



11 June 2013

Land off Station Road,
Hayling Island

Ecological Assessment

Report Number: 1435_2011_R02a_JA_RW

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1435/P01 June 2013 JSA/JTF

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Land off Station Road, Hayling Island
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Section 1: Introduction

- 1.1 This report has been prepared by Tyler Grange LLP on behalf of Hayling Island Builders Ltd in respect of Land off Station Road, Hayling Island, Havant ('the site').
- 1.2 The site is allocated in Havant District Council's Site Allocations Local Plan for residential and employment under Policies UE21 and BD73. The client is seeking to submit a planning application for mixed use development.
- 1.3 This report:
- Describes and evaluates the ecological resources within the likely 'zone of influence'¹ using available background data and results of field surveys;
 - Assesses the issues and opportunities that would arise as a result of its future development; and
 - Describes the potential consequences in terms of legislation and policy, and where appropriate describes mitigation and enhancement proposals, and a mechanism for controlling them.

¹ Defined as the areas/resources that may be affected by the biophysical changes caused by activities associated with a project (Ref. 1)



Section 2: Methodology

Scoping

- 2.1. The scope of the assessment was informed by consultation and data searches, and an initial phase I survey.

Data Search

- 2.2. The data search was originally conducted in 5th January 2012 and was updated on 5th March 2013. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given area.
- 2.3. Hampshire Biodiversity Information Centre (HBIC) were contacted for:
- Species records for a 2km radius surrounding the site, including sites known to support Brent goose; and
 - Records of statutory and non-statutory designated sites for the area within a 5km and 2km radius, respectively, of the site.
- 2.4. The online Multi-Agency Geographic Information for the Countryside (MAGIC) website (Ref 1) was consulted to identify any sites subject to statutory protection under national or European nature conservation legislation within 5km of the site.
- 2.5. Information supplied by these organisations has, where relevant, been incorporated into the following account with due acknowledgement.
- 2.6. In addition, the Natural Area profile (Ref. 2), as defined by Natural England, was consulted to determine the important ecological resources at a regional level. Natural England recognises 120 such Natural Areas, the boundaries of which are derived using the distribution of geology, wildlife and natural features, and on the land use pattern and human history of each area.
- 2.7. The Biodiversity Action Plans (BAP) for the UK, Hampshire and Havant (Refs. 3, 4 and 5) were reviewed to identify whether any of the habitats or species within or adjacent to the site are BAP-listed and therefore the subject of conservation action. The BAPs contain information that can assist with the evaluation of ecological resources and can inform site enhancement strategies.
- 2.8. Lastly, relevant planning policies and supplementary planning documents relating to biodiversity were consulted.



Extended Phase I Survey

- 2.9. An extended Phase I survey of the site was undertaken on 19th November 2011 by Andy Johnson, an experienced ecological consultant and member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Further investigation of habitats within the site was undertaken on subsequent survey visits in 2012 and 2013.
- 2.10. The habitat survey was based on guidance set out in the 'Handbook for Phase I habitat survey' (Ref. 6). This entailed recording the main plant species and classifying and mapping broad habitat types present. Nomenclature for plant species follows that of BSBI (Ref. 7).
- 2.11. Note was taken of the more conspicuous fauna, and any evidence of, or potential for the presence of protected/notable flora and fauna.
- 2.12. A basic inventory of the habitats and a representative species list was produced. Where access allowed, adjacent fields were also considered, in order to assess the site within the wider landscape and to provide information with which to assess possible impacts within the zone of influence of the proposed development.

Wintering Birds

- 2.13. The scoping exercise confirmed that a key issue with respect to future development is the potential for adverse effects through habitat loss and increased disturbance affecting the bird interest of the nearby Solent and Southampton Water Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site. The SPA is designated on account of the internationally important numbers of dark bellied Brent geese *Branta bernicla bernicla* and some wading bird species. The birds use the adjacent grassland to forage and roost at high tide.
- 2.14. Brent geese and wading birds are long-lived and use a range of different sites over a winter season and over their life-time. Further to consultation with Deborah Whitfield of Hampshire Wildlife Trust, it was recommended that a minimum of three years winter survey data is gathered in order to assess usage of sites by waders and Brent geese. The survey should cover not just the site but adjacent fields that could be indirectly affected by development (fields H34E (which includes the site), H34D and H34C; see **Appendix 1**). These should take place once every two weeks from October to March, at high tide following the methodology outlined in the published strategy.
- 2.15. Accordingly, surveys in winter season 2011/12 and 2012/13 were conducted using the method set out in the 2010 Solent Waders and Brent Goose Strategy (Ref. 8). Dates and weather conditions of surveys are provided in **Appendix 2**. Further to consultation with Natural England and Hampshire County Council's ecologist, it was agreed a third season of data was not necessary (**Appendix 3**).

Evaluation

- 2.16. The evaluation of habitats is defined in accordance with the 'Guidelines for Environmental Impact Assessment' (2006; Ref. 1). The level of value of specific ecological receptors is assigned using a geographic frame of reference, with international value being most important, then national, regional, county, district, local and lastly, within the context of the site.
- 2.17. Value judgements are based on various characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include site designations (such as SSSIs), or for undesignated features, the size, conservation status (locally, nationally or



internationally), and the quality of the ecological resource. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Quality Assurance

- 2.18. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment' published by the Chartered Institute for Ecology and Environmental Management (CIEEM, July 2006; Ref. 1). All ecologists at Tyler Grange LLP are member of CIEEM and abide by its Professional Code of Conduct.

Limitations

- 2.19. Please note that the findings of this report are valid at the time of writing. Owing to the dynamic nature of ecological resources, if more than six months have elapsed since the report was written, advice should be sought to determine whether update work is required. The findings of the report should not be relied upon without this advice.



Section 3: Baseline Conditions

Site Context

- 3.1. The site is situated within the South Coast Plain & Hampshire Lowlands Natural Area (Number 75), as defined by Natural England. The landscape character of the Natural Area is split between the generally open, often featureless landscape of the coastal plain and the more varied landscape within the triangular area between Southampton, Chandlers Ford and Waterlooville (referred to as the Hampshire Lowlands).
- 3.2. Of most relevance here is the coastal plain, which includes several large coastal inlets or harbours of distinctive individual character, as well as the large urban conurbations around Southampton and Portsmouth and stretching along the coast between Littlehampton and Brighton. The overall landform of the coastal plain is flat and low lying, with an indented shoreline exposed to the prevailing south westerly winds. The coastal habitats of the Natural Area are internationally important for wintering and passage wildfowl and wading birds, characterised by species such as the Brent goose. In addition, the coastal wetlands and shingle islands are of international importance for breeding terns and of national importance for breeding waders.
- 3.3. The site is situated close to Langstone Harbour. It is bounded by residential development, a garage and builders' yard to the south, with residential to the east and west, and arable farmland to the north. The Billy Trail recreational route is to the west.

Protected Sites

Statutory Sites

- 3.4. The site is not covered by or adjacent to any statutorily-protected sites of nature conservation interest; however, there are number of such sites nearby (**Appendix 4a**).
- 3.5. Langstone Harbour Site of Special Scientific Interest (SSSI) is circa 400m to the west of the site at its closest point. In summary, the SSSI is notified for:
 - Tidal mudflats that support one of the largest areas of mixed saltmarsh on the south coast, and extensive cord-grass *Spartina anglica* marsh;
 - Farlington Marshes, supporting brackish marsh, fresh marsh, a large lagoon with associated reedbeds, *Agrostis stolonifera* grassland and scrub; and
 - Its international importance as a rich intertidal system supporting high densities of intertidal invertebrates and large populations of migrant and overwintering waders and wildfowl, dependent upon them and upon the extensive beds of eelgrass *Zostera* species. Waders of importance include: dunlin *Calidris alpina*; grey plover *Pluvialis squatarola*; black-tailed godwit *Limosa limosa*; redshank *Tringa totanus* and ringed plover *Charadrius hiaticula*. It also supports wintering dark-bellied Brent geese and shelduck *Tadorna tadorna* (**Appendix 4b**).
- 3.6. Chichester Harbour SSSI is circa 2km east of the site, and is notified for similar bird interest (**Appendix 4c**).



- 3.7. Sinah Common SSSI is situated circa 900m south of the site. In summary, the site is notified for its coastal habitats including the following: pioneer shingle vegetation, maritime shingle grassland which includes dry acid grassland and lichen rich acid grassland, mobile dune, semi-fixed dune, dune heath and an associated small area of saltmarsh. The site is also notified for endangered and nationally scarce plants (**Appendix 4d**).
- 3.8. All or parts of the above SSSIs are also subject of international designations (refer to **Appendix 2a** for mapping):
- Chichester and Langstone Harbours Special Protection Area (SPA) on account of wintering and passage migrant birds (**Appendix 4e**);
 - Chichester and Langstone Harbours Ramsar on account of the estuarine habitats and associated flora and internationally important wetland bird assemblage (**Appendix 4f**); and
 - Solent Maritime Special Area of Conservation (SAC) on account of estuarine habitat, cord-grass and Atlantic salt meadows. It also supports Desmoulin's whorl snail *Vertigo moulinsiana* (**Appendix 4g**).

Non-statutory ('local') Sites

- 3.9. In Hampshire non-statutory sites are named Sites of Interest for Nature Conservation (SINC). Those within 2km, and their reasons for designation, are provided in **Appendix 5**.
- 3.10. The site is covered by Saltmarsh Lane E SINC, which occupies a total area of 12.5ha, and includes similar farmland fields to the north. Data from HBIC states that the site qualifies as a SINC under criterion 6B² on account of Dark-Bellied Brent goose. HBIC returned a plan of 'Waders and Brent Goose Strategy sites', which confirms the site (part of H34E) had been found to support Brent goose, with 70 birds apparently recorded in 2010 (**Appendix 1**). This is a recent designation, the site not having being notified as a SINC in the 2012 data searches. As described later in this report, the value of the site and adjacent fields for Brent geese has been established through detailed surveys.
- 3.11. A number of similar farmland fields within 2km of the site that are known to be – or could potentially be – of value for Brent geese are identified as SINC.
- 3.12. There are five other SINC designated for botanical interest:
- Landfill Meadow (700m north);
 - Sinah Warren Village Marsh (700m west);
 - Beachlands East (1.25km southeast);
 - The Kench Scrubs (1.5km west); and
 - Hayling Island Beach (1.5km southeast).

² 6B relates to "Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle." (Ref. 10)

Habitats

- 3.13. Detailed habitat descriptions are given below and should be read in conjunction with plan **Habitat Features 1435/P01**.
- 3.14. The site is the southern portion of a large, flat farmland field (photograph 1). In 2011-12 it supported seeded grassland (rye grass *Lolium* sp.). In 2012 it supported cereals. The field is ploughed close to the boundaries, with a circa 2m wide margin of rough grasses, cow parsley *Anthriscus sylvestris*, and nettle *Urtica dioica*. No notable arable weed species were recorded.



