

**MILL RYTHE HOLIDAY VILLAGE,
HAYLING ISLAND, HAMPSHIRE**

**HABITAT REGULATIONS ASSESSMENT:
STAGE 1 SCREENING REPORT**

A Report to: Away Resorts c/o A & M Architectural
Partnership LLP

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Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
Tel: 01676 525880 Fax: 01676 521400
E-mail: admin@middlemarch-environmental.com Web: www.middlemarch-environmental.com

REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	31/10/2016	Dr Tom Matthews (Senior Ecological Consultant)	Tom Docker MCIEEM (Ecological Impact Assessment Manager)	Dr Philip Fermor CEnv MCIEEM (Managing Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

In August 2016, Away Resorts c/o A & M Architectural Partnership LLP commissioned Middlemarch Environmental Ltd to undertake a Habitat Regulations Assessment (Stage 1: Screening) associated with a proposed development at Mill Rythe Holiday Village, Hayling Island in Hampshire. This assessment is required to inform a planning application associated with a Holiday Village.

As part of a suite of preliminary ecological surveys, Middlemarch Environmental Ltd recommended that a Habitat Regulations Assessment be undertaken due to the proposed development site's proximity to a number of nature conservation sites. Reference to mapped data identified the following European statutory nature conservation sites within a 5 km radius of the scheme: Chichester and Langstone Harbours Ramsar Site and Special Protection Area (SPA), Solent Maritime Special Area of Conservation (SAC), Solent and Isle of Wight Lagoons SAC, and Portsmouth Harbour Ramsar Site and SPA. These sites form part of the Natura 2000 network of European statutory nature conservation sites.

This report comprises Stage 1 (Evidence Gathering and Screening) of a Habitat Regulations Assessment for the scheme. The need for projects with the potential to impact upon Natura 2000 sites to be assessed is stated in Article 6 of the European Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (hereafter 'the Habitats Directive'). Articles 6 (3) and 6 (4) of this Directive state that an Appropriate Assessment is required for any plan or project that is considered likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects. Natura 2000 sites are those sites designated under the Habitats Directive to ensure the protection of European important habitats, and include SACs, SPAs, Offshore Marine Sites (OMS) and Ramsar sites. The Habitats Directive is transposed into UK legislation through the Habitat Regulations. Regulation 61 of the Habitat Regulations incorporates the requirements of Articles 6 (3) and 6 (4) of the Habitats Directive.

The competent authority can only agree to the proposed development after having ascertained that it will not adversely affect the integrity of any Natura 2000 sites. Where adverse impacts are anticipated, projects or plans may still be agreed provided that there are no alternative solutions and the plan is considered to be of overriding public interest. In such instances appropriate compensatory measures are required to ensure that the overall coherence of the Natura 2000 site network is protected.

2. METHODOLOGY

The current assessment is based on the best practice for Habitat Regulations Assessment as outlined in The Habitat Regulations Handbook (DTA Publications, 2013 and subsequent updates). This document expands upon previous guidance published by the Impacts Assessment Unit at Oxford Brookes University (2001) and the Department for Communities and Local Government (2006).

Best practice guidance identifies that the Habitat Regulations Assessment process is broadly divisible into four stages, with the need to complete each stage determined by the results of the previous stage. In summary, these stages are:

- **Stage 1: Evidence Gathering and Screening**
This stage is associated with collecting evidence regarding those parts of the Natura 2000 network that have the potential to be impacted by the strategic land-use plan, either alone or in combination with other projects or plans. Where no significant effects are perceived, sites may be screened out of the need for further assessment during Stage 2.
- **Stage 2: Appropriate Assessment of Significant Impacts**
Where it is considered a Natura 2000 site may experience significant effects from a project or strategic land-use plan, either alone or in combination, a detailed assessment of likelihood and severity of the perceived impact on the integrity of the Natura 2000 network is undertaken. This assessment is based on a detailed review of the project or plan in conjunction with the structure, function and conservation objectives of the Natura 2000 site. This stage may also include a preliminary assessment regarding the potential for the identified impacts to be mitigated.
- **Stage 3: Assessment of Alternative Solutions**
Where impacts on the integrity of the Natura 2000 network are perceived, this stage examines alternative ways of achieving the objectives of the project or strategic land-use plan in order to avoid these impacts.
- **Stage 4: Imperative Reasons of Overriding Public Interest and Compensation Measures**
Where the potential for adverse impacts remains, and where it is deemed that a project or land-use plan should proceed for Imperative Reasons of Overriding Public Interest (IROPI), an investigation of appropriate compensatory measures is undertaken.

This report focuses on Stage 1 of the Habitat Regulations Assessment process. Evidence gathering and screening is undertaken for those Natura 2000 Sites identified as being of relevance to the current project. In accordance with the consultation response summarised in Section 1.2, the following Natura 2000 sites are considered in this screening report: Chichester and Langstone Harbours Ramsar Site and SPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, and Portsmouth Harbour Ramsar Site and SPA. These sites form part of the Natura 2000 network of European statutory nature conservation sites.

Implicit in the Habitats Directive is the application of the **precautionary principle**, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty whether there will be an impact or not (Oxford Brookes, 2001). The European Commission's Final Communication from the Commission on the Precautionary Principle (European Commission, 2000a) states that the use of the precautionary principle presupposes:

- Identification of potentially negative effects resulting from a phenomenon, product or procedure; and,
- A scientific evaluation of the risks which because of the insufficiency of the data, their inconclusive or imprecise nature, makes it impossible to determine with sufficient certainty the risk in question (CEC, 2000).

According to best practice guidance, this means that the emphasis for assessment should be on objectively demonstrating, with supporting evidence, that there will be no significant effects on a Natura 2000 site. The publication 'Managing Natura 2000 Sites: The Provision of Article 6 of the 'Habitats' Directive 92/43/EEC' (European Commission, 2000b) provides explanatory guidance regarding this point, which is paraphrased below.

It is clear from the context and from the purpose of the directive that the 'integrity of the site' relates to the site's conservation objectives. For example, it is possible that a plan or project will adversely affect the

integrity of a site only in a visual sense or only habitat types or species other than those listed in Annex I or Annex II. In such cases, the effects do not amount to an adverse effect for the purposes of Article 6(3), provided that the coherence of the network is not affected.

The expression 'integrity of the site' shows that focus is here on the specific site. Thus, it is not allowed to destroy a site or part of it on the basis that the conservation status of the habitat types and species it hosts will anyway remain favourable within the European territory of the Member State.

As regards the connotation or meaning of 'integrity', this can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation. The 'integrity of the site' has been usefully defined 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 levels of populations of the species for which it was classified' (IEEM, 2006).

The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives.

Conservation objectives for the Natura 2000 sites considered in this assessment are presented in Chapters 4 to 7.

3. RELEVANT NATURA 2000 SITES

This report presents evidence to allow potential impacts on relevant Natura 2000 sites to be assessed and the need for a full Habitat Regulations Assessment to be screened. The report focuses on six sites: Chichester and Langstone Harbours Ramsar Site and SPA, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, and Portsmouth Harbour Ramsar Site and SPA.

