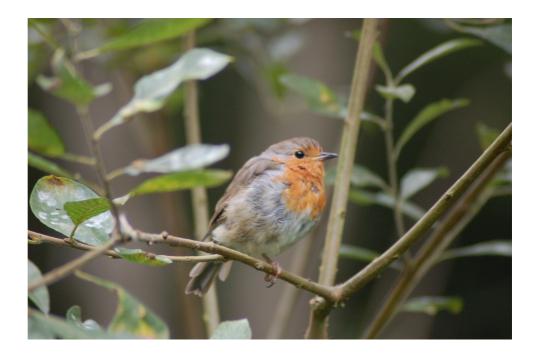


MVV Umwelt Energy from Waste Combined Heat and Power Facility, North Yard, Devonport **Breeding Bird Survey Report**

August 2010



Prepared for





Revision Schedule

Breeding Bird Survey Report August 2010

Rev	Date	Details	Prepared by	Reviewed by	Approved by
00	1 st August 2010	Draft	Paul Gregory Ecologist	Ian Roach Principal Environmental Consultant	lan Roach Principal Environmental Consultant
01	31 st August 2010	Draft	Paul Gregory Ecologist	lan Roach Principal Environmental Consultant	lan Roach Principal Environmental Consultant
02	14 th October 2010	Final	Paul Gregory Ecologist	lan Roach Principal Environmental Consultant	lan Roach Principal Environmental Consultant

This document has been prepared in accordance with the scope of Scott Wilson's In a document has been prepared in accordance with the scope of Scott Wilson's appointment with its client and is subject to the terms of that appointment. It is addressed to and for the sole and confidential use and reliance of Scott Wilson's client. Scott Wilson accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of the Company Secretary of Scott Wilson Ltd. Any advice, opinions, or recommendations within this document should be read and relied upon only in the content of the document and under the adviced to part period local. context of the document as a whole. The contents of this document do not provide legal or tax advice or opinion.

Devon PL1 1LD

Scott Wilson Mayflower House Armada Way Plymouth

Tel 01752 676700 Fax 08702386023

www.scottwilson.com



Table of Contents

1	Introduction	
1.1	Background	1
1.2	Limitations	1
1.3	Site Description	1
1.4	Development Description	1
2	Legislation and Policy	2
2.1	Legislation	2
2.2	Biodiversity Action Plans	2
2.3	Planning Policy Statement 9	2
2.4	Plymouth City Council Local Development Framework	4
3	Methodology	3
4	Results	7
4.1	Desk Study Results	7
4.2	Field Survey Results	9
5	Evaluation11	
6	Recommendations and Mitigation12	2
7	References13	3
8	Appendices14	1
8.1	Location Plan14	4
8.2	Breeding Bird Territories Map1	5
8.3	Scientific Names and Species Codes10	3
8.4	Legislation18	3
8.5	Bird Survey Data from MoD 19	9



1 Introduction

1.1 Background

- 1.1.1 MVV Umwelt GmbH is bidding for the South West Devon Waste Partnership (SWDWP) residual waste treatment PFI contract. MVV has submitted its variant bid for the Devonport site and is working towards preparing a planning application.
- 1.1.2 Scott Wilson Limited is providing planning, environmental and engineering advice to assist MVV in its bid for the SWDWP contract and in its preparation for a planning application. Scott Wilson has prepared this Breeding Bird Survey for these purposes. The objective of this report is to determine the status of breeding birds within the proposed development site.

1.2 Limitations

1.2.1 The findings and recommendations presented in this report are based on the information available at the time of writing (August, 2010) and the site conditions pertaining at the time the survey was undertaken (May – July 2010).

1.3 Site Description

- 1.3.1 The surveyed area occupies *c*. 9 ha of land centred on national grid reference: SX 446 573. The site access is *via* the Camel's Head entrance into Her Majesty's Naval Base (HMNB) Devonport, located *c*. 4 km north west of Plymouth city centre. The site lies in the north of the naval base / dockyard complex. The surrounding landscape is dominated by the suburban environments of the city of Plymouth, mainly industrial and residential buildings. The Tamar estuary is located *c*. 500m to the west of the site. A location plan is provided as Appendix 8.1.
- 1.3.2 Ashcroft currently uses the central part of the site to process demolition rubble, created from different construction projects throughout the dockyard. The southern part of the site is currently used as a storage compound for a variety of containers and skips. Semi-natural broadleaved woodland occurs towards the north and north western areas of the site, whilst semi-improved grassland and mudflats, associated with the estuarine tributaries, occur towards the east of the site.
- 1.3.3 The land to the west of the site is currently used as a car park, whilst to the east is the Devonport Distribution Facility (DDF), which stands approximately 8m high. The DDF is bordered to the north and south by large areas of tarmac which are currently used as loading bays and service yards. Directly to the south of the site is Weston Mill Lake naval dock.

