



Dean Moor Solar Farm

Environmental Statement: Appendix 8.6 – Wintering Bird and Hen Harrier Survey Report on behalf of FVS Dean Moor Limited

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**DEAN MOOR SOLAR FARM
ENVIRONMENTAL STATEMENT
APPENDIX 8.6 – WINTERING BIRD AND HEN HARRIER
SURVEY REPORT 2023-2024
PLANNING INSPECTORATE REFERENCE EN010155
PREPARED ON BEHALF OF FVS DEAN MOOR LIMITED**

**The Infrastructure Planning (Applications: Prescribed Forms and
Procedure) Regulations 2009, Regulation 5(2)(a)**

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1 Introduction

1.1 Overview

- 1.1.1 This report presents the results of a wintering bird survey and hen harrier survey for the Dean Moor Solar Farm (the 'Proposed Development'), commissioned by FVS Dean Moor Limited. This report forms Appendix 8.6 of Chapter 8 – Biodiversity of the ES for the Proposed Development [REF: 6.2].
- 1.1.2 The purpose of the wintering bird survey and the hen harrier survey is to identify the species present and their use of the Site (defined in paragraph 1.2.1 below). The results will be used to inform the ecological impact assessment, as well as the evolving design of the Proposed Development.
- 1.1.3 It should be noted that the Site Location Plan (ES Figure 1.1) differs from the Draft Order Limits that were assessed during PEIR. The figures attributed to this report therefore present the previous iteration of the Draft Order Limits as the results of this survey represent a fixed point in time in relation to the previous iteration of the Draft Order Limits. It is considered that the minimal changes to the Order Limits after PEIR submission do not affect the results of this survey and the results are considered valid.

1.2 Site Location and Description

- 1.2.1 The Proposed Development will be located on approximately 276.5 hectares (ha) of land between the villages of Gilgarran and Branthwaite in West Cumbria (the Site), which is situated within the administrative boundary of Cumberland Council (the Council).
- 1.2.2 The Site Location Plan is shown on ES Figure 1.1 [REF: 6.2]. The Order Limits for the Proposed Development constitute the maximum area of land potentially required for the construction, operation and decommissioning of the Proposed Development. The Order Limits refer to the same area as the Site and is divided into four main areas (Areas A, B, C, and D).
- 1.2.3 The Site is predominantly pasture that is grazed by sheep. It is generally drained by a series of unnamed minor watercourses which run broadly

south to north and west to east in Area C. The watercourses coalesce near Branthwaite Rigg and flow north to ultimately join the River Derwent.

1.2.4 The land within the Site has a varied topography with steep-sided hills associated with Thief Gill in Area C; and flat land to the north, east and west around Areas A and B. Small areas of plantation woodland are present in and adjacent to Areas A and B.

1.2.5 Land surrounding the Site is dominated by grazing pasture and arable farmland, with large areas of plantation woodland also located north, east and west of the Site.

1.3 Proposed Development

1.3.1 The Proposed Development comprises the construction, operation, and decommissioning of a solar photovoltaic (PV) energy generating station with a total capacity exceeding 50MW comprising solar PV arrays, grid connection infrastructure, associated infrastructure, and green infrastructure.

1.3.2 The Parameter Plan for the Proposed Development is presented in ES Figure 3.4 [REF: 6.2].

1.4 Report Objectives

1.4.1 The objectives of this report are to:

- Outline survey methodologies and relevant survey guidance; and
- Detail the results of the surveys.

2 Methods

2.1 Overview

Wintering bird survey

2.1.1 Wintering bird surveys were undertaken from September 2023 to March 2024 to determine whether the Site was functionally linked to the Solway Firth Special Protection Area ('SPA'). Each survey was completed in line with the current industry guidance¹.

Hen harrier survey

2.1.2 After consultation with Natural England and Cumbria Bird Club ('CBC'), surveys were undertaken to identify whether the Site was being utilised by hen harrier (*Circus cyaneus*). These surveys were undertaken from November 2023 to March 2024. Each survey was completed in line with the current industry guidance².

Habitat description

2.1.3 General habitat assessment is described in ES Appendix 8.1 [REF: 6.3].

2.2 Field Survey

Wintering bird survey

2.2.1 Due to the presence of the Solway Firth SPA, which lies 5km to the west of the Site and which is designated due to its importance during winter for non-breeding waterfowl and non-breeding gulls, the survey period was extended to include September, October and March so that passage migrants were also recorded.

