



BE/148/20/OUT - Nursery Fields Land to North of Chalcraft Lane, Bersted

Habitats Regulations Assessment/ Appropriate
Assessment

Prepared by Arun District Council

Final Report

3rd March 2021

1. HABITATS REGULATIONS ASSESSMENT PROCESS

Legislation

- 1.1 The primary legislative protection covering International Sites originates from the European Directive 92/43/EEC (the 'Habitats Directive'), which is transposed into UK legislation by the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') with the key sections of relevance to projects appearing from Regulations 63 onwards. Regulation 63 states that:

“(1) a competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-

- (a) Is likely to have a significant effect on a European site [International Site] or a European off-shore marine site (either alone or in combination with other plans or projects), and*
- (b) Is not directly connected with or necessary to the management of that site,*

Must make an appropriate assessment of the implications of the plan or project for that site in view of the site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.”

National and Local Planning Policy

- 1.2 Section 15 of the National Planning Policy Framework (NPPF) (2019) relates to conserving and enhancing the natural environment, and paragraphs 174-177 are of particular relevance to International Sites (Ramsars/SPAs and SACs) and have been taken into account in the preparation of this Appropriate Assessment. Paragraph 176 of the NPPF requires that Ramsar sites are treated as if they are fully designated International Sites for the purposes of considering development proposals that may affect them.
- 1.3 Arun Local Plan (2018) policies ENV SP1, ENV DM1, ENV DM2, ENV DM3, ENV DM4 and ENV DM5 relate to the protection and enhancement of the environment, including designated sites of European importance. Policy ENV DM2 specifically relates to development which may affect Pagham Harour SPA/Ramsar, and seeks financial contributions towards the agreed strategic approach to access management at Pagham Harbour, and promotes the creation of new accessible green spaces, to avoid and reduce impacts from recreational disturbance on these designated wildlife sites.

Guidance

- 1.4 Guidance published by the European Commission entitled 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites' (2001) advises on carrying out the stepwise approach to HRA required by Article 6 of the Habitats Directive. This requires that the following stages are undertaken in sequence:

1. Screening the need for an Appropriate Assessment;
2. The Appropriate Assessment;
3. The Assessment of Alternative Solutions; and
4. Assessment where no alternative solutions exist and where adverse impacts remain (also known as the test for “Imperative Reasons of Overriding Public Interest” or IROPI).

Relevant Case Law

Case C-127/02 of the European Court of Justice (ECJ) – The “Waddenzee” Case

1.5 The ECJ Waddenzee Case clarified several important points in relation to the correct interpretation of Article 6(3) of the Habitats Directive in particular. This clarification has been helpfully set out in Government Circular 06/05 “Biodiversity and Geological Conservation”.

1.6 One of the key messages from the ECJ was that, where a plan or project has the potential to affect a Natura 2000 site, an “Appropriate Assessment” is necessary:

“...if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either alone or in combination with other plans and projects”

[Paragraph 13 of Circular 06/05 or paragraph 44 of the Waddenzee Judgment]

1.7 The ECJ expanded upon this by saying that:

“...where such a plan or project has an effect on that site but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned.”

[Paragraph 47 of the Waddenzee Judgement]

1.8 Further to the above the ECJ clarified that, once an Appropriate Assessment has been triggered, except in the circumstances outlined in Article 6(4) of the Directive, a plan or project can only be authorised where it will not have an adverse effect on the integrity of the Natura 2000 site, and that:

“That is the case where no reasonable scientific doubt remains as to the absence of such effects”.

[Paragraph 21 of Circular 06/05, or paragraph 59 of the Waddenzee Judgement]

The ‘Dilly Lane’ and ‘People over Wind’ Judgments

1.9 The High Court, in the judgment of J Sullivan in Hart DC v Secretary of State for Communities and Local Government (2008), has for some time formed the basis of established HRA Practice, insofar as it has determined the approach to the Screening and Appropriate Assessment stages of the HRA process.