1.4 Development Description

1.4.1 MVV proposes to construct and operate an energy-from-waste (EfW) combined heat and power (CHP) facility at the site. The land requirement is c. 3.4 ha. This includes the EfW plant itself, buildings, ancillary equipment, storage areas, office and amenity buildings, weighbridges, an ash recycling plant, site access and landscaping.



2 Legislation and Policy

2.1 Legislation

- 2.1.1 Under the Wildlife and Countryside Act (1981) (as amended), the majority of birds, their nests and eggs are protected. It is illegal to:
 - intentionally kill, injure or take any wild bird;
 - intentionally or recklessly take, damage or destroy the nest of any wild bird whilst it is in use or being built;
 - intentionally or recklessly take or destroy the egg of any wild bird;
- 2.1.2 Schedule 1 of the Wildlife and Countryside Act provides further protection for selected species during the breeding season. It is an arrestable offence to intentionally or wilfully disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. For further information on the legislation relating to wild birds, please refer to Appendix 8.4.

2.2 Biodiversity Action Plans

- 2.2.1 The UK Biodiversity Action Plan (BAP) is the UK Government's response to the Convention on Biological Diversity (1992). It describes the country's important biological resources and has resulted in the production of detailed plans for the protection of key habitats and species.
- 2.2.2 Through Section 40 of the Natural Environmental and Rural Communities Act (2006), local planning authorities have a duty to consider habitats and species listed within the national BAP (priority species and priority habitats) and local BAPs when considering a planning application.
- 2.2.3 The Devon Local BAP 2005 ensures that the targets and priorities within the UK BAP are implemented at local level for those habitats and species present in Devon. The Local BAP lists species and habitats that are to be considered during planning applications.

2.3 Planning Policy Statement 9

- 2.3.1 Protected species are a material consideration in the planning process under Planning Policy Statement 9 (PPS9). PPS9 sets out planning policies on the protection of biodiversity and geological conservation through the planning system.
- 2.3.2 The Government's objectives are:

"to promote sustainable development: ensuring that biological and geological diversity are conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity and geological diversity with other considerations.

to conserve, enhance and restore the diversity of England's wildlife and geology: sustaining, and where possible improving, the quality and extent of natural habitat and



geological and geomorphological sites; the natural physical processes on which they depend; and the populations of naturally occurring species which they support.

to contribute to rural renewal and urban renaissance by: enhancing biodiversity in green spaces and among developments so that they are used by wildlife and valued by people, recognising that healthy functional ecosystems can contribute to a better quality of life and to people's sense of well-being; and ensuring that developments take account of the role and value of biodiversity in supporting economic diversification and contributing to a high quality environment."

2.3.3 The statement gives advice to Local Planning Authorities to help ensure that the potential impacts of planning decisions on biodiversity and ecological conservation are fully considered. In particular the statement includes the following advice:

"Sites of Special Scientific Interest (SSSI)

Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on a SSSI (either individually or in combination with other developments), planning permission should not normally be granted.

Regional and Local Sites

Criteria based policies should be established in local development documents against which proposals for any development on, or affecting, regional or local sites will be judged.

Ancient Woodland and Other Important Natural Habitats

Planning permission should not be granted for any development resulting in the loss or deterioration of ancient woodland unless the need for, and benefits of, the development outweigh the loss of the woodland habitat. Loss of aged and veteran trees should also be avoided and planning authorities should encourage conservation of such trees in development proposals.

Local authorities should conserve (and identify opportunities to enhance and add to) other important natural habitats identified in the Countryside and Rights of Way Act 2000 Section 74 list through policies in plans.

Networks of Natural Habitats

Local authorities should aim to maintain networks of natural habitats by avoiding or repairing the fragmentation and isolation of natural habitats through policies in plans. Such networks should be protected from development and, where possible, strengthened by or integrated within it.

Previously Developed Land

Where previously developed sites have significant biodiversity or geological interest of recognised local importance, local planning authorities, together with developers, should aim to retain this interest or incorporate it into any development of the site.

Biodiversity within Developments



When considering proposals, local planning authorities should maximise opportunities for building in beneficial biodiversity or geological features in and around developments, using planning obligations where appropriate.

Species Protection

Local authorities must take measures to protect the habitats of wildlife species of principal importance for the conservation of biodiversity in England not already receiving statutory protection from decline, through policies in local development documents. Planning Authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. Planning authorities should refuse permission where harm to the species or their habitats would result unless the need for, and benefits of, the development clearly outweigh that harm."

2.4 Plymouth City Council Local Development Framework

Core Strategy Development Plan Document

- 2.4.1 The Core Strategy sets out the overall planning vision and framework for the city from 2006 to 2021 and beyond. Key policies are as follows:
- 2.4.2 Policy CS 18 Plymouth's Green Space
- 2.4.3 "The Council will protect and support a diverse and multi-functional network of green space and waterscape, through:
 - 1. Identifying in the Site Allocations Development Plan Document and Area Action Plans a network of strategically and locally important Greenscape Areas. Development on or adjacent to these Greenscape Areas will not be permitted where it would result in unacceptable conflict with the function(s) or characteristics of that area.
 - 2. Requiring development proposals to improve the quality and quantity of accessible green space, where appropriate.
 - 3. Requiring development proposals to address local deficiencies in accessible green space, where appropriate.
 - 4. Using its planning powers to safeguard important trees and hedgerows, and to secure provision for soft landscaping where appropriate as part of development."
- 2.4.4 Policy CS 19 Wildlife
- 2.4.5 "The Council will promote effective stewardship of the city's wildlife through:
 - 1. Safeguarding national and international protected sites for nature conservation from inappropriate development.
 - 2. Appropriate consideration being given to European and nationally protected and important species.



