Scientific Interest*. • The impact on Ringwood Forest and Home Wood Site of Importance for Nature Conservation. • Protection of populations and conservation status of rare and notable species including Smooth Snake, Sand Lizard and Coral Necklace*. • Restoration must include habitats to expand those within the designated sites and relate to the wider landscape and enhance ecological networks*. • Dust, noise and lighting management plan and monitoring is required*. • Protection and enhancement of the amenity and users of the Moors Valley Country Park and other local residents. • Maintenance and management of levels of permissive access and recreational use of the Moors Valley Country Park via the B3081*. • Protection of the nearby cycle paths, bridleways, and footpaths. • Recreational displacement must be carefully managed. Management arrangements to secure short and long term objectives for amenity and biodiversity including heathland, woodland, acid grassland and protected species. • Associated legal agreements must ensure no further irreversible habitat loss or risk to the conservation status of species. • Phasing programme and working to protect the amenity of local residents and permissive access to the site. • Protection of the amenity and well-being of Verwood residents, other residents in the vicinity and local businesses. Exclusion from extraction and buffer of the northern end of the site to protect the amenity of local residents*.	

			• Soil handling, management and monitoring is required. • Importation of material as part of the restoration would need appropriate supporting investigations and risk assessment. • A Transport Assessment or Statement is required. • A Routeing Agreement is required. Routeing to the SRN (A31) will be along the B3081, which is a suitable route for HGV traffic. The SRN is located some 1.4 miles south from the site. A new priority junction will be required to the B3801 to ensure provision for people walking, cycling and horse-riding and the impact on peak flows is managed. • Traffic issues including cumulative impact with other mineral and waste operations and the protection of Verwood from minerals traffic. • Protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the hydrological regime of Ebblake Bog Site of Special Scientific Interest*. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrogeological Assessment is required. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.'*) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water management** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** (see text above) **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**

	groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.			

Table 4.5: Midgham Farm (NFD04)

Extraction of 4.2 million tonnes of sharp sand and gravel (3.8 million tonnes during Plan period), from 2024. Restoration to agriculture at the existing levels using imported inert materials, including nature conservation and increased permissive access.

International sites potentially affected and qualifying features	Potential impacts identified at Screening stage	Could the development have an adverse effect on any International site integrity either alone or in combination with other plans or projects?	Mitigation / measures	If mitigation / measures are implemented, can adverse effects on the International site from the Plan Partial Update be ruled out?
Avon Valley SPA/Ramsar • A037(NB) *Cygnus columbianus bewickii*: Bewick swan • A051(NB) *Anas strepera*: Gadwall *Midgham Farm (NFD04) is 0.53 km from the Avon Valley SPA/Ramsar*	**Removal of supporting habitat** New/extended minerals and waste sites can lead to loss of, or impact on, habitat that provides functional support to International sites, such as grassland that provides roosting and foraging sites for qualifying bird species.	Based on the distance of the SPA/Ramsar form the proposed site and its land management, the site may provide supporting habitat for SPA/Ramsar qualifying bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Avon Valley SPA/Ramsar, River Avon SAC, Dorset Heaths SAC and the Dorset Heathlands SPA/Ramsar*. • The impact on the offsite roosting, foraging and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment*. • Protection of water quality and quantity of the River Avon require protection*. • Restoration proposals will need to relate to the wider landscape and enhance ecological networks including provision of deciduous woodland along the boundaries of the site*. • Dust, noise and lighting management plan and monitoring is required*. • Buffering of the offsite woodland are required.	**YES**

			• Pre-commencement planting and restoration proposals require phasing and development design to ensure connectivity is retained or replaced as a priority, most notably in the southern boundary. • A buffer is required in the north-west corner and western edge of the site to protect the amenity and well-being of Alderholt Village and any urban expansion. Buffers are also required to protect the adjacent residential properties along the site boundary. • Replacement of hedgerows, where removed, and additional native tree planting along Hillbury Road. • Restoration should include no large open water bodies, for to landscape and airport safeguarding reasons. However, small ponds may be acceptable to contribute towards biodiversity. • The site is Best and Most Versatile (Grade 3a and 3b). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • A new priority junction will be required onto Hillbury Road and a conveyor belt to cross Lomer Lane for the second phase of extraction. • A Transport Assessment or Statement is required. This should consider cumulative traffic impacts taking into account that the site is a continuation of existing extraction operations at Bleak Hill which would cease prior to commencement at Midgham Farm. The safety of other road users (walkers, cyclists and horse riders) will also need to be considered on Hillbury Road and Harbridge Drove (due to the lack of footpath). • A Routeing Agreement is required. Routeing to the SRN (A31) will be south along Hillbury Road/Harbridge Drove before joining briefly the B3081 to its junction with the A31. Both Harbridge Drove and the B3081 are suitable routes for HGV traffic. The SRN is located some 5.5 miles south from the site. • Protection and enhancement of rights of way (Fordingbridge footpath 090/8a, Fordingbridge footpath 090/2, Fordingbridge footpath 090/3) and connectivity to the wider network. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrological Assessment required to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Noise; dust; lighting; vibration	The qualifying features could be vulnerable to the effects of noise, dust, light pollution and vibration at this proximity.	**Policy 3: Protection of habitats and species** (see text above)	**YES**

	Noise and vibration effects can be caused by activities associated with the operation of machinery and / or extra traffic movements to and from the facility. Dust deposition on ground and water from operational activities can lead to contamination at nearby International sites. Light pollution can be caused by artificial lighting on site as well as vehicle traffic movements to and from and within the site.		**Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause significant adverse noise, dust, lighting, vibration…'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Dust:** • **Environment Agency permitting** requirements will provide strict control over site operations and emissions. • Dust suppression will be controlled by a specific **planning condition** imposed on any planning permission. • Where dust emissions are likely to arise, mineral operators are expected to prepare a D**ust Assessment Study**, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.[54] **Noise:** • Where noise has the potential to affect the integrity of an International site, a noise assessment can be required as part of a planning proposal and **planning conditions** would be imposed to assess and monitor levels, and provide necessary mitigation. **Lighting:** • The potential for lighting impacts on International sites can be avoided/mitigated through the imposition of **planning conditions** to limit hours of operation, specify types and extent of lighting used and use of screening, to reduce light pollution. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Water pollution Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication,	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water management** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources,	**YES**

[54] Planning Practice Guidance Paragraph: 023 Reference ID: 27-023-20140306 - https://www.gov.uk/guidance/minerals#Dust-emissions

	sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).		he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in local hydrology. There is current	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water management**	**YES**

	Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.	uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	(see text above) **Policy 12: Flood risk and prevention** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Air quality / Traffic Air pollution can result from emissions from on-site activities on minerals and waste sites and associated vehicle movements.	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.	**Policy 3: Protection of habitats and species** (see text above) **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'have a significant adverse impact on air quality'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) **Environment Agency permitting** requirements will provide strict control over site operations and emissions. Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
	Recreation related impacts	Based on the distance of the site from the SPA/Ramsar and the fact	**Policy 3: Protection of habitats and species** (see text above)	**YES**

	Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	that a PRoW crosses the site, there is the potential of a significant effect from recreational displacement.	**Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
River Avon SAC • 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* • 1095 Sea lamprey *Petromyzon marinus* • 1096 Brook lamprey *Lampetra planeri* • 1106 Atlantic salmon *Salmo salar* • 1163 Bullhead *Cottus gobio* *Midgham Farm (NFD04) is 0.53 km from the River Avon SAC*	**Water pollution** Water pollution can result in a number of detrimental impacts on flora and fauna in waterbodies, from direct effects, eutrophication, sedimentation, changes to species composition, including impacts on waterfowl. Sedimentation can also affect flow conveyance (potentially increasing flood risk).	The qualifying features of the SAC are vulnerable to the effects of changes in water quality from a range of pollution sources. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Policy 8: Water management** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere,	**YES**

			land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Avon Valley SPA/Ramsar, River Avon SAC, Dorset Heaths SAC and the Dorset Heathlands SPA/Ramsar*. • The impact on the offsite roosting, foraging and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment*. • Protection of water quality and quantity of the River Avon require protection*. • Restoration proposals will need to relate to the wider landscape and enhance ecological networks including provision of deciduous woodland along the boundaries of the site*. • Dust, noise and lighting management plan and monitoring is required*. • Buffering of the offsite woodland are required. • Pre-commencement planting and restoration proposals require phasing and development design to ensure connectivity is retained or replaced as a priority, most notably in the southern boundary. • A buffer is required in the north-west corner and western edge of the site to protect the amenity and well-being of Alderholt Village and any urban	

			expansion. Buffers are also required to protect the adjacent residential properties along the site boundary. • Replacement of hedgerows, where removed, and additional native tree planting along Hillbury Road. • Restoration should include no large open water bodies, for to landscape and airport safeguarding reasons. However, small ponds may be acceptable to contribute towards biodiversity. • The site is Best and Most Versatile (Grade 3a and 3b). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • A new priority junction will be required onto Hillbury Road and a conveyor belt to cross Lomer Lane for the second phase of extraction. • A Transport Assessment or Statement is required. This should consider cumulative traffic impacts taking into account that the site is a continuation of existing extraction operations at Bleak Hill which would cease prior to commencement at Midgham Farm. The safety of other road users (walkers, cyclists and horse riders) will also need to be considered on Hillbury Road and Harbridge Drove (due to the lack of footpath). • A Routeing Agreement is required. Routeing to the SRN (A31) will be south along Hillbury Road/Harbridge Drove before joining briefly the B3081 to its junction with the A31. Both Harbridge Drove and the B3081 are suitable routes for HGV traffic. The SRN is located some 5.5 miles south from the site. • Protection and enhancement of rights of way (Fordingbridge footpath 090/8a, Fordingbridge footpath 090/2, Fordingbridge footpath 090/3) and connectivity to the wider network. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrological Assessment required to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.'*) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Changes in surface / groundwater hydrology Changes in the movement of groundwater flows can result in the	The qualifying features of the SAC are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** (see text above) **Policy 8: Water management** (see text above) **Policy 12: Flood risk and prevention** (see text above)	**YES**

	drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.		**Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. *[Policy wording modified following initial screening stage to change all reference to 'unacceptable' to 'significant adverse']* **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
	Recreation related impacts Recreation can be displaced on to areas vulnerable to disturbance or pressure by changes to the accessibility of footpaths and cycleways or areas of permissive access.	Based on the distance of the site from the SAC and the fact that a PRoW crosses the site, there is the potential of a significant effect from recreational displacement.	**Policy 3: Protection of habitats and species** (see text above) **Policy 10: Restoration of minerals and waste developments** requires that 'Restoration of minerals and waste developments should be in keeping with the character and setting of the local area and should contribute to the delivery of local objectives for… community use where these are consistent with the development plan. **Development Considerations** (see text above) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	**YES**
Dorset Heaths SAC • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 7150 Depressions on peat substrates	**Changes in surface / groundwater hydrology** Changes in the movement of groundwater flows can result in the drying out of certain sites,	The qualifying features of the SAC are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SAC.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]*	**YES**

of the Rhynchosporion • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae** • 7230 Alkaline fens • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 1044 Southern damselfly *Coenagrion mercuriale* • 1166 Great crested newt *Triturus cristatus* *Midgham Farm (NFD04) is* 1.79 km from the Dorset Heaths SAC	changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.		**Policy 8: Water management** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]* **Policy 12: Flood risk and prevention** requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment.	

			[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]. Relevant Development Considerations include: • Protection of the Avon Valley SPA/Ramsar, River Avon SAC, Dorset Heaths SAC and the Dorset Heathlands SPA/Ramsar*. • The impact on the offsite roosting, foraging and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment*. • Protection of water quality and quantity of the River Avon require protection*. • Restoration proposals will need to relate to the wider landscape and enhance ecological networks including provision of deciduous woodland along the boundaries of the site*. • Dust, noise and lighting management plan and monitoring is required*. • Buffering of the offsite woodland are required. • Pre-commencement planting and restoration proposals require phasing and development design to ensure connectivity is retained or replaced as a priority, most notably in the southern boundary. • A buffer is required in the north-west corner and western edge of the site to protect the amenity and well-being of Alderholt Village and any urban expansion. Buffers are also required to protect the adjacent residential properties along the site boundary. • Replacement of hedgerows, where removed, and additional native tree planting along Hillbury Road. • Restoration should include no large open water bodies, for to landscape and airport safeguarding reasons. However, small ponds may be acceptable to contribute towards biodiversity. • The site is Best and Most Versatile (Grade 3a and 3b). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • A new priority junction will be required onto Hillbury Road and a conveyor belt to cross Lomer Lane for the second phase of extraction. • A Transport Assessment or Statement is required. This should consider cumulative traffic impacts taking into account that the site is a continuation of existing extraction operations at Bleak Hill which would cease prior to commencement at Midgham Farm. The safety of other road users (walkers, cyclists and horse riders) will also need to be considered on Hillbury Road and Harbridge Drove (due to the lack of footpath). • A Routeing Agreement is required. Routeing to the SRN (A31) will be south along Hillbury Road/Harbridge Drove before joining briefly the B3081 to its junction with the A31. Both Harbridge Drove and the B3081 are suitable routes for HGV traffic. The SRN is located some 5.5 miles south from the site. • Protection and enhancement of rights of way (Fordingbridge footpath 090/8a, Fordingbridge footpath 090/2, Fordingbridge footpath 090/3) and connectivity to the wider network.	

			• Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrological Assessment required to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.')* Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	
Dorset Heathlands SPA/Ramsar • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A082(NB) *Circus cyaneus*: Hen harrier • A098(NB) *Falco columbarius*: Merlin *Midgham Farm (NFD04) is* 1.79 km from the Dorset Heathlands SPA/Ramsar	**Changes in surface / groundwater hydrology** Changes in the movement of groundwater flows can result in the drying out of certain sites, changing vegetation communities, concentrating contaminants and reduce wetland habitat's ability to support flora and fauna. Alternatively, changes in groundwater flows can result in saturation or flooding, or changes in water chemistry, which similarly can affect habitat and species composition.	The qualifying features of the SPA/Ramsar are vulnerable to the effects of changes in local hydrology. There is current uncertainty in relation to hydrological connectivity between the allocated site and the SPA/Ramsar.	**Policy 3: Protection of habitats and species** requires that development that is likely to result in a significant effect, either alone or in combination, on the following designated sites: Special Protection Areas, Special Areas of Conservation, Ramsar sites; sites identified, or required, as compensatory measures for adverse effects on such sites; and European Protected Species, will need to satisfy the requirements of the Habitats Regulations. *[Policy wording modified following the initial Screening stage to strengthen reference to sites identified or required as compensatory measures for adverse effects on International sites to counteract adverse effects on internationally designated sites; and make reference to Biodiversity Opportunity Areas and river basins.]* **Policy 8: Water management** requires that planning proposals 'do not result in the deterioration of the physical state, water quality or ecological status of any water resource and waterbody including rivers, streams, lakes, ponds, groundwater source protection zones and groundwater aquifers; and cause significant adverse risk to the quantity and quality of water resources; and cause changes to groundwater and surface water levels which would result in significant adverse impacts on adjoining land, potential groundwater resources, he potential yield of groundwater resources, river flows or natural habitats; and achieve nutrient neutrality, where relevant'. The policy requires a WFD screening assessment in all cases where there are potential impacts on groundwater bodies and surface water bodies. The policy also requires that 'where proposals are in a groundwater source protection zone, a Hydrogeological / Hydrological Risk Assessment must be provided to determine whether there is a hazard to water resources, quality or abstractors. If the Hydrogeological / Hydrological Risk Assessment identifies unacceptable risk, the developer must provide appropriate mitigation'. [*Policy wording has been modified following the initial screening stage - to make reference to nutrient neutrality, quality of water resources, requirement for WFD assessment and change reference to 'unacceptable' to 'significant adverse, throughout]*	**YES**

			Policy 12: Flood risk and prevention requires that minerals and waste development apply the Sequential Test and where necessary the Exception Test to the selection of unplanned proposals; apply the sequential approach directing development to the area at the lowest risk of flooding; and not result in an increased flood risk overall; ensure development is safe from flooding for its lifetime including an assessment of climate change impacts, and incorporate flood protection, flood resilience and resistance measures where appropriate to the character and biodiversity of the area and the specific requirements of the site; include site drainage systems 1:100 year events (with appropriate allowance for climate change); incorporate SuDS (if appropriate); and refer to Catchment Management Plans in determining whether a proposal is located in a Priority Area or Critical Contributing Area and, where relevant, apply the recommended standards. *[Policy wording modified following the initial screening stage to make reference to the Sequential Test, Exception Test, sequential approach, climate change allowances and the requirement re: CMPs]* **Policy 11: Protecting public health, safety, amenity and well-being** requires that minerals and waste development not release emissions to the atmosphere, land or water (above appropriate standards), including 'cause a significant adverse impact on coastal, surface or groundwaters'. **Development Considerations** for the site allocation have been designed to ensure that the consideration of this and other hazards will be addressed at the planning proposal stage to address any uncertainty with respect to the operational use of the site, at this stage of the assessment. *[Significant improvements / additions have been made to the Development Considerations since the initial Screening stage]*. Relevant Development Considerations include: • Protection of the Avon Valley SPA/Ramsar, River Avon SAC, Dorset Heaths SAC and the Dorset Heathlands SPA/Ramsar*. • The impact on the offsite roosting, foraging and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*. • A Hydrological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment*. • Protection of water quality and quantity of the River Avon require protection*. • Restoration proposals will need to relate to the wider landscape and enhance ecological networks including provision of deciduous woodland along the boundaries of the site*. • Dust, noise and lighting management plan and monitoring is required*. • Buffering of the offsite woodland are required. • Pre-commencement planting and restoration proposals require phasing and development design to ensure connectivity is retained or replaced as a priority, most notably in the southern boundary. • A buffer is required in the north-west corner and western edge of the site to protect the amenity and well-being of Alderholt Village and any urban	

			expansion. Buffers are also required to protect the adjacent residential properties along the site boundary. • Replacement of hedgerows, where removed, and additional native tree planting along Hillbury Road. • Restoration should include no large open water bodies, for to landscape and airport safeguarding reasons. However, small ponds may be acceptable to contribute towards biodiversity. • The site is Best and Most Versatile (Grade 3a and 3b). Soil handling and management is required and restoration to original (or improved) agricultural land classification. • A new priority junction will be required onto Hillbury Road and a conveyor belt to cross Lomer Lane for the second phase of extraction. • A Transport Assessment or Statement is required. This should consider cumulative traffic impacts taking into account that the site is a continuation of existing extraction operations at Bleak Hill which would cease prior to commencement at Midgham Farm. The safety of other road users (walkers, cyclists and horse riders) will also need to be considered on Hillbury Road and Harbridge Drove (due to the lack of footpath). • A Routeing Agreement is required. Routeing to the SRN (A31) will be south along Hillbury Road/Harbridge Drove before joining briefly the B3081 to its junction with the A31. Both Harbridge Drove and the B3081 are suitable routes for HGV traffic. The SRN is located some 5.5 miles south from the site. • Protection and enhancement of rights of way (Fordingbridge footpath 090/8a, Fordingbridge footpath 090/2, Fordingbridge footpath 090/3) and connectivity to the wider network. • Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. • Hydrogeological/Hydrological Assessment required to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed. *('The Asterix denotes that development cannot be permitted if it may negatively affect the integrity of International protected sites and the development requirements for maintaining this integrity must be addressed.'*) Any proposed development at this site would be subject to a **development-specific project level HRA**, which will provide a greater level of detail on potential impacts than is possible in this HRA.	

Proposed Submission site allocations

4.58 Tables 4.2 – 4.5 have shown that the none of the screened-in proposed site allocations are likely to have a significant effect on the integrity of any International sites alone, provided the mitigation and other measures listed in the respective assessment tables are implemented. The assessment of their potential in-combination effects is considered in paragraph 4.60 onwards.

Policy 20: Local land-won aggregates

4.59 Policy 20 is subject to Appropriate Assessment based on the inclusion of four screened-in sites: Hamble Airfield (EAL02); Ashley Manor Farm (NFD01); Purple Haze (NFD03); and Midgham Farm (NFD04). Although it has been concluded that none of the four proposed site allocations would be likely to have a significant effect on the integrity of any International site alone (see Tables 4.2 – 4.5), the assessment of their potential in-combination effects is considered in paragraph 4.60 onwards.

Assessment of effects of policies and site allocations in-combination

4.60 The Habitats Regulations[55] requires the Appropriate Assessment of land use plans to consider the effect of the Plan in-combination with other plans or projects. Other plans that could potentially combine with the proposals in the Plan Partial Update to cause in-combination effects and the location of other proposed developments have been considered.

4.61 International sites may be affected by impacts from more than one site allocation. This may occur where more than one site allocation is within reasonably close proximity of a particular International site, where these site allocations will be operational at the same time, and where potential effects of the sites are similar (cumulative effect).

4.62 In addition, there may be in-combination effects from planned and active minerals and waste sites and other types of development proposed in the Local Plans for the Plan area's constituent and neighbouring local planning authorities, together with relevant Nationally Significant Infrastructure Projects. A list of such plans and projects is provided in Appendix 3.

4.63 Table 4.6 shows the proximity of International sites against Proposed Submission allocation sites, and other planned and active strategic minerals and waste sites, within a 5km (precautionary principle screening buffer). Given the timing of the Plan, only existing operations and existing planning permissions that have permission to be operating post 2023 were included. Distances were calculated as the crow flies using the shortest distance between the International site and relevant Proposed Submission or active minerals and waste site. For active waste sites, only those considered strategic were selected (safeguarded waste sites) as being those likely to create a cumulative/in-combination effect.

[55] The Conservation of Habitats and Species Regulations 2017 - http://www.legislation.gov.uk/uksi/2017/1012/contents/made

Table 4.6: Proposed Submission site allocations and other planned and active strategic minerals and waste sites within 5km grouped around each relevant International site

International site	Proposed site allocation	Dist. (km)	Other planned and active M&W site	Dist. (km)
Dorset Heaths SAC	Purple Haze (NFD03)	0.21	Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm	0.23
	Midgham Farm (NFD04)	1.79	Chatsworth/Blue Haze (NF105) - non-hazardous landfill – Purple Haze / Midgham Farm	0.59
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	1.45
			Ringwood WWTW (NF248) – Purple Haze	1.56
			Fordingbridge WWTW (NF242) – Midgham Farm	3.53
			Nea Farm/Blashford Quarry (NF254/NF097) – sand extraction / concrete batching – Purple Haze / Midgham Farm	3.69
River Avon SAC	Midgham Farm (NFD04)	0.53	Nea Farm/Blashford Quarry (NF254/NF097)– sand extraction / concrete batching – Purple Haze / Midgham Farm	Adj.
	Purple Haze (NFD03)	1.26	Ringwood WWTW (NF248) – Purple Haze	0.10
			Fordingbridge WWTW (NF242) – Midgham Farm	0.25
			Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm	0.64
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	1.27
			Chatsworth/Blue Haze (NF105) - non-hazardous landfill – Purple Haze / Midgham Farm	1.61
Solent Maritime SAC	Hamble Airfield (EAL02)	0.29	Forest Lodge Farm (NF271) (soft and sharp sand and gravel extraction – Hamble Airfield	0.42
	Ashley Manor Farm (NFD01)	4.29	Ashlett Creek WWTW (NF224) - Hamble Airfield	0.60
			Fawley Thermal Treatment Centre (NF001) – WTS (non-hazardous); incineration (hazardous) - Hamble Airfield	0.71
			Hook Park Wastewater Pumping Station (FA076) - Hamble Airfield	0.89
			Rookery Farm (FA032) - recycling (aggregate) - Hamble Airfield	1.29
			Downton Manor Farm (NF177) – sand and gravel extraction – Ashley Manor	2.14

			Caird Avenue (NF002) - Sand and gravel processing plant site and waste transfer station - Ashley Manor	4.79

The New Forest SAC	Midgham Farm (NFD04)	1.95	Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm	2.87
	Ashley Manor Farm (NFD01)	3.85	Sway WWTW (NF237) - Ashley Manor	1.22
	Purple Haze (NFD03)	4.20	Nea Farm/Blashford Quarry (NF254/NF097)– sand extraction / concrete batching – Purple Haze / Midgham Farm	1.40
			Fordingbridge WWTW (NF242) – Midgham Farm	2.11
			Double H Nurseries Ltd (NF260) CHP Plant - Ashley Manor	2.13
			Ringwood WWTW (NF248) – Purple Haze	2.62
			Downton Manor Farm (NF177) – sand and gravel extraction - Ashley Manor	2.73
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	2.81
			Caird Avenue (NF002) - Sand and gravel processing plant site and waste transfer station - Ashley Manor	3.96

Avon Valley SPA/Ramsar	Midgham Farm (NFD04)	0.53	Nea Farm/Blashford Quarry (NF254/NF097)– sand extraction / concrete batching – Purple Haze / Midgham Farm	Adj.
	Purple Haze (NFD03)	1.33	Ringwood WWTW (NF248) – Purple Haze	Adj.
			Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm	0.64
			Fordingbridge WWTW (NF242) – Midgham Farm	0.85
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	1.27
			Chatsworth/Blue Haze (NF105) - non-hazardous landfill – Purple Haze / Midgham Farm	1.56

Dorset Heathlands SPA/Ramsar	Purple Haze (NFD03)	0.21	Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm	0.23
	Midgham Farm (NFD04)	1.79	Chatsworth/Blue Haze (NF105) - non-hazardous landfill – Purple Haze / Midgham Farm	0.59
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	1.45
			Ringwood WWTW (NF248) – Purple Haze	1.56
			Fordingbridge WWTW (NF242) – Midgham Farm	3.53

			Nea Farm/Blashford Quarry (NF254/NF097)– sand extraction / concrete batching – Purple Haze / Midgham Farm	3.69

New Forest SPA/Ramsar	Midgham Farm (NFD04)	1.95	Nea Farm/Blashford Quarry (NF254/NF097)– sand extraction / concrete batching – Purple Haze / Midgham Farm	1.40
	Ashley Manor Farm (NFD01)	3.99	Sway WWTW (NF237) - Ashley Manor	1.78
	Purple Haze (NFD03)	4.23	Fordingbridge WWTW (NF242) – Midgham Farm	2.11
			Bleak Hill (NF091) – sand and gravel extraction / landfill (inert) – Purple Haze / Midgham Farm	2.81
			Ringwood WWTW (NF248) – Purple Haze	2.97
			Plumley Wood (NF255) – Sand and gravel extraction – Purple Haze / Midgham Farm / Midgham Farm	2.98
			Double H Nurseries Ltd (NF260) CHP Plant - Ashley Manor	3.55
			Caird Avenue (NF002) - Sand and gravel processing plant site and waste transfer station - Ashley Manor	3.63

Solent and Dorset Coast SPA	Hamble Airfield (EAL02)	0.30	Hook Park Wastewater Pumping Station (FA076) - Hamble Airfield	0.43
	Ashley Manor Farm (NFD01)	1.27	Ashlett Creek WWTW (NF224) - Hamble Airfield	1.05
			Forest Lodge Farm (NF271) (soft and sharp sand and gravel extraction) - Hamble Airfield	1.09
			Rookery Farm (FA032) - recycling (aggregate) - Hamble Airfield	1.34
			Fawley Thermal Treatment Centre (NF001) – WTS (non-hazardous); incineration (hazardous) - Hamble Airfield	1.41

Solent & Southampton Water SPA/Ramsar	Hamble Airfield (EAL02)	0.30	Hook Park Wastewater Pumping Station (FA076) - Hamble Airfield	Adj.
	Ashley Manor Farm (NFD01)	3.87	Forest Lodge Farm (NF271) (soft and sharp sand and gravel extraction) - Hamble Airfield	0.42
			Ashlett Creek WWTW (NF224) - Hamble Airfield	0.60
			Fawley Thermal Treatment Centre (NF001) – WTS (non-hazardous); incineration (hazardous) - Hamble Airfield	0.71
			Rookery Farm (FA032) - recycling (aggregate) - Hamble Airfield	1.29
			Downton Manor Farm (NF177) – sand and gravel extraction - Ashley	1.72
			Sway WWTW (NF237) - Ashley Manor	3.70
			Caird Avenue (NF002) - Sand and gravel processing plant site and waste transfer station - Ashley Manor	4.39

4.64 Table 4.7 shows the proximity of International sites and other forms of development e.g. strategic residential/commercial development within a 5km (precautionary principle screening buffer) of Proposed Submission site allocations. Distances were calculated as the crow flies using the shortest distance between the International site and other strategic development.

