



David Wilson Homes

Land at Portsdown Hill, Havant

Wintering Bird Survey Report

Updated July 2014

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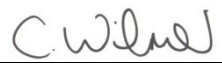
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Executive Summary

Site location	Portsdown Hill, Havant, Hampshire (OS grid reference SU 693 062),
Previous reports/surveys	An extended Phase 1 habitat survey was undertaken of the site by WYG in August 2013, which recommended that wintering bird surveys be undertaken for the site.
WYG Survey	- Existing data for the site was reviewed. - WYG completed a Winter Bird survey using the Solent Water Brent Goose Strategy methodology. In agreement with Natural England, two high tide surveys and one low tide survey were completed each month between October 2013 to March 2014, and hence a total of 16 visits were made to the site.
Results	- A total of 22 species were recorded using the site; six of these species are birds of conservation concern of which four are red listed and two are amber listed; one of the red listed species (lapwing) is also a BAP priority and a NERC species as well as being one of an assemblage of wintering waterfowl that are a qualifying feature of the nearby Chichester and Langstone Harbour Special Protection Area. - The data search and consultation revealed a single record of significant numbers of lapwing (>1% of the SPA population) using the wider site (development area and adjacent land) in 2013.
Mitigation and Enhancement Recommendations	- Mitigation and enhancement is proposed for winter birds, particularly lapwing, and Brent geese: -Hedgerow and tree management to ensure hedgerows are maintained at a height of 2 metres - The adjacent arable field will farmed on a rotational basis to benefit lapwing and Brent geese (see Appendix G). -No public access into the arable land to the west of the site. -Monitoring recommendations to determine the success of the mitigation and enhancement proposed. - Breeding Birds -No work to take place during the breeding season (March-September inclusive) without supervision of a suitably qualified ecologist to avoid damaging or disturbing nesting birds.



1.0 Introduction

1.1 Background

WYG was commissioned by David Wilson Homes in October 2013 to undertake winter bird surveys at Portsdown Hill (referred to as the "site"), following on from recommendations made during an extended Phase 1 habitat survey (WYG, 2013). In addition the site is designated at a local level as a Site of Importance for Nature Conservation due to supporting a significant population of a species which has a restricted distribution or has substantially declined in population or range, these species are the dwarf spurge *Euphorbia exigua* which is present on site and Brent geese (*Branta bernicla bernicla*) which were recorded using the site between 1995 and 1998 (HBIC, see appendix 2). The site itself is surrounded by other SINC's; over the road to the south is Forty Acers farm B also designated due to Brent geese and to the north are a number of SINC's designated as unimproved, semi-improved and impoverished semi-natural grassland.

The site lies within 800 metres of Langstone Harbour Special Protection Area & Ramsar and Solent Maritime Special Area of Conservation, designated for overwintering populations of the following species: Brent geese, dunlin, black-tailed godwit, common shelduck, Eurasian widgeon, Eurasian teal, northern pintail, common redshank and red-breasted merganser. The harbour is a wetland of international importance for over wintering wildfowl, the area regularly supports 93,142 individual waterfowl. This report assesses the potential impact of the proposed development on the bird populations using the designated site.

1.2 Site Location and Description

The site is located at Portsdown Hill, Havant, Hampshire, at Ordnance Survey grid reference SU 69368 06115. The site is approximately 4.75 ha in size, comprising the eastern part of a large arable field with horse paddocks in the northeast corner of the site (see phase 1 plan in Appendix F). The site is located on the western periphery of Bedhampton. The proposed site is located directly to the west of Glebe Park Avenue and junction 5 of the A3, Bedhampton (OS grid reference SU 693 062).

The eastern boundary comprises residential buildings with gardens (seen in attached phase 1 map appendix F), beyond which lies the major infrastructure associated with the A27 and A3M. The southern corner of the proposed site borders Havant Road (A2030), and the proposed western boundary intersects the middle of the arable field and hence arable land lies beyond the western boundary. To the northern boundary lies residential development beyond which lies Portsdown Hill Road. In the centre of the northern



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boundary within a residential garden which lies over the boundary, it is understood that a former chalk quarrying area is present which is now heavily vegetated.

The majority of the site is part of a large arable field, with an area of heavily grazed horse paddocks (improved grassland with scattered scrub and fruit trees) and associated run-down timber sheds occupying the north east corner of the site.

1.3 Development Description

The proposed development area is identified on the phase 1 plan in Appendix F, and plans consist of 47 residential dwellings with some garages, and associated access, parking and open space.

1.4 Survey Scope

This report provides the results from the wintering bird surveys undertaken between October 2013 and March 2014 in accordance with the Solent and Waders Brent Goose Strategy (SWBGS Steering Group, 2010).

The scope of work comprised:

- A desk study to obtain existing information regarding surveys undertaken on previous occasions.
- Two high tide and one low tide visit were completed every month through the October – March period (agreed with Simon Thompson, Natural England, on the 25th of November 2013), to assess the numbers and species making use of the site and adjacent habitats. During these surveys, data was also collected on the frequency and nature of disturbance events.
- An assessment of the potential ecological constraints to and impacts from the proposed development along with recommendations for further survey, avoidance, mitigation and enhancement where appropriate.

1.5 Relevant Legislation

All wild birds in the UK are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy the nest (whilst being built or in use) or its eggs. Bird species listed in Schedule 1 of the 1981 Act



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(as amended) receive further protection which makes it an offence to intentionally or recklessly disturb these species while building a nest or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird (HMSO 1981 & 2000).

In addition, Annex 1 of the EU 'Birds' Directive (1979) lists 194 species that are subject to special conservation measures concerning their habitat in order to ensure their survival and reproduction. Member States are required to designate Special Protection Areas (SPAs) for the Annex 1 and all migratory species. SPAs are scientifically identified areas critical to the survival of the targeted species. The SPAs form part of the Natura 2000 EU network of protected nature sites. The designation of an area as an SPA gives it a high level of protection from potentially damaging developments (European Commission (EC) 1979).

Brent geese are afforded protection under Section 4.2 of the Wild Birds Directive 79/409/EEC. Section 4.2 of the Directive states that all Member States are required to:

"...take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance."

Measures taken by the UK Government in fulfilment of this duty include designating wildlife sites where the species occur. Brent geese are a principle feature of Langstone Harbour Special Protection Area (SPA) and a feature of the Chichester and Langstone Harbour Ramsar Site and Langstone Harbour Site of Special Scientific Interest (SSSI). About 16% of the UK migratory/wintering population of Brent geese are present within this SPA. The SPA is also designated for significant numbers of black-tailed godwit, dunlin, grey plover, redshank and ringed plover, with the area classed as a Wetland of International Importance regularly supporting a population of 93,000 individual wintering waterfowl (JNCC, 1996).