- 1.10 Up until recently the established approach derived from the Dilly Lane Case meant that where impact avoidance and mitigation measures were put forward as integral parts of a plan or project, and where the competent authority was also satisfied that those measures would be effective, deliverable and could be secured, then there was no need for an Appropriate Assessment to be carried out.
- 1.11 This was because in such circumstances it was considered that the information pertaining to the efficacy of those impact avoidance and mitigation measures represented the 'objective information' referred to by the European Court of Justice (ECJ) in the Waddenzee case (above).
- 1.12 More recently however, in case C-323/17 of the ECJ (referred to as 'People over Wind'), the ECJ concluded that it was not appropriate to take account of "...measures intended to avoid or reduce the harmful effects of the plan or project..." at the Screening stage of the HRA process. Although there appear to be some inconsistencies between this judgment and previous ECJ case law, until such time as the ECJ may provide further clarification, it will be necessary to consider the efficacy of impact avoidance and mitigation measures such as SAMM through the medium of an Appropriate Assessment in order to ensure compliance with the findings of the judgment.

The Grace and Sweetman Case

- 1.13 The above approach was confirmed in the July 2018 Grace and Sweetman case (C-164/17). In this case the ECJ ruled that a project resulting in the loss of land within a European site which could support the qualifying feature(s) cannot be mitigated by measures designed to improve the capacity of other areas of the European site to support those feature(s). Such a project must therefore fail the 'appropriate assessment test at Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. If the project must proceed for imperative reasons of overriding public interest, such measures may be required to compensate for the loss of area within the European Site, as per Article 6(4).
- 1.14 In light of the above it is the view of the LPA that as there is no proposal to remove land from the SPA, ECJ ruling C-164/17 is not relevant to this application.

Screening Likely Significant Effects

- 1.15 The purpose of the initial screening stage is to determine whether the proposals will give rise to a 'likely significant effect' (LSE). If an LSE can be ruled out, the proposals are deemed to pass the screening stage. However, if an LSE is identified, or uncertain, the competent authority must proceed to the next stage and carry out an Appropriate Assessment of the proposals, in light of the conservation objections of the International Site in question.

The Appropriate Assessment Stage

- 1.16 The purpose of the Appropriate Assessment (AA) is to further analyse likely significant effects identified during the screening stage, as well as any effects which were uncertain or not well

understood and take these forward for assessment in accordance with the precautionary principle. The AA evaluates the implications of the plan or project, either alone or in combination with other plans and projects, in light of the conservation objectives of the affected International Site. It also assesses the effectiveness of measures intended to avoid or reduce the harmful impacts of the plan or project and concludes on the overall likely significant effect and whether it would significantly adversely affect the integrity of the International site in question.

- 1.17 The AA stage includes a test of whether the plan or project proposals will result in significant adverse effects on site integrity, in combination with other plans or projects.:

In Combination Effects

- 1.18 Other plans or projects being prepared or implemented in the area may have the potential to cause negative effects on the integrity of International Sites. These effects may act in combination with the effects of this application, potentially leading to a likely insignificant effect becoming significant. It is therefore important to consider whether this application could contribute to effects generated by other plans and projects.

2. ASSESSING THE CURRENT APPLICATION

Consultation with Natural England

2.1 Natural England (NE), the Government's statutory adviser on nature conservation in England, has been consulted on the proposals. The Courts have determined on several occasions that the views of NE as the statutory nature conservation advisory should be given 'great weight' unless a 'cogent explanation' is given for not doing so. NE has advised ADC in the following correspondence (see Appendix 1)

- NE Consultation response dated 8th January 2021:

2.2 In NE consultation response dated 8th January 2021, NE have confirmed that "Subject to the appropriate financial contribution being secured, Natural England is satisfied that the proposal will mitigate against the potential recreational impacts of the development on the site". The advice provided in summary was as follows;

- This application will result in a net increase in residential accommodation, so impacts to the Special Protection Area (SPA) and Ramsar Site (at Pagham Harbour) may result from increased recreational disturbance.
- The Authority (Arun District Council) has measures in place to manage these potential impacts through the agreed strategic solution which NE consider to be ecologically sound.
- Subject to appropriate financial contributions being secured, NE are satisfied that the proposal will mitigate against the potential recreational impacts of the development proposed.
- NE advice is that this proposed development, and the application of these measures to avoid or reduce the likely harmful effects from it, may need to be formally checked and confirmed by the

Authority (ADC), via an appropriate assessment in view of the European Site's conservation objectives and in accordance with the Conservation of Habitats & Species Regulations 2017 (as amended).

- This is because the recent People over Wind Ruling by the Court of Justice of the European Union concluded that, when interpreting article 6(3) of the Habitats Directive, it is not appropriate when determining whether or not a plan or project is likely to have a significant effect on a site and requires an appropriate assessment, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.
- NE advises that it is a matter for the Authority (ADC) to decide whether an appropriate assessment of this proposal is necessary in light of this ruling.

