Appendix 9.11

WINTER BIRD SURVEY



FORT HALSTEAD, KENT

WINTER BIRD SURVEY

A Report to: CBRE Ltd

Report No: RT-MME-127947-11 Rev A

Date Final Issued: April 2019 Date Rev A Issued: September 2019



Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ Tel: 01676 525880 Fax: 01676 521400

E-mail: admin@middlemarch-environmental.com Web: www.middlemarch-environmental.com

REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:	
Rev A	12/09/2019	Hannah Train GradCIEEM (Senior Ecological Consultant)	Tom Docker MSc CEcol MCIEEM (Associate Director, EIA)	Dr Philip Fermor CEnv MCIEEM (Managing Director)	
Final	05/04/2019	Jamie Fletcher (Ecological Consultant)	Tom Docker MCIEEM (Ecological Impact Assessment Manager)	Dr Philip Fermor CEnv MCIEEM (Managing Director)	

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

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

CBRE Ltd commissioned Middlemarch Environmental Ltd to undertake a Winter Bird Survey at the site of Fort Halstead, Kent. This assessment is required to inform a hybrid planning application associated with the proposed redevelopment of the site, which will involve the demolition of the majority of existing industrial buildings and the construction of a new employment-led mixed-use village. It is understood that the new village will comprise business areas (Use Classes B1a/b/c with energetic testing operations), development of up to 750 residential dwellings, a village centre (Use Classes A1/A3/A4/A5/B1a/D1/D2), a one form entry primary school, use of the Fort Area and bunkers as an Historic Interpretation Centre (Use Class D1), together with amenity space, landscape and ecological enhancements both on the site and on the adjacent land within the Applicants ownership.

A suite of baseline surveys have been completed by Waterman Group between 2006 and 2013, the results of which are provided in an Ecological Appraisal (Report EED12715-102.R.2.3.7.LM) and Protected Species and Habitat Survey (Report EED12715-102.R.3.3.6.LM), and summarised in the ecology chapter of an EIA associated with a previous application, for which outline planning consent was granted.

Due to the amount of time that has elapsed since the previous surveys were completed, updated ecological surveys were required for the current planning application.

During the winter bird survey visits completed between 17th December 2018 and 28th February 2019, a total of 43 species were recorded using the site. Of these 43 species:

- Six species are listed as UK BAP Priority Species (bullfinch, dunnock, marsh tit, skylark, song thrush and starling)
- Four species are listed as Priority Species in the Kent Biodiversity Action Plan (bullfinch, marsh tit, skylark and song thrush).
- Seven species identified on site are Red Listed by The Royal Society for the Protection of Birds (fieldfare, marsh tit, mistle thrush, redwing, skylark, song thrush and starling).
- Five species are Amber Listed by The Royal Society for the Protection of Birds (black-headed gull, dunnock, kestrel, meadow pipit and stock dove).
- Four species are listed under Schedule 1 of the Wildlife and Countryside Act, 1981 (brambling, fieldfare, peregrine falcon and redwing).

The four winter bird survey visits undertaken during winter 2018/2019 indicate that the site is of high value to a number of woodland and generalist species, with high numbers of species including blackbird, blue tit, great tit, chaffinch, brambling, jackdaw and woodpigeon recorded on site during the survey period. Furthermore, notable species of high conservation concern including red listed marsh tit, song thrush, mistle thrush and skylark were also consistently recorded on site.

The data acquired during the survey period indicates that bird numbers on site remain relatively stable during the winter months, with a moderate increase in the number of some species as winter progresses and resources become more scarce.

In conclusion, as the wintering bird survey visits recorded a number of species of National and Local importance i.e. species listed on the National Biodiversity Action Plan and Red/Amber Listed Species, it is considered that the site is of high value for wintering bird species and as such efforts should be made to maintain the value of the site throughout the construction phase and post development. The retention and effective management of the large amount of woodland, grassland and scrub on site will be key in achieving this, whilst sympathetic and responsible construction phase and post development considerations, notably the predominant use of suitable native species as part of any landscaping schemes on site and the effective management of areas of retained or newly created habitat, will also be of considerable benefit to birds on site.