- 3. Maintaining a citywide network of local wildlife sites and wildlife corridors, links and stepping stones between areas of natural green space.
- 4. Ensuring that development retains, protects and enhances features of biological or geological interest, and provides for the appropriate management of these features.
- 5. Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.
- 6. Supporting wildlife enhancements which contribute to the habitat restoration targets set out in the South West Nature Map and in National, Regional and Local Biodiversity Action Plans."



- 3.1.1 The survey followed the standard Common Bird Census (CBC) methodology, as detailed by Marchant (1983) and Bibby *et al.* (1992). CBC involves production of maps showing the location of each territorial bird. These species maps were analysed to estimate the numbers of the various species within specific habitats of the study area and to compare how the birds are distributed in relation to different elements of the habitat.
- 3.1.2 The full methodology for the CBC involves ten complete mapping visits during the census season, mid-March to late June, but in practice this is very rarely done and it is very common for breeding bird surveys to comprise three complete mapping visits. For this study, five complete mapping surveys were considered sufficient to evaluate the importance of habitats for breeding birds since the project is to be the subject of with respect to an Environmental Impact Appraisal (EIA). The first full survey was undertaken in early May 2010 and the last survey was undertaken in late-June 2010.
- 3.1.3 In British conditions, bird activity remains at a moderately high level until about noon (Marchant, 1983). Cold, windy or wet days were generally avoided since the activity, and thus detectability, of the birds is much reduced.
- 3.1.4 The location, movements and activities of birds present during the field survey were recorded on species maps, except those species for which the CBC is not suited, primarily colonial species such as rook, jackdaw and hirundines (swallows and martins). However, these were included within the annual bird counts from the desk study. All the birds were registered on *c.* 1:2500 scale maps. Birds were recorded using standard BTO species and activity codes (Marchant 1983; Bibby *et al.* 1992).
- 3.1.5 This report follows the current standard reference on the national conservation status of the UK bird fauna, namely Gregory *et al.* (2009). This publication places UK bird species on one of three lists (Red, Amber, or Green). Red List birds are of high conservation concern, Amber List birds are of medium conservation concern, Green List birds are not currently believed to be of conservation concern (threatened). The locations of Red, Amber and Green List bird territories determined for the site are shown in Appendix 8.2 and summarised in Tables 1 to 4. The BTO species abbreviations used in these figures are given in Appendix 8.3.





4 Results

4.1 Desk Study Results

- 4.1.1 Bird data has been obtained and reviewed for the general area from the following sources:
 - Ministry of Defence (MoD) annual bird count 2001 to 2004 and 2008; and
 - Anecdotal information from MoD personnel.
- 4.1.2 All species were surveyed during the annual counts and standard breeding atlas methods were used, with breeding evidence collected and reported in three categories:
 - Possible breeding (adult present in suitable nesting habitat during the breeding season);
 - Probable breeding (bird holding territory, courtship displays seen, pair present in suitable nesting habitat); and
 - Proved breeding (e.g. nest with eggs or young found, adults carrying food or faecal sacs etc).
- 4.1.3 Bird records were obtained from the MoD annual bird count for the period of 2001 to 2004 and 2008. The data supplied by the MoD covers "All species" recorded within the whole of HMNB Devonport site, so are not solely restricted to the MVV development site. The desk study represents all the bird species encountered within the HMNB Devonport site regardless of their conservation status. Only breeding birds on the base are represented in Table 1. The full annual bird count 2001 to 2004 and 2008 including non-breeding birds and migrants is represented in Appendix 8.5.
- 4.1.4 HMNB Devonport MoD annual bird count revealed buzzard (*Buteo buteo*) and kestrel (*Falco tinnunculus*), which are Schedule 1 species, breeding on the site. Herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*) and starling (*Sturnus vulgaris*), which are Red List species, and whitethroat (*Sylvia communis*), swift (*Apus apus*), swallow (*Hirundo rustica*) and house martin (*Delichon urbica*), which are Amber List species, were breeding on the site during dates of survey.
- 4.1.5 Green List species recorded breeding on the site were feral pigeon (*Columba livia x*), grey wagtail (*Motacilla cinerea*), pied wagtail (*Motacilla alba yarrellii*), black bird (*Turdus merula*), robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), magpie (*Pica pica*), jackdaw (*Corvus monedula*), blue tit (*Cyanistes caeruleus*), wood pigeon (*Columba palumbus*), collard dove (*Streptopelia decaocto*) and greenfinch (*Carduelis chloris*).
- 4.1.6 Anecdotal evidence from MoD personnel (along with authors' observations) suggests that kingfisher (*Alcedo atthis*) is present on the site and use the tributaries and creeks associated with Weston Mill Lake and the Tamar estuary for foraging/feeding during the winter months. However, no formal wintering bird survey has been undertaken.
- 4.1.7 There are HMNB Devonport bird survey records of black redstart (*Phoenicurus ochruros*) overwintering on the bare ground and aggregate spoil heaps within the development footprint. This bird species is protected under Schedule 1 on the Wildlife and Countryside Act (1981). It appears in Appendix 11 of the Bonn Convention on the Conservation of Migratory Species of