Consultation with Council's Ecology Officer

2.3 The other relevant statutory consultation response received were as follows;

- Environment Officer, Chichester District Council (CDC) response dated 15th December 2020:

2.4 In summary the Environment Officer's comments were as follows;

Bats

As detailed within the Ecological Assessment (Oct 2020) there are 5 mature trees onsite which support bat roosting potential. These trees must be retained and protected from disturbance. If this not possible then further bat surveys will be required on these trees.

The hedgerows and trees on site are used by many protected species for commuting and foraging and will need to be retained and enhanced for bats. This will include having a buffer strip around the hedgerows and trees (5m) and during construction fencing should be used to ensure this area is undisturbed. Any gaps should also be filled in using native hedge species to improve connectivity. Conditions should be used to ensure this. Further details for the protection of these areas will need to be included within a CEMP. This should involve the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees / hedgerows.

The lighting scheme for the site will need to take into consideration the presence of bats in the local area and the scheme should minimise potential impacts to any bats using the trees, hedgerows and buildings through the provision of dark habitat orientated north-south direction and avoiding unnecessary artificial light spill through the use of directional light sources and shielding. We require that further details of the lighting scheme and dark corridors are provided as part of this application.

Badgers

Prior to start on site a badger survey should be undertaken to ensure badgers are not using the site. If a badger sett is found onsite, Natural England should be consulted and a mitigation strategy produced. As a precaution any trenches should be covered overnight, or a means of escape made available and any hazardous chemicals need to be suitably stored away so animals cannot access them. Further detailed relating to this will need to be included within the CEMP.

Dormice

The hedgerows and trees on site may be used by many protected species for nesting and foraging

and will need to be retained and enhanced for dormice. This will include having a buffer strip around the hedgerows and trees (5m) and during construction fencing should be used to ensure this area is undisturbed. Any gaps should also be filled in using native hedge species to improve connectivity. Conditions should be used to ensure this. Further details for the protection of these areas will need to be included within a CEMP. This should involve the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees / hedgerows.

Reptiles

As detailed within the Ecological Assessment (Oct 2020) reptiles have been found onsite. Due to this mitigation is required. Unfortunately though some mitigation proposals have been included within the assessment we require that prior to determination a full mitigation strategy is submitted. The mitigation strategy will need to include details of reptile fencing, translocation methods, the translocation site / enhancements and the timings of the works.

Hedgehogs

Precautions should be put in place for hedgehogs and the site will need to be searched carefully before works begin. Any brush piles, compost and debris piles on site must be removed outside of the hibernation period mid- October to mid-March inclusive. The piles must undergo soft demolition. If any small mammals including hedgehogs are found they should be relocated away from the construction area into surrounding suitable habitats. Details of this will need to be included within the CEMP.

Nesting Birds

Any works to the trees or vegetation clearance on the site should only be undertaken outside of the bird breeding season which takes place between 1st March – 1st October. If works are required within this time an ecologist will need to check the site before any works take place (within 24 hours of any work). Further safeguards for birds during construction should be included within the CEMP.

Policy ENV DM5 - Mitigation and enhancements

In line with Policy ENV DM5 of the Arun District Local Plan information on Biodiversity Net Gain needs to be provided as part of the planning application prior to determination. We are pleased to see in the inclusion of the following mitigation included into the site;

- Grassland onsite retained
- Wildflower grassland created
- Creation of seasonal water bodies
- Retention and enhancement of ditches
- Species rich grassland and scrub areas planting
- Retention of hedgerows and trees
- long term management plan

We also require the following are incorporated into the scheme;

- Any trees removed should be replace at a ratio of 2:1
- Bat boxes integrated into at least 20% of properties across the site
- Bat boxes installed on trees within the green corridor areas
- Bird boxes installed on at least 20 of properties onsite

- Barn owl boxes installed onsite within a suitable location
- Log piles onsite
- We require that gaps are included at the bottom of the fences to allow movement of small mammals across the site
- hedgehog nesting boxes included across the site

We require that a mitigation and enhancement management strategy and plan is put together for the above detailing how all the above will be created, installed, managed and protected. We require that this is submitted as part of this application.