CONTENTS

1.	INT	RODUCTION	4
	1.2 1.3	PROJECT BACKGROUND SITE DESCRIPTION DOCUMENTATION PROVIDED	4 5
2.	MET	THODOLOGIES	6
	2.1 2.2	DESK STUDY	6
3.	RES	SULTS	7
•	3.1 3.2	RELEVANT NATURE CONSERVATION SITES	7
4. \	WINT	ER BIRD SURVEY RESULTS	8
		FIELD SURVEY	
5.	DIS	CUSSION1	1
Ę	5.2	SUMMARY OF PROPOSALS	1
		NCLUSIONS	

1. INTRODUCTION

1.1 PROJECT BACKGROUND

CBRE Ltd commissioned Middlemarch Environmental Ltd to undertake a Winter Bird Survey at the site of Fort Halstead, Kent. This assessment is required to inform a hybrid planning application associated with the proposed redevelopment of the site, which will involve the demolition of the majority of existing industrial buildings and the construction of a new employment-led mixed-use village. It is understood that the new village will comprise business areas (Use Classes B1a/b/c with energetic testing operations), development of up to 750 residential dwellings, a village centre (Use Classes A1/A3/A4/A5/B1a/D1/D2), a one form entry primary school, use of the Fort Area and bunkers as an Historic Interpretation Centre (Use Class D1), together with amenity space, landscape and ecological enhancements both on the site and on the adjacent land within the Applicants ownership.

A suite of baseline surveys have been completed by Waterman Group between 2006 and 2013, the results of which are provided in an Ecological Appraisal (Report EED12715-102.R.2.3.7.LM) and Protected Species and Habitat Survey (Report EED12715-102.R.3.3.6.LM), and summarised in the ecology chapter of an EIA associated with a previous application, for which outline planning consent was granted.

Due to the amount of time that has elapsed since the previous surveys were completed, updated ecological surveys were required for the current planning application.

As part of the requirement for updated ecological surveys Middlemarch Environmental Ltd have completed the following assessments on site:

- Preliminary Ecological Appraisal (Report RT-MME-127947-01);
- Preliminary Bat Roost Assessment (Report RT-MME-127947-02);
- Nocturnal Emergence and Dawn Re-entry Bat Surveys (Report RT-MME-127947-03);
- Bat Activity Surveys (Report RT-MME-127947-04);
- Badger Survey (Report RT-MME-127947-05);
- Breeding Bird Survey (Report RT-MME-127947-06);
- Botanical Survey (Report RT-MME-127947-07);
- Terrestrial Invertebrate Survey (Report RT-MME-127947-08);
- Reptile Survey (Report RT-MME-127947-09):
- Dormouse Survey (Report RT-MME-127947-10);
- Pre-development Arboricultural Survey (Report RT-MME-128206-01); and,
- Arboricultural Impact Assessment (Report RT-MME-128206-02).

This report provides an assessment of the findings of the winter bird survey completed on site, and is based on four survey visits undertaken in December 2018 and January and February 2019.

Valuable data that can be collected from winter surveys includes:

- Identifying important areas for wintering waterfowl and wading birds;
- Identifying important roost sites;
- Identifying important feeding areas; and,
- Identifying important species that may be present on site i.e. Birds of Conservation Concern that may only be present on site during the winter months.

This report identifies the bird species and numbers that were recorded using the site during surveys undertaken in December 2018 and January and February 2019, and also provides discussion and evaluation of the ornithological value of the site in terms of identifying important areas/habitats on site for feeding and roosting and Species of Conservation Concern. The report also provides an evaluation of the site in a County and regional context.

1.2 SITE DESCRIPTION

The site is located off Star Hill Road in Halstead, Kent, centred at National Grid Reference TQ 4970 5922. It is an irregular shaped parcel of land that measures 131.89 ha in size.

At the time of the survey, the site comprised a defence research facility which contained a number of buildings with associated areas of hardstanding, surrounded by parcels of semi-natural and plantation woodland. Areas of neutral grassland, calcareous grassland and amenity grassland were also present, as well as patches of scrub and tall ruderal vegetation.