Wild Animals, whereby a range of states are encouraged to conclude international agreements to benefit the species. It is also a UK National BAP Priority Species that benefits from areas of sparse waste-ground or urban 'brown field' sites. Sparse vegetation and stony ground are necessary for feeding and many urban or industrial environments adequately provide this habitat requirement.

Date **Species** Notes including conservation status 2001; 2002; 2003; 2004 Buzzard Pair breeding on MoD land. Schedule 1, WCA Act, 1981. 2001; 2002; 2003 Kestrel Pair breeding on MoD land. Schedule 1, WCA Act, 1981. 2001; 2002; 2003; 2004 Herring Gull Various numbers breed on MoD land. Red list. BAP Priority Species. 2001; 2002; 2003; 2004; Feral Pigeon Various numbers breed on MoD land. Green list. 2008 2001: 2002: 2003: 2004: Swift Up to 6 pairs breeding on MoD land. Amber list. 2008 2001; 2002; 2003; 2004; Swallow Up to 12 pairs breeding on MoD land. Amber list. 2008 Grev Wagtail 2008 Breeding on MoD land. Green list. 2001; 2002; 2003; 2004 **Pied Wagtail** Breeding on MoD land. Green list. 2001; 2002; 2003; 2004; Wren Breeding on MoD land. Green list. 2008 2001; 2002; 2003; 2004; Robin Breeding on MoD land. Green list. 2008 2001: 2002: 2003: 2004: Blackbird Breeding on MoD land. Green list. 2008 2001; 2002; 2003; 2004 Whitethroat Breeding on MoD land. Amber list. 2001; 2002; 2003; 2004 Magpie Breeding on MoD land. Green list. 2001; 2002; 2003; 2004; Jackdaw Breeding on MoD land. Green list. 2008 2001; 2002; 2003; 2004; Breeding on MoD land. Red list. Starling 2008 2001; 2002; 2003; 2004; Breeding on MoD land in redundant buildings. Red House 2008 Sparrow list. 2002; 2003 House Martin Breeding on MoD land. Amber list. 2001; 2002; 2003; 2004; Blue tit Breeding on MoD land. Green list. 2008 2003; 2004; 2008 Woodpigeon Breeding on MoD land. Green list. 2003; 2004 **Collared Dove** Breeding on MoD land. Green list. 2008 Greenfinch Breeding on MoD land. Green list.

Table 1: HMNB Devonport Breeding Bird Data Results



4.2 Field Survey Results

- 4.2.1 The Breeding Bird Survey recorded twenty four species flying over, within the site and surrounding area. Of these, the survey found thirteen species holding definite territories (breeding) either within or adjacent the site. Of these, one was a Red List species and two were Amber List species with the remaining ten being Green List species. Only breeding birds within the site boundary or adjacent the site boundary are represented (Table 2).
- 4.2.2 The habitats on site consist of bare ground, continuous scrub, rank semi-improved neutral grassland, ephemeral/short perennials, tall ruderals, semi-natural broadleaved woodland, hard standing and aggregate spoil.
- 4.2.3 Blackie's Wood towards the north west of the site consists of semi-natural broadleaved woodland dominated by pedunculate oak/English oak (*Quercus robur*) and common ash (*Fraxinus excelsior*), common hazel (*Corylus avellana*), common hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) are abundant in the understory with frequent wild cherry (*Prunus avium*) and English Elm (*Ulmus procera*).
- 4.2.4 The continuous scrub on site is dominated by butterfly-bush (*Buddleja davidi*), blackthorn (*Prunus spinosa*), immature sycamore (*Acer pseudoplatanus*), goat willow (*Salix caprea*), and elder (*Sambucus ebulus*). The continuous scrub has been left fairly unmanaged with occasional semi-mature trees.
- 4.2.5 The Breeding Bird Survey revealed territories for house sparrow (*Passer domesticus*), which are Red List species breeding in buildings adjacent to the development footprint and whitethroat (*Sylvia communis*) and dunnock (*Prunella modularis*), which are Amber List species, breeding on the site. Green List species recorded breeding on the site were black bird (*Turdus merula*), robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), greenfinch (*Carduelis chloris*), goldfinch (*Carduelis carduelis*), great tit (*Parus major*), blackcap (*Sylvia atricapilla*), chiffchaff (*Phylloscopus collybita*), chaffinch (*Fringilla coelebs*) and long-tailed tit (*Aegithalos caudatus*).
- 4.2.6 The buildings adjacent to the site provide suitable nesting habitat for house sparrow (Red List). The continuous scrub on and adjacent to the site provides suitable nesting and feeding habitats for a variety of small woodland bird species (Amber and Green List). Blackie's Wood towards the north west of the site is where the majority of woodland bird (Amber and Green List) territories were recorded.