The qualifying criteria and relative distances of the sites from the application site boundary are summarised in Table 3.1. Elsewhere in the report Chichester and Langstone Harbours SPA and Ramsar Site are treated as the same protected area, as the boundaries are largely concurrent. The same approach is adopted for Portsmouth Harbour SPA and Ramsar site. However, they are treated separately in Table 3.1 as the qualifying features for the two designations differ slightly in each case.

NATURA 2000 SITE	QUALIFYING FEATURES	DISTANCE FROM APPLICATION SITE
Chichester and Langstone Harbours Ramsar Site	The Ramsar site contains a variety of habitats, including intertidal mudflats, saltmarsh, sand and shingle spits and sand Dunes (Ramsar Criterion 1). The Ramsar site also supports a waterfowl assemblage of international importance (Ramsar Criterion 5), including dark-bellied brent geese <i>Branta bernicla</i>, common shelduck <i>Tadorna tadorna</i>, black-tailed godwit <i>Limosa limosa</i>, ringed plover <i>Charadrius hiaticula</i>, grey plover <i>Pluvialis squatarola</i>, dunlin <i>Calidris alpina</i>, common redshank <i>Tringa tetanus</i> and little tern <i>Sterna albifrons</i> (Ramsar Criterion 6).	Adjacent to site
Chichester and Langstone Harbours SPA	The site supports important winter populations of common shelduck, Eurasian wigeon <i>Anas penelope</i>, Eurasian teal <i>Anas crecca</i>, northern pintail <i>Anas acuta</i>, northern shoveler <i>Anas clypeata</i>, red-breasted merganser <i>Mergus serrator</i>, ringed plover, grey plover, sanderling <i>Calidris alba</i>, dunlin, bar-tailed godwit <i>Limosa lapponica</i>, Eurasian curlew <i>Numenius arquata</i>, common redshank and ruddy turnstone <i>Arenaria interpres</i>. The site also supports important breeding populations of sandwich tern <i>Sterna sandvicensis</i>, common tern <i>Sterna hirundo</i> and little tern.	Adjacent to site
Solent Maritime SAC	The site contains a number of habitats listed as qualifying features, including sandbanks, estuaries, mudflats and sandflats, coastal lagoons, annual vegetation of drift lines, perennial vegetation of stony banks, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Cord-grass swards and Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>). Desmoulin's whorl snail <i>Vertigo moulinsiana</i> is listed as a qualifying species.	Adjacent to site
Solent and Isle of Wight Lagoons SAC	The site contains the qualifying habitat, coastal lagoons.	5.66 km northwest
Portsmouth Harbour Ramsar Site	The extent and diversity of intertidal mudflat and saltmarsh habitat present (Ramsar Criterion 3). The site contains extensive beds of eelgrass <i>Zostera angustifolia</i> and <i>Zostera noltei</i> which support the grazing dark-bellied brent geese populations. The Ramsar site also supports an internationally important winter population of dark-bellied brent goose (Ramsar Criterion 6).	8.71 km west-northwest
Portsmouth Harbour SPA	Internationally important winter populations of dark-bellied brent geese, red-breasted merganser, dunlin and black-tailed godwit.	8.71 km west-northwest

Table 3.1: Summary of Natura 2000 Qualifying Criteria and Distance from Application Site Boundary

The location of these sites in relation to the proposed development site is shown on Drawing C123420-03-01 in Chapter 13. The designation criteria and conservation objectives for each of the Natura 2000 sites listed in Table 3.1 are detailed in Chapters 4 to 7, and the known areas of vulnerability are detailed in Chapter 8.

4. CHICHESTER AND LANGSTONE HARBOURS SPA AND RAMSAR SITE

4.1 QUALIFYING CRITERIA

The following information is taken from the Joint Nature Conservation Committee (JNCC) site description and accompanying Natura 2000 data sheet, both of which are available at:

<http://jncc.defra.gov.uk/default.aspx?page=2034>

Information regarding the Ramsar Site designation is taken from the Ramsar Sites Information Data Sheet, which is available at: <http://jncc.defra.gov.uk/pdf/RIS/UK11013.pdf>

Country:	England
Unitary Authority:	Hampshire and West Sussex Councils
Latitude:	50 48 23 N
Longitude:	00 55 12 W
Site Code:	UK9011011 (SPA); UK11013 (Ramsar Site Code)
Status:	Designated Special Protection Area (SPA); Ramsar Site
Area (ha):	5810.95

Chichester and Langstone Harbours SPA and Ramsar site comprises large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is important for a wide range of coastal and transitional habitats, and is considered internationally important for its waterfowl assemblage.

4.1.1 SPA Qualifying Criteria

Qualifying Habitats

The site does not contain any Annex I habitats (Habitats Directive: 92/43/EEC) that are listed as primary reasons for selection.

Qualifying Species

The site supports important breeding populations of the following Annex I (Birds Directive: 79/409/EEC) species:

- Sandwich tern *Sterna sandvicensis* (1.1% of the British breeding population); and,
- Little tern *Sterna albifrons* (4.2% of the British breeding population).

The site supports an important passage population of the following Annex I (Birds Directive: 79/409/EEC) species:

- Little egret *Egretta garzetta* (17.1% of the British population as at 1998).

The site supports important overwintering populations of the following Annex I (Birds Directive: 79/409/EEC) species:

- Bar-tailed godwit *Limosa lapponica* (3.2% of the British wintering population); and,
- Little egret *Egretta garzetta* (20% of the British wintering population as at 1998);

This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

- Ringed plover *Charadrius hiaticula* (up to 4.9% of the Europe and North Africa wintering population);
- Black-tailed godwit *Limosa limosa islandica* (1.4% of the wintering Iceland-breeding population);
- Dark-bellied brent goose *Branta bernicla bernicla* (5.7% of the wintering Western Siberia/Western Europe population);
- Dunlin *Calidris alpina alpina* (3.2% of the wintering Northern Siberia/Europe/Western Africa population);
- Grey plover *Pluvialis squatarola* (2.5% of the wintering Eastern Atlantic wintering population); and,
- Redshank *Tringa totanus* (1.2% of the wintering Eastern Atlantic wintering population).

4.1.2 Ramsar Qualifying Criteria

As outlined in the Ramsar Information Sheet, the site qualifies as a Ramsar site via five criteria:

Ramsar Criterion 1

As outlined in the Ramsar Information Sheet, the site supports *“two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes”*.

Ramsar Criterion 5

The site supports an internationally important wintering population of waterfowl. The information sheet states *“76480 waterfowl (5 year peak mean 1998/99-2002/2003)”*.

Ramsar Criterion 6

The site supports internationally important populations of bird species listed above as designation criteria for the SPA.