The site was bordered by the A224 Polhill to the north-east and Star Hill Road to the south-west. A mixture of arable and pastoral fields, pockets of woodland and farm buildings surround the site. The wider landscape was dominated by a rural setting, consisting of agricultural land interspersed with pockets of woodland and small settlements.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author		
Fort Halstead – Design and Access Statement: 00556l	John Thompson and Partners		
Site Location Plan: 00556I_S01 Rev D5	John Thompson and Partners		
Land Use and Green Infrastructure Plan: 00556I_PP01 Rev D10	John Thompson and Partners		
Building Heights Plan: 00556I_PP02 Rev D10	John Thompson and Partners		
Access and Movement: 00556I_PP03 Rev D9	John Thompson and Partners		
Demolition Plan: 00556I_PP04 Rev D8	John Thompson and Partners		
Ecological Appraisal: EED12715-102.R.2.3.7.LM	Waterman Group		
Protected Species and Habitats Survey: EED12715-102.R.3.3.6.LM	Waterman Group		
Environmental Statement - Ecology and Nature Conservation	Waterman Group		
Decision Notice (planning application number SE/15/00628/OUT)	Sevenoaks District Council		

Table 1.1: Documentation Provided by Client

2. METHODOLOGIES

2.1 DESK STUDY

As part of the Preliminary Ecological Appraisal (Report RT-MME-127947-01) an ecological desk study was undertaken. The consultees for the desk study were:

- Natural England MAGIC website for statutory conservation sites; and,
- Kent and Medway Biological Records Centre.

Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations. Relevant bird data are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

2.2 FIELDWORK

The objective of the field survey was to identify important species or habitats that are present on the site and in what numbers, both in terms of number of species and quantities of individual birds present, and the areas that they favour. Particular attention was paid to the presence of birds of Conservation Concern (species that are listed as either red or amber by the Royal Society for the Protection of Birds) and those listed as UK Species of Principal Importance and as priority species on the Local Biodiversity Action Plan.

Counts of passage and wintering birds were carried out on four occasions in December 2018 and January and February 2019.

The passage and wintering bird survey comprised a walkover survey by an experienced field ornithologist in line with the method described by Hilden (1986, 1987), highlighted in 'Bird Census Techniques' (Bibby *et al*, 1992). The observer follows a defined route taking in all the major habitats on site, maintaining a slow, steady pace. The observer logs all birds and their activities both visually and by call. Care was taken not to log the same birds twice, although some duplication is inevitable. In addition, some point counts were undertaken at dusk in order to establish important roosting sites. These point counts were usually carried out in the vicinity of habitats that are known to be valuable as roosting areas i.e. patches of dense scrub and hedgerows. Survey visits generally lasted between four and five hours.

3. RESULTS

3.1 RELEVANT NATURE CONSERVATION SITES

The desk study exercise included a search for statutory and non-statutory nature conservation sites of ornithological interest. A search radius of 10 km was used for European statutory sites, 5 km for UK statutory sites and 2 km for non-statutory sites. No sites for which the citations include information regarding bird species were found within the search area.

3.2 SPECIES RECORDS

The desk study revealed records of 33 species of bird that are protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) within 2 km of the survey area, including barn owl *Tyto alba*, brambling *Fringilla montifringilla*, fieldfare *Turdus pilaris*, goshawk *Accipiter gentilis*, hen harrier *Circus cyaneus*, hobby *Falco Subbuteo*, honey-buzzard *Pernis apivorus*, marsh harrier *Circus aeruginosus*, merlin *Falco columbarius*, osprey *Pandion haliaetus*, peregrine *Falco peregrinus*, red kite *Milvus milvus* and redwing *Turdus iliacus*.

The desk study also revealed records of 31 species of bird that are listed as Species of Principal Importance within 2 km of the survey area, including corn bunting *Miliaria calandra*, cuckoo *Cuculus canorus*, house sparrow *Passer domesticus*, lesser spotted woodpecker *Dendrocopus minor*, marsh tit *Parus palustris*, skylark *Alauda arvensis*, song thrush *Turdus philomelos*, starling *Sturnus vulgaris*, tree sparrow *Passer montanus*, turtle dove *Streptopelia turtur*, willow tit *Parus montanus*, yellow wagtail *Motacilla flava* and yellowhammer *Emberiza citronella*, which are also on the RSPB Red List, and bullfinch *Pyrrhula pyrrhula*, dunnock *Prunella modularis*, nightjar *Caprimulgus europaeus* and reed bunting *Emberiza schoeniclus*, which are also on the RSPB Amber List.