4.65 Each of the Hampshire and adjacent Authorities are at different stages with the development of their Local Plans. Each of the Local Plans propose development which, in-combination with the development of site allocations within the Proposed Submission Plan, could have the potential to have a significant effect in-combination.

4.66 In order to assess the potential in-combination effects of Proposed Submission site allocations and other types of development, only other types of development that are considered strategic were considered, using the following criteria:

- Magnitude of development: sites greater than 99 residential properties or 2,500 square metres of commercial development.
- Distance from site: a 5km zone of influence (precautionary principle screening buffer).
- Likely or potential temporal overlap.

Table 4.7: Proximity of International sites to strategic residential/commercial development located within 5km of Proposed Submission site allocations

International site	Strategic development (Residential/industrial/commercial)	Dist. (km)
Dorset Heaths SAC	ALD1 – Options 1&2 - Significant expansion of Alderholt Village (allocation option for minimum 1000 dwellings – DC emerging plan) - Midgham Farm/ Purple Haze	0.38
	VER2 – North West Verwood new neighbourhood (allocation for 230 homes – DC) - Purple Haze/Midgham	0.59
	SS13 – Land at Moortown Lane (allocation for estimated 480 dwellings and employment uses – NFDC) – Purple Haze	1.95
	SS14 - Land North of Hightown Road (allocation for estimated 270 dwellings and employment uses – NFDC) - Purple Haze	2.91
	SS15 - Land at Snails Lane (allocation for estimated 100 dwellings – NFDC) – Purple Haze/Midgham Farm	3.09
	SS16 - Land North of Station Road (allocation for estimated 140 dwellings – NFDC) – Midgham Farm	3.93
	SS17 - Land at Whitsbury Road (allocation for estimated 330 dwellings – NFDC) - Midgham Farm	4.31
River Avon SAC	SS18 - Land at Burgate (allocation for estimated 400 dwellings – NFDC) - Midgham Farm	0.01
	SS15 (see text above)	0.15
	SS13 (see text above)	0.36
	SS16 (see text above)	0.51
	SS17 (see text above)	0.59
	SS14 (see text above)	1.32
	ALD1 – Option 1&2 (see text above)	1.69

Solent Maritime SAC	HA07 – Warsash Maritime Academy, Newton Road (allocation for estimated 100 dwellings – FBC) – Hamble Airfield	Adj.
	SS4 – The Former Fawley Power Station (allocation estimated 1380 dwellings – NFDC) - Hamble Airfield	Adj.
	SP26 – Fawley Power Station (allocation of 120 dwellings – NFNPA) - Hamble Airfield	Adj.
	SH3 – North Whiteley, Botley Road (permission for mixed development incl. up to 3500 dwellings – part implemented – WCC) - Hamble Airfield	0.06
	Petrochemical Works, Charlestown Road (development for refinery related/petrochemical uses and vacant expansion land – NFDC) – Hamble Airfield	0.06
	HA01 – Land East of Brook Lane (permission for 140 dwellings – part implemented – FBC) – Hamble Airfield	0.38
	BU2 – Serenity, Heath House Lane (permission for 123 dwellings – part implemented – EBC) – Hamble Airfield	0.80
	HE4 – Land off Peewit Hill Close (allocation for B8 & E(G)(II)/(III) – EBC) – Hamble Airfield	1.25
	SS7 – Land North of Manor Road (allocation for estimated 110 dwellings – NFDC) - Ashley Manor	1.28
	HE2 – Land on St. Johns Road, Foord Road and Dodwell Lane (permission for 216 dwellings – part implemented – FBC) – Hamble Airfield	1.31
	SS5 – Land at Milford Road (Permission for estimated 185 dwellings – NFDC) - Ashley Manor	1.78
	HE5(1) – Land at Netley Firs, Kanes Hill (permission for redevelopment for 23 B1C & B2 industrial units – EBC) – Hamble Airfield	2.11
	E4c - Land at Little Park Farm (allocation for industrial development – FBC)	2.12
	E4 - Area 12, Phase 2, Solent Business Park, Rookery Avenue (allocation for business park development (part completed) – FBC) – Hamble Airfield	2.46
	MSA18 – Centenary Quay, Victoria Road (permission for mixed use development incl. 1279 dwellings – part implemented – SCC) - Hamble Airfield	2.91
	SS8 – Land at Hordle Lane (permission for estimated 160 dwellings – NFDC) – Ashley Manor	3.73
	SS9 – Land at Everton Road (allocation for estimated 100 dwellings – NFDC) - Ashley Manor	4.55
	NMT5 – Land East of Caird Avenue (Allocation for mixed development including industrial uses – NFDC) – Ashley Manor	4.61

The New Forest SAC	SS14 (see text above)	0.90
	SS15 (see text above)	1.05
	SS5 (see text above)	1.33
	SS10 – Land at Brockhills Lane (allocation for estimated 130 dwellings – NFDC) - Ashley Manor	1.53
	SS18 (see text above)	1.68
	SS17 (see text above)	1.85
	SS13 (see text above)	1.89
	SS8 (see text above)	2.33
	SS9 (see text above)	2.34
	SS7 (see text above)	2.34
	SS11 – Land South of Gore Road (allocation for estimated 160 dwellings – NFDC) - Ashley Manor	2.42
	SS16 (see text above)	2.51
	ALD1 – Option 1&2 (see text above)	3.10

	NMT5 (see text above)	3.73

Avon Valley SPA/Ramsar	SS13 (see text above)	0.11
	SS15 (see text above)	0.59
	SS14 (see text above)	1.25
	ALD1 – Option 1&2 (see text above)	1.69
	SS16 (see text above)	2.46
	SS17 (see text above)	3.09

Dorset Heathlands SPA/Ramsar	ALD1 – Option 1&2 (see text above)	0.38
	VER2 (see text above)	0.59
	SS13 (see text above)	1.95
	SS14 (see text above)	2.91
	SS15 (see text above)	3.09
	SS16 (see text above)	3.93
	SS17 (see text above)	4.31

New Forest SPA/Ramsar	SS14 (see text above)	0.90
	SS15 (see text above)	1.05
	SS10 (see text above)	1.53
	SS18 (see text above	1.68
	SS17 (see text above)	1.85
	SS13 (see text above)	1.89
	SS16 (see text above)	2.89
	ALD1 – Option 1&2 (see text above)	3.10
	SS11 (see text above)	3.58
	NMT5 (see text above)	3.73
	SS5 (see text above)	3.77

Solent and Dorset Coast SPA	HA07 (see text above)	0.30
	HA01 (see text above)	0.54
	BU2 (see text above)	1.13
	HE4 (see text above)	1.57
	HE2 (see text above)	1.62
	E4c (see text above)	2.02
	SH3 (see text above)	2.30
	HE5(1) (see text above)	2.42
	E4 (see text above)	2.57
	SS4 (see above text)	3.20
	SP26 (see text above)	3.65
	Petrochemical Works (see text above)	4.65
	MSA19 (see text above)	4.91

Solent & Southampton Water SPA/Ramsar	HA07 (see text above)	Adj.
	SS4 (see above text)	Adj.
	MSA18 (see text above)	Adj.
	SP26 (see text above)	Adj.
	SH3 (see text above)	0.06
	Petrochemical Works (see text above)	0.06
	HA01 (see text above)	0.38
	SS5 (see text above)	0.73
	BU2 (see text above)	0.80
	SS7 (see text above)	0.93
	HE4 (see text above)	1.25
	HE2 (see text above)	1.31
	HE5(1) (see text above)	2.11
	E4c (see text above)	2.27
	E4 (see text above)	2.46
	SS8 (see text above)	3.34
	SS9 (see text above)	3.96
	NMT5 (see text above)	4.61

4.67 A summary of the potential for in-combination effects to result from Proposed Submission site allocations interacting with one another and with other plans or projects is provided below, detailed against each relevant International site.

4.68 Only those International sites that are relevant to screened-in Proposed Submission site allocations and policy are included below. All other International sites listed in the HRA Baseline and Methodology Report are excluded as not having any potential to be significantly effected by any of the screened in site allocations or policy.

Dorset Heaths SAC

4.69 Purple Haze (NFD03) and Midgham Farm (NFD04) are 0.21km and 1.79km from the Dorset Heaths SAC, respectively. The next closest proposed site allocation is Ashley Manor Farm (NFD01) at 7.85km. Both Purple Haze and Midgham Farm were determined not to be likely to have a significant effect on the Dorset Heaths SAC, alone (see Tables 4.4 and 4.5, above).

4.70 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SAC. It should be noted, however, that Chatsworth/Blue Haze (NF105), within close proximity of Purple Haze, is expected to end operations before the commencement of any permitted activity at Purple Haze.

4.71 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated within the zone of influence of the SAC. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.72 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.73 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SAC alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.74 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.4 and 4.5, for Purple Haze and Midgham Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active

minerals and waste developments, and current allocated residential/commercial developments, would not be likely to have a significant effect on the integrity of the Dorset Heaths SAC, when considered in-combination.

River Avon SAC

4.75 Midgham Farm (NFD04) and Purple Haze (NFD03) are 0.53km and 1.26km from the River Avon SAC, respectively. The next closest proposed site allocation is Ashley Manor Farm (NFD01) at 8.98km. Both Purple Haze and Midgham Farm were determined not to be likely to have a significant effect on the River Avon SAC, alone (see Tables 4.4 and 4.5, above).

4.76 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SAC. It should be noted, however, that Chatsworth/Blue Haze (NF105), within close proximity of Purple Haze, is expected to end operations before the commencement of any permitted activity at Purple Haze.

4.77 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated within the zone of influence of the SAC. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.78 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.79 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SAC alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.80 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.4 and 4.5, for Purple Haze and Midgham Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments and current allocated residential and industrial/commercial developments, would not be likely to have a significant effect on the integrity of the River Avon SAC, when considered in-combination.

Solent Maritime SAC

4.81 Hamble Airfield (EAL02) and Ashley Manor Farm (NFD01)) are 0.29km and 4.29km from the Solent Maritime SAC, respectively. There is no other Proposed Submission site allocation within 10km of the SAC. Both Hamble Airfield and Ashley Manor Farm were determined not to be likely to have a significant effect on the River Avon SAC, alone (see Tables 4.2 and 4.3, above).

4.82 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SAC.

4.83 It can also be seen in Table 4.7 that there are a number of strategic residential / industrial / commercial developments allocated/permitted within the zone of influence of the SAC, with three sites adjacent to the SAC and two others in very close proximity.

4.84 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Hamble Airfield. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.85 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA and where permitted, project level HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SAC alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.86 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.2 and 4.3, for Hamble Airfield and Ashley Manor Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated/permitted residential and industrial/commercial developments, would not be likely to have a significant effect on the integrity of the Solent Maritime SAC, when considered in-combination.

The New Forest SAC

4.87 Midgham Farm (NFD04), Ashley Manor Farm (NFD01) and Purple Haze (NFD03) are 1.95km, 3.85km and 4.20km from The New Forest SAC, respectively. The next closest proposed site allocation is Hamble Airfield (EAL02) at 5.47km. Ashley Manor Farm, Purple Haze and Midgham Farm, were determined not to be likely to have a significant effect on The New Forest SAC, alone (see Tables 4.3, 4.4 and 4.5, above).

4.88 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SAC.

4.89 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated/permitted within the zone of influence of the SAC. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.90 There is considerable uncertainty on the timing of any minerals development on the three Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the three proposed site allocations and the development of the relevant allocated residential / commercial allocations.

4.91 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA and where permitted, project level HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SAC alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.92 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.3, 4.4 and 4.5, for Ashley Manor Farm, Purple Haze and Midgham Farm, respectively, and through the development management processes, the three Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated/permitted residential/commercial developments, would not be likely to have a significant effect on the integrity of The New Forest SAC, when considered in-combination.

Avon Valley SPA/Ramsar

4.93 Midgham Farm (NFD04) and Purple Haze (NFD03) are 0.53km and 1.33km from the Avon Valley SPA/Ramsar, respectively. The next closest proposed site allocation is Ashley Manor Farm (NFD01) at 8.98km. Purple Haze and Midgham Farm, were determined not to be likely to have a significant effect on the Avon Valley SPA/Ramsar, alone (see Tables 4.4 and 4.5, above).

4.94 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SPA/Ramsar.

4.95 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated within the zone of influence of the SPA/Ramsar. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.96 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.97 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SPA/Ramsar alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.98 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.4 and 4.5, for Purple Haze and Midgham Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated residential/commercial developments, would not be likely to have a significant effect on the integrity of the Avon Valley SPA/Ramsar, when considered in-combination.

Dorset Heathlands SPA/Ramsar

4.99 Purple Haze (NFD03) and Midgham Farm (NFD04) are 0.21km and 1.79km from the Dorset Heathlands SPA/Ramsar, respectively. The next closest proposed site allocation is Ashley Manor Farm (NFD01) at 7.85km. Purple Haze and Midgham Farm, were determined not to be likely to have a significant effect on the Dorset Heathlands SPA/Ramsar, alone (see Tables 4.4 and 4.5, above).

4.100 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SPA/Ramsar.

4.101 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated within the zone of influence of the SPA/Ramsar. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.102 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.103 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SPA/Ramsar alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.104 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.4 and 4.5, for Purple Haze and Midgham Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated residential/commercial developments, would not be likely to have a significant effect on the integrity of the Dorset Heathlands SPA/Ramsar, when considered in-combination.

New Forest SPA/Ramsar

4.105 Midgham Farm (NFD04), Ashley Manor Farm (NFD01) and Purple Haze (NFD03) are 1.95km, 3.99km and 4.23km from the New Forest SPA/Ramsar, respectively. The next closest proposed site allocation is Hamble Airfield (EAL02) at 5.47km. Ashley Manor Farm, Purple Haze and Midgham Farm, were determined not to be likely to have a significant effect on the Dorset Heathlands SPA/Ramsar, alone (see Tables 4.3, 4.4 and 4.5, above).

4.106 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SPA/Ramsar.

4.107 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated/permitted within the zone of influence of the SPA/Ramsar. It should be noted that ALD 1, options 1 and 2 are allocation options in the emerging Dorset Council Local Plan and may be subject to modification.

4.108 There is considerable uncertainty on the timing of any minerals development on the three Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Purple Haze. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the three proposed site allocations and the development of the relevant allocated residential/commercial allocations.

4.109 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA and permissions through project level HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SPA/Ramsar alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations

and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.110 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.4 and 4.5, for Purple Haze and Midgham Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated residential/commercial developments, would not be likely to have a significant effect on the integrity of the New Forest SPA/Ramsar, when considered in-combination.

Solent and Dorset Coast SPA

4.111 Hamble Airfield (EAL02) and Ashley Manor Farm (NFD01) are 0.30km and 1.27km from the Solent and Dorset Coast SPA, respectively. No other Proposed Submission site allocation is within 10km of the SPA. Hamble Airfield and Ashley Manor Farm were determined not to be likely to have a significant effect on the Solent and Dorset Coast SPA, alone (see Tables 4.2 and 4.3, above).

4.112 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SPA.

4.113 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated/permitted within the zone of influence of the SPA.

4.114 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Hamble Airfield. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the three proposed site allocations and the development of the relevant allocated residential/commercial allocations/permissions.

4.115 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA and permissions through project level HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SPA alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.116 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.2 and 4.3, for Hamble Airfield and Ashley Manor Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated residential /

commercial developments, would not be likely to have a significant effect on the integrity of the Solent and Dorset Coast SPA, when considered in-combination.

Solent and Southampton Water SPA/Ramsar

4.117 Hamble Airfield (EAL02) and Ashley Manor Farm (NFD01) are 0.30km and 3.87km from the Solent & Southampton Water SPA/Ramsar, respectively. No other Proposed Submission site allocation is within 10km of the SPA. Hamble Airfield and Ashley Manor Farm were determined not to be likely to have a significant effect on the Solent & Southampton Water SPA/Ramsar, alone (see Tables 4.2 and 4.3, above).

4.118 It can be seen in Table 4.6 that there are a number of planned and active minerals and waste sites within the precautionary principle zone of influence of the SPA.

4.119 It can also be seen in Table 4.7 that there are a number of strategic residential / commercial developments allocated/permitted within the zone of influence of the SPA/Ramsar.

4.120 There is considerable uncertainty on the timing of any minerals development on the two Proposed Submission allocation sites. There is also uncertainty in relation to the specific nature of the development that might come forward, save for the details of the current planning proposal at Hamble Airfield. There is significant uncertainty at this stage in relation to the temporal overlap between the development of the two proposed site allocations and the development of the relevant allocated residential/commercial allocations/permissions.

4.121 All current planned and active minerals and waste sites have been through Plan level and project level HRA, and relevant residential and industrial/commercial allocations have been subject to Local Plan HRA and permissions through project level HRA. These HRAs have concluded that these developments would not be likely to have a have a significant effect on the SPA/Ramsar alone or in-combination. Furthermore, any development proposals coming forward for the Proposed Submission site allocations and the Local Plan residential/commercial allocations, would likewise be subject to project level HRA.

4.122 It is considered that subject to the implementation of mitigation and other measures outlined in the assessment Tables 4.2 and 4.3, for Hamble Airfield and Ashley Manor Farm, respectively, and through the development management processes, the two Proposed Submission site allocations, in combination with each other, current planned and active minerals and waste developments, and current allocated residential / commercial developments, would not be likely to have a significant effect on the integrity of the Solent & Southampton Water SPA/Ramsar, when considered in-combination.

5. Monitoring

5.1 Monitoring in relation to plans and projects is not specified by the Habitats Regulations, but it is considered to be good practice, and guidance suggests that monitoring the effects of plan implementation in relation to any issues identified by the HRA should be undertaken.

5.2 It is important that measures for monitoring and review of International sites of interest in the Plan area are established in support of the HRA findings and mitigation measures which will provide the necessary policy tools to ensure that adverse effects on the integrity of sites do not occur over the Plan period.

5.3 Monitoring for the HRA will be in tandem with the SA/SEA requirements and will link up with the Hampshire Minerals and Waste Plan Authorities' Annual Monitoring Report on the implementation of the Plan Partial Update. Monitoring of those minerals and waste planning permissions that require HRA are incorporated into the annual monitoring exercise. This will allow the Plan Authorities to determine if the Plan is having an adverse effect on any International sites.

5.4 Where site allocations cannot be permitted, the Plan's Implementation and Monitoring Plan will be used to monitor the impact of this on the Plan and the monitoring triggers will act to instigate a review of the plan in light of any such decisions. This will include proposals that may be refused based on their effects on International sites.

5.5 In addition, each of the sites and areas that have been assessed within this HRA process will be subject to conditions and planning obligations that will have elements of monitoring and compliance included.

6. Measures for avoiding adverse effects on site integrity

6.1 Potential measures for avoiding adverse effects on site integrity are set out in Section 3 and Table 3.1 of this report, which include removal of proposals or removal / modification of policies, that may cause an adverse effect, and imposition of development restrictions.

6.2 Site selection, policy formulation and the preparation of the suite of Development Considerations for each site allocation in the Proposed Submission Plan have been informed by the various stages and iterations of this HRA process.

6.3 A significant number of proposed minerals and waste site allocations were removed from the Draft Plan Partial Update just prior to and following the Regulation 18 Draft Plan Consultation. The reasons for those sites not being taken forward in the Proposed Submission Plan are provided in Table 7.1 of the Regulation 19 HRA Screening Assessment[56]. More detailed reasons for the sites not being taken forward are set out in the Proposal Study[57].

6.4 Although many sites were removed because they subsequently gained planning permission, were not considered strategic or could be covered by the safeguarding policy, a number of sites were excluded based wholly or partly on their potential negative effects on the environment, including the potential for significant effects on the integrity of International sites. An example is Bramshill Quarry Extension (HAR03), which was excluded from the Proposed Submission Plan based on objection from Natural England and, in particular, its potential effects on the integrity of the Thames Basin Heaths SPA, which could not be mitigated.

6.5 A significant number of changes / improvements were made to the wording of most policies, including supporting text, to strengthen the protective nature of the Development Management Policies, and to ensure accuracy and improve clarity for all policies. The significant number of beneficial changes to policies in the Proposed Submission Plan is evident in the comparison of policy wording between the HRA Regulation 19 Screening Report and the earlier Regulation 18 Screening Report[58].

6.6 Significant improvements have been made to the Development Considerations for the five Proposed Submission site allocations, as set out in full in Appendix A of the Proposed Submission Plan[59], and in particularly for the four site allocations assessed as part of this Appropriate Assessment (relevant Development Considerations are set

[56] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[57] Minerals and Waste Site Proposal Study (October 2023) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[58] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (August 2022) - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

[59]

out in assessment Tables 4.2 – 4.5). These includes Development Considerations specifically related to potential effects of the proposed allocations on International sites. Those Development Considerations relating specifically to International sites are delineated with an asterix to denote that they must be addressed - "*development cannot be permitted if it may negatively affect the integrity of European protected sites. The development requirements for maintaining this integrity are identified with an asterisk (*) in the text and must be addressed*."

6.7 The final HRA Record of Assessment and Determination will include a summation of changes made as a result of the HRA process.

Acronyms and Initialisations

AA	Appropriate Assessment
AADT	Annual average daily traffic
APIS	Air Pollution Information System
cSAC	Candidate SAC
DMRB	Design Manual for Roads and Bridges
DPD	Development Plan Document
EC	European Community
ECJ	European Court of Justice
EU	European Union
GIS	Geographical Information System
HMWP	Hampshire Minerals and Waste Plan
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LDD	Local Development Document
LTP	Local Transport Plan
MWPA	Minerals and Waste Planning Authorities
NH_3	Ammonia
NO_x	Oxides of Nitrogen
NPPF	National Planning Policy Framework
NSN	National Site Network
pH	Scale used to specify the acidity or basicity of an aqueous solution
PRoW	Public Rights of Way
pSAC	Potential or possible SAC
pSPA	Potential SPA
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SACO	Supplementary Advice on Conservation Objectives
SEA	Strategic Environmental Assessment
SNAP	Site Nitrogen Action Plan
SO_2	Sulphur Dioxide
SO_x	Oxides of Sulphur
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom
UV	Ultra Violet

Glossary

Appropriate Assessment (AA)
A self-contained step in the wider decision-making process of Habitats Regulations Assessment (HRA), required under the Conservation of Habitats and Species Regulations 2017 (as amended). An appropriate assessment is only required where the competent authority determines that the plan or project is likely to have a significant effect on a National Site Network (NSN) site or Ramsar site, either alone or in combination with other plans or projects, and the plan or project is not directly connected with or necessary to the management of that site.

Biodiversity
The total variety of life on earth, including all genes, species, ecosystems and the ecological processes of which they are part.

Climate Change
Long-term shift in weather patterns in a specific region or globally, involving changes in overall weather patterns, including precipitation, temperatures and cloud cover and thought to be leading to an increased frequency of extreme weather events. Much of the observed and predicted climate change is attributed to human activities that have resulted in increased concentrations of greenhouse gases in the atmosphere, such as carbon dioxide.

Climate Change Adaptation
Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate Change Mitigation
Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Compensation
Measures taken to make up for the loss of, or permanent damage to, biological resources through the provision of replacement areas. Any replacement area should be similar to or, with appropriate management, have the ability to reproduce the ecological functions and conditions of those biological resources that have been lost or damaged.

Competent Authority
A competent authority is any Minister, Government Department, public or statutory undertaker, public body of any description or person holding public office. Used in the Habitats Regulations to refer to the authority that is responsible for adopting, authorising or undertaking a plan or project.

Conservation Objectives
A statement of the nature conservation aspirations for a site, expressed in terms of the favourable condition that is sought for the species and/or habitats for which the site has been selected to attain.

Conservation Status
Four parameters are considered when assessing conservation status. For habitat these are range, area, structure and function (referred to as habitat condition) and future prospects. For species, the parameters are range, population, habitat (extent and condition) and future

prospects. The Habitats Regulations define when the conservation status of the habitats and species it lists is to be considered as favourable.

Cumulative Impacts/Effects
Impacts/effects that result from the incremental changes caused by other past, present or reasonably foreseeable actions together with the plan or project in question.

Development Plan Document (DPD)
Documents that form part of a statutory development plan such as a Minerals and Waste Plan.

Favourable Condition
The condition represented by the achievement of the conservation objectives; the desired condition for a designated habitat or a species on an individual site.

Favourable Conservation Status
The conservation status of habitats and species is 'favourable' where all that is necessary to sustain the habitats and species in the long term is in place.

Habitats Directive
Abbreviated term for European Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (1992). It is the aim of this Directive to promote the conservation of certain habitats and species within the European Union and is implemented in the UK through the Habitats Regulations.

Habitats Regulations
Abbreviated term for The Conservation of Habitats and Species Regulations 2017 (as amended), which transposes the Habitats Directive and Birds Directive into UK legislation.

Habitats Regulations Assessment (HRA)
As required by the Habitats Regulations, the identification of any aspects of an emerging plan or project that would have the potential to cause a likely significant effect on National Site Network (NSN) sites and Ramsar sites (either alone or in combination with other plans and projects), and to begin to identify appropriate mitigation strategies where such effects are identified (see also Appropriate Assessment).

In-Combination Effect
Effects, which may or may not interact with each other, but which could affect the same receptor or interest feature (i.e. a habitat or species for which an International Site is designated).