4.2 CONSERVATION OBJECTIVES

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), and subject to natural change;

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 VULNERABILITY OF THE SPA AND RAMSAR SITE

Natural England has produced a Site Improvement Plan for the Solent area, which includes information regarding the areas of known vulnerability for all of the constituent Natura 2000 sites that occur in the area. These areas of vulnerability are detailed in Chapter 8.

5. SOLENT MARITIME SAC

5.1 QUALIFYING CRITERIA

The following information is taken from the Joint Nature Conservation Committee (JNCC) site description and accompanying Natura 2000 data sheet, both of which are available at:

<http://jncc.defra.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0030059>

Country:	England
Unitary Authority:	Extra-Regio, Hampshire and Isle of Wight, Surrey, East and West Sussex
Centroid:	SU756003
Latitude:	50.79638889
Longitude:	-0.927777778
Site Code:	UK0030059
Status:	Designated Special Area of Conservation (SAC)
Area (ha):	11243.12

5.1.1 SPA Qualifying Criteria

Qualifying Habitats

The site contains the following Annex I habitats (Habitats Directive: 92/43/EEC) that are listed as primary reasons for selection:

1130 Estuaries

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain **estuaries** (Yar, Medina, King's Quay Shore, Hamble) and four bar-built **estuaries** (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass *Zostera* spp. and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour.

1320 Spartina swards (*Spartinion maritimae*)

Solent Maritime is the only site for smooth cord-grass *Spartina alterniflora* in the UK and is one of only two sites where significant amounts of small cord-grass *S. maritima* are found. It is also one of the few remaining sites for Townsend's cord-grass *S. x townsendii* and holds extensive areas of common cord-grass *Spartina anglica*, all four taxa thus occurring here in close proximity. It has additional historical and scientific interest as the site where *S. alterniflora* was first recorded in the UK (1829) and where *S. x townsendii* and, later, *S. anglica* first occurred.

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

The Solent contains the second-largest aggregation of **Atlantic salt meadows** in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of saltmarsh. In contrast to the Severn estuary, the salt meadows at this site are notable as being representative of the ungrazed type and support a different range of communities dominated by sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and thrift *Armeria maritima*. As a whole the site is less truncated by man-made features than other parts of the south coast and shows rare and unusual transitions to freshwater reedswamp and alluvial woodland as well as coastal grassland. Typical **Atlantic salt meadow** is still widespread in this site, despite a long history of colonisation by cord-grass *Spartina* spp.

The site also contains the following Annex 1 habitats that are present as a qualifying feature, but are not a primary reason for selection:

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 * Priority feature

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* \("white dunes"\)](#)

Qualifying Species

The following Annex II species is present as a qualifying feature, but is not a primary reason for selection:

1016 [Desmoulin's whorl snail](#) *Vertigo moulinsiana*

5.2 CONSERVATION OBJECTIVES

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change:

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.

5.3 VULNERABILITY OF THE SAC

Natural England has produced a Site Improvement Plan for the Solent area, which includes information regarding the areas of known vulnerability for all of the constituent Natura 2000 sites that occur in the area. These areas of vulnerability are detailed in Chapter 8.

6. SOLENT AND ISLE OF WIGHT LAGOONS SAC

6.1 QUALIFYING CRITERIA

The following information is taken from the Joint Nature Conservation Committee (JNCC) site description and accompanying Natura 2000 data sheet, both of which are available at:

<http://jncc.defra.gov.uk/ProtectedSites/SACselection/sac.asp?EUCODE=UK0017073>

Country:	England
Unitary Authority:	Hampshire and Isle of Wight
Centroid:	SZ608977
Latitude:	50.775
Longitude:	-1.136944444
Site Code:	UK0017073
Status:	Designated Special Area of Conservation (SAC)
Area (ha):	37.93

6.1.1 SPA Qualifying Criteria

Qualifying Habitats

The site contains the following Annex I habitats (Habitats Directive: 92/43/EEC) that are listed as primary reasons for selection:

1150 Coastal lagoons * Priority feature

The Solent on the south coast of England encompasses a series of **Coastal lagoons**, including percolation, isolated and sluiced lagoons. The site includes a number of lagoons in the marshes in the Keyhaven – Pennington area, at Farlington Marshes in Chichester Harbour, behind the sea-wall at Bembridge Harbour and at Gilkicker, near Gosport. The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort *Lamprothamnium papulosum*, the nationally scarce lagoon sand shrimp *Gammarus insensibilis*, and the nationally scarce starlet sea anemone *Nematostella vectensis*. The lagoons in Keyhaven – Pennington Marshes are part of a network of ditches and ponds within the saltmarsh behind a sea-wall. Farlington Marshes is an isolated lagoon in marsh pasture that, although separated from the sea by a sea-wall, receives sea water during spring tides. The lagoon holds a well-developed low-medium salinity insect-dominated fauna. Gilkicker Lagoon is a sluiced lagoon with marked seasonal salinity fluctuation and supports a high species diversity. The lagoons at Bembridge Harbour have formed in a depression behind the sea-wall and sea water enters by percolation. Species diversity in these lagoons is high and the fauna includes very high densities of *N. vectensis*.

Qualifying Species

The site does not support any Annex II species that are listed as primary reasons for selection.

6.2 CONSERVATION OBJECTIVES

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change:

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;
- The structure and function (including typical species) of qualifying natural habitats; and,
- The supporting processes on which qualifying natural habitats rely.

6.3 VULNERABILITY OF THE SPA AND RAMSAR SITE

Natural England has produced a Site Improvement Plan for the Solent area, which includes information regarding the areas of known vulnerability for all of the constituent Natura 2000 sites that occur in the area. These areas of vulnerability are detailed in Chapter 8.

7. PORTSMOUTH HARBOUR SPA AND RAMSAR SITE

7.1 QUALIFYING CRITERIA

The following information is taken from the Joint Nature Conservation Committee (JNCC) site description and accompanying Natura 2000 data sheet, both of which are available at:

<http://jncc.defra.gov.uk/default.aspx?page=2036>

Information regarding the Ramsar Site designation is taken from the Ramsar Sites Information Data Sheet, which is available at: <http://jncc.defra.gov.uk/pdf/RIS/UK11055.pdf>

Country:	England
Unitary Authority:	City of Portsmouth, Hampshire
Latitude:	50 49 41 N
Longitude:	01 07 32 W
Site Code:	UK9011051 (SPA); UK11055 (Ramsar Site Code)
Status:	Designated Special Protection Area (SPA); Ramsar Site
Area (ha):	1248.77

7.1.1 SPA Qualifying Criteria

Qualifying Habitats

The site does not contain any Annex I habitats (Habitats Directive: 92/43/EEC) that are listed as primary reasons for selection.

Qualifying Species

This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

- Dark-bellied Brent Goose *Branta bernicla bernicla* (at least 0.9% of the wintering Western Siberia/Western Europe population).