2.0 Methods

2.1 Data Search & Previous survey information

Data on the use of the surrounding areas by important bird populations were obtained through direct consultation with Hampshire Biological Information Centre (HBIC). HBIC provided information in relation to winter bird surveys that had previously been undertaken at the site.

In addition, a previous ecological assessment of the site for wintering birds completed by Aluco Ecology (2009) has been reviewed.

Additional information was provided by the Hampshire County Council Ecologist in response to a draft version of this report dated 2nd April 2014.

2.2 Survey Methodology

It was requested by Simon Thompson of Natural England that the Brent geese survey method (Solent Water Brent Goose Strategy [SWBGS] Steering Group, 2010) be followed with the aim of assessing the potential impact of the proposed development on important bird species and specifically Brent geese whilst identifying potential ecological constraints to the development and informing ecological mitigation if required.

Usually three years worth of winter bird survey data is required, however, following consultation, it was agreed with Simon Thompson from Natural England that in the event that Brent geese which are primary qualifying species of the SPA are not recorded on site, two years worth of data should be sufficient. An initial year of data had been collected by HBIC and Hampshire County Council during 2012 to 2013, so WYG then completed a second winter of surveys from 2013 to 2014.

Surveys were undertaken by WYG at the site on 16 occasions between October 2013 and March 2014. Following the agreement of Simon Thompson at Natural England, two surveys a month were undertaken at high tide and one survey at low tide (as per email communication with Simon Thompson 25th November).

Survey methods followed those detailed in the SWBGS using the Bird Monitoring Methods as described in Gilbert *et al.* (1998) for Core Count (high tide) and Low Tide Counts. Each survey occasion took place over



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four hours, spanning high tide or low tide. During the four hours, counts of all species were undertaken every half hour.

The vantage point used was located in the south west corner of the grazing field (OS grid reference SU 69320 06141), which offered the best view of the stubble fields and views to the rear through a large gap in the hedge. In order to count the birds using the two fields at the north west of the site, a count at the start of each 30 minute survey interval was undertaken from the south-west corner of these fields (OS grid reference SU 69115 06214).

The area covered by the surveyor (using binoculars and telescope) was larger than the proposed development site, and equated to the whole of the SWBGS area HO3, as identified in Figure 1 on page 13.

In order to provide an indication of the current levels of disturbance to birds using the site, data was collected during the surveys detailing the frequency of disturbance events such as walkers. Where applicable, notes were made on the effect of each disturbance event on the birds present. The results are summarised in Section 3.3.1 of this report. Detailed data are available on request from WYG.

2.3 Survey Limitations

Following conversation with Natural England in November, it was advised that the Solent and Waders Brent Goose Strategy (2010) methodology should be followed. However, Natural England agreed that as the site is inland, only one low tide and two high tide visits were required each month. Low tide is the most unlikely time for Brent geese to be found on the site; as at that time they would be expected to be feeding on the exposed mud of the harbours where eelgrass can be found, within the SPA.

At the site, sixteen counts were undertaken between the 24th October 2013 and the 28th of March 2014. SWBGS (2010) and Gilbert *et al.* (2008) recommend that monthly surveys are undertaken between September and March for high tide counts and between November and February for low tide counts.

The lack of September surveys is considered to be a slight limitation to the survey results, as the results gathered may possibly underestimate the number of migratory waders that could have used the site as a staging point in their winter migration. This is considered to be a minor limiting factor as the mild weather conditions at the time allowed many wintering birds to delay their migration, with some birds even



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overwintering within the UK rather than completing their migration. Thus it is possible that there were fewer migrating birds in September and those present may well have stayed longer and been recorded within the October survey.

On 12th December 2013, a bonfire was lit on site at 13:07 during the survey. For the remaining hour the smoke changed the flight patterns and behaviour of the birds using the site. Although significant at the time, it is unlikely to have caused a limitation to the overall survey information as it was a one off occurrence lasting only an hour.

The surveys were all conducted in suitable weather conditions to record birds and access was available across the entire site. Rain experienced during the January 2014 survey was not considered to have limited the species present.



3.0 Survey Results

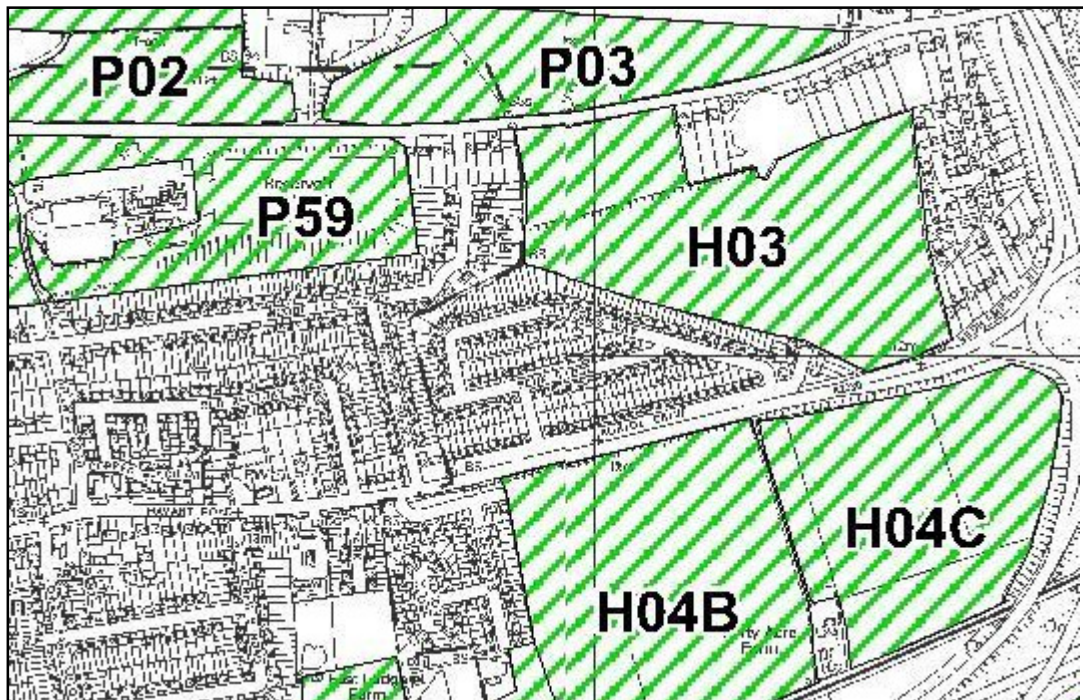
3.1 Data Search Results

3.1.1 Hampshire Biodiversity Information Centre data including Solent and Waders Brent Goose Strategy (2010) information

A summary is provided below of the data that has been provided to make an assessment of this site for its use by winter birds:

- HBIC provided records from the Solent and Waders Brent Goose Strategy (2010) surveys between 1995 and 1998. Brent geese were recorded using the site on 15 out of the 65 visits between 1995 and 1998 for the site HO3 (which includes the proposed development site) as illustrated in Figure 1 on page 13.
- No data (either positive or negative records) is available for the site between 2006 and 2009 in the Solent and Brent Goose Strategy;
- Aluco Ecology (2009) suggests that following conversations with a local ornithologist (HWT, pers. comm.) that the site had not been used by Brent geese for some time due to changes in the management practice by ploughing and not re-sowing which was considered to offer little food source on the site over winter.
- Winter bird surveys were completed of the site between 27th November 2012 and 23rd March 2013 by HBIC, no Brent geese were recorded during the six visits to the site, and it is understood that these surveys were ad-hoc Brent Goose surveys (post Solent Waders and Brent Goose Strategy 2010 publication) within Strategy Site Code 'H03' which includes the site (see appendix B)
- Hampshire County Council also completed a winter bird survey between 6th November 2012 and 28th March 2013 and no Brent geese were recorded, however a maximum of 101 lapwings were recorded using the southern arable field at the proposed development site. Lapwing were recorded on 3 occasions on 15th January 2013, but were not recorded on the other 6 visits on 6th and 28th November, 3rd December, 1st and 11th February and 28th March 2013 (Consultation response from County Ecologist, dated 2nd April 2014).

Figure 1. Solent waders & Brent geese survey map showing area H03 (which includes the proposed development site) taken from King (2010)



3.2 Survey Dates and Weather Conditions

All surveys have been conducted in good weather conditions; there have been a few occasions where there has been a brief duration of poorer conditions which had little impact on visibility and overall the conditions have been good.

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Table 1: Dates and weather conditions

Date	Portsmouth tide time and height (m) (H=high, L=low)	Start time	End time	Temp. (°C)	Cloud cover (out of 8)	Wind speed (Beaufort scale) and direction	Precipitation
24 October 2013	15:19 (H)	13:20	17:20	14	2	2 (N)	None
15 November 2013	9:41 (H)	07:41	11:41	5	0	0	None
15 November 2013	14:49 (L)	12:49	16:49	7	2	1 (N)	None
22 November 2013	13:53 (H)	11:50	14:50	6	0	0	None
06 December 2013	12:21 (H)	10:21	15:21	5	5	4 (NW)	None
12 December 2013	12:37 (L)	10:37	14:37	3	1	0	Light Fog/Haze
19 December 2013	12:27(H)	10:27	14:27	6	1	2(W)	rain at end of day
03 January 2014	12:16 (H)	10:16	14:16	7	7	5(NW)	rain at end of day
10 January 2014	11:56 (L)	09:56	13:56	7	8	4/5(W)	None
15 January 2014	10:52 (H)	08:52	12:52	8	8	1(NW)	Light patches
11 February 2014	14:33(L)	12:33	16:33	8	5	2(W)	None
18 February 2014	13:19 (H)	11:19	15:19	9	8	2(N)	Light and Patchy
28 February 2014	10:16(H)	08:16	12:16	13	5	0	Early on light short
13 March 2014	9:25(H)	07:25	11:25	3	1	0	None
13 March 2014	14:49(L)	12:49	16:49	12	0	1(N)	None
28 March 2014	9:11 (H)	07:11	11:11	8	8	1(N)	None

3.3 Wintering Bird Data

3.3.1 Survey Results Summary

A total of 28 bird species were recorded from the surveyed area; of those, six were Birds of Conservation Concern (BOCC), four red list species (common starling, lapwing, herring gull, skylark) and two amber list species (dunnock and meadow pipit). Further information is provided regarding those birds considered to be wintering, or that are qualifying features of the SPA.

Table 2. Summary of Peak Counts of Relevant Birds

Species	Scientific name	Peak Count	SPA Qualifying Feature?	Designation
Black-headed gull	<i>Chroicocephalus ridibundus</i>	19	No	BOCC Amber
Brent goose	<i>Branta bernicla</i>	0	Yes. Chichester and Langstone Harbours support 17,119 individuals representing up to 5.7% of the Western Siberia/Western Europe population (JNCC website)	HBAP; BOCC Red; NERC_s41
Herring gull	<i>Larus argentatus</i>	8	No	BOCC Red
Lapwing	<i>Vanellus vanellus</i>	34	Yes, Chichester and Langstone Harbours support 4510 individuals representing up to 0.3% of the UK population (JNCC website)	HBAP; BOCC Red; NERC_s41

KEY:

HBAP (Habitats and Biodiversity Action Plan)

BOCC (Birds of Conservation Concern)

NERC (Natural Environment and Rural Communities Act 2006)

Out of the sixteen surveys completed by WYG (eleven high and five low) in the HO3 area, a total of 422 counts were made of which 269 were made at high tide and 153 at low tide; a count represents a bird or a group of birds which occurred at a specific time.



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In summary our survey results show the following:

- **No Brent geese** were recorded.
- On the 22nd November and the 6th December, flocks of **lapwing** landed in the field; on the 22nd 34 lapwing remained in the stubble most of the day feeding on invertebrates where as on the 6th of December 8 lapwing landed on site and flew off again within a 30 minute count, on both occasions the lapwing landed outside the proposed development areas.
- A peak count of 19 black-headed gulls were recorded on the 13th of March feeding on site; this species was recorded during every visit to the site, they were largely recorded in the stubble field areas of the H03 survey site.
- A peak count of 8 herring gulls was also observed on the 24th of October loafing on stubble to the north west of the site; they were never recorded again in such numbers and only occurred during high tide.
- In general, it was considered that during low tide, the site supported very few birds with a reduced number of gull species recorded and only black headed gulls being left feeding in smaller numbers than during the high tide.
- On the 12th December 2013, a number of meadow pipit flocks (maximum count of 39) were recorded moving around the site, feeding in the stubble and along vegetated boundaries and hedgerows, meadow pipits are on the BOCC amber list.
- The proposed development site itself is used by a number of other species, of interest a family group of three common buzzard that roost in the trees along the northern boundary edge and sometimes on the stable buildings, a kestrel (Bird of Conservation Concern (BoCC) Amber listed species) has been seen hunting over the paddocks and numerous tit flocks fly from the scrub. Starlings (BoCC Red list) and blackbirds have been recorded feeding on the berries and insects within the hedgerows around site too.



3.3.2 Disturbance

During bird counts, records were made of the frequency of potential disturbance events to the birds occupying and feeding on the site. Disturbance events noted from the vantage point are described in Table 3.

