

**INFORMATION FOR
HABITATS REGULATIONS
ASSESSMENT**

**LAND AT MANOR FARM
& COPSEYS NURSERY,
DENVILLES,
HAMPSHIRE**

FEBRUARY 2013

CONTENTS

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Outline of the Scheme and Site Location	1
1.3	Relevant Legislation and Policy	2
1.4	European Sites	4
1.5	Screening of Potential Adverse Effects	6
1.6	Structure of Report	6
2.0	RESEARCH INTO DISTURBANCE	7
2.1	Introduction	7
2.2	Solent Forum Research	8
2.3	Local Area Research	12
3.0	FURTHER RESEARCH INTO LOCAL EFFECTS	14
3.1	Introduction	14
3.2	European Sites Adjacent to the Development	14
3.3	Open Space Adjacent to the Development	16
4.0	ADDITIONAL AVOIDANCE AND MITIGATION DESIGN	19
4.1	Creation of New Open Space	19
5.0	POTENTIAL LIKELY SIGNIFICANT EFFECTS TO EUROPEAN SITES FROM DEVELOPMENT PROPOSALS	23
5.1	Background Assessment	23
5.2	Further Information	23
5.3	Likely Significant Effects from Disturbance	25
6.0	CONCLUSIONS	27
7.0	REFERENCES	28

INFORMATION FOR HABITATS REGULATIONS ASSESSMENT LAND AT MANOR FARM AND COPSEYS NURSERY, DENVILLES, HAMPSHIRE

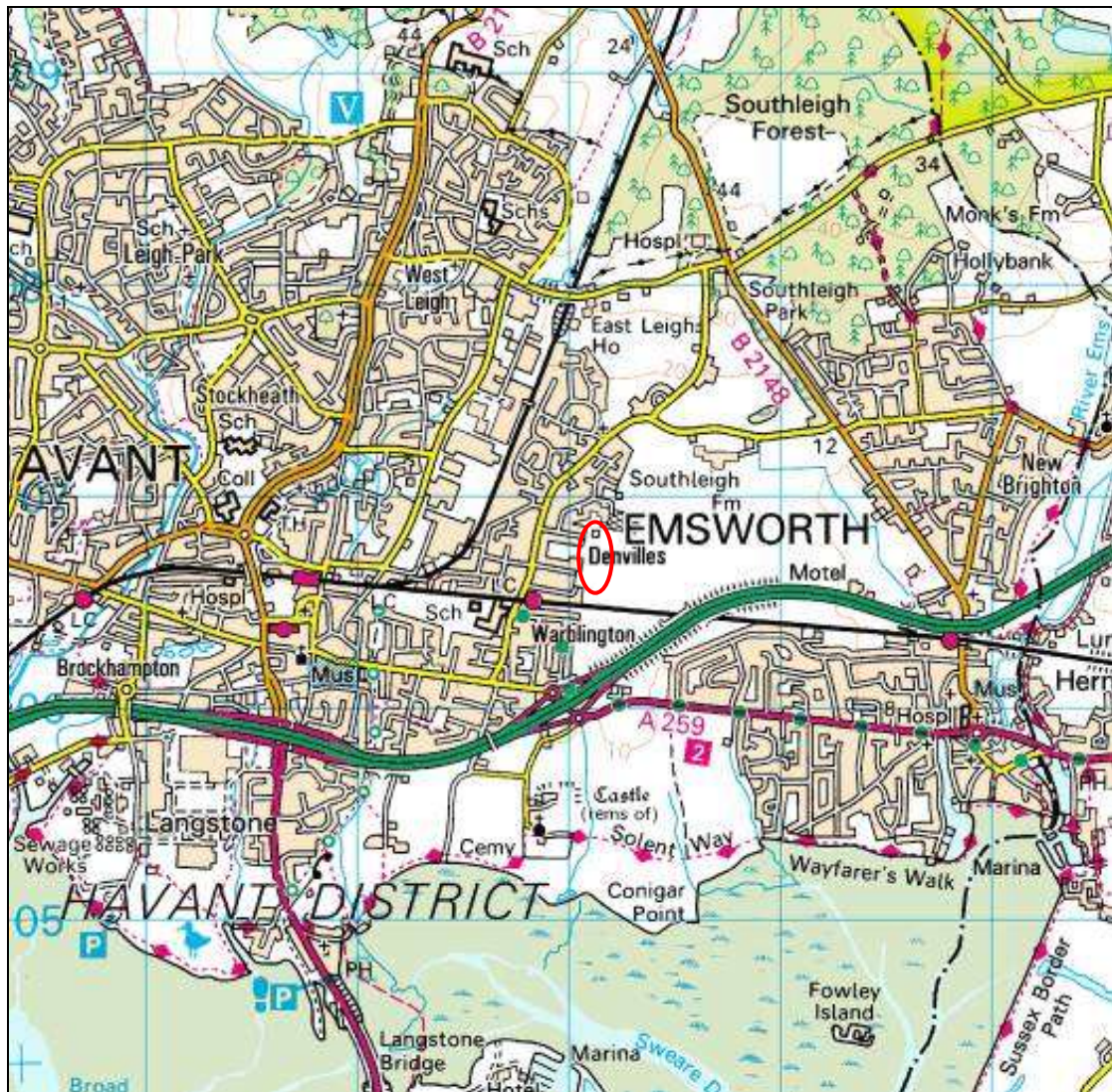
1.0 INTRODUCTION

1.1 Background

- 1.1.1 Aluco Ecology Ltd was commissioned by Barratt David Wilson Homes to research the potential for the proposed development on land at Manor Farm and Copseys Nursery, Denvilles, Havant to have an adverse effect on European designated sites along the Solent coastline.
- 1.1.2 Considerable background data has already been prepared on this subject; research commissioned by the Solent Forum Disturbance and Mitigation Project, research relating to the Chichester District Council Local Development Framework (EDP, unpublished), research by the East Solent Shoreline Management Plan (HBC, 1997), North Solent SMP (NFDC, 2007) the Chichester Harbour AONB Management Plan (CHC, 2009) and research through recent local development proposals (Ecology Solutions 2009, Ecology Solutions 2011, EDP, unpublished).
- 1.1.3 This document is provided to offer an overview of the relevant research and analyse this research in relation to the development proposals under consideration in a Planning Application for 191 units on land at Manor Farm and Copseys Nursery, Denvilles.
- 1.1.4 The report has been commissioned on the basis of an application consultation response from Natural England on the potential for indirect effects to significantly adversely affect the interest features of the European Sites (which are described below).
- 1.1.5 This report therefore provides additional local information based on the proposed development and wider local picture and discusses the potential for effects from the development through an increase in population and resultant potential for increase in recreational type use of the European Sites.

1.2 Outline of the Scheme and Site Location

- 1.2.1 The land consists of a farm with farm house, yards, arable land, horticultural glasshouses and a modern detached house to the east of the village of Denvilles, Hampshire. Its location is shown at **Figure 1** below.
- 1.2.2 Barratt David Wilson Homes has submitted a Planning Application for planning Approval for 191 units on the site.



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Figure 1: Location of the Site

1.3 Relevant Legislation and Policy

- 1.3.1 The Habitats Directive 1992/43/EC and Wild Birds Directive 1979/409/EEC were implemented by the European Union as a pan European initiative to commit Member States to designate and protect wildlife sites that fell within the criteria adopted, and that these sites would represent a network of the most important and representative wildlife areas in the European Union. The sites are known collectively as Natura 2000/Sites of Community Importance. Under the Wild Birds Directive Member States are required to designate Special Protection Areas (SPAs) for species of bird and their habitats considered of importance. Under the Habitats Directive Member States are required to designate Special Areas of Conservation (SAC) for all other species and habitats considered to be of importance. The Habitats Directive also outlines provisions in Section 6.3-6.4 on the protection of these sites (and SPAs) from Plans and Projects by Member States.
- 1.3.2 In the UK these Directives are implemented into national legislation through the Habitats & Species Regulations 2010. This sets out the tests that a plan or project should go through in

order to ascertain whether it would have a material impact on the designated features of a European Site (i.e. an SPA/SAC). By policy the UK Government also considers sites designated under the International Convention on the Protection of Wetlands Especially as Waterfowl Habitat (the Ramsar Convention, 1971) should be protected by this procedure. In this document 'European Site' is used to refer to the Solent SPA/SAC/marine SACs and Ramsar sites collectively.