CEMP and LEMP

Full details on how the habitats and enhancements onsite will be managed during the construction phase and post construction will need to be included within the Construction Environmental Management Plan (CEMP) and Landscape and Management Plan (LEMP) as part of a reserve matters application.

Recreational Disturbance

For this application we are satisfied that the HRA issue of recreational disturbance can be resolved as long as the applicant is willing to provide a contribution to the Bird Aware scheme, the standard HRA Screening Matrix and Appropriate Assessment Statement template can be used. The applicant has also provided further mitigation to mitigate disturbance including the following;

- open space and vegetation buffers
- new access to PROW
- doorstep recreation for walkers, dog walkers and cyclists
- information pack to residents

Natural England should be consulted regarding this mitigation and its suitability.

3. SCREENING OF LIKELY SIGNIFICANT EFFECTS

Introduction

3.1 This section sets out Stage 1 of the HRA, Screening. It describes the application site and development proposals, and explores the potential impacts generated by the development that could give rise to a likely significant effect (LSE) on Pagham Harbour SPA/Ramsar.

Description of the Application Site

3.2 The application site is located to the west of the village of North Bersted, near Bognor Regis. It is located within the wider Local Plan Strategic Housing Allocation, West of Bersted (SD3) which has been allocated for up to 2,500 new homes and associated community uses etc. The application site itself consists agricultural land with a range of hedgerows and trees and ditches and rife/watercourses running through the site. To the north east of the site are some residential properties, the Bersted community centre and local playing fields, and a site (off New Barn Lane) which received planning permission in 2019 for the construction of 99 dwellings (ref. BE/29/19/PL). To the south east is Chalcroft Nurseries, existing residential development and Chalcraft Lane. An application for the

construction of up to 20 dwellings and 2,240sqm of commercial floorspace at the Chalcroft Nursery site (ref. BE/81/20/OUT) is currently under consideration by Arun District Council. To the north west and south west it is existing farmland.

Description of Development

3.3 Landform Bersted Ltd. Have applied for outline planning permission, with all matters reserved, except for site access, for the construction of up to 225 dwellings. The description of the development is as follows:

“Outline application with all matters, except for site access, reserved for the development of up to 225 residential units with associated infrastructure, open space and vehicular and pedestrian access. This application affects a Public Right of Way.”

3.4 The proposal is not directly connected with or necessary to the management of Pagham Harbour SPA/Ramsar and as such must be the subject to HRA.

Potential for Likely Significant Effects on Pagham Harbour SPA/Ramsar

Location of site in relation to designated habitat sites:

3.5 The application site is situated approximately 3.6km away from the Pagham Harbour SPA/Ramsar site to the south west of the site at its closest point. Other European/internationally designated sites are located at greater distances. The Chichester and Langstone Harbour SPA/Ramsar site and the Solent Maritime Special Area of Conservation (SAC) are located approximately 7.9km to the west of the application site. The Solent to Dorset Coast potential SPA (pSPA) boundary overlaps that of Pagham Harbour and is approximately 1.9km to the south of the application site at its nearest point. There are no other such sites within 10km of the application site.

3.6 In relation to the Chichester and Langstone Harbours SPA/Ramsar site and the Solent Maritime SAC, it is considered that, given the distances involved, the development proposals would not be likely to give rise to a significant effect on these sites, when the project is considered alone or in combination with other plans or projects. This conclusion is supported by the “Interim Policy Statement on Development and Disturbance of Birds in Special Protection Areas and identified Compensatory Habitats” document (April 2014) published by Chichester District Council. It is stated that:

“Through the Solent Disturbance and Mitigation Project (SDMP), Councils across the Solent have identified a ‘zone of influence’ surrounding the Chichester & Langstone Harbours SPA/SAC site that extends to 5.6km from the Special Area of Conservation (SAC) boundary. Accordingly the Council will consider planning applications which fall within the zone as set out below.”

3.7 Therefore, given that the application site falls outside of the 5.6km zone of influence identified within the ‘Interim Policy Statement on Development and Disturbance of Birds in Special Protection Areas and identified Compensatory Habitats’ document (April 2014) published by Chichester District Council, no further consideration is required in relation to potential effects on the Chichester and Langstone Harbours SPA/Ramsar site and the Solent Maritime SAC.

3.8 In relation to the Solent to Dorset Coast pSPA, which would be classified in order to protect foraging species of Tern Sterna, given the distances involved and the nature of the Development

Proposals, no disturbance effects to Tern species using this pSPA would occur. On this basis no further consideration is therefore required.