Photograph 1: The site viewed from the northwest in winter 2012/2013, illustrating the arable field with stubble

- 3.15. The site is bounded to the west and south west by hedgerows:
- H1 is species-rich supporting ten woody species namely hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, dogwood *Viburnum opulus*, holly *Ilex aquifolium*, ash *Fraxinus excelsior*, oak *Quercus robur*, wild cherry *Prunus avium*, elder *Sambucus nigra*, buckthorn *Rhamnus cathartica* and sycamore *Acer pseudoplatanus*. It is 3-4m in height. Further north, outside the site, the hedgerow is unmanaged and is best described as a tree belt supporting field maple *Acer campestre*, hawthorn, cherry and buckthorn. There is a dry drainage ditch alongside; and
 - H2 hedge is, at 6m, taller and outgrown, comprising predominantly hawthorn and blackthorn, with field maple, elder and holly. Again, there is a dry ditch.
- 3.16. To the south and east the site is bounded by fences that form the rear boundaries of the adjacent properties. There are occasional semi-mature oak trees.
- 3.17. At the time of survey there was a small area of rough grass, ruderal and scrub on disturbed ground where the proposed access from the south would be constructed (photograph 2). There are also some rubble piles. The footings of a house, together with building materials, were present here, though there was no sign of construction work at the time of the survey. The sward comprised competitive species typical of unmanaged grassland, being dominated by false oat-grass *Arrhenatherum elatius*, Yorkshire fog *Holcus lanatus* and cock's-foot *Dactylis glomerata*, with forbs such as ribwort plantain, creeping buttercup, broad-leaved dock *Rumex obtusifolius*, teasel

Dipsacus fullonum and willowherb *Epilobium* sp. Presence of occasional sapling oak and silver birch *Betula pendula* is indicative of a lack of recent management. There is bramble scrub with oak, hawthorn and sycamore on the east, north and south margins of the grassland.



Photograph 2: Rough grassland at southern boundary

- 3.18. Outside of the site boundary are arable fields farmed on a similar rotation of grassland and cereals, bounded by hedgerows with associated wet or dry ditches. There are some small paddocks supporting improved and semi-improved grassland to the north, one of which is designated Landfill Meadow SINC owing to the presence of Pale Flax *Linum bienne*, and county scarce species.
- 3.19. The Billy Trail, a recreational route along a dismantled railway to the west, supports parallel hedgerows with occasional blocks of oak dominated woodland.

Fauna

Birds

- 3.20. As sated above, the site is an area of known importance to wintering waders and Brent geese. The findings of detailed surveys in winter season 2011/12 and 2012/13 at the site and adjacent fields are provided in **Appendix 2**.
- 3.21. In summary, the surveys indicated that none of the birds that are qualifying features of the nearby SSSI/SPA use the site, and the closest they were recorded is c.300m to the north of the site boundary. The seeded grassland present in 2011/2012 was suitable habitat for grazing Brent geese, though the cereal stubble present in the following 2012/13 season was sub-optimal.
- 3.22. The survey findings are at odds with the data returned by HBIC which states 70 Brent geese were recorded in 2010 (**Appendix 1**).
- 3.23. In spring and summer, the site would be expected to support small numbers of breeding birds in hedgerows and trees, though on the basis of the habitats present, notable species, and/or numbers of birds would not be expected.

Amphibians

- 3.24. No records of great crested newt *Triturus cristatus* within 2km of the site were returned; there are no suitable ponds within the site and no other ponds are shown on the Ordnance Survey mapping within 500m. There are similarly no records of common toad *Bufo bufo* (a UK BAP species and hence also Species of Principal Importance (SoPI³)).

Badger Meles meles

- 3.25. No evidence of badger was recorded within the site. The arable field is sub-optimal forage for badgers, which prefer permanent grassland that supports abundant earthworms and insect larvae.

Bats

- 3.26. Several records for bats within the 2km search area were returned, though these were either not for the site, or the exact grid reference was not specified. No buildings that could be used as roosts exist, and no trees at the site boundaries were considered likely to support roosting bats. Bats would be expected to use the site boundaries for commuting and occasional foraging, though the majority of the site is unsuitable.

Other Mammals

- 3.27. A record for European hedgehog *Erinaceus europaeus*, a UK BAP priority and SoPI, exists more than 1km away at Sinah Common to the west. This species may use private gardens adjacent to the site, and hedgerows and scrub located along boundaries, however, the majority of the site offers little cover and therefore little suitable habitat for hedgehog.

Reptiles

- 3.28. Records for the common species of reptile (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, and adder *Vipera berus*) exist within 1km of the site. The rough grassland, scrub and rubble in the south of the site could support reptiles (slow-worms being most likely), though it is small, and isolated from similar habitat from which reptiles might colonise. Consequently, reptile presence is quite unlikely.

Invertebrates

- 3.29. Owing to the nature of the habitats present, notable invertebrate species would not be expected.

³ As required under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, local authorities must have regard to the conservation of biodiversity, when carrying out their normal functions. Section 41 requires the Secretary of State to publish lists of Species of Principal Importance (SoPIs) and Habitats of Principal Importance (HoPIs) for the conservation of biodiversity in England

Section 4: Evaluation

Statutory Protected Sites

- 4.1. By virtue of their designation as internationally important sites on account of their ecological interest, all SSSIs are of **national ecological value**.
- 4.2. Some of these are further protected as SACs, SPAs and Ramsar sites, which are selected on account of them representing part of the European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Habitats Directive (as amended) and Annex I of the Birds Directive. Consequently, SACs and SPAs are of **European ecological value**.

Non- Statutory Protected Sites

- 4.3. SINC's are identified on the basis that they support ecological resources that are of importance within the district or county. They are therefore of **county ecological value**.
- 4.4. The site is part of Saltmarsh Lane E SINC, with the field to the west Saltmarsh Lane C SINC (H34E and H34C, respectively on the plan in **Appendix 1**). HBIC confirmed records exist of Brent geese (maximum of 70 and 66, respectively), but that the status of the sites for the species is "uncertain" since they *"fell below the minimum confidence threshold, meaning that sites need further survey work to inform their assessment"*. Policy DM23 "Uncertain Sites for Brent Geese and Waders" in the Havant Borough Draft Local Plan (Allocations) December 2012 states that *"studies will be required to be undertaken in accordance with an appropriate survey methodology in order to determine their level of importance"* of such sites (**Appendix 6**).
- 4.5. No Brent geese or waders were recorded in surveys undertaken in winter seasons 2011/12 and 2012/13. Based on this survey data, it is concluded that H34E and H34C would not qualify as "important" sites, which is defined as *"sites which are classed as important for Waders and/or Brent Geese"*.

Habitats

- 4.6. The arable field, rough grassland and scrub support no notable flora and are common and widespread habitat types. They are of **negligible value**.
- 4.7. Species-rich hedgerow H1 would qualify under the ecology and land-use criteria in the Hedgerows Regulations 1997. It is considered to be of **local value**. Hedgerow H2 supports fewer species and is of **site value**.
- 4.8. Semi-mature oak trees at the site boundaries are likely to provide opportunities for birds and invertebrates, and are not replaceable in the short to medium term. They are of **local value**.
- 4.9. Outside of the site boundary, the woodland and hedgerows along the Billy Trail are of **local value**. Other predominantly arable habitats nearby are of **negligible value**.

Fauna

- 4.10. Whilst the site would support breeding birds, invertebrates and small mammals, it is unlikely that they would be of greater than **site value** to any of these.



Section 5: Potential Ecological Effects, Mitigation and Enhancement

Proposed Development

- 5.1. The site is proposed for residential (60 dwellings) and employment development, with access from the southern and western boundaries.
- 5.2. Potential effects on valuable ecological resources - and the mitigation strategy to address them - are described below, with reference to relevant policy (in the Local Plan and the Core Strategy Pre-Submission) and legislation, which is set out in **Appendix 6**.
- 5.3. In accordance with the NPPF and local policies, ecological enhancements that deliver biodiversity gain are also described, which have been informed by local and national strategies, including BAPs.

Langstone Harbour SSSI and Chichester Harbour SSSI; Chichester and Langstone Harbours SPA

- 5.4. Whilst the legal mechanism for protection of the SSSIs and SPA differ, the reasons for their designation - and hence potential effects and requirement for mitigation - are similar, and hence they can be considered together.

Potential Impacts

- 5.5. Whilst there are some historic data, given none of the birds for which the SSSIs and SPA are designated were recorded at the site or in adjacent fields during surveys, direct effects which could adversely affect the integrity of the SSSIs and the SPA are not likely.
- 5.6. However, at a meeting Natural England and Hampshire County Council's ecologist advised that construction noise above 69dB (which could be exceeded by piling or tipping) can cause birds to flush (**Appendix 3**). If not controlled, this could lead to indirect effects to birds using nearby fields during the winter months. Alone, this effect is unlikely to affect the integrity of the SSSIs and the SPA, though could be significant at a more local level.
- 5.7. The most significant potential issue is associated with increased people and pets as a result of proposed new housing. Whilst the site and adjacent farmland does not appear to be of importance in maintaining the integrity of the SSSIs and the SPA, increased recreational use of the local area could affect the Brent geese and waders, through induced stress, and effects associated with displacement of birds to other parts of the estuary. Such effects have been explored through "The Solent Disturbance and Mitigation Project", and Natural England has confirmed that the potential for such issues to result in a significant effect upon the integrity of the SPAs "*cannot be ruled out*" (Ref. 9).
- 5.8. At a meeting with Havant Borough Council, Natural England and Hampshire County Council's ecologist, it was confirmed that whilst the development at the site alone is not likely to affect the integrity of the SPA (and the Langstone Harbour SSSI), in combination with other residential developments, an impact was possible (**Appendix 3**).



- 5.9. The SPA is protected under the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations'; see **Appendix 6**). Regulation 61 ensures that competent authorities (in this case, Havant Borough Council) can only agree to a plan/project which is likely to have a significant effect (alone or in-combination) after having determined that it will not adversely affect the integrity of any European site (subject to imperative reasons of over-riding public interest and consideration of alternative solutions). Impacts associated with recreational activities that can be linked to plans or projects should therefore be avoided through the correct application of Regulation 61 by competent authorities. Regulation 61 applies to all European sites and therefore covers both SACs and SPAs (listed Ramsar features are also protected as a matter of government policy).
- 5.10. Consequently, mitigation is required to ensure such impacts of the proposed residential development are avoided.

Mitigation Strategy

- 5.11. Disturbance to birds during the construction phase could be avoided by timing works that might exceed the noise threshold to ensure that they do not occur during the winter months (October to February, inclusive (Ref. 8)), when the Brent geese would not be likely to be present on nearby fields. This would be included in a construction method statement.
- 5.12. A bespoke strategy to address the effects of development at the site was discussed with Natural England and the councils. However, this was not progressed because a strategic approach across the affected planning authorities is to be adopted to address these potential significant cumulative effects. The principles of this strategy are set out in the recently published Phase III of the Solent Disturbance and Mitigation Project (Ref. 9). It is the intention that each planning authority will set up a mechanism to address the potential effects associated with increased recreational use as a result of development, with each developer making a financial contribution to deliver mitigation, which would be controlled by a legal mechanism (S106 or CIL).
- 5.13. At the time of writing, the mechanism for delivery of the strategy had not been established, but it has been agreed with Havant Borough Council that such a contribution would be made at the appropriate time, in order that adverse effects as a result of development of the site can be avoided. This would be controlled by a S106 agreement.

Other Statutory Protected Sites

- 5.14. Given the distances involved and scale of development proposed, it is not likely that development of the site would affect the integrity of Solent Maritime SAC or Sinah Common SSSI.

Non-statutory Protected Sites

- 5.15. The issues associated with the partial loss of Saltmarsh Lane E SINC as a result of development relate to potential impact to Brent geese, and have been addressed above. The same applies to Saltmarsh Lane C SINC.
- 5.16. Owing to the scale of development and distances involved, no adverse effects to the five other SINC designated for botanical interest within 2km are anticipated.