7.1.2 Ramsar Qualifying Criteria

As outlined in the Ramsar Information Sheet, the site qualifies as a Ramsar site under the following two criteria:

Ramsar Criterion 3

As outlined in the Ramsar Information Sheet, “the intertidal mudflat areas possess extensive beds of eelgrass *Zostera angustifolia* and *Zostera noltei* which support the grazing dark-bellied brent geese populations. The mud-snail *Hydrobia ulvae* is found at extremely high densities, which helps to support the wading bird interest of the site. Common cord-grass *Spartina anglica* dominates large areas of the saltmarsh and there are also extensive areas of green algae *Enteromorpha* spp. and sea lettuce *Ulva lactuca*. More locally the saltmarsh is dominated by sea purslane *Halimione portulacoides* which gradates to more varied communities at the higher shore levels. The site also includes a number of saline lagoons hosting nationally important species”.

Ramsar Criterion 6

The site supports internationally important populations of wintering dark-bellied brent goose *Branta bernicla bernicla*.

7.2 CONSERVATION OBJECTIVES

The site’s conservation objectives apply to the Special Protection Area and the individual species and/or assemblage of species for which the site has been classified (the “Qualifying features” listed below).

The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and 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 populations of the qualifying features; and,
- the distribution of the qualifying features within the site.

7.3 VULNERABILITY OF THE SPA AND RAMSAR SITE

Natural England has produced a Site Improvement Plan for the Solent area, which includes information regarding the areas of known vulnerability for all of the constituent Natura 2000 sites that occur in the area. These areas of vulnerability are detailed in Chapter 8.

8. VULNERABILITY OF THE NATURA 2000 SITES

Natural England has produced a Site Improvement Plan for the Solent area, which includes information regarding the areas of known vulnerability for all of the constituent Natura 2000 sites that occur in the area. The document lists each area of vulnerability, and outlines actions to be implemented to address these threats. Each of the issues to which the Natura 2000 sites are vulnerable are listed in Table 8.1.

Area of Vulnerability	Detail
Public Access / Disturbance	Many human activities in the area can disturb birds. This includes activities such as: walking; dog walking; bird watching; boating; kayaking; kite surfing; hang gliding; paramotors; jet skis; wildfowling; model helicopters/aircraft; boat mooring, and Hovercraft. Recreational activities can also affect annual vegetation of drift lines (H1210) and the vegetation of stony banks (H1220).
Coastal Squeeze	Habitats are being lost as they are squeezed between rising sea levels and hard coastal defences that are maintained. There is a direct impact due to loss of the SAC habitats such as saltmarsh. There is also an impact on birds due to the loss of habitat for feeding, roosting and breeding. In some areas rising sea levels will result in coastal grasslands being lost to more saline grasslands, thus losing habitat for some breeding waders of the waterbird assemblage. The habitats that are lost could be created elsewhere, but there is difficulty in finding suitable areas. The neutral grassland habitats will take a long time to create as mitigation, but intertidal habitat can be created relatively quickly.
Fisheries: Commercial Marine and Estuarine	Dredges (inc. hydraulic), benthic trawls and seines and shore-based activities are categorised as 'Red' for these interest features (and specifically the sub-features: • Intertidal muddy sand communities; • Subtidal eelgrass <i>Zostera marina</i> beds as part of Defra's revised approach to commercial fisheries management in European Marine Sites (EMS), and requisite mechanisms are being or will be implemented by Southern IFCA and Sussex IFCA. Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs require assessment and (where appropriate) management. This assessment will be undertaken by SIFCA. For activities categorised as 'green', these assessments should take account of any in-combination effects of amber activities, and/or appropriate plans or projects, in the site. Towed gear, hand gathering of shellfish, bait digging and aquaculture are the main fishery activities in this site.
Water Pollution	Water pollution affects a range of habitat and bird species at the site through eutrophication and toxicity. Sources include both point source discharges (including flood alleviation / storm discharges) and diffuse water pollution from agriculture / road runoff, as well as historic contamination of marine sediments, primarily from copper and Tributyltin (TBT). Environment Agency flood event discharge consents allow untreated waters to be discharged which end up in the SAC and are likely to have a negative impact. There is a threat of spillage from Oil Transportation and Transfer and by the usage by ships & pilotage.
Changes in Species Distributions	Many waders and wildfowl are decreasing in the Solent probably as they move north and east under national trends. Some fish, such as sand eels, may be moving their breeding grounds resulting in less food availability for breeding terns. Invertebrate populations in the intertidal muds are changing and this may disadvantage some wintering wader species. Desmoulin's Whorl Snail has decreased dramatically. Areas of salt-marsh are eroding and decreasing resulting in decreasing breeding gulls and terns as their habitat decreases and decreasing plant species of salt-marshes.
Climate Change	Climate change has impacts upon coastal species, in that gull and tern colonies are more frequently washed out with raising sea levels when storm surges cause flooding to habitats.

Table 8.1: Summary of Known Areas of Vulnerability for Solent Natura 2000 Sites (continues)

Area of Vulnerability	Detail
Change to Site Conditions	There is an increasing loss of salt-marsh in much of the Solent for reasons unknown, and this needs to be investigated.
Invasive Species	The highest risk pathways through which marine invasive species are introduced and then spread have been identified as: commercial shipping (<i>through release of ballast water, and biofouling on hulls</i>); recreational boating (<i>through biofouling on hulls</i>); aquaculture (<i>through contamination of imported or moved stock - or escaped stock in the case of the pacific oyster</i>), and natural dispersal.
Direct Land Take from Development	Private sea defences are causing disruption to the natural processes of allowing erosion to move sediments around the SAC.
Biological Resource Use	Gull egg collecting occurs in some places, and wildfowling occurs in several places. These activities are likely to be disturbing to breeding and wintering birds even though they are licenced/consented at the moment.
Change in Land Management	Changes to land management are likely to occur in areas where tidal flaps/sluices are altered and this results in changes to water levels or salinity of that land. Some sluices are failing, which may also result in changes to water levels or salinity of land. Some ditches and drains are neglected and this can cause difficulties in land management, resulting in changes.
Inappropriate Pest Control	Predator control is decreasing, resulting in increased predation by foxes etc. and this is the likely cause of decrease in successful breeding of gulls and terns.
Air Pollution: Impact of Atmospheric Nitrogen Deposition	Nitrogen deposition exceeds site relevant critical loads. Locally observed effects are unknown.
Hydrological Changes	Titchfield Haven has a high level of water abstraction licences - if all were used then water levels would be too low in the SAC/SPA. Percolation of sea water through sea walls is causing saline intrusion into non-saline grassland habitats and changing them.
Direct Impact From Third Party	Off-roading is causing damage to some areas of grassland. Private sea defences are causing disruption to the natural movement processes of natural materials along the coast. Military helicopters cause disturbance to wintering birds. House boats are unlicensed and have the potential to cause damage to intertidal habitats. Fly grazing is causing issues affecting large areas of Chichester Harbour.
Extraction: Non-living resources	Shingle extraction for aggregates may have an adverse impact upon intertidal fauna and flora, and may affect the movement of coastal sediments that would in turn have an impact upon intertidal habitats.