2.2.2 Monthly surveys were carried out (September 2023 to March 2024) with two surveys in September and November and one survey per month in the remaining months (October and December 2023 to March 2024). Surveys were undertaken throughout the month with approximately two weeks between surveys where possible (with adjustments made due to inclement

¹ Bird Survey & Assessment Steering Group. (2023). Bird survey guidelines for assessing ecological impacts, v.1.0.0. <https://birdsurveyguidelines.org>. [Accessed April 2024]

² Hardy, J., Crick, H., Wernham, C., Riley, H., and Thompson, D. (2009) Raptors: a field guide to survey and monitoring. 2nd Edition, Edinburgh: The Stationery Office.

weather). Surveys were conducted during the diurnal period and between the timings of 07:30 and 18:30 (adjusted accordingly for daylight changes).

2.2.3 During the nine surveys, which were undertaken over the course of twelve separate visits to the Site, (not including a scoping visit) the 'look-see' methodology³ was employed. This involved observing habitats along a pre-determined survey transect route and stopping at intervals and scanning the survey area for birds using close-focusing binoculars. All species heard and or observed were recorded onto base maps using standard British Trust for Ornithology ('BTO') Species Codes, with other notes made where appropriate, in accordance with standard practice⁴ .

2.2.4 All bird species using or flying over the Site were recorded with details of the survey timings and weather conditions presented in Table 2.1. Figures 1A – 1R show the monthly survey results, which includes information on the conservation status of birds with reference to the Wildlife and Countryside Act 1981 (as amended) and the Birds of Conservation Concern (BoCC)⁵ .

³ Gilbert, G., Gibbons, D.W and Evans, J. (1998) Bird monitoring methods: A manual of techniques for UK key species. The Royal Society for the Protection of Birds (RSPB), Sandy, Bedfordshire, England.

⁴ Bibby, C.J., Burgess, N.D, Hill, D.A, and Mustoe, S.H (2000) Bird census techniques. Academic Press, London.

⁵ Stanbury, A., Eaton M., Aebischer N., Balmer D., Brown A., Douse A., Lindley P., McCulloch N., Noble D. and Win I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern (BoCC 5) in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723–747.

Table 2.1: Wintering bird survey details

Date	Timing	Sunrise / sunset	Temp	Wind speed (Beaufort Force)	Cloud cover (Oktas)	Precipitation	Visibility	Figures
Scoping 22/02/2023*	9:00-14:00	06:09 – 18:28	6°C	1	8	Light Intermittent	>2km	N/A
Survey No. 1 14/09/2023	7:30-13:15	06:41 – 19:31	15°C	3	7	No rain	>2km	1A, 1B
Survey No. 2 29/09/2023	8:00-13:30	07:09 – 18:53	13°C	5	6	Light Intermittent	<2km	1C, 1D
Survey No. 3 09/10/2023	8:00-14:30	07:28 – 18:28	15°C	3	2	Light intermittent	<2km	1E, 1F
Survey No. 4 10/11/2023	8:00-13:38	07:33 – 16:17	5°C	1	1	No rain	>2km	1G, 1H
Survey No. 5 23/11/2023	8:30-14:00	07:56 – 15:59	8°C	4	0	Light intermittent	>2km	1I, 1J
Survey No. 6 (north) 18/12/2023*	10:30-13:30	08:29 – 15:46	8°C	4	8	Light intermittent	<2km	1K, 1L
Survey No. 6 (south) 19/12/2024*	10:30-13:30	08:30 – 15:46	10°C	3	4	No rain	>2km	1K, 1L
Survey No. 7 (south) 29/01/2024*	10:30-12:30	08:06 – 16:43	5°C	1	8	Heavy persistent	<2km	1M, 1N
Survey No. 7 (north) 30/01/2024*	10:10 - 14:00	08:05 - 16:45	6°C	2	0	No rain	>2km	1M, 1N
Survey No. 8 22/02/2024	08:15-13:50	07:18 – 17:32	8°C	4	5	No rain	>2km	1O, 1P
Survey No. 9 (north and south) 21/03/2024*	09:00-14:30	06:10 – 18:27	10°C	3	7	Light persistent	<2km	1Q, 1R
Survey No. 9 (south) 22/03/2024*	08:30 - 10:30	06:07 - 18:29	10°C	7	6	Light intermittent	<2km	1Q, 1R

