

Cleator Moor Innovation Quarter

BREEDING BIRD SURVEY REPORT

784-B029668 Rev 1

Copeland Borough Council

November 2021

Prepared on Behalf of Tetra Tech Limited.

Document control

Document:	Breeding Bird Survey Report
Project:	Cleator Moor Innovation Quarter
Client:	Copeland Borough Council
Job Number:	784-B029668
File Origin:	\\ds-dc-vm-002\Group Ecology\Projects\Projects 784-B000000\B029668 Leconfield\REPORTS\Breeding Birds

Revision:	1	Status:	Final
Date:	November 2021		
Prepared by: Patryk Gruba MCIEEM Senior Ecologist		Checked by Luke Verrall MCIEEM Senior Ecologist	Approved By: Phil Preston MCIEEM Principal Ecologist
Description of revision: First issue			

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GLOSSARY

BAWC	Birds and Wildlife in Cumbria Report
BoCC	Bird(s) of Conservation Concern
BTO	British Trust for Ornithology
C2C	Coast to Coast
CBAP	Cumbria Biodiversity Action Plan
CBDC	Cumbria Biodiversity Data Centre
CIEEM	Chartered Institute of Ecology & Environmental Management
EcIA	Ecological Impact Assessment
ECOW	Ecological Clerk of Works
HRA	Habitat Regulations Assessment
HPI	Habitat of Principal Importance
HAP	Habitat Action Plan
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAP	Species Action Plan
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by Copeland Borough Council to undertake Breeding Bird Surveys of a site known as Cleator Moor Innovation Quarter (CMIQ) in Cleator Moor, Cumbria

This report has been prepared by Senior Ecologist Patryk Gruba MCIEEM and the conditions pertinent to it are provided in Appendix A.

1.2 SITE LOCATION

The 'site' is located in Cleator Moor and is centred at Ordnance Survey National Grid Reference NY 01570 15529 – see Figure 1 for site location plan. The Main Leconfield Site A (Site A) comprises the Industrial Estate (15.45 ha in size) and lies on the north side of Leconfield Street. Additionally, two expansion areas are present; these comprise Expansion Site B (Site B) to the north-east and Expansion Site C (Site C) to the south-east of the main site. At the time of survey there was no access to Site B, therefore this expansion area is not included within the remit of this survey.

Site A comprises 13 industrial / commercial buildings with associated hard standing, roads and amenity grassland. These are surrounded by pockets of habitats that include broadleaved and mixed woodland, plantation / screen planting, scattered trees, scrub, semi-improved neutral grassland, marshy grassland, swamp and tall ruderal vegetation.

Site B comprises agricultural fields predominantly used as open pasture and is divided from Site A by Nor Beck.

Site C comprises a mixture of woodland, allotments and grassland, all of which were located east from the C2C cycle path which divides Site C from Site A.

The surrounding land is a mixture of build-up areas and agricultural fields. Cleator Moor town centre is located approx. 300m southeast of the site.

1.3 DEVELOPMENT PROPOSALS

The CMIQ site has been used as an industrial estate since 1980s and over the last 10 years, the site has declined significantly. Therefore, it is proposed to redevelop as an Innovation Quarter in West Cumbria.

The majority of the buildings within Site A will be retained with some refurbishment as part of the redevelopment; however, Buildings B6 and B7 are proposed to be demolished (See Figure 2 for locations and building references) and the masterplan showing the proposed site plan is shown in Appendix B (Drawing Reference:ZZ-DR-A-90004_SITE PLAN PROPOSED – LABELLED).

Small areas of woodland will be lost to facilitate access and internal roads – these are indicated on the Proposed Site Plan and include narrow sections in the northwest and northeast of Site A; a narrow section between Sites A and B; and two narrow sections between Site A and C.

1.4 PURPOSE OF THE REPORT

The objectives of this report are to:

- Provide details of the existing information on statutory and non-statutory sites of ornithological interest and relevant records of protected/notable bird species within 2 km of the site; and
- Present the results of the breeding bird surveys undertaken at the site in 2021

- Provide an assessment of the potential ecological constraints to and impacts from the development and recommendations for avoidance, mitigation and enhancement where appropriate.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 DESK STUDY

2.1.1 Previous Reports

The following reports were reviewed:

- Tetra Tech (2021) Cleator Moor Innovation Quarter: Ecological Appraisal. On behalf of Copeland Borough Council. Ref: 784-B029668
- WYG (2020) Leconfield Industrial Estate: Ecological Appraisal Report.

2.1.2 Local Ecological Records Centre

Information was requested from the Cumbria Biodiversity Data Centre (CBDC) for the presence of non-statutory nature conservation designations and records of protected and notable bird species within 2km of the site.

This data search covered:

- Legally protected and notable species of bird, including those listed as Species of Principal Importance and included as NERC Act Section 41 Priority Species.
- Local Wildlife Sites (LWS) including Cumbria Wildlife Sites (CWS).

2.1.3 Local Species Recorders

The Birds and Wildlife in Cumbria (BAWC) Report was reviewed as part of the desk study (Cumbria Naturalist Union, 2021). BAWC is a County Natural History report published annually by the Cumbria Naturalist Union and includes bird records for the county.

Records for the bird report are drawn from a range of sources, these include records submitted by individual observers, either through the Cumbria Bird Club recording system, or from the BTO's online reporting system 'Birdtrack'. In addition, records are supplied via several organisations or groups such as CBDC, Cumbria Wildlife Trust and RSPB.

The most recent Birds and Wildlife in Cumbria Report (Cumbria Naturalist Union, 2021) covers bird records for 2021. Cumbria Status of the birds recorded on site has been provided in Appendix C.

2.1.4 Online Resources

A search for relevant information was also made on the following websites:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for nearby statutory designated sites with designated ornithological features, namely Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites, Sites of Special Scientific interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR). For Natura 2000 (SPA and SAC) and Ramsar and SSSI sites, the search area was extended to 5 km, to ensure adequate coverage of these European sites.

2.2 FIELD SURVEYS

The survey methodology involved two survey visits to the site during the breeding season, in May and June, using the standard territory (registration) mapping techniques as detailed in Bibby et al. (2007). This method is based on the observation that many species are territorial during the breeding season. This is found particularly amongst passerines, where territories are often marked by conspicuous song, display, and periodic disputes with neighbouring individuals. Registrations of birds were recorded on an appropriate field map, using standard British Trust for Ornithology (BTO) two letter

species codes and activity codes (Gilbert et al., 2002). The surveys were timed between sunrise and midday to record periods of uniform bird activity (Gilbert et al., 2002).

The survey area included the Main Leconfield Site A (Site A) along with the accessible land within Site B and Site C. The surveys consisted of a combination of observations from fixed vantage points and a walked transect route around the site, which ensured full coverage of the survey area. The registrations of birds, using standard British Trust for Ornithology (BTO) two letter species codes and activity codes (Gilbert et al., 2002), were placed onto an appropriate field map. Specific symbols were used for singing, calling and movements of the same bird between different areas, flying, carrying food, nest building, aggressive encounters and other notable behaviour (Gilbert *et al.*, 2002). The expected outcome of this technique was that mapped registrations fell into clusters, approximately coinciding with territories.

The likelihood of breeding was determined using the BTO breeding status codes table (see link in References), using observations of activities such as singing, food carrying, aggressive encounters and actual nest building.

Confirmed – examples of confirmed breeding include:

- Recently fledged or downy young;
- Adult carrying faecal sac or food for young;
- Nests containing eggs;
- Nest with young seen or heard; and
- Distraction displays / injury feigning.

Probable – examples of probable breeding include:

- Pair seen in suitable habitat;
- Permanent territory (defended over at least two survey visits);
- Courtship and display;
- Visiting potential nest site;
- Agitated behaviour; and
- Nest building / hole excavation.