Table 8.1 (cont): Summary of Known Areas of Vulnerability for Solent Natura 2000 Sites

9. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

9.1 CURRENT LAND USE

The development site is an irregular shaped parcel of land approximately 14 ha in size, located on Hayling Island, at National Grid Reference SU 73178 00804. The development site includes the existing Mill Rythe Holiday Village with a number of self-catering accommodation units and associated leisure facilities. At the time of the survey, the site included tennis courts, bowling green, swimming pool, car parking and associated hard and soft landscaping. The east of the site is dominated by a mosaic of grassland used as a 'pitch and putt' golf course. A large lake is present in the north east corner with a smaller man-made lake in the north west corner of the site. The wider landscape is dominated by large estuarine systems comprising habitats such as mud and sand flats and salt meadows.

The 'pitch and putt' golf course located in the eastern region of the site is designated as the Mill Rythe Holiday Village Site of Importance for Nature Conservation (SINC), a non-statutory wildlife site designation. The SINC is designated due to the presence of a notable plant species, spiny retharrow *Ononis spinosa*, and is also known to be one of the areas in the locality that are used by dark-bellied brent geese. For this reason the site is listed on the Solent Wader and Brent Goose Strategy. Spiny retharrow is not listed as a qualifying species for any of the Natura 2000 sites considered in this report, however dark-bellied brent goose is a qualifying species for the Portsmouth Harbour SPA and Ramsar site and the Chichester and Langstone Harbours SPA and Ramsar site. This species is not, however, a qualifying species for either the Solent Maritime SAC or the Solent and Isle of Wight Lagoons SAC.

Plates 9.1 to 9.5, taken on the 2nd September 2016, show the current land use on and surrounding the site.



Plate 9.1: Amenity grassland and scattered trees (west of the site)



Plate 9.2: Rough grassland and path (northern boundary)



Plate 9.3: Large lake in north-east



Plate 9.4: Buildings surrounded by amenity grassland



Plate 9.5: Dense scrub around north-eastern lake

9.2 SCOPE OF THE PROPOSED DEVELOPMENT

The site proposals include the demolition of the existing units within the holiday village and the construction of circa. 291 mixed accommodation units (including 204 caravans and lodges and refurbishment of 87 chalets) with associated dining and leisure facilities. The eastern section of the site, which comprises the 'pitch and putt' golf course designated as the Mill Rythe Holiday Village SIN, will be retained in situ and will not be subject to any change of use.

It is understood that the development proposals will result in increase in the overall capacity of the holiday village in comparison to existing visitor numbers. The new accommodation will be installed on the same footprint as the existing holiday village. At the time of writing detail regarding the construction process is not known, therefore a precautionary approach is adopted when considering the potential for likely significant effects to occur to Natura 2000 sites as a result of the development.

A&M Architectural Partnership Drawing 3877-200, showing the proposed masterplan for the scheme, is provided in Chapter 13.

10. POTENTIAL SIGNIFICANT EFFECTS ON NATURA 2000 SITES

This chapter provides a discussion of the potential for significant effects on the collection of Natura 2000 sites located in the Solent area, in proximity to site. For clarity, this section follows the same broad structure as Natural England's Site Improvement Plan for the area, with the potential for the proposed development to contribute to each of the known areas of vulnerability discussed individually.

10.1 PUBLIC ACCESS / DISTURBANCE

This potential impact is associated with disturbance to qualifying bird species for the Chichester and Langstone Harbours and Portsmouth Harbour sites as a result of human activity. Examples of recreational activities that can cause disturbance to birds include low-intensity recreation such as walking and dog-walking, as well as water-based recreational activities such as kayaking, jet-skiing etc.

The proposed development of a holiday village will generate potential sources of disturbance as a result of human presence, however each of the activities with the potential to cause disturbance is currently possible at the existing holiday village. As the proposed development involves a replacement of the existing facility with a new-build of reduced capacity, it is not considered likely that the new development will have an impact that exceeds existing ambient levels of disturbance. As a precaution, and to help to raise awareness of the environmental sensitivity of nearby habitat areas (particularly the adjacent Chichester and Langstone Harbours SPA and Ramsar site), the developer could provide information to guests, either as part of the printed literature issued with welcome packs or through interpretation boards within the holiday village. This information should communicate the ecological value of the surrounding area and make recommendations for how disturbance to bird species can be avoided, e.g. keeping dogs on leads. A recommendation is made in Chapter 12.

The construction process is likely to provide a temporary source of visual and noise disturbance, which in the absence of appropriate control measures could lead to temporary displacement of sensitive bird species from part of the adjacent Chichester and Langstone Harbours SPA and Ramsar site, and also from the Mill Rythe Holiday Village SINC which provides supporting habitat for the brent goose, a qualifying species for this site. Although any such disturbance is likely to be temporary in nature, any construction activities between October and March have the potential to have a significant effect on the usage of the adjacent Natura 2000 sites by brent geese over the period of at least one wintering season. These impacts can, however be easily avoided through the implementation of sensitive working practices, including restricting the duration of noisy activities and using hoarding to screen potential sources of visual disturbance. A recommendation for the production of a Construction Ecological Management Plan (CEcMP) is made in Chapter 12. Provided that suitable proposals are implemented, and due to the presence of other areas of supporting habitat for this species in the near vicinity, no likely significant disturbance effects are predicted.

10.2 COASTAL SQUEEZE

This area of potential vulnerability is associated with rising sea levels and hard coastal defences, which has resulted in the loss of areas of valuable intertidal habitat including saltmarsh and mudflats. The proposed development will be built within the footprint of the existing Mill Rythe Holiday Village, and will require no land take from coastal or intertidal habitats. Furthermore, no changes to existing coastal defences are anticipated.

The proposed development will not cause likely significant effects as a result of coastal squeeze.

10.3 FISHERIES

This area of vulnerability is associated with commercial fisheries. The proposed development of a new holiday village facility will have no impact on commercial fishing, therefore no likely significant effects are predicted.

10.4 WATER POLLUTION

This area of vulnerability is linked to a wide range of sources of pollution, including storm discharges, agriculture, road runoff, discharge from marine sediments, oil transportation and ships/pilotage. The proposed development will have no influence of the majority of these sources of water pollution, however if

designed inappropriately the drainage system, including foul sewers and runoff from hard surfaces, could provide a minor contribution to this area of vulnerability.

As part of the planning application process the drainage proposals for the scheme will be subject to expert scrutiny, and planning consent will not be granted unless the proposals meet required standards. In addition, as the site is to be constructed on the location of the existing holiday village, there is existing drainage infrastructure in place. It is not considered likely that the proposed development will be allowed to proceed without appropriate drainage arrangements, therefore the risk of likely significant effects is considered to be negligible.

The construction phase of the development has the potential to contribute to water pollution in the absence of appropriate control measures, through issues such as siltation, vehicle fuel spillages and accidental pollution incidents. These potential issues are, however, all easily avoided by implementing good working practices. The proposed CEcMP, recommended in Chapter 12, will provide detail regarding procedures that will be implemented to avoid water pollution incidents, and to remediate them if they do occur.