The desk study also returned records of numerous other species on the RSPB Red List and RSPB Amber List found within 2 km of the survey area.

4. WINTER BIRD SURVEY RESULTS

4.1 FIELD SURVEY

The dates and weather conditions of the winter bird survey are detailed in Table 4.1

Date	Parameter						
Date	Temperature (°C)	Cloud (%)	Wind (Beaufort)	Precipitation			
17/12/2018	6	10	F0-F1	Nil			
23/01/2019	0	100	F0-F2	Nil			
13/02/2019	6	100	F0-F1	Nil			
28/02/2019	9	25-100	F0-F1	Nil			

Table 4.1: Dates and Weather Conditions of Winter Bird Surveys at Fort Halstead

During the winter bird survey visits completed to date, a total of 43 species were recorded using the site. Of these 43 species:

- Six species are listed as UK BAP Priority Species (bullfinch, dunnock, marsh tit, skylark, song thrush and starling)
- Four species are listed as Priority Species in the Kent Biodiversity Action Plan (bullfinch, marsh tit, skylark and song thrush).
- Seven species identified on site are Red Listed by The Royal Society for the Protection of Birds (fieldfare, marsh tit, mistle thrush, redwing, skylark, song thrush and starling).
- Five species are Amber Listed by The Royal Society for the Protection of Birds (black-headed gull, dunnock, kestrel, meadow pipit and stock dove).
- Four species are listed under Schedule 1 of the Wildlife and Countryside Act, 1981 (brambling, fieldfare, peregrine falcon and redwing).

The species list and numbers of each bird species recorded at Fort Halstead during the winter bird survey visits completed to date is presented in Table 4.2 which also highlights the conservation status of the species, i.e. whether they are locally or nationally important.

Common Name	Scientific Name		Ctatus				
Common Name	Scientific Name	17-12-2018	17-12-2018 23-01-2019 13-02-2019		28-02-2019	Status	
Blackbird	Turdus merula	79	58	37	39	-	
Black-Headed Gull	Chroicocephalus ridibundus	-	-	4	-	RSPB Amber	
Blue Tit	Cyanistes carduelis	68	74	90	84	-	
Brambling	Fringillia montifringilla	18	27	26	20	Sch. 1	
Bullfinch	Pyrrhula pyrrhula	9	4	4	2	RSPB Amber; SPI England; Local BAP	
Carrion Crow	Corvus corone	14	49	19	29	-	
Chaffinch	Fringilla coelebs	67	52	44	57	-	
Coal Tit	Periparus ater	24	27	32	25	-	
Common Buzzard	Buteo buteo	-	1	2	1	-	
Dunnock	Prunella modularis	3	5	6	4	SPI England; RSPB Amber	
Fieldfare	Turdus pilaris	10	-	25	2	RSPB Red; Sch. 1	

Table 4.2: Winter Bird Survey Data, Fort Halstead (Continues)