3.9 The Arun Local Plan HRA Stage 2 Screening Report (June 2016) identified a potential effect of the West of Bersted Strategic Allocation site SD3 (in which this application site is located) upon Pagham Harbour SPA/Ramsar through recreational disturbance.

Disturbance

3.10 For disturbance impacts, the Arun Local Plan HRA Screening Report (2016) discusses how the 2013 Arun Local Plan HRA concluded that *'residential allocations within 5km of Pagham Harbour SPA/Ramsar site would be the principle source of additional visitors to the International Site and would hence result in a risk of adverse effects on site integrity'*. Also, that *'mitigation measures recommended in the 2013 HRA were subsequently incorporated into the Publication ALP (October 2014) as Policy ENV DM2'*.

3.11 The Arun Local Plan HRA Screening Report confirmed that the West of Bersted Strategic Allocation is one of the potential new (residential) development allocations located within 5km of the SPA/Ramsar and concluded that the West of Bersted development was likely to be deliverable in compliance with Policy ENV DM2. The conclusions drawn within the Arun Local Plan HRA Screening Report rely upon the joint scheme of mitigation to avoid individually insignificant effects from the scheme contributing to a combined likely significant effect.

3.12 Given the current application site is located with the WEB Strategic Allocation and is within 5k of the Pagham Harbour SPA/Ramsar, the conclusions within the Arun Local Plan HRA Screening Report are relevant to the consideration of likely significant effects from this development, and it can be concluded that this proposal could result in likely significant effects due to increased recreational disturbance, and also impacts on water quality.

3.13 It was identified within Natural England's consultation response dated 8th January 2021 that as the application will result in a new increase in residential accommodation, impacts to the Pagham Harbour SPA/Ramsar Site may result from increase recreational disturbance. It was also stated that measures are in place to manage these potential impacts through the agreed strategic solution which NE consider to be ecologically sound. Subject to the appropriate financial contributions being secured.

Direct Loss of Habitat

3.14 Potential direct loss of supporting habitat for Brent Geese has been screened out for further assessment. The Council's Local Plan policy ENV DM2 (Pagham Harbour) requires that *"to ensure no detrimental impacts through the loss of supporting habitat, development within Buffer Zone B for Pagham Harbour SPA, will need to prove the site is not used regularly by birds. To do this information on the cropping regime, frequency of planting favoured by Brent Geese, sources of disturbance, openness of the site, historic data search and at least one seasons wintering surveys will need to be provided. Where results suggest regular use, an additional winter bird survey should be carried out and mitigation design aspects incorporated as necessary, to enable informed judgments to be made."* The Council's Local Plan policy H SP2 (a) which relates to the West of Bersted strategic allocation states development must *"ensure no detrimental impact to Pagham Harbour SPA, through*

compliance with ENV DM2 (Pagham Harbour) and its supporting text". The EIA Scoping Opinion for the wider strategic allocation included the requirement for a full winter bird survey.

3.15 The applicant's ecologist have submitted some further information (Briefing Note to support the sHRA, dated February 2020) during the course of the determination period of the application. This sets out the historic cropping regime for the last three winters and concludes that the land management of the application site means the land has not always supported food sources suitable for foraging Brent Geese but at some times (winter 2019-2020 and winter 2020-2021) it has supported a suitable food crop for foraging Brent Geese. The document also provides 2 months of winter bird surveys covering January and February 2021 (the 2 months out of the 4 winter months November-February when fields are most likely to be used by Brent Geese who have used up food sources in the harbour during the early part of winter). The document states that (as per the cropping regime information provided) the 2021 winter surveys have been undertaken when the land is planted with suitable crops (winter wheat). The winter surveys state no Brent Geese were recorded either flying over or utilising the application site. In addition to this, the document states that separate ecologist site visits (not formal winter surveys) during October, November and December recorded no sightings or presence of Geese e.g. Goose droppings or short grass due to grazing. The document also confirms that there are no historic records to show Brent Geese utilising the site for the past 25 years. The ecologist also contends in the Briefing Note that the characteristics of the application site is also not suitable for use by Brent Goose, due to its lack of openness, and regular disturbance from dog walkers, given PRoW routes through and adjacent to the site (however, these arguments are not fully accepted by either the Council or Natural England).