Table 3. Disturbance events

Date	Time	Disturbance event count	Observed impact on birds
15-Nov-13	15:55-16:09	Surveyor walks through centre field, appeared to be taking soil samples.	At the time, 25 wood pigeons take flight. They circle above the housing estate, some settling on roofs and aerials. The rest disappear north - some return at 16:12
12-Dec-13	13:07-all day	Bonfire started on site - continued throughout the survey	All black-headed gulls avoided the fire area; however, they seem unaffected by the smoke and continue to use smoky areas. All meadow pipits avoid the area

Generally, little non-natural disturbance was noted on site; therefore, when it does occur, it appears that the majority of birds avoided the immediate area. Species such as wood pigeon were noted to circle over the housing estates until the disturbance event had finished; the majority of species were recorded to return to the site once the disturbance was over. When a bonfire was started on site, the black-headed gulls avoided the fire area but they flew through the smoke whereas the meadow pipits appeared to avoid the area completely.



4.0 Discussion

4.1 Summary of survey results

During the WYG surveys, the site was noted to have mixed use by birds; the stubble field provided a food source to a range of bird species with the hedgerows and trees offering shelter, perches and potential breeding opportunities. Of the species recorded by WYG on site, Lapwing were the only qualifying species of the SPA, six were Birds of Conservation Concern (BOCC) - four red list species (common starling, lapwing, herring gull, and skylark) and two amber list species (dunlin and meadow pipits). Lapwing and herring gull used the arable land to feed; they were not recorded within the proposed development area. Both species are red list BOCC with lapwing also being a HBAP (Habitats and Biodiversity Action Plan) priority and Natural Environment and Rural Communities (NERC) Act species which require measures to protect them from any adverse effects of development.

Of the 16 surveys undertaken by WYG between October 2013 and March 2014, 11 were high tide surveys and 5 were low tide surveys. Key results are as follows:

- No Brent geese were recorded using the site by WYG. However, occasional, historical use has been noted by HBIC between 1995 and 1998.
- None of the other species for which Langstone Harbour SPA is designated (i.e. black-tailed godwit, dunlin, grey plover, redshank and ringed plover) were recorded using the site by WYG.
- A maximum of 34 lapwings were recorded by WYG using the site at any one time, and they were all located outside of the proposed development site but within the arable land that lies directly to the west of the proposed development site.
 - However, during a survey undertaken by Hampshire County Council on 15th January a total of 101 lapwings were recorded at the site (County Ecologist consultation, April 2014). It is understood the location of these birds was towards the southern boundary of the arable land, in a line from east to west, which crossed both the proposed development site and the arable land that lies to the west of the proposed development site.



4.2 Potential Impacts

4.2.1 Habitat Loss

The areas of habitat which will be impacted by the proposed development includes a portion of the stubble field and the paddock area which is grazed by horses (see Appendix F). The paddock is considered to have minimal potential to support lapwing, given its proximity to the houses, fragmented hedgerows and surrounding trees; however, it is good habitat for common starling, duncock and meadow pipits which all feed in the hedgerows and scrub surround the paddock.

The stubble field is primarily used for feeding by a number of species, most notably lapwing, herring gull, skylark and meadow pipits. Only meadow pipit has been recorded by WYG feeding within the proposed development area. It is worth noting that the majority of the stubble field will be untouched, and, as such suitable foraging areas will be retained.

4.2.2 Disturbance to wintering waders

The site appeared to be subject to little non-natural disturbance with species present reacting to the occasional disturbance incidents that occurred during surveys; therefore, during the construction and operational phase, it is considered that the development has some potential to disturb lapwings and other species using the surrounding fields.

Disturbance to the qualifying features of Langstone Harbour SPA is considered to be minimal as Brent geese have not been recorded on site and none of the other qualifying species (black-tailed godwit, dunlin, grey plover, redshank and ringed plover) have been recorded on site.

However, lapwings form part of the overwintering assemblage of waterfowl for which the SPA is designated. Lapwings have been recorded on site on three occasions within the past few years, despite a large number of surveys undertaken. Lapwing occurred during two out of the sixteen WYG winter bird surveys, albeit outside the proposed development area, but in areas of arable field that have potential to be impacted by the proposed development (e.g. through noise during construction). However, the records provided by HBIC of the Hampshire County Council survey provided records of 101 lapwings using the site on 15th January 2013, on this occasion it is understood that the birds were spread between the proposed development site and the adjacent arable land. The total wintering lapwing population for Langstone Harbour was 4,175 in 1997 according to JNCCs Langstone Harbour pages and 4,510 according to the JNCC SPA Lapwing population index. The highest count obtained for lapwing was 101, this equates to 2.2 to



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2.4% of the wintering lapwing population in the harbour as recorded in 1997, and approximately 0.6% of the 17,119 individuals representing the Western Siberia/Western Europe population. However, it is worth noting that lapwing were only recorded on one of the seven visits by HCC, and during 2 of the 16 survey visits by WYG, and that on all but one of these occasions <1% of the total wintering population have been observed using the site. On the occasion when 101 lapwing were recorded, they were not all within the proposed development site, but spread between the site and the adjacent arable field (within HO3). Consequently, the site is considered to be used infrequently by significant numbers of lapwing, although given the low frequency with which the site is used, it is not considered to be an 'important' site for lapwings. Mitigation and enhancement measures, with particular reference to lapwing are proposed in section 4.3 below.

4.2.1 Disturbance to breeding birds

The proposed development site includes areas of scrub, grassland, hedgerows and stubble field which offer potential nesting habitat for a variety of bird species. Visits in March have identified nesting long-tailed tits in a shrub in the south west of the paddock.

4.3 Mitigation & Enhancement

4.3.1 General Habitat Mitigation

The loss of the paddocks, mixed scrub and fragmented hedgerows used by common starling, dunnoek and meadow pipits will be mitigated for by the creation of a habitat mosaic of hedgerows, trees and interconnected grassland within the site layout; this will offer foraging, roosting and nesting areas to these and other species.

Mitigation measures, including timing and future management will be prescribed within an ecological mitigation, compensation and enhancement plan (as recommended during consultation with the County Ecologist, April 2014).

4.3.1 Mitigation and enhancement for Lapwings and Brent geese

Whilst the site is considered to be used infrequently by significant numbers of lapwings, it is recognised that there will some small loss of foraging habitat for lapwings. Despite the fact that lapwings have only been recorded using the south west section of the field by HCC, the northern section is considered to be the



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most valuable to lapwing in the long term as it is located away from the main roads; Havant Road and Portsdown Hill Road.