10.5 CHANGES IN SPECIES DISTRIBUTIONS / CLIMATE CHANGE

These two areas of vulnerability are inherently linked, as the observed trends in climate are known to be an influencing factor on the changes in species distributions. This is resulting in the movement of important species, including prey species for wintering birds, away from traditional breeding grounds into new areas. This in turn has caused a reduction in the number of bird species that are so reliant on these prey species. Climate change is also known to change plant distribution and habitat composition, and to cause an increase in weather incidents such as storms which can cause flooding and subsequently result in failed breeding attempts for several bird species.

Climate change is a global issue, and it not considered that such a small scale development as a replacement holiday village is capable of creating an observable change in climate. The development will in fact replace an existing development, meaning that a number of old technologies (e.g. central heating systems) will be replaced by newer, more energy efficient systems. There is no evidence to suggest that the proposed development would result in a likely significant effect either on species distribution or the climate.

10.6 CHANGES TO SITE CONDITIONS

The area of vulnerability is associated with increasing losses of saltmarsh habitat, however the Site Improvement Plan for the Solent area states that the reasons for this loss of habitat are unknown and require further investigation.

The proposed development will solely be constructed within the footprint of the existing holiday village site, and will require no loss of saltmarsh habitat. No likely significant effects are predicted.

10.7 INVASIVE SPECIES

The Solent Site Improvement Plan produced by Natural England identified four key issues associated with the potential spread of invasive species: commercial shipping, recreational boating, aquaculture and natural dispersal. The proposed development will have no influence on either commercial shipping or aquaculture, and the potential for spread of invasive species as a result of recreational boating will, due to the scale of the development, not exceed the ambient level of risk presented by the existing holiday village facility.

The Preliminary Ecological Appraisal (RT-MME-123420-01) completed by Middlemarch Environmental Ltd in early September 2016 identified two desk study records of invasive species within a 1 km radius of the site, Virginia creeper and Japanese knotweed, however no evidence of either of these species, or any other non-native invasive species, was recorded on site during the survey. Provided that construction works are undertaken in a sensitive manner and are controlled by the recommended CEcMP, no issues associated with the spread of invasive species are predicted.

10.8 DIRECT LAND TAKE FROM DEVELOPMENT

The proposed development will result in no direct land take from any Natura 2000 site. No likely significant effects are predicted.

10.9 BIOLOGICAL RESOURCE USE

This issue is associated with the legal and illegal practices of gull egg collecting and wildfowling. Given that the proposed development will result in a reduced capacity for the holiday village, there is no evidence to suggest that the development is likely to lead to an increased risk above existing ambient levels. No likely significant effects are predicted.

10.10 CHANGES IN LAND MANAGEMENT

This area of vulnerability is associated with hydrological management, and the potential for changes in habitat to occur as a result of alternations in both water level and salinity. The proposed development will not have any influence of the operation of tidal flaps or sluices within any of the Natura 2000 sites, and will be constructed within an existing area of the built environment. No likely significant effects are predicted.

10.11 INAPPROPRIATE PEST CONTROL

This issue is linked to a decline in control of pest species such as foxes and rats, which in turn are predating both eggs and the young of gulls and waterbirds which is reducing breeding success. The proposed development will have no influence on pest control within the Natura 2000 network, and therefore no likely significant effects are predicted.

10.12 AIR POLLUTION: NITROGEN DEPOSITION

Nitrogen deposition within the nearby Natura 2000 site network is understood to already be in excess of critical loads. The replacement of an existing holiday village with a smaller (in terms of total capacity), modern and more energy efficient facility will not result in a significant increase in nitrogen deposition levels, however there is the potential for construction vehicles to cause a small-scale temporary increase in nitrogen deposition during the construction process.

Natural England Commissioned Report NECR199, published in February 2016, describes several sources which state that vegetation is susceptible to changes from nitrogen deposition from road vehicles up to 200 m from roads, with the greatest impacts likely to occur within the first 50 m to 100 m. The construction process for the new holiday village will involve work within 200 m of the Chichester and Langstone Harbours SPA and Ramsar site and the Solent Maritime SAC, however the construction process is limited in duration and therefore habitats are likely to recover from any short term increase in nitrogen exposure post-development. As the vast majority of both the Chichester and Langstone Harbours and Solent Maritime Natura 2000 sites is located well in excess of 200 m from the proposed development footprint, the potential for likely significant effects to occur is considered to be negligible.

10.13 HYDROLOGICAL CHANGE

This area of vulnerability is associated with water abstraction at Titchfield Haven, for which existing abstraction levels are already known to be high. Titchfield Haven is located c. 19 km to the west of the proposed development site, and the development will have a reduced capacity compared to the existing holiday village, therefore no significant increases in water abstraction will occur.

10.14 DIRECT IMPACT FROM THIRD PARTY

This area of vulnerability is linked to a wide range of sources, including off-roading, sea defences, military helicopters and house boats. It is not anticipated that the proposed development will lead to an increase in any of these factors, therefore no likely significant effects are predicted.

10.15 EXTRACTION: NON-LIVING RESOURCE

This issue is associated with extraction of shingle for aggregates. The proposed development will not require any increase in shingle extraction, therefore no likely significant effects are predicted.

11. SCREENING MATRIX

Table 11.1 provides a screening matrix summarising the findings of the screening exercise.

SITE	FACTOR AFFECTING SITE INTEGRITY	POTENTIAL EFFECTS ARISING FROM DEVELOPMENT PROPOSALS	SIGNIFICANCE OF RESIDUAL EFFECTS
Solent Natura 2000 Network (Chichester and Langstone Harbours SPA and Ramsar, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, Portsmouth Harbour SPA and Ramsar)	Public access / disturbance	The proposed new holiday village will have a reduced capacity compared to the existing village, therefore the potential for disturbance to qualifying species and habitats should decrease in comparison to existing levels. It is recommended that information regarding the ecological sensitivity of the area be provided to guests at the holiday village, either through printed literature in the welcome pack or through the installation of interpretation boards on site. Potential construction phase disturbance can be avoided through sensitive working practices, to be detailed within a CECMP.	NLSE
	Coastal squeeze	The proposed development will not have any impact on water levels or coastal defences, therefore no increase in coastal squeeze will occur.	NLSE
	Fisheries	The proposed development will have no influence on fisheries.	NLSE
	Water pollution	The proposed development will only be granted planning consent once the drainage solution has been subject to expert review. The construction phase has the potential to cause small-scale water pollution incidents, however this risk can be minimised through sensitive working practices and implementation of a CECMP to control works.	NLSE
	Changes in species distribution / climate change	These two interlinked issues are globally significant, and it is not considered that the replacement of a small holiday village site will have an influence on either climate change or species distribution.	NLSE
	Change to site conditions	The proposed development will not result in the loss of any areas of saltmarsh habitat.	NLSE
	Invasive species	No invasive species were recorded on site during the Preliminary Ecological Appraisal completed by Middlemarch Environmental Ltd in early September 2016.	NLSE
	Direct land take from development	No direct land take from any Natura 2000 site is predicted as a result of the proposed development.	NLSE
	Biological resource use	The proposed development will result in a reduction in visitor numbers to the site, therefore the risk posed by gull egg collected and wildfowling will not increase.	NLSE
	Changes in land management	The proposed development will have no impact on the operation of tidal flaps and sluices within the Natura 2000 network, therefore no changes in water levels or salinity are predicted.	NLSE
	Inappropriate pest control	The proposed development will have no influence on pest control within the Natura 2000 sites.	NLSE
	Air pollution: nitrogen	The operational phase of the proposed development will be more energy efficient than the existing facility, therefore no increase in nitrogen deposition is predicted. The construction phase will involve temporary movement of construction vehicles within 200 m of a nature conservation site which may cause a small increase in nitrogen deposition, however this will be over a very short period and is not considered likely to be measurable within the Natura 2000 network as a whole.	NLSE