Habitats

- 5.17. The proposed development would result in the loss of arable and rough grassland habitat of negligible value, requiring no mitigation.
- 5.18. Some loss of discrete lengths of species-rich hedgerow H1 of local value would be required to facilitate access to the proposed employment development. This could be compensated by new native hedgerow planting along the northern boundary of the site. Unaffected hedgerows would be retained within managed buffers to protect them from degradation once the development is complete.
- 5.19. Oak trees of local value would be retained, and to avoid damage during the construction phase, would be protected in accordance with BS:5837. This would also apply to retained hedgerows.
- 5.20. Other potential effects associated with the construction phase would be avoided or mitigated by adopting a construction method statement to:
- Control dust during the construction phase and to avoid degradation of retained habitats on site and close by;
 - Control run-off to avoid pollution entering the nearby ditch network, and ultimately the nearby coastal protected sites; and
 - Control noise, as described above.

Fauna

Birds

- 5.21. Potential effects to wintering birds have already been discussed.
- 5.22. All native wild birds being protected under the Wildlife and Countryside Act (WCA) 1981 (as amended) whilst nesting. Clearance of parts of hedgerow H1 and scrub would be timed to avoid the bird nesting season, or else it would be preceded by a survey to confirm disturbance would not occur.

Bats

- 5.23. No features likely to support roosting bats would be affected by development. There is the potential for off-site properties to support bats, though the habitats within the site are not likely to be of importance for bat foraging. Provided lighting is designed appropriately, development should not affect bat commuting routes in the event they exist.

Reptiles

- 5.24. There is some albeit low potential for slow-worm to be present in the small area of rough grassland, scrub and rubble. All native reptiles are protected from harm under the WCA 1981. Prior to construction, the grassland could be subject of phased strimming (one cut to 15cm, followed by a second cut to ground level a few days later in suitable weather) to encourage slow-worm into adjacent gardens, out of harm's way. Rubble piles could be dismantled by hand, and any slow-worm moved from the affected area.



Other

- 5.25. No specific mitigation in respect of badger, amphibians or invertebrates is required.
- 5.26. The proposals in respect of reptiles will also protect hedgehog, if present.

Summary of Enhancement Opportunities

- 5.27. As required by planning policy, opportunities to deliver biodiversity gain as a result of development have been explored, and are as follows:
- Landscaping design to include: native hedgerow planting within managed buffers (2-3m width); native tree planting; green walls (comprising ivy or other climbing plants) on commercial buildings;
 - Provision of bird nest boxes on new buildings for birds of conservation concern, such as house sparrow, house martin and swift;
 - Install integral bat boxes into buildings to improve roosting opportunities; and
 - Manage new and retained habitats, and provisions for fauna.



Section 6: Summary and Conclusion

- 6.1. In common with any residential development in the vicinity of the Solent, the most significant issue with respect to future development of the site relates to the potential for adverse effects to the nearby SSSIs and SPAs that are designated for dark-bellied Brent geese and wading birds. In combination with other proposed residential development in the vicinity of the Solent, predicted increased recreational use has the potential to disturb the birds.
- 6.2. A strategy has been devised through the Solent Disturbance and Mitigation Project to mitigate such potential effects of residential development (Ref. 9). At the time of writing, the exact mechanism for delivery of the strategy in Havant Borough had yet to be devised. However, it has been agreed with the council that – once a mechanism has been adopted – a contribution to the mitigation strategy would be made. This would be controlled through a S106.
- 6.3. Impacts of construction noise upon Brent geese and wading birds would be avoided by timing noisy works to avoid the winter months.
- 6.4. No other protected sites are likely to be affected.
- 6.5. The majority of the site is of negligible value, though some species-rich hedgerow of local value would be affected by development. Retained hedgerows and trees of local value would be protected during construction, and there are opportunities to more than compensate habitat losses through landscape design and building design adopting ecological design principles.
- 6.6. A strategy to avoid impacts to nesting birds and reptiles, if present, is described, together with measures to provide better opportunities for birds of conservation concern, and bats.
- 6.7. An appropriate mechanism for controlling delivery of the mitigation and enhancement strategy would involve the use of planning conditions to secure:
 - The landscape design and provisions for fauna;
 - A construction method statement, including protected species strategies; and
 - A management plan for habitats within the site boundary.
- 6.8. In conclusion, with the implementation of the mitigation and enhancement strategy, the proposed development would be in conformity with planning policy that seeks to protect and enhance ecological resources.

References

- 1 Institute of Ecology and Environmental Management (2006). *Guidelines for Ecological Impact Assessment in the United Kingdom* (version 7 July 2006). <http://www.ieem.org.uk/ecia/index.html>. Institute for Ecology and Environmental Management, Winchester
- 2 Natural Area Profile 75: South Coast Plain & Hampshire Lowlands
<http://www.naturalareas.naturalengland.org.uk/Science/natural/profiles%5CnaProfile75.pdf>
- 3 UK Biodiversity Action Plan (<http://www.ukbap.org.uk/>)
- 4 Hampshire Biodiversity Action Plan
<http://www.hampshirebiodiversity.org.uk/hampshire%20BAP.html>
- 5 Havant Biodiversity Action Plan
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- 6 Joint Nature Conservation Committee (2007). *Handbook for Phase 1 habitat survey - a technique for environmental audit*. JNCC, Peterborough.
- 7 Botanical Society of the British Isles. www.bsbi.org.uk
- 8 King, D. (2010) *Solent Waders and Brent Goose Strategy 2010*. Hampshire and Isle of Wight Wildlife Trust.
- 9 Liley, D. & Tyldesley, D. (2013). *Solent Disturbance and Mitigation Project: Phase III. Towards an Avoidance and Mitigation Strategy*. Unpublished report. Footprint Ecology/David Tyldesley & Associates
- 10 Criteria for selecting Sites of Importance for Nature Conservation in Hampshire (October 1996)



Appendix 1: Waders and Brent Goose Strategy Sites



Details of the Solent Wader and Brent Goose Strategy sites within your search area:

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary
H104	31	Uncertain	0			Waders in 2010 strategy
H30	78	Uncertain	40	Uncertain	Yes	Waders and Brent in 2010 strategy
H31A	0	Uncertain	12	Uncertain	Yes	Brent in 2010 strategy
H31B	0	Uncertain	0		Yes	Positive records from 2002 strategy only
H34A	0	Uncertain	9	Uncertain		Brent in 2010 strategy
H34B	0	Uncertain	0		Yes	Positive records from 2002 strategy only
H34C	0	Uncertain	66	Uncertain	Yes	Brent in 2010 strategy
H34D	7	Uncertain	0			Waders in 2010 strategy
H34E	0	Uncertain	70	Uncertain	Yes	Brent in 2010 strategy
H40A	0	Uncertain	400	Uncertain	Yes	Brent in 2010 strategy
H44	0		0		Yes	Positive records from 2002 strategy only
H45	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H46A	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H46B	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H47	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H48C	97	Uncertain	1000	Important	Yes	Waders and Brent in 2010 strategy
H48D	45	Uncertain	375	Uncertain	Yes	Waders and Brent in 2010 strategy
H48E	0	No recorded use	0		Yes	Positive records from 2002 strategy only
H48F	138	Uncertain	0		Yes	Waders in 2010 strategy
H48G	53	Uncertain	150	Uncertain	Yes	Waders and Brent in 2010 strategy
H49A	180	Uncertain	0		Yes	Waders in 2010 strategy
H49B	141	Uncertain	1	Uncertain		Waders and Brent in 2010 strategy
H49C	0	Uncertain	0		Yes	Positive records from 2002 strategy only
H49D	0	Uncertain	0		Yes	Positive records from 2002 strategy only

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Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary
H49E	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H49F	0	Uncertain	0		Yes	Positive records from 2002 strategy only
H49G	24	Uncertain	0			Waders in 2010 strategy
H49H	19	Uncertain	750	Important	Yes	Waders and Brent in 2010 strategy
H49I	29	Uncertain	0	Uncertain	Yes	Waders in 2010 strategy
H49J	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H50A	0	Uncertain	0			Surveyed for 2010 strategy without positive results
H50B	1	Uncertain	460	Important	Yes	Waders and Brent in 2010 strategy
H50C	3	Uncertain	52	Uncertain		Waders and Brent in 2010 strategy
H82	110	Important	150	Important		Waders and Brent in 2010 strategy
H83	113	Uncertain	60	Uncertain		Waders and Brent in 2010 strategy
H84	30	Uncertain	130	Important		Waders and Brent in 2010 strategy
H85	134	Important	584	Important		Waders and Brent in 2010 strategy

Notes:

- This information is based on the 'Wader and Brent Goose Strategy 2010' but refers to information held separately in the 'Brent Goose Strategy 2002' where the more recent data is deficient. Both strategies are published by the Hampshire and Isle of Wight Wildlife Trust.
- The 'site code' field relates to the unique reference given to each polygon within both strategies. This 'site code' field can be found on the map accompanying this document.
- In the above table, if the classification is blank, the Maximum count field should also be blank (rather than '0').
- During the 2010 survey work, a method of scoring the confidence for the inclusion of sites was employed (for methodology please refer to the 2010 strategy report). The classification fields in the table above refer to this level of confidence, explained more fully in the confidence table below;

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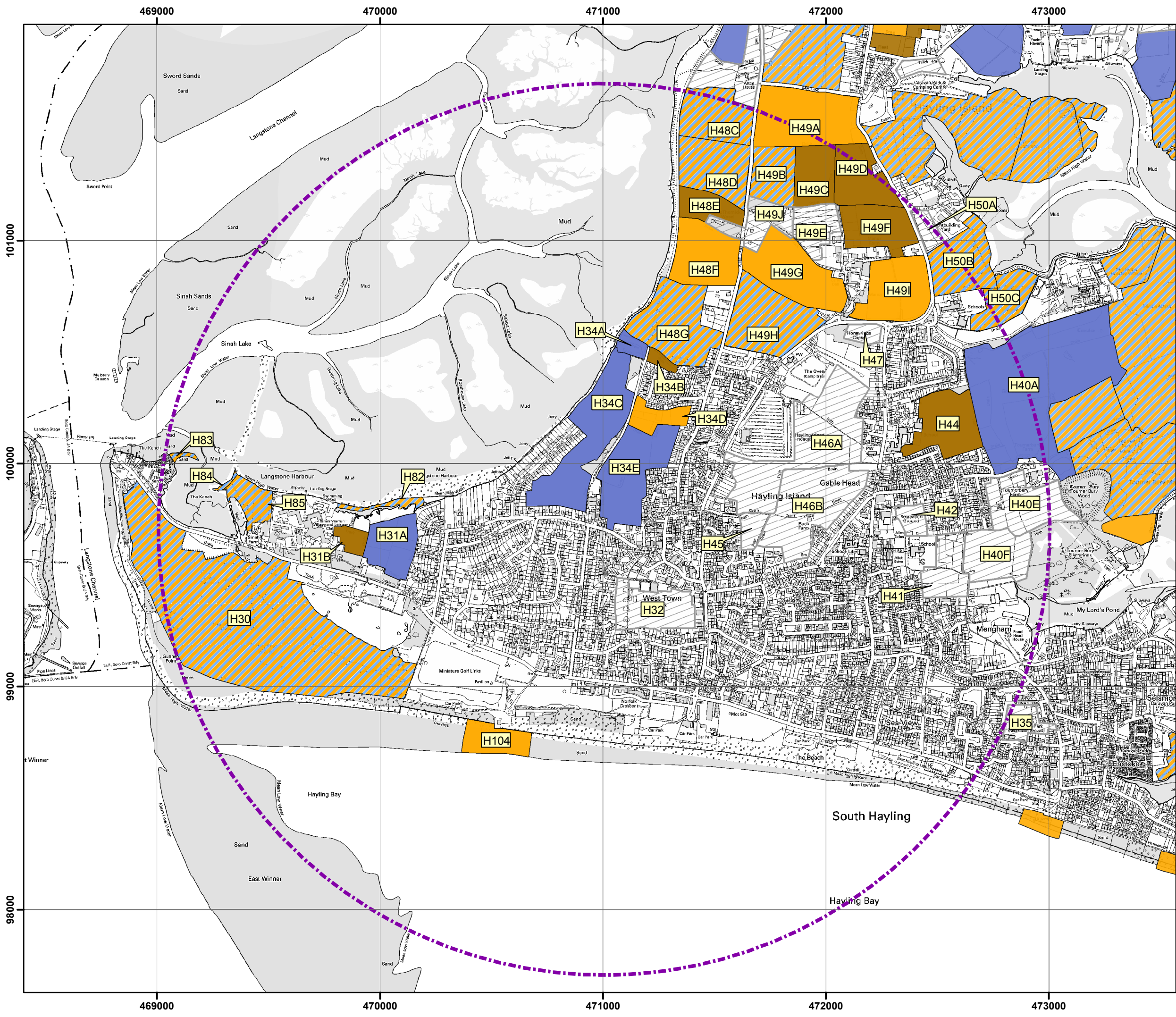
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Classification Explanation (Level of Confidence)	
Important	Sites which are classed as important for Waders and/or Brent Geese
Uncertain	Sites that fell below the minimum confidence threshold, meaning that sites need further survey work to inform their assessment
No recorded use	Surveyors recorded when birds were not seen at a site. Where regular negative counts were recorded, and the confidence threshold was met, sites were classified as "no recorded use"
Blank	Confidence scoring was not carried out