Integrity (of a site)
The coherence of a site's ecological structure and function across its whole area that enables it to sustain the habitat, complex of habitats and/or levels of populations of the species for which it was classified.

Interest Feature
A natural or semi-natural feature for which an International site has been selected. This includes any Habitats Directive Annex I habitat, any Annex II species and any population of a bird species for which an SPA has been classified under the Birds Directive.

Local Development Documents (LDD)
Documents that form part of a statutory development plan (Development Plan Documents) or which amplify the policies of the statutory development plan (Supplementary Planning Documents).

Mitigation
Measures taken to avoid or reduce negative impacts. Measures may include locating the development and its working areas and access routes away from areas of high ecological interest, or timing works to avoid sensitive periods. See also 'compensation' (which is separate from mitigation).

National Planning Policy Framework (NPPF)
Government policy framework that sets out planning policies for England and how they are expected to be applied. It provides guidance for local planning authorities and decision-takers, both in preparing development plans and in development management.

National Site Network (NSN)
Under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, SACs and SPAs in the UK no longer form part of the EU's Natura 2000 ecological network. The 2019 Regulations have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK.

Natural England
A non-departmental public body sponsored by the Department for Environment, Food and Rural Affairs (DEFRA), responsible for ensuring that England's natural environment, including its land, flora and fauna, freshwater and marine environments, geology and soils, are protected and improved. It also has a responsibility to help people enjoy, understand and access the natural environment.

Precautionary Principle
An approach which takes avoiding action based on the possibility of significant environmental or other damage, even before there is conclusive evidence that the damage will occur.

Ramsar Site
An internationally important wetland designated under the Convention on Wetlands of International Importance especially as Wildfowl Habitat (Ramsar, Iran) 1971 and, as a matter of government policy, afforded the same protection as a site designated under the Habitats Regulations.

Regulation 18 Consultation
Initial consultation stage of the preparation/review of a Local Plan under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012.

Regulation 19 Consultation
Pre-submission publication representations stage of the preparation/review of a Local Plan under Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012.

Screening (HRA)
Determination of whether a plan or project (or parts therein) are likely to have a likely significant effect on the integrity of International sites alone or in-combination with other plans or projects and therefore whether an Appropriate Assessment is necessary.

Site of Special Scientific Interest (SSSI)
A site designated by Natural England as an area of special interest by reason of any of its flora, fauna, geological or physiographical features and of national importance.

Special Area of Conservation (SAC)
Sites identified under the EU Habitats Directive (92/43/EEC) supporting habitats or species listed within Annex I and II of that legislation, which form a network of internally recognised sites across Europe alongside SPA and Ramsar sites. Following the UK withdrawal from the EU, these sites are provided equivalent protection under the UK transposition of this Directive - The Conservation of Habitats and Species Regulations 2017 (as amended), as amended by the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.

Special Protection Area (SPA)
Sites identified under the EU Directive on the Conservation of Wild Birds protecting sites supporting the habitats of migratory and other particularly threatened species of bird. They form a network of internally recognised sites across Europe alongside SAC and Ramsar sites. Following the UK withdrawal from the EU, these sites are provided equivalent protection under the UK transposition of this Directive - The Conservation of Habitats and Species Regulations 2017 (as amended), as amended by the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.

Sustainable Development
The use of resources to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Appendix 1: Natural England Response to Baseline and Methodology Report Consultation

The following text is Natural England's response to a formal consultation of 'Version 1 – June 2020' of the HRA Baseline and Methodology Report:

Date: 28 June 2021
Our ref: 355329 & 355335

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

T 0300 060 3900

Hampshire Planning Policy
hmwp.consult@hants.gov.uk
Hampshire County Council
BY EMAIL ONLY

Dear Hampshire Planning Policy,

Consultation: Hampshire Minerals and Waste Plan: Partial Update. Sustainability Appraisal (SA) Scoping & Baseline Report and Habitats Regulation Assessment Baseline & Methodology Report.

Thank you for your consultations on the above documents which were received on the 1st June 2021.

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

SA Scoping and Baseline Report

Relevant Plans and Programmes

Natural England has not reviewed the plans within the Sustainability Appraisal Scoping Report. However, we advise that the following types of plans relating to the natural environment should be considered where applicable to your plan area;

- Green infrastructure strategies
- Biodiversity plans
- Rights of Way Improvement Plans
- Shoreline management plans
- Coastal access plans
- River basin management plans
- AONB and National Park management plans
- Relevant landscape plans and strategies

Designated Sites

At this stage we cannot identify particular sites which may be significantly affected by the Local Plan but suggest that the following designations, amongst others, are taken in to consideration when creating any future site allocations:

- Site of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Ramsar Site
- National Park

- Area of Outstanding Natural Beauty
- Site of 20 ha or more of best and most versatile agricultural land

Objectives and Indicators

We particularly emphasise the importance of considering the enhancement and restoration of biodiversity and landscapes, as well as it's protection and that of Best and Most Versatile agricultural land. Natural England is supportive of the appraisal criteria under SA3 and SA5 for these purposes. The monitoring indicators for SA3 could go further to reflect these criteria e.g. including the number of permitted applications which generate adverse effects on sites of environmental importance and those which contribute to an enhancement to the ecological network/habitat connectivity.

We note that the proposed monitoring indicators under SA15 may not reflect all potential impacts to the quality and extent of existing recreational assets which could be considered further, e.g. through considering informal footpaths and accessible spaces which may not be a Right of Way or in a current green/blue infrastructure strategy.

Habitats Regulation Assessment

Natural England understands that the partial update to the Hampshire Minerals and Waste Plan has potential to affect Habitats (European) sites, particularly as it may allocate proposed sites for development. We agree with the proposed methodology for assessing these impacts and advise that where likely significant effects are identified they are evaluated through a full Appropriate Assessment. The outcomes of the Habitats Regulation Assessment (HRA) should also inform future versions of the SA.

Please note that Natural England reserves the right to provide further comments on the HRA at future stages of the plan-making process, should the responsible authority seek our views on the subsequent stages.

For any queries relating to the specific advice in this letter only please contact Miranda Petty on Miranda.petty@naturalengland.org.uk or 02082 258045. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours faithfully

Miranda Petty
Thames Solent Team
Sustainable Development

Appendix 2: Natural England Response to Regulation 18 Draft Plan Consultation

The following text is Natural England's response to the Regulation 18 consultation that ran from 8 November to 31 January. Consultation documents included the Revised HRA Baseline and Methodology Report and Regulation 18 HRA Screening Report.

Date: 31 January 2023
Our ref: 412302
Your ref: N/A

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HCC Minerals and Waste Policy Team
Minerals and Waste Planning Policy
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BY EMAIL ONLY

Dear Policy Team,

Hampshire Minerals and Waste Plan Partial Update - Draft Plan Consultation 8 November 2022 to 31 January 2023

Thank you for your consultation on the above dated 08 November 2022 which was received by Natural England on the same date.

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

Below we set out our specific comments on the Plan's Vision, policies, site allocations and HRA Screening report.

Please note our objections to the Bramshill Quarry Extension and Purple Haze site allocations, covered further below.

Further detailed advice can be found within Annex 1 of this letter relating to several aspects of the Plan, including designated sites, biodiversity net gain, landscape, agri-environment schemes and soils.

Plan Vision

The Plan seeks to balance the needs of three main priorities including protection of the environment, maintenance of communities and supporting the County's economy. Natural England welcome the emphasis the Vision places on carbon-neutral minerals and waste development, to meet the Government target for net zero by 2050.

However we would encourage the Plan Vision to go beyond just the protection of the natural environment, to restoring and enhancing it. It should be stronger in its acknowledgement of the climate and ecological emergencies currently underway and recognise the important role of the natural environment to deliver measures that reduce the effects of climate change and enable nature recovery. The plan should take a strategic approach to the protection and enhancement of the natural environment, including providing a net gain for biodiversity, considering opportunities to enhance and improve connectivity. Where relevant there should be linkages with the Biodiversity Action Plan, Local Nature Partnership, National Park/Area of Outstanding Natural Beauty Management Plans, Rights of Way Improvement Plans, Green Infrastructure Strategies, and the Nature Recovery Network.

The Plan should have a clear aim to significantly and demonstrably improve the natural environment to ensure the needs of minerals and waste development are met sustainably.

With regard to the mapping in Figure 3 and Figure 7, we recommend that Special Areas of Conservation (SACs), Ramsar sites and Sites of Special Scientific Interest (SSSIs) are added, or that a separate map is provided showing environmental designations clearly.

Policies

Policy 2: Climate change – mitigation and adaptation

Climate change is already impacting on nature and society in England. The projected scale and rate of climate change, coupled with existing environmental pressures, has serious implications for the natural environment and the services it provides to society. In response, many local authorities across England are formally declaring a climate change emergency and are now looking for practical steps to address it. The faster that greenhouse gas emissions can be reduced, the more the overall pressure on the natural environment will be reduced.

The Plan should consider climate change adaption and recognise the role of the natural environment to deliver measures to reduce the effects of climate change, for example tree planting to moderate heat island effects. In addition factors which may lead to exacerbate climate change (through more greenhouse gases) should be avoided (e.g. pollution, habitat fragmentation, loss of biodiversity) and the natural environment's resilience to change should be protected. Green Infrastructure and resilient ecological networks play an important role in aiding climate change adaptation.

Natural England welcome this policy that supports minerals and waste proposals that contribute towards climate change mitigation and adaptation. It sets out several opportunities that can be utilised, including reductions in greenhouse gases and sustainable use of resources. However we strongly recommend the Policy also incorporates 'Nature-based solutions' as an essential tool in tackling climate change and its effects. These involve the restoration of ecosystems for the long-term benefit of people and nature. Examples include:

- Expansion of tree and woodland cover - to strengthen woodland habitat networks, protect soils, provide shade whilst capturing additional carbon from the atmosphere.
- Restoration and creation of priority habitats such as lowland meadows, lowland fens and rush pastures. This improves places where people live and recreate, protecting carbon stores and strengthening the nature recovery network.
- Natural floodplain management, through the use of tree planting, habitat creation and restoration, to alleviate flooding further downstream.
- Retrofitting of green and blue infrastructure such as trees and sustainable urban drainage systems (SUDS) in urban localities to address flood risk and heat island effects

We recommend the Plan ensures the following:

1. Identify, protect and plan to restore areas of peatland (shallow and deep peats, where present). Wherever possible this should include consideration and management of the catchment areas that support the peatland.

2. Identify opportunities to increase tree and woodland cover consistent with the UK target. Wherever possible, this should provide multi-functional benefits. Planting on peatlands and other open priority habitats must be avoided.

3. Identify areas where nature-based solutions can provide benefits to people whilst reducing climate change vulnerability in the natural environment.

4. Identify habitats and protected sites that are particularly vulnerable to the impacts of climate change and consider how the Plan can reduce these vulnerabilities.

Natural England has published a range of resources to help with the recommended actions; please see links listed under Annex 2 of this letter. Natural England would be happy to advise further on this aspect of the Plan update as it progresses.

Policy 3: Protection of habitats and species

Natural England welcome this policy.

With regard to paragraph 4.28 of the Draft Plan, it should be made clear that where adverse effects on integrity of Habitats sites (SPAs or SACs) cannot be ruled out, development can only proceed where it can be demonstrated that all 3 legal tests for a derogation under the Habitats Regulations have been satisfied i.e. no alternative solutions, imperative reasons of overriding public interest and necessary compensatory measures have been secured (with regard to compensatory measures, these would have to be implemented and functioning prior to any habitat loss or damage as a result of a proposal). This process is discussed in more detail further below.

Please see further detailed advice on biodiversity net gain within Annex 1.

Policy 8: Water resources

It is recommended the Policy title refers to water quality as well as resource.

The Policy rightly outlines that nitrogen and phosphorus in Hampshire's water environment are current significant challenges. The Policy should recognise that the River Avon and the River Itchen within Hampshire are both designated SACs that are currently suffering from nutrient enrichment and require nutrient neutrality from new development. Additionally, much of Hampshire also lies within the catchment for the Solent coastal marine sites including Solent and Southampton Water SPA, Portsmouth Harbour SPA, Chichester and Langstone Harbours SPAS and Solent Maritime SAC. The River Test SSSI and other water bodies across the County may also be sensitive to the impacts of nutrient enrichment.

Minerals and waste development may disturb and mobilise nutrients locked within the soil or add to nutrient levels through construction and operational processes. Therefore the Plan should ensure that impacts of nutrients on the designated sites are assessed and avoided/mitigated where appropriate.

Policy 9: Protection of Soils

We welcome that the protection of best and most versatile (BMV) agricultural land (Grades 1, 2 and 3a in the Agricultural Land Classification (ALC)) and for soils as a resource for the future is reflected in this policy. Policy 9 should also include specific reference to mitigation measures for the protection of soils in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the Institute of Quarrying Good Practice Guide for Handling Soils. Mitigation should aim to minimise soil disturbance and to retain as many ecosystem services as possible through careful soil management during the construction process and appropriate soil re-use.

Please see further advice relating to soils under the Soil, Agricultural Land Quality and Reclamation section within Annex 1.

Policy 10: Restoration of minerals and waste developments

We advise that the Policy itself better reflects biodiversity priorities of the Plan, in particular including a link to environmental net gain and Policy 3. The after-use of sites should be designed and implemented specifically for **public** benefit.

With regard to soils, Policy 10 should reflect the need to restore BMV agricultural land back to its original land quality as an important consideration. The Policy should safeguard the long term capability of BMV agricultural land by providing for development on lower quality agricultural land wherever possible. Appropriate aftercare should also be included under this policy. Please see further advice under the Soils section within Annex 1.

Site allocations

Ashley Manor farm

The proposed development in this location could have potential significant effects on the Solent and Southampton Water Special Protection Area (SPA) in relation to potential SPA bird use of the site at high tide for foraging/roosting. We recognise that the allocation site lies outside of the current mapped Solent Wader and Brent Goose network, which aims to identify, maintain and protect a network of sites within the Solent area that are regularly used by the designated overwintering birds of the Solent Special Protection Areas (SPAs). However, given the development size, its proximity to the to the Solent coastline and the mobile nature of the designated species, we would recommend that evidence is gathered at this site to determine any usage by overwintering bird species. Mitigation may need to be provided in line with the SW&BGS mitigation guidance.

The allocation site also comprises best and most versatile (BMV) agricultural land (specifically Grades 2 and 3a in the Agricultural Land Classification (ALC)). Please refer to our advice on Soil, Agricultural Land Quality and Reclamation within Annex I regarding soil handling and management.

Bramshill Quarry extension - OBJECTION

Natural England **objects** to this site allocation. We advise that the proposal is likely to adversely affect a significant area of the Thames Basin Heaths SPA, designated for supporting breeding European nightjar, Dartford warbler and Woodlark. Within this SPA the principal habitats supporting these qualifying species are lowland heathland and rotationally managed coniferous plantation woodland. We note that the HRA screening report classes this proposal as within category C2 (indirect effects) when clearly the proposed allocation would steer development directly onto an international site, the definition of category C1, which brings into question the soundness of this screening process and its relationship to the partial update of the Plan.

The proposed allocation also forms the majority of Unit 6 and part of Unit 13 of the Castle Bottom to Yateley and Hawley Site of Special Scientific Interest (SSSI) and the proposals are likely to harm features of the SSSI including breeding bird assemblages of the species listed above, lowland heathland and invertebrate assemblages. Unit 6 of the SSSI was last assessed in 2021 as 'Unfavourable recovering' for lowland heath and invertebrate assemblage features. The area was clear-felled around 12 years ago and these capital works were followed by ongoing restoration work for open heathland habitat under Higher Level Stewardship, enabling a 'vast improvement in site condition since…2013'. All three SPA birds have been recorded using the area. In particular, the blocks of gorse are at a height and density valuable to breeding and over wintering Dartford warbler.

Various impact pathways on the designated site are identified and explored below.

- Direct habitat loss

The policy outlines a requirement to exclude and buffer the Hartford Bridge Flats management area. The extent of this area is not defined, but if it is the area outside the Forest England holding – Unit 6 of the SSSI as described above – then it comprises over half of the proposed allocation area, which begs the question why this area is included within the allocation boundary. Notwithstanding this, the impacts of works will still lead to extensive habitat loss within the SPA. The timeframes for such losses is not detailed within the policy or supporting information, although the Plan covers the time period up to 2040. However, past experience shows us that mineral extraction proposals of this type and size can span decades, often being extended beyond their original intended lifetime.

We consider the timeframe and scale of losses would be significant, in particular through destruction of supporting habitat, disturbing and displacement of SPA birds, with potential consequences for the breeding success of the populations, across the site over the lifetime of the project. No information currently appears to support the Policy with regard to how direct and indirect impacts will be appropriately avoided or mitigated.

We note the Policy requirement to 'ensure no net loss of foraging and breeding areas used by the SPA birds'. No detail is provided as to how this approach will be implemented to ensure adverse effects can be avoided. It is Natural England's advice that any proposal to create new habitat (including habitat translocation, habitat conversion and/or habitat banking) within a Habitat Site's boundary specifically to 'mitigate' for a predicted loss of SAC or SPA habitat (with regard to HRA) would be a compensatory measure, rather than mitigation. Thus we would question the soundness of a policy that allowed mineral development within an SPA based on no net loss.

The Forestry England Forest Design Plan for the area shows that much of the plantation within the southern part of the allocation site appears to be outlined for clear fell across different periods between 2017 to beyond 2046. Some of the land also is shown to fall under a Section 106 with long term plans for open habitat, suggesting this area may have been secured as mitigation land, presumably related to the existing adjacent quarry. If this is the case, then this land clearly should be safeguarded. With regard to plans for restoration of heathland habitat on minerals sites, it is important to note that its success is not guaranteed. Past experience of similar scenarios elsewhere shows us that removal of the habitat and its underlying geology means it is unlikely the habitat can be replaced like for like. Restored habitats are usually more prone to scrub and tree invasion; the structure and function of such habitats usually differ to the original. This introduces uncertainty about the future value of restored habitats to SPA birds and condition of heathland communities particularly over the long term.

In light of this, we consider the works would be contrary to the conservation objectives for the Thames Basin Heaths SPA, in particular to maintaining or restoring the structure and function of supporting habitats to SPA features, and the supporting processes on which those habitats rely, which are intrinsically linked to the supporting geology.

- Recreational disturbance

The proposed works may cause displacement of existing recreational use at the site into more sensitive areas across the protected sites, with potential harmful consequences to breeding SPA birds. This aspect will require further work to ascertain the current level of use, potential impact from its displacement, and any corresponding scope for mitigation.

- Changes in hydrology

Detailed consideration will be required of the potential significant implications the works may have on qualifying features and supporting habitat either onsite or within the surrounding designated site(s) by affecting the surface and/or groundwater hydrology/geohydrology regime.

- Pollution events and biosecurity threats

Further consideration will be required of noise, visual, vibrational, water and air pollution impacts from construction and operational activities. The proposal also poses potential biosecurity threats through spread of invasive non-native species or disease.

Assessment under the Habitats Regulations

Likely significant effect

The Plan is supported by an HRA Screening report that identifies this site allocation would appear to require the direct partial loss of Thames Basin Heaths SPA and therefore likely significant effects

cannot be excluded. Unless it is removed at this early stage, we advise that the allocation is taken forward for consideration within an appropriate assessment under the Habitats Regulations, where the full significance of the impact on the site's integrity, alone or in combination with other plans/projects, should be further tested in view of the site's conservation objectives.

Appropriate Assessment

Appropriate assessments cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. Complete information is required to ensure that the plan or proposal will not affect the integrity of the international sites.

Further guidance is available to competent authorities at Habitats regulations assessments: protecting a European site - GOV.UK (www.gov.uk) and to planning authorities at https://www.gov.uk/guidance/appropriate-assessment.

Natural England is a statutory consultee on the Appropriate Assessment stage of the HRA process, and a competent authority should have regard for Natural England's advice.

Implications for the Hampshire Minerals and Waste Plan partial update

Natural England consider the Bramshill Quarry Extension site allocation is contrary to the Habitats Regulations objective to protect Habitats Sites, due the extent and magnitude of the direct habitat losses as a result of the development. We find it hard to see how an appropriate assessment could come to any other conclusion than that the proposal would result in a significant adverse effect on the integrity of the Thames Basin Heaths SPA.

Where adverse effects on integrity of an SPA cannot be ruled out, a plan or project can only proceed where it can be demonstrated that all 3 legal tests for a derogation under the Habitats Regulations have been passed.

The site allocation would also damage or destroy the interest features for which Castle Bottom to Yateley and Hawley Commons SSSI has been notified.

It is considered the policy would not meet several requirements of the revised National Planning Policy Framework (July 2021), in particular the following paragraphs:

> *174. Planning policies and decisions should contribute to and enhance the natural and local environment by:*
>
> *a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
>
> *b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
>
> *c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
>
> *d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
>
> *e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil,*

> *air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; …*
>
> *175. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.*
>
> *179. To protect and enhance biodiversity and geodiversity, plans should:*
>
> > *b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

As you are aware, the Plan and its allocation sites must be both legally compliant and sound. The NPPF sets out four tests of soundness including:

> *a) Positively prepared – providing a strategy which, as a minimum, seeks to meet the area's objectively assessed needs[21]; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;*
>
> *b) Justified – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;*
>
> *c) Effective – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground; and*
>
> *d) Consistent with national policy – enabling the delivery of sustainable development in accordance with the policies in this Framework and other statements of national planning policy, where relevant.*

Overall it is Natural England's view that it would be very difficult for the Plan to demonstrate it is **Justified** and **Consistent with national policy** where this allocation policy is taken forward for progression.

Natural England objects to the Bramshill Quarry Extension site allocation. We strongly recommend that alternative options are sought to meet mineral needs within the County that are less environmentally damaging and more sustainable.

Purple Haze - OBJECTION

Since the adoption of the original Plan, a planning application has come forward for works at Purple Haze, with supporting information that enabled further consideration of the environmental implications of the development. Based on this information, Natural England objected to the application. The reasons for this objection still stand and remain pertinent to our advice for the proposed site allocation within the current Plan partial update, discussed below.

- Hydrological impacts

Natural England retain serious concerns that the proposal may have adverse effects on the natural hydrological regime of Ebblake Bog which forms part of the Dorset Heaths Special Area of Conservation (SAC) and Dorset Heathlands SPA and Ramsar, also designated as SSSI.

Ebblake Bog is an acid mire in the upper valley of the Moors River. It has developed on a section of the river valley that has a poor hydraulic gradient and permitted the accumulation of relatively deep peat. Valley mires are rare habitats in lowland England, being confined mainly to the New Forest and the Poole Basin, with a few outlying sites elsewhere. The habitat is now internationally scarce, and the few relatively undamaged mires, of which Ebblake Bog is one, thus assume special nature conservation importance.

The HRA Screening Report rightly screens this policy into the forthcoming appropriate assessment, where the full significance of the impact on the site's integrity, alone or in combination with other plans/projects, should be further tested in view of the site's conservation objectives. The appropriate assessment must show whether an adverse effect on the integrity of the site from the proposal can be ruled out or not. Robust hydrogeological evidence will be required to inform the assessment.

- Functionally linked land to Habitats sites

Natural England advise that the proposal is likely to adversely affect a significant area of Ringwood Forest which support breeding and foraging Annex 1 birds that are the basis of the Dorset Heathland SPA designation. The area has been identified by RSPB as an Important Bird Area, supporting a population of nightjar which is significant on a national scale which is contiguous with several sites within the SPA. Significant loss of habitat used by nightjar close to the SPA may have effects on the overall SPA population. The functional linkage for SPA birds will therefore require consideration.

Additionally, further functional linkages are possible between the application site and the Dorset Heaths SAC concerning typical species of the SAC (see NE supplementary advice to the conservation objectives) such as rare reptiles and invertebrates. These will need to be assessed.

- Recreational disturbance

The proposed works may cause displacement of existing recreational use at the site into surrounding protected sites that support features sensitive to recreational disturbance. This aspect will require further work to ascertain the current level of use, potential impact on sites from its displacement, and any corresponding scope for mitigation.

The development considerations for this policy include the protection of the Dorset Heathland SAC, SPA and Ramsar site, the Avon Valley SPA and Ramsar site and the River Avon SAC. We advise that the **New Forest SAC, SPA and Ramsar is also included** with respect to potential displacement of recreation into those sites.

- Protected species

Natural England understands that the site is considered to be of national importance for rare reptiles (sand lizard and smooth snake). In these circumstances the loss of this site should be given a high degree of weight in its own right as well as contributing to the overall ecological interest of the application site. The implementation of the proposal would be dependent on the receipt of a license from Natural England in order to prevent the contravention of statutory protections of these reptiles and their habitats under the Habitat Regulations. In order to grant the requisite licenses Natural England would need to be satisfied, amongst other criteria, that favourable conservation status for each species was maintained.

- Irreplaceable habitats

We consider the wet heath and wet/heath mire transitions within the application site should be viewed as irreplaceable habitat (NPPF definition;' Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity'). Drier heathland within the application site could also come into the same category because of the species diversity that it supports. Policy in the

NPPF (180 c.) is that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

The Triangle

Page 86 of the JCEB Minerals Proposal Study June 2018_FINAL (hants.gov.uk) states only the Provisional ALC Grade. Post 1988 data is however available for this site at Agricultural Land Classification detailed Post 1988 ALC survey, Romsey, The Triangle Ridge (Hants Minerals Site 8) - ALCR21293 (naturalengland.org.uk).

Please refer to further advice on soils and BMV land under Annex 1.

Yeatton Farm

As with Ashley Manor Farm above, the proposed development in this location could have potential significant effects on the Solent and Southampton Water Special Protection Area (SPA) in relation to potential SPA bird use of the site at high tide for foraging/roosting. Again, we would recommend that evidence is gathered at this site to determine any usage by the designated overwintering bird species. Mitigation may need to be provided in line with the SW&BGS mitigation guidance.

The allocation site also comprises Grades 2 and 3a BMV agricultural land. Please refer to our advice on Soil, Agricultural Land Quality and Reclamation within Annex I regarding soil handling and management.

Additionally, our systems show the site supports good quality semi-improved grassland priority habitat. The Policy should ensure impacts on priority habitats are appropriately addressed in line with your duties and obligations under relevant legislation and national policy (see advice on priority habitats and biodiversity net gain under Annex I).

Habitats Regulations Assessment screening report

Natural England concur with the impact pathways listed and discussed within the screening report. Please see our advice on aspects such as water quality and resources, air quality under Annex I. We look forward to receiving the draft Appropriate Assessment of the Plan.

If you have any queries relating to the advice in this letter please contact me.

Should you wish to discuss the issues described within this letter and scope for mitigation with Natural England, we would be happy to provide advice through our Discretionary Advice Service.

Please consult us again once the information requested above, has been provided.