3.16 Notwithstanding the above regarding the specific characteristics of the site, and although not a full suite of winter bird surveys (i.e. Nov-Feb) have been provided to date, based on the further information now submitted by the applicant's ecologist contained within the Briefing Note dated February 2021, it can be reasonably concluded that the site does not form supporting habitat or functionally linked land for Brent Geese. It is therefore concluded there would be no direct loss of supporting habitats or functionally linked land for Brent Geese as a result of the development, and that a LSE and adverse effect on the integrity of the European protected site in this respect can be screened out at this stage.

Screening Conclusion

3.17 The ECJ (People over Wind) ruling means that impact avoidance and mitigation measures should now be considered at the AA stage. It is no longer possible to rule out a LSE at screening stage where such measures are relied upon. Instead, taking the assessment through to the AA stage is necessary to explore whether any contribution toward an adverse effect on the integrity of the site can rule out a LSE.

3.18 In summary, it is considered that recreational disturbance impacts arising from an increased population from the proposed development of up to 225 dwellings and potential water quality impacts would result in the potential for a LSE on the Pagham Harbour SPA/Ramsar, both alone, and in combination with other plans and projects within the area. This is considered in detail in the AA later in this report.

4. APPROPRIATE ASSESSMENT

Qualifying Features

4.1 The Qualifying Features of the Pagham Harbour Special Protection Area (SPA) are identified as;

A046a Branta bernicla bernicla - Dark-bellied Brent goose (Non-breeding);

A151 Philomachus pugnax - Ruff (Non-breeding);

A193 Sterna hirundo - Common tern (Breeding);

A195 Sterna albifrons - Little tern (Breeding);

Qualifying features for Pagham Harbour Ramsar are identified as:

A046a Branta bernicla bernicla - Dark-bellied Brent goose (Non-breeding)

A157 Limosa Islandica; Black-tailed godwit (Non-breeding)

Conservation Objectives

4.2 The Conservation Objectives for the Pagham Harbour SPA/Ramsar are identified as;

“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.”*

4.3 The species of birds for which the Pagham Harbour SPA/Ramsar is designated are susceptible to disturbance. Therefore, it is necessary to consider means by which the in-combination disturbance of birds with the Pagham Harbour SPA/Ramsar can be mitigated.

Appropriate Assessment Matrix (Stage 1)

Identification of potential effects, on qualifying features, conservation objectives and any relevant mitigation measures

Potential Effect	Site Conservation Objective(s)	Qualifying features	Potential for Impact (Direct/Indirect/Cumulative)	Relevant Mitigation Measures (proposed by applicant and/or LPA)
1. Construction phase and operational impacts e.g. from noise, dust, light,	Maintain or restore the population of each of the qualifying features.	All species	No direct construction impact likely - given enclosure/buffers to site provided by trees and hedgerows, built form to south and south-west and distance to SPA/Ramsar (3.6km).	Details of measures to monitor air and water particulate levels and standard construction practices used to avoid impacts

Potential Effect	Site Conservation Objective(s)	Qualifying features	Potential for Impact (Direct/Indirect/Cumulative)	Relevant Mitigation Measures (proposed by applicant and/or LPA)
water quality			Potential for indirect construction and operational impacts e.g. from air and water particulates.	including contamination of ground and surface water are to be secured by planning condition within a Construction and Environmental Management Plan (CEMP) The applicant proposes in their sHRA a number of mitigation measures to be detailed in the CEMP to include: - Spill kits for machine operators - use of interceptors/bunds where appropriate - safe storage protocols for any chemicals on site - scheme for the disposal of contaminated water Applicants also propose SUDs scheme (infiltration, gullies/channel/swales, and water treatment via basins) to be

Potential Effect	Site Conservation Objective(s)	Qualifying features	Potential for Impact (Direct/Indirect/Cumulative)	Relevant Mitigation Measures (proposed by applicant and/or LPA)
				secured by S106 legal agreement or planning condition Applicants state Wastewater treatment to be primarily managed by Southern Water, subject to upgrades will be capacity in the sewage network and treatment to be undertaken at local WWTW. The CEMP, SUDs strategy and waste water strategy are to be secured by planning condition.
	Maintain or restore the distribution of the qualifying features within the site.	All species		As above.
2. Increase in recreational disturbance, caused by increased human population (in combination	Maintain or restore the population of each of the qualifying features.	All species	Potential for indirect impact. Without mitigation, bird populations would be reduced and/or re-distributed due to increased recreational disturbance from increased numbers of visitors.	Joint Pagham Scheme of Mitigation The Scheme proposes:-