- Where up-to-date data does not exist in the 2010 update for sites identified as "important" in the 2002 Strategy, the 2002 Strategy remains the best available data source. It is recommended that those sites identified as important in 2002 but lacking updated data be considered as "uncertain" and warranting further investigation.
- **If you would like the full dataset for the 2010 strategy, which includes more detailed GIS layers, this can be supplied by CD. Please contact HBIC for further information.**

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HBIC Ref: 4033

**Waders and Brent Goose Strategy
sites within 2km of 'Land between
Furniss Way & Dancers Way,
Hayling Island' (SZ710997):**

Legend

- Search Area
- Wader & Brent Geese Sites (labelled cream)**
- Surveyed for 2010 strategy without positive results
- Brent in 2010 strategy
- Waders in 2010 strategy
- Waders and Brent in 2010 strategy
- Positive records from 2002 strategy only

Created: 20/03/2013
Scale at A3: 1:16,000

0 137.5 275 550 825 1,100 Meters

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Appendix 2: Wintering Bird Survey Results





BRENT GOOSE COUNTS – SOUTH END OF HAYLING BILLY TRACK

Date	Time on site (High Tide)	Weather (cloud, wind)	Species	Field H34E		Field H34D	Field H34C		Use	Disturbance	Comments
				S	N		S	N			
9/10/12	16:00 (18:30)	Overcast, drizzle, E3	BG	0	0	0	0	0	-	-	100 some distance away in Langstone Harbour.
27/10/12	12:00 (11:03)	1/8 cloud, wind N5	BG	0	0	0	0	0	-	-	32 just offshore in Langstone Harbour.
12/11/12	11:00 (09:32)	Overcast, drizzle, SW1	BG	0	0	0	0	0	-	-	50 just offshore in Langstone Harbour. 1 adult in H48E.
26/11/12	11:00 (09:54)	7/8 cloud, wind SW1	BG	0	0	0	0	0	-	-	None in the vicinity.
6/12/12	15:00 (16:29)	Overcast, wind NW3	BG	0	0	0	0	0	-	-	“
17/12/12	14:10 (14:10)	1/8 cloud, wind W3	BG	0	0	0	0	0	-	-	350 in Langstone Harbour flew to H48F*.
5/1/13	15:10 (16:58)	Overcast, wind W1	BG	0	0	0	0	0	-	-	One adult just offshore in Langstone Harbour.
17/1/13	15:00 (15:19)	6/8 cloud, wind E2	BG	0	0	0	0	0	-	-	None in the vicinity.
2/2/13	15:00 (15:24)	1/8 cloud, wind NW4	BG	0	0	0	0	0	-	-	320 flew over H48G to land in Langstone Harbour. 80 more in H49H.
16/2/13	14:30 (15:28)	7/8 cloud, still.	BG	0	0	0	0	0	-	-	None in the vicinity.
2/3/13	14:30 (14:18)	Overcast, wind NE3	BG	0	0	0	0	0	-	-	11 in Langstone Harbour (but not close to the site). 40 in H48E
15/3/13	14:00 (13:38)	Overcast, wind SW5	BG	0	0	0	0	0	-	-	None in the vicinity.

Field H34E divided into N/S by ditch; field H34C by a line across from end of the houses. Both fields containing stubble in winter 2012/13.

*note: a bird scarer (and scarecrow) are present in H48F this winter, though not running all the time.

The fields alongside the Billy Track (H48D-G) were much less used this winter than in 2011-12. Many contain stubble (as do the large fields in the middle of Hayling e.g. H60N), although some have been winter-sown. Brent Geese still using improved grassland fields at the north end of the island.

Date	Time on site (High Tide)	Weather (cloud, wind)	Species	Field H34E		Field H34D	Field H34C		Use	Disturbance	Comments
10/11/11	10:45 (10:57)	7/8, E1	BG	0	0	0	0	1	Feeding	-	A solitary juvenile.
24/11/11	09:45 (09:59)	6/8, SW2	BG	0	0	0	0	0	-	N/A	c.1200 in H48F/G.
10/12/11	10:05 (11:05)	1/8, W1	BG	0	0	0	0	0	-	N/A	c.1500 in H48F/G.
24/12/11	10:00 (10:34)	6/8, 0	BG	0	0	0	0	c.465	Feeding	-	165 joined by 300 that flew in from north (probably disturbed from another field).
10/1/12	12:00 (11:56)	6/8, W1	BG	0	0	0	0	0	-	N/A	c.1400 in H48F/G.
23/1/12	12:00 (11:18)	6/8, W2	BG	0	0	0	0	0	-	N/A	c.1000 in H48F/G.
12/2/12	13:25 (14:25)	8/8, W1 (during a cold snap).	BG	0	0	0	0	c.300	Feeding	Dog walker?	Arriving from adjacent part of Langstone Harbour, again probably having been disturbed.
“	“	“	L.	0	0	10	0	1	Feeding	-	An isolated occurrence, presumably weather related.
“	“	“	GP	0	0	0	0	139	Feeding	-	An isolated occurrence, presumably weather related.
24/2/12	13:00 (12:56)	8/8, SW2	BG	0	0	0	0	0	-	N/A	c.600 in H48D.
10/3/12	13:40 (12:37)	1/8, 0	BG	0	0	0	0	0	-	Dog walker?	c.600 in adjacent harbour (presumably disturbed from fields).
19/3/12	10:30 (09:48)	0/8, 0	BG	0	0	0	0	c.500	Feeding	Dog walker	Flew in from adjacent water at 11:00, but flushed back there after 20 minutes.

Field H34E divided into N/S by ditch; field H34C by a line across from end of the houses. Both fields containing seeded grassland in winter 2011/12.

BG = brent goose; L. = lapwing, GP = golden plover

In addition to the north end of H34C, fields H48D-G, located further north along the west Hayling shore, were used much more regularly during this survey, with up to 1500 present. However, birds are regularly disturbed by dog walkers in all these areas. They will often fly to the adjacent water before returning to the fields to continue feeding.

Appendix 3: Notes of a meeting with Havant Borough Council, Natural England and Hampshire County Council





Land at Station Road, Hayling

Meeting to Discuss SPA Strategy

10.30am 25th April 2013

Havant Borough Council, Public Service Plaza, Civic Centre Road, Havant PO9 2AX

Attendees:	Daphne Haywood	Havant BC
	Lucy Howard	Havant BC
	Simon Thompson	Natural England
	Tristan Norton	HBIC/Hants CC
	Thomas Hickman	Gillenden
	Charles Moran	CMA Planning
	Julian Arthur	Tyler Grange

1. Introductions and Purpose of meeting

- a. To discuss what would be required for a planning application to address the policies/legislation protecting the nearby SPA bird sites. The key issue being potential for indirect effects from disturbance as a result of increased numbers of people in the vicinity of the SPA and the nearby high tide feeding areas.
- b. JA noted that the client wanted to submit an application shortly (ideally May 2013), and was aware that this would be in advance of adoption of a cross authority strategy and mechanism for delivery to address indirect effects to the SPA, which is in preparation. The objective of the meeting was to discuss options and a means of mitigating effects of development in advance of adoption of a strategy.

2. Planning background

- a. The site is allocated in the draft SHLAA for residential and employment under Policies UE21/BD73.
- b. Status of Development Plan – Core Strategy Pre Submission to be published early May 2013. LH advice to wait until this before any application, because it will be important to refer to ongoing support for the site's allocation.
- c. HRA of plan, status and timetable – an HRA screening of the SHLAA has been undertaken. LH advised that Alexia Kemp at HBC is leading on this, and that we should involve her in discussions concerning this application.
- d. Solent Disturbance and Mitigation Project (SDMP) – ST advised that Phase III of SDMP, which sets out mitigation recommendations, will be published end of May 2013. It is intended that each residential development will make a financial contribution to HBC to deliver mitigation, which would be controlled by CIL. However, Natural England acknowledges that it will take some time for this 'full scheme' to be set up. So for the first 12 months an 'interim scheme' for mitigation is recommended, to enable development to come forward.
- e. NE sought a legal opinion that stated access management (a key tenet of the mitigation strategy) falls outside of CIL and the interim strategy can therefore be controlled by S106, providing more flexibility until full scheme adopted.

- f. The nearby Goldring Close site was discussed. This is subject of an appeal. To date they have not submitted a mitigation package to address effects to the SPA, which is seen as a key point at issue.

3. Ecology issues

- a. The winter bird survey data provided by JA was taken as read. ST and TN advised that this would be sufficient to inform the planning application.
- b. In summary, the site does not appear to be of importance to the birds for which the SPA is designated. In common with farmland on the island, it is farmed on rotation between grassland and cereal crops, the latter not being used by the birds. Fields close by are more important to the birds.
- c. JA considered that there were no other substantive issues as a result of proposed development. As required by policy, opportunities to deliver biodiversity gain through development design would be sought.

4. Mitigation Strategy for site and planning application. ST advised that:

- a. Indirect effects to the SPA are most likely as a result of the potential increase in recreation, with – as indicated by SDMP research – dog walkers being the key issue. Thus, management of recreation was likely to be an important part of the strategy. The Suitable Accessible Natural Greenspace (SANG) approach adopted for nearby Dorset Heathland sites was discussed, though ST advised that a) the need for alternative greenspace was not as acute for the Solent SPAs when compared with heathland sites, as impacts of disturbance considered to be less significant b) consequently, the SDMP mitigation proposals are far less prescriptive than those for nearby Dorset heathland SPA, and in any event, it was not possible to re-create the coast and recreational users will always be drawn to it.
- b. ST has commented on the SDMP Phase III and stated that mitigation could involve one or a combination of the following:
 - i. *Enhancement of POS elsewhere in Havant* (need not be close to the site) to make it more attractive to dog walkers e.g. circular walk, more dog bins. Would require some evidence that would be successful based on a recreation audit of users/dog walkers close to the POS. Once enhanced, the frequency of dog bin emptying could be used as evidence of increased use. It would not be appropriate to encourage increased dog use in POS heavily used by children.
Action: DH to liaise with Paul Hurst in HBC parks department to determine if there are POSs that might be suitable candidates.
Action: a recreation study would be needed for planning, assuming a suitable site identified.
 - ii. *Diversion of users away from sensitive area* – this can be achieved by signage and wardening. However, in this case, given the site's close proximity to the Hayling Billy Trail, which is a key recreational route through sensitive bird areas, this approach is not considered worthy of further consideration. Furthermore, for this size of development a warden would be prohibitively expensive.
 - iii. *Protection of best sites for birds* – if sites were known where recreational management could be improved (fencing, signage) then this could mitigate effects. Though could be difficult to secure with 3rd party landowners.
Action: JA to contact Peter Potts at HCC and Chris Coburn RSPB to identify possible sites.
 - iv. *Construction Mitigation* – ST and TN advised that construction noise should be controlled during winter months. Noise above 69dB (which could be exceeded by piling or tipping) can cause birds to flush.