Yours sincerely

Becky Aziz
Senior Advisor Sustainable Development
Thames Solent Area Team
Natural England

Annex 1

Designated sites

The Local Plan should set criteria based policies to ensure the protection of designated biodiversity and geological sites. Such policies should clearly distinguish between international, national and local sites[1]. Natural England advises that all relevant Sites of Special Scientific Interest (SSSIs), European sites (Special Areas of Conservation and Special Protect Areas) and Ramsar sites[2] should be included on the proposals map for the area so they can be clearly identified in the context of proposed development allocations and policies for development. Designated sites should be protected and, where possible, enhanced.

The Plan partial update should be screened under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (as amended) at an early stage so that outcomes of the assessment can inform key decision making on strategic options and development sites. It may be necessary to outline avoidance and/or mitigation measures at the plan level, which will usually need to be considered as part of an Appropriate Assessment, including a clear direction for project level HRA work to ensure no adverse effect on the integrity of internationally designated sites. It may also be necessary for plans to provide policies for strategic or cross boundary approaches, particularly in areas where designated sites cover more than one Local Planning Authority boundary.

Natural England would welcome early discussion on the Habitats Regulations Assessment (HRA) of the plan and can offer further advice as policy options are progressed.

Biodiversity and Geodiversity

The Plan should set out a strategic approach, planning positively for the creation, protection, enhancement and management of networks of biodiversity. There should be consideration of geodiversity conservation in terms of any geological sites and features in the wider environment.

A strategic approach for networks of biodiversity should support a similar approach for green infrastructure (outlined below). Planning policies and decisions should contribute and enhance the natural and local environment, as outlined in para 170 of the NPPF. Plans should set out the approach to delivering net gains for biodiversity.

Priority habitats, ecological networks and priority and/or legally protected species populations

The Plan should be underpinned by up to date environmental evidence. This should include an assessment of existing and potential components of local ecological networks. This assessment should inform the Sustainability Appraisal, ensure that land of least environment value is chosen for development, and that the mitigation hierarchy is followed and inform opportunities for enhancement as well as development requirements for particular sites.

Priority habitats and species are those listed under Section 41 of the Natural Environment and Rural Communities Act, 2006 and UK Biodiversity Action Plan (UK BAP). Further information is available here: Habitats and species of principal importance in England. Local Biodiversity Action Plans (LBAPs) identify the local action needed to deliver UK targets for habitats and species. They also identify targets for other habitats and species of local importance and can provide a useful blueprint for biodiversity enhancement in any particular area.

Protected species are those species protected under domestic or European law. Further information can be found here Standing advice for protected species. Sites containing watercourses, old buildings,

[1] International sites include: Special Protection Areas (SPAs); Special Areas of Conservation (SACs) and Ramsar sites[1]. National sites include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) Local sites include wildlife Sites or geological sites (a variety of terms are in use for local sites).

[2] The following wildlife sites should also be given the same protection as European sites: potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on European sites

significant hedgerows and substantial trees are possible habitats for protected species.

Ecological networks are coherent systems of natural habitats organised across whole landscapes so as to maintain ecological functions. A key principle is to maintain connectivity - to enable free movement and dispersal of wildlife e.g. badger routes, river corridors for the migration of fish and staging posts for migratory birds. Local ecological networks will form a key part of the wider Nature Recovery Network proposed in the 25 Year Environment Plan. Where development is proposed, opportunities should be explored to contribute to the enhancement of ecological networks.

Planning positively for ecological networks will also contribute towards a strategic approach for the creation, protection, enhancement and management of green infrastructure, as identified in paragraph 171 of the NPPF.

Where a plan area contains irreplaceable habitats, such as ancient woodland, ancient and veteran trees, there should be appropriate policies to ensure their protection. Natural England and the Forestry Commission have produced standing advice on ancient woodland, ancient and veteran trees.

We advise consultation with the Hampshire Biodiversity Information Centre (HBIC) for information and advice about Local Sites of geodiversity and biodiversity interest, e.g. SINCs.

Biodiversity net gain

The Environment Act 2021 requires Biodiversity Net Gain (BNG) as a mandatory condition of planning permission from November 2023. A Biodiversity Gain Plan will need to be submitted by developers to set out the strategy for achievement of BNG for development proposals, including metric calculations as well as information not captured in the metric e.g., species factors; habitat management plans; how biodiversity net gains will be managed and maintained. The key requirements of mandatory BNG are set out below:

- A minimum of 10% BNG
- Developers must use the statutory metric to be produced and published by the Secretary of State (SoS) for Defra to calculate gains and/or losses of habitat
- BNG can be delivered on-site or off-site as units, or as a last resort via the statutory credits system, currently under development.
- Land delivering off-site BNG will be required to be formally registered on the national Biodiversity Gain Site register, currently under development.
- Land delivering habitats for BNG will have to be legally secured and maintained for a minimum of 30 years.

Further guidance on mandatory BNG and how it will be implemented will soon be available via the Government response to the recent BNG Regulations and Implementation consultation, the SoS Metric consultation response and draft Statutory Instruments, due early 2023.

We welcome the requirement within Policy EN2 for development to achieve 10% net gain for biodiversity, in accordance with the Environment Act 2021 and national guidance. BNG will form a key tool in delivering nature's recovery and is also fundamental to health and wellbeing, as well as creating attractive and sustainable places to live and work in.

We recommend a separate standalone policy for BNG is developed that aligns as closely as possible with the requirements of the Environment Act and anticipated framework for mandatory net gain, and that it is updated as necessary with the forthcoming guidance.

The Plan's approach to BNG should be compliant with the mitigation hierarchy, as outlined in paragraph 180 of the National Planning Policy Framework (NPPF). Policies and decisions should first consider options to avoid adverse impacts on biodiversity from occurring. When avoidance is not possible, impacts should be mitigated and finally, if there is no alternative, compensation should be provided for any remaining impacts. BNG should be additional to any habitat creation required to mitigate or compensate for impacts. It is also important to note that net gains can be delivered even

if there are no losses through development.

The policy should ensure that BNG is not applied to irreplaceable habitats and should also make clear that any mitigation and/or compensation requirements for designated sites should be dealt with separately to BNG provision.

Natural England will be happy to support Hampshire County Council on this aspect of the Plan as it progresses.

- Wider environmental gains

Your authority should consider the requirements of the NPPF (paragraph 8, 73, 104, 120, 174, 175 and 180) and seek opportunities for wider environmental net gain wherever possible. This can be achieved by considering how policies and proposed allocations can contribute to wider environment enhancement, help adapt to the impacts of climate change and/or take forward elements of existing green infrastructure, open space of biodiversity strategies. Opportunities for environmental gains, including nature-based solutions to help adapt to climate chance, might include:

- Identifying opportunities for new multi-functional green and blue infrastructure
- Managing existing and new public spaces to be more wildlife friendly (e.g., by sowing wildflower strips) and climate resilient. O'Sullivan et. al (2017) provide a useful example of cost-effective, low-maintenance management for species-rich grassland on road verges and the value they can contribute to biodiversity and ecosystem services
- Planting trees, including street trees, characteristic to the local area to make a positive contribution to the local landscape
- Improving access and links to existing greenspace, identifying improvements to the existing public right of way network, or extending the network to create missing footpath or cycleway links
- Restoring neglected environmental features (e.g., a hedgerow or stone wall or clearing away an eyesore)

Any habitat creation and/or enhancement as a result of the above may also deliver measurable BNG.

Green Infrastructure

Green infrastructure refers to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to provide multiple benefits including space for recreation, access to nature, flood storage and urban cooling to support climate change mitigation, food production, wildlife habitats and health & well-being improvements provided by trees, rights of way, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands.

Green infrastructure is also relevant in a rural context, where it might additionally refer to the use of farmland, woodland, wetlands or other natural features to provide services such as flood protection, carbon storage or water purification.

A strategic approach for green infrastructure is required to ensure its protection and enhancement, as outlined in para 171 of the NPPF. Green Infrastructure should be incorporated into the plan as a strategic policy area, supported by appropriate detailed policies and proposals to ensure effective provision and delivery. Evidence of a strategic approach can be underpinned by Green Infrastructure Strategy. We encourage the provision of green infrastructure to be included as a specific policy in the Plan or alternatively integrated into relevant other policies, for example biodiversity, green space, flood risk, climate change, reflecting the multifunctional benefits of green infrastructure.

Soil, Agricultural Land Quality and Reclamation

The Minerals and Waste Plan should give appropriate weight to the roles performed by the area's

soils. These should be valued as a finite multi-functional resource which underpins our well-being and prosperity. Decisions about minerals development and restoration should take full account of the impact on soils, their intrinsic character and the sustainability of the many ecosystem services they deliver.

1. The 25 Year Environment Plan (25YEP) sets out government action to help the natural world regain and retain good health, including highlighting the need to:

   - protect the best agricultural land
   - put a value on natural capital, including healthy soil
   - ensure all soils are managed sustainably by 2030
   - restore and protect peatland

2. Soil is a finite resource which plays an essential role within sustainable ecosystems, performing an array of functions supporting a range of ecosystem services, including storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food. In order to safeguard soil resources as part of the overall sustainability of the development, it is important that the soil resource is able to retain as many of its important functions as possible. This can be achieved through careful soil management and appropriate, beneficial soil re-use, with consideration on how any adverse impacts on soils can be avoided or minimised.

3. The conservation and sustainable management of soils is reflected in the National Planning Policy Framework (NPPF), particularly in paragraphs 174, 175 and 210. When planning authorities are considering land use change, the permanency of the impact on soils is an important consideration. Particular care over planned changes to the most potentially productive soil is needed, for the ecosystem services it supports including its role in agriculture and food production. Plan policies should therefore take account of the impact on agricultural land and soil resources and the wide range of vital functions (ecosystem services) they provide and conform to NPPF and Planning Practice Guidance (Natural Environment and Minerals).

4. Where minerals underlie BMV agricultural land, **it is particularly important that restoration and aftercare preserve the long-term potential of the land as a national, high quality resource**. Where alternative afteruses (such as forestry and some forms of amenity, including nature conservation) are proposed on BMV agricultural land, the methods used in restoration and aftercare should enable the land to retain its longer-term agricultural capability, thus remaining a high quality resource for the future.

5. The soils and ALC baseline, as presented in HMWP Partial Update SA Revised Baseline Report September 2021 FINAL (hants.gov.uk), utilises the 'Provisional ALC data' as opposed to 'pre-1988 ALC data', as is stated in the report. The Provisional ALC maps were only intended as a strategic guide to land quality, primarily to support strategic regional and county level planning. The Provisional Mapping predates the subdivision of Grade 3 land and the subsequent revised 1988 assessment methodology. The maps are not suitable for use in evaluating individual sites where development is proposed. In the JCEB Minerals Proposal Study, the Provisional ALC grades, as presented in Figure 7.2 (HMWP Partial Update SA Revised Baseline Report September 2021 are referred to as 'pre-1988' ALC data. This is, however, incorrect terminology, as 'pre-1988' ALC refers to Pre 1988 ALC Site survey data, which are available for selected locations at a scale of either 1:25,000 or 1:10,000. These surveys were based on superseded MAFF Technical Guidance.

6. All of the allocated sites contain BMV agricultural land. In line with the the Planning Practice Guidance (PPG) to support the NPPF; we welcome that the allocated sites are all accompanied by a detailed ALC Survey (Post-1988) (with the exception of The Triangle site allocation, see above), available on the magic website.

   To support plan allocations (and subsequent planning applications), sites over 5ha agricultural land should have a site-specific Soils Management Plan informed by a detailed ALC and soil resource survey, in line with best practice guidance: Construction Code of Practice for the

Sustainable Use of Soils on Construction Sites to inform any subsequent soil handling and site restoration plans. Further information can be found in the PPG Minerals Guidance restoration and aftercare of minerals sites section, the Defra Guidance for Successful Reclamation of Mineral and Waste sites and the Institute of Quarrying Good Practice Guide for Handling Soils.

The assessment of soil properties to inform appropriate soil management, restoration and drainage, where required, and demonstrate the ability to deliver high quality development that protects and maximises opportunities to enhance the natural environment.

7. Reclamation to non-agricultural uses does not mean that there can be any reduced commitment to high standards in the reclamation. Such reclamations require equal commitment by mineral operators, mineral planning authorities and any other parties involved to achieve high standards of implementation.

8. Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through provision of suitable soil handling and management advice. The planning authority should ensure that sufficient site-specific soil survey data is available to inform decision making. To include, for example, assessment of soil properties to inform appropriate soil management, restoration and drainage, where required.

Air Pollution

We would expect the plan to address the impacts of air quality on the natural environment. In particular, it should address the traffic impacts associated with new development, particularly where this impacts on European sites and SSSIs. The environmental assessment of the plan (SA and HRA) should also consider any detrimental impacts on the natural environment, and suggest appropriate avoidance or mitigation measures where applicable.

Natural England advises that one of the main issues which should be considered in the plan and the SA/HRA are proposals which are likely to generate additional nitrogen emissions as a result of increased traffic generation, which can be damaging to the natural environment.

The effects on local roads in the vicinity of any proposed development on nearby designated nature conservation sites (including increased traffic, construction of new roads, and upgrading of existing roads), and the impacts on vulnerable sites from air quality effects on the wider road network in the area (a greater distance away from the development) can be assessed using traffic projections and the 200m distance criterion followed by local Air Quality modelling where required. We consider that the designated sites at risk from local impacts are those within 200m of a road with increased traffic[3], which feature habitats that are vulnerable to nitrogen deposition/acidification. APIS provides a searchable database and information on pollutants and their impacts on habitats and species.

It is advised that assessment, alone and in combination with other plans and projects, should be carried out in line with Natural England guidance that provides a simple step by step approach to assessing road traffic emissions under the Habitats Regulations. All designated sites that may be impacted by the affected road network within a reasonable buffer zone should be screened in for consideration under the Local Plan appropriate assessment. Please note that the method for assessing in combination effects has changed in the past few years due to a number of high profile appeal decisions. They include the following: The Wealden Judgement; The People Over Wind Case; and CJEU Ruling In The Netherlands Nitrogen And Agriculture Cases C-293/17 and C-294/17. As such we would be looking for a more detailed in-combination assessment with other plans/projects in the area and with Local Plans.

Please note that ammonia (NH_3) from traffic emissions should also be assessed as the impact from this source on designated sites is currently unclear.

[3] The ecological effects of diffuse air pollution (2004) English Nature Research Report 580
Design Manual for Roads and Bridges Volume 11, Section 3 Part 1 (2007), Highways Agency

It is advised air quality impacts on interest features of nationally and locally designated sites is also carried out as part of an assessment of impacts on SSSIs and wider biodiversity.

Water Quality and Resources and Flood Risk Management

Natural England expects the Plan to consider the strategic impacts on water quality and resources as outlined in paragraph 170 of the NPPF. We would also expect the plan to address flood risk management in line with the paragraphs 155-165 of the NPPF.

The Local Plan should be based on an up to date evidence base on the water environment and as such the relevant River Basin Management Plans should inform the development proposed in the Local Plan. These Plans (available here) implement the EU Water Framework Directive and outline the main issues for the water environment and the actions needed to tackle them. Local Planning Authorities must in exercising their functions, have regard to these plans.

The Local Plan should contain policies which protect habitats from water related impacts and where appropriate seek enhancement. Priority for enhancements should be focussed on European sites, SSSIs and local sites which contribute to a wider ecological network.

Plans should positively contribute to reducing flood risk by working with natural processes and where possible use Green Infrastructure policies and the provision of SUDs to achieve this.

Landscape

Natural England expects the Plan to include strategic policies to protect and enhance valued landscapes, as well criteria based policies to guide development.

The plan area includes several Areas of Outstanding Natural Beauty and two National Parks. We advise the LPA to take into account the relevant Management Plan for the area. For Areas of Outstanding Natural Beauty, the LPA should seek the views of the AONB Partnership. Development proposals brought forward through the plan should avoid significant impacts on protected landscapes, including those outside the plan's area and early consideration should be given to the major development tests set out in paragraph 172 of the National Planning Policy Framework (NPPF).

Policy should also reflect requirements of the NPPF (paragraph 172) in relation to Coastal Change Management Areas, Heritage Coasts and the England Coast Path.

Tranquillity

The Local Plan should identify relevant areas of tranquillity and provide appropriate policy protection to such areas as identified in paragraph 100 and 180 of the NPPF.

Tranquillity is an important landscape attribute in certain areas e.g. within National Parks/AONBs, particularly where this is identified as a special quality. The CPRE have mapped areas of tranquillity which are available here and are a helpful source of evidence for the Local Plan and SEA/SA.

Agri-environment schemes

Minerals sites may be under existing Higher Level Stewardship agreements before minerals are extracted and may be returned to agricultural use following landfilling. We advise early contact by agreement holders with the Rural Payments Agency to discuss individual cases so that any payments can be amended accordingly.

Access and Rights of Way

Natural England advises that the Plan should include policies to ensure protection and enhancement of public rights of way and National Trails, as outlined in paragraph 98 of the NPPF. Recognition

should be given to the value of rights of way and access to the natural environment in relation to health and wellbeing and links to the wider green infrastructure network. The plan should seek to link existing rights of way where possible, and provides for new access opportunities. The plan should avoid building on open space of public value as outlined in paragraph 97 of the NPPF.

Annex 2

Climate change – further resources

Please see below links to further resources that may be useful in developing local policy to address climate change within the local authority area.

- The Climate Change Adaptation Manual - provides extensive information on climate change adaptation for the natural environment. It considers the potential impacts of climate change on individual priority habitats and outlines possible adaptation responses. It includes the Landscape Scale Adaptation Assessment Method to assist those wanting to undertake a climate change vulnerability assessment for an area larger than an individual site or specific environmental feature, focussing on identifying vulnerabilities to climate change.
- The National Biodiversity Climate Change Vulnerability Model is a mapping tool that helps identify areas likely to be more vulnerable to the impacts of climate change.
- Carbon Storage and Sequestration by Habitat 2021 (NERR094) – a recently updated report that reviews and summarises the carbon storage and sequestration rates of different semi-natural habitats that can inform the design of nature-based solutions to achieve climate mitigation and adaptation.
- The Nature Networks Evidence Handbook – aims to help the designers of nature net
- .works by identifying the principles of network design and describing the evidence that underpins the desirable features of nature networks. It builds on the Making Space for Nature report of Lawton et al. 2010), outlining some of the practical aspects of implementing a nature network plan, as well as describing the tools that are available to help in decision making.
- Natural England Climate Change webinars - a range of introductory climate change webinars available on YouTube.

Appendix 3: Plans or Projects Considered In-combination

The following table sets out the principal plans and projects that have been considered as part of the in-combination component of this Appropriate Assessment.

Plan / Project	Nature of proposals	Impact Pathways
Neighbouring Minerals and Waste Plans		
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Wiltshire Minerals and Waste Plan 2009 West Berkshire Minerals and Waste Plan to 2037 Central and Eastern Berkshire Joint Minerals and Waste Plan to 2036 Surrey Minerals and Waste Plan 2011 West Sussex Minerals and Waste Plans (Joint Minerals Local Plan and Waste Local Plan) (2018, partial review 2021) Somerset Minerals and Waste Plans (2015 and 2013, respectively)	Allocation of sites for mineral extraction and waste management adjacent to the HMWP Partial Update Plan area. International sites relevant to screened-in site allocations, potentially affected, based on plan boundary geographical proximity: • Dorset Heaths SAC • Mottisfont Bats SAC • River Avon SAC • Solent Maritime SAC • Solent and Dorset Coast SPA • Thames Basin Heaths SPA • Avon Valley SPA/Ramsar • Dorset Heathlands SPA/Ramsar • Portsmouth Harbour SPA/Ramsar • Solent & Southampton Water SPA/Ramsar	Potential effects on International sites include: • Land take • Impact to functionally linked land • Noise and visual disturbance • Changes to water levels/quality • Air pollution/quality • Recreation related impacts The approved Plans have been subject to HRA, and mitigation and policies have been developed to ensure that development brought forward under these plans does not have an adverse effect on the integrity of International sites and development which would adversely affect integrity would not be permitted. It is recognised, however, that there may be in-combination effects between allocated sites in neighbouring minerals and waste plans and the HMWP Partial Update based on proximity and the nature of potential impact pathways.
Local Transport Plans		
Hampshire Local Transport Plan (LTP3) 2011-2031 Emerging Hampshire Local Transport Plan (LTP4) Local Transport Plan 3 – Strategy for South Hampshire Southampton Local Transport Plan (LTP 4) – Connected Southampton: Transport Strategy 2040 Portsmouth Local Transport Plan (LTP3)	Policy frameworks for transport, traffic and highways improvements/maintenance. Potential for effects on all International sites within and adjacent to the Plan area.	Potential effects on International sites include: • Impact to functionally linked land • Noise and visual disturbance • Air pollution/quality The approved Plans have been subject to HRA and mitigation and policies have been developed to ensure that projects brought forward under these plans do not have an adverse effect on the integrity of International sites and development which would adversely affect integrity would not be permitted. The aim of the LTPs is to reduce the air quality impacts of transport and traffic.
Local Plans		
New Forest National Park Local Plan 2016-2036 (adopted 2019) South Downs National Park Local Plan 2014-2033 (adopted 2019)	Allocation of land for housing and employment. Potential for effects on all International sites within and adjacent to the Plan area.	Potential effects on International sites include: • Recreational pressure from new residential developments. • Atmospheric pollution from traffic associated with new developments.

Southampton City Council Local Development Plan (revised 2015) and emerging Local Plan Portsmouth Local Plan 2006 – 2027 and emerging Local Plan New Forest District Council Local Plan 2016-2036 Test Valley Borough Revised Local Plan 2011-2029 (2016) Basingstoke & Deane Borough Council Local Plan 2011-2029 Eastleigh Borough Local Plan 2016 – 2036 Fareham Borough Local Plan 2023-2037 Winchester District Local Plan 2018-2036 (emerging) Havant District Local Plan: Core Strategy (2011) East Hampshire District Local Plan: Joint Core Strategy (2014) and emerging Local Plan (2021-2040) Rushmoor Local Plan 2014-2032 Hart Local Plan 2014-2032 Gosport Borough Local Plan 2011-2029 Chichester Local Plan – Key Policies 2014-2029		• Changes to hydrological conditions. • Impacts to functionally linked land. The approved Local Plans have been subject to HRA and mitigation and policies have been developed to ensure that development brought forward under these plans does not have an adverse effect on the integrity of International sites and development which would adversely affect integrity would not be permitted. It is recognised, however, that there may be in-combination effects between allocated sites in the listed plans and the HMWP Partial Update based on proximity and the nature of potential impact pathways.
Relevant neighbouring Local Plans		
East Dorset and Christchurch Local Plan Core Strategy adopted 2014 and emerging Dorset Council Local Plan 2021-2038 Wiltshire Core Strategy adopted 2015 Wokingham Borough Local Development Framework Adopted Core Strategy Development Plan Document 2010 and emerging Local Plan Bracknell Forest Core Strategy Development Plan Document adopted 2008 and emerging Local Plan	Allocation of land for housing and employment. Potential for effects on all International sites within and adjacent to the Plan area.	Potential effects on International sites include: • Recreational pressure from new residential developments. • Atmospheric pollution from traffic associated with new developments. • Changes to hydrological conditions. • Impacts to functionally linked land. The approved Local Plans have been subject to HRA, and mitigation and policies have been developed to ensure that development brought forward under these plans does not have an adverse effect on the integrity of International sites and development which would adversely affect integrity would not be permitted. It is recognised, however, that there may be in-combination effects between allocated sites in the listed plans and the HMWP Partial Update based on proximity

		and the nature of potential impact pathways.
Nationally Significant Infrastructure Projects		
Southampton to London Pipeline	Part replacement of aviation fuel pipeline from Fawley Refinery to West London. Works pass through Thames Basin Heaths SPA and Thursley, Ash, Pirbright and Chobham SAC.	• Habitat loss • Disturbance • Hydrological impacts • Invasive species introductions • Air quality and water quality The Environmental Statement[60] and HRA for the project confirms that the project will not affect the integrity of any SPA's, SAC's or Ramsar sites. No significant impacts are anticipated with implementation of mitigation.
AQUIND Interconnector	AQUIND Interconnector consists of the construction of a 2,000 MW bi-directional electrical power transmission link between the South Coast of England and Normandy in France and would facilitate the import and export of electricity between the UK and France. Onshore activities have potential to affect Chichester and Langstone Harbour SPA/Ramsar, and Portsmouth Harbour SPA/Ramsar	• Disturbance and displacement of qualifying birds. • Temporary habitat loss. • Accidental spills/litter HRA[61] undertaken for the project concludes that there would be no adverse effects on the integrity of any of the affected sites, either alone or in-combination.
Highways England – M3 Junction 9 Improvement Project.	Highways Improvements to M3 Junction 9. Potential impacts to River Itchen SAC and Mottisfont Bats SAC.	• Habitat loss • Disturbance • Hydrological impacts • Air quality and water quality Preliminary Environmental Information Report[62] concludes that significant impacts are not anticipated at the River Itchen SAC from any construction or operational activity, however potential habitat degradation caused by traffic emissions will be considered through ongoing assessment work. No significant impacts are anticipated to Mottisfont Bats Special Area of Conservation due to the intervening distance from the Proposed Scheme boundary.

[60] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN070005/EN070005-000158-6.1%20Non-Technical%20Summary.pdf

[61] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020022/EN020022-001581-6.8.1%20HRA%20-%20Vol%201%20-%20Habitats%20Regulations%20Assessment%20Report%20Main%20Text%20Rev002_tracked.pdf

[62] https://highwaysengland.citizenspace.com/he/m3-junction-9-supplementary/supporting_documents/M3%20Junction%209%20%20May%202021%20%20Preliminary%20Environmental%20Information%20Report%20%20NonTechnical%20Summary%20%201%20of%202.pdf

Appendix 4: Relevant International Sites – Key Information

Key information including Conservation Objectives and site vulnerabilities for International sites, relevant to the Appropriate Assessment, are provided in Tables A4.1 – A4.10. International sites condition in relation to component SSSI Units is provided in Table A4.11.