1.3.3 The relevant tests for Plans and Projects are set out in Regulation 61-62 of the Habitat Regulations:

<p>Assessment of implications for European sites and European offshore marine sites</p> <p>61.—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—</p> <p class="list-item-l1">(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and</p> <p class="list-item-l1">(b) is not directly connected with or necessary to the management of that site,</p> <p>must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.</p> <p>(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 them to determine whether an appropriate assessment is required.</p> <p>(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specify.</p> <p>(4) They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must take such steps for that purpose as they consider appropriate.</p> <p>(5) In the light of the conclusions of the assessment, and subject to regulation 62 (considerations of overriding public interest), the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).</p> <p>(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.</p> <p>(7) This regulation does not apply in relation to a site which is—</p> <p class="list-item-l1">(a) a European site by reason of regulation 8(1)(c), or</p> <p class="list-item-l1">(b) a European offshore marine site by reason of regulation 15(c) of the 2007 Regulations</p> <p>(site protected in accordance with Article 5(4) of the Habitats Directive).</p> <p>(8) Where a plan or project requires an appropriate assessment both under this regulation and under the 2007 Regulations, the assessment required by this regulation need not identify those effects of the plan or project that are specifically attributable to that part of it that is to be carried out in Great Britain, provided that an assessment made for the purpose of this regulation and the 2007 Regulations assesses the effects of the plan or project as a whole.</p>

Considerations of overriding public interest 62.—(1) If the competent authority are satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), they may agree to the plan or project notwithstanding a negative assessment of the implications for the European site or the European offshore marine site (as the case may be). (2) Where the site concerned hosts a priority natural habitat type or a priority species, the reasons referred to in paragraph (1) must be either— (a) reasons relating to human health, public safety or beneficial consequences of primary importance to the environment; or (b) any other reasons which the competent authority, having due regard to the opinion of the European Commission, consider to be imperative reasons of overriding public interest. (3) Where a competent authority other than the Secretary of State or the Welsh Ministers desire to obtain the opinion of the European Commission as to whether reasons are to be considered imperative reasons of overriding public interest, they may submit a written request to the appropriate authority— (a) identifying the matter on which an opinion is sought; and (b) accompanied by any documents or information which may be required. (4) The appropriate authority— (a) may seek the opinion of the European Commission concerning the plan or project; and (b) where such an opinion is received, must send it to the competent authority. (5) Where a competent authority other than the Secretary of State or the Welsh Ministers propose to agree to a plan or project under this regulation notwithstanding a negative assessment of the implications for the site concerned— (a) they must notify the appropriate authority; and (b) they must not agree to the plan or project before the end of the period of 21 days beginning with the day notified by the appropriate authority as that on which their notification was received, unless the appropriate authority notify them that they may do so. (6) Without prejudice to any other power, the appropriate authority may give directions to the competent authority in any such case prohibiting them from agreeing to the plan or project, either indefinitely or during such period as may be specified in the direction.

- 1.3.4 With regard to a Planning Application the Competent Authority would be the Local Planning Authority, in this case Havant Borough Council, to consider the potential for impacts and adverse effects on any European Site prior to granting permission for the project to proceed.

1.4 European Sites Subject to this Assessment

Statutory Designated Sites

- 1.4.1 Four European and Internationally important sites (Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar Sites) are present within 5km of the site, and are summarised in **Table 1** below.

Table 1: Statutory Designated Sites

Site	Status	Distance from Site	Summary
Solent Maritime	SAC	1.4m	Estuarine habitats and species
Solent & IoW Lagoons	SAC	1.4m	Estuarine habitats and species
Chichester & Langstone Harbour	SPA	1.4km	Estuarine habitats and species
Chichester & Langstone Harbour	Ramsar	1.4km	Estuarine habitats and species

1.4.2 Conservation Objectives for Chichester & Langstone SPA/Ramsar are collectively based on maintaining in favourable condition the habitats on which the interest features depend (where they are not related to habitats per se :

- Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular; sand / shingle and shallow coastal waters.
- Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular; shingle, saltmarsh, intertidal mudflats / sandflats and mixed sediment shores.
- Subject to natural change, maintain in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular; shingle, saltmarsh, intertidal mudflats / sandflats, mixed sediment shores and shallow coastal waters.

1.4.3 The Conservation Objectives for the Solent Marine SAC are:

- Subject to natural change, maintain the ‘estuaries’ in favourable condition, in particular: saltmarsh communities, intertidal mudflats / sandflats communities, mixed sediment communities and subtidal sediment communities.
- Subject to natural change, maintain the ‘Cord-grass swards’ in favourable condition, in particular; Small Cord-grass (*Spartina maritima*) communities, Smooth Cord-grass (*Spartina alternifolia*) communities, Townsend’s Cord-grass (*Spartina x townsendii*) communities.
- Subject to natural change, maintain the ‘Atlantic salt meadows (Glaucopuccinellietalia)’ in favourable condition, in particular; low marsh communities, mid-marsh communities, upper marsh communities and transitional high marsh communities.
- Subject to natural change, maintain the ‘annual vegetation of drift lines’ in favourable condition.
- Subject to natural change, maintain the ‘*Salicornia* and other annuals colonising mud and sand’ in favourable condition, in particular; annual *Salicornia* saltmarsh communities and *Suaeda maritima* saltmarsh communities.
- Subject to natural change, maintain the ‘mudflats and sandflats not covered by seawater at low tide’ in favourable condition, in particular; intertidal mud communities, intertidal muddy sand communities, intertidal sand communities and intertidal mixed sediment communities.
- Subject to natural change, maintain the ‘sandbanks slightly covered by seawater all the time’ in favourable condition, in particular; subtidal gravely sand and sand, subtidal muddy sand and subtidal Eelgrass *Zostera marina* beds.

1.4.4 The European Sites closest to the proposed development are considered further in **Section 3.2.**

1.5 Screening of Potential Adverse Effects

- 1.5.1 Consultation with Natural England highlighted the potential impacts on European and Ramsar Sites from additional residential development, whereby new residents may use and contribute to increased recreational disturbance issues with a potential likely significant effect on the European Sites (particularly Chichester & Langstone Harbour SPA/Ramsar).

1.6 Structure of Report

- 1.6.1 The remainder of this report is set out to provide further summary of the large amounts of information available on the potential for adverse effects to occur on the European Sites in the area.

- 1.6.2 This involves the following:

- consideration of the research underpinning the effects of increases in residential populations adjacent to the coast (within 7km or even further) and their recreational use of the coast; followed by
- consideration of the conditions local to the site and potential for adverse effects from increased recreational potential; then
- consideration of measures that are put forward to avoid any perceived adverse effect arising from the development and research surrounding such measures.
- Finally an assessment of Likely Significant Effects on the European and Ramsar sites is undertaken with assessment of avoidance and mitigation measures.