Furthermore, consultation with Hampshire County Council ecologist and Natural England have advised that given the site is designated for Brent geese (although there are no records of Brent geese using the site for 16 years), mitigation would be expected for Brent geese too. Due to changes in management practices and probably other factors which have occurred over the last 16 years, Brent geese do not appear to be using the site at present, however, between 1995-1998 on occasion the site was used by a significant number of Brent geese.

Therefore the mitigation has been designed to provide mitigation for both lapwing and Brent geese and hence provide an overall enhancement for these two species. The mitigation that is proposed involves retaining the arable land to the west of the site as shown by the plan in Appendix G. It is proposed to manage the retained arable field to the west of the site for arable use. Consultation has been undertaken with both Hampshire County Council ecologist and Natural England who have agreed that adopting rotational farming practices in perpetuity for this site will be considered appropriate mitigation and enhancement. The rotational farming that will be implemented for the retained arable land to the west of the site will involve farming practice rotations over a four year period. This will include sowing winter wheat one in four years and spring wheat one in four years allowing the remaining two years to be sown with a crop of choice.

The continued management of the site for arable use will also be appropriate for the management of dwarf spurge which is present along the disturbed margins of this field and the dwarf spurge present on the development site will also be translocated to this field.

Within the development, it is proposed to create a native species hedgerow (using locally sourced plants) of no greater than 2m in height along the western boundary of the proposed development site, and to plant trees to screen the houses from the field, which will reduce the visual and noise disturbance to the remainder of the arable field. There will be no permitted access into the arable land that will be retained beyond the western boundary of the proposed development site. The planting (and subsequent protection) of the hedgerow should take place at as early a stage as possible, to allow the hedge to mature.

Waders (including lapwing) will also benefit if trees, scrub and hedgerows on site are managed to remain below 2m in height (Milsom *et al.*, 1998) as this will offer increased visibility, allowing birds to detect predators and prevent perches for predatory species such as magpies and carrion crows. The newly created



Portsmouth Hill: Wintering Bird Survey Report

hedgerow along the western boundary will be maintained at 2 metres in height. This will be achieved through pruning/lopping of trees and flailing and cutting of scrub and hedgerow outside of the breeding season (March-September). Tree and scrub management should be undertaken every second year (ideally in the months of March and October) to avoid disturbance of the summer breeding or wintering bird seasons, again, this will be detailed in the 'scheme of ecological mitigation, compensation and enhancement measures'.

4.3.2 Mitigation for Breeding Birds

To avoid destroying or disturbing active bird nests, it is recommended that vegetation clearance is undertaken outside the bird nesting season. This runs from March to September inclusive. It is considered likely that if the site is successfully granted planning permission, site clearance will fall within the summer and hence within the breeding bird season. Therefore it is recommended that where scrub is to be removed, the area is to be inspected by a suitably qualified ecologist no more than 48 hours prior to work commencing. Should any active nests be found, they must be left in situ and not disturbed until all the young have fledged and cease to return to the nest. A buffer of approximately 5 metres (although the ecologist will confirm with regards to various species) should be enacted around each active nest and every effort must be made not to enter or disturb this area. If, once started, construction works cease for more than five days, it is recommended that an update check is undertaken before any clearance activities are resumed to confirm whether any nesting birds have taken up residence in the intervening period.

4.3.3 Monitoring

Monitoring will be proposed for the site to determine the success of the rotational farming at the site. Given the infrequent use of the site by lapwing and no confirmed use by Brent geese over the past 16 years. However, from consultation with Natural England it is understood that this will be difficult. Therefore monitoring is proposed in the first and third year when the land is sown with winter and spring wheat. The monitoring will be undertaken for a four hour period (2 hours either side of high tide) on a monthly basis between November and January. The months of November to January are considered appropriate for monitoring as in previous years these are the only months that lapwing and Brent geese have been recorded using the site. In addition, Brent geese tend to arrive in the UK from September, but greatest numbers arrive from late October to early November with the highest counts in January hence this period is considered appropriate. The proposed monitoring outlined above should also be robust to record wintering lapwing within the mitigation area.



Portsmouth Hill: Wintering Bird Survey Report



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WYG Phase 1 Habitat report Land adjacent to Portsmouth hill, August 2013



Appendices



Appendix A – Report Conditions



Portsmouth Hill: Wintering Bird Survey Report

Report Conditions

Portsmouth Hill – Wintering Bird Report

This report is produced solely for the benefit of David Wilson Homes, and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYG. In time improved practices, fresh information or amended legislation may necessitate a re-assessment. Opinions and information provided in this report are on the basis of WYG using due skill and care in the preparation of the report.

This report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times.

This report is limited to those aspects reported on, within the scope and limits agreed with the client under our appointment. It is necessarily restricted and no liability is accepted for any other aspect. It is based on the information sources indicated in the report. Some of the opinions are based on unconfirmed data and information and are presented as the best obtained within the scope for this report.

Reliance has been placed on the documents and information supplied to WYG by others but no independent verification of these has been made and no warranty is given on them. No liability is accepted or warranty given in relation to the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report.

Whilst skill and care have been used, no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather related conditions.

Although care is taken to select monitoring and survey periods that are typical of the environmental conditions being measured, within the overall reporting programme constraints, measured conditions may not be fully representative of the actual conditions. Any predictive or modelling work, undertaken as part of the commission will be subject to limitations including the representativeness of data used by the model and the assumptions inherent within the approach used. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions.

The potential influence of our assessment and report on other aspects of any development or future planning requires evaluation by other involved parties. The performance of environmental protection measures, e.g. of buildings and other structures in relation to acoustics, vibration, noise mitigation, and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.



Appendix B – Desktop Study Information



Portsmouth Hill: Wintering Bird Survey Report

Data has been obtained from Hampshire Biodiversity Information Centre who has provided data for the site from December 1995 through to March 1999