Possible – examples of possible breeding include:

- Observed in suitable nesting habitat; and
- Singing male.
- **Non-breeder** – examples of non-breeding behaviour include:
 - Overflying;
 - Migrant;
 - Summering non-breeder; and
 - Observed in unsuitable nesting habitat.

The field data from each survey was transferred into the main bird map of the site. This map was analysed to estimate the number of potential breeding territories found for each species and produce a table with bird species total.

The following meteorological variables were recorded at both the start and end of each survey:

- Cloud cover (0% - clear sky, to 100% - total cloud cover);
- Wind speed (Beaufort scale (BF); Force 0 – no wind, to Force 6 – strong wind (note: surveys should not be carried out above Force 6 wind));
- Temperature (°C);
- Precipitation (mm); and
- Visibility (excellent, good, moderate or poor).

Details of the breeding bird survey dates and weather conditions are provided in Table 1 below.

Table 1: Breeding bird survey dates and weather conditions.

Visit No.	Date	Start & Finish Times	Weather Conditions
1	27/05/2021	07:00 – 11:30	Start - Temp. 8°C, wind 1, cloud cover 0%, no precipitation and visibility excellent. End - Temp 14°C, wind 1-2, cloud cover 10%, no precipitation and visibility excellent.
2	15/06/2021	07:00 – 11:15	Start - Temp. 13°C, wind 1-2, cloud cover 90%, no precipitation and visibility excellent. End - Temp 15°C, wind 3, cloud cover 80%, no precipitation and visibility excellent.

2.3 LIMITATIONS

Due to the complexity of avian behaviour some degree of subjectivity is inevitably involved in this assessment. However, overall the survey is considered to offer a high degree of accuracy in assessing the range of species breeding within the site and their relative abundance.

Standard methodology dictates that the breeding bird survey effort would involve a total of four survey visits, one during each month of March, April, May and June. However, due to the date of commission, surveys could only be undertaken in May and June in 2021. Although, some of the early breeders could have been missed due to the lack of bird data from earlier in the season, it is considered that the data from the two visits supported by the desk study would be likely to determine assumed status of the site for local populations of breeding birds. Therefore, this it is not considered to be a significant constraint to this survey as most of the breeding territories would have been likely detected during two visits conducted.

There was no access to the norther section of Expansion Site B (Site B). The southern section of Site B was surveyed from the boundary with the Main Leconfield Site (Site A); however, it was not possible to conduct a comprehensive breeding bird survey of the entire Site B and further surveys may be required in order to fully appraise the value of this land to the local breeding bird populations.

The details of this report will remain valid for a period of one breeding bird season (i.e. the 2022 breeding bird season), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 BASELINE CONDITIONS

3.1 DESK STUDY

3.1.1 Previous Reports – Habitat Appraisal for Breeding Birds

An ecological appraisal report was produced by WYG in January 2020, for which records of protected / notable species and information regarding statutory and non-statutory designated sites were obtained from CBDC as part of that assessment (WYG, 2020).

This report considered only the Main Leconfield Site (Site A) and it concluded that the habitats on site, including trees, scrub and grassland provide suitability for nesting birds and therefore breeding birds could pose a constraint to proposed works on site.

Site B and Site C were subject to the additional walkover survey completed as part of the Copeland Local Plan Site Allocations project; the results of the survey were summarised in the Tetra Tech Ecological Appraisal Report (Tetra Tech, 2021)

Site B comprised of agricultural pastures that included a mixture of marshy grassland, semi-improved neutral grassland and species-poor grassland; these were divided by a network of hedgerows with occasional scattered trees. The southern section of Site B comprised North Beck with adjacent mature screen planting / scrub alongside the public footpath.

Site C comprised of a woodland strip adjacent to the C2C cycle path, semi-improved neutral grassland and private allotments.

Previous Reports – Desk Study

No statutory or non-statutory designated sites that include ornithological qualifying features were identified within 5 km of the site. Solway Firth SPA is located 5.5 km north-west from site. Table 2 below presents information regarding qualifying features of this designated site (SNH, undated). All qualifying features of the Solway Firth SPA are non-breeding birds; therefore, this breeding bird survey does not consider non-breeding bird species designated under the Solway Firth SPA.

Table 2: Solway Firth SPA Summary of Qualifying Features

Relevant Directive	Feature	Extent	Importance
Article 4.1 of EC Directive 79/409 Non-breeding Annex 1	Red-throated diver <i>Gavia stellata</i>	521 individuals	3.1% of the Great Britain population (non-breeding)
	Whooper swan <i>Cygnus cygnus</i>	250 individuals	4% of the population in Great Britain (non-breeding winter); 1.5% of the north west European population
	Golden plover <i>Pluvialis precaria</i>	3,380 individuals	2% of the population in Great Britain (non-breeding)
	Bar-tailed godwit <i>Limosa lapponica</i>	4,800 individuals	8% of the population in Great Britain (non-breeding); 4% of east Atlantic flyway
	Barnacle goose <i>Branta leucopsis</i>	12,300 individuals	100% of the Svalbard population (non-breeding), all of which winter in Britain.
Article 4.2 of EC Directive 79/409	Pink-footed geese <i>Anser brachyrhynchus</i>	14,900 individuals;	14% of the Icelandic population, all of which winter in Great Britain
	Pintail <i>Anas acuta</i>	1,400 individuals	6% of the Great Britain population; 2% of north west European

Migratory / Non-breeding	Scaup <i>Aythya marila</i>	2,300 individuals	57% of the Great Britain population; 2% of north west European
	Oystercatcher <i>Haematopus ostralegus</i>	33,850 individuals	12% of the Great Britain population; 4% of the east Atlantic flyway
	Knot <i>Calidris canutus</i>	15,300 individuals	7% of the Great Britain population; 4% of the east Atlantic flyway
	Curlew <i>Numenius arquata</i>	6,700 individuals	7% of the Great Britain population; 2% of east Atlantic flyway
	Redshank <i>Tringa totanus</i>	2,100 individuals	3% of the Great Britain population; 2% of east Atlantic flyway
Article 4.2 of EC Directive 79/409	Ringed plover <i>Charadrius hiaticula</i>	981 individuals	1.3% of the biogeographic population
Passage / Non-breeding			
Article 4.2 of EC Directive 79/409	Shelduck <i>Tadorna tadorna</i>	1,600 individuals	2% of the Great Britain population;
Migratory / Non-breeding	Teal <i>Anas crecca</i>	1,400 individuals	1% of the Great Britain population;
	Shoveler <i>Anas clypeata</i>	120 individuals	1% of the Great Britain population;
	Goldeneye <i>Bucephala clangula</i>	300 individuals	2% of the Great Britain population;
	Grey plover <i>Pluvialis squatarola</i>	720 individuals	3% of the Great Britain population;
	Sanderling <i>Calidris alba</i>	260 individuals	2% of the Great Britain population
	Dunlin <i>Calidris alpina</i>	11,900 individuals	3% of the Great Britain population;
	Turnstone <i>Arenaria interpres</i>	600 individuals	1% of the Great Britain population
	Common scoter <i>Melanitta nigra</i>	1,588 individuals	1.6% of the Great Britain population;
	Goosander <i>Mergus merganser</i>	146 individuals	1.6% of the Great Britain population;
	Lapwing <i>Vanellus</i>	5037 individuals	0.8% of the Great Britain population;
	Cormorant <i>Phalacrocorax carbo</i>	581 individuals	1.6% of the Great Britain population;
	Black-headed gull <i>Chroicocephalus ridibundus</i>	13,732 individuals	0.6% of the Great Britain population;
	Common gull <i>Larus canus</i>	12,486 individuals	1.8% of the Great Britain population;
	Herring gull <i>Larus argentatus</i>	3034 individuals	0.4% of the Great Britain population;

Notable bird species records returned from CBDC are summarised in Table 3.3 below.