Table 11.1: Assessment of Effects of the Proposed Development on Natura 2000 Sites (continues)

SITE	FACTOR AFFECTING SITE INTEGRITY	POTENTIAL EFFECTS ARISING FROM DEVELOPMENT PROPOSALS	SIGNIFICANCE OF RESIDUAL EFFECTS
Solent Natura 2000 Network (Chichester and Langstone Harbours SPA and Ramsar, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, Portsmouth Harbour SPA and Ramsar)	Hydrological changes	The proposed development is small in scale than this existing development, and will not increase the water abstraction burden on Titchfield Haven, which is located c. 19 km to the west.	NLSE
	Direct impact from third party	Proposed development will not result in an increase in any of the multiple factors understood to be influencing habitats and species.	NLSE
	Extraction of non-living resources	Proposed development will require no increase in abstraction of shingle for aggregate material.	NLSE
Key: NLSE – No Likely Significant Effect PSE – Possible Significant Effect LSE – Likely Significant Effect			

Table 11.1 (cont): Assessment of Effects of the Proposed Development on Natura 2000 Sites

12. CONCLUSIONS AND PRECAUTIONARY RECOMMENDATIONS

12.1 CONCLUSIONS

In accordance with best practice guidance, a screening exercise has been undertaken to assess whether the proposed development is likely to result in significant impacts to the integrity of the network of Natura 2000 sites within the Solent, comprising Chichester and Langstone Harbours SPA and Ramsar, Solent Maritime SAC, Solent and Isle of Wight Lagoons SAC, Portsmouth Harbour SPA and Ramsar. This assessment has been undertaken based on development information provided by the client team and ecological information relating to the site and its surrounds collected by Middlemarch Environmental Ltd in September and October 2016.

The conservation objectives for each of the Natura 2000 sites considered in this report are associated with preserving the favourable conservation status of qualifying habitats and species. Natural England has recently published a Site Improvement Plan for the Solent area that covers all of the sites considered in this report, and describes known areas of vulnerability for these sites. These areas of vulnerability are all factors which could reduce the ability of the sites to meet their conservation objectives, therefore this assessment is focused on the ability of the proposed development to contribute to known areas of vulnerability.

The proposed development involves the demolition of buildings within the existing Mill Rythe Holiday Village, and the construction of c. 265 new holiday accommodation units. Information provided by the client team indicates that the capacity of the holiday village will be reduced when compared to the existing facility.

The majority of areas of vulnerability identified by Natural England have no link to the proposed development, and therefore no likely significant effects are predicted. The construction and operations phases of the development could however, in the absence of any avoidance or mitigation measures, contribute to an increase in species disturbance, water pollution and temporary increase in air pollution during the construction phase. None of these issues are considered to represent significant effects, and a series of recommendations are provided in Section 12.2 to allow these potential impacts to be minimised or avoided.

12.2 PRECAUTIONARY RECOMMENDATIONS

In accordance with the precautionary principle, which is a key tenet underpinning the Habitat Regulations Assessment process, the following recommendations are made. Provided that these recommendations are adhered to, no further stages of the Habitat Regulations Assessment process are recommended.

R1 Implementation of a Construction Ecological Management Plan (CEcMP)

The purpose of a CEcMP is to outline how a construction project will avoid, minimise or mitigate effects on sensitive ecological receptors. A CEcMP should be produced for the proposed development to include information about how adverse effects on ecological receptors will be avoided during the construction phase. This will include information regarding storage of materials on site, measures to be implemented to manage noise and visual disturbance to bird species, remedial actions should any pollution incidents occur, and parties responsible for implementation of avoidance and mitigation measures.

All proposed pollution avoidance and other environmental protection measures provided in the CEcMP must be adhered to. A suitably qualified ecologist should audit and sign off the implementation of biodiversity protection measures.

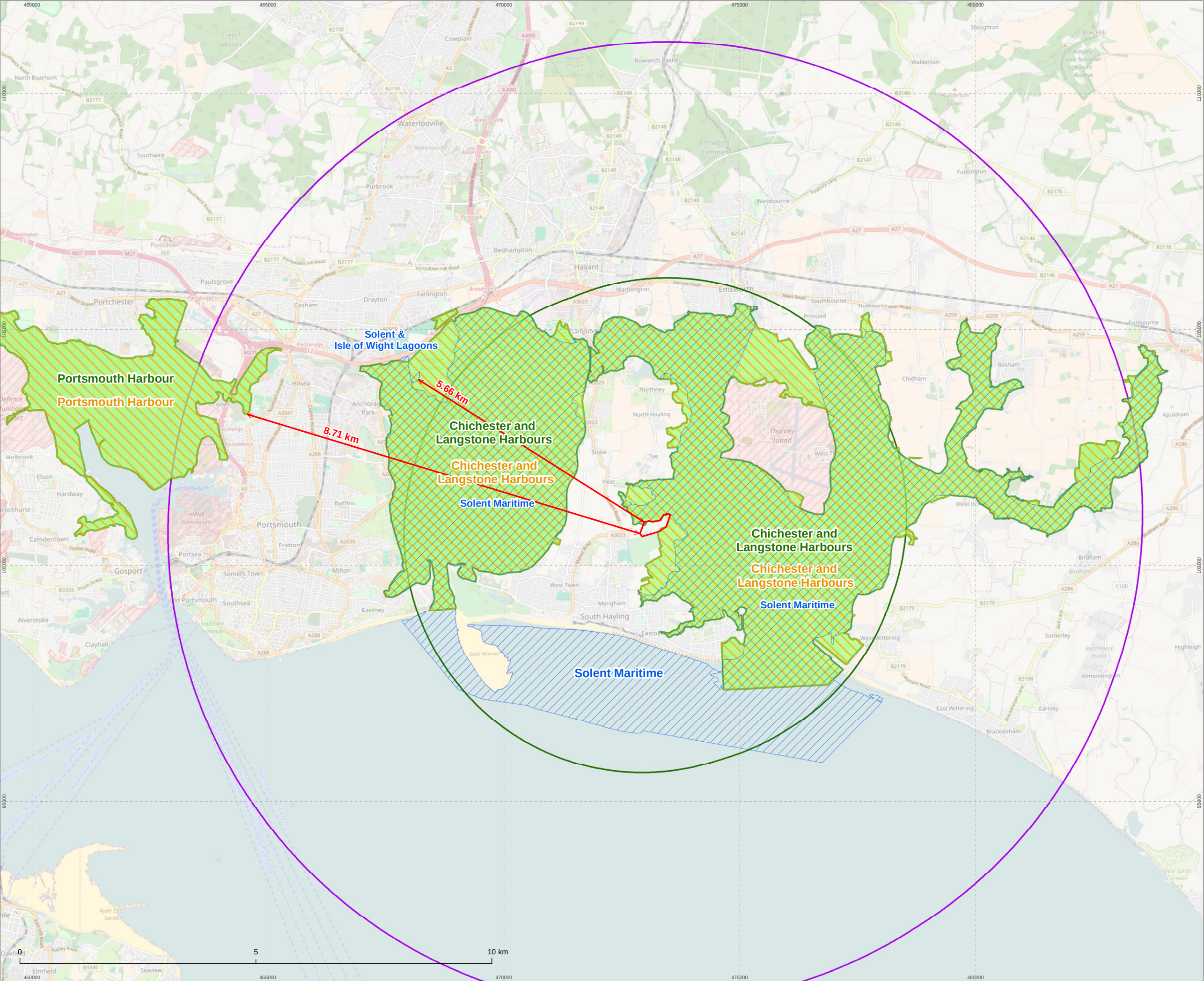
R2 Ecological Information for Holiday Village Guests