Table 2: Breeding Bird Survey for Red, Amber and Green List Birds of Conservation ${\sf Concern}^1$

Species	Notes and including conservation status
House sparrow	Breeding in buildings adjacent to the site. Red List, UK Priority BAP. Breeding Population Decline. Severe decline in the UK breeding population size, of more than 50%, over 25 years. SPEC European Conservation status. Categorised as a Species of European Conservation Concern (SPEC 1, 2 or 3).
Whitethroat	Breeding on site. Amber List. Breeding Population Decline, moderate decline (by more than 25% but less than 50%).
Dunnock	Breeding on site. Amber List. Breeding Population Decline, moderate decline (by more than 25% but less than 50%).

¹ Eaton *et a*l, Birds of Conservation Concern. June 2009



Species	Notes and including conservation status
Blackbird	Breeding on site. Green List. Not of conservation concern (threatened).
Chaffinch	Breeding on site. Green List. Not of conservation concern (threatened).
Goldfinch	Breeding on site. Green List. Not of conservation concern (threatened).
Great tit	Breeding on site. Green List. Not of conservation concern (threatened).
Greenfinch	Breeding on site. Green List. Not of conservation concern (threatened).
Long-tailed tit	Breeding on site. Green List. Not of conservation concern (threatened).
Robin	Breeding on site. Green List. Not of conservation concern (threatened).
Wren	Breeding on site. Green List. Not of conservation concern (threatened).
Blackcap	Breeding on site. Green List. Not of conservation concern (threatened).
Chiffchaff	Breeding on site. Green List. Not of conservation concern (threatened).

4.2.7 Several other species were recorded on the site, flying over or on passage through the site. These were carrion crow (*Corvus corone*), magpie (*Pica pica*), house martin (*Delichon urbica*), swallow (*Hirundo rustica*), swift (*Apus apus*), buzzard (*Buteo buteo*), heron (*Ardea cinerea*), herring gull (*Larus argentatus*), black headed gull (*Larus ridibundus*), wood pigeon (*Columba palumbus*) and oyster catcher (*Haematopus ostralegus*).



5 Evaluation

- 5.1.1 The following account summarises the ornithological interest of the site and surrounding land. The semi-natural broadleaved woodland and continuous scrub on the site and adjacent to the site are of moderate value for breeding and wintering birds.
- 5.1.2 The annual bird count data 2001 to 2004 and 2008 including non-breeding birds and migrants gives limited information on the importance of the area for breeding and over-wintering birds with respect to the MVV development footprint. The data supplied by the MoD covers "All species" recorded within the whole of HMNB Devonport site and it is not known which records, if any, where within the MVV development footprint.
- 5.1.3 Therefore, it is considered that greater weight is given to the results of the 2010 Breeding Bird Survey for the value of the site to support birds (breeding, shelter and food).
- 5.1.4 Based upon the results of the Breeding Bird Survey, it is considered that the development footprint has moderate value for breeding birds, as it supports house sparrow, which are Red List species breeding in buildings adjacent the development footprint and whitethroat and dunnock, which are Amber List species breeding on the site. The semi-natural broadleaved woodland of Blackie's Wood and continuous scrub are of particular importance to these species.
- 5.1.5 It should be noted that this site has the potential to support over-wintering species such as waders in the intertidal estuarine habitats, as well as flocks of migrant thrush species such as redwing (*Turdus iliacus*) and fieldfare (*Turdus pilaris*). Mixed flocks of finches will also benefit from the site as the weed rich grassland adjacent to the site provides a variety of seeds on which to feed upon.
- 5.1.6 The survey found three bird species of conservation concern one Red List, and two Amber List bird species using the site for breeding, foraging and feeding. One species is UK BAP priority species.
- 5.1.7 The desk study revealed two Schedule 1, WCA, 1981 species, three Red List species and four Amber List species. However, these birds were recorded within the whole of HMNB Devonport site and may not have been recorded within the MVV development footprint.
- 5.1.8 Kingfisher, a Schedule 1, WCA, 1981 and Amber List species, has been recorded using the tributaries and creeks associated with Weston Mill Lake and the Tamar estuary for foraging/feeding during the winter months.
- 5.1.9 Black redstart, a Schedule 1, WCA, 1981, UK BAP priority species and Amber List species has also been recorded during the winter period on the bare ground and aggregate spoil heaps within the development footprint. However, no formal wintering bird survey has been undertaken.
- 5.1.10 The site is adjacent to the Tamar-Tavy Estuary Site of Special Scientific Interest and Special Area of Conservation which support passage migrants in both spring and autumn within the tributaries and lakes of the MoD base. These provide both food and shelter.