2.0 RESEARCH INTO DISTURBANCE EFFECTS ON THE EUROPEAN SITES

2.1 Background

- 2.1.1 The consideration of the potential for urbanisation and development around the Solent coastline to have adverse effects on the features of European Sites is being researched through the Solent Disturbance and Mitigation Project, initiated through the Solent Forum. This is using data from various sources such as the Wetland Bird Census (WeBS), Green Space Initiatives etc.
- 2.1.2 Disturbance effects on the designated features of the Solent Estuary such as migratory and wintering bird populations as a whole are natural events that occur wherever human contact occurs with nature. The fact that people who use the coast will disturb birds and wildlife sites is not the issue. The concern is the degree to which the extent of disturbance is having a significant adverse effect on the features designated under the European Sites designations.
- 2.1.3 Development within the Solent has occurred in the recent past with only minimal consideration of the indirect effects that an increase in human populations will have on the designated coastal European Sites. The baseline to which events occur is now a semi-urbanised to urbanised section of coastline within the Solent estuary, with only remote and private areas south of the New Forest little impacted by the south coast population.
- 2.1.4 The research being undertaken to understand the effects of additional populations on the European Sites is being carried out with the mandate to provide a solution to a scenario whereby urbanisation will result in a significant adverse impact on the features of the designated coastal European Sites along the Solent, with the principal pathway to significant impact being an increase in recreation beyond a point whereby the features of the European Sites are able cope with the disturbance pressure.
- 2.1.5 The ability to predict this point, and to predict (or even react) to the consequences of this pressure is not an exact science because the variables are too great. The research is currently at the stage of completion of initial modelling of these potential impacts throughout the Solent and will advise on solutions and avoidance measures for Local Planning Authorities. It should be noted that this task can only be general and by inference the results and recommendations will only be perceived conclusions and precautionary responses to the threats (as recognised by Stillman et al, 2012); and crucially recommendations and solutions will only be able to operate within the system (i.e. the planning system) and local environment (i.e. constraints of the Solent coastline) present. This substantially reduces the options for workable conclusions.
- 2.1.6 As such a reasonable approach can be adopted whereby it is recognised that there is potential for an issue in the general sense, and that solutions to reduce and avoid such an issue are also able to be deduced in a reasonable fashion (given the constraints and parameters of situation). This can then be drilled down to a local level, where a more detailed examination of local circumstances can determine whether action should be taken to avoid and reduce potential for effects and what action may reasonably be taken at that local level.

2.2 General Conclusions of the Research

2.2.1 The Visitor Questionnaire Survey Work on the European Sites (Fearnley et al 2010) summarises a number of patterns from the research undertaken including the following:

A number of clear patterns have emerged from the on-site visitor surveys:

- 94% of people visiting the surveyed sites were local residents
- The most popular days to make a visit to the coast were weekends (with the number of visitors on a weekend day typically being around a third as much again as counted on a week day). The most popular time of day to visit was between 09:00 and 12:00.
- Walking was the most popular activity (44% of interviewees) and dog walking the second most popular (42% of interviewees). Dog walkers in particular tended to be regular visitors, with a quarter stating that they visit 'most days'.
- Visitor's motivation to visit a specific site varied depending on the interview location. The most popular response was 'close to home' where as one in five of interviewee responses commented on the attractive scenery and views.
- Visitors were also asked what features would be necessary to make another site attractive for use as an alternative to the site where they were interviewed and 34% of visitors indicated that nothing would deflect their use while 17% would be deflected by attractive scenery, 11% if the site were dog friendly and 11% if it were close to home.
- The split between how visitors arrived at the coast was quite well balanced with just over half of visitors (51%) arriving by car and 46% of visitors by foot. Half of all car visitors lived within 4.0km and 75% of car visitors lived within 9.1km of their interview location. Half of all foot visitors lived with 0.7km and 75% of foot visitors lived with 1.2km of their interview location. These distances did vary between site.
- The number of visitors to sampled stretches of coast was related to the number of houses around each access point.
- Models of car visitor rates using formal car parking provisions should also consider on road parking capacities within 500m of the access point.

2.2.2 The Bird Disturbance Survey Work (Liley et al, 2011) is partially summarised in general at Section 4:

The results provide an overview of the scale and underlying patterns of disturbance across a wide geographic area. The patterns are complex, given the context of a range of species, a wide range of sites (with different habitats) and with survey work undertaken across a range of dates, different weather conditions and tide heights. The results will be used to inform the development of model(s) to explore the impacts of disturbance at a Solent-wide scale. We highlight the following key results:

- Visitor rates were relatively high at around 13 groups (20 people) per hour
- A wide range of activities and recreational use was recorded.
- Around one in five events resulted in disturbance (i.e. a change in behaviour of the birds present).
- Dog walking was the most frequently recorded activity (41% of observations) and accounted for some 47% of instances of major flight. Some 2% of observations involved dog walkers with their dogs off leads and on the intertidal and accounted for a disproportionate amount of disturbance events (for example some 27% of all disturbance events involving major flight).
- There was no evidence that more disturbance events occurred at the busiest sites – sites that were busy typically had lots of activities taking place on the seawall and did not involve activities that necessarily brought people close to the birds.
- Disturbance (i.e. a change in behaviour) tended to occur when the activity occurred close to the birds and birds tended to show no response when the potential disturbance was further away.
- Bird densities are lower where visitor numbers are high, indicating that disturbance does influence the distribution of birds.
- Multivariate analyses indicate that there was a stronger response to water based activities, in that birds responded to water based activities at greater distances and tended to be displaced further.

2.2.3 The household questionnaire research (Fearnley et al 2011) produced a number of key results in Section 5:

- A high proportion of questionnaires were returned (1382). There were no significant differences in return rates according to distance from coast, but there was a significant difference in return rates between local authorities. A fifth (20%) of the respondents owned at least one dog.
- There were high visitor rates to the coast, for example 68% of households had visited the coast within the previous month. Only 12% of households had not visited the coast within the past year or had never visited the coast
- A significantly higher proportion of households that had not visited the coast within the past year did not have access to their own private transport. Non-coastal visiting households also had fewer children and fewer dogs.
- 1194 respondents completed the general question relating to frequency of visit to the coast, indicating that in total they made an estimated 90,920 annual coastal visits.
- Over half of all households (55%) stated they tend visit the coast equally all year and an additional 39% of households tend to visit the coast more in the summer time. Access rates are therefore higher in the summer but high levels of access still occur in the winter.
- Visitor levels tended to be highest in the afternoon. One in ten (10%) of respondents indicated that their visit was tide or weather dependent.
- In general, the main activity undertaken was walking, with 74% of households indicating this as an activity they undertook at the coast
- In general, the majority of visitors make trips to the coast to specifically to see the sea and coastline and enjoy the attractive scenery. Most (88%) of respondents were attracted to sites for sea views and attractive scenery.
- Safety, cleanliness, the ability to do a range of different walks and routes, the presence of wildlife and a short travel distance from home were other factors that respondents cited as important in attracting them to particular locations.

- In general, respondents were deterred from particular locations by parking charges, if the car park was a substantial distance to the water and where dogs were off leads.
- For dog owners only, features and characteristics which were either attractive or strongly attractive were 'short travel time from home', 'sea views and attractive scenery', 'dogs can be off the lead', 'feel safe', 'the ability to do a range of different walks / routes', 'presence of wildlife' and 'substantial distance from car park to water'. Dog-owners were deterred from sites by 'dog restrictions with no go dog areas', 'car parking charges' and 'dog restrictions where dogs are required to be on a short lead'. By contrast non dog owners tended to be attracted to sites with 'available toilets' and deterred by 'dogs can be off the lead' and 'substantial distance from car park to water'.
- The three features which were most frequently listed as either 'attractive' or 'strongly attractive' by households who undertook water based activities were 'sea views and attractive scenery', 'ability to do a range of different walks/routes' and the 'presence of wildlife'. Water-based users were more likely to be influenced 'if a site was 'good for favoured activity (i.e. good wind for kite surfing)'.
- From the data on visits to specific coastal sections, just over half (52%) of all estimated annual visits made by the respondents were made by car and 39% of visits were made by foot.
- Using the data on visits to specific coastal sections the average number of visits made each year to the coast, per household is 132.8. The stretch of coast between the Old Portsmouth Marina and South Parade Pier (section 51) was the section with the most visits (by respondents).
- Using the data on visits to specific coastal sections and the activities undertaken there, enjoying the scenery was the only activity given which took place at every coastal section and accounted for 17% of all activity responses (Map 2, data table and map annex). Walking took place at all but 1 coastal section and was the most frequently listed activity (Map 1, data table and map annex).
- The more extreme water sports only occurred across a limited number of coastal sections which is likely to be reflective of the specific water and wind conditions and coastal topography required to safely undertake each activity (Maps 14 – 17 in data table and map annex)
- Over a third (39%) of respondents stated that their routes took them onto the beach or the mudflats, as opposed to the seawall or on the water.