Tables A4.1 to A4.9: Relevant International sites – description, conservation objectives and qualifying features

Table A4.1: Dorset Heaths SAC	
Location:	SY887835 (approximate centre of site)
Area (ha):	5719.54
Main Characteristics:	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys, it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.
Conservation Objective:	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.
Qualifying Features:	• 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 7150 Depressions on peat substrates of the Rhynchosporion • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae** • 7230 Alkaline fens • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 1044 Southern damselfly *Coenagrion mercuriale* • 1166 Great crested newt *Triturus cristatus*
Site vulnerabilities / sensitivities	• Fragmentation and physical loss • Recreational pressure and a high incidence of wildfires • Affected by several old mineral extraction permissions, some still active • Lack of use for traditional agriculture • Undergrazing • Invasion by conifer and introduced scrub species, especially Rhododendron
Site priority pressures / threats	• Inappropriate scrub control • Public access/ disturbance • Undergrazing • Inappropriate forestry and woodland management • Drainage • Water pollution • Invasive species • Habitat fragmentation • Conflicting conservation objectives • Wildfire / arson

	• Air Pollution: risk of atmospheric nitrogen deposition • Deer

Table A4.2: River Avon SAC	
Location:	SU124339 (approximate centre of site)
Area (ha):	416.57
Main Characteristics:	The River Avon SAC is one of the richest chalk rivers in Europe. It is important for its fish population, invertebrate, which include populations of Desmoulins Whorl Snail and its in-river plant community habitat as well as bankside habitats.
Conservation Objective:	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.
Qualifying Features:	• 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* • 1095 Sea lamprey *Petromyzon marinus* • 1096 Brook lamprey *Lampetra planeri* • 1106 Atlantic salmon *Salmo salar* • 1163 Bullhead *Cottus gobio*
Site vulnerabilities / sensitivities	• Below-average rainfall / drought • Decreased flow velocities and increased siltation (especially affecting Ranunculus cover) • Increased abstractions • Combined effect of low flow with point sources of nutrient inputs producing localised increases in competitive plant growth • Inappropriate stocking with fish populations (intentional or accidental) • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Inappropriate control of vegetation (as a refuge for fry and juvenile fish) • River channel workings leading to less natural form • Sediment oxygen availability • Toxic contamination - synthetic compounds • Toxic contamination - non-synthetic compounds • Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in organic loading • Non-toxic contamination - changes in mineral loading • Non-toxic contamination - changes in thermal regime • Non-toxic contamination - changes in turbidity • Biological disturbance - microbial pathogens • Biological disturbance - non-native species, translocation or introduction • Biological disturbance - selective extraction of species • Food availability
Site priority pressure/threat	• Physical modification • Siltation • Water pollution • Water abstraction • Changes in species distributions

	• Invasive species • Public access/ disturbance • Hydrological changes • Inappropriate weed control • Change in land management • Habitat fragmentation

Table A4.3: Solent Maritime SAC	
Location:	SU756003 (approximate centre of site)
Area (ha):	11243.12
Main Characteristics:	The Solent Site Improvement Plan covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA. The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass *Spartina maritima*. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objective:	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.
Qualifying Features:	• 1130 Estuaries • 1320 Spartina swards (*Spartinion maritimae*) • 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • 1110 Sandbanks which are slightly covered by sea water all the time • 1140 Mudflats and sandflats not covered by seawater at low tide • 1150 Coastal lagoons* • 1210 Annual vegetation of drift lines • 1220 Perennial vegetation of stony banks • 1310 *Salicornia* and other annuals colonizing mud and sand • 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* (""white dunes"")" • 1016 Desmoulin's whorl snail *Vertigo moulinsiana*
Site vulnerabilities / sensitivities	• Water level management • Water depth (standing water - fresh water, brackish or saline) • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities)

	• Inappropriate control of vegetation - burning, grazing, mowing or clearing of deadwood • Succession • Changes in creek system pattern • Coastal defences / coastal squeeze • Sea level rise • Isolating barrier - presence and nature • Sediment oxygen availability • Sedimentation regime • Physical loss - removal • Physical loss - smothering • Physical damage - siltation • Physical damage - abrasion/erosion • Physical damage - selective extraction • Toxic contamination - synthetic compounds • Toxic contamination - non-synthetic compounds • Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in organic loading • Non-toxic contamination - changes in thermal regime • Non-toxic contamination - changes in turbidity • Non-toxic contamination - changes in salinity • Biological disturbance - non-native species, translocation or introduction • Biological disturbance - selective extraction of species
Site priority pressure/threat	• Public access/ disturbance • Coastal squeeze • Fisheries: commercial, marine and estuarine • Water pollution • Changes in species distributions • Climate change • Change to site conditions • Invasive species • Direct land take from development • Biological resource use • Change in land management • Inappropriate pest control • Air Pollution: risk of atmospheric nitrogen deposition • Hydrological changes • Direct impact from third party

Table A4.4: The New Forest SAC	
Location:	SU225075 (approximate centre of site)
Area (ha):	29213.57
Main Characteristics:	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt.

	The New Forest is one of the most important sites for wildlife in the UK and recognised as being of exceptional importance for nature conservation throughout Europe. Over 90% of the SAC comprises the unenclosed land of the Crown Lands and adjacent commons, the remainder is managed by private owners and occupiers. Of fundamental importance to sustaining the exceptional quality on the open forest is the persistence of commoning, the commoners stock roam freely maintaining the structural diversity and richness of the habitats complemented by annual heathland cutting and burning programmes.
Conservation Objective:	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.
Qualifying Features:	• 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) • 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7150 Depressions on peat substrates of the *Rhynchosporion* • 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) • 9130 *Asperulo-Fagetum* beech forests • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 91D0 Bog woodland* • 91E0 Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* • 7140 Transition mires and quaking bogs • 7230 Alkaline fens • 1044 Southern damselfly Coenagrion mercuriale • 1083 Stag beetle Lucanus cervus • 1166 Great crested newt Triturus cristatus
Site vulnerabilities / sensitivities	• Mix of acid and alkaline soil conditions • Soil compaction Below-average rainfall / drought • Water levels and hydrology (groundwater, rainwater or floodwater-fed) • Water depth (standing water - fresh water, brackish or saline) • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Extent of suitable larval habitat (southern damselfly) • Extent of suitable larval habitat (stag beetle) • Inappropriate control of vegetation -burning, grazing, mowing or clearing of deadwood • Succession • River channel workings leading to less natural form • Physical loss - removal • Physical damage - abrasion/erosion • Toxic contamination - synthetic compounds • Toxic contamination - non-synthetic compounds

	• Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in organic loading • Non-toxic contamination - changes in mineral loading • Biological disturbance - microbial pathogens • Biological disturbance - non-native species, translocation or introduction
Site priority pressure/threat	• Drainage • Inappropriate scrub control • Fish stocking • Deer • Air Pollution: risk of atmospheric nitrogen deposition • Public access/ disturbance • Change in land management • Changes in species distributions • Water pollution • Forestry and woodland management • Inappropriate ditch management • Invasive species • Vehicles • Inappropriate cutting/mowing • Direct impact from 3rd party

Table A4.5: Avon Valley SPA/Ramsar	
Location:	SZ144983 (approximate centre of site)
Area:	1385.08
Main Characteristics:	The Avon Valley SPA is a wide river valley comprising mostly unimproved wet grassland and has importance for wintering wildfowl with Bewick's Swan and Gadwall as the notified features. The population of Bewick's Swan in the Avon Valley have decreased in line with a national trend of decrease, which is felt to be due to decreased breeding success. At the moment the SPA does not meet the threshold for them.
Conservation Objective:	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.
Qualifying Features:	• A037(NB) *Cygnus columbianus bewickii*: Bewick swan • A051(NB) *Anas strepera*: Gadwall Ramsar Criteria: • The site shows a greater range of habitats than any other chalk river in Britain, including fen, mire, lowland wet grassland and small areas of woodland. • The site supports a diverse assemblage of wetland flora and fauna including several nationally-rare species. • Gadwall, *Anas strepera strepera*, NW Europe. Northern pintail, *Anas acuta*, NW Europe. Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe.
Site vulnerabilities / sensitivities	SPA • Water levels and hydrology (groundwater, rainwater or floodwater-fed) • Water level management • Water depth (standing water - fresh water, brackish or saline) • Increased abstractions • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities)

	• Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Biological disturbance - selective extraction of species • Predation - domestic animals • Height/density of vegetative cover (as bird refuge) • Obstruction to sight lines • Connectivity - between sheltering and foraging habitats • Food availability Ramsar • Water levels and hydrology (groundwater, rainwater or floodwater-fed) • Decreased flow velocities and increased siltation (especially affecting Ranunculus cover) • Increased abstractions • Inappropriate stocking with fish populations (intentional or accidental) • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Inappropriate control of vegetation - burning, grazing, mowing or clearing of deadwood • Succession • Isolating barrier - presence and nature • Physical damage - siltation • Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Toxic contamination - synthetic compounds • Biological disturbance - non-native species, translocation or introduction • Predation - domestic animals
Site priority pressure/threat	• Physical modification • Siltation • Water pollution • Water abstraction • Changes in species distributions • Invasive species • Public access/ disturbance • Hydrological changes • Inappropriate weed control • Change in land management • Habitat fragmentation

Table A4.6: Dorset Heathlands SPA/Ramsar	
Location:	SY887834 (approximate centre of site)
Area (ha):	8168.79 (SPA); 6,730 (Ramsar
Main Characteristics:	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history. This inland wetland contains numerous examples of wet heath (*Erica ciliaris*, *E. tetralix*) and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are amongst the best of their type in lowland Britain. The site supports a large assemblage of nationally rare and scarce wetland plant species and invertebrates (28 species).
Conservation Objective:	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, an • The distribution of the qualifying features within the site.
Qualifying Features:	• A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A082(NB) *Circus cyaneus*: Hen harrier • A098(NB) *Falco columbarius*: Merlin Ramsar Criteria: • Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*. Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*. • Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species. • Has a high species richness and high ecological diversity of wetland habitat types and transitions and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.
Site vulnerabilities / sensitivities	SPA • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Inappropriate control of vegetation - burning, grazing, mowing or clearing of deadwood • Succession • Physical loss - removal • Physical damage - selective extraction • Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Predation - domestic animals • Height/density of vegetative cover (as bird refuge) • Food availability Ramsar • Mix of acid and alkaline soil conditions • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Physical loss - removal • Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in mineral loading
Site priority pressure/threat	• Inappropriate scrub control • Public access/ disturbance • Undergrazing • Inappropriate forestry and woodland management • Drainage • Water pollution • Invasive species • Habitat fragmentation • Conflicting conservation objectives • Wildfire / arson • Air Pollution: risk of atmospheric nitrogen deposition • Deer

Table A4.7: New Forest SPA/Ramsar	
Location:	SU242030 (approximate centre of site)
Area (ha):	27,997.59 (SPA); 28,003 (Ramsar)

Main Characteristics:	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. Pools in the heath-mire matrix contain nutrient-enriched water supporting a species-rich assemblage of plants. Several species of plants, invertebrates and birds occurring at the site are rare, vulnerable, endangered or nationally scarce. The site is important for breeding, feeding and roosting birds characteristic of the heathland environment and wintering raptors, with up to 15 Circus cyaneus feeding or roosting in the area.
Conservation Objective:	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.
Qualifying Features:	• A072(B) *Pernis apivorus*: European honey-buzzard • A082(NB) *Circus cyaneus*: Hen harrier • A099(B) *Falco subbuteo*: Eurasian hobby • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A314(B) *Phylloscopus sibilatrix*: Wood warbler Ramsar Criteria • Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain. • The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plants are found on the site, as are at least 65 British Red Data Book species of invertebrate. The higher plants *Cicendia filiformis, Illecebrum verticillatum* and *Myosurus minimus* are considered vulnerable by the GB Red Book; while *Mentha pulegium* and *Ranunculus tripartitus* are included as endangered; and *Pulicaria vulgaris* as critically endangered. The Dark Guest Ant *Anergates atratulus* is also considered vulnerable by the IUCN Red List. • The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England. The site contains a rich invertebrate fauna.

Site vulnerabilities / sensitivities	• Soil compaction • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Inappropriate control of vegetation - burning, grazing, mowing or clearing of deadwood • Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Biological disturbance - non-native species, translocation or introduction • Biological disturbance - selective extraction of species • Predation - domestic animals • Height/density of vegetative cover (as bird refuge) • Food availability
Site priority pressure/threat	• Drainage • Inappropriate scrub control • Fish stocking • Deer • Air Pollution: risk of atmospheric nitrogen deposition • Public access/ disturbance • Change in land management • Changes in species distributions • Water pollution • Forestry and woodland management • Inappropriate ditch management • Invasive species • Vehicles • Inappropriate cutting/mowing • Direct impact from 3rd party

Table A4.8: Solent and Dorset Coast SPA	
Location:	SZ470973 (approximate centre of site)
Area (ha):	88,980.55
Main Characteristics:	Solent and Dorset Coast SPA protects important foraging areas at sea used by qualifying interest features from colonies within adjacent SPAs. These qualifying interest features are three species of tern: common tern, Sandwich tern and little tern. The site is located on the south coast within the English Channel. The site extends from the Isle of Purbeck in the West to Bognor Regis in the East, following the coastline on either side to the Isle of Wight and into Southampton Water. The boundary was established as a composite of the usage of the area within adjacent SPAs. From west to east, the adjacent SPAs with these tern species as qualifying interest features (in parentheses) are: Poole Harbour (common tern) Solent and Southampton Water SPA (common, Sandwich and little tern) and Chichester & Langstone Harbours SPA (common, Sandwich and little tern). In addition to these species at these sites, Sandwich terns at the Poole Harbour SPA are included in determining the details of the SPA. However, certain species at certain sites i.e. Roseate tern at Solent and Southampton Water SPA, and Sandwich, little and common tern at Pagham Harbour SPA are not included in determining the details of the SPA.
Conservation Objective:	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.
Qualifying Features:	• A191 *Sterna sandvicensis*; Sandwich tern (Breeding) • A193 *Sterna hirundo*; Common tern (Breeding) • A195 *Sternula albifrons*; Little tern (Breeding)
Site vulnerabilities / sensitivities	• Water level management • Water depth (standing water - fresh water, brackish or saline) • Changes in flow velocity • Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Extent of suitable foraging habitat • Changes in creek system pattern • Coastal defences / coastal squeeze • Sea level rise • Sedimentation regime • Physical loss - removal • Physical loss - smothering • Physical damage - abrasion/erosion • Physical damage - selective extraction • Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Toxic contamination - synthetic compounds • Toxic contamination - non-synthetic compounds • Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in organic loading • Biological disturbance - non-native species, translocation or introduction • Biological disturbance - selective extraction of species • Predation - domestic animals • Height/density of vegetative cover (as bird refuge) • Obstruction to sight lines • Connectivity - between sheltering and foraging habitats • Food availability
Site priority pressure/threat	• Public access/ disturbance • Coastal squeeze • Fisheries: commercial, marine and estuarine • Water pollution • Changes in species distributions • Climate change • Change to site conditions • Invasive species • Direct land take from development • Biological resource use • Change in land management • Inappropriate pest control • Air Pollution: risk of atmospheric nitrogen deposition • Hydrological changes • Direct impact from third party

Table A4.9: Solent and Southampton Water SPA/Ramsar	
Location:	SZ335936 (approximate centre of site)
Area (ha):	5505.86 (SPA); 5,415 (Ramsar)
Main Characteristics:	The Solent Site Improvement Plan (SIP) covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA.

	The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass Spartina maritima. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objective:	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.
Qualifying Features:	• A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose • A052(NB) *Anas crecca*: Eurasian teal • A156(NB) *Limosa limosa islandica*: Black-tailed godwit • Waterbird assemblage • A176(B) *Larus melanocephalus*: Mediterranean gull • A191(B) *Sterna sandvicensis*: Sandwich tern • A192(B) *Sterna dougallii*: Roseate tern • A193(B) *Sterna hirundo*: Common tern • A195(B) *Sterna albifrons*: Little tern • A137(NB) *Charadrius hiaticula*: Ringed plover Ramsar Criteria: • The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. • The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. The higher plants *Orobanche purpurea* and *Spartina maritima* are considered vulnerable and endangered, respectively, in the GB Red Book. The Mediterranean gull (*Larus melanocephalus*) is included in CITES Appendix I • Species with peak counts in winter: 51,343 waterfowl (5-year peak mean 1998/99-2002/2003) • Black-tailed godwit, *Limosa limosa* islandica, Iceland/W Europe. Dark-bellied brent goose, *Branta bernicla bernicla.* Eurasian teal, *Anas crecca*, NW Europe
Site vulnerabilities / sensitivities	SPA • Water level management • Water depth (standing water - fresh water, brackish or saline) • Changes in flow velocity SPA/Ramsar

	• Extent and condition of habitat cover (including species composition, vegetative cover and characteristic communities) • Extent of suitable foraging habitat • Changes in creek system pattern • Coastal defences / coastal squeeze • Sea level rise • Sedimentation regime • Physical loss - removal • Physical loss - smothering • Physical damage - abrasion/erosion • Physical damage - selective extraction • Non-physical disturbance - noise • Non-physical disturbance - visual disturbance • Toxic contamination - synthetic compounds • Toxic contamination - non-synthetic compounds • Non-toxic contamination - changes in nutrient loading • Non-toxic contamination - changes in organic loading • Biological disturbance - non-native species, translocation or introduction • Biological disturbance - selective extraction of species • Predation - domestic animals • Height/density of vegetative cover (as bird refuge) • Obstruction to sight lines • Connectivity - between sheltering and foraging habitats • Food availability
Site priority pressure/threat	• Public access/ disturbance • Coastal squeeze • Fisheries: commercial, marine and estuarine • Water pollution • Changes in species distributions • Climate change • Change to site conditions • Invasive species • Direct land take from development • Biological resource use • Change in land management • Inappropriate pest control • Air Pollution: risk of atmospheric nitrogen deposition • Hydrological changes • Direct impact from third party

Table A4.11: Relevant International Sites Condition (Status of Component SSSIs Units)

International Site	SSSI	Favourable	Unfavourable – Recovering	Unfavourable – No Change	Unfavourable – Declining	Partially Destroyed	Destroyed
Dorset Heaths SAC	Bourne Valley	0.00%	25.00%	38.04%	36.53%	0.00%	0.44%
	Canford Heath	0.00%	53.94%	45.08%	0.00%	0.00%	0.98%
	Christchurch Harbour	80.56%	19.44%	0.00%	0.00%	0.00%	0.00%
	Cranborne Common	8.64%	82.84%	0.00%	0.00%	0.00%	0.00%
	Ebblake Bog	0.00%	83.65%	5.81%	10.54%	0.00%	0.00%
	Ferndown Common	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	Holt and West Moors	11.58%	61.55%	21.74%	4.88%	0.00%	0.25%
	Horton Common	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
	Hurn Common	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	Lions Hill	0.00%	85.37%	11.67%	2.96%	0.00%	0.00%
	Parley Common	7.24%	22.20%	61.27%	8.86%	0.00%	0.42%
	Slop Blog and Uddens Heath	0.00%	48.45%	1.47%	36.39%	0.00%	13.68%
	St Leonards and St Ives Heath	0.39%	72.61%	18.29%	8.71%	0.00%	0.00%
	Town Common	1.34%	53.91%	39.74%	5.01%	0.00%	0.00%
	Turbary and Kinson Commons	0.00%	17.83%	74.92%	7.25%	0.00%	0.00%
	Verwood Heaths	0.00%	99.74%	0.00%	0.00%	0.00%	0.26%
Mottisfont Bats SAC	Mottisfont Bats	51.78%	48.22%	0.00%	0.00%	0.00%	0.00%
River Avon SAC	Porton Meadows	0.00%	65.44%	31.94%	2.62%	0.00%	0.00%
	River Avon System	3.48%	8.79%	84.93%	2.80%	0.00%	0.00%
	Gilkicker Lagoon	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Hurst Castle and Lymington River Estuary	21.46%	75.67%	0.00%	2.88%	0.00%	0.00%
	Langstone Harbour	8.39%	91.05%	0.56%	0.00%	0.00%	0.00%
Solent Maritime SAC	Bouldnor and Hamstead cliffs	85.14%	14.86%	0.00%	0.00%	0.00%	0.00%
	Chichester Harbour	6.77%	3.10%	9.69%	80.44%	0.00%	0.00%
	Eling and Bury Marshes	11.45%	0.00%	88.55%	0.00%	0.00%	0.00%
	Hurst Castle and Lymington River Estuary	21.46%	75.67%	0.00%	2.88%	0.00%	0.00%
	Hythe to Calshot Marshes	0.00%	89.35%	10.65%	0.00%	0.00%	0.00%
	King's Quay Shore	95.19%	4.62%	0.00%	0.00%	0.20%	0.00%
	Langstone Harbour	8.39%	91.05%	0.56%	0.00%	0.00%	0.00%
	Lee-on-The Solent to Itchen Estuary	73.40%	0.00%	26.60%	0.00%	0.00%	0.00%
	Lincegrove and Hackett's Marshes	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	Lower Test Valley	65.15%	34.85%	0.00%	0.00%	0.00%	0.00%
	Medina Estuary	14.25%	0.00%	85.75%	0.00%	0.00%	0.00%
	Newtown Harbour	55.95%	9.16%	34.55%	0.35%	0.00%	0.00%
	North Solent	67.49%	19.32%	2.04%	11.14%	0.00%	0.00%

	Thorness Bay	30.18%	0.00%	0.00%	69.82%	0.00%	0.00%
	Upper Hamble Estuary & Woods	89.50%	0.00%	2.76%	7.75%	0.00%	0.00%
	Yar Estuary	31.52%	2.01%	66.47%	0.00%	0.00%	0.00%
Avon Valley SPA/Ramsar	Avon Valley (Bickton-Christchurch)	58.73%	27.43%	6.06%	7.79%	0.00%	0.00%
	River Avon System	3.48%	8.79%	84.93%	2.80%	0.00%	0.00%
	Langstone Harbour	8.39%	91.05%	0.56%	0.00%	0.00%	0.00%
Dorset Heathlands SPA/Ramsar	Bourne Valley	0.00%	25.00%	38.04%	36.53%	0.00%	0.44%
	Canford Heath	0.00%	53.94%	45.08%	0.00%	0.00%	0.98%
	Christchurch Harbour	80.56%	19.44%	0.00%	0.00%	0.00%	0.00%
	Cranborne Common	8.64%	82.84%	8.52%	0.00%	0.00%	0.00%
	Ebblake Bog	0.00%	83.65%	5.81%	10.54%	0.00%	0.00%
	Ferndown Common	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	Holt and West Moors Heaths	11.58%	61.55%	21.74%	4.88%	0.00%	0.25%
	Horton Common	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
	Hurn Common	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	Lions Hill	0.00%	85.37%	11.67%	2.96%	0.00%	0.00%
	Parley Common	7.24%	22.20%	61.27%	8.86%	0.00%	0.42%
	Slop Bog and Uddens Heath	0.00%	48.45%	1.47%	36.39%	0.00%	13.68%
	St Leonards and St Ives Heaths	0.39%	72.61%	18.29%	8.71%	0.00%	0.00%
	Town Common	1.34%	53.91%	39.74%	5.01%	0.00%	0.00%
	Turbary and Kinson Commons	0.00%	17.83%	74.92%	7.25%	0.00%	0.00%
	Verwood Heaths	0.00%	99.74%	0.00%	0.00%	0.00%	0.26%
Portsmouth Harbour SPA/Ramsar	Portsmouth Harbour	2.58%	25.70%	71.21%	0.15%	0.00%	0.35%
Solent & Dorset Coast SPA	Dibden Bay	98.00%	0.00%	0.00%	2.00%	0.00%	0.00%
	Hythe to Calshot Marshes	0.00%	89.35%	10.65%	0.00%	0.00%	0.00%
	Lee-on-the Solent to Itchen Estuary	73.40%	0.00%	26.60%	0.00%	0.00%	0.00%
	Lincegrove and Hackett's Marshes	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	North Solent	67.49%	19.32%	2.04%	11.14%	0.00%	0.00%
	Titchfield Haven	0.00%	96.48%	0.00%	3.52%	0.00%	0.00%
	Upper Hamble Estuary and Woods	89.50%	0.00%	2.76%	7.75%	0.00%	0.00%
Solent & Southampton Water SPA/Ramsar	Brading Marshes to St Helen's Ledges	32.18%	46.69%	9.32%	11.80%	0.00%	0.00%
	Eling and Bury Marshes	11.45%	0.00%	88.55%	0.00%	0.00%	0.00%
	Hurst Castle and Lymington River Estuary	21.46%	75.67%	0.00%	2.88%	0.00%	0.00%
	Hythe to Calshot Marshes	0.00%	89.35%	10.65%	0.00%	0.00%	0.00%
	King's Quay Shore	95.19%	4.62%	0.00%	0.00%	0.20%	0.00%
	Lee-on-The Solent to Itchen Estuary	73.40%	0.00%	26.60%	0.00%	0.00%	0.00%
	Lincegrove and Hackett's Marshes	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	Lower Test Valley	65.15%	34.85%	0.00%	0.00%	0.00%	0.00%

	Lymington River Reedbeds	35.50%	64.50%	0.00%	0.00%	0.00%	0.00%
	Medina Estuary	14.25%	0.00%	85.75%	0.00%	0.00%	0.00%
	Newtown Harbour	55.95%	9.16%	34.55%	0.35%	0.00%	0.00%
	North Solent	67.49%	19.32%	2.04%	11.14%	0.00%	0.00%
	River Test	17.91%	37.53%	43.52%	1.03%	0.00%	0.00%
	Ryde Sands and Wootton Creek	71.92%	22.25%	5.84%	0.00%	0.00%	0.00%
	Sowley Pond	66.62%	0.00%	33.38%	0.00%	0.00%	0.00%
	The New Forest	54.68%	41.65%	2.11%	1.55%	0.00%	0.01%
	Thorness Bay	30.18%	0.00%	0.00%	69.82%	0.00%	0.00%
	Titchfield Haven	0.00%	96.48%	0.00%	3.52%	0.00%	0.00%
	Upper Hamble Estuary & Woods	89.50%	0.00%	2.76%	7.75%	0.00%	0.00%
	Whitecliff Bay and Bembridge Ledges	99.07%	0.00%	0.93%	0.00%	0.00%	0.00%
	Yar Estuary	31.52%	2.01%	66.47%	0.00%	0.00%	0.00%
Thames Basin Heaths SPA	Ash to Brookwood Heaths	90.50%	8.52%	0.97%	0.00%	0.00%	0.00%
	Bourley & Long Valley	0.86%	99.14%	0.00%	0.00%	0.00%	0.00%
	Bramshill	99.94%	0.00%	0.06%	0.00%	0.00%	0.00%
	Broadmoor to Bagshot Woods and Heaths	75.63%	23.83%	0.55%	0.00%	0.00%	0.00%
	Castle Bottom to Yateley and Hawley Commons	26.67%	69.69%	0.81%	2.82%	0.00%	0.00%
	Colony Bog and Bagshot Heath	94.94%	4.39%	0.00%	0.67%	0.00%	0.00%
	Eelmoor Marsh	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Hazeley Heath	0.00%	96.11%	0.00%	3.89%	0.00%	0.00%
	Sandhurst to Owlsmoor Bogs and Heaths	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	Whitmoor Common	76.43%	22.24%	1.33%	0.00%	0.00%	0.00%
	Broxhead & Kingsley Commons	56.07%	43.93%	0.00%	0.00%	0.00%	0.00%
	Devil's Punch Bowl	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Woolmer Forest	41.62%	58.38%	0.00%	0.00%	0.00%	0.00%

Appendix 5: Regulation 19 Screened-In Policies

Tables A5.1, below, is reproduced from the Regulation 19 HRA Screening Report[63] and represent those minerals and waste policies in the Proposed Submission Plan that are screened-in for further consideration. Table A5.1 includes the screened-in minerals policy and Table A5.2 includes the screened-in waste policies.