Table 3: Notable bird records within 2km of the site

Latin name	Common name	BoCC status	W&CA Sch. 1	NERC Act S.41	No. of records
<i>Acanthis cabaret</i>	Lesser Redpoll	Red	–	Yes	6
<i>Acanthis flammea</i>	Common (Mealy) Redpoll	Amber	–	–	1
<i>Actitis hypoglaucis</i>	Common Sandpiper	Amber	–	–	5
<i>Alauda arvensis</i>	Skylark	Red	–	Yes	27
<i>Salcedo atthis</i>	Kingfisher	Amber	–	–	2
<i>Anas clypeata</i>	Shoveler	Amber	–	–	2
<i>Anas crecca</i>	Teal	Amber	–	–	12
<i>Anas penelope</i>	Wigeon	Amber	–	–	4
<i>Anas platyrhynchos</i>	Mallard	Amber	–	–	53
<i>Anas strepera</i>	Gadwall	Amber	–	–	1
<i>Anser anser</i>	Greylag Goose	Amber	–	–	16
<i>Anser brachyrhynchus</i>	Pink-footed Goose	Amber	–	–	1
<i>Anthus pratensis</i>	Meadow Pipit	Amber	–	–	36
<i>Anthus trivialis</i>	Tree Pipit	Red	–	Yes	5
<i>Apus</i>	Swift	Amber	–	–	23
<i>Aythya ferina</i>	Pochard	Red	–	–	10
<i>Branta canadensis</i>	Canada Goose	–	Yes	–	3
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	Amber	–	–	32
<i>Cinclus cinclus</i>	Dipper	Amber	–	–	23
<i>Columba oenas</i>	Stock Dove	Amber	–	–	1
<i>Cuculus canorus</i>	Cuckoo	Red	–	Yes	10

Latin name	Common name	BoCC status	W&CA Sch. 1	NERC Act S.41	No. of records
<i>Cygnus</i>	Whooper Swan	Amber	–	–	1
<i>Cygnus olor</i>	Mute Swan	Amber	–	–	28
<i>Delichon urbicum</i>	House Martin	Amber	–	–	14
<i>Emberiza citrinella</i>	Yellowhammer	Red	–	Yes	18
<i>Emberiza schoeniclus</i>	Reed Bunting	Amber	–	Yes	36
<i>Falco tinnunculus</i>	Kestrel	Amber	–	–	32
<i>Ficedula hypoleuca</i>	Pied Flycatcher	Red	–	–	2
<i>Gallinago gallinago</i>	Snipe	Amber	–	–	9
<i>Haematopus ostralegus</i>	Oystercatcher	Amber	–	–	11
<i>Larus argentatus</i>	Herring Gull	Red	–	–	83
<i>Larus canus</i>	Common Gull	Amber	–	–	8
<i>Larus fuscus</i>	Lesser Black-backed Gull	Amber	–	–	21
<i>Larus marinus</i>	Great Black-backed Gull	Amber	–	–	6
<i>Linaria cannabina</i>	Linnet	Red	–	–	26
<i>Locustella naevia</i>	Grasshopper Warbler	Red	–	Yes	11
<i>Motacilla cinerea</i>	Grey Wagtail	Red	–	–	15
<i>Muscicapa striata</i>	Spotted Flycatcher	Red	–	Yes	10
<i>Numenius arquata</i>	Curlew	Red	–	Yes	23
<i>Passer domesticus</i>	House Sparrow	Red	–	Yes	77
<i>Passer montanus</i>	Tree Sparrow	Red	–	Yes	12
<i>Perdix perdix</i>	Grey Partridge	Red	–	Yes	4

Latin name	Common name	BoCC status	W&CA Sch. 1	NERC Act S.41	No. of records
<i>Phoenicurus phoenicurus</i>	Redstart	Amber	–	–	1
<i>Phylloscopus sibilatrix</i>	Wood Warbler	Red	–	Yes	1
<i>Phylloscopus trochilus</i>	Willow Warbler	Amber	–	–	52
<i>Prunella modularis</i>	Dunnock	Amber	–	–	84
<i>Pyrhula</i>	Bullfinch	Amber	–	–	32
<i>Saxicola rubetra</i>	Whinchat	Red	–	–	1
<i>Scolopax rusticola</i>	Woodcock	Red	–	–	5
<i>Bucephala clangula</i>	Goldeneye	Amber	–	–	6
<i>Accipiter gentilis</i>	Goshawk	–	Yes	–	1
<i>Falco peregrinus</i>	Peregrine	–	Yes	–	6
<i>Tyto alba</i>	Barn Owl	–	Yes	–	31
<i>Turdus pilaris</i>	Fieldfare	Red	–	–	17
<i>Fringilla montifringilla</i>	Brambling	–	Yes	–	3
<i>Strix aluco</i>	Tawny Owl	Amber	–	–	13
<i>Sturnus vulgaris</i>	Starling	Red	–	–	72
<i>Tringa nebularia</i>	Greenshank	Amber	–	–	1
<i>Tringa totanus</i>	Redshank	Amber	–	–	2
<i>Turdus iliacus</i>	Redwing	Red	–	–	3
<i>Turdus philomelos</i>	Song Thrush	Red	–	–	64
<i>Turdus viscivorus</i>	Mistle Thrush	Red	–	–	29
<i>Vanellus</i>	Lapwing	Red	–	Yes	18

A review of bird species previously recorded within 2 km of the site and habitats recorded on site Ecological Appraisal (Tetra Tech, 2021) has been used to undertake a detailed assessment of the

potential habitat suitability for the breeding bird species within the site. Birds that haven't been previously recorded breeding in Cumbria (Cumbria Naturalist Union, 2021) have been excluded from the table below.

Table 4: Assessment of potential breeding habitat suitability for the bird species previously recorded within 2 km from site

Species	Breeding habitat preferences	Potential breeding habitat present on site
Lesser Redpoll	Woodland and gardens	Yes
Common Sandpiper	Fast rivers, lakes, lochs, and reservoirs	No
Skylark	Farmland, meadows, and moorland	Yes
Kingfisher	Still or slow flowing water such as lakes, canals and rivers	No
Mallard	Still or slow flowing waterbodies such as lakes, ponds and canals	No
Gadwall	Lakes, ponds, and gravel pits	No
Greylag Goose	Gravel pits, lakes and reservoirs	No
Meadow Pipit	Farmland, grassland and heathland	Yes
Tree Pipit	Woodland, grassland and heathland	Yes
Swift	Farmland, grassland, residential and wetland	Yes
Pochard	Lakes and gravel pits	No
Canada Goose	Farmland, grassland and wetlands	Yes
Black-headed Gull	Urban, farmland, wetlands and coastal.	Yes
Dipper	Upland, wetlands and slow flowing water.	No
Stock Dove	Woodland, farmland and urban & suburban	Yes
Cuckoo	Woodland, farmland, heathland and upland	Yes
Mute Swan	Farmland, grassland, intertidal and wetland	No
House Martin	Farmland, urban & suburban and wetland	Yes
Yellowhammer	Farmland, grassland and heathland	Yes