Date	Month	Season	Other birds/waterfowl (use WEBS codes)	Brent (Y/N)	No of Brent
30-Dec-95	Dec	1995-1996	Not recorded	Y	50
18-Jan-96	Jan	1995-1996	0	Y	600
26-Jan-96	Jan	1995-1996	0	Y	115
31-Jan-96	Jan	1995-1996	0	N	0
1-Feb-96	Feb	1995-1996	0	N	0
16-Feb-96	Feb	1995-1996	Not recorded	N	0
2-Mar-96	Mar	1995-1996	Not recorded	N	0
15-Nov-97	Nov	1997-1998	Not recorded	N	0
19-Nov-97	Nov	1997-1998	Not recorded	N	0
22-Nov-97	Nov	1997-1998	Not recorded	N	0
23-Nov-97	Nov	1997-1998	Not recorded	N	0
25-Nov-97	Nov	1997-1998	Not recorded	N	0
27-Nov-97	Nov	1997-1998	Not recorded	N	0
1-Dec-97	Dec	1997-1998	Not recorded	N	0
4-Dec-97	Dec	1997-1998	Not recorded	Y	3
4-Dec-97	Dec	1997-1998	Not recorded	Y	200
5-Dec-97	Dec	1997-1998	Not recorded	N	0
9-Dec-97	Dec	1997-1998	Not recorded	N	0
10-Dec-97	Dec	1997-1998	Not recorded	N	0
12-Dec-97	Dec	1997-1998	Not recorded	Y	35
14-Dec-97	Dec	1997-1998	Not recorded	N	0
16-Dec-97	Dec	1997-1998	Not recorded	N	0
16-Dec-97	Dec	1997-1998	Not recorded	N	0
16-Dec-97	Dec	1997-1998	Not recorded	Y	300
20-Dec-97	Dec	1997-1998	Not recorded	Y	300
20-Dec-97	Dec	1997-1998	Not recorded	Y	850
21-Dec-97	Dec	1997-1998	Not recorded	N	0
23-Dec-97	Dec	1997-1998	Not recorded	N	0
24-Dec-97	Dec	1997-1998	Not recorded	N	0
28-Dec-97	Dec	1997-1998	Not recorded	N	0
30-Dec-97	Dec	1997-1998	Not recorded	N	0
1-Jan-98	Jan	1997-1998	Not recorded	N	0
4-Jan-98	Jan	1997-1998	Not recorded	N	0



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Date	Month	Season	Other birds/waterfowl (use WEBS codes)	Brent (Y/N)	No of Brent
6-Jan-98	Jan	1997-1998	Not recorded	N	0
13-Jan-98	Jan	1997-1998	Not recorded	N	0
15-Jan-98	Jan	1997-1998	Not recorded	N	0
16-Jan-98	Jan	1997-1998	Not recorded	N	0
20-Jan-98	Jan	1997-1998	Not recorded	Y	180
21-Jan-98	Jan	1997-1998	Not recorded	N	0
23-Jan-98	Jan	1997-1998	Not recorded	Y	300
28-Jan-98	Jan	1997-1998	Not recorded	N	0
5-Feb-98	Feb	1997-1998	Not recorded	N	0
10-Feb-98	Feb	1997-1998	Not recorded	N	0
11-Feb-98	Feb	1997-1998	Not recorded	N	0
18-Feb-98	Feb	1997-1998	Not recorded	N	0
23-Feb-98	Feb	1997-1998	Not recorded	N	0
25-Feb-98	Feb	1997-1998	Not recorded	N	0
4-Mar-98	Mar	1997-1998	Not recorded	N	0
7-Mar-98	Mar	1997-1998	Not recorded	N	0
10-Mar-98	Mar	1997-1998	Not recorded	N	0
19-Mar-98	Mar	1997-1998	Not recorded	N	0
16-Dec-98	Dec	1998-1999		Y	141
17-Dec-98	Dec	1998-1999		N	0
17-Dec-98	Dec	1998-1999		Y	200
22-Dec-98	Dec	1998-1999		N	0
24-Dec-98	Dec	1998-1999		Y	50
28-Dec-98	Dec	1998-1999	Not recorded	Y	140
5-Jan-99	Jan	1998-1999	Not recorded	N	0
11-Jan-99	Jan	1998-1999		N	0
14-Jan-99	Jan	1998-1999	Not recorded	N	0
16-Jan-99	Jan	1998-1999	Not recorded	N	0
23-Jan-99	Jan	1998-1999	Not recorded	N	0
18-Feb-99	Feb	1998-1999		N	0
5-Mar-99	Mar	1998-1999	Not recorded	N	0
8-Mar-99	Mar	1998-1999	Not recorded	N	0
19-Mar-99	Mar	1998-1999	Not recorded	N	0

Details of ad-hoc Brent Goose surveys (post Solent Waders and Brent Goose Strategy 2010 publication) within Strategy Site Code 'H03':

Season	Date	Species	Count	Time on Site	Disturbance	Brent Yes/No	Comments	Count Comment
2012-13	27-Nov-12	No birds seen		High Tide				
2012-13	27-Nov-12	No birds seen		High Tide				
2012-13	18-Dec-12	No birds seen		High Tide				
2012-13	05-Feb-13	No birds seen		High Tide				
2012-13	23-Feb-13	No birds seen		High Tide				
2012-13	23-Mar-13	No birds seen		High Tide				

Notes:

- Six visits had been made to this site between November 2012 - March 2013. No brent geese were identified on these occasions (hence the blank cells for Count or Brent Yes/No).
- Please bear in mind these are ad-hoc records submitted after the Solent Waders and Brent Goose Strategy 2010 publication, therefore no formal assessment of the site in question has been carried out with regard to site use and classification using these more recent records.
- Site visits showing negative results for brent geese presence should not be taken as evidence to show that sites are not used by brent geese.

sharing information about Hampshire's wildlife

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



Appendix C – Peak Counts (WYG)

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Values																
Row Labels	24-Oct	15-Nov	15-Nov2	22-Nov	06-Dec	12-Dec	19-Dec	03-Jan	10-Jan	15-Jan	11-Feb	18-Feb	28-Feb	13-Mar	13-Mar2	28-Mar
Black Bird	0	1	1	0	1	2	1	0	3	4	4	3	4	3	4	4
Black-headed gull	8	12	2	7	2	6	10	9	15	5	9	6	9	19	14	13
Blue Tit	3	2	0	0	0	3	2	0	3	2	3	3	3	0	0	3
Brent goose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrion Crow	3	1	0	2	1	2	2	0	2	2	3	3	5	58	13	5
Chaffinch	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0
Chiff Chaff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Common Buzzard	3	1	0	2	1	2	1	0	3	1	3	5	0	3	1	2
Common Starling	7	0	0	0	5	0	0	0	0	0	0	0	0	3	4	2
Duncock	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	4
Gold Crest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Goldfinch	0	5	2	2	0	0	0	0	0	0	6	4	6	3	3	4
Great Tit	3	2	0	0	0	4	2	0	2	2	2	3	3	8	3	2
Greenfinch	0	0	0	3	0	0	0	1	0	0	0	0	0	2	4	3
Herring gull	8	0	0	0	1	0	0	0	0	0	0	0	0	0	2	3
Jackdaws	2	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0
Jay	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Kestrel	1	0	0	0	0	1	0	0	0	0	0	1	0	2	0	1
Lapwing	0	0	0	34	8	0	0	0	0	0	0	0	0	0	0	0
Long Tail Tit	4	5	0	0	0	0	0	3	4	0	4	5	3	3	4	6
Magpie	5	2	1	5	5	5	10	0	4	3	9	3	10	8	8	11
Meadow Pipit	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0
Pheasant	0	0	0	0	0	9	6	0	3	4	0	0	0	3	6	4
Robin	1	1	1	1	2	2	1	0	2	2	2	2	3	2	1	3
Skylark	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	0
Sparrow Hawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Wood Pigeons	19	27	30	30	4	1	2	1	5	5	2	3	8	28	46	16
Wren	1	2	0	0	1	2	1	0	2	1	2	2	2	2	2	3
Grand Total	68	62	37	86	33	78	38	17	48	37	49	43	58	153	117	90