Goldcrest	Regulus regulus	15	9	14	12	-
Cardualis						
Goldfinch carduelis		16	10	30	18	-
Great Spotted Woodpecker	Dendrocopos major	4	6	5	8	-
Great Tit	Parus major	58	59	42	79	
Greenfinch Carduelis chloris		-	-	-	2	-
Green Woodpecker	Picus viridis	2	3	3	2	-
Jackdaw	Corvus monedula	58	40	c125	39	•
Jay	Garralus glandarius	7	4	6	10	-
Kestrel	Falco tinnunculus	1	-	1	-	RSPB Amber
Long-Tailed Tit	Aegithalos caudatus	12	17	18	25	-
Magpie	Pica pica	19	22	28	17	-
Meadow Pipit	Anthus pratensis	4	2	8	8	RSPB Amber
Marsh Tit	Poecile palustris	1	2	1	1	RSPB Red; SPI England; Local BAP
Mistle Thrush	Turdus viscivorus	2	4	2	2	RSPB Red
Nuthatch	Sitta europaea	7	9	8	9	-
Peregrine Falcon	Falco peregrinus	-	-	-	1	Sch. 1
Pheasant	Phasianus colchicus	17	12	7	14	-
Pied Wagtail	Montacilla alba	9	8	6	6	-
Redwing	Turdus iliacus	33	46	30	42	RSPB Red; Sch. 1
Red-Legged Partridge	Alectoris rufa	4	-	5	4	-
Ring-Necked Parakeet	Psittacula krameri	-	-	-	5	-
Robin	Erithacus rubecula	26	19	18	27	-
Rook	Corvus frugilegus	17	10	8	39	-
Siskin	Spinus spinus	14	30	12	6	-
Skylark	Alauda arvensis	4	2	5	4	RSPB Red; SPI England; Local BAP
Song Thrush	Turdus philomelos	4	3	7	6	RSPB Red; SPI England; Local BAP
Sparrowhawk	Accipiter nisus	-	1	-	2	-
Starling	Sturnus vulgaris	12	-	-	-	SPI England; RSPB Red
Stock Dove	Columba oenas	6	4	c50	7	RSPB Amber
Treecreeper	Certhia familiaris	5	5	4	6	-
Woodpigeon	Columba palumbus	79	73	174	113	-
Wren	Troglodytes troglodytes	15	18	20	19	-
Key:						

Key:

RSPB Red Species: included on RSPB Red List of Conservation Concern (see below) RSPB Amber Species: included on RSPB Amber List of Conservation Concern (see below)

UK SPI: UK Species of Principal Importance

Local BAP: Kent Biodiversity Action Plan Priority Species

Sch. 1.: Listed under Schedule 1 of the Wildlife and Countryside Act 1981

Table 4.2: Winter Bird Survey Data, Fort Halstead (Continues)

Key (Continued):

Notes for RSPB Red-listing Criteria

Species that meet any of the following criteria are red listed:

IUCN: Global Conservation Status. Species listed by Birdlife International as being Globally Threatened using IUCN criteria.

HD: Historic Decline. A severe decline in the UK between 1800-1995, without substantial recent recovery.

BDp: Breeding Population Decline. Severe decline in the UK breeding population size, of more than 50% over the last 25years (BDp¹) or the entire period used for assessments since the first BoCC review, starting in 1969 ("longer term") (BDp²).

WDp: Non-breeding Population Decline. Severe decline in the UK non-breeding population size, of more than 50%, over 25 years (WDp¹) or the longer term (WDp²).

BDr: Breeding Range Decline. Severe decline in the UK range, of more than 50%, as measured by number of 10 km squares occupied by breeding birds, over 25 years (BDr¹) or the longer term (BDr²).

Notes for RSPB Amber List Criteria

Species that meet any of the following criteria, but none of the red listed criteria, are amber listed:

SPEC: European Conservation Status. Categorised as a Species of European Conservation Concern (SPEC 1, 2 or 3).

Hdrec: Historic Decline – Recovery. Red listed for Historical Decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years).

BDMp: Breeding population Decline. As for red list criteria BDp¹ and BDp² but with moderate decline (by more than 25% but less than 50%).

WDMp: Non-breeding population Decline. As for red list criteria WDp¹ and WDp², but with moderate decline (by more than 25% but less than 50%).

BDMr: Breeding Range Decline. As for red list criteria BDr¹ and BDr² but with moderate decline (by more than 25% but less than 50%).

BR and **WR** rarity. UK breeding population of less than 300 pairs (BR), or non-breeding population of less than 900 individuals (WR).

BL and WL Localisation. At least 50% of the UK breeding (BL) or non-breeding (WL) population found in 10 or fewer sites

BI and **WI** International Importance. At least 20% of the European breeding (BI) or non-breeding (WI) population found in the UK.

Table 4.2: Winter Bird Survey Data, Fort Halstead (Continued)

4.2 SURVEY CONSTRAINTS

No significant survey constraints were experienced.