Species	Breeding habitat preferences	Potential breeding habitat present on site
Reed Bunting	Farmland, grassland, urban & suburban and wetland	Yes
Kestrel	Farmland, grassland and heathland	Yes
Pied Flycatcher	Woodland	Yes
Snipe	Farmland, grassland, marine & intertidal, upland and wetlands	No
Oystercatcher	Farmland, grassland, marine & intertidal, upland and wetland	No
Herring Gull	Farmland, grassland, marine & intertidal, urban and wetland	Yes
Common Gull	Farmland, grassland, marine & intertidal, upland and wetland	Yes
Lesser Black-backed Gull	Farmland, grassland, marine & intertidal, upland and wetland	Yes
Great Black-backed Gull	Farmland, marine & intertidal, urban, upland and wetland	Yes
Linnet	Farmland, grassland, heathland and urban & suburban.	Yes
Grasshopper Warbler	Grassland, heathland and wetland	Yes
Grey Wagtail	Marine & intertidal, upland, urban & suburban and wetland	Yes
Spotted Flycatcher	Woodland, farmland and urban & suburban	Yes
Curlew	Farmland, grassland, marine & intertidal, upland and wetland	Yes
House Sparrow	Farmland and urban & suburban	Yes
Tree Sparrow	Woodland, farmland, urban & suburban	Yes
Grey Partridge	Farmland and grassland	Yes
Redstart	Woodland, upland and urban & suburban	Yes
Wood Warbler	Woodland and urban & suburban	Yes
Willow Warbler	Woodland, grassland, heathland and urban & suburban	Yes
Dunnock	Woodland, farmland, grassland, urban & suburban	Yes

Species	Breeding habitat preferences	Potential breeding habitat present on site
Bullfinch	Woodland, farmland and urban & suburban	Yes
Whinchat	Woodland, farmland, grassland, heathland and upland	Yes
Woodcock	Woodland, farmland, upland and urban & suburban	No
Goldeneye	Marine & intertidal and wetland	No
Goshawk	Large woodlands, upland and wetlands	No
Peregrine	Farmland, grassland, marine & intertidal, upland and wetland, urban	Yes
Barn Owl	Trees, buildings, cliffs and quarries	Yes
Tawny Owl	Woodland, farmland and urban and suburban	Yes
Starling	Woodland, farmland, grassland, marine & intertidal, upland, urban & suburban, wetland	Yes
Greenshank	Marine & intertidal and wetland	No
Redshank	Grassland, marine & intertidal, upland and wetland	Yes
Song Thrush	Woodland, farmland, grassland and urban & suburban	Yes
Mistle Thrush	Woodland, farmland, grassland, heathland and urban & suburban	Yes
Lapwing	Farmland, grassland, marine & intertidal, upland and wetland	Yes

3.2 FIELD SURVEYS

A total of 31 bird species were recorded during the suite of breeding bird surveys. Of these species, six BoCC Red List and seven BoCC Amber List species were recorded. In addition, three species listed as Species of Principal Importance (SPI) under the NERC Act were recorded.

No species listed under Schedule 1 of the W&CA were recorded within the survey area

These notable species, along with their breeding status and number of potential territories, are summarised in Table 5 below, with their locations shown in Figure 3. Detailed survey results are included in Appendix D.

With reference to Table 5, it should be noted that the presence of a potential territory does not indicate the total number of breeding territories / pairs, but rather the maximum number of potential breeding territories / pairs during the season when surveys were completed.

Table 5: Potential breeding bird territories recorded during the 2021 bird surveys

Common Name	Scientific Name	UK Status	Number of potential territories	Breeding status
Blackbird	<i>Turdus merula</i>	BoCC Green	41	Probable
Blackcap	<i>Sylvia atricapilla</i>	BoCC Green	3	Possible
Blue tit	<i>Cyanistes caeruleus</i>	BoCC Green	13	Probable
Carrion crow	<i>Corvus corone</i>	BoCC Green	1	Probable
Chiffchaff	<i>Phylloscopus collybita</i>	BoCC Green	17	Probable
Chaffinch	<i>Fringilla coelebs</i>	BoCC Green	19	Possible
Coal tit	<i>Periparus ater</i>	BoCC Green	6	Possible
Dunnock	<i>Prunella modularis</i>	BoCC Amber	5	Probable
Feral pigeon	<i>Columba livia</i>	BoCC Green	2	Confirmed
Grasshopper warbler	<i>Locustella naevia</i>	BoCC Red, NERC Act	1	Possible
Greenfinch	<i>Chloris chloris</i>	BoCC Green	1	Possible
Great tit	<i>Parus major</i>	BoCC Green	13	Possible
Garden warbler	<i>Sylvia borin</i>	BoCC Green	3	Possible
Herring gull	<i>Larus argentatus</i>	BoCC Red	8	Confirmed
House sparrow	<i>Passer domesticus</i>	BoCC Red, NERC Act	4	Possible
Jay	<i>Garrulus glandarius</i>	BoCC Green	1	Probable
Jackdaw	<i>Corvus monedula</i>	BoCC Green	5	Possible
Lesser black-backed gull	<i>Larus fuscus</i>	BoCC Amber	8	Confirmed
Linnet	<i>Linaria cannabina</i>	BoCC Red	1	Possible

Common Name	Scientific Name	UK Status	Number of potential territories	Breeding status
Long-tailed tit	<i>Aegithalos caudatus</i>	BoCC Green	2	Possible
Magpie	<i>Pica</i>	BoCC Green	3	Possible
Oystercatcher	<i>Haematopus ostralegus</i>	BoCC Amber	3	Confirmed
Robin	<i>Erithacus rubecula</i>	BoCC Green	14	Probable
Reed bunting	<i>Emberiza schoeniclus</i>	BoCC Amber, NERC Act	2	Possible
Starling	<i>Sturnus vulgaris</i>	BoCC Red	2	Confirmed
Swift	<i>Apus</i>	BoCC Amber	2	Possible
Song thrush	<i>Turdus philomelos</i>	BoCC Red	13	Probable
Whitethroat	<i>Sylvia communis</i>	BoCC Green	3	Possible
Woodpigeon	<i>Columba palumbus</i>	BoCC Green	15	Probable
Wren	<i>Troglodytes</i>	BoCC Amber	31	Probable
Willow warbler	<i>Phylloscopus trochilus</i>	BoCC Amber	15	Confirmed

4.0 RELEVANT PLANNING POLICY

4.1 REVISED NATIONAL PLANNING POLICY FRAMEWORK

A revised NPPF was issued on 20th July 2021 (Ministry of Housing Communities and Local Government, 2019) and currently supplements government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System* (Office of the Deputy Prime Minister, 2005).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 174 of the NPPF also states that:

'Planning policies and decisions should contribute to and enhance the natural environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

The conservation and enhancement of wildlife is also specifically reference re: development within the National Parks or the Broads.

Paragraph 180 then goes on to confirm that:

When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

- c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*

Regarding EclA's and HRA's – any sites identified, or required, as compensatory measures for adverse effects on any Natura 2000/habitats site should also be given the same level as protection as the pSPA's and cSAC's themselves. In addition, when an application is being determined, Paragraph 182 clarifies that:

“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

Paragraph 183 is also relevant as;

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:...

- c) *limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.*

4.2 BIODIVERSITY 2020: A STRATEGY FOR ENGLAND'S WILDLIFE & ECOSYSTEM SERVICES

Biodiversity 2020 (DEFRA, 2011) replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix B for further details).

4.3 LOCAL BIODIVERSITY ACTION PLAN

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Cumbria Biodiversity Action Plan (CBAP) was launched in 2001; Species Action Plans (SAPs) were drawn up for 21 species (including six bird species) and Habitat Action Plans (HAPs) were drawn up for 19 habitats. Following the UKBAP review in 2007, the CBAP was reviewed in 2009 and it was decided to include all habitats and species which are listed as HPI and SPI under the NERC Act 2006. A list of all 268 SPI which occur in Cumbria is provided at:

<https://www.cumbriawildlifetrust.org.uk/sites/default/files/cumbria%20bap%20species%20updated%20list%202009%20web.pdf>

The original action plans for Cumbria were further reviewed as part of the Cumbria Biodiversity Evidence Base (CBEB) and detailed statements have been prepared for 11 species/species groups and 21 habitats. For the purposes of this report, the bird species listed in the Table 66 are of most relevance to this report:

Table 6: LBAP SAPs - Birds

Species Action Plans
Barn owl, <i>Tyto alba</i>
Hen harrier, <i>Circus cyaneus</i>
Wintering geese and swans; i.e.. whooper swan, barnacle goose, pink-footed goose and greylag goose (Icelandic population)

It should be noted that the existence of a SAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these species, rather than to protect a county-scarce feature (for example).