6 **Recommendations and Mitigation**

- 6.1.1 In line with PPS9, planning authorities in England should ensure that species of principal importance for conservation of biodiversity are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The provision of compensatory habitat for both priority and rare breeding species should be considered in order to mitigate against the loss of the species habitat.
- 6.1.2 The future development of the site has, by its nature, the potential to lead to the loss of overwintering habitat *i.e.* bare ground and aggregate spoil heaps, which is currently supporting a species of conservation concern, *i.e.* black redstart.
- 6.1.3 The inclusion of a brown roof within the development will compensate for the loss of overwintering habitat for black redstart.
- 6.1.4 The impact upon over-wintering species has not been addressed and given the desk study information that has been identified it is recommended that a wintering bird survey is also undertaken to evaluate the site's importance for wintering birds.
- 6.1.5 Any vegetation clearance works should be undertaken outside of the bird-nesting season. The nesting season is March August inclusive, so any vegetation should preferably be cleared September February. However if undertaken during the bird-nesting season, then an on-site ecologist should supervise all clearance work.

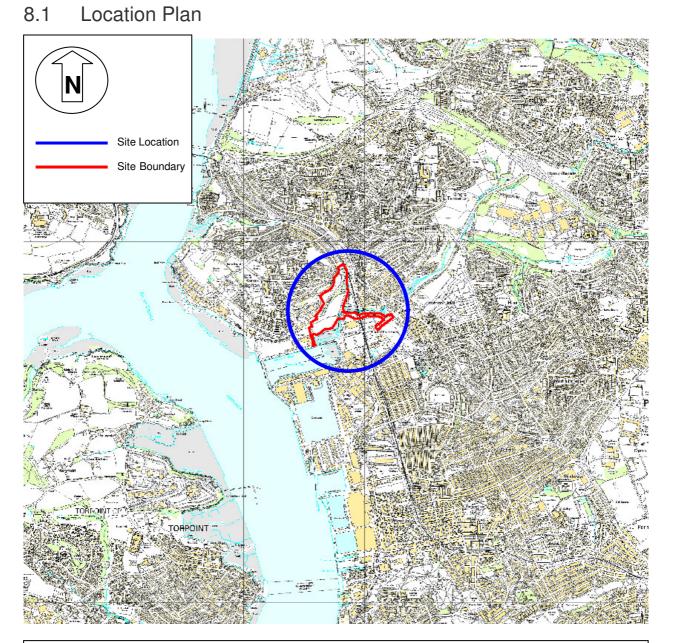


7 References

- 7.1.1 Bibby, C.J., Burgess, N.D. & Hill D.A. (1992) *Bird census techniques*. Academic Press, London.
- 7.1.2 Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) Bird Census Techniques, 2nd Edition.
- 7.1.3 British Trust for Ornithology (BTO) <u>http://www.bto.org/</u>Accessed 21st July 2001.
- 7.1.4 Eaton, M.A., Brown, A.F., Noble, D.G., Musgrove, A.J., Hearn, R.D., Aebischer, N.J, Procter, D.A., Gibbons., Evans. A., and Gregory, R.D., (2009) Birds of Conservation Concern 3. *The population status of birds in the United Kingdom, Channel Islands and Isle of Man:*. British Birds 102: June 2009 296-341.
- 7.1.5 Gibbons D. W., Avery M.I., Baillie, S.R., Gregory, R.D., Kirby, J., Porter, R.F., Tucker, G.M. and Williams, G. (1996). *Bird species of conservation concern in the United Kingdom, Channel Islands and Isle of Man: Revising the Red Data List.* RSPB Conservation Review 10: 7-18.
- 7.1.6 Gilbert, G., Gibbons, D.W., and Evan, J. (1998). *Bird Monitoring Methods*.
- 7.1.7 Marchant, J. (1983). *BTO common birds census instructions*. Maund & Irvine Ltd., Tring.
- 7.1.8 Office of the Deputy Prime Minister (2005) *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*.
- 7.1.9 UK Biodiversity Action Plan (UK BAP) (2007). UK Biodiversity Action Plan website: <u>http://www.ukbap.org.uk</u>. Accessed on 20th July, 2010



Appendices 8



This document has been prepared in accordance with the scope of Scott Wilson's appointment with its client and is subject to the terms of that appointment. Scott Wilson accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared. © Scott Wilson Ltd 2010. Reproduced from Ordnance Survey digital map data © Crown Copyright. All rights reserved. Licence number 0100031673.