Appendix D – Full List of Common and Scientific Names



Portsmouth Hill: Wintering Bird Survey Report

Species Name	Latin Name
Black Bird	<i>Turdus merula</i>
Black-headed gull	<i>Chroicocephalus ridibundus</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Brent goose	<i>Branta bernicla</i>
Carrion Crow	<i>Corvus corone</i>
Common Buzzard	<i>Buteo buteo</i>
Common gull	<i>Larus canus</i>
Common Starling	<i>Sturnus vulgaris</i>
Curlew	<i>Numenius arquata</i>
Dunlin	<i>Calidris alpina</i>
Dunnock	<i>Prunella modularis</i>
Goldfinch	<i>Carduelis carduelis</i>
Great Tit	<i>Parus major</i>
Greenfinch	<i>Carduelis chloris</i>
Herring gull	<i>Larus argentatus</i>
Jackdaws	<i>Corvus monedula</i>
Kestrel	<i>Falco tinnunculus</i>
Lapwing	<i>Vanellus vanellus</i>
Long Tail Tit	<i>Aegithalos caudatus</i>
Magpie	<i>Pica pica</i>
Meadow Pipit	<i>Anthus pratensis</i>
Oystercatcher	<i>Haematopus ostralegus</i>
Pheasant	<i>Phasianus colchicus</i>
Ringed plover	<i>Charadrius hiaticula</i>
Robin	<i>Erithacus rubecula</i>
Skylark	<i>Alauda arvensis</i>
Wood Pigeons	<i>Columba palumbus</i>
Wren	<i>troglodytidae</i>



Appendix E – Contacts (Emails/Letters)



Portsmouth Hill: Wintering Bird Survey Report

Dear Clare,

Thank you for sending through this additional clarifying email. I agree all the points you make with the exception of the points regarding the amount of survey data. I agree that 2 recent years of survey effort may be sufficient, but this is on the assumption that this current winter's survey again finds no use.

I hope that clarifies the position.

Kind regards

Simon

Simon Thompson
Lead Adviser
Land-Use Operations Team
Natural England
Cromwell House - 2nd Floor
15 Andover Road
Winchester
SO23 7BT
Direct Dial: 0300 060 4625

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Portsdown Hill: Wintering Bird Survey Report

Subject: RE: 102477 - Portsdown Hill, Havant

Dear Simon,

Further to our conversation regarding Portsdown Hill and my email of 13th November 2013 (below), we have received the raw data from Hampshire Biodiversity Information Centre but as discussed the site was not surveyed as part of the 2010 Solent Waders and Brent Goose Strategy. However, as we discussed that some data we have access to is quite old i.e. 1995-1999 where we have records of Brent geese on site. However, the Aluco Ecology report notes that the Brent geese feed on the winter crop. During the Aluco Ecology site visit in December 2009 the site was ploughed and today the site has stubble on the arable land and in the north west corner there is an area of grassland which is currently grazed by horses and hence considered sub-optimal for these species.

As discussed, given this information and the access to previous data (1995-1999) and that we will have 2 recent years of winter bird data 2012-2013 (data attached again for your info) and 2013-2014 (surveys currently underway and no records of Brent geese to date), it is considered that two recent years of winter bird surveys is sufficient to support the planning application for the site.

Further, as discussed you are happy that we complete only high tide surveys of the site twice a month and where possible to complete a low tide survey at the site once a month.

Also, we discussed whilst it is best practice to space the winter bird surveys at least a week or so apart, where the tide times would result in the surveys being undertaken in the dark, you are happy that the two high tide surveys are completed close to one another to ensure daylight working is achieved.

Many thanks, Kind regards

Clare May

Principal Ecologist

WYG

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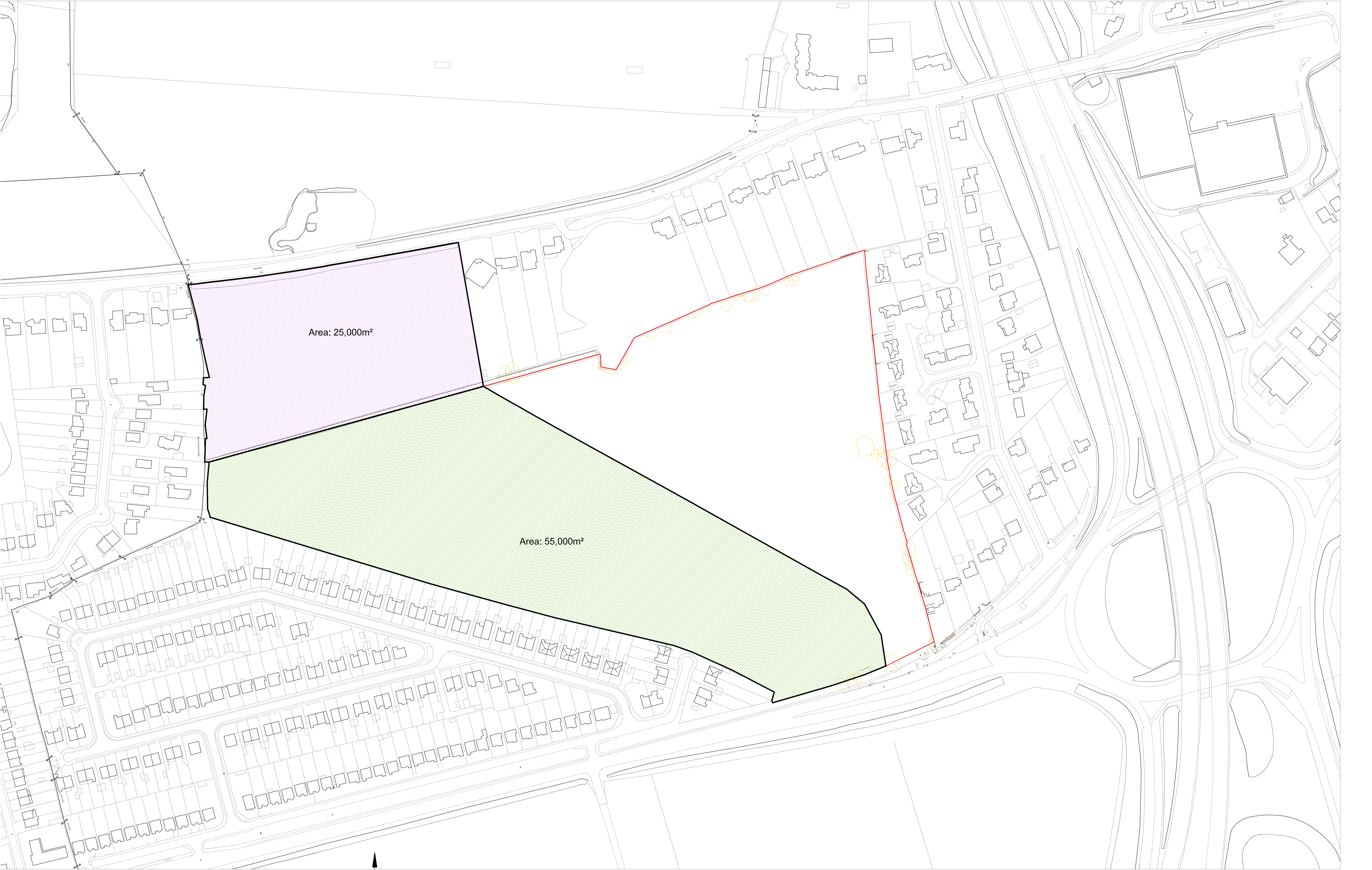
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Appendix F – Phase 1 Survey Plan