4.4 LOCAL PLAN

Copeland Borough Council holds the following policies relevant to this development in their Local Plan 2013-2028: Core Strategy and Development Management Policies DPD, adopted in 2013:

Policy SS5 – Provision and Access to Open Space and Green Infrastructure

Adequate provision and access to open space, and the development of the Borough's green infrastructure, will be promoted by:

- Protecting against the loss of designated open space (including playing fields, play areas and allotments) within settlements, and of the access routes or wildlife corridors which connect them, whilst ensuring also that they are well maintained. Where it is necessary to build on land covered by this policy, equivalent replacement provision should be made.
- Setting minimum open space standards for new development in accordance with Policy DM12.
- Promoting the establishment, improvement and protection of green infrastructure networks connecting open spaces with each other and with the countryside.

Policy ENV3 – Biodiversity and Geodiversity

The Council will contribute to the implementation of the UK and Cumbria Biodiversity Action Plan within the plan area by seeking to:

- Improve the condition of internationally, nationally and locally designated sites.
- Ensure that development incorporates measures to protect and enhance any biodiversity interest.
- Enhance, extend and restore priority habitats and look for opportunities to create new habitat.
- Protect and strengthen populations of priority or other protected species.
- Boost the biodiversity value of existing wildlife corridors and create new corridors, and stepping stones that connect them, to develop a functional Ecological Network.
- Restrict access and usage where appropriate and necessary in order to conserve an area's biodiversity value.

Policy DM25 supports this policy, setting out the detailed approach towards managing development proposals that are likely to have an effect on nature conservation sites, habitats and protected species.

Policy DM25 – Protecting Nature Conservation Sites, Habitats and Species

All development proposals should:

- a) Protect the biodiversity value of land and buildings.
- b) Minimise fragmentation of habitats.
- c) Maximise opportunities for conservation, restoration, enhancement and connection of natural habitats and creation of habitats for species listed in UK and Cumbria Biodiversity Action Plans. Special consideration should also be given to those European habitats that lie outside the boundaries of European designated sites.

Development proposals that would cause a direct or indirect adverse effect on locally recognised sites of biodiversity and geodiversity importance, including County Wildlife Sites, Local Nature Reserves and Regionally Important Geological/Geomorphological Sites or protected species will not be permitted unless:

- a) The benefits of the development clearly outweigh the impacts on the features of the site and the wider network of natural habitats; and
- b) Prevention, mitigation and/or compensation measures are provided. An appropriate long-term management plan will be sought and arrangements to provide adequate funding will be made in accordance with a formal planning agreement or obligation.

Where compensatory habitat is created, it should be of equal or greater size than the area lost as a result of the development.

Development proposals where the principal objective is to conserve or enhance biodiversity or geodiversity interests will be supported in principle.

Where there is evidence to suspect the presence of protected species any planning application should be accompanied by a survey assessing their presence and, if present, the proposal must be sensitive to, and make provision for, their needs.

All development proposals must take into account any likely significant effects on the internationally important sites both within the Borough and within a 20km radius of the Borough boundary as well as those that are hydrologically linked to the development plan area.

Policy DM28 – Protection of Trees

Development proposals which are likely to affect any trees within the Borough will be required to:

- a) Include an arboricultural assessment as to whether any of those trees are worthy of retention and protection by means of a Tree Preservation Order.
- b) Submit proposals for the replacement or relocation of any trees removed, with net provision at a minimum ratio of 2:1, with preference for the replacement of trees on site and with native species.

Any proposed works to Trees within Conservation Areas, or protected with Tree Preservation Orders, will be required to include an arboricultural survey to justify why works are necessary and that the works proposed will, where possible, not adversely affect the amenity value of the area. Applicants for development that will result in the loss or deterioration of ancient woodland or veteran trees outside

woodland should demonstrate that the need for and benefits of the development will clearly outweigh the loss.

5.0 RELEVANT LEGISLATION

All wild birds in the UK are protected under Section 1 of the W&CA 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 W&CA 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).

Forty-nine bird species are listed as 'species of principal importance for the conservation of biological diversity in England' under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of this Act places a duty (the Statutory Biodiversity Duty) on public bodies (including local planning authorities) when undertaking their duties (including the making of planning decisions) "to take such measures as they consider expedient for the purposes of conserving biodiversity". The conservation of species listed on Section 41 of the NERC Act, including the restoration or enhancement of a population or habitat, is therefore legally required to be considered in planning decisions. ODPM Circular 06/2005 further clarifies that they are capable of being a material consideration for planning decisions, along with Local Biodiversity Action Plan priority species, as referred to below.

5.1 OTHER CONSERVATION LISTS AND GUIDANCE

5.1.1 Birds of Conservation Concern (BoCC)

The conservation status of all regularly occurring British birds has been analysed in co-operation with the leading governmental and non-governmental conservation organisations, including the Royal Society for the Protection of Birds (RSPB), British Trust for Ornithology (BTO) and Birdlife International Birds of Conservation Concern 4 (Eaton *et al.*, 2015). The basis of species ongoing population trends are assigned to one of three lists of Conservation Concern. These are the UK Red, Amber and Green list.

The criteria for birds being included in the lists is as follows.

Red List

- Globally threatened.
- Historical population decline in UK during 1800–1995.
- Severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period (the entire period used for assessments since the first BoCC review, starting in 1969). Severe (at least 50%) contraction of UK breeding range over last 25 years, or the longer-term period.

Amber List

- Species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern).
- Historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years.
- Moderate (25-49%) decline in UK breeding population over last 25 years, or since 1969.
- Moderate (25-49%) contraction of UK breeding range over last 25 years, or since 1969.

- Moderate (25-49%) decline in UK non-breeding population over last 25 years, or since 1969.
- Rare breeder; 1–300 breeding pairs in UK.
- Rare non-breeders; less than 900 individuals.
- Localised; at least 50% of UK breeding or non-breeding population in 10 or fewer sites, but not applied to rare breeders or non-breeders.
- Internationally important; at least 20% of European breeding or non-breeding population in UK (NW European and East Atlantic Flyway populations used for non-breeding wildfowl and waders respectively).

Green List

- Species that occur regularly in the UK but do not qualify under any or the above criteria.

Although the lists confer no legal status in themselves, they are useful in evaluating the conservation significance of bird assemblages, and for assessing the potential significance of impacts and informing appropriate levels of mitigation with respect to bird populations.

6.0 DISCUSSION AND RECOMENDATIONS

A total of 31 bird species were identified during breeding bird surveys completed on site. Of these species, six BoCC Red List and seven BoCC Amber List species were recorded. In addition, three species listed as Species of Principal Importance (SPI) under the NERC Act were recorded.

Of the 31 species recorded, six species were confirmed breeders, while 10 were probable breeders and 15 were possible breeders.

6.1 ASSESSMENT AND RECOMENDATIONS

Breeding birds recorded on site included predominantly common passerine species breeding within the woodland edge and scrub habitats on site. The Masterplan for the CMIQ (Appendix B) indicates that majority of these habitats will be retained and incorporated into the proposed site layout.

Therefore, it is considered that the proposed development is unlikely to significantly affect local populations of breeding birds through habitat loss and availability of potential breeding territories.