*Scoping survey only (data not included within the report) **Surveys split over two days

Hen harrier survey

- 2.2.5 Vantage Point ('VP') surveys were undertaken with two vantage point locations identified to give an effective visual coverage of the Site: one in the south close to Thief's Gill and Pica Road (looking north), and; one to the north of the Site based along Branthwaite Road (looking south). Each survey consisted of a three-hour watch using binoculars and spotting scope from the two locations to observe birds flying over or using the Site for foraging or roosting.
- 2.2.6 In accordance with recommendations provided by Natural England, each VP was surveyed twice per calendar month between November and March and at roughly fortnightly intervals. To effectively survey for potential hen harrier roost sites as well as general commuting and foraging behaviour of hen harrier the surveys took place at dusk and dawn. Dusk surveys were undertaken from approximately two hours prior to sunset until one hour after, or until it became too dark to continue the survey. Dawn surveys were undertaken from around one hour prior to sunrise until two hours after⁶. On each survey occasion the survey visits from each VP location were undertaken back-to-back and where possible VP locations alternated between dusk and dawn on subsequent visits to effectively cover the survey period.
- 2.2.7 During hen harrier surveys, other species of raptor were recorded incidentally when identified on or flying over the Site.
- 2.2.8 Details of the survey timings and weather conditions are presented in Table 2.2. Vantage Point locations are shown on Figures 2a and 2b.

⁶ Hardy, J. Crick, H., Wernham, C., Riley, H., and Thompson, D. (2009) Raptors: a field guide to survey and monitoring. 2nd Edition, Edinburgh: The Stationery Office.

Table 2.2: Hen harrier survey details

Date and Vantage Point Location	Timing	Sunrise / sunset	Temperature	Wind speed (Beaufort Force)	Cloud cover (Okta s)	Precipitation	Visibility
21/11/2023 VP 2	14:00 – 17:04	16:04	7°C	1	5	No rain	>2km
22/11/2023 VP 1	07:05 – 10:05	07:53	9°C	3	8	Light intermittent	<2km
28/11/2023 VP 2	13:56 – 16:56	15:55	4°C	1	2	No rain	>2km
29/11/2023 VP 1	07:05 – 10:10	08:09	-5°C	2	3	No rain	>2km
06/12/2023 VP 1	13:50 – 16:50	15:50	2°C	5	5	No rain	<2km
07/12/2023 VP 2	07:20 – 10:20	08:21	5°C	5	7	No rain	<2km
18/12/2023 VP 2	13:50 – 16:48	15:48	11°C	1	4	Light intermittent	>2km
19/12/2023 VP 1	07:33 – 10:33	08:33	6°C	3	3	No rain	>2km
05/01/2024 VP 1	14:04 – 17:04	16:04	6°C	2	1	No rain	>2km
06/01/2024 VP 2	07:35 – 10:35	08:35	-1°C	1	1	No rain	>2km
29/01/2024 VP 2	14:45 – 17:30	16:45	5°C	1	7	Heavy persistent	<2km
30/01/2024 VP 1	07:10 – 10:10	08:08	3°C	2	1	No rain	>2km
11/02/2024	15:15 – 08:15	17:10	6°C	3	1	No rain	>2km
12/02/2024 VP 2	06:45 – 09:45	07:43	3°C	4	2	Light intermittent	>2km
22/02/2024 VP 1	15:35 – 18:35	17:35	7°C	4	1	No rain	>2km
23/02/2024 VP 2	06:20 – 09:20	07:18	5°C	5	8	No rain	<2km
04/03/2024 VP 2	16:00 – 19:00	18:07	9°C	2	1	No rain	>2km
05/03/2024 VP 1	06:00 – 09:00	06:52	4°C	4	2	No rain	>2km
21/03/2024 VP 2	16:30 – 19:30	18:33	10°C	5	6	No rain	>2km
22/03/2024 VP1	05:15 – 08:15	06:10	10°C	5	6	No rain	<2km

2.3 General Habitat Setting

- 2.3.1 Habitats recorded on Site are described in the ES with Figures 3a and 3b of the accompanying Preliminary Ecological Appraisal ('PEA') (ES Appendix 8.1) showing their distribution across the Site.
- 2.3.2 Habitats within the Site include modified grassland which is extensive in Areas A and C and used for sheep grazing, with some areas being heavily poached. Other neutral grassland surrounds one of the ponds while damp grassland was present in the southwest.
- 2.3.3 Much of the habitat adjacent to Area A is dominated by broadleaved woodland plantation, although a small number of conifers do occur. A small mixed plantation is present in the east of the Site, beside which is evidence of recent felling. Two Sitka-dominated plantations are present in the south of the Site, with two younger plantation blocks present on the southern slope.
- 2.3.4 The Site supports two notable habitats: lowland dry acid grassland on the slopes of the gorge containing Thief's Gill and hedgerows.