Appendix G – Lapwing & Brent geese Mitigation Plan



architecture
urbanism
safety

LHC GROUP
80000 (11.11.11)

EXETER 01382 44434
PLYMOUTH 01752 66666
SOUTHAMPTON 08450 71466



Appendix H – Management Requirements for Lapwing Mitigation Area

5.1 Location of Lapwing & Brent geese Mitigation Area

The location of the Lapwing & Brent Geese Mitigation Area is illustrated in Appendix G. This land will be secured through an exchange of contracts with the landowner to ensure that this land is managed as detailed in this report for both lapwing & Brent geese mitigation and where necessary to allow access for an appropriate management company to access the land to ensure the area is managed as per the agreed management plan. The use of this land for lapwing & Brent geese mitigation and its subsequent management will be secured via planning condition on any consent issued.

5.2 Ecology

Wintering **wildfowl** and **waders** have three broad habitat requirements: suitable feeding conditions; suitable roost sites; and lack of disturbance (RSPB, 1997). Management regimes aimed at promoting these conditions on grassland habitats are applied widely in coastal and estuarine areas to provide suitable foraging and roosting conditions.

5.2.1 Lapwing

Lapwing tend to flock together in large numbers during the non-breeding season feeding on soil-dwelling invertebrates such as earthworms and crane-fly larvae. Spring sown wheat has the benefit that the crop is not too dense or high thus allowing lapwings to attempt to nesting. It will also mean that soil dwelling invertebrates that lapwing feed on are present over the winter.

5.2.2 Brent Geese

Brent geese feed on eelgrass (*Zostera spp.*) and *Enteromorpha* spp. which collects on the intertidal mud, However, during high tide, Brent geese can move to higher land, and have been found to be using arable fields around the Solent and these species have a particular affinity to foraging within winter wheat.



5.3 Preparation and management of Mitigation land

5.3.1 Winter wheat

The exact timing of the sowing depends upon the variety of winter wheat that is planted. Similarly the depth at which the crop is sown also depends upon the variety.

The field will need to be prepared prior to sowing by ploughing the field and spraying of a natural manure to fertilize the field. The method to which the winter wheat is sown will be dependent upon the management companies and/or farmers available machinery but such as a grain drill attached to a tractor would be appropriate. The winter wheat will be sown at the beginning of winter between October and the end of November. Winter wheat needs a period after initial growth with consistent temperatures under 7°C in order for it to “vernalise” and become fertile.

Dependent upon weather condition, the winter wheat will be ready for harvesting between late July to early August, Harvesting can be undertaken with either a combine harvester or a sythe. The harvesting of this crop does not impact the two target species and hence the harvesting of the crop i.e. timings and methods will be at the discretion of the farmer/management company.

5.3.2 Spring wheat

Again the timing and the depth at which the seed is sown is dependent upon the variety of spring wheat which is sown. The spring wheat will be sown in early spring around March time but generally once ground temperatures are above 8°C. Again, dependent upon the weather conditions the crop is usually ready for harvesting in July. This report will not dictate harvesting methods as these will not impact these two target species.

The continual soil disturbance both through sowing of winter and spring wheat will provide the necessary disturbance required for dwarf spurge to continue to grow. The grassland margins along the northern and western boundary will be retained for reptile habitat.

Any agricultural practices taking place in the wider site, should keep a precautionary watch for nests between mid-March and June.



5.3.3 Fertiliser

Application of fertiliser should not be required, or be reduced to an absolute minimum requirement in order to promote a diverse plant assemblage and invertebrate community.

5.3.4 Control of Invasive, Noxious and Pernicious Weeds

Control of undesirable plant species, such as creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort and common nettle, may be required. In this instance, proposed control methods should be discussed with an ecologist.

5.3.5 Hedgerow/Tree/Scrub Management

As described within the report (Section 4.3.1), trees, scrub and hedgerows on the site as a whole will be managed to remain below 2m in height (Milsom *et al.*, 1998) to retain as a wide visual horizon for lapwing and Brent geese as possible. This will be achieved through pruning/lopping of trees and flailing and cutting of scrub and hedgerow outside of the breeding season (March-September). If tree and scrub management must be undertaken within these months then a suitably qualified Ecologist should undertake a check for breeding/wintering birds 48 hours in advance of works being undertaken.

5.3.6 Minimising Disturbance

There will be no recreational access to the enhancement site so as to minimise any disturbance to the Brent geese and lapwing using this site. This will be reinforced with clear and instructive signage to highlight that the enhancement site is of nature conservation value.

5.4 Monitoring of Mitigation Area

Monitoring will be proposed for the site to determine the success of the rotational farming at the site. Given the infrequent use of the site by lapwing and no confirmed use by Brent geese over the past 16 years. However, from consultation with Natural England it is understood that this will be difficult. Therefore monitoring is proposed in the first and third year when the land is sown with winter and spring wheat. The monitoring will be undertaken for a four hour period (2 hours either side of high tide) on a monthly basis between November and January. The months of November to January are considered appropriate for monitoring as in previous years these are the only months that lapwing and Brent geese have been recorded using the site. In addition, Brent geese tend to arrive in the UK from September, but greatest numbers arrive from late October to early November with the highest counts in January hence this period is



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considered appropriate. The proposed monitoring outlined above should also be robust to record wintering lapwing within the mitigation area.