Masterplan for the site (Appendix B) suggests that some limited scrub and young woodland removal will be undertaken in the east and west sections of Site A; furthermore, hardstanding areas within Site A that were used by nesting oystercatcher will be developed as part of the proposal. Therefore, it is recommended that removal of these habitat is mitigated through new tree and scrub planting within the Main Leconfield Site A and creation of scrapes / bare ground areas or undisturbed hardstanding areas that could provide suitable habitat for breeding oystercatcher.

The proposed Masterplan (Appendix B) also indicates that majority of the Expansion Site B will be developed as part of the proposal. This will predominantly include the norther section of site B which currently includes semi-improved grazed grassland and hedgerows. No detailed breeding bird survey was conducted within this section of the site (due to the lack of access) therefore there is no survey data available on bird species and distribution of breeding territories within the northern part of Site B. However, it is considered that improved and semi-improved grassland habitats as well as species-poor hedgerows comprising majority of site B are unlikely to be of great significance to the local bird populations in terms of assemblage diversity and density of breeding bird territories. Therefore, It is recommended that new / replacement hedgerow planting and grassland enhancement is undertaken in order to compensate for the loss of these habitats.

6.2 REASONABLE AVOIDANCE MEASURES

To avoid committing an offence under relevant legislation as highlighted above any works affecting potential bird nesting habitat (i.e. any vegetation clearance, ground clearance / excavation works, building demolition) should be carried out outside the main bird breeding season (i.e. considered to be March to August, inclusive). If this is not possible, potential nesting habitat should be checked for nests by a suitably qualified and experienced ecologist / ECOW immediately prior to its removal. Once complete, a 48-hour window will allow for the area to be made unsuitable for nesting in the area checked. If these works in the checked area are not completed within 48h, a further inspection will be required.

If a nesting bird is identified, the ecologist will advise on suitable working methods and exclusion zones to restrict works and/or vehicular access in the area until the chicks have fledged or the nest becomes otherwise inactive. Measures will depend on the nature of the works in that area as well as any bird species identified to be nesting.

6.3 ENHACMNET

A nest box scheme undertaken as part of the development could provide additional nesting provisions for the local populations of breeding birds.

The number of nesting opportunities on site could be improved further by installing bird boxes on existing trees and buildings or incorporating integrated bird boxes within the new buildings design. Bird boxes should be positioned at least 3-4m above the ground in a sheltered position. It is recommended that the following box types (or equivalent) are used:

- At least 20 no. 1B Schwegler Nest Box (or similar) with 32mm entrance hole to attract small-medium crevice dwelling species such as house sparrow *Passer domesticus*, blue tit *Cyanistes caeruleus*, great tit *Parus major* and coal tit *Periparus ater*.
<https://www.nhbs.com/1b-schwegler-nest-box>
- At least 20 no. 2H Schwegler 2H Nest box (or equivalent) with open front to attract species such as robin *Erithacus rubecula*, blue tit, coal tit and wren *Troglodytes troglodytes*:
<https://www.nhbs.com/2h-schwegler-robin-box>
- House sparrow nest boxes and swallow cups could be installed on the new / existing buildings. These should be installed along the north-east elevations in order to be sheltered from the prevailing wind and rain. It is recommended that 10 no. of house sparrow nest boxes and 10 no. of swallow cups are installed on site.:
<https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>
<https://www.nhbs.com/eco-swallow-nest>
- Swift bricks or similar could be incorporated during the building process to provide breeding space for cavity dwelling species such as swift. It is recommended that 10 no. of swift brick are incorporated into the new buildings on site (if the design allows):
<https://manthorpebuildingproducts.co.uk/product/gswb-swift-nest-brick>
<https://ibstockbrick.co.uk/kevington/eco-products/>

SUMMARY

No statutory or non-statutory designated sites of ornithological note were identified within 5 km of the site. Solway Firth Special Protection Area (SPA) is located 5.5 km north-west from site.

The habitats on site included woodland, trees, scrub and grassland provide a variety of nesting and foraging opportunities for a variety of bird species. In addition, buildings and hard standing / bare ground provide nesting habitat for building-specialist and ground nesting birds.

A total of 31 bird species were recorded during the suite of breeding bird surveys. Of these species, six BoCC Red List and seven BoCC Amber List species were recorded. In addition, three species listed as Species of Principal Importance (SPI) under the NERC Act were recorded.

Of the 31 species recorded, six species were confirmed breeders, while 10 were probable breeders and 15 were possible breeders.

Due to the lack of access, it was not possible to conduct a comprehensive breeding bird survey of the entire Expansion Site B and further surveys may be required in order to fully appraise the value of this land to the local breeding bird populations.

Breeding birds recorded on site included predominantly common passerine species breeding within the woodland edge and scrub habitats on site. The Masterplan from the CMIQ indicates that majority of these habitats will be retained and incorporated into the proposed site layout. Therefore, it is considered that the proposed development is unlikely to significantly affect local populations of breeding birds through habitat loss and availability of potential breeding territories.

Habitat / vegetation clearance should avoid the nesting period (March to September inclusive) or be immediately preceded (within 48 hours) by a check by a suitably qualified ecologist / ECOW.

A nest box scheme undertaken as part of the development could provide additional nesting provisions for the local populations of breeding birds. It is recommended that following nest boxes are installed on site: 20 no. 1B Schwegler Nest Box (or equivalent), 20 no. 2H Schwegler 2H Nest box (or equivalent), 10 no of house sparrow boxes, 10 no. of swallow cups and 10 no. of swift bricks.

7.0 REFERENCES

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- Wildlife and Countryside Act, 1981 (as amended), HMSO.
- WYG (2020) *Leconfield Industrial Estate: Ecological Appraisal Report*.
- Tetra Tech (2021) Cleator Moor Innovation Quarter: Ecological Appraisal. On behalf of Copeland Borough Council. Ref: 784-B029668 (unpublished report)

FIGURES

Figure 1 – Site Location Plan

Figure 2 – Survey Transect Route

Figure 3 – Breeding Bird Territories



Site Location Plan
CLEATOR MOOR INNOVATION QUARTER



Copeland Borough Council

Legend

 Site boundary

Notes:

Drawn by: CL
Checked by: GP
Office: Southampton

Figure No. 1
Revision No. A

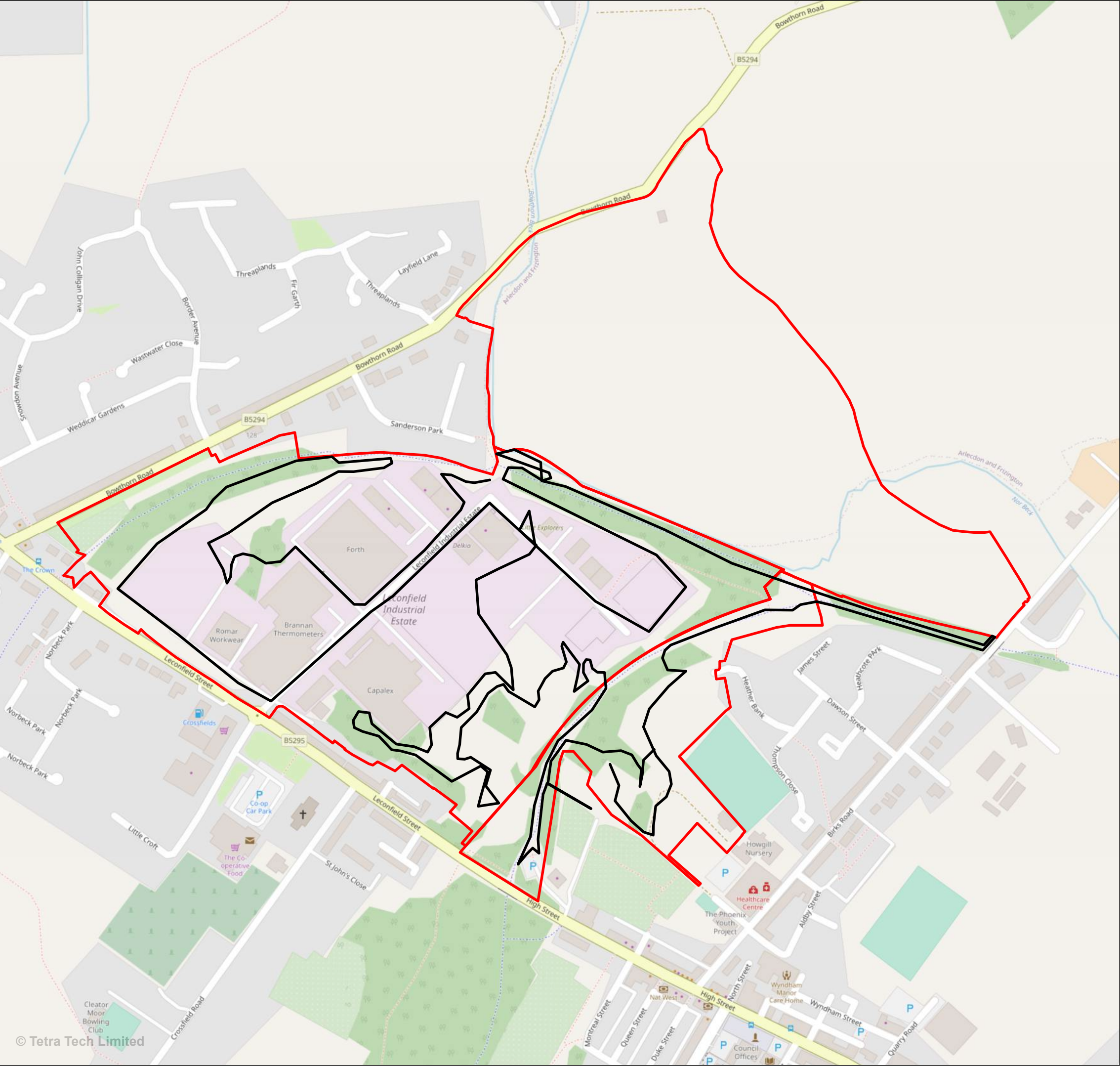
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21 October 2021
NGR: 301752E 515602N

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Hampshire, SO30 2AF



Survey Transect Route

CLEATOR MOOR INNOVATION QUARTER

Copeland Borough Council

Legend

- Site boundary
- Survey transect route

Notes:

Drawn by: CL
Checked by: GP
Office: Southampton

Figure No. 2
Revision No. A

0 50 100 150 Meters
Scale 1:4,000 @A3

04 November 2021
NGR: 301752E 515602N

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Breeding Bird Territories

CLEATOR MOOR INNOVATION QUARTER



Copeland Borough Council

Legend

Site boundary

Breeding Birds Territories

BoCC status

- Amber
- Green
- Red

BoCC Red listed species

- GH - Grasshopper Warbler
- HG - Herring Gull
- HS - House Sparrow
- SG - Starling
- ST - Song Thrush

BoCC Amber listed species

- D. - Dunnock
- LB - Lesser Black-backed Gull
- OC - Oystercatcher
- RB - Reed Bunting
- SI - Swift
- WW - Willow Warbler

BoCC Green listed species

- B - Blackbird
- B. - Blackbird
- BC - Blackcap
- BT - Blue Tit
- C. - Carrion Crow
- CC - Chiffchaff
- CH - Chaffinch
- CT - Coal Tit
- FP - Feral Pigeon
- GT - Great Tit
- GW - Garden Warbler
- J. - Jay
- JD - Jackdaw
- LT - Long-tailed Tit
- MG - Magpie
- R - Robin
- R. - Robin
- WH - Whitethroat
- WP - Woodpigeon
- WR - Wren

Notes:

Drawn by: CL
Checked by: GP
Office: Southampton

Figure No. 3a
Revision No. A

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Scale 1:2,304 @A3

04 November 2021
NGR: 301537E 515468N

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Breeding Bird Territories
CLEATOR MOOR INNOVATION QUARTER



Copeland Borough Council

Legend

Site boundary

Breeding Birds Territories

BoCC status

- Amber
- Green
- Red

BoCC Red listed species

- GH - Grasshopper Warbler
- HG - Herring Gull
- HS - House Sparrow
- LI - Linnet
- SG - Starling
- ST - Song Thrush

BoCC Amber listed species

- D. - Dunnock
- LB - Lesser Black-backed Gull
- OC - Oystercatcher
- RB - Reed Bunting
- SI - Swift
- WW - Willow Warbler

BoCC Green listed species

- B - Blackbird
- B. - Blackbird
- BC - Blackcap
- BT - Blue Tit
- C. - Carrion Crow
- CC - Chiffchaff
- CH - Chaffinch
- CT - Coal Tit
- GR - Greenfinch
- GT - Great Tit
- GW - Garden Warbler
- J. - Jay
- JD - Jackdaw
- LT - Long-tailed Tit
- MG - Magpie
- R. - Robin
- WH - Whitethroat
- WP - Woodpigeon
- WR - Wren

Notes:

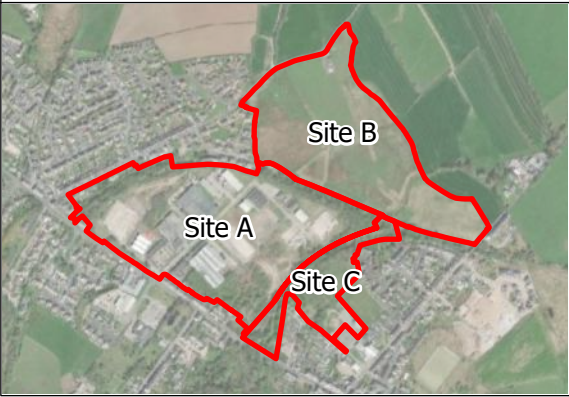
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Checked by: GP
Office: Southampton

Figure No. 3b
Revision No. A

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Scale 1:2,304 @A3

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NGR: 301898E 515461N

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APPENDIX A – REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of the Copeland Borough Council (“the Client”) for the proposed uses stated in the report by Tetra Tech Limited (“Tetra Tech”). Tetra Tech exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder’s permission.