Figure 1. Site Location Plan

Not to Scale Date 01.08.10 Project Title: Devonport Dockyard: Breeding Bird Survey

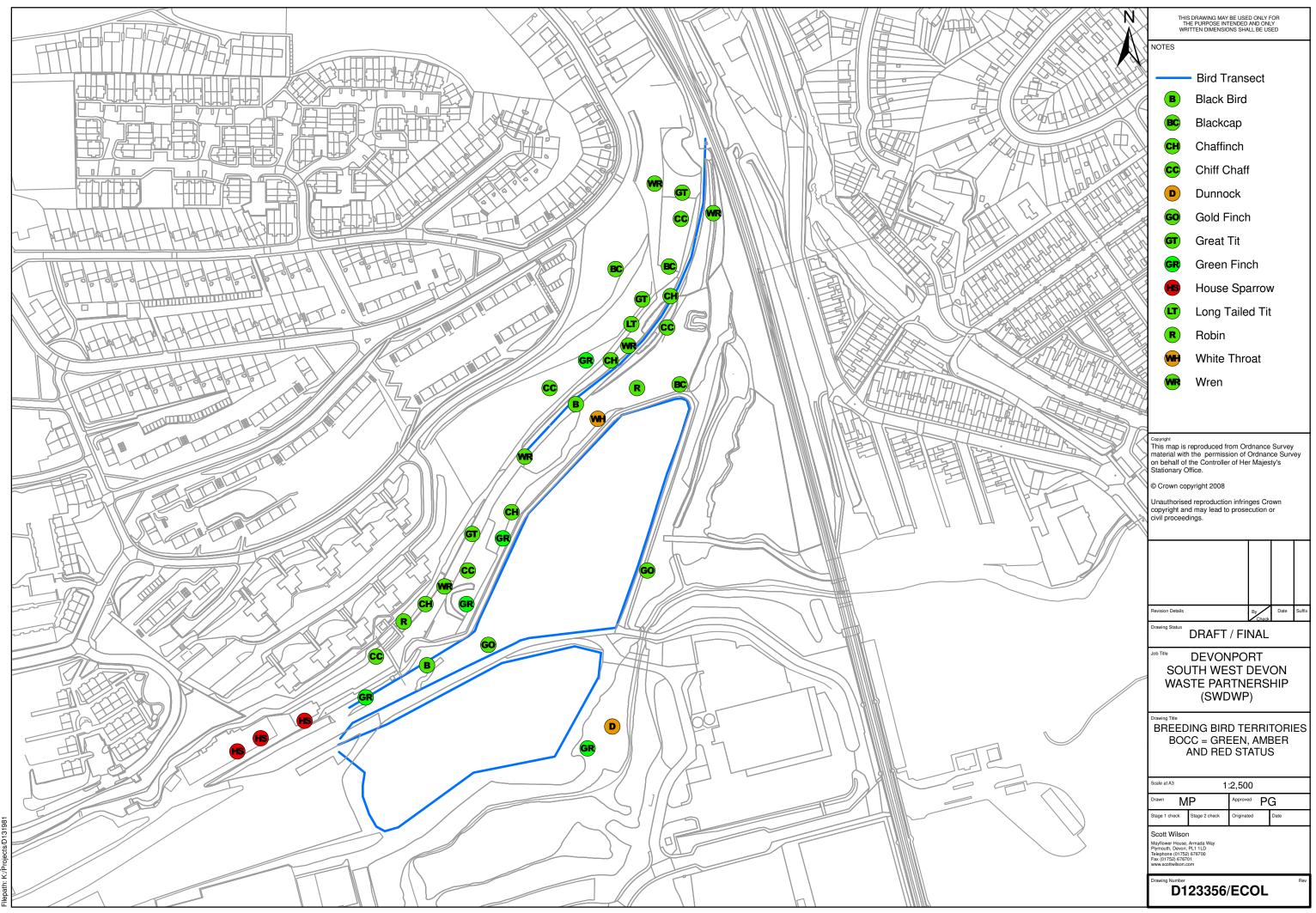
Scott Wilson Ltd Mayflower House Armada Way Plymouth Devon PL1 1LD United Kingdom



Tel: +44 (0) 1752 676 700 Fax: +44 (0) 8702 386 023



8.2 Breeding Bird Territories Map



ath: K:/Projects



8.3 Scientific Names and Species Codes

Standard BTO codes used in the breeding bird survey.