- 2.2.4 Modelling work (Stillman et al, 2012) has been undertaken. This has used old data collected on the intertidal invertebrate resource available for waders in the Estuary. The data and modelling has provided conclusions that have not been validated by existing background data and the results have therefore not been heavily relied upon in this location. It is noted that as a general conclusion, where food resources are low disturbance will have a potentially greater effect on bird populations.
- 2.2.5 The model uses the southern coast prediction of housing increase to estimate an increase in coastal use of c15%, from 52 million to 60 million visits per year. In the Southampton Water modelling, disturbance did reduce the number of waterfowl surviving wintering periods. Modelling suggested that restricting disturbance to the shore e.g. high water level (along sea walls etc) would increase wader survival. Similarly close control/s on leads would also provide a positive effect.
- 2.2.6 A general conclusion of the modelling in Southampton Water was that where visitor rates increased beyond 30 per day per hectare, wader survival rates decreased. Applying the extrapolated model, and assuming disturbance in Chichester Harbour would occur as a precaution, 50% of sites in the Solent would exceed the threshold for disturbance at this level.

2.3 Local Area Research

- 2.3.1 As part of a proposed development at Stockbridge, Chichester local visitor questionnaire surveys were undertaken by Aluco Ecology to a methodology agreed with Natural England (Aluco Ecology 2012). The results of these surveys from a total of 130 households / 280 people and 41 dog owners from the 130 households concluded:

- When asked the main reason for visiting open spaces these were Walking (86%), Cycling (48%), family outing (46%), Nature watching/study (42%), with Dog walking (29%);
- In terms of distances travelled to visit open space sites, this was relatively well split, but the most given answer was over 5km (40%). Less than 500m (35%);
- Travelling to open space sites involved walking (74%) and motor vehicle (62%) much more than any other option;
- When asked the length of visits the main response was between 1-2hours (42%) with 30mins-1hr the next highest at 36%;
- The majority of respondents visited open space sites weekly (52%), with daily (32%) and once a month (15%) also scoring significant percentages;
- Use of open space sites is generally throughout the year (82%), with the remainder only avoiding the main winter period;
- 93% of respondents visit the coast. Of these places visited, the most popular is the National Trust land at West Wittering/East Head (70%), with Bracklesham/East Wittering (67%) also high scoring. About half of respondents visit the Fishbourne area and the Bosham/Chidham area. Less visitors go to Pagham (42%) and Selsey Bill & Bognor Regis (a third each), other answers given include Hayling Island, Portsmouth Harbour and further west;

- When visiting the coast, the most popular visit ratio is given as once a month (44%), with 40% visiting weekly and only 3.8% daily;
- In terms of other open space sites away from the coast 94% of respondents use the Chichester Canal, and 79% visit the South Downs. Half of respondents also use general rights of way in the local area. The Chichester Gravel Pits complex is relatively little used with only 9%;
- With alternative open space sites, these are used more frequently, with weekly 52% given as the most frequent visit ratio. Daily and monthly both scored 24%;

A particularly useful and relevant part of this survey was to ask existing local residents specifically about the creation of a New Open space and whether it would be used and how often the following responses were given:

- With regards to whether it would be an open space resource a respondent would use, just under two thirds of respondents, 62% replied yes, with 4% no return;
- When asked whether the respondent would use the site as an alternative to visiting the coast, 28% replied that they would, with 65% replying negatively;
- Of the people who would use the site, when asked how often that use would be 43% replied weekly, 22% monthly and 18% daily.

2.3.2 As part of the mixed use development at the former Graylingwell Hospital site in west Chichester coastal use visitor questionnaire surveys were undertaken by Ecology Solutions during six days in winter 2008 to a methodology agreed with Natural England (Ecology Solutions, 2009). The survey was conducted from West Wittering to Fishbourne along the eastern edge of Chichester Harbour at eight survey locations. The results of these surveys concluded:

- Estimated total visitors during the period Nov-Feb is 37,680. 27,730 people live in the Chichester PO19 postcode area, and the use of the coast by people from this area accounted for 11.9% of use (based on those who gave postcode data – two thirds with a further 15.5% giving partial postcode);
- The areas with the most visitor pressure were those able to cope with largest amount of visitors through parking (i.e. East Head/Witterings and Bosham);
- 65.7% of visitors arrived by car, and 29.9% on foot. Along the eastern edge of Fishbourne Channel closest to the proposed site, the survey points recorded the following car/foot percentages: marina (72.2%/11%), Apuldram (55%/45%), Fishbourne (34%/63%);
- Distance time travelled to reach the coast was evenly split 26.4% travelled upto 5mins, 21.5% 5-10mins, 20.1% 10-20 mins, 12% 20-30mins, 19.9% greater than 30mins;
- Frequency of visits percentages were 21.2% daily, 30% once a week, 15.1% once a month and 26.4% sporadically or less. Survey point 7 had the most number of visitors visiting weekly (40.3%);
- The most popular reason for visiting was for dog walking (46.1%), with walking the second most popular (32.3%);
- For length of visits 44.3% visited for 30mins-1hr and 40.4% for 1-3hrs;