Table A5.1: Screened-in minerals policy from the Regulation 19 screening of minerals policies and supporting text

Minerals Policy	HRA Screening Outcome (green = screened out. Amber = screened in for appropriate assessment)	
	Category	Rationale
Policy 20: Local land-won aggregates An adequate and steady supply of locally extracted sand and gravel will be provided by maintaining a landbank of permitted sand and gravel reserves sufficient for at least seven years from: 1. the extraction of remaining reserves at the following permitted sites: i. Bramshill Quarry, Bramshill (sharp sand and gravel) ii. Mortimer Quarry, Mortimer West End (sharp sand and gravel) iii. Badminston Farm (Fawley) Quarry, Fawley (sharp sand and gravel) iv. Bleak Hill Quarry (Hamer Warren), Harbridge (sharp sand and gravel) v. Downton Manor Farm Quarry, Milford on Sea (sharp sand and gravel) vi. Blashford Quarry (including Plumley Wood / Nea Farm), near Ringwood (sharp sand and gravel / soft sand) vii. Roke Manor Quarry, Shootash (sharp sand and gravel) viii. Frith End Sand Quarry, Sleaford (soft sand) ix. Kingsley Quarry, Kingsley (soft sand) x. Roeshot, Christchurch (sharp sand and gravel) xi. Forest Lodge Home Farm, Hythe (soft sand / sharp sand and gravel) 2. new sand and gravel extraction sites, provided the proposals address the development considerations outlined in 'Appendix A – Site allocations': i. Ashley Manor, New Milton (sharp sand and gravel) (Inset Map 2) – 1.5 million tonnes ii. Hamble Airfield, Hamble-le-Rice (sharp sand and gravel) (Inset Map 10) – 1.50 million tonnes iii. Midgham Farm, Alderholt (sharp sand and gravel) (Inset Map 14) – 4.2 million tonnes iv. Purple Haze, Ringwood Forest (soft sand / sharp sand and gravel) (Inset Map 15) – 4.0 million tonnes	C2	This policy seeks to maintain a steady and adequate supply of locally extracted sand and gravel through the extraction of existing permitted sites, extensions to existing sites, and future new sites not identified in this policy. Future sites will be subject to HRA screening through the normal development management process and this policy is also supported by the inclusion of 'Policy 3: Protection of habitats and species' that relates specifically to the protection of International sites. However, the site extensions and proposed sites are subject to HRA screening as part of this assessment process and these have been screened in. This policy is screened in.

[63] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

3. Proposals for new sites outside the areas identified in Policy 20 (including extension of sites identified in Policy 20 (1) will be supported where: a. the development is in line with the other policies in this Plan, the development would not pose unacceptable harm to the environment and local communities; and b. monitoring indicates that the sites identified in Policy 20 (1) or (2) are unlikely to be delivered to meet Hampshire's aggregate supply requirements or the proposal maximises the use of existing plant and infrastructure and available mineral resources at an existing associated quarry; or c. the development is for the extraction of minerals prior to a planned development; or d. the development is part of a proposal for another beneficial use, or e. the development is for a specific local requirement. The extension and new sites identified above are shown on the 'Policies Map'.		

Appendix 6: Regulation 19 Screened-In Site Allocations

The following tables (Tables 6.1 – 6.4) are reproduced from the Regulation 19 HRA Screening Report[64] and represent those site allocations in the Proposed Submission Plan that were screened-in for further consideration in this Appropriate Assessment.

Screened-In Site Allocations

Table	Proposed site allocation
A6.1	Hamble Airfield (EAL02)
A6.2	Ashley Manor Farm (NFD01)
A6.3	Purple Haze (NFD03)
A6.4	Midgham Farm (NFD04)

TABLE A6.1	
Site name and reference	**Hamble Airfield (EAL02)**
Location of Site	Eastleigh Borough; SU 477 078
Brief description of Site	**Site category:** Mineral extraction **Approximate size of site:** 62 ha **Current use:** Open unused land **Proposal:** Extraction of between 1.5 and 1.6 Mt of sand and gravel **Restoration:** Importation of approximately 1.9 Mt of inert material to restore to current site levels (not final) **Previous consideration within the plan making process:** Site is allocated within the currently adopted Hampshire Minerals and Waste Plan (2013)
International site potentially affected	**Solent Maritime SAC**
Location of International site	SU756003 (approximate centre of site)
Distance from International site	0.29km

[64] Hampshire Minerals and Waste Plan: Partial Update – Habitats Regulations Assessment Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

Brief description of International site	The Solent Site Improvement Plan covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA. The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass *Spartina maritima*. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 1130 Estuaries • 1320 Spartina swards (*Spartinion maritimae*) • 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • 1110 Sandbanks which are slightly covered by sea water all the time • 1140 Mudflats and sandflats not covered by seawater at low tide • 1150 Coastal lagoons* • 1210 Annual vegetation of drift lines

	• 1220 Perennial vegetation of stony banks • 1310 *Salicornia* and other annuals colonizing mud and sand • 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* (""white dunes"")" • 1016 Desmoulin's whorl snail *Vertigo moulinsiana*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.29km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not include supporting habitat relevant to the SAC.
Noise	Y	The interest features of the SAC at this distance could be vulnerable to this hazard.
Vibration	Y	As above.
Lighting	N	The interest features of the SAC at this distance would not be vulnerable to this hazard.
Dust	Y	Due to the distance of the SAC from the proposed site, the interest features could be impacted by this hazard.
Water pollution	Y	Due to the proximity of the SAC, interest features are considered vulnerable to this hazard.
Changes in surface / groundwater hydrology	Y	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is only 0.29 km from the SAC, mineral extraction operations could have a significant negative effect on the International site.
Air quality / Traffic	N	Based on the nature of the proposed development activity, the distance of the proposed site from the SAC, the projected increase in traffic movements being c. 1%, and the proposed routeing of vehicle traffic onto Hamble Lane, the interest features are unlikely to be significantly affected by air pollution.
Recreation related impacts	Y	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SAC.
Details of other plans and projects which may affect the International site in-combination		

Relevant Local Plans Eastleigh Borough Local Plan 2016 – 2036 Southampton City Council Local Development Plan (revised 2015) Fareham Borough Local Plan 2011-2026 Winchester District Local Plan 2018-2013 (emerging) Relevant proposed or allocated minerals and waste sites: Ashley Manor Farm (NFD01) (M) – 4.29 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 187 Non-residential within 5 km: 88 Other projects Southampton to London Pipeline	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Solent and Dorset Coast SPA**
Location of International site	SZ470973 (approximate centre of site)
Distance from International site	0.30 km
Brief description of International site	Solent and Dorset Coast SPA protects important foraging areas at sea used by qualifying interest features from colonies within adjacent SPAs. These qualifying interest features are three species of tern: common tern, Sandwich tern and little tern. The site is located on the south coast within the English Channel. The site extends from the Isle of Purbeck in the West to Bognor Regis in the East, following the coastline on either side to the Isle of Wight and into Southampton Water. The boundary was established as a composite of the usage of the area within adjacent SPAs. From west to east, the adjacent SPAs with these tern species as qualifying interest features (in parentheses) are: Poole Harbour (common tern) Solent and Southampton Water SPA (common, Sandwich and little tern) and Chichester & Langstone Harbours SPA (common, Sandwich and little tern). In addition to these species at these sites, Sandwich terns at the Poole Harbour SPA are included in determining the details of the SPA. However, certain

	species at certain sites i.e. Roseate tern at Solent and Southampton Water SPA, and Sandwich, little and common tern at Pagham Harbour SPA are not included in determining the details of the SPA.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• A191 *Sterna sandvicensis*; Sandwich tern (Breeding) • A193 *Sterna hirundo*; Common tern (Breeding) • A195 *Sternula albifrons*; Little tern (Breeding)

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The proposed site is located 0.30 km from the SPA. The SPA would not, therefore be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	The main issue is the proximity of the proposed site to the SPA and the potential for the site to provide supporting SPA habitat for qualifying feature bird species, particularly breeding. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.
Noise	Y	Proximity of the site to the SPA and the potential suitability of the site as SPA supporting habitat could lead to indirect impacts from this hazard.
Vibration	Y	As above.
Lighting	Y	As above.
Dust	Y	As above.
Water pollution	Y	Due to the proximity of the SPA, interest features are considered vulnerable to this hazard.

Changes in surface / groundwater hydrology	Y	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is only 0.30 km from the SPA, mineral extraction operations could have a significant negative effect on the International site.
Air quality / Traffic	Y	Based on the potential for the proposed site to provide supporting habitat for SPA qualifying bird species, the interest features are vulnerable to this hazard.
Recreation related impacts	Y	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SPA.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
Eastleigh Borough Local Plan 2016 – 2036
Southampton City Council Local Development Plan (revised 2015)
Fareham Borough Local Plan 2011-2026
Winchester District Local Plan 2018-2013 (emerging)
Relevant proposed or allocated minerals and waste sites:
Ashley Manor Farm (NFD01) (M) – 1.27km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 208
Non-residential within 5 km: 113
Other projects
Southampton to London Pipeline

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Solent and Southampton Water SPA/Ramsar**
Location of International site	SZ335936 (approximate centre of site)
Distance from International site	0.29 km
Brief description of International site	The Solent Site Improvement Plan (SIP) covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA.

	The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. And green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass Spartina maritima. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objectives of the International site	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
Qualifying Features of the International site	• A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose • A052(NB) *Anas crecca*: Eurasian teal • A156(NB) *Limosa limosa islandica*: Black-tailed godwit • Waterbird assemblage • A176(B) *Larus melanocephalus*: Mediterranean gull • A191(B) *Sterna sandvicensis*: Sandwich tern • A192(B) *Sterna dougallii*: Roseate tern • A193(B) *Sterna hirundo*: Common tern • A195(B) *Sterna albifrons*: Little tern • A137(NB) *Charadrius hiaticula*: Ringed plover <u>Ramsar Criteria:</u>

	• The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. • The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. The higher plants *Orobanche purpurea* and *Spartina maritima* are considered vulnerable and endangered, respectively, in the GB Red Book. The Mediterranean gull (*Larus melanocephalus*) is included in CITES Appendix I • Species with peak counts in winter: 51,343 waterfowl (5-year peak mean 1998/99-2002/2003) • Black-tailed godwit, *Limosa limosa* islandica, Iceland/W Europe. Dark-bellied brent goose, *Branta bernicla bernicla.* Eurasian teal, *Anas crecca*, NW Europe

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.29 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	The main issue is the proximity of the proposed site to the SPA/Ramsar and the potential for the site to provide supporting SPA/Ramsar habitat for qualifying feature bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.
Noise	Y	Proximity of the site to the SPA/Ramsar and the potential suitability of the site as SPA supporting habitat could lead to indirect impacts from this hazard.
Vibration	Y	As above.
Lighting	Y	As above.
Dust	Y	As above.
Water pollution	Y	Due to the proximity of the SPA/Ramsar, interest features are considered vulnerable to this hazard.
Changes in surface / groundwater hydrology	Y	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is

		only 0.29 km from the SPA/Ramsar, mineral extraction operations could have a significant negative effect on the International site.
Air quality / Traffic	Y	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.
Recreation related impacts	Y	As the proposed site may be currently subject to significant informal recreational use, displacement of users as a result of development may have a negative effect on the interest features of the SPA/Ramsar.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans Eastleigh Borough Local Plan 2016 – 2036 Southampton City Council Local Development Plan (revised 2015) Fareham Borough Local Plan 2011-2026 Winchester District Local Plan 2018-2013 (emerging) Relevant proposed or allocated minerals and waste sites: Ashley Manor Farm (NFD01) (M) – 3.87 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 149 Non-residential within 5 km: 78 Other projects Southampton to London Pipeline		
Could the potential impacts of the development of the proposed site have a likely significant effect:		
Alone?		**Yes** (C2)
In-combination with other plans/projects?		**Yes**

TABLE A6.2	
Site name and reference	**Ashley Manor Farm (NFD01)**
Location of Site	New Forest District; SZ 2557 9395
Brief description of Site	**Site category:** Mineral extraction **Approximate size of site:** 26.62 ha **Current use:** Open agricultural land **Proposal:** Extraction of approximately 1.75 million tonnes of sand and gravel **Restoration:** Restoration to agriculture with species rich meadow, ditches/ponds and extra hedgerows, utilising approximately 1.5 million tonnes of inert material **Previous consideration within the plan making process:**
International site potentially affected	**The New Forest SAC**
Location of International site	SU225075 (approximate centre of site)
Distance from International site	3.85km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. The New Forest is one of the most important sites for wildlife in the UK and recognised as being of exceptional importance for nature conservation throughout the European Union. Over 90% of the SAC comprises the unenclosed land of the Crown Lands and adjacent commons, the remainder is managed by private owners and occupiers. Of fundamental importance to sustaining the exceptional quality on the open forest is the persistence of commoning, the commoners stock roam freely maintaining the structural diversity and richness of the habitats complemented by annual heathland cutting and burning programmes.

Conservation Objectives of the International site	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
Qualifying Features of the International site	• 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) • 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7150 Depressions on peat substrates of the *Rhynchosporion* • 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) • 9130 *Asperulo-Fagetum* beech forests • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 91D0 Bog woodland* • 91E0 Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* • 7140 Transition mires and quaking bogs • 7230 Alkaline fens • 1044 Southern damselfly Coenagrion mercuriale • 1083 Stag beetle Lucanus cervus • 1166 Great crested newt Triturus cristatus

Potential causes of significant effect (hazard)	Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)	Details
Land take	N	The site is located 3.85 km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	Based on the agricultural nature of the proposed site it does not include supporting habitat relevant to the SAC.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SAC, it is unlikely that there would be a significant effect on the SAC's qualifying features relating to this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	As above.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	As above.
Recreation related impacts	N	Although there is a PRoW within and on the boundary of the proposed site, it is unlikely that there would be a significant effect from recreational displacement, due to the distance from the SAC.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) Christchurch and East Dorset Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Mineral and Waste Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 1.95 km Purple Haze (NFD03) (M) – 4.20 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 70		

Non-residential within 5 km: 48	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**
International site potentially affected	**Solent and Dorset Coast SPA**
Location of International site	SZ470973 (approximate centre of site)
Distance from International site	1.27 km
Brief description of International site	Solent and Dorset Coast SPA protects important foraging areas at sea used by qualifying interest features from colonies within adjacent SPAs. These qualifying interest features are three species of tern: common tern, Sandwich tern and little tern. The site is located on the south coast within the English Channel. The site extends from the Isle of Purbeck in the West to Bognor Regis in the East, following the coastline on either side to the Isle of Wight and into Southampton Water. The boundary was established as a composite of the usage of the area within adjacent SPAs. From west to east, the adjacent SPAs with these tern species as qualifying interest features (in parentheses) are: Poole Harbour (common tern) Solent and Southampton Water SPA (common, Sandwich and little tern) and Chichester & Langstone Harbours SPA (common, Sandwich and little tern). In addition to these species at these sites, Sandwich terns at the Poole Harbour SPA are included in determining the details of the SPA. However, certain species at certain sites i.e. Roseate tern at Solent and Southampton Water SPA, and Sandwich, little and common tern at Pagham Harbour SPA are not included in determining the details of the SPA.
Conservation Objectives of the International site	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

Qualifying Features of the International site	• A191 *Sterna sandvicensis*; Sandwich tern (Breeding) • A193 *Sterna hirundo*; Common tern (Breeding) • A195 *Sternula albifrons*; Little tern (Breeding)	
Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The proposed site is located 1.27 km from the SPA. The SPA would not, therefore be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The site is currently managed as intensive arable and would not, therefore, provide supporting habitat for SPA qualifying species.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SPA, it is unlikely that there would be a significant effect on the SPA's qualifying features from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	Y	There is the potential for a water pollution impact on the SPA from the development of this site, which includes nutrient enrichment. Further consideration needs to be given to the presence of impact pathways between the proposed site and the SPA.
Changes in surface / groundwater hydrology	N	Based on the distance of the proposed site from the SPA and the nature of its qualifying features, it is unlikely that this hazard would have a significant effect on those features.
Air quality / Traffic	N	Based on the nature of the proposed development activity, the distance of the proposed site from the SPA and the fact that the magnitude of change in traffic resulting from the proposed development from the existing conditions would be negligible, it is unlikely that there would be a significant effect on the SPA's qualifying features from this hazard.
Recreation related impacts	N	Although there is a PRoW within and on the boundary of the proposed site, it is unlikely that there would be a significant effect from recreational displacement, due to the distance from the SPA.

Details of other plans and projects which may affect the International site in-combination	
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) Christchurch and East Dorset Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Mineral and Waste Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Hamble Airfield (EAL02) (M) – 0.30km Development Plan planned development: Residential (10+ dwellings) within 5 km: 208 Non-residential within 5 km: 113 Other projects Southampton to London Pipeline	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Solent and Southampton Water SPA/Ramsar**
Location of International site	SZ335936 (approximate centre of site)
Distance from International site	3.87km
Brief description of International site	The Solent Site Improvement Plan (SIP) covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA. The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass Spartina maritima. The

	rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objectives of the International site	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
Qualifying Features of the International site	• A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose • A052(NB) *Anas crecca*: Eurasian teal • A156(NB) *Limosa limosa islandica*: Black-tailed godwit • Waterbird assemblage • A176(B) *Larus melanocephalus*: Mediterranean gull • A191(B) *Sterna sandvicensis*: Sandwich tern • A192(B) *Sterna dougallii*: Roseate tern • A193(B) *Sterna hirundo*: Common tern • A195(B) *Sterna albifrons*: Little tern • A137(NB) *Charadrius hiaticula*: Ringed plover Ramsar Criteria: • The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. • The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. The higher plants *Orobanche purpurea* and *Spartina maritima* are

	considered vulnerable and endangered, respectively, in the GB Red Book. The Mediterranean gull (*Larus melanocephalus*) is included in CITES Appendix I • Species with peak counts in winter: 51,343 waterfowl (5-year peak mean 1998/99-2002/2003) • Black-tailed godwit, *Limosa limosa* islandica, Iceland/W Europe. Dark-bellied brent goose, *Branta bernicla bernicla.* Eurasian teal, *Anas crecca*, NW Europe

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 3.87 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	The proposed development in this location could have potential significant effects on the Solent and Southampton Water Special Protection Area (SPA) in relation to potential SPA bird use of the site at high tide for foraging/roosting. It is recognised that the allocation site lies outside of the current mapped Solent Wader and Brent Goose network, which aims to identify, maintain and protect a network of sites within the Solent area that are regularly used by the designated overwintering birds of the Solent Special Protection Areas (SPAs). However, given the development size, its proximity to the Solent coastline and the mobile nature of the designated species, it is recommended that evidence is gathered at this site to determine any usage by overwintering bird species.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SPA/Ramsar, it is unlikely that there would be a significant effect on the SPA/Ramsar's qualifying features from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	Although a watercourse exists close to the proposed site that feeds into the SPA/Ramsar, the distance between the proposed site and the SPA/Ramsar, which is significantly greater than the 'as the crow flies' distance of 3.87 km, would make any associated significant effect unlikely.
Changes in surface / groundwater hydrology	N	Based on the distance of the proposed site from the SPA/Ramsar, it is unlikely that this hazard would have a significant effect on its qualifying features.

Air quality / Traffic	N	Based on the nature of the proposed development activity, the distance of the proposed site from the SPA/Ramsar and the fact that the magnitude of change in traffic resulting from the proposed development from the existing conditions would be negligible, it is unlikely that there would be a significant effect on the SPA/Ramsar's qualifying features from this hazard.
Recreation related impacts	N	Although there is a PRoW within and on the boundary of the proposed site, it is unlikely that there would be a significant effect from recreational displacement, due to the distance from the SPA/Ramsar.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
New Forest District Council Local Plan 2016-2036
New Forest National Park Local Plan 2016-2036 (adopted 2019)
Christchurch and East Dorset Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038
Other relevant Mineral and Waste Plans
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014
Relevant proposed or allocated minerals and waste sites:
Hamble Airfield (EAL02) (M) – 0.29 km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 149
Non-residential within 5 km: 78
Other projects
Southampton to London Pipeline

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**New Forest SPA/Ramsar**
Location of International site	SU242030 (approximate centre of site)
Distance from International site	3.99km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year.

	The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. Pools in the heath-mire matrix contain nutrient-enriched water supporting a species-rich assemblage of plants. Several species of plants, invertebrates and birds occurring at the site are rare, vulnerable, endangered or nationally scarce. The site is important for breeding, feeding and roosting birds characteristic of the heathland environment and wintering raptors, with up to 15 Circus cyaneus feeding or roosting in the area.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• A072(B) *Pernis apivorus*: European honey-buzzard • A082(NB) *Circus cyaneus*: Hen harrier • A099(B) *Falco subbuteo*: Eurasian hobby • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A314(B) *Phylloscopus sibilatrix*: Wood warbler Ramsar Criteria • Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.

	• The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plants are found on the site, as are at least 65 British Red Data Book species of invertebrate. The higher plants *Cicendia filiformis, Illecebrum verticillatum* and *Myosurus minimus* are considered vulnerable by the GB Red Book; while *Mentha pulegium* and *Ranunculus tripartitus* are included as endangered; and *Pulicaria vulgaris* as critically endangered. The Dark Guest Ant *Anergates atratulus* is also considered vulnerable by the IUCN Red List. • The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England. The site contains a rich invertebrate fauna.

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 3.99 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	Based on the agricultural nature of the proposed site, it does not include supporting habitat relevant to the SPA/Ramsar.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SPA/Ramsar, it is unlikely that there would be a significant effect on the SPA/Ramsar's qualifying features relating to this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	As above.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	As above.
Recreation related impacts	N	Although there is a PRoW within and on the boundary of the proposed site, it is unlikely that there would be a significant effect from recreational displacement, due to the distance from the SPA/Ramsar.

Details of other plans and projects which may affect the International site in-combination	
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) Christchurch and East Dorset Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Mineral and Waste Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 1.95 km Purple Haze (NFD03) (M) – 4.23 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 65 Non-residential within 5 km: 43	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**

International site potentially affected	**Solent Maritime SAC**
Location of International site	SU756003 (approximate centre of site)
Distance from International site	4.29km
Brief description of International site	The Solent Site Improvement Plan covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA. The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera* spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass *Spartina maritima*. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and

	internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 1130 Estuaries • 1320 Spartina swards (*Spartinion maritimae*) • 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • 1110 Sandbanks which are slightly covered by sea water all the time • 1140 Mudflats and sandflats not covered by seawater at low tide • 1150 Coastal lagoons* • 1210 Annual vegetation of drift lines • 1220 Perennial vegetation of stony banks • 1310 *Salicornia* and other annuals colonizing mud and sand • 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* (""white dunes"")" • 1016 Desmoulin's whorl snail *Vertigo moulinsiana*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 4.29 km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The site is currently managed as intensive arable and would not, therefore, provide supporting habitat for SAC qualifying species.

Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SAC, it is unlikely that there would be a significant effect on the SAC's qualifying features from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	Although a watercourse exists close to the proposed site that feeds into the SAC, the distance between the proposed site and the SAC, which is significantly greater than the 'as the crow flies' distance of 4.29 km, would make any associated significant effect unlikely.
Changes in surface / groundwater hydrology	N	Based on the distance of the proposed site from the SAC, it is unlikely that this hazard would have a significant effect on its qualifying features.
Air quality / Traffic	N	Based on the nature of the proposed development activity, the distance of the proposed site from the SAC and the fact that the magnitude of change in traffic resulting from the proposed development from the existing conditions would be negligible, it is unlikely that there would be a significant effect on the SAC's qualifying features from this hazard.
Recreation related impacts	N	Although there is a PRoW within and on the boundary of the proposed site, it is unlikely that there would be a significant effect from recreational displacement, due to the distance from the SAC.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) Christchurch and East Dorset Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Mineral and Waste Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Hamble Airfield (EAL02) (M) – 0.29 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 187 Non-residential within 5 km: 88 Other projects		

Southampton to London Pipeline	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**

TABLE A6.3	
Site name and reference	**Purple Haze (NFD03)**
Location of Site	New Forest District; SU 11500 06900
Brief description of Site	**Site category:** Mineral extraction **Approximate size of site:** 70 ha **Current use:** Managed woodland and heathland **Proposal:** Extraction of up to 8 Mt of sand and gravel **Restoration:** Restoration to heathland, woodland and conservation **Previous consideration within the plan making process:** Site is allocated in the currently adopted Hampshire Minerals and Waste Plan (2013)
International site potentially affected	**Dorset Heaths SAC**
Location of International site	SY887835 (approximate centre of site)
Distance from International site	0.21km
Brief description of International site	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys, it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 7150 Depressions on peat substrates of the Rhynchosporion • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

	• 7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae** • 7230 Alkaline fens • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 1044 Southern damselfly *Coenagrion mercuriale* • 1166 Great crested newt *Triturus cristatus*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.21 km from the SAC. The SAC site would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	Functional linkages are possible between the proposed allocation site and the Dorset Heaths SAC relating to typical species of the SAC, such as rare reptiles and invertebrates.
Noise	N	Based on the nature of the SAC's qualifying features, the proposed use of the site would be unlikely to have a significant effect on those features from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	Y	Based on the proximity of the SAC, the qualifying features could be vulnerable to this hazard
Water pollution	Y	As above.
Changes in surface / groundwater hydrology	Y	As above.
Air quality / Traffic	N	Based on the distance of the site from the SAC and the likely increase in traffic being approximately 0.2%, it is not likely that there would be a significant effect on the SAC's qualifying features from this hazard.
Recreation related impacts	Y	Based on the proximity of the SAC and the presence of a bridleway to the north west boundary of the site, there is the potential of impact on the SAC from recreational displacement.
Details of other plans and projects which may affect the International site in-combination		
<u>Relevant Local Plans</u> New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019)		

East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 1.79 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 8 / Non-residential within 5 km: 8	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Dorset Heathlands SPA/Ramsar**
Location of International site	SY887834 (approximate centre of site)
Distance from International site	0.21km
Brief description of International site	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history. This inland wetland contains numerous examples of wet heath (*Erica ciliaris*, *E. tetralix*) and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are amongst the best of their type in lowland Britain. The site supports a large assemblage of nationally rare and scarce wetland plant species and invertebrates (28 species).
Conservation Objectives of the International site	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, an • The distribution of the qualifying features within the site.
Qualifying Features of the International site	• A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark

	• A302(B) *Sylvia undata*: Dartford warbler • A082(NB) *Circus cyaneus*: Hen harrier • A098(NB) *Falco columbarius*: Merlin Ramsar Criteria: • Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*. Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*. • Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species. • Has a high species richness and high ecological diversity of wetland habitat types and transitions and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.21 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	There is the potential for the site to provide supporting habitat for SPA/Ramsar qualifying bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.
Noise	Y	Proximity of the site to the SPA/Ramsar and the potential suitability of the site as SPA supporting habitat could lead to significant effects from this hazard.
Vibration	Y	As above.
Lighting	Y	As above.
Dust	Y	As above.
Water pollution	Y	Due to the proximity of the SPA/Ramsar, interest features are considered vulnerable to this hazard.
Changes in surface / groundwater hydrology	Y	Dewatering is a key process in the extraction of sand and gravel. This can have impacts on groundwater flow up to 2 km from the extraction site. As the site is

		only 0.21 km from the SPA/Ramsar, mineral extraction operations could have a significant negative effect on the International site.
Air quality / Traffic	Y	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.
Recreation related impacts	Y	Based on the proximity of the SPA/Ramsar and the presence of a bridleway to the north west boundary of the site, there is the potential of impact on the SPA/Ramsar from recreational displacement.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
New Forest District Council Local Plan 2016-2036
New Forest National Park Local Plan 2016-2036 (adopted 2019)
East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038
Other relevant Minerals and Waste Local Plans
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014
Relevant proposed or allocated minerals and waste sites:
Midgham Farm (NFD04) (M) – 1.79 km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 8 / Non-residential within 5 km: 14

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**River Avon SAC**
Location of International site	SU124339 (approximate centre of site)
Distance from International site	1.26km
Brief description of International site	The River Avon SAC is one of the richest chalk rivers in Europe. It is important for its fish population, invertebrate, which include populations of Desmoulins Whorl Snail and its in-river plant community habitat as well as bankside habitats.
Conservation Objectives of the International site	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
Qualifying Features of the International site	• 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* • 1095 Sea lamprey *Petromyzon marinus* • 1096 Brook lamprey *Lampetra planeri* • 1106 Atlantic salmon *Salmo salar* • 1163 Bullhead *Cottus gobio*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 1.26 km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not provide supporting habitat for the SAC
Noise	N	Based on the distance of the SAC from the proposed site and the nature of its qualifying features, the intended use of the site is not likely to have a significant effect on those features from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	Y	Based on the proximity of the river and river corridor, there is the potential for the SAC to be significantly affected by this hazard. Further consideration should be given to the presence of impact pathways.
Changes in surface / groundwater hydrology	Y	As above.