- v. *Timescales* - The strategy must be secured in perpetuity (120 years), as required by the Habitats Regulations. It must be in place by first occupation i.e. when effects likely to occur.
- vi. *Mechanism for Securing Delivery* – it was agreed that S106 would be an appropriate mechanism. A management plan would be needed.
- c. ST/LH considered a cost-benefit approach should be adopted. By applying for planning in advance of the adopted strategy, it might be less cost effective than to wait until autumn 2103 when strategy adopted and a CIL contribution (which might be cheaper) could be made. The SDMP Phase III includes indicative costs, so a decision could be made once the financial implications of different options have been considered.
- d. ST stated that NE would comment on the acceptability of the strategy submitted with planning. If not sufficient would submit a holding objection.

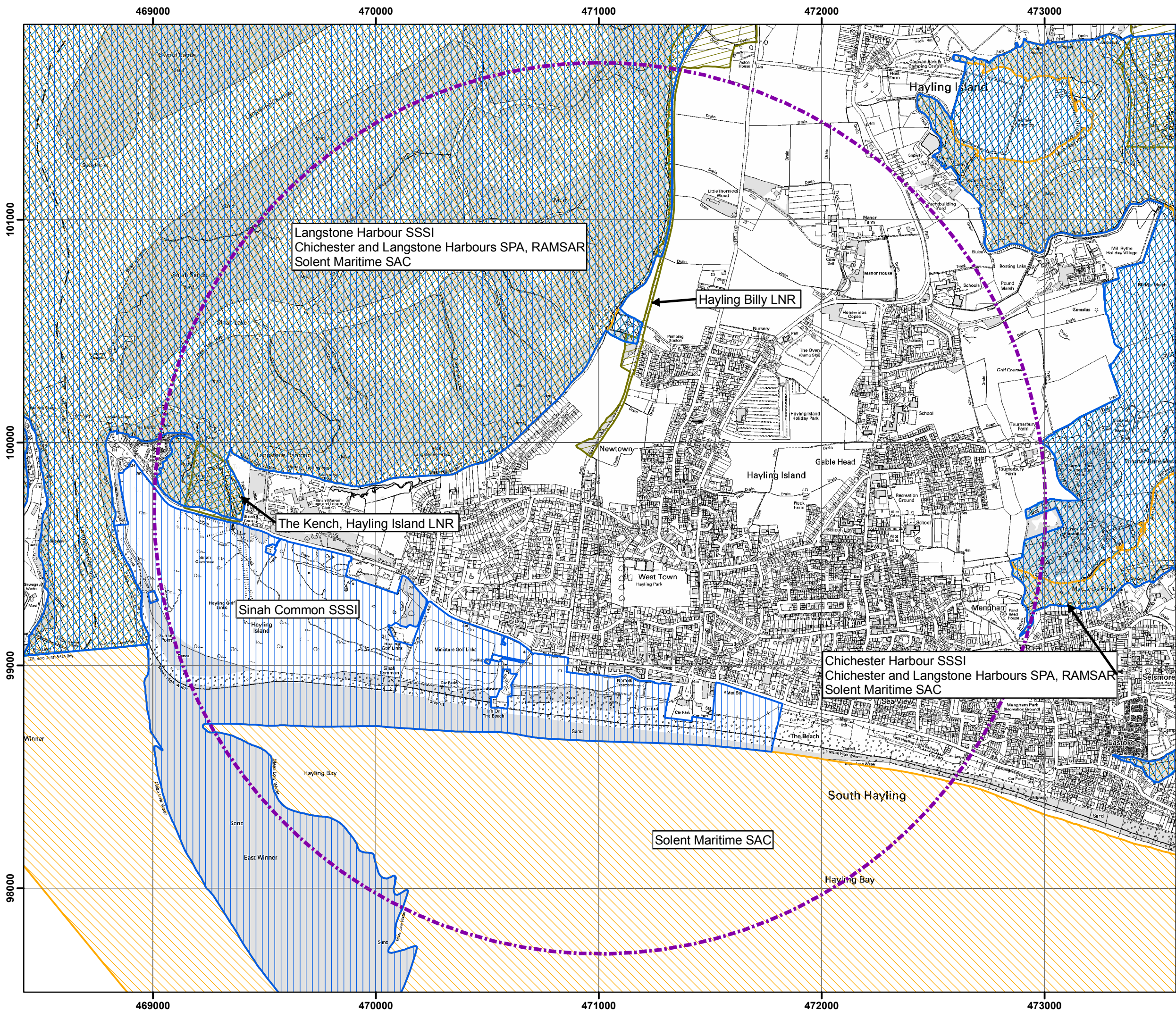
5. HRA of planning application

- a. ST advised that we have sufficient information in respect of the birds' use of the local area. Provided the mitigation was satisfactory, whilst an HRA screening of the application would be needed, a full HRA would not be necessary.

Appendix 4: Statutory Protected Sites Information

- 4a Plan of Statutory Protected Sites
- 4b Langstone Harbour SSSI Citation
- 4c Chichester Harbour SSSI Citation
- 4d Sinah Common SSSI Citation
- 4e Chichester and Langstone Harbours SPA Citation
- 4f Chichester and Langstone Harbours Ramsar Citation
- 4g Solent Maritime Special Area of Conservation Citation





Hampshire Biodiversity
Information Centre

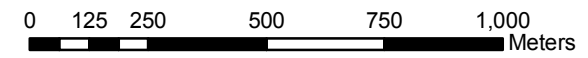
HBIC Ref: 4033

**Statutory designated sites
within 2km of 'Land between
Furniss Way & Dancers Way,
Hayling Island' (SZ710997):**

Legend

- Search Area
- SSSI
- SAC
- SPA
- LNR
- RAMSAR

Created: 15/03/2013
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Please note: The boundaries for statutory sites have been provided as digital data from Natural England (NE); this digital data is indicative not definitive. Paper maps produced by NE at the time the sites were designated show the official site boundaries.

File ref:

County: Hampshire

Site Name: Langstone Harbour SSSI

Local Planning Authority: Hampshire County Council, Havant Borough Council, Portsmouth City Council

National Grid Reference: SU 700030

Ordnance Survey Sheet 1:50,000: 197 **1:25,000:** SU 60, 70; SZ 69, 79

Area: 2,069.4 (ha) 5.113.4 (ac)

Date Notified (Under 1949 Act): 1958 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1985 **Date of Last Revision:** -

Other Information:

Farlington Marshes (118.9 ha) is a Local Nature Reserve owned by Portsmouth City Council and managed by the Hampshire and Isle of Wight Naturalists' Trust under a long lease; 550 ha including a series of saltmarsh islands and extensive mud flats are owned by the Royal Society for the Protection of Birds.

Reasons for Notification:

Langstone Harbour is a tidal basin which at high water resembles an almost land-locked lake. At low water extensive mud flats are exposed, drained by three main channels which unite to make a common and narrow exit to the sea. The harbour includes one of the largest areas of mixed saltmarsh on the south coast, and extensive cord-grass *Spartina anglica* marsh in an advanced state of degeneration. The Site of Special Scientific Interest including Farlington Marshes, a peninsula of grassland and marsh on reclaimed tidal silt protected by a sea wall; and a similar but much smaller area at Southmoor in the north-east of the harbour. The harbour is of international importance as a rich intertidal system supporting high densities of intertidal invertebrates and large populations of migrant and overwintering waders and wildfowl, dependent upon them and upon the extensive beds of eelgrass *Zostera* species. The *Zostera angustifolia* and *Z. noltii* beds are among the largest in Britain. The harbour is among the twenty most important intertidal areas in Britain as a summer and autumn assembly ground for waders during the moult (when they require abundant high protein food) and as a post-moult wintering ground. Dunlin *Calidris alpina* often exceed 30,000 individuals, or 6% of the British winter population, or 3% of the European and North African wintering population. Grey plover *Pluvialis squatarola* and black-tailed godwit *Limosa limosa* achieve numbers which represent 1-2% of the European and North African migration flyway population; and redshank *Tringa totanus* and ringed plover *Charadrius hiaticula* do so periodically. At times as many as 20% of the black-tailed godwit, 8% of the ringed plover and 8-10% of the grey plover wintering in Britain are present in the harbour. The total numbers of waders present sometimes exceeds 40,000. Langstone Harbour and the adjoining and connected Portsmouth and Chichester Harbours form a single, coherent ecosystem which is among the ten most important intertidal areas for waders in Britain. In the 1970s and 1980s Langstone Harbour alone has consistently supported in excess of 5,000 wintering dark-bellied geese *Branta bernicla*, or 5-10% of the world population depending on fluctuating population levels. It has supported up to 2.5% of the European winter population of shelduck *Tadorna tadorna* and regularly supports substantial numbers of other ducks in autumn and winter.

Farlington Marshes intrudes into the north-west sector of the harbour. Its vegetation is strongly influenced by drainage water from the chalk and by

brackish water infiltration. The marshes embrace a variety of habitats – brackish marsh, fresh marsh, a large lagoon with associated reed *Phragmites* beds, *Agrostis stolonifera* grassland and scrub. It is a vital high water wader roost for the Harbour and a major feeding ground for Brent geese after the *Zostera* beds in the Harbour have been consumed. Few comparable sites have survived agricultural improvement on the south and east coasts of England, where the habitat was formerly common: the grassland flora is especially rich for reclaimed silt, and includes over 50 species of grasses. Southmoor shares these characteristics but is much smaller.

Langstone Harbour has been the forum for important ecological research on estuarine eutrophication and the relationship with algal blanketing of the muds, changes in invertebrate communities and changes in the composition of vertebrate predator communities.

COUNTY: WEST SUSSEX/HAMPSHIRE

SITE NAME: CHICHESTER HARBOUR

DISTRICT: CHICHESTER/HAVANT

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: CHICHESTER DISTRICT COUNCIL; HAVANT BOROUGH COUNCIL

National Grid Ref: SU 760 000

Area: 2657 ha 6566.7 acres W Sussex
3695 ha 9130.3 acres Total

Ordnance Survey Sheet 1:50,000:197

1:10,000: SU 70 NW,NE,SW,SE, SU 80 NW, SW,SE, SZ 79
NW,NE, SZ 89 NW

Date Notified (Under 1949 Act): 1970

Date of Last Revision: 1980

Date Notified (Under 1981 Act): 1984 (Hants) 1985 (W Sussex)

Other Information: This site lies within the South Coast Plain. It includes Nutbourne Marshes Local Nature Reserve. The site is listed in 'A Nature Conservation Review' and is a Geological Conservation Review site.

Reasons for Notification:

Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.