3.0 FURTHER RESEARCH INTO POTENTIAL FOR THE DEVELOPMENT TO CREATE INDIRECT RECREATIONAL EFFECTS

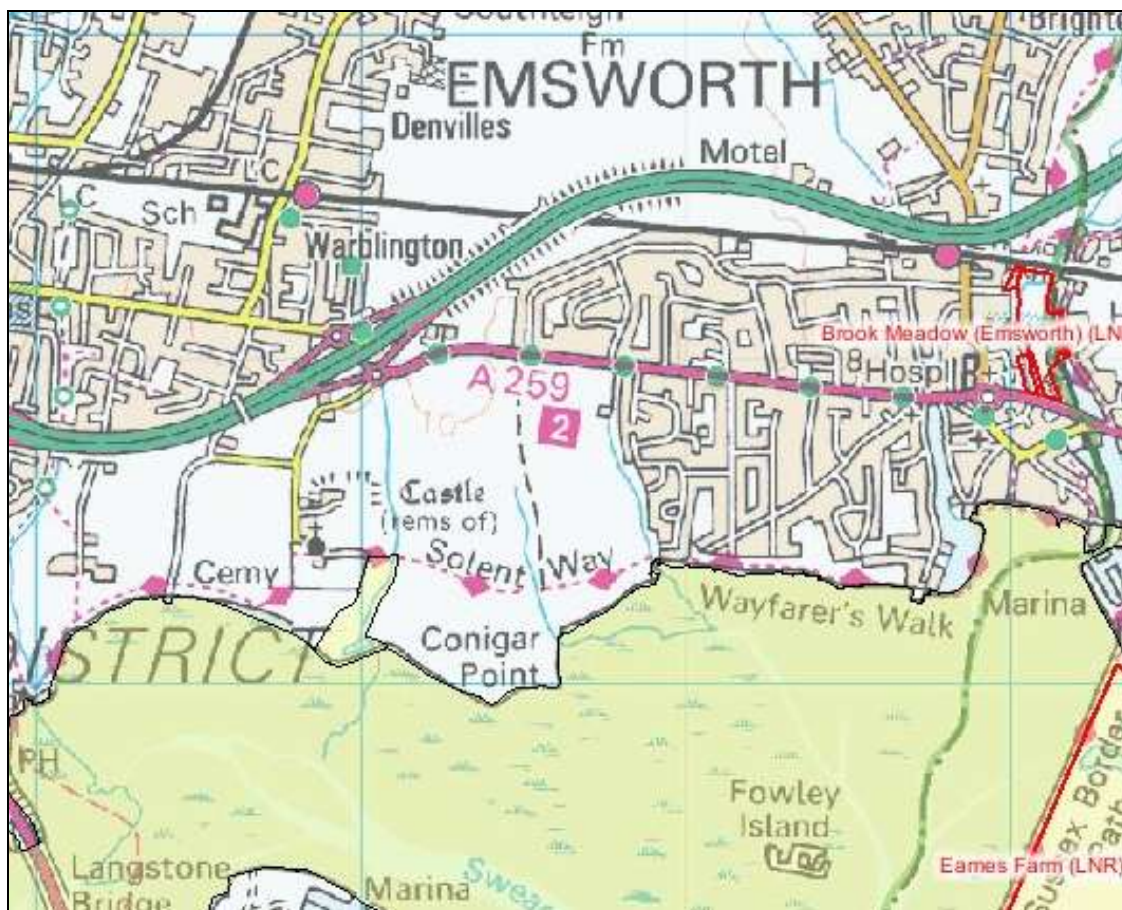
3.1 Introduction

- 3.1.1 The proposed development of 191 dwellings should take into account the overall picture that the research outlined in Section 2 has provided and focus on the local picture in Havant.
- 3.1.2 This section outlines the local area where the proposed development is located, the proximity and extent of European Sites adjacent to the scheme and proximity and extent of other features including recreational resources in the local area. It then goes on to explore the potential for adverse effects from the additional development as a result of additional informal recreational pressure.

3.2 The European Sites Adjacent to the Development

General

- 3.2.1 The closest part of the European Sites (which take up the entire coastline along this stretch of the Solent) is close to Conigar Point, which is at the closest point from the development site, about 1.4km away in a straight line with the European Sites largely mirror the extent of the coastline.
- 3.2.2 The management of the coastline will in future be further influenced by potential rising sea levels and action plans have been prepared by the North Solent Shoreline Management Plan (SMP) (NFDC, 2010). The SAP is set to gain intertidal habitat as a result of sea level rises over the 100 year period by 10% (Stillman et al, 2012).



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Figure 2: Shoreline of Chichester Harbour closest to the Proposed Development Site
Chichester Harbour combined area of SPA, SAC, Ramsar, SSSI is pale green

Access

- 3.2.3 Access to the coastline is driven to a large extent by restrictions on parking, knowledge of local attractions and facilities present in the area. Distance of the site to the coast (1.4km) is such that the development would not contribute to additional disturbance events directly from the development users accessing the local coastline, especially with the railway and A27(T) to be negotiated before reaching the coast. It is considered that any users would need to drive to the coast. The following factors are to be considered when assessing the access to the coast for development users:
- quality of the coast adjacent to the site - the Emsworth to Warblington stretch is industrial to the west and urbanised to the east (Emsworth) with a small strip of farmland with a right of way. Car users are more likely to venture further to enjoy open spaces;
 - the additional open space provided on site will encourage local non-coastal recreation, and provides a new resource for existing residents, who currently have no access to open areas around the site/within easy walking distance on designated foot paths.

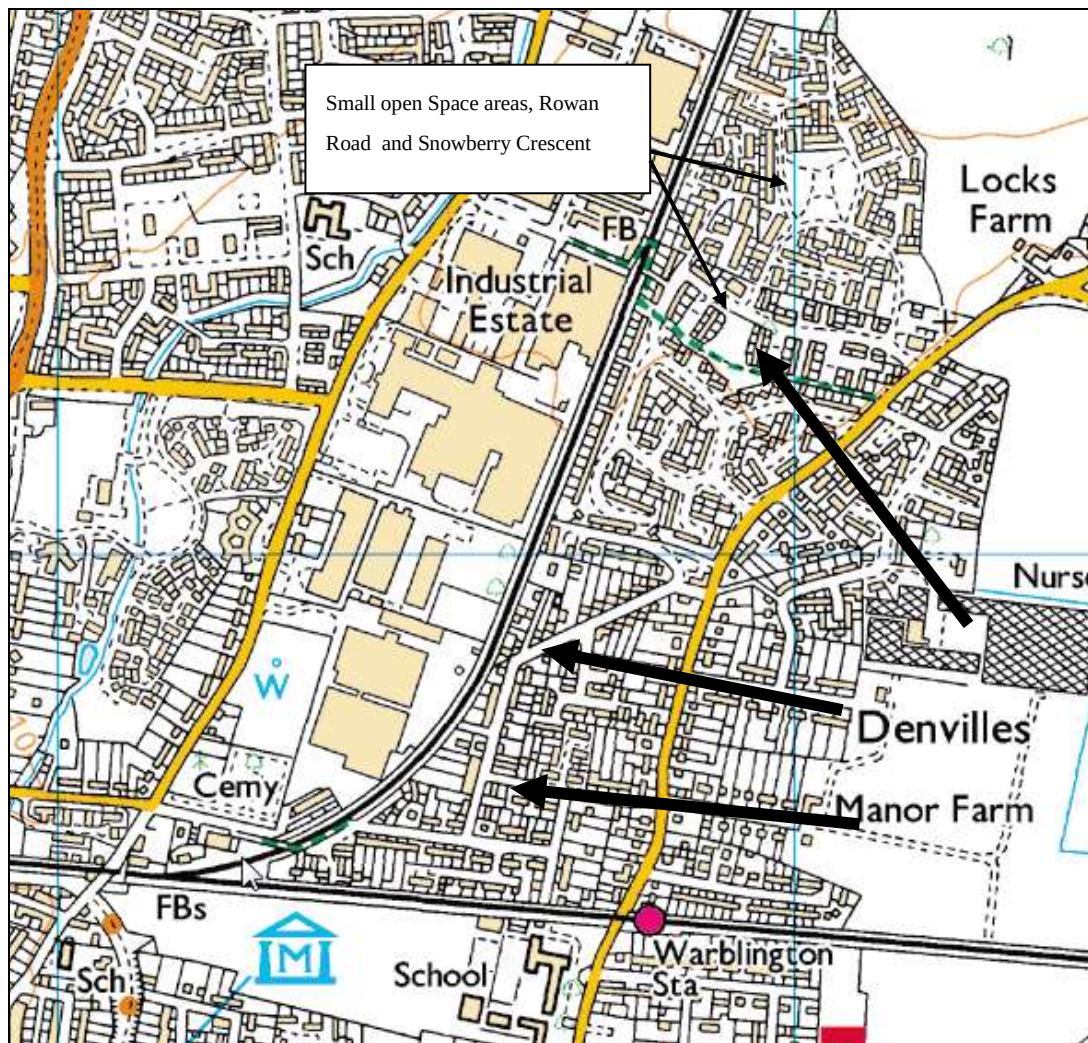
- the Warblington Church area is closest to the proposed development has restricted road parking, This will naturally limit use of the site by those outside of walking distance given the parameters defined in the Solent Forum research (75% of visitors arriving on foot are within 1.2km of the coastline, Liley et al 2011). This includes those from the Manor Farm Denvilles area.

3.2.4 The Graylingwell research (Ecology Solutions, 2009) shows that the most popular parts of the Harbour are those that cater for recreational access on a larger scale, i.e. East Head and West Wittering controlled by the National Trust, and given the more westerly location to that research Hayling Island would also fit with that model of use, and likely to be the primary location in relation to the site.

3.3 Open Space Near to the Development

3.3.1 *Adjacent areas to the site*

There is limited local open space resource for use by local residents in the immediate area, particularly in relation to functional dog walking and weekday use. Looking at the existing housing, particularly that to the east of Southleigh Road (Glenleigh Park, Hallet Road, Fifth Ave, Blenheim Garden) but also the housing between Southleigh Road and the railway, the nearest open space areas are small areas off Rowan Road and Snowberry Crescent to the north both small green areas without any circular walk. The railway line creates significant restriction to access by foot to the west and south (**Figure 3**).