5. DISCUSSION

5.1 SUMMARY OF PROPOSALS

The proposals for the site are as follows:

Hybrid planning permission comprising:

In detail:

- Demolition of existing buildings:
- Change of use and works to buildings Q13 and Q14 (including landscaping and public realm);
- Primary and secondary accesses.

In outline:

- Development of business space (use classes B1a/b/c) of up to 27,659 sq m GEA;
- Works within the 'X' enclave relating to energetic testing operations, including fencing, access, car parking;
- Development of up to 750 residential dwellings;
- Development of a mixed-use village centre (use classes A1/A3/A4/A5/B1a/D1/D2);
- Development of a one form entry primary school;
- Change of use of Fort Area and bunkers to Historic Interpretation Centre (use class D1) with workshop space;
- Roads, pedestrian and cycle routes, public transport infrastructure, car parking, utilities infrastructure, drainage;
- Landscaping, landforming and ecological mitigation works.

5.2 SUMMARY OF DESKTOP STUDY FINDINGS

The desk study revealed records of 33 species of bird that are protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 31 species of bird that are listed as Species of Principal Importance and numerous other species on the RSPB Red List and RSPB Amber List found within 2 km of the survey area. Of these records many relate to species which could be discounted as having the potential to breed or overwinter on site as a result of their niche habitat requirements or shrinking range and distribution, with examples including:

- Nightjar are migratory ground nesting birds closely associated with heathland and young coniferous
 woodland. Neither such habitat exists within or in the immediate vicinity of Fort Halstead, therefore
 these birds can be reasonably discounted as having the potential to breed or overwinter on site.
- Willow tit are a rapidly declining resident species which inhabit areas of wet and scrubby woodland.
 Whilst suitable habitat exists on site, willow tit are now extinct in Kent and are fast becoming a
 species confined to more northern counties in the UK. This species can therefore be reasonably
 discounted as having the potential to breed or overwinter on site, in the absence of a future local
 reintroduction scheme.

Whilst some species recorded within a 2 km radius of the site are highly unlikely to breed or overwinter on site many of the species recorded do have the potential to breed and/or overwinter on site, with examples including:

- House sparrow and starling are species closely associated with areas of residential development,
 with both species readily using houses and other buildings to nest, whilst also frequently visiting
 garden bird feeders. The proposed development on site may benefit both species, providing suitable
 provisions in the form of nest boxes and appropriate landscaping features are made available, and
 as such it is entirely possible that both species will occur and breed on site in future.
- Hobby is a migratory breeding species of falcon which specialises in predating hirundines and
 dragonflies and often nests in mature broadleaved woodland. With such habitat and prey species
 abundant both on site and within the wider area it is entirely possible that this species will occur or
 breed on site in the future.

5.3 FIELD SURVEY FINDINGS

The four winter bird survey visits undertaken during winter 2018/2019 indicate that the site is of high value to a number of woodland and generalist species, with high numbers of species including blackbird, blue tit, great tit, chaffinch, brambling, jackdaw and woodpigeon recorded on site during the survey period. Furthermore, notable species of high conservation concern including red listed marsh tit, song thrush, mistle thrush and skylark were also consistently recorded on site.

The abundance of woodland on site was the most productive habitat in terms of species diversity and abundance, with the semi-natural broadleaved woodland present around the internal boundary of Fort Halstead and within the wider ownership boundary supporting a wide range of common woodland and generalist species. A number of scarce or declining species of high conservation concern were also noted within this habitat, including marsh tit, song thrush, mistle thrush, bullfinch and stock dove.

Despite only being recorded in low numbers, with a peak count of two birds, marsh tit are considered to be the species of greatest conservation importance recorded on site. This is due to the rapid decline in population and range the species are experiencing throughout the UK, with this species now seldom found in the majority of woodland sites in Kent. Marsh tit were recorded consistently throughout the survey period in semi-natural broadleaved woodland along Panton Way in the south-western part of the site. The presence of the species in this area is consistent with the findings of the 2018 Breeding Bird Survey completed on site, with the area clearly occupied by the species throughout the year.

Although locally scarce, brambling were recorded in good numbers on site consistently throughout the survey period. The semi-natural broadleaved woodland and mixed plantation woodland located in the north-eastern part of the site, bordered by Crow Drive to the west and Polhill/A224 to the east, supported the greatest numbers of brambling, with birds feeding on beech mast produced by the high number of beech *Fagus sylvatica* trees in the area.