Air quality / Traffic	N	Based on the distance of the SAC , the lack of supporting habitat for SAC qualifying features and the estimated increase in traffic approximately 0.2%, the proposed use of the site is unlikely to have a significant effect on those features.
Recreation related impacts	N	Although there is a bridleway to the north west boundary of the site, due to the distance of the SAC, there is unlikely to be a significant effect from recreational displacement.

Details of other plans and projects which may affect the International site in-combination
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 0.53 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 8 / Non-residential within 5 km: 10

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Avon Valley SPA/Ramsar**
Location of International site	SZ144983 (approximate centre of site)
Distance from International site	1.33 km
Brief description of International site	The Avon Valley SPA is a wide river valley comprising mostly unimproved wet grassland and has importance for wintering wildfowl with Bewick's Swan and Gadwall as the notified features. The population of Bewick's Swan in the Avon Valley have decreased in line with a national trend of decrease, which is felt to be due to decreased breeding success. At the moment the SPA does not meet the threshold for them.
Conservation Objectives of the International site	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
Qualifying Features of the International site	• A037(NB) *Cygnus columbianus bewickii*: Bewick swan • A051(NB) *Anas strepera*: Gadwall Ramsar Criteria: • The site shows a greater range of habitats than any other chalk river in Britain, including fen, mire, lowland wet grassland and small areas of woodland. • The site supports a diverse assemblage of wetland flora and fauna including several nationally-rare species. • Gadwall, *Anas strepera strepera*, NW Europe. Northern pintail, *Anas acuta*, NW Europe. Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe.

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 1.33 km from the SPA/Ramsar. The SPA/Ramsar site would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	Based on the distance from the SPA/Ramsar and the nature of the qualifying features, the proposed site does not provide supporting habitat for the SPA/Ramsar.
Noise	N	Based on the distance of the SPA/Ramsar from the proposed site and the nature of its qualifying features, the intended use of the site is not likely to have a significant effect on those features in relation to this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	Y	Based on the proximity of the river and river corridor, there is the potential for the SPA/Ramsar to be significantly affected by this hazard. Further consideration should be given to the presence of impact pathways.
Changes in surface / groundwater hydrology	Y	As above.

Air quality / Traffic	N	Based on the distance of the SPA/Ramsar, the lack of supporting habitat for SPA/Ramsar qualifying features, and the estimated increase in traffic approximately 0.2%, the proposed use of the site is unlikely to have a significant effect on those features.
Recreation related impacts	N	Although there is a bridleway to the north west boundary of the site, due to the distance of the SPA/Ramsar, there is unlikely to be a significant effect from recreational displacement.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
New Forest District Council Local Plan 2016-2036
New Forest National Park Local Plan 2016-2036 (adopted 2019)
East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038
Other relevant Minerals and Waste Local Plans
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014
Relevant proposed or allocated minerals and waste sites:
Midgham Farm (NFD04) (M) - 0.53 km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 10 / Non-residential within 5 km: 8

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**The New Forest SAC**
Location of International site	SU225075 (approximate centre of site)
Distance from International site	4.20km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers.

	These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. The New Forest is one of the most important sites for wildlife in the UK and recognised as being of exceptional importance for nature conservation throughout the European Union. Over 90% of the SAC comprises the unenclosed land of the Crown Lands and adjacent commons, the remainder is managed by private owners and occupiers. Of fundamental importance to sustaining the exceptional quality on the open forest is the persistence of commoning, the commoners stock roam freely maintaining the structural diversity and richness of the habitats complemented by annual heathland cutting and burning programmes.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) • 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7150 Depressions on peat substrates of the *Rhynchosporion* • 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*)

	• 9130 *Asperulo-Fagetum* beech forests • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 91D0 Bog woodland* • 91E0 Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* • 7140 Transition mires and quaking bogs • 7230 Alkaline fens • 1044 Southern damselfly Coenagrion mercuriale • 1083 Stag beetle Lucanus cervus • 1166 Great crested newt Triturus cristatus

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 4.2km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The site does not include supporting habitat relevant to the SAC.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SAC, it is unlikely that there would be a significant effect on the SAC's qualifying features relating to this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	As above.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	As above.
Recreation related impacts	N	Although there is a bridleway to the north west boundary of the site, due to the distance of the SAC from the proposed site, there is unlikely to be a significant effect from recreational displacement.
Details of other plans and projects which may affect the International site in-combination		

Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 1.95 km Ashley Manor Farm (NFD01) (M) – 3.85 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 70 / Non-residential within 5 km: 48	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**

International site potentially affected	**New Forest SPA/Ramsar**
Location of International site	SU242030 (approximate centre of site)
Distance from International site	4.23 km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. Pools in the heath-mire matrix contain nutrient-enriched water supporting a species-rich assemblage of plants. Several species of plants, invertebrates and birds occurring at the site are rare, vulnerable, endangered or nationally scarce. The site is important for breeding, feeding and roosting birds characteristic of the heathland environment and wintering raptors, with up to 15 Circus cyaneus feeding or roosting in the area.

Conservation Objectives of the International site	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.
Qualifying Features of the International site	• A072(B) *Pernis apivorus*: European honey-buzzard • A082(NB) *Circus cyaneus*: Hen harrier • A099(B) *Falco subbuteo*: Eurasian hobby • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A314(B) *Phylloscopus sibilatrix*: Wood warbler Ramsar Criteria • Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain. • The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plants are found on the site, as are at least 65 British Red Data Book species of invertebrate. The higher plants *Cicendia filiformis, Illecebrum verticillatum* and *Myosurus minimus* are considered vulnerable by the GB Red Book; while *Mentha pulegium* and *Ranunculus tripartitus* are included as endangered; and *Pulicaria vulgaris* as critically endangered. The Dark Guest Ant *Anergates atratulus* is also considered vulnerable by the IUCN Red List. • The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England. The site contains a rich invertebrate fauna.

Potential causes of significant effect (hazard)	Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)	Details
Land take	N	The site is located 4.23 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat	N	Based on the distance from the SPA/Ramsar and the nature of the proposed site, it does not include supporting habitat relevant to the SPA/Ramsar.
Noise	N	Based on the nature of the proposed development activity and the distance of the proposed site from the SPA/Ramsar, it is unlikely that there would be a significant effect on the SPA/Ramsar's qualifying features relating to this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	As above.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	As above.
Recreation related impacts	N	Although there is a bridleway to the north west boundary of the site, due to the distance of the SPA/Ramsar from the proposed site, there is unlikely to be a significant effect from recreational displacement.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 and emerging Dorset Council Local Plan 2021-2038 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Midgham Farm (NFD04) (M) – 1.95 km Ashley Manor Farm (NFD01) (M) – 3.99 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 65 Non-residential within 5 km: 43		

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**

TABLE A6.4	
Site name and reference	**Midgham Farm (NFD04)**
Location of Site	New Forest District; SU 1287 1212
Brief description of Site	**Site category:** Mineral extraction **Approximate size of site:** 89.7 ha **Current use:** Open agricultural land **Proposal:** Extraction of up to 4.18 Mt of sand and gravel from two areas east and west of Lomer Lane **Restoration:** Restoration to agriculture at the existing levels using imported inert materials, including nature conservation and increased permissive access **Previous consideration within the plan making process:**
International site potentially affected	**Avon Valley SPA/Ramsar**
Location of International site	SZ144983 (approximate centre of site)
Distance from International site	0.53 km
Brief description of International site	The Avon Valley SPA is a wide river valley comprising mostly unimproved wet grassland and has importance for wintering wildfowl with Bewick's Swan and Gadwall as the notified features. The population of Bewick's Swan in the Avon Valley have decreased in line with a national trend of decrease, which is felt to be due to decreased breeding success. At the moment the SPA does not meet the threshold for them.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• A037(NB) *Cygnus columbianus bewickii*: Bewick swan • A051(NB) *Anas strepera*: Gadwall Ramsar Criteria:

	• The site shows a greater range of habitats than any other chalk river in Britain, including fen, mire, lowland wet grassland and small areas of woodland. • The site supports a diverse assemblage of wetland flora and fauna including several nationally-rare species. • Gadwall, *Anas strepera strepera*, NW Europe. Northern pintail, *Anas acuta*, NW Europe. Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe.

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.53 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	Y	Based on the distance of the SPA/Ramsar form the proposed site and its land management, the site may provide supporting habitat for SPA/Ramsar qualifying bird species. Further surveys will be required to determine the level of importance of this habitat for the qualifying feature species of birds, especially in combination with other sites in the vicinity.
Noise	Y	Proximity of the site to the SPA/Ramsar and the potential suitability of the site as SPA supporting habitat could lead to significant effects on qualifying feature species from this hazard.
Vibration	Y	As above.
Lighting	Y	As above.
Dust	Y	As above.
Water pollution	Y	Based on the distance of the SPA/Ramsar from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features. Further consideration will need to be given to the presence of potential impact pathways.
Changes in surface / groundwater hydrology	Y	Based on the distance of the SPA/Ramsar from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features.
Air quality / Traffic	Y	Based on the potential for the proposed site to provide supporting habitat for SPA/Ramsar qualifying bird species, the interest features are vulnerable to this hazard.

Recreation related impacts	Y	Based on the distance of the site from the SPA/Ramsar and the fact that a PRoW crosses the site, there is the potential of a significant effect from recreational displacement.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
New Forest District Council Local Plan 2016-2036
New Forest National Park Local Plan 2016-2036 (adopted 2019)
East Dorset and Christchurch Local Plan 2014
Other relevant Minerals and Waste Local Plans
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014
Relevant proposed or allocated minerals and waste sites:
Purple Haze (NFD03) (M) - 1.33 km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 10
Non-residential within 5 km: 8

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**River Avon SAC**
Location of International site	SU124339 (approximate centre of site)
Distance from International site	0.53 km
Brief description of International site	The River Avon SAC is one of the richest chalk rivers in Europe. It is important for its fish population, invertebrate, which include populations of Desmoulins Whorl Snail and its in-river plant community habitat as well as bankside habitats.
Conservation Objectives of the International site	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
Qualifying Features of the International site	• 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation • 1016 Desmoulin's whorl snail *Vertigo moulinsiana* • 1095 Sea lamprey *Petromyzon marinus* • 1096 Brook lamprey *Lampetra planeri* • 1106 Atlantic salmon *Salmo salar* • 1163 Bullhead *Cottus gobio*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 0.53 km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The site does not provide supporting habitat for the SAC.
Noise	N	The distance of the site from the SAC and the nature of the intended activity would not lead to a significant effect on qualifying feature species from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	Y	Based on the distance of the SAC from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features. Further consideration will need to be given to the presence of potential impact pathways.
Changes in surface / groundwater hydrology	Y	Based on the distance of the SAC from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features.
Air quality / Traffic	N	Based on the distance of the site from the SAC, the lack of supporting habitat for SAC qualifying features and the estimated increase in traffic approximately 0.2%,

		the proposed use of the site is unlikely to have a significant effect on those features in relation to this hazard.
Recreation related impacts	Y	Based on the distance of the site from the SAC and the fact that a PRoW crosses the site, there is the potential of a significant effect from recreational displacement.

Details of other plans and projects which may affect the International site in-combination
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Purple Haze (NFD03) (M) – 1.26 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 8 Non-residential within 5 km: 10

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Dorset Heaths SAC**
Location of International site	SY887835 (approximate centre of site)
Distance from International site	1.79 km
Brief description of International site	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys, it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 7150 Depressions on peat substrates of the Rhynchosporion • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7210 Calcareous fens with Cladium mariscus and species of the *Caricion davallianae** • 7230 Alkaline fens • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 1044 Southern damselfly *Coenagrion mercuriale* • 1166 Great crested newt *Triturus cristatus*

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 1.79 km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not provide supporting habitat for the SAC.
Noise	N	The distance of the site from the SAC and the nature of the intended activity would not lead to a significant effect on qualifying feature species from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	Based on the position of the proposed site and the SAC in relation to the Avon Valley and its river, it is unlikely that there would be impact pathways that would create a significant effect on the SAC from this hazard.

Changes in surface / groundwater hydrology	Y	Based on the distance of the SAC from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features.
Air quality / Traffic	N	Based on the distance of the site from the SAC, the lack of supporting habitat for SAC qualifying features and the estimated increase in traffic approximately 0.2%, the proposed use of the site is unlikely to have a significant effect on those features in relation to this hazard.
Recreation related impacts	N	Based on the distance of the proposed site from the SAC, it is unlikely that there would be a significant effect from recreational displacement.

Details of other plans and projects which may affect the International site in-combination

Relevant Local Plans
New Forest District Council Local Plan 2016-2036
New Forest National Park Local Plan 2016-2036 (adopted 2019)
East Dorset and Christchurch Local Plan 2014
Other relevant Minerals and Waste Local Plans
Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014
Relevant proposed or allocated minerals and waste sites:
Purple Haze (NFD03) (M) – 0.21 km
Development Plan planned development:
Residential (10+ dwellings) within 5 km: 8
Non-residential within 5 km: 8

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**

International site potentially affected	**Dorset Heathlands SPA/Ramsar**
Location of International site	SY887834 (approximate centre of site)
Distance from International site	1.79km
Brief description of International site	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.

	This inland wetland contains numerous examples of wet heath (*Erica ciliaris*, *E. tetralix*) and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are amongst the best of their type in lowland Britain. The site supports a large assemblage of nationally rare and scarce wetland plant species and invertebrates (28 species).	
Conservation Objectives of the International site	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, an • The distribution of the qualifying features within the site	
Qualifying Features of the International site	• A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler • A082(NB) *Circus cyaneus*: Hen harrier • A098(NB) *Falco columbarius*: Merlin Ramsar Criteria: • Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*. Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*. • Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species. • Has a high species richness and high ecological diversity of wetland habitat types and transitions and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.	
Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**

Land take	N	The site is located 1.79 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not provide supporting habitat for the SPA/Ramsar.
Noise	N	The distance of the site from the SPA/Ramsar and the nature of the intended activity would not lead to a significant effect on qualifying feature species from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	Based on the position of the proposed site and the SPA/Ramsar in relation to the Avon Valley and its river, it is unlikely that there would be impact pathways that would create a likely significant effect on the SPA/Ramsar from this hazard.
Changes in surface / groundwater hydrology	Y	Based on the distance of the SPA/Ramsar from the proposed site, there is the potential for this hazard to have a significant effect on the qualifying features.
Air quality / Traffic	N	Based on the distance of the site from the SPA/Ramsar, the lack of supporting habitat for SPA/Ramsar qualifying features and the estimated increase in traffic approximately 0.2%, the proposed use of the site is unlikely to have a significant effect on those features in relation to this hazard.
Recreation related impacts	N	Based on the distance of the proposed site from the SPA/Ramsar, it is unlikely that there would be a significant effect from recreational displacement.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Purple Haze (NFD03) (M) – 0.21 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 8		

Non-residential within 5 km: 14	
Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**Yes** (C2)
In-combination with other plans/projects?	**Yes**
International site potentially affected	**The New Forest SAC**
Location of International site	SU225075 (approximate centre of site)
Distance from International site	1.95 km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. The New Forest is one of the most important sites for wildlife in the UK and recognised as being of exceptional importance for nature conservation throughout the European Union. Over 90% of the SAC comprises the unenclosed land of the Crown Lands and adjacent commons, the remainder is managed by private owners and occupiers. Of fundamental importance to sustaining the exceptional quality on the open forest is the persistence of commoning, the commoners stock roam freely maintaining the structural diversity and richness of the habitats complemented by annual heathland cutting and burning programmes.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) • 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* • 4010 Northern Atlantic wet heaths with *Erica tetralix* • 4030 European dry heaths • 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • 7150 Depressions on peat substrates of the *Rhynchosporion* • 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) • 9130 *Asperulo-Fagetum* beech forests • 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains • 91D0 Bog woodland* • 91E0 Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* • 7140 Transition mires and quaking bogs • 7230 Alkaline fens • 1044 Southern damselfly Coenagrion mercuriale • 1083 Stag beetle Lucanus cervus • 1166 Great crested newt Triturus cristatus

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 1.95km from the SAC. The SAC would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not provide supporting habitat for the SAC.

Noise	N	The distance of the site from the SAC and the nature of the intended activity would not lead to a significant effect on qualifying feature species from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.
Water pollution	N	Based on the distance from the SAC and position of the proposed site on the opposite side of the Avon Valley from the SAC, it is unlikely that there would be a significant effect on the SAC from this hazard.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	Based on the distance of the site from the SAC and the lack of supporting habitat for SAC qualifying features, the proposed use of the site is unlikely to have a significant effect on those features in relation to this hazard.
Recreation related impacts	N	Based on the distance from the SAC and position of the proposed site on the opposite side of the Avon Valley from the SAC, it is unlikely that there would be a significant effect on the SAC from this hazard.
Details of other plans and projects which may affect the International site in-combination		
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Ashley Manor Farm (NFD01) (M) – 3.85 km Purple Haze (NFD03) (M) – 4.20 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 70 Non-residential within 5 km: 48		
Could the potential impacts of the development of the proposed site have a likely significant effect:		
Alone?	**No** (B)	
In-combination with other plans/projects?	**No**	

International site potentially affected	**New Forest SPA/Ramsar**
Location of International site	SU242030 (approximate centre of site)
Distance from International site	1.95 km
Brief description of International site	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and over-wintering birds and other notable species such as southern damselfly, stag beetle and great crested newt. Pools in the heath-mire matrix contain nutrient-enriched water supporting a species-rich assemblage of plants. Several species of plants, invertebrates and birds occurring at the site are rare, vulnerable, endangered or nationally scarce. The site is important for breeding, feeding and roosting birds characteristic of the heathland environment and wintering raptors, with up to 15 Circus cyaneus feeding or roosting in the area.
Conservation Objectives of the International site	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.
Qualifying Features of the International site	• A072(B) *Pernis apivorus*: European honey-buzzard • A082(NB) *Circus cyaneus*: Hen harrier • A099(B) *Falco subbuteo*: Eurasian hobby • A224(B) *Caprimulgus europaeus*: European nightjar • A246(B) *Lullula arborea*: Woodlark • A302(B) *Sylvia undata*: Dartford warbler

	• A314(B) *Phylloscopus sibilatrix*: Wood warbler Ramsar Criteria • Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain. • The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plants are found on the site, as are at least 65 British Red Data Book species of invertebrate. The higher plants *Cicendia filiformis, Illecebrum verticillatum* and *Myosurus minimus* are considered vulnerable by the GB Red Book; while *Mentha pulegium* and *Ranunculus tripartitus* are included as endangered; and *Pulicaria vulgaris* as critically endangered. The Dark Guest Ant *Anergates atratulus* is also considered vulnerable by the IUCN Red List. • The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England. The site contains a rich invertebrate fauna.

Potential causes of significant effect (hazard)	**Cited interest features likely to be vulnerable to this hazard alone and in-combination? (Y/N)**	**Details**
Land take	N	The site is located 1.95 km from the SPA/Ramsar. The SPA/Ramsar would not, therefore, be impacted by direct loss of land.
Removal of supporting habitat (functionally linked land)	N	The proposed site does not provide supporting habitat for the SPA/Ramsar.
Noise	N	The distance of the site from the SPA/Ramsar and the nature of the intended activity would not lead to a significant effect on qualifying feature species from this hazard.
Vibration	N	As above.
Lighting	N	As above.
Dust	N	As above.

Water pollution	N	Based on the distance from the SPA/Ramsar and position of the proposed site on the opposite side of the Avon Valley from the SPA/Ramsar, it is unlikely that there would be a significant effect on the SPA/Ramsar from this hazard.
Changes in surface / groundwater hydrology	N	As above.
Air quality / Traffic	N	Based on the distance of the site from the SPA/Ramsar and the lack of supporting habitat for SPA/Ramsar qualifying features, the proposed use of the site is unlikely to have a significant effect on those features in relation to this hazard.
Recreation related impacts	N	Based on the distance from the SPA/Ramsar and position of the proposed site on the opposite side of the Avon Valley from the SPA/Ramsar, it is unlikely that there would be a significant effect on the SPA/Ramsar from this hazard.

Details of other plans and projects which may affect the International site in-combination
Relevant Local Plans New Forest District Council Local Plan 2016-2036 New Forest National Park Local Plan 2016-2036 (adopted 2019) East Dorset and Christchurch Local Plan 2014 Other relevant Minerals and Waste Local Plans Bournemouth, Christchurch, Poole and Dorset Minerals and Waste Plan 2014 Relevant proposed or allocated minerals and waste sites: Ashley Manor Farm (NFD01) (M) – 3.99 km Purple Haze (NFD03) (M) – 4.23 km Development Plan planned development: Residential (10+ dwellings) within 5 km: 65 Non-residential within 5 km: 43

Could the potential impacts of the development of the proposed site have a likely significant effect:	
Alone?	**No** (B)
In-combination with other plans/projects?	**No**

Appendix 7: Boundary maps for Proposed Submission site allocations

Legend to boundary plans of screened-in site allocations, below

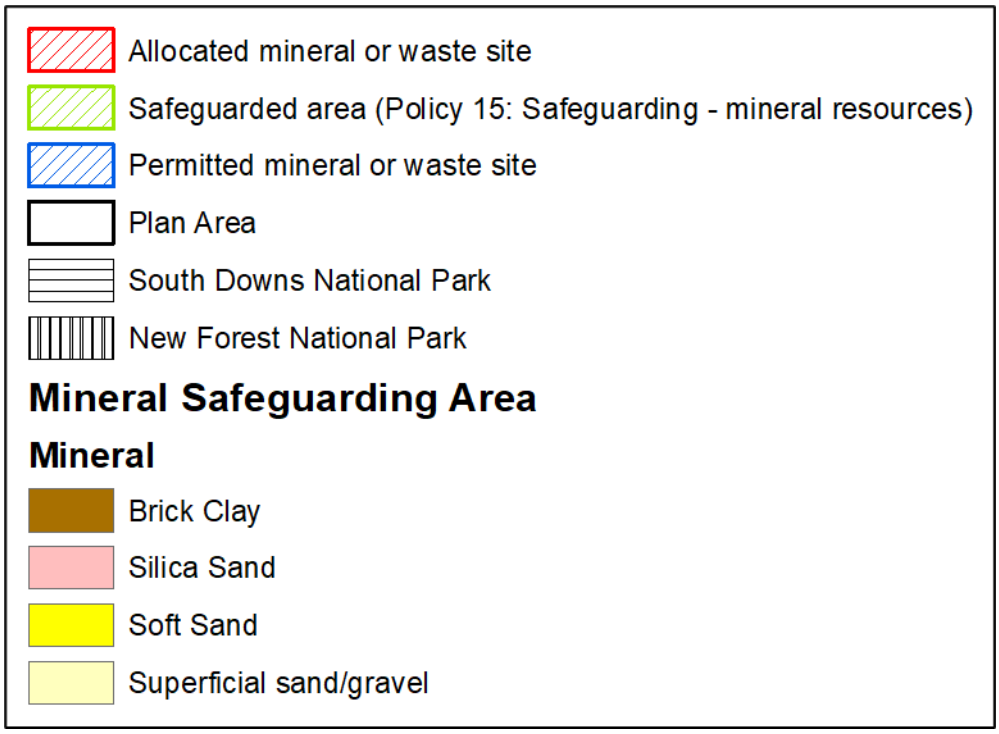


Figure A7.1: Hamble Airfield (EAL02)