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Figure 3: Local recreational provision –approx. 500m arrows

Hayling Island

- 3.3.2 Hayling Island is perhaps the most obvious draw to the coast with accessible beaches; these have the benefit of being outside the main SPA area with use of the beaches not heavily impacting on SPA bird species. This is a significant existing ‘honey pot’ recreational use site.

South Downs

- 3.3.3 The Downs are present to the north east of Denvilles and represent a large area of countryside and informal recreational opportunities for all residents in the Havant area. It is likely that the features, scale and location of the Downs provide as much a draw for recreation as the coastal area around Chichester and Langstone Harbours and the Solent.

Advertisement of European Sites as Informal Recreation

- 3.3.4 It is important to consider that there is active promotion to increase use of the coastline as a recreational resource encouraging responsible informal recreation, with signage and interpretation on websites and on site such as the Solent Way. With local sites, the National Trust, RSPB and Wildlife Trusts all promote the responsible use of coastal areas, often in direct but managed contact with SPA bird species such as at Farlington Marshes, Hayling

Oyster-beds and Billyline, with East Head, West Wittering and Pagham Harbour further afield.

Conclusions for Informal Recreation Provision Adjacent to Development Site

3.3.5 The following conclusions can be made about local green space provision:

- The closest point from the European Sites to the proposed development is 1.4km;
- Access along the coast here is possible on road and only nearer the coast through the rights of way network;
- Parts of the European Sites closest to the proposed development are under the control and management of conservation organisations with the nearest area of coast not known for particularly notable concentrations of waterfowl or particularly sensitive uses such as high tide feeding areas and roost;
- The most popular areas locally for visitors are Hayling Island and the National Trust sites at West Wittering/East Head;
- Other parts of the harbour are under private, third party and Council/Conservancy ownership;
- Popular coastal areas (such as Hayling Island) and the AONB are open for informal public recreation;
- Green space provision around the proposed development is very limited;
- Formal recreational space is proposed on the development site which will increase provision within the local area for all residents;
- Close to home walks are generally favoured for daily and especially weekday use, the nearest coast is beyond the normal distance that the majority of residents will walk for regular recreational use;
- The new Open Space provides a 1km circular walk on an all-weather path surface in addition to open play areas suitable for energetic ball and retrieve exercise for dogs. The new open space provision has been designed for a range of walk lengths due to interlocking path networks and open nature to provide a safe feeling environment. Dog bins will be provided and regularly serviced to ensure a clean walking environment.
- Due to the lack in local recreational / dog walking areas the proposed new open space will also provide for and be used by existing residents of local housing. This will provide a positive impact in reducing indirect recreational pressure at the coast, especially in relation to weekday and functional walks such as dog walks from existing local housing.

4.0 CONSIDERATION OF AVOIDANCE AND MITIGATION MEASURES PUT FORWARD AS PART OF THE DEVELOPMENT PROPOSALS

4.1 Creation of New Open Space as Part of Development

Introduction

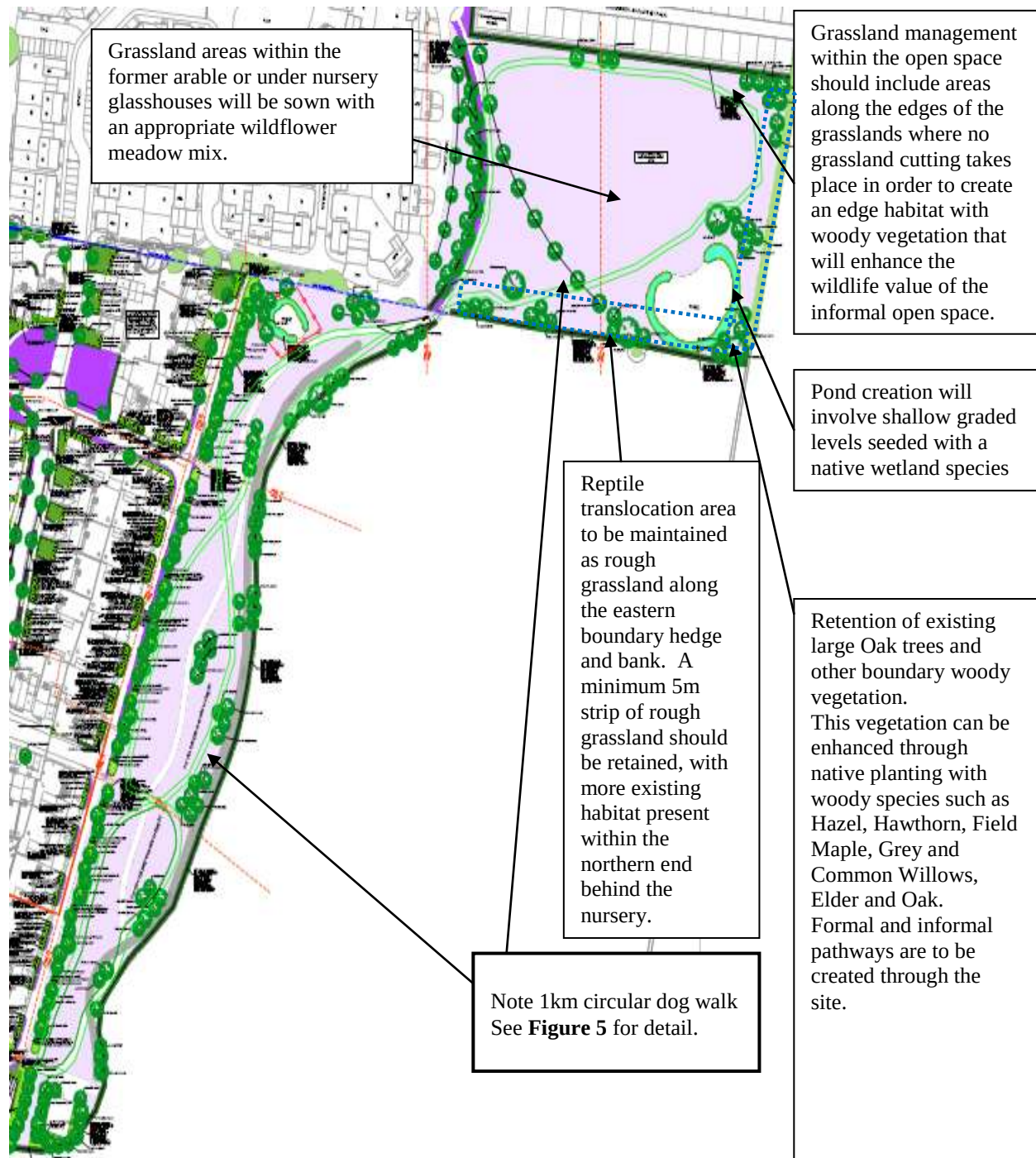
- 4.1.1 The body of research on disturbance impacts along the Solent coast suggests that in order to avoid and mitigate for the potential disturbance issues from existing and/or new development, the most effective solutions are likely to be such as creation and/or enhancement of new or existing alternative green spaces away from the coast. This is to cater for the day-to-day exercise, play and dog walk which usually occur in small time blocks and usually preferred with easy walking distance of the dwelling, with those within 500m of the house most well used.
- 4.1.2 On this basis and in consultation with Natural England, the proposals include opportunities to increase the local open space provision for existing local residents as well as residents in the new houses associated with the proposed development. The open space includes a total provision of 3.36ha. When taking away the formal open space within the development (0.25ha), and the allotments (0.49ha), the informal open space element equates to just over 2.6ha. This is well over two times the required amount for the development and therefore consistent with the HRA recommendations for the Council's core strategy (UE Associates, 2010) which suggested that development in the District should look to provide additional open space beyond the requirements of national policy. This open space would also be in an area where there is no existing open space for the local residents as the site is currently private nurseries.