In order to increase awareness of the ecological sensitivity of the surrounding area, and to help to minimise the potential for disturbance to qualifying habitats and species, it is recommended that ecological information be provided to guests. This information could either be provided as part of the welcome pack for new guests, or through the installation of interpretation boards within the site. Ecological information provided should be verified by a suitably qualified ecologist, and the information should include recommendations for how disturbance can be avoided, e.g. by keeping dogs on leads at all times in sensitive areas.

13. DRAWINGS

Middlemarch Environmental Ltd Drawing C123420-03-01 - Location of Natura 2000 Sites in Relation to Application Site

A&M Architectural Partnership Drawing 3877-200 – Proposed Masterplan



C123420-03-01

Legend

Special Area of Conservation (SAC)

Special Protection Area (SPA)

RAMSAR site

Site boundary

5000 m radius from site boundary

10000 m radius from site boundary

Project

Mill Rythe Holiday Village, Hayling Island

Drawing

Statutory Sites

Client

Away Resorts c/o & M Architectural Partnership LLP

Drawing Number

C123420-03-01

Revision

00

Scale @ A3

1:75,000

Date

September 2016

Approved By

TM

Drawn By

RP

MIDDLEMARCH ENVIRONMENTAL

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880 F:01676 521400
E:admin@middlemarch-environmental.com

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LEGEND:

SYM.	DESCRIPTION
	BOUNDARY OF DEVELOPMENT SITE
	EXISTING BUILDINGS TO BE RETAINED
	PROPOSED CARAVAN BASES
	EXISTING TREES TO BE RETAINED
	EXISTING HEDGES / SCRUB TO BE RETAINED
	PROPOSED WOODLAND PLANTING.
	PROPOSED SPECIMEN TREES
	PROPOSED WILDFLOWER MEADOW AREAS
	PROPOSED MOWN GRASS AREAS
	EXISTING AMENITY GRASS AREAS
	EXISTING WATER BODIES
	PROPOSED ACCESS ROADS / PARKING BAYS
	PROPOSED PATHS & PEDESTRIAN AREAS
	PROPOSED DECK AREAS AROUND CENTRAL COMPLEX

NOTES:

PROVIDE MINIMUM DEPTH OF TOPSOIL TO PLANTED AREAS AS FOLLOWS: GRASS AREAS : 200MM, SHRUB PLANTING: 450MM, AND TREE PITS: 750MM.

TREE PITS SHALL BE BACKFILLED WITH A PRE-MIXED SOIL/ COMPOST MIXTURE INCORPORATING A SLOW RELEASE FERTILIZER.

SPECIMEN TREES TO BE DOUBLE STAKED WITH SINGLE CROSSBAR.

TO EACH TREE, TRANSPLANT AND CONTAINER GROWN PLANTING STATION THE CONTRACTOR SHALL SUPPLY AND INCORPORATE A SLOW RELEASE FERTILIZER.

CONTAINER GROWN STOCK SHALL BE PLANTED IN A PIT EXCAVATED TO SUFFICIENT DEPTH AND WIDTH TO ACCOMMODATE THE PLANT WITHOUT DISTURBING THE ROOTS.

TRANSPLANT PITS SHALL BE EXCAVATED TO A DEPTH OF 300MM DIAMETER AND 300MM DEPTH BELOW EXISTING GROUND LEVEL. ALL PITS SHALL BE EXCAVATED TO SUFFICIENT DEPTH AND WIDTH TO ACCOMMODATE THE PLANT WITHOUT DISTURBING ITS ROOTS. DURING BACKFILLING THE FINAL SOIL LEVEL AROUND THE TRANSPLANT SHOULD BE RAISED TO 40MM ABOVE THE SURROUNDING SOIL LEVEL.

ORNAMENTAL PLANTING AREAS SHALL BE CULTIVATED TO A MEDIUM TILTH AND 300MM DEEP. A SLOW RELEASE FERTILIZER SHALL BE INCORPORATED IN A SECOND PASS FOLLOWING INITIAL CULTIVATION. THE CONTRACTOR SHALL PLACE A 50MM LAYER OF ORGANIC MULCH TO COVER THE COMPLETE AREA OF ORNAMENTAL PLANTING AREAS. BEFORE APPLICATION OF THE MULCH THE AREA SHALL BE WEED FREE. THE CONTRACTOR SHALL PLACE A 75MM DEPTH LAYER OF ORGANIC MULCH TO A CIRCLE 500MM RADIUS AROUND THE BASE OF ALL STANDARD TREES WITHIN GRASS AREAS. BEFORE APPLICATION OF THE MULCH THE AREAS SHALL BE WEED FREE.

PLANTING BEDS SHOULD BE KEPT COMPLETELY WEED FREE AND DEPTH OF MULCH MAINTAINED AT 50MM DEPTH.

RABBIT GUARDS MAY BE REQUIRED, EITHER INDIVIDUAL GUARDS OR FENCING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION OF SERVICES PRIOR TO PLANTING. TREES WITHIN PLANTING MIXES SHOULD BE PLACED AWAY FROM ANY OVERHEAD POWER LINES.

14. REFERENCES AND BIBLIOGRAPHY

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