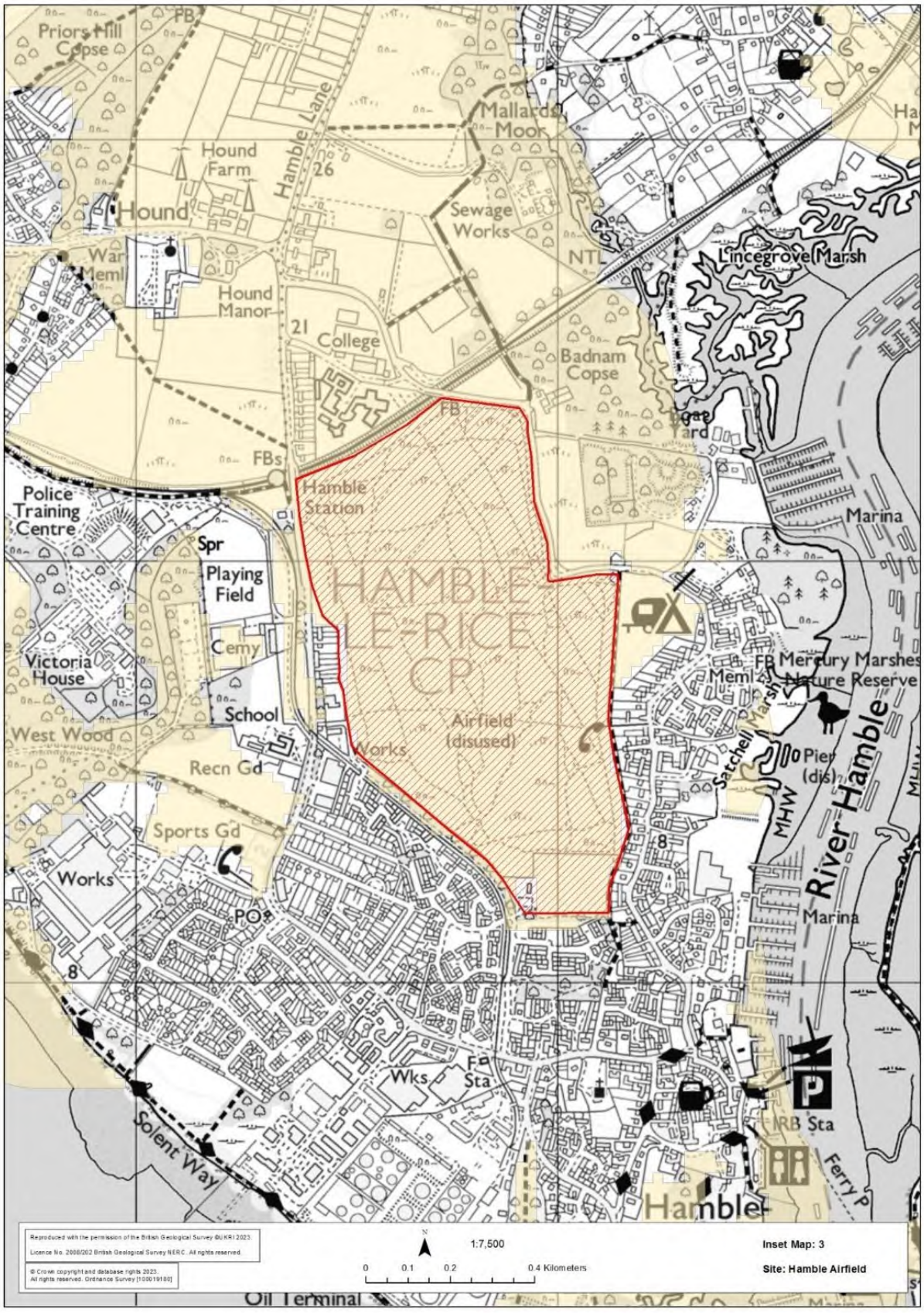


Figure A7.2: Ashley Manor Farm (NFD01)

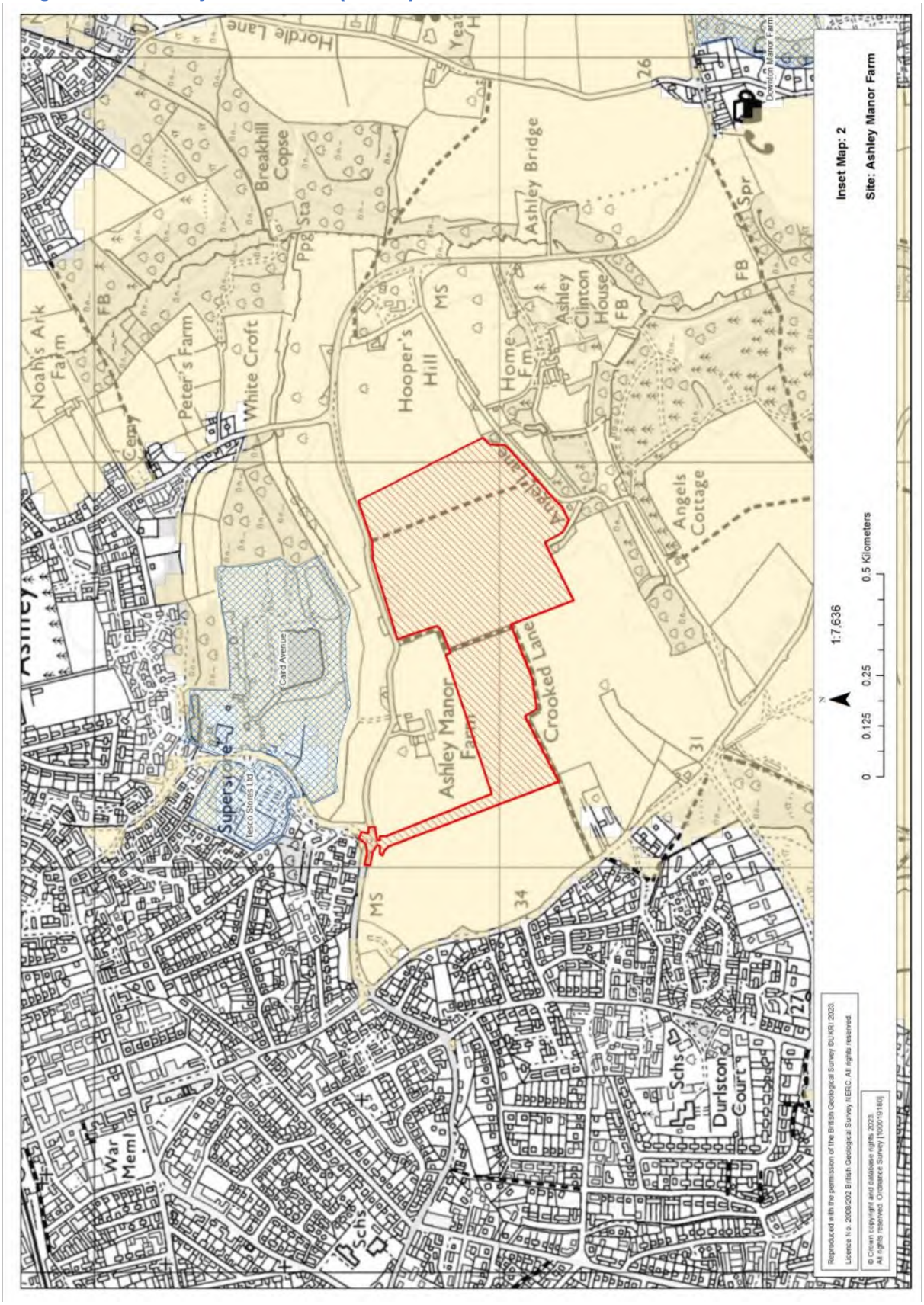


Figure A7.3: Purple Haze (NFD03)

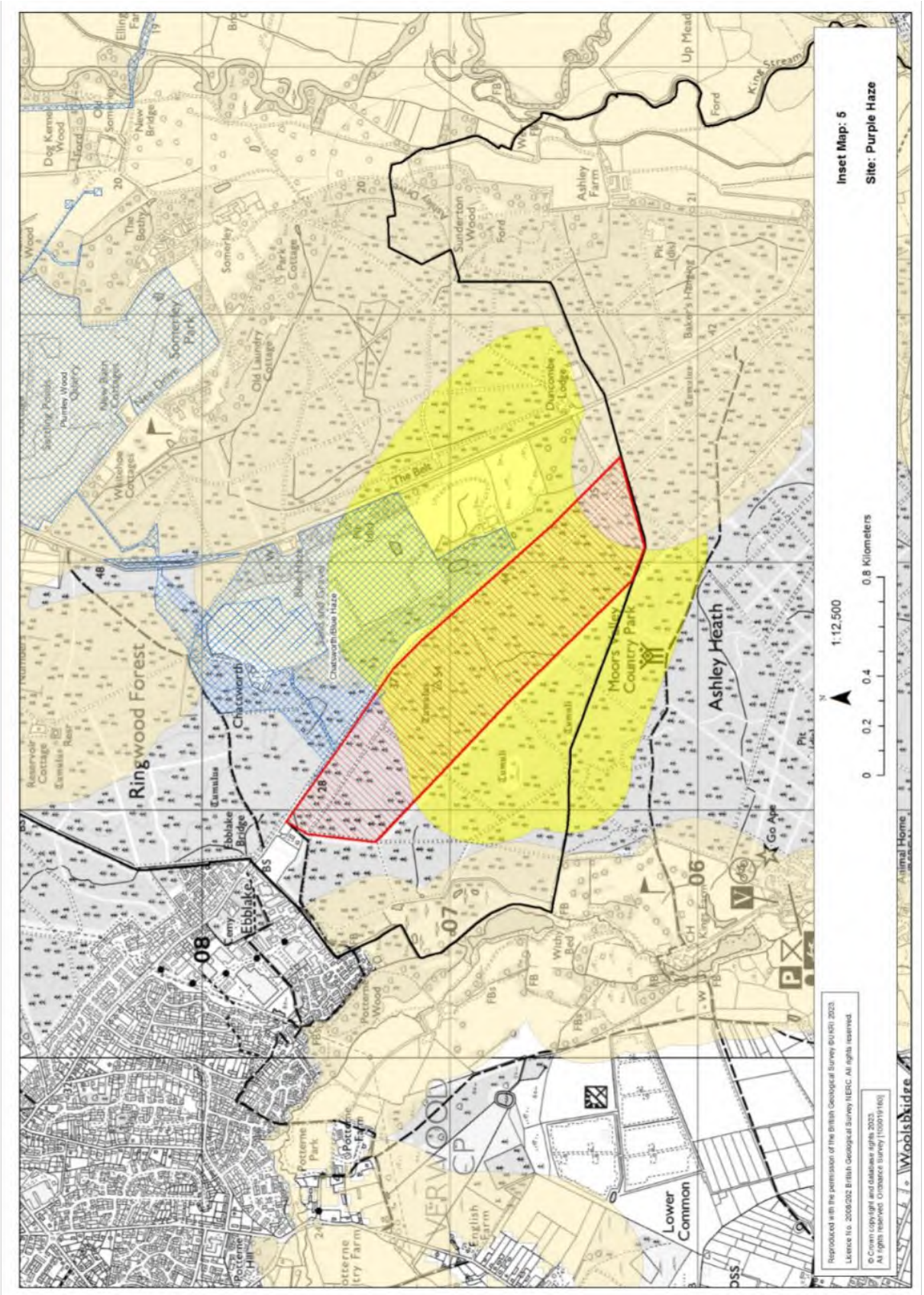
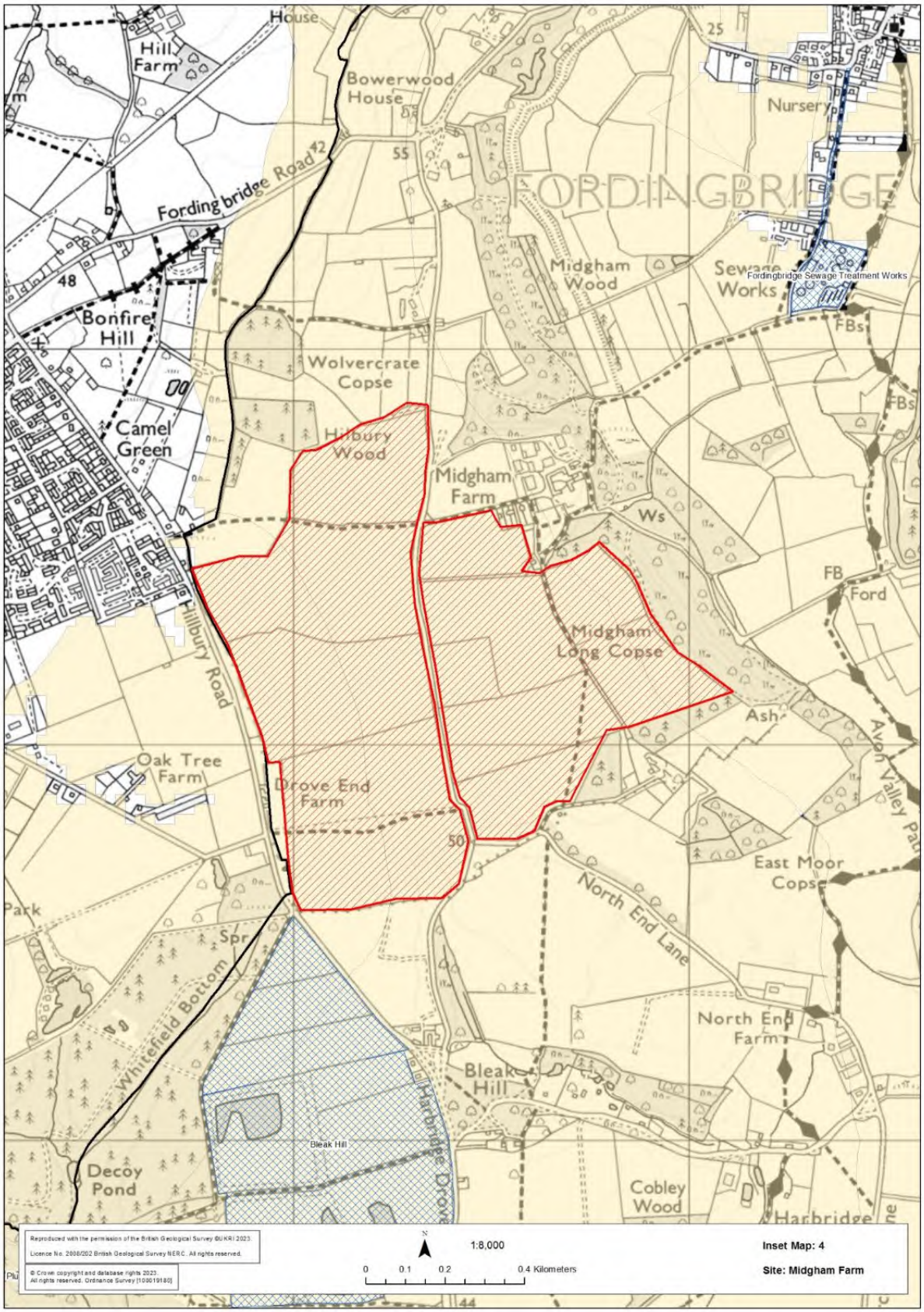


Figure A7.4: Midgham Farm (NFD04)



Appendix 8: Proposed development / use of site allocations subject to Appropriate Assessment

Hamble Airfield (EAL02)	
Existing site:	Scrub vegetation and rough grazing
Proposal:	Extraction of 1.5 million tonnes of sharp sand and gravel
Area:	62 hectares
Restoration:	Restoration to a combination of grazing, nature conservation, open space, public access and woodland
Start date:	2024+
Ashley Manor Farm (NFD01)	
Existing site:	Open agricultural land
Proposal:	Extraction of 1.5 million tonnes of sharp sand and gravel
Area:	26.6 hectares
Restoration:	Restoration to agriculture with species rich meadow, ditches/ponds and extra hedgerows, utilising approximately 1.5 million tonnes of inert material
Start date:	2024
Purple Haze (NFD03)	
Existing site:	Coniferous plantation
Proposal:	7.25 million tonnes of soft sand and 0.75 million tonnes of sharp sand and gravel (3.4 million tonnes will be available in the Plan period)
Area:	70 hectares
Restoration:	If the site is not used for non-hazardous landfill, inert fill will be used to agreed levels. The site will eventually be used for a combination of deciduous woodland planting, heathland, nature conservation areas, enhanced recreational areas and public open space, linked to the Moors Valley Country Park
Start date:	2024+
Midgham Farm (NFD04)	
Existing site:	Open agricultural land
Proposal:	Extraction of 4.2 million tonnes of sharp sand and gravel (3.8 million tonnes during Plan period)
Area:	89.7 hectares
Restoration:	Restoration to agriculture at the existing levels using imported inert materials, including nature conservation and increased permissive access
Start date:	2024
Restoration:	Delivery of existing restoration scheme approved under planning permission 19/11325 for Bleak I and II

Appendix 9: Development Considerations

Development Considerations for Regulation 19 screened-in site allocations, reproduced from the Proposed Submission Plan[65], are set out in Table A9.1, below. The Proposed Submission Plan states in Appendix A that **"development cannot be permitted if it may negatively affect the integrity of European protected sites. The development requirements for maintaining this integrity are identified with an asterisk (*) in the text and must be addressed."**

Furthermore, the Proposed Submission Plan states that development considerations "*will be done at the planning application stage, which should present the most appropriate responses, which are likely to include detailed site appraisals and Environmental Impact Assessment. These will identify what effects the development will have, and how to tackle them. All assessment information and suggested mitigation measures should be clearly identified and form part of the pre-application discussions and consultation with the local community*."

Only those Development Considerations that are considered relevant to International sites and their SSSI Units will be reproduced in the assessment tables (Tables 4.2 – 4.5).

Table A9.1: Development Consideration for screened-in allocated sites as set out in the Proposed Submission Plan

Hamble Airfield (EAL02)
Protection of the Solent and Southampton Water SPA and Ramsar, Solent and Dorset Coast SPA and Solent Maritime SAC*. A Hydrological assessment is required to consider whether proposed works will affect adjacent National Site Network, Ramsars and SSSIs, especially with regards to any changes to freshwater flows into the Hythe to Calshot Marshes SSSI and Solent & Southampton Water SPA/SAC/Ramsar and the issue of nutrient enrichment*. The impact on all roosting, foraging and breeding areas used by qualifying bird species of nearby SPAs and Ramsar, and on their functional linkage*. Mitigation and possible compensation likely to be required. Protection of the Lee on Solent to Itchen Valley Estuary Site of Special Scientific Interest*. Dust, noise and lighting management plan and monitoring is required*. The impact on Badnam Copse and West Wood Site of Importance for Nature Conservation. Early habitats creation through progressive restoration and/or edge buffer zones is required and a range of suitable habitats as the site provides a network opportunity. This should include provision of woodland (and wet woodland) habitat linkages. Protection of mature trees around the site boundary. Large areas for mitigation, either as buffer around site, a single large area, or several smaller areas should be provided. This will need to tie in with the long-term aims for the site (housing development) and will need liaison with Local Planning Authority.

[65] HMWP Partial Update HRA Screening Report (Proposed Submission) October 2023 - https://www.hants.gov.uk/landplanningandenvironment/strategic-planning/hampshire-minerals-waste-plan/minerals-waste-plan-partial-update-consultation

Soil testing, handling and management is required including for the potential for associated impact on groundwater and to determine soil quality. If PFAS are found to be present at any location on the site, then affected material would need careful management/remediation.

Protection and enhancement of adjacent public rights of way (Footpath Hamble-le-Rice 103/1) and connectivity to the wider network.

Maintain and manage existing informal recreational use of the site and provision of enhanced public recreational after-use.

Archaeological assessment is required, including desk-based assessment and, if needed, field evaluation.

Phasing programme and working to protect local businesses and the amenity and well-being of local residents.

Hydrological/Hydrogeological Assessment is required to ensure protection of the water quality and recharge of the groundwater and surface water*.

Safe and satisfactory access to ensure provision is made for vulnerable highway users and the impact on peak flows is managed.

A Transport Assessment is required.

A Routeing Agreement is required. Routes to the SRN and MRN are limited. The route suggested by the site promoter, via Hamble Lane to the A3024 and M27, is the most likely to be acceptable.

Through consultation on the draft Plan, local users have shared that people walk and cycle in the carriageway (due to the lack of pavements or separate cycle facilities) on Satchell Lane. Safety of these users should be considered through the Transport Assessment.

Traffic issues including consideration of people walking, cycling and school traffic, particularly at The Hamble School and Hamble Primary, and management of traffic and congestion on Hamble Lane.

Traffic issues including consideration of school traffic and pedestrians, particularly at The Hamble School and Hamble Primary, and management of traffic and congestion on Hamble Lane.

Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere.

Protection of existing sewer pipelines.

The testing of the soil for contaminates and the potential impact on groundwater requires assessment. If contaminates are found to be present at any location on the site, then affected material would need careful management/remediation.

Ashley Manor Farm (NFD01)

Protection of the Solent and Southampton Water SPA/Ramsar and the Solent and Dorset Coast SPA*.

Ecological and hydrological assessment of all watercourses, ditches and aquatic habitats will be required including an understanding of the hydrological regime and interaction between and importance of any functional connection to offsite habitats and features including the nearby SINCs, SSSIs, SPAs and Ramsar*.

The impact on all roosting, foraging and breeding areas used by qualifying bird species of the nearby SPAs and Ramsar, and on their functional linkage*.

Mitigation should comply with the Solent Waders and Brent Goose Strategy.

Early establishment of replacement and enhanced hedgerows bounding the site with an ecological receptor for reptiles and other species is required.

Long term management of species-rich meadows, ponds and other habitats is required.

Dust management plan and monitoring is required.

Restoration should be to existing ground levels and should include Crooked Lane replacing the double hedgerow feature along the whole route. Restoration should provide a suitable setting for the Listed Buildings and respect their significance.

The site is Best and Most Versatile (Grade 2 and 3). Soil handling and management is required and restoration to original (or improved) agricultural land classification.

The new planting around the site should be managed to allow it to reach maturity.

Footpaths New Milton 168/721 and 168/720 will require protection and enhancement with greater connectivity to wider network.

Development should protect the setting of the nearby Listed Buildings (Ashley Manor Farmhouse and Sampson Cottage).

A new approach to the existing Caird Avenue/ Lymington Road roundabout will be required to provide access to the site.

A Transport Assessment is required.

A Routeing Agreement is required. Routeing of HGV traffic will be limited to Caird Avenue between the roundabout and the New Milton Sand and Ballast plant.

Hydrological/Hydrogeological Assessment and monitoring is required, taking into account the adjacent Historic Landfill, to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed.

Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere.

Protection of existing sewer pipelines is required.

The impact on local business and amenity and well-being of residential properties.

Purple Haze (NFD03)

Protection of the Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, Avon Valley SPA and Ramsar, and the River Avon SAC (and the New Forest SAC/SPA/Ramsar in relation to recreational displacement)*.

The impact on the offsite roosting, foraging, and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*.

A Hydrological/hydrogeological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment, and including the protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the ecohydrological regimes of Ebblake Bog and Moors River Sites of Special Scientific Interest*.

The impact on Ringwood Forest and Home Wood Site of Importance for Nature Conservation.

Protection of populations and conservation status of rare and notable species including Smooth Snake, Sand Lizard and Coral Necklace*.

Restoration must include habitats to expand those within the designated sites and relate to the wider landscape and enhance ecological networks*.

Dust, noise and lighting management plan and monitoring is required*.

Protection and enhancement of the amenity and users of the Moors Valley Country Park and other local residents.

Maintenance and management of levels of permissive access and recreational use of the Moors Valley Country Park via the B3081*.

Protection of the nearby cycle paths, bridleways, and footpaths.

Recreational displacement must be carefully managed. Management arrangements to secure short and long term objectives for amenity and biodiversity including heathland, woodland, acid grassland and protected species.

Associated legal agreements must ensure no further irreversible habitat loss or risk to the conservation status of species.

Phasing programme and working to protect the amenity of local residents and permissive access to the site.

The impact on the Bronze Age burial mound and its preservation. A programme of archaeological mitigation will be required, including archaeological excavation of the putative burial mound and walk through survey prior to development and the monitoring of topsoil and over burden stripping in a strip map and record exercise during development.

Protection of the amenity and well-being of Verwood residents, other residents in the vicinity and local businesses. Exclusion from extraction and buffer of the northern end of the site to protect the amenity of local residents*.

Soil handling, management and monitoring is required.

Importation of material as part of the restoration would need appropriate supporting investigations and risk assessment.

A Transport Assessment is required.

A Routeing Agreement is required. Routeing to the SRN (A31) will be along the B3081, which is a suitable route for HGV traffic. The SRN is located some 1.4 miles south from the site. A new priority junction will be required to the B3801 to ensure provision for people walking, cycling and horse-riding and the impact on peak flows is managed.

Traffic issues including cumulative impact with other mineral and waste operations and the protection of Verwood from minerals traffic.

Protection of the water quality and recharge of the underlying aquifer, groundwater and surface water and safeguard the hydrological regime of Ebblake Bog Site of Special Scientific Interest*.

Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere.

Hydrogeological/Hydrogeological Assessment is required.

Midgham Farm (NFD04)

Protection of the Avon Valley SPA/Ramsar, River Avon SAC, Dorset Heaths SAC and the Dorset Heathlands SPA/Ramsar*.

The impact on the offsite roosting, foraging and breeding areas of the qualifying bird species of nearby SPAs/Ramsars, and on their functional linkage*.

A Hydrological assessment is required to consider whether proposed works will affect nearby National Site Network sites, Ramsars and SSSIs, including the issue of nutrient enrichment*.

Protection of water quality and quantity of the River Avon require protection*.

Restoration proposals will need to relate to the wider landscape and enhance ecological networks including provision of deciduous woodland along the boundaries of the site*.

Dust, noise and lighting management plan and monitoring is required*.

Buffering of the offsite woodland are required.

Pre-commencement planting and restoration proposals require phasing and development design to ensure connectivity is retained or replaced as a priority, most notably in the southern boundary.

A buffer is required in the north-west corner and western edge of the site to protect the amenity and well-being of Alderholt Village and any urban expansion. Buffers are also required to protect the adjacent residential properties along the site boundary.

Replacement of hedgerows, where removed, and additional native tree planting along Hillbury Road.

Restoration should include no large open water bodies, for to landscape and airport safeguarding reasons. However, small ponds may be acceptable to contribute towards biodiversity.

Archaeological issues are likely to be significant at this site. Archaeological surveys are required, and the presence of the historic settlement may (on balance of archaeological merit or on balance of value of deposits compared to cost of mitigation) require preservation and possible exclusion from development, which may reduce capacity.

The site is Best and Most Versatile (Grade 3a and 3b). Soil handling and management is required and restoration to original (or improved) agricultural land classification.

A new priority junction will be required onto Hillbury Road and a conveyor belt to cross Lomer Lane for the second phase of extraction.

A Transport Assessment is required. This should consider cumulative traffic impacts taking into account that the site is a continuation of existing extraction operations at Bleak Hill which would cease prior to commencement at Midgham Farm. The safety of other road users (walkers, cyclists and horse riders) will also need to be considered on Hillbury Road and Harbridge Drove (due to the lack of footpath).

A Routeing Agreement is required. Routeing to the SRN (A31) will be south along Hillbury Road/Harbridge Drove before joining briefly the B3081 to its junction with the A31. Both Harbridge Drove and the B3081 are suitable routes for HGV traffic. The SRN is located some 5.5 miles south from the site.

Protection and enhancement of rights of way (Fordingbridge footpath 090/8a, Fordingbridge footpath 090/2, Fordingbridge footpath 090/3) and connectivity to the wider network.

Flood Risk Assessment required. Site must be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, not impede waterflows and not increase flood risk elsewhere. Hydrogeological/Hydrological Assessment required to ensure that any impacts on groundwater flows and water quality are considered and mitigated where needed.

A summary of this document can be made available in large print, in Braille or audio cassette. Copies in other languages may also be obtained. Please contact Hampshire County Council by email HMWP.consult@hants.gov.uk or by calling 01962 846746.