The intertidal area is fragmented in the upper reaches of the harbour by intruding tongues of land giving a very long and varied coastline. The harbour exhibits a wide range of intertidal and associated terrestrial habitats and with the neighbouring Langstone and Portsmouth Harbours is unusual in providing a large volume of sheltered saline water fed by a few streams of only low volume. The extensive intertidal mudflats are the feeding grounds, at the relevant times of year for internationally important numbers of ringed plover, grey plover, redshank, black-tailed godwit, dunlin, sanderling, curlew and greenshank (the latter two in autumn particularly). Bar-tailed godwit numbers are of European importance. Amongst the wildfowl, shelduck, teal and dark-bellied brent goose numbers are of international importance with 5% of the world population of the latter. The unimproved permanent pasture behind the sea wall provides alternative feeding sites for the geese and major high tide wader roosts. Some of this pasture is floristically rich being a red fescue *Festuca rubra* sward with scarce species such as green-winged orchid *Orchis morio* and adder's tongue fern *Ophioglossum vulgatum*.

The lower saltmarsh habitat fringing the mud flats is dominated by cord grass *Spartina anglica* and in most places the upper saltmarsh is rather restricted by the sea wall but there are some pure stands of sea purslane *Halimione portulacoides* while in some areas there is also sea lavender *Limonium vulgare*, sea aster *Aster tripolium* and other saltmarsh species.

Shingle occurs as spits and islands and most are rather unstable permitting little vegetation to become established. This habitat forms the main breeding grounds in the harbour for ringed plover, blackheaded gull and three species of terns. The extensive sand dunes at East Head are dominated by marram grass *Ammophila arenaria* although the degree of ground cover varies from 90% to 10% on the more recently established dunes.

At the head of Fishbourne Channel saltmarsh grades through a reed *Phragmites australis* bed into fresh marsh

influenced by a chalk spring. Most of the other fresh marshes behind the sea wall are small but at Thorney Deep's reclaimed saltmarsh has given way to extensive fresh water marsh vegetation influenced by salt water intrusion; here the reed is fringed by extensive areas of rushes *Juncus* species and invasive willow *Salix* scrub. A number of small ponds occur one of which contains the rare annual beard grass *Polypogon monspeliensis*. Significant blocks of scrub, mainly hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* occur which are important for breeding and roosting birds. Hedgerows of oak *Quercus robur* are common and in some places the oak roots are strongly influenced by salt water. Semi-natural broadleaved woodland associated with the Harbour is important for breeding birds and supports two heronries. Oak is the major tree species usually with hazel *Corylus avellana* coppice, as at Old Park Wood, although Tournembury Wood has well spaced oaks with the occasional beech *Fagus sylvatica*, holly *Ilex aquifolium* and yew *Taxus baccata* with a fairly dense ground flora of bramble *Rubus fruticosus* and bracken *Pteridium aquilinum*.

Notable invertebrates include the long-winged conehead *Conocephalus discolor* and the moths, starwort shark *Cucullia asteris*, the sand dart *Agrotis ripae*, shore wainscot *Mythimna litoralis* and lunar hornet *Sphecia bemeciformis*.

Geology and Physiography

East of Langstone, at SU 725053, a low cliff line at high water mark exhibits a complex of Brickearth and Coombe Rock deposits and at East Head, SZ 769991 there is a sizeable sand dune and shingle system both of which are of geomorphological importance.

COUNTY: HAMPSHIRE

SITE NAME: SINAH COMMON

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authorities: Hampshire County Council, Havant Borough Council

National Grid References: SZ 700992

Area: 242.42 (ha.)

Ordnance Survey Sheets 1:50,000: 196, 197

1:10,000: SZ 69 NE,
SZ 79 NW

Date Notified (Under 1949 Act): Not Applicable

Date Notified (Under 1981 Act): 20 March 2000

Date Confirmed (Under 1981 Act): 14 December 2000

Reasons for Notification:

The site is notified for its coastal habitats including the following: pioneer shingle vegetation, maritime shingle grassland which includes dry acid grassland and lichen rich acid grassland, mobile dune, semi-fixed dune, dune heath and an associated small area of saltmarsh. The site is also notified for the chiding pink *Petrorhagia nauteuillii* an endangered* plant which occurs at just two sites in Britain, and for its outstanding assemblage of nationally scarce** plants including little robin *Geranium purpureum*, Nottingham catchfly *Silene nutans*, bulbous meadow-grass *Poa bulbosa*, bearded fescue *Vulpia fasciculata* subsp *ambigua*, dune fescue *Vulpia fasciculata*, suffocated clover *Trifolium suffocatum*, smooth cat's-ear *Hypochaeris glabra*, stiff saltmarsh-grass *Puccinella rupestris*, mossy stonecrop *Crassula tillaea*, toothed medick *Medicago polymorpha* and dotted sedge *Carex punctata*.

General Description:

Sinah Common SSSI comprises a complex of maritime habitats which extend for over 2km eastwards from the south-western extremity of Hayling Island, Hampshire. Gunner Point at the western end contains the most extensive sand dunes and vegetated shingle beach in Hampshire. This part of the site supports shingle beach vegetation and grassland, dune heath, dune grassland, saltmarsh and open water communities. To the east of Gunner Point there is an extensive area of fragmented dune grassland and shingle. The site embraces the adjacent intertidal area including East Winner because of the important functional relationship between this and the sand and shingle system.

The present day Gunner Point is a relatively recent feature having developed over the past 150 years due to accretion of material originating from the extreme east of Sinah Common. The shingle beach supports sea kale *Crambe maritima*, yellow horned-poppy *Glaucium flavum*, sea radish *Raphanus raphanistrum* subsp *maritimus*, sea beet *Beta vulgaris* subsp *maritima* and curled dock *Rumex crispus*. To landward, sand and humus have accumulated within the shingle, resulting in more stable conditions which has led to development of a range of grassland, heath and scrub communities. The grasslands range from maritime grassland to dry acid grassland further from the sea. These often species-rich grasslands, dominated by common bent *Agrostis capillaris* and sheep's-fescue *Festuca ovina*, have a high lichen cover and support species such as sheep's-bit *Jasione montana*, upright chickweed *Moenchia erecta*, heath pearlwort *Sagina subulata* and occasional sea campion *Silene uniflora*. Other species present include the lichen *Cornicularia aculeata*, the bryophytes *Scleropodium tourettii* and *Archidium alternifolium*, bell heather *Erica cinerea*, rough clover *Trifolium scabrum*, green-winged orchid *Orchis morio* and autumn lady's-tresses *Spiranthes spiralis*, as well as the following nationally scarce species: Nottingham catchfly, bulbous meadow-grass, bearded fescue, suffocated clover, smooth cat's-ear, mossy stonecrop and toothed medick. Large populations of many of the nationally scarce

species also occur in the eastern half of the site in areas of disturbed sand dune and shingle vegetation, while open shingle areas support the largest known populations in Hampshire of the nationally scarce little robin, comprising many thousands of plants. A matrix of gorse *Ulex europaeus* and oak *Quercus robur* scrub occurs to the north of the site. Dartford warblers *Sylvia undata* breed in the scrub on the shingle.

The shingle at Gunner Point grades into dunes with acidic sandy grassland. This part of the site is mainly comprised of semi-fixed dunes dominated by marram grass *Ammophila arenaria*, a species which also grows on the fixed dunes in association with lyme grass *Leymus arenarius*, sea couch *Elytrigia atherica* and sand sedge *Carex arenaria*. The locally scarce sea spurge *Euphorbia paralias*, soft-brome *Bromus hordeaceus* subsp *ferronii* and the nationally scarce dune fescue occur on the dunes. Sea holly *Eryngium maritimum* is also present on the dunes.

Dune heath, dominated by bell heather, also occurs on Sinah Common and is one of only two locations for this habitat in the Solent area. Bell heather grows in association with sheep's-fescue and the lichens *Cladonia portentosa* and *C. foliacea* and the mosses *Polytrichum juniperinum*, *Dicranum scoparium* and *Hypnum lacunosum*.

Sinah Common supports brackish communities overlying wet sand, on the site of old mineral workings. This saltmarsh community is dominated by sea rush *Juncus maritimus* and sea club-rush *Bolboschoenus maritimus* with occasional saltmarsh rush *Juncus gerardii*, sea milkwort *Glaux maritima* and sea aster *Aster tripolium*. Species more typical of freshwater communities include marsh pennywort *Hydrocotyle vulgaris* and southern marsh-orchid *Dactylorhiza praetermissa*. The locally scarce royal fern *Osmunda regalis* occurs on the site together with the nationally scarce stiff saltmarsh-grass and dotted sedge, a western species here growing at its most easterly location in Britain.

Flooded gravel workings provide an area of open water colonised by rigid hornwort *Ceratophyllum demersum*, a locally scarce species in Hampshire. The nationally rare charophyte *Chara baltica* has been recorded.

The diversity of vegetation is reflected in a rich invertebrate fauna including a number of nationally rare*** or vulnerable and nationally scarce species. All the nationally rare species, namely the solitary bee *Hylaeus euryscapus*, a mud wasp *Podalonia affinis* and the moths *Stigmella samiatella*, *Platytes alpinella*, *Cynaeda dentalis*, *Gymnancyla canella* and *Psammathocrita argentella*, and many of the nationally scarce species including the grey bush cricket *Platycleis albopunctata* and long-winged conehead *Conocephalus discolor*, are associated with coastal shingle and sand dunes. Typical saltmarsh invertebrates recorded include *Mythimna favicolor*, *Apamea oblonga*, *Scopula emutaria* and *Eupithecis subumbrata*. *Selidosema brunnearia* and *Scopula margine punctata* are moths characteristic of coastal heathland.

Other Information:

The saltmarsh area within the Hayling golf club is managed as nature reserve by the Hampshire and Isle of Wight Wildlife Trust.

* Endangered as given in definitions of IUCN threat categories (IUCN 1994) in British Red Data Book 1 Vascular Plants

** Nationally scarce species occur in 16--100 10km squares in Britain as listed in Scarce Plants in Britain, (JNCC,1994)

*** Nationally rare species are listed in the relevant Red Data Book ie British Red Data Book 2: Insects

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type 1.2 Site code

1.3 Compilation date 1.4 Update

1.5 Relationship with other Natura 2000 sites

☐	☐	☐	☐	☐	☐	☐	☐
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1.6 Respondent(s)

1.7 Site name

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	198710
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	latitude
00 55 12 W	50 48 23 N

2.2 Site area (ha) 2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK561	Hampshire	54.00%
UK533	West Sussex	46.00%

2.6 Biogeographic region

☐
Alpine

☒
Atlantic

☐
Boreal

☐
Continental

☐
Macaronesia

☐
Mediterranean

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

Population						Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A054	<i>Anas acuta</i>			330 I		C		C	
A056	<i>Anas clypeata</i>			100 I		C		C	
A052	<i>Anas crecca</i>			1824 I		C		C	
A050	<i>Anas penelope</i>			2055 I		C		C	
A169	<i>Arenaria interpres</i>			430 I		C		C	
A046a	<i>Branta bernicla bernicla</i>			17119 I		A		C	
A144	<i>Calidris alba</i>			236 I		C		C	
A149	<i>Calidris alpina alpina</i>			44294 I		B		C	
A137	<i>Charadrius hiaticula</i>			846 I		B		C	
A157	<i>Limosa lapponica</i>			1692 I		B		C	
A069	<i>Mergus serrator</i>			297 I		B		C	
A160	<i>Numenius arquata</i>			1861 I		C		C	
A141	<i>Pluvialis squatarola</i>			3825 I		B		C	
A195	<i>Sterna albifrons</i>		100 P			B		C	
A193	<i>Sterna hirundo</i>		33 P			C		C	
A191	<i>Sterna sandvicensis</i>		31 P			C		C	
A048	<i>Tadorna tadorna</i>			2410 I		B		C	
A162	<i>Tringa totanus</i>			1788 I		C		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	63.0
Salt marshes. Salt pastures. Salt steppes	21.5
Coastal sand dunes. Sand beaches. Machair	0.3
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	0.4
Bogs. Marshes. Water fringed vegetation. Fens	0.5
Heath. Scrub. Maquis and garrigue. Phygrana	0.1
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	1.7
Alpine and sub-alpine grassland	
Improved grassland	11.7
Other arable land	
Broad-leaved deciduous woodland	0.8
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Scree. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	0.2
Total habitat cover	100%