Brambling were one of a number of winter migrant species recorded on site, with redwing, fieldfare and siskin also recorded frequently throughout the survey period. Furthermore, many continental blackbirds were noted during the survey period, with other continental and domestic migrant species recorded on site likely to include among others robin, song thrush, woodpigeon, chaffinch, goldcrest, meadow pipit and skylark.

The unimproved calcareous grassland located in the southern and south-eastern parts of the site provided suitable habitat for both skylark and meadow pipit, with the birds from both species recorded on site likely to be migrants from either continental Europe or other parts of the UK. Despite only low numbers of skylark and meadow pipit being recorded on site, peak counts of five and eight respectively, the high conservation status of both species means that efforts should be made to retain, increase or enhance suitable habitat on site. Measures taken to improve the habitat for both species on site could include the building of an enclosure free from sheep grazing and public access measuring at least 1 ha, though preferably larger, in the southern or south-eastern part of the site.

The recording of 43 different species on site and the presence of large numbers of species including blackbird, blue tit, great tit, chaffinch, brambling, jackdaw and woodpigeon all show the sites importance to a wide range of bird species during the winter months. It is therefore recommended that efforts are made to minimize the loss of suitable habitat on site during the construction phase and post development and mitigation for loss of any habitat is included as part of the development proposals. Particular efforts should be made to ensure any mitigation incorporates the specific requirements of species of high conservation concern including marsh tit, song thrush, mistle thrush, skylark, starling, bullfinch, meadow pipit and stock dove.

6. CONCLUSIONS

During the four winter bird survey visits completed during December 2018 and January and February 2019 a total of 43 species were recorded using the site. Of these 43 species:

- Six species are listed as UK BAP Priority Species (bullfinch, dunnock, marsh tit, skylark, song thrush and starling)
- Four species are listed as Priority Species in the Kent Biodiversity Action Plan (bullfinch, marsh tit, skylark and song thrush).
- Seven species identified on site are Red Listed by The Royal Society for the Protection of Birds (fieldfare, marsh tit, mistle thrush, redwing, skylark, song thrush and starling).
- Five species are Amber Listed by The Royal Society for the Protection of Birds (black-headed gull, dunnock, kestrel, meadow pipit and stock dove).
- Four species are listed under Schedule 1 of the Wildlife and Countryside Act, 1981 (brambling, fieldfare, peregrine falcon and redwing).