BTO code	Species	Scientific Name	Conservation Status	
В	Blackbird	Turdus merula	Green	
BC	Blackcap	Sylvia atricapilla	Green	
BF	Bullfinch	Pyrrhula pyrrhula	Amber	
CG	Canada Goose	Branta canadensis	Green	
С	Carrion Crow	Corvus corone corone	Green	
СН	Chaffinch	Fringilla coelebs	Green	
CC	Chiffchaff	Phylloscopus collybita	Green	
CD	Collared Dove	Streptopelia decaocto	Green	
CO	Coot	Fulica atra	Green	
D	Dunnock	Prunella modularis	Amber	
FP	Feral Pigeon	Columba livia x	Green	
GO	Goldfinch	Carduelis carduelis	Green	
GT	Great Tit	Parus major	Green	
GR	Greenfinch	Carduelis chloris	Green	
Н	Grey Heron	Ardea cinerea	Green	
HG	Herring Gull	Larus argentatus	Red	
HM	House Martin	Delichon urbica	Amber	
HS	House Sparrow	Passer domesticus	Red	
JD	Jackdaw	Corvus monedula	Green	
К	Kestrel	Falco tinnunculus	Amber	
L	Northern Lapwing	Vanellus vanellus	Red	
LW	Lesser Whitethroat	Sylvia curruca curruca	Green	
LI	Linnet	Carduelis cannabina	Red	
MG	Magpie	Pica pica	Green	
MA	Mallard	Anas platyrhynchos	Amber	
MP	Meadow Pipit	Anthus pratensis	Amber	
PH	Pheasant	Phasianus colchicus	Introduced	
Q	Quail	Coturnix coturnix	Amber	
RL	Red-legged Partridge	Alectoris rufa	Introduced	
RB	Reed Bunting	Emberiza schoeniclus	Amber	
RW	Reed Warbler	Acrocephalus scirpaceus	Green	
R	Robin	Erithacus rubecula	Green	
SM	Sand Martin	Riparia riparia	Amber	
SW	Sedge Warbler	Acrocephalus schoenobaenus	Green	
S	Skylark	Alauda arvensis	Red	
ST	Song Thrush	Turdus philomelos	Red	
SH	Sparrowhawk	Accipiter nisus	Green	
SG	Starling	Sturnus vulgaris	Red	
SD	Stock Dove	Columba oenas	Amber	
SC	(Common) Stonechat	Saxicola torquata	Amber	
SL	Barn Swallow	Hirundo rustica	Amber	
SI	(Common) Swift	Apus apus	Amber	



BTO code	Species	Scientific Name	Conservation Status
W	Northern Wheatear	Oenanthe oenanthe	Amber
WH	(Common) Whitethroat	Sylvia communis	Amber
WW	Willow Warbler	Phylloscopus trochilus	Amber
WP	Woodpigeon	Columba palumbus	Green
WR	Wren	Troglodytes troglodytes	Green



8.4 Legislation

- 8.4.1 Under the Wildlife and Countryside Act (1981) (as amended), all birds, their nests and eggs are protected, it is thus an offence, with certain exceptions, to:
 - intentionally kill, injure or take any wild bird;
 - intentionally or recklessly take, damage or destroy the nest of any wild bird whilst it is in use or being built;
 - intentionally or recklessly take or destroy the egg of any wild bird;
 - have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954;
 - have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954;
 - use traps or similar items to kill, injure or take wild birds;
 - have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations.
- 8.4.2 Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species during the breeding season. If any person intentionally or wilfully disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird, that person shall be guilty of an offence. For the purpose of this offence 'Any wild bird' means any bird included in Schedule 1. These are arrestable offences.



8.5 Bird Survey Data from MoD

Name	2001	2002	2003	2004	2008
Blackbird	12	18	25+	20+	6
Black-headed gull	25	10	5	15	2
Black redstart		3	1		
Blue tit	6	4	10	12	5
Buzzard	1	1	1	2	
Carrion crow	7	7	7	12	10
Chaffinch	4	6	11	10	2
Chiffchaff	1	1	1	2	
Coal tit				2	
Collared dove	6	6	10	8	
Cormorant	1	1	1	1	3
Curlew	1	1	1	1	
Dunnock	2	2	1	3	
Dunlin	50+	50+	50+	50+	
Feral pigeon	50+	50+	60+	80+	40+
Goldfinch	10	9	9	10	24
Great tit	2	-	5	12	2
Greater black-backed gull	1	1	1	1	
Greenfinch	8	10	11	18	10
Grey heron	1	2	1	1	1
Grey wagtail				3	
Herring gull	30+	30+	28	20	12
House martin		4	2	4	
House sparrow	60+	30+	50+	45+	15
Jackdaw	5	15	12	12	15
Kestrel	1	1	1	1	
Kingfisher		1	1	1	
Lesser black-backed gull				1	
Linnet	8	6	5	4	
Little egret	1	1	1	1	
Long-tailed tit				4	
Magpie	13	14	16	10	6
Mallard	1		1	1	
Meadow pipit	1	1	1	1	
Mediterranean gull			1		
Mute swan	1	1	1	1	
Oystercatcher	1	1	1	1	
Peregrine		1	1	1	
Pheasant		-	1	1	1
Pied wagtail	8	2	4	8	
Redshank	1	1	1	1	
Robin	6	3	7	10	8
Rook	1	- 1	1	1	
Sandwich turn	1	1	1	·	
Shelduck	•	1	1	1	



Song thrush	1	2	1	2	
Sparrowhawk	1	1	1		
Starling	30+	20+	20+	12+	25
Stock dove	1	1			
Barn swallow	10	10	18	20	20
Swift	8	8	4	8	3
Turnstone	10+	10+	10+	10	
(Common) Whitethroat	1	3	4	3	
Woodpigeon		14	25+	25+	18
Wren	3	3	7	4	4
Grand Total	162	179	199	245	192