4.1 Other site characteristics

Soil & geology:

Alluvium, Clay, Gravel, Mud, Neutral, Nutrient-rich, Sand, Sedimentary, Shingle

Geomorphology & landscape:

Coastal, Enclosed coast (including embayment), Estuary, Floodplain, Intertidal sediments (including sandflat/mudflat), Islands, Lagoon, Lowland, Pools, Shingle bar, Subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

<i>Sterna albifrons</i> (Eastern Atlantic - breeding)	4.2% of the GB breeding population 5 year mean, 1992-1996
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<i>Sterna hirundo</i> (Northern/Eastern Europe - breeding)	0.3% of the GB breeding population 5 year mean, 1992-1996
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<i>Sterna sandvicensis</i> (Western Europe/Western Africa)	0.2% of the GB breeding population 5 year mean, 1993-1997
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Over winter the area regularly supports:

<i>Limosa lapponica</i> (Western Palearctic - wintering)	3.2% of the GB population 5 year peak mean 1991/92-1995/96
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ARTICLE 4.2 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

<i>Anas acuta</i> (North-western Europe)	1.2% of the population in Great Britain 5 year peak mean 1991/92-1995/96
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<i>Anas clypeata</i> (North-western/Central Europe)	1% of the population in Great Britain 5 year peak mean 1991/92-1995/96
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<i>Anas crecca</i> (North-western Europe)	0.5% of the population 5 year peak mean 1991/92-1995/96
--	--

<i>Anas penelope</i> (Western Siberia/North-western/North-eastern Europe)	0.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96
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<i>Arenaria interpres</i> (Western Palearctic - wintering)	0.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96
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<i>Branta bernicla bernicla</i> (Western Siberia/Western Europe)	5.7% of the population 5 year peak mean 1991/92-1995/96
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<i>Calidris alba</i> (Eastern Atlantic/Western & Southern Africa - wintering)	0.2% of the population 5 year peak mean 1991/92-1995/96
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<i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa)	3.2% of the population 5 year peak mean 1991/92-1995/96
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<i>Charadrius hiaticula</i> (Europe/Northern Africa - wintering)	3% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<i>Mergus serrator</i> (North-western/Central Europe)	3% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<i>Numenius arquata</i> (Europe - breeding)	1.6% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<i>Pluvialis squatarola</i> (Eastern Atlantic - wintering)	2.3% of the population 5 year peak mean 1991/92-1995/96
<i>Tadorna tadorna</i> (North-western Europe)	3.3% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<i>Tringa totanus</i> (Eastern Atlantic - wintering)	1% of the population 5 year peak mean 1991/92-1995/96
ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS	
Over winter the area regularly supports:	
93230 waterfowl (5 year peak mean 01/04/1998)	
Including:	
<i>Branta bernicla bernicla</i> , <i>Tadorna tadorna</i> , <i>Anas penelope</i> , <i>Anas crecca</i> , <i>Anas acuta</i> , <i>Anas clypeata</i> , <i>Mergus serrator</i> , <i>Charadrius hiaticula</i> , <i>Pluvialis squatarola</i> , <i>Calidris alba</i> , <i>Calidris alpina alpina</i> , <i>Limosa lapponica</i> , <i>Numenius arquata</i> , <i>Tringa totanus</i> , <i>Arenaria interpres</i> .	

4.3 Vulnerability

The SPA comprises two large, sheltered estuarine basins on the central south coast of England. Langstone Harbour is fringed by urban and industrial development, whereas Chichester is surrounded mainly by high grade farmland. The site is subjected to significant recreational pressures, especially during summer months. Effluent discharges and agricultural run-off can lead to localised eutrophication problems although recent studies carried out by the Environmental Agency have shown that elevated nutrient levels are maintained by inputs from coastal waters.

Sea-level rise and 'coastal squeeze' are significant threats to the long-term maintenance of habitat diversity and structural integrity. Incremental loss of fringing habitats and transitional communities is a threat as hard coastal defences are maintained by riparian land-owners. A strategy for managing sea defences, incorporating set-back, is currently being prepared by the Environment Agency (EA). Impact on the site from water abstraction is being investigated by the EA.

Both harbours are managed by statutory bodies whose remits include conservation of the natural environment. Conservation bodies have an advisory input to the management of the harbours, and play an active role in the management of numerous Local Authority and RSPB nature reserves around the site. Additional measures for safeguarding the nature conservation interests of the harbours including measures to address effects of recreational activity are expected to be applied via the Management Scheme for the Solent Maritime candidate SAC.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 October 1987

3. Country:

UK (England)

4. Name of the Ramsar site:

Chichester and Langstone Harbours

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. **For RIS updates only,** changes to the site since its designation or earlier update:

a) Site boundary and area:

**** Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): yes ✓ -or- no ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) Yes
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** yes ✓ -or- no ☐;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

50 48 23 N 00 55 12 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Portsmouth

The site lies on the central south coast of mainland England, approximately 1 km east of Portsmouth.

Administrative region: Hampshire; West Sussex

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 5810.03

Min. -2

Max. 4

Mean 0

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is of particular significance for over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats supporting important plant and animal communities.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

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

Assemblages of international importance:

Species with peak counts in winter:

76480 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

Ringed plover , <i>Charadrius hiaticula</i> , Europe/Northwest Africa	853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	906 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)
Common redshank , <i>Tringa totanus totanus</i> ,	2577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Dark-bellied brent goose, <i>Branta bernicla bernicla</i> ,	12987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9-2002/3)
Common shelduck , <i>Tadorna tadorna</i> , NW Europe	1468 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	3043 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)
Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	33436 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species regularly supported during the breeding season:

Little tern , <i>Sterna albifrons albifrons</i> , W Europe	130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census)
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Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	neutral, shingle, sand, mud, alluvium, nutrient-rich, sedimentary, clay, gravel
Geomorphology and landscape	lowland, coastal, floodplain, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), enclosed coast (including embayment), estuary, islands, lagoon, pools
Nutrient status	eutrophic, mesotrophic
pH	circumneutral
Salinity	brackish / mixosaline, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Bognor Regis, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/bognor_regis.html) Max. daily temperature: 13.7° C Min. daily temperature: 7.7° C Days of air frost: 24.0 Rainfall: 717.4 mm Hrs. of sunshine: 1902.9

General description of the Physical Features:

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland. The basin contains a wide range of coastal habitats.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping, Maintenance of water quality (removal of nutrients)

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	46
H	Salt marshes	21.4
Other	Other	14.3
F	Estuarine waters	14.1
B	Marine beds (e.g. sea grass beds)	1.7
Ts	Freshwater marshes / pools: seasonal / intermittent	0.9
E	Sand / shingle shores (including dune systems)	0.8
Tp	Freshwater marshes / pools: permanent	0.4
Sp	Saline / brackish marshes: permanent	0.3
W	Shrub-dominated wetlands	0.07
M	Rivers / streams / creeks: permanent	0.02
J	Coastal brackish / saline lagoons	0.01

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The site comprises two large, interconnected sheltered estuarine basins providing extensive intertidal mud and sand flats with eelgrass *Zostera* spp. beds, large areas of mixed saltmarsh and extensive cord-grass *Spartina* spp. swards in an advanced state of degeneration. Fringing habitats include shingle spits, saline, brackish and freshwater lagoons, coastal grazing marsh and deciduous woodland. The site supports important overwintering populations of migratory waterfowl.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Nationally important species occurring on the site.

Higher plants.

Polypogon monspeliensis, *Zostera angustifolia*, *Zostera marina*, *Zostera noltei*

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Birds**Species currently occurring at levels of national importance:****Species regularly supported during the breeding season:**

Mediterranean gull , <i>Larus melanocephalus</i> , Europe	47 apparently occupied nests, representing an average of 43.5% of the GB population (Seabird 2000 Census)
Black-headed gull , <i>Larus ridibundus</i> , N & C Europe	3180 apparently occupied nests, representing an average of 2.4% of the GB population (Seabird 2000 Census)

Common tern , *Sterna hirundo hirundo*, N & E Europe

127 apparently occupied nests, representing an average of 1.2% of the GB population (Seabird 2000 Census)

Species with peak counts in spring/autumn:

Little egret , *Egretta garzetta*, West Mediterranean

224 individuals, representing an average of 13.5% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian oystercatcher , *Haematopus ostralegus ostralegus*, Europe & NW Africa -wintering

3403 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Whimbrel , *Numenius phaeopus*, Europe/Western Africa

192 individuals, representing an average of 6.4% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak)

Eurasian curlew , *Numenius arquata arquata*, N. a. *arquata* Europe (breeding)

3108 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9-2002/3)

Spotted redshank , *Tringa erythropus*, Europe/W Africa

6 individuals, representing an average of 4.4% of the GB population (5 year peak mean 1998/9-2002/3)

Common greenshank , *Tringa nebularia*, Europe/W Africa

215 individuals, representing an average of 36% of the GB population (5 year peak mean 1998/9-2002/3)

Ruddy turnstone , *Arenaria interpres interpres*, NE Canada, Greenland/W Europe & NW Africa

569 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Little grebe , *Tachybaptus ruficollis ruficollis*, Europe to E Urals, NW Africa

131 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)

Black-necked grebe , *Podiceps nigricollis nigricollis*, Europe, N Africa

14 individuals, representing an average of 11.6% of the GB population (5 year peak mean 1998/9-2002/3)

Great bittern , *Botaurus stellaris stellaris*, W Europe, NW Africa

1 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian teal , *Anas crecca*, NW Europe

2226 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

Red-breasted merganser , *Mergus serrator*, NW & C Europe

306 individuals, representing an average of 3.1% of the GB population (5 year peak mean 1998/9-2002/3)

Water rail , *Rallus aquaticus*, Europe

12 individuals, representing an average of 2.6% of the GB population (5 year peak mean 1998/9-2002/3)

Bar-tailed godwit , *Limosa lapponica lapponica*, W Palearctic

1189 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

17 British Red Data Book species and 84 nationally scarce species have been recorded from Chichester and Langstone Harbours Ramsar site.

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
 Aquatic vegetation (e.g. reeds, willows, seaweed)
 Archaeological/historical site
 Environmental education/ interpretation
 Fisheries production
 Livestock grazing
 Non-consumptive recreation
 Scientific research
 Sport fishing
 Sport hunting
 Subsistence fishing
 Tourism
 Traditional cultural
 Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? **No**

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+
Public/communal	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	

Cutting of vegetation (small-scale/subsistence)		+
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Marine/saltwater aquaculture	+	
Gathering of shellfish	+	
Bait collection	+	
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Livestock watering hole/pond	+	
Permanent pastoral agriculture	+	
Hay meadows	+	+
Hunting: recreational/sport	+	+
Industry	+	+
Sewage treatment/disposal	+	+
Harbour/port	+	+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Mineral exploration (excl. hydrocarbons)		+
Transport route	+	+
Domestic water supply		+
Urban development		+
Non-urbanised settlements	+	+
Military activities	+	+
Horticulture (incl. market gardening)		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2		+		+
Eutrophication	1		+		+
Pollution – domestic sewage	1			+	

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Erosion - Coastal Defence Strategies, regulation of private coastal defences, shoreline management plans are in place or are being developed.