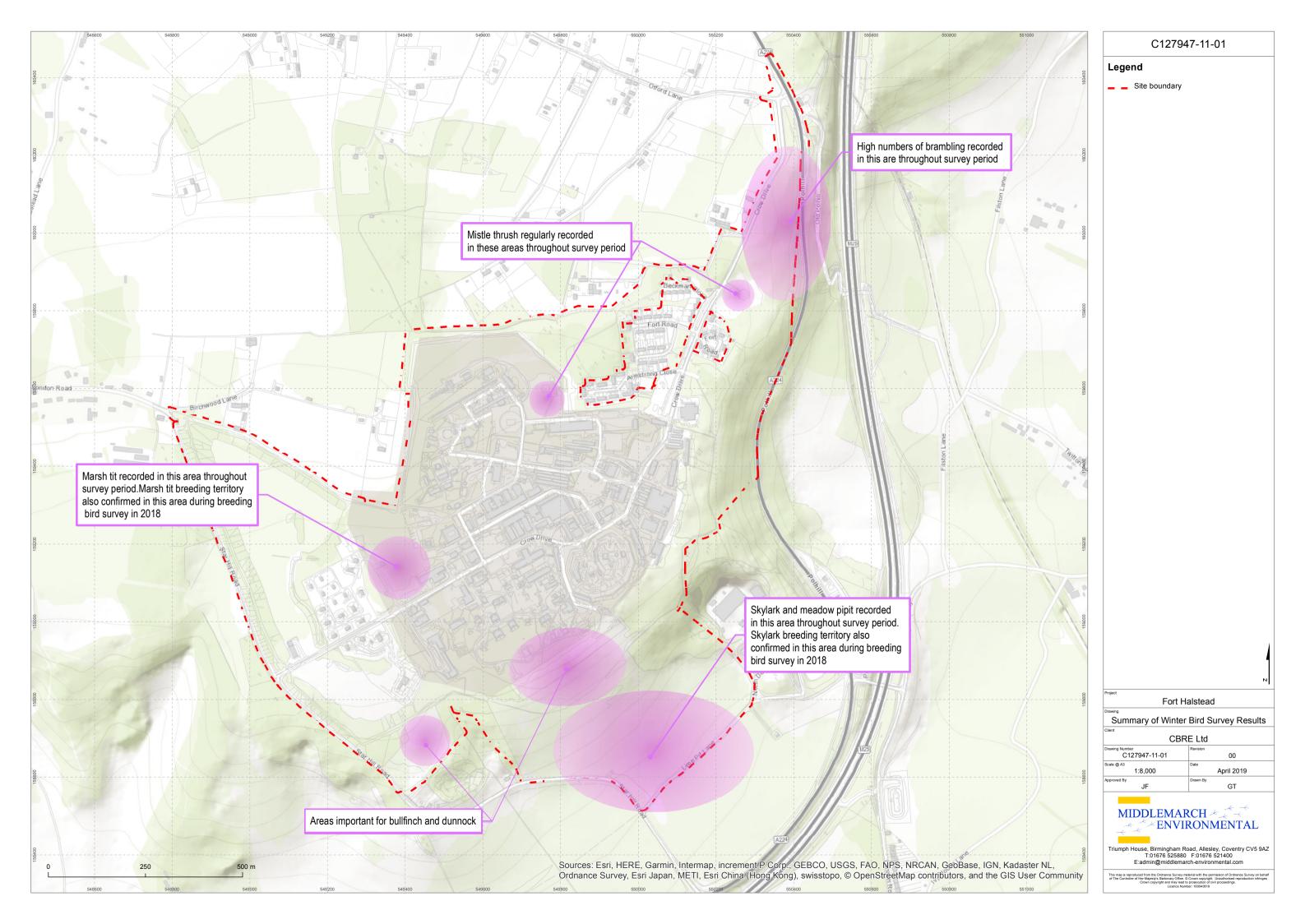
The four winter bird survey visits undertaken during winter 2018/2019 indicate that the site is of high value to a number of woodland and generalist species, with high numbers of species including blackbird, blue tit, great tit, chaffinch, brambling, jackdaw and woodpigeon recorded on site during the survey period. Furthermore, notable species of high conservation concern including red listed marsh tit, song thrush, mistle thrush and skylark were also consistently recorded on site.

The data acquired during the survey period indicates that bird numbers on site remain relatively stable during the winter months, with a moderate increase in the number of some species as winter progresses and resources become more scarce.

In conclusion, as the wintering bird survey visits recorded a number of species of National and Local importance i.e. species listed on the National Biodiversity Action Plan and Red/Amber Listed Species, it is considered that the site is of high value for wintering bird species and as such efforts should be made to maintain the value of the site throughout the construction phase and post development. The retention and effective management of the large amount of woodland, grassland and scrub on site will be key in achieving this, whilst sympathetic and responsible construction phase and post development considerations, notably the predominant use of suitable native species as part of any landscaping schemes on site and the effective management of areas of retained or newly created habitat, will also be of considerable benefit to birds on site.

7. DRAWINGS

Drawing C127947-11-01 - Summary of Winter Bird Survey Results



REFERENCES AND BIBLIOGRAPHY

Bibby, C. J., Hill, D. A., Burgess, N. D. and Mustoe, S., (1992), Bird Census Techniques. Academic Press.

BTO Birdtrack. Available: http://www.bto.org/volunteer-surveys/birdtrack

Fuller, R.J. (1982). Bird Habitats in Britain. T & A D Poyser.

R.S.P.B. et al (2009), Birds of Conservation Concern 3 (2209). Royal Society for the Protection of Birds, Sandy.

UK Biodiversity Group (1998) *Tranche 2 Action Plans*. Volume 1 – Vertebrates and Vascular Plants. English Nature.