Design of Open Space

- 4.1.3 The design of the open space has focused on the following aims:
- To provide a suitable informal open area for local residents for recreational purposes;
 - Circular dog walk, general open play areas, features and interest on the walk
 - To significantly increase existing local open space resource;
 - To provide future benefits to local wildlife;
 - To assist and complete the local landscape.
- 4.1.4 A plan of the layout of the proposed open space is provided at **Figure 4** below. Whilst design has taken in the principals of the Thames Basin Heaths suitable alternative natural space criteria 'SANGS', it has not rigidly stuck to these criteria although the design does meet the majority of the criteria (Natural England, 2007).
- 4.1.5 One of the main features of the open space is to provide additional habitat and features of interest on the walk. Informal walkways through the open space will enable a circular route of 1km on site through the different habitats planned on site.
- 4.1.6 Provision of native locally sourced species within the landscaping of the scheme and particularly within the open space area to the eastern end of the scheme will provide new

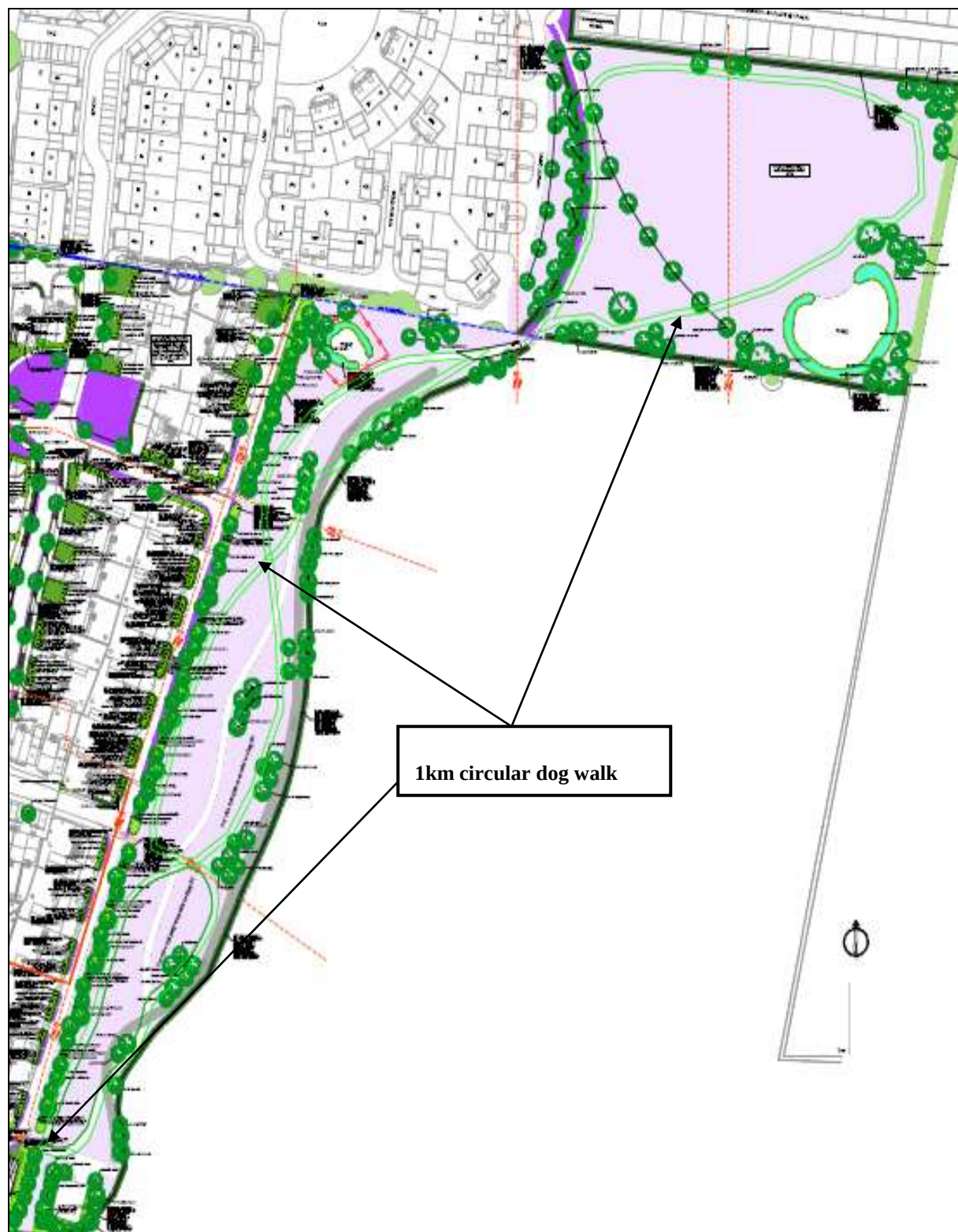
habitats for wildlife on the edge of the site. The natural habitats will extend to the offsite boundaries to provide suitable corridors for wildlife.

- 4.1.7 Two new ponds will be created on site as part of the surface water strategy. These ponds will be designed to have shallow edge profiles and will have the surrounding area planted with native species vegetation mixes providing focal points along the walking routes.
- 4.1.8 Benefits to the local bat and bird communities will arise from the proposals, by providing new roosting and nesting opportunities, through the provision of bat and bird boxes that can be located in the mature trees just off site and in the buildings to be constructed.
- 4.1.9 The eastern boundary hedge, the ditch line and the 5m retained habitat strip will be enhanced for wildlife. The hedge will be cut every three years in an 'A' shape to provide additional habitat at the base of the hedgerow and bank.
- 4.1.10 **Figure 4-5** below shows enhancement potential. This will be developed in a management plan for the retained and created open areas, which will include ecology prescriptions and management options.



ALUCO ECOLOGY

Figure 4: Mitigation and Enhancement



ALUCO ECOLOGY

Figure 5: Enlarged to show walk detail

5.0 POTENTIAL LIKELY SIGNIFICANT EFFECTS TO EUROPEAN SITES FROM DEVELOPMENT PROPOSALS

5.1 Introduction

- 5.1.1 This section provides information for the formal screening process within the Habitat Regulations 2010. The assessment includes potential mitigation measures outlined above, as well as avoidance measures, as case law (e.g. Hart District Council v (1) Secretary of State for Communities & Local Government, (2) Luckmore Ltd, (3) Barratt Homes Ltd) ‘the Dilly Lane’ case, provides for assessment of Likely Significant Effects to include such mitigation as well as avoidance measures.
- 5.1.2 The assessment of Likely Significant Effects alone or in-combination considers the whether the development proposals are likely to have a significant effect (including any avoidance and mitigation measures documented or offered as a part of the scheme) on the features of the European & Ramsar Sites and their conservation objectives (see Section 1).
- 5.1.3 The main issues that have through consultation have requested that further information is how the additional development and additional new residents will use and contribute to a potential likely significant effect on the European Sites (particularly Chichester & Langstone Harbour SPA/Ramsar);
- 5.1.4 The assessment of Likely Significant Effects alone and in-combination can be considered in the light of the additional local information and extensive background research undertaken and summarised above in Sections 2 and 3.
- 5.1.5 The conclusions of this assessment can be used by Havant Borough Council as information for their Habitats Regulation Assessment on the proposed planning project, and whether they would be required to undertake an Appropriate Assessment under the Habitat Regulations 2010.