Some larger-scale saltmarsh re-creation projects, beneficial usage of maintenance dredgings and managed realignment scheme to offset losses to coastal squeeze have been proposed. CHaMPs identify potential areas suitable for managed realignment.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	+
Site management statement/plan implemented	+	
Area of Outstanding National Beauty (AONB)	+	+
Special Area of Conservation (SAC)	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Contemporary.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Bird Ringing by Solent Shorebirds Study Group.

Environment.

Coastal Sediment (SCOPAC)

Water Quality/Eutrophication (EA/Southern Water).

Various research and educational establishments carry out ongoing research into a number of different aspects of the environment.

Flora.

Spartina survey (EN project).

Completed.

Environment.

Extensive research and survey into:

Tidal regimes.

Proposed:

Intertidal Habitat Monitoring (EN/EA project).

Sediment movement.

Flora and Fauna.

The distribution of all major plant and animal groups/communities.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Interpretation facilities and interpretative panels exist at strategic locations on the Harbour footpaths; all nature reserve areas are covered by warden and ranger services with an educational remit. An Education Officer is employed by the Chichester Harbour Conservancy to instruct both school parties and adults in the cultural and nature conservation aspects of the harbour.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Walking, including dog walking: all year.

Birdwatching: all year.

Angling and bait-digging: all year.

Swimming (in restricted areas) - mostly summer.

Sailing, windsurfing, canoeing, waterskiing.

Sept-Feb wildfowling.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP & Davidson, NC (eds.) (1998) *Coasts and seas of the United Kingdom. Region 9 Southern England: Hayling Island to Lyme Regis*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)

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- Bratton, JH (ed.) (1991) *British Red Data Books: 3. Invertebrates other than insects*. Joint Nature Conservation Committee, Peterborough
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- Clark, M & Gurnell, A (1987) *The Solent estuary: environmental background*. Southampton University, GeoData Unit, Southampton
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- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge. www.wwt.org.uk/publications/default.asp?PubID=14
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- Sneddon, P & Randall, RE (1994) *Coastal vegetated shingle structures of Great Britain: Appendix 3. Shingle sites in England*. Joint Nature Conservation Committee, Peterborough
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- Tubbs, C (1991) The Solent: a changing wildlife heritage. Hampshire and Isle of Wight Wildlife Trust, Romsey
- Tubbs, CR & Tubbs, JM (1980) Wader and shelduck feeding distribution in Langstone Harbour, Hampshire. *Bird Study*, 27, 239-248

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org

European Site Conservation Objectives for Solent Maritime Special Area of Conservation Site code: UK0030059

With regard to the natural habitats and/or species for which the site has been designated ('the Qualifying Features' listed below);

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- The populations of qualifying species;
- The distribution of qualifying species within the site.

Qualifying Features:

H1110. Sandbanks which are slightly covered by sea water all the time

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons*

H1210. Annual vegetation of drift lines

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1320. *Spartina* swards (*Spartinion maritimae*); Cord-grass swards

H1330. Atlantic salt meadows (*Glaucio-Puccinellietalia maritimae*)

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

S1016. *Vertigo moulinsiana*; Desmoulin's whorl snail

* denotes a priority natural habitat or species (supporting explanatory text on following page)

This is a European Marine Site

This site is a part of the Solent Maritime European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at:

<http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx>

*** Priority natural habitats or species**

Some of the natural habitats and species listed in the Habitats Directive and for which SACs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Directive and the Habitats Regulations. These priority natural habitats and species are denoted by an asterisk (*) in Annex I and II of the Directive. The term 'priority' is also used in other contexts, for example with reference to particular habitats or species that are prioritised in UK Biodiversity Action Plans. It is important to note however that these are not necessarily the priority natural habitats or species within the meaning of the Habitats Directive or the Habitats Regulations.

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each habitat or species of a [Special Area of Conservation \(SAC\)](#). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving favourable conservation status for those features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

Appendix 5: Non-Statutory Protected Sites Information



Details of Sites of Importance for Nature Conservation (SINCs) within the search area:

Please see [Criteria for SINCs in Hampshire](#) for more information on Sites of Importance for Nature Conservation in Hampshire. If there are any criteria beginning with a 'P' in the SINC table below, these denote SINCs in Portsmouth, designated using different criteria (see accompanying document.)

SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
HV0055	Saltmarsh Lane C	SU71000010	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	12.50
HV0057	Saltmarsh Lane E	SU71100000	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	9.88
HV0060	Landfill Meadow	SU71300050	4A/6A	Linum bienne (Pale Flax) [CS]	0.69
HV0061	Hayling Billy G	SU71300060	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	10.21
HV0062	Hayling Billy F	SU71500090	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	7.92
HV0063	Hayling Billy E	SU71500120	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	3.36
HV0064	Hayling Billy D	SU71500130	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	7.82
HV0065	Hayling Billy C	SU71500160	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	6.94
HV0073	South of Daw Lane H	SU71700060	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	9.99
HV0078	South of Daw Lane C	SU71900130	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	4.82
HV0079	South of Daw Lane A	SU71900150	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	11.24
HV0085	South of Daw Lane D	SU72100130	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	6.18
HV0091	Hayling Secondary School Playing Field	SU72500020	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	7.74
HV0093	Pound Marsh B	SU72590089	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	6.50

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.

Hampshire Biodiversity Information Centre

SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
HV0099	Tournerbury Farm A	SU72900030	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	29.62
HV0121	The Kench Scrubs	SZ69409990	4A/6A	Inula crithmoides (Golden-Samphire) [NS] Raphanus raphanistrum maritimus (Sea Radish) [CS] Tripleurospermum maritimum (Sea Mayweed) [-]	1.26
HV0122	Gun Site Car Park & Open Space	SZ70009940	4A/6A	Geranium purpureum forsteri (Geranium purpureum forsteri) [NS]	2.14
HV0123	Sinah Warren Village Marsh	SZ70009980	4A		3.78
HV0124	Sinah Stables	SZ70059963	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	4.95
HV0125	Beachlands East	SZ72009870	4A/6A	Carex arenaria (Sand Sedge) [CS] Medicago polymorpha (Toothed Medick) [NS] Moenchia erecta (Upright Chickweed) [nHS] Sedum anglicum (English Stonecrop) [CS] Trifolium suffocatum (Suffocated Clover) [NS] Tripleurospermum maritimum (Sea Mayweed)	11.88
HV0138	Hayling Island Beach	SZ74609800	4A/6A	Crassula tillaea (Mossy Stonecrop) [NS] Hypochaeris glabra (Smooth Cat's-Ear) [NR] Polygonum maritimum (Sea Knotgrass) [NR] Vulpia fasciculata (Dune Fescue) [NS] Vulpia unilateralis (Mat-Grass Fescue) [NS] plus various other notable plants	13.70

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.



Hampshire Biodiversity
Information Centre

HBIC Ref: 4033

Sites of Importance for Nature
Conservation, and woodlands
listed on the Ancient Woodland
Inventory within 2km of 'Land
between Furniss Way & Dancers
Way, Hayling Island' (SZ710997):

Legend

- Search Area
- SINC (labelled pink)
- Surrounding SINC

Ancient Woodland Inventory

- Semi-Natural
- Replanted

Created: 20/03/2013

Scale at A3: 1:16,000

0 125 250 500 750 1,000 Meters



Ancient Woodland boundaries are provided by Natural England and have been derived from the 1996 provisional Hampshire Ancient Woodland Inventory. These boundaries are indicative not definitive and tend not to include ancient woodlands below 2ha in size.

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Appendix 6: Legislation and Planning Policy



Appendix 6: Legislation and Planning Policy

Legislative Context

- A6.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2010;
 - The Countryside and Rights of Way (CRoW) Act 2000;
 - The Hedgerows Regulations 1997;
 - The Protection of Badgers Act 1992; and
 - The Natural Environment and Rural Communities Act (NERC) 2006.
- A6.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2010.
- A6.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A6.4. The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a place of rest or shelter of a protected animal (except common reptiles) or nest site.

National Policy

- A6.5. The relevant adopted policy at the national level is set out in The National Planning Policy Framework (2012), which replaces Planning Policy Statement 9 (PPS9) 'Biodiversity and Geological Conservation' (2005). The NPPF aims to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth. It sets out the key principles of ensuring that development is sustainable and that the potential impacts of planning decisions on biodiversity and geological conservation are fully considered (although the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined).
- A6.6. Outline principles state that planning should:



- Contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework; and
- Promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production).

A6.7. Chapter 11, Conserving and Enhancing the Natural Environment, sets out a number of planning protocols, as follows:

- The NPPF provides guidance as to the protection of statutorily designated sites, including international sites, National Nature Reserves (NNR) and SSSIs, as well as non-statutory regional and local sites. The NPPF also addresses development and wildlife issues outside these sites and seeks to ensure that planning policies minimise any adverse effects on wildlife;
- The NPPF places emphasis on local authorities to further the conservation of those habitats of principal importance, or those habitats supporting species of principal importance, which are identified in Section 41 of the Natural Environment and Rural Communities Act 2006;
- The NPPF requires that adverse effects of development on species of principal importance should be avoided through planning conditions or obligations and that planning permission should be refused where harm to these species, or their habitats, may result, unless the need for and benefits of the development clearly outweigh the harm;
- The NPPF requires that opportunities for improving biodiversity within developments should be maximised. It states that development proposals where the primary objective is to conserve or enhance biodiversity should be permitted and that opportunities to incorporate biodiversity in and around developments should be encouraged; and
- The NPPF states that by encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

Local Policy

Havant Borough Draft Local Plan (Allocations) December 2012

Policy DM23 Uncertain Sites for Brent Geese and Waders

A6.8. Where sites are identified as having as having an uncertain value within and as defined by the Solent Waders and Brent Goose Strategy (2010), studies will be required to be undertaken in accordance with an appropriate survey methodology in order to determine their level of importance.

Havant Borough Core Strategy March 2011

Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough

A6.9. Planning permission will be granted for development that:

1. Ensures the key landscape and built form principles set out in the Havant Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.



2. Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.
3. Has particular regard to the following hierarchy of nature conservation designations within the borough (as identified on the Proposals Map):
 - (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International].
 - (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National].
 - (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above [Local].
4. Protects and where appropriate enhances the borough's statutory and non-statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.
5. Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.
6. Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.
7. Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh.
8. Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.
9. Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterlooville; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.
10. Protects the best and most versatile agricultural land that has the greatest potential for local food security.
11. Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research.



Plan

Habitat Features

1435/P01 June 2013 JSA/JTF

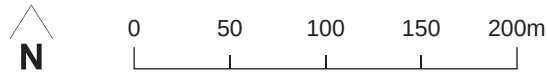


Land off Station Road, Hayling Island
Ecological Assessment

1435_2011_R02a 11 June 2013 JA_RW



- Site Boundary
- A F1 Arable (and field reference)
- Hedgerow (and reference number)
- Tree Line
- Woodland
- Tree
- Wet Ditch
- Dry Ditch
- Rough Grassland
- SI Mesotrophic Grassland
- I Improved Grassland



Project Details	Land between Furniss Way and Dancers Way, Hayling Island
Title	
Scale	As Shown
Drawing Ref	1435/P01
Date	June 2013
Checked	JSA/JTF