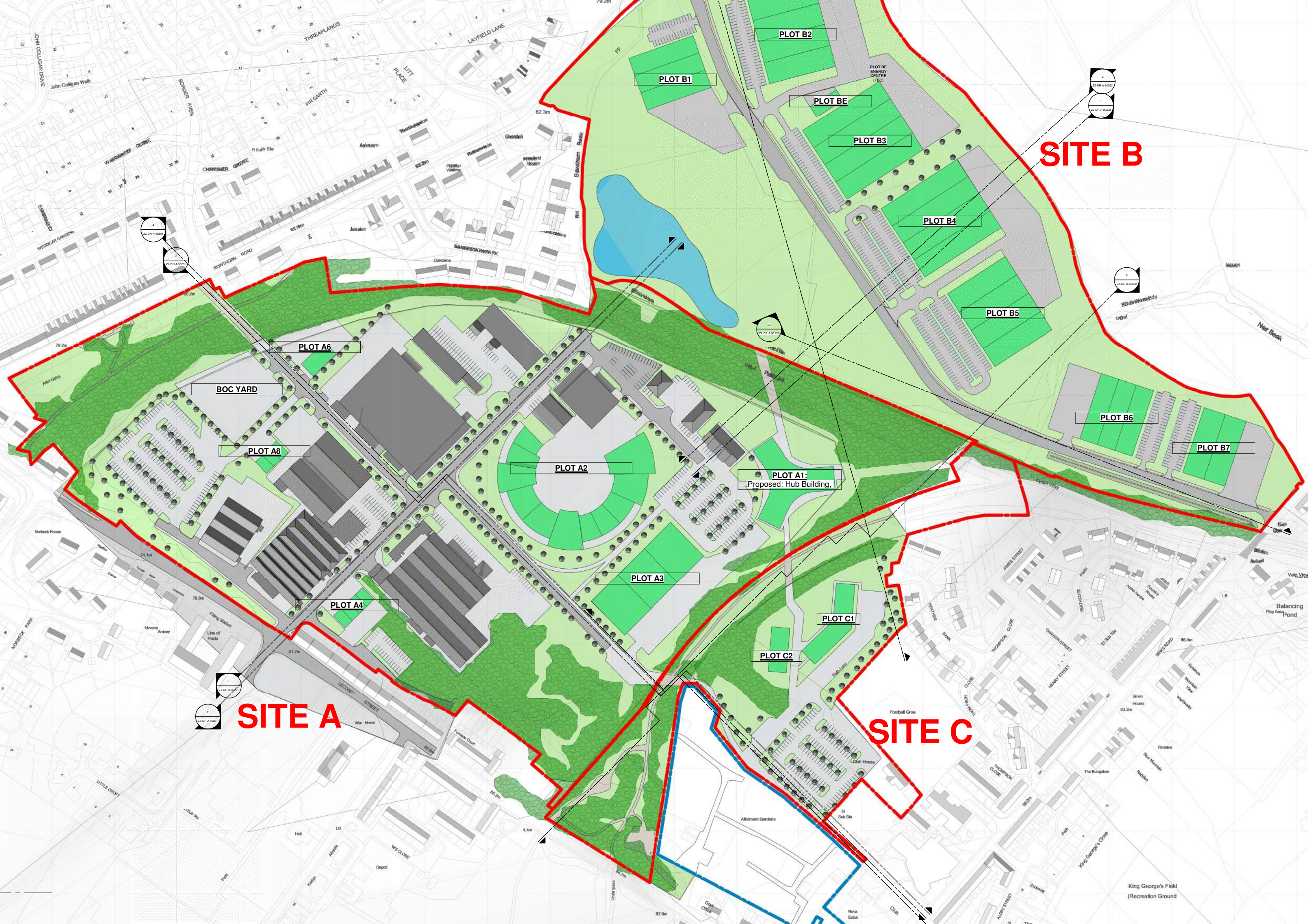
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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections’. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. 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. 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 “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and 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. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B – MASTERPLAN



SITE B

SITE A

SITE C

PLOT B1

PLOT B2

PLOT BE

PLOT B3

PLOT B4

PLOT B5

PLOT B6

PLOT B7

PLOT A6

BOC YARD

PLOT A8

PLOT A2

PLOT A1:
Proposed Hub Building

PLOT A3

PLOT A4

PLOT C1

PLOT C2

APPENDIX C – CUMBRIA STATUS OF THE BIRDS RECORDED ON SITE

Common Name (BTO code)	UK Status	Cumbria Status*
Blackbird (B.)	BoCC Green	An abundant resident and passage migrant. Breeds in very large numbers.
Blackcap (BC)	BoCC Green	An abundant summer visitor and passage migrant, uncommon in winter. Breeds in large numbers.
Blue Tit (BT)	BoCC Green	An abundant resident. Breeds in very large numbers.
Carrion Crow (C.)	BoCC Green	An abundant resident. Breeds in very large numbers.
Chiffchaff (CC)	BoCC Green	An abundant summer visitor, passage migrant, scarce in winter. Breeds in very large numbers.
Chaffinch (CH)	BoCC Amber	An abundant resident, passage migrant and winter visitor. Breeds in very large numbers.
Coal Tit (CT)	BoCC Green	An abundant visitor. Breeds in large numbers.
Dunnock (D.)	BoCC Red, NERC Act	An abundant resident and passage migrant. Breeds in very large numbers.
Feral Pigeon (FP)	BoCC Green	A common resident. Breeds in large numbers.
Grasshopper Warbler (GH)	BoCC Green	A fairly common summer visitor. Breeds in moderate numbers.
Greenfinch (GF)	BoCC Green	An abundant resident and winter visitor. Breeds in large numbers.
Great Tit (GT)	BoCC Red	An abundant resident. Breeds in very large numbers.
Garden Warbler (GW)	BoCC Red, NERC Act	An abundant summer visitor and passage migrant. Breeds in large numbers.
Herring Gull (HG)	BoCC Green	An abundant resident. Breeds in declining numbers.
House Sparrow (HS)	BoCC Green	An abundant resident. Breeds in very large numbers.
Jay (J.)	BoCC Amber	A common resident. Breeds in moderate numbers.
Jackdaw (JD)	BoCC Red	An abundant resident. Breeds in very large numbers.
Lesser Black-backed Gull (LB)	BoCC Green	An abundant summer visitor and common passage migrant, overwintering in smaller numbers. Breeds in large numbers.
Linnet (LI)	BoCC Green	An abundant resident, passage migrant and winter visitor. Breeds in very large numbers.

Common Name (BTO code)	UK Status	Cumbria Status*
Long-tailed Tit (LT)	BoCC Amber	An abundant resident. Breeds in large numbers.
Magpie (MG)	BoCC Green	A locally abundant resident. Breeds in large numbers.
Oystercatcher (OC)	BoCC Amber, NERC Act	An abundant resident, passage migrant and winter visitor. Breeds in large numbers.
Robin (R.)	BoCC Red	An abundant resident and passage migrant. Breeds in very large numbers.
Reed Bunting (RB)	BoCC Amber	A common resident. Breeds in moderate numbers.
Starling (SG)	BoCC Red	An abundant resident and winter visitor. Breeds in very large numbers.
Swift (SI)	BoCC Green	A common summer visitor and passage migrant. Breeds in moderate numbers.
Song Thrush (ST)	BoCC Green	An abundant resident and passage migrant. Breeds in very large numbers.
Whitethroat (WH)	BoCC Amber	An abundant summer visitor and passage migrant. Breeds in large numbers.
Woodpigeon (WP)	BoCC Amber	An abundant resident and winter visitor. Breeds in very large numbers.
Wren (W.)	BoCC Green	Breeds in large numbers.
Willow Warbler (WW.)	BoCC Green	An abundant summer visitor and passage migrant. Breeds in very large numbers.
Described within the most recent Bird and Wildlife in Cumbria report that covers the 2019 period (Cumbria Naturalists Union, 2020).		

APPENDIX D – BIRD SPECIES RECORDED – 2021 BREEDING BIRD SURVEYS

Common Name (BTO code)	27/05/2021	15/06/2021
	Total Count	
Blackbird (B.)	29	26
Blackcap (BC)	-	3
Blue Tit (BT)	7	8
Carrion Crow (C.)	2	4
Chiffchaff (CC)	8	11
Chaffinch (CH)	10	11
Coal Tit (CT)	4	4
Dunnock (D.)	6	4
Feral Pigeon (FP)	5	2
Grasshopper Warbler (GH)	1	-
Greenfinch (GF)	1	-
Great Tit (GT)	6	8
Garden Warbler (GW)	2	1
Herring Gull (HG)	21	17
House Sparrow (HS)	6	2
Jay (J.)	1	1
Jackdaw (JD)	10	12
Lesser Black-backed Gull (LB)	11	15
Linnet (LI)	5	-
Long-tailed Tit (LT)	7	-
Magpie (MG)	1	5
Oystercatcher (OC)	5	5
Robin (R.)	11	4
Reed Bunting (RB)	2	-
Starling (SG)	24	2
Swift (SI)	-	7
Song Thrush (ST)	8	9

Common Name (BTO code)	27/05/2021	15/06/2021
	Total Count	
Whitethroat (WH)	2	1
Woodpigeon (WP)	22	63
Wren (W.)	18	20
Willow Warbler (WW.)	9	12