5.2 Evaluation of Further Information

Solent Forum Research – General Conclusions

- 5.2.1 A number of the general conclusions and key results that are being used to further model overall solutions are reproduced in **Section 2** above. It shows that whilst the extent of users to the coast occurs from a wide populous, the core results show that many regular users are visiting their nearest stretch of coastline in order to engage in informal recreation. This is not surprising or unexpected. The research suggests a 1km buffer around the coastal European Site boundaries whereby additional pressure from proximity and ability to walk to the coast will potentially provide additional effects (Fearnley et al, 2011). The current development proposals are outside this buffer.
- 5.2.2 An interesting conclusion and interpretation of the bird disturbance studies was that “...sites with high levels of access per se (i.e. high visitor numbers) did not necessarily see the most disturbance events, perhaps indicating that other factors, such as the types of activity taking

place, how people behave *and how access is managed at each location*, determine the extent of disturbance.” (Liley et al, 2011 at Section 3.18). The italics have been added to show that the ability to provide solutions to the disturbance effects issue, and what they should follow, are already suggested.

- 5.2.3 In relation to the modelling in Chichester Harbour, the conclusions provided were that the model output would result in wide scale mortality of the majority of modelled species. This is either with or without additional pressure from disturbance. Given that the Harbour already has disturbance events, and that WeBS data shows the opposite conclusions to the modelling, the model was abandoned. Suggestions were made that the Harbour may be more sensitive to disturbance if food availability is lower than elsewhere in the Solent, but this is not backed up by the WeBS bird data, only the invertebrate sampling data.

Assessment of the Local Situation

- 5.2.4 The data collected from the Solent Disturbance and Mitigation Project was not specifically designed to provide a detailed local picture for each section of coastline, and any examination of the minute details of the research at a local level should bare this in mind as a limitation. However, some useful information is available and can be combined with further information provided from the assessment of local green infrastructure and resources, and the local situation at the coast.
- 5.2.5 As can be seen by the disturbance research by Fearnley et al (2010), the local situation from the data around Fishbourne shows that for users that arrive by car, 25% are from 1.7km or closer, half are from 3.4km, with the majority (75%) within 15km. The maximum distance for foot users was 1.3km away (Fearnley et al, 2010). The results of this study show that users in the Fishbourne area come from within 1.3km if they walk (29% of respondents). If they arrive by car (67%), then only 25% are within 1.7km, with 75% as wide ranging as 15km and the final 25% are between 15-55km away.
- 5.2.6 The questionnaire research from the Graylingwell Hospital development shows for distance time travelled in order to reach a coastal location were ‘fairly evenly split’ (Ecology Solutions, 2009 at 6.7.1). The majority were just within the up to five minutes category (26%), with 5-10, 10-20, 20-30 and >30mins accounting for around the 20% mark each. It has already been shown that people are unlikely to walk from the proposed development site to the coast given the distance (over 2km) on public rights of way / roads.
- 5.2.7 A recent visitor questionnaire undertaken on the eastern side of Chichester for the Shopwyke proposed development (Ecology Solutions, 2011) demonstrated that only 3.7% said they visited daily and 41% said that they visit the coast once a week. This is supported by data presented to the Solent Forum (EDP, unpublished) from strategic growth areas in Chichester which suggests that 1-3% of existing residents use the coast daily and two thirds once a month. It also showed that there is no differentiation in the areas of strategic growth and the mode of travel to the SPA. A conclusion of this survey stated for the strategic growth areas “*What became clear from the survey was that the proximity of the site to the SPA had no relevance to the level of usage – however accessibility, good quality parking facilities and dog walking provision did affect usage and that people would be prepared to use an alternative*

good quality area if it was provided.” It should be noted that none of the strategic growth areas included walking distance sites (i.e. the 1km or closer to the coast).

5.3 Likely Significant Effects through disturbance and increased population

Pagham Harbour SPA/Ramsar

- 5.3.1 The distance of the site from Pagham Harbour, combined with the local situation and catering for visitors via various reserves and habitat management mean that the potential for likely significant disturbance events either alone or in-combination occurring from this development are considered de minimis. No further assessment is therefore required.

Chichester & Langstone Harbours SPA/Ramsar (& Solent Maritime SAC)

- 5.3.1 The proposed development is of a scale and location that on its own it is unlikely to have a significant effect on the features of the European and Ramsar sites. The only potential pathway to significant effects and requirements for a detailed Appropriate Assessment are therefore potential for the additional residents to contribute to an in-combination effect from existing use and other proposed developments within the zone of influence of the sites. The likely significant effect in-combination is considered below.
- 5.3.2 The wider Solent picture and detailed local picture building up is that users of the most local stretch of coast either arrive on foot or by car. The majority of foot users are from within 1km. Virtually all are within 1.3km based on local data. The proposed development is outside this for walking to the coast. Therefore in order to contribute to the cumulative or in-combination effect of disturbance at the coast, users from the proposed development would drive to the coast.
- 5.3.2 When you look at the local open space resource for the residents in the Manor Farm, Denvilles area compared to the picture shown by other studies, the conclusion may be drawn that users are predicted not to use the coast with any more significance than users within the area. The conclusions of the EDP report, for example, suggest the main motivation for use is **availability** and **accessibility**. The difference of living 2km or 5km away from the coast does not appear to be significant.
- 5.3.3 Looking at the features of the proposed development. The location of this development is very well situated in order to provide new alternative open space informal recreation resources. The proposal will increase the local area resource with the provision of 3.36ha comprising formal open space within the development (0.25ha), allotments (0.49ha), and the informal open space element which equates to just over 2.6ha. This will provide more than just the direct benefit open space elsewhere would provide. The local site is therefore in a position to provide new access to recreation resources not only for residents of the new proposed development but also locally to existing residents. Local research suggests that residents adjacent to the development would also use the open space and some as an alternative to the coastline.
- 5.3.4 It is accepted that the development will also lead to residents using the coast along Chichester - Langstone Harbour. However, use of this resource is restricted by access from vehicle users

(a key factor), and avoidance measures are already in place. This will serve to limit additional pressure from new development.

5.3.5 With the measures proposed on site to provide well-used alternative open space recreational resource, plus the existing local situation regarding access being north of the A27 with restricted existing local footpath links, there is a case for suggesting along with the local survey data that the additional pressure from the proposed development is de minimis.

5.3.6 To summarise, the likely significant in-combination assessment has shown that:

- Local area research demonstrates the current development proposals are a distance away such that they fall within the general use pattern of the coastal sites,
- The site is outside the main range of ‘by foot’ coast visits for daily functional walks, with the addition of railway lines and the A27 to cross which is likely to further influence local ‘by foot’ movement,
- The local circumstances, backed up by questionnaire survey data in the local area suggests that there is benefit from providing alternative recreational resources within close walking distance from homes and that these new resources would be used by the new residents and local existing residents as there is a minimal existing local open space provision,
- At the local coastline, there are ‘natural’ access restrictions from car visits, such as Warblington Church area. Once in a car there is the obvious draw of the beach areas on Hayling Island or East Head.

5.3.7 With the scheme providing such onsite recreational provision for the new and existing local houses, the potential for it to contribute to significant in-combination disturbance to the features of the SPA/Ramsar (see Section 1) is avoided and any recreation use is therefore considered de minimis.

6.0 CONCLUSIONS

- 6.1.1 This report has sought to consider all the relevant background information and detailed research undertaken along the Solent Coastline and then compared it to the local situation to the development of 191 dwellings at Manor Farm and Copseys Nursery, Denvilles, Havant. The local situation here indicates that the majority of use of the coast by local residents is not likely to be at its closest point to the development as they are likely to be accessing the coast by car.
- 6.1.2 The local situation is often unique to any site. The Manor Farm Denvilles local area has minimal local open space areas, especially those suitable for weekday use and dog walking. It is reasonable to presume that the new proposed open space area will be used by existing local residents, particularly those within 500m of the site. These would currently be encouraged to drive potentially resulting in coastal visits. The development provides an opportunity to enhance this local resource and provide additional informal open space. Local research has provided background information on how this space will be used. It is predicted that a significant majority of existing residents within 500m would use the new open space (nearly two thirds of respondents from research) and nearly a third of those stated they would use it as an alternative to the coast.
- 6.1.3 On this basis Havant Borough Council can use this additional information for the site to screen out the Application at the Likely Significant Effects stage of the Habitats Regulations Assessment.

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