Potential Effect	Site Conservation Objective(s)	Qualifying features	Potential for Impact (Direct/Indirect/Cumulative)	Relevant Mitigation Measures (proposed by applicant and/or LPA)
with applications, plans and projects) resulting in decrease in survival rates and populations of birds.	Maintain or restore the distribution of the qualifying feature within the site.			1.Provision of 1 x FTE Visitor Experience Officer to advise visitors on recreational disturbance, its impacts, and ways to behave in wildlife friendly ways 2. General dog initiatives to encourage responsible dog walking at the coast and use of alternative dog-friendly sites 3. Monitoring schemes to check effectiveness of scheme Payment of strategic access management and monitoring (SAMM) tariff. The applicants sHRA states the applicant is fully committed to the payment of this tariff. A Section 106 legal agreement is being prepared and the Heads of Terms will include payment of £871 per dwelling as a SAMM tariff.

Potential Effect	Site Conservation Objective(s)	Qualifying features	Potential for Impact (Direct/Indirect/Cumulative)	Relevant Mitigation Measures (proposed by applicant and/or LPA)
				This S106 agreement will be signed prior to the grant of any planning permission. In addition, the sHRA states that the development will deliver - access to a network of PROWs for walkers, dog walkers and cyclists - resident information pack on local walking routes to encourage use of these and diverting visitors away from the designated sites - provision of open space on site as recreational opportunities for dog walkers etc.. These measures set out in the sHRA could be secured by a planning condition.

Appropriate Assessment (stage 2) - scale & seriousness of potential effects

4.4 Those effects that are identified in the table above as having a potential impact on the site's conservation objectives for the qualifying species are taken forward to a second stage of assessment. This stage assesses the scale and seriousness of the potential effects, including their:

- magnitude
- duration
- reversibility
- likelihood of occurrence
- how the impact may change over time

These assessment criteria are taken from the Defra document "The Habitats and Wild Birds Directives in England and its Seas - Core guidance for developers, regulators & land/marine managers" (2012) (Draft for Public Consultation)¹. This stage includes consideration of the mitigation measures that form part of the application. This is presented by the following table:

Effect	Magnitude	Duration	Reversibility	Likelihood of Occurrence	Changes over time
1. Construction phase and operational impacts e.g. from noise, dust, light, water quality	No direct impact on habitats expected. Possible indirect impacts on designated site from air and water particulates.	Temporary impacts during construction phase (approx. 5 years) and potentially permanent impacts during lifetime of development.	Yes with introduction of new or different mitigation measures could reverse future impacts.	Potential impact, however mitigation measures (conditions for CEMP, SUDs and waste water drainage schemes) proposed to reduce/avoid impacts.	The impact could occur when the development is being built/occupied. Mitigation measures (conditions for CEMP, SUDs and waste water drainage schemes) proposed to reduce/avoid impacts.

¹ It does not appear as though this document has ever proceeded past the Consultation stage.

Effect	Magnitude	Duration	Reversibility	Likelihood of Occurrence	Changes over time
2. Recreational disturbance	Indirect impact on designated site from greater visitor numbers.	Potentially throughout lifetime/ occupation of development.	Yes with introduction of new or different mitigation measures could reverse future impacts.	Potential impact, however mitigation measures in form of SAMM tariff, and open space/PRoW link provision proposed to reduce/avoid impacts.	The impact could occur once the development is being occupied. Mitigation measures in form of SAMM tariff, and open space/PRoW link provision proposed to reduce/avoid impacts.

5 CONCLUSION

5.1 A number of potential Likely Significant Effects have been identified at Screening stage for this development application. An Appropriate Assessment has been undertaken to assess these LSEs, their potential magnitude, duration, reversibility, likelihood, changes and potential mitigation measures.

5.2 The proposed mitigation measures (to include a SAMM financial contribution to be secured by S106 legal agreement and a Construction & Environmental Management Plan, SUDs scheme, waste water drainage scheme and HRA measures to be secured by planning conditions) these are considered by Arun District Council to result in the avoidance and mitigation of an adverse effect on the integrity of Pagham Harbour SPA/Ramsar site, alone, or when taken in-combination with others plans and projects.

5.3 Natural England is to be consulted on the conclusion of this HRA / AA and the application determined accordingly.