2.4 Consideration of Potential Limitations

Wintering bird survey

- 2.4.1 During the wintering bird survey season on two occasions there were slight delays in the commencement surveys. Survey Nos. 2 and 3 were undertaken 10 days apart and Surveys Nos. 4 and 5 were undertaken 13 days apart. The delays were due to inclement weather and were rescheduled for the soonest available dates. In the context of the full survey season this is not considered to be a significant limitation.
- 2.4.2 Wintering bird surveys were conducted during core survey period (November through March) with one survey per month and extended to include the passage period (September, October, and March). Based on the protracted passage period, habitats present; and the location of the Site there was the possibility of passage waders, raptors and wintering geese to be present on Site. As such the passage surveys were extended to include an extra survey in September and an extra survey in October.

However, due to weather constraints the second October survey was pushed back to November. Therefore, a single passage survey in October and an additional passage survey in November was completed. The passage surveys were to cover migratory species, in particular grey geese passing through the area, however only 1 individual greylag goose *Anser anser* was recorded flying over the Site during all of surveys. The second October survey being moved to November is not seen as a significant limitation.

- 2.4.3 During both the wintering bird and hen harrier survey carried out on 29 January 2024 ('VP 2') heavy rain persisted. The north section of the Site was covered during both surveys (the south section of the wintering bird and hen harrier surveys were completed the following day). While species were recorded, the level of precipitation during the survey may have limited bird activity. However, over the course of the rest of the surveys, the weather was not limiting, and it is unlikely that the weather on 29 January alone would give rise to a significant limitation.

Hen harrier survey

- 2.4.4 Due to the timing of commission for the hen harrier surveys, the month of October was missed and only five months of survey effort were completed (November to March inclusive; two surveys per month). Subsequently, the November surveys were undertaken a week apart as was the first December survey. A non-standard survey methodology was used which on a precautionary basis included more surveys than recommended (Gilbert et. al., 1998) which recommends a single survey per month.
- 2.4.5 Two surveys per month were undertaken at roughly fortnightly intervals and the methodology used for the hen harrier surveys does not state recommended timings between surveys. While the timings differ between the two surveys, it is considered that there is scope for the wintering bird surveys to detect hen harrier in the early part of the survey season. Despite the omission of hen harrier surveys in October it is considered unlikely that this is a significant limitation.

2.4.6 During the hen harrier survey on 21 March 2024 (VP 2) low cloud cover reduced visibility to less than 100m one hour into the survey, potentially limiting the species recorded for the remaining two hours. This happened on only one occasion, affecting a portion of the survey visit at VP 2, and although the visible range was shortened for this time, it was still possible to survey up to 100m. In the context of the surveys as a whole this is unlikely to have given rise to a significant limitation.

3 Results

3.1 Wintering Birds

- 3.1.1 In total 67 species were recorded within and immediately adjacent to the Site during the wintering bird surveys. This includes pheasant which is an introduced species and does not have an assigned BoCC status. Green List species (see Table 3.1) and pheasant are not discussed further within the report as they are species of least conservation concern.
- 3.1.2 Three were Schedule 1 species: fieldfare (*Turdus pilaris*), peregrine and redwing (*Turdus iliacus*).
- 3.1.3 Eleven were Section 41 species: bullfinch (*Pyrrhula pyrrhula*) pileate, dunnock (*Prunella modularis*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lesser redpoll (*Carduelis cabaret*), linnet (*Carduelis cannabina*), lapwing (*Vanellus vanellus*), reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), and starling (*Sturnus vulgaris*).
- 3.1.4 Twelve were BoCC Red List species: fieldfare, greenfinch (*Carduelis chloris*), herring gull, house martin (*Delichon urbicum*), house sparrow, lapwing, linnet, mistle thrush (*Turdus viscivorus*), lesser redpoll, skylark, starling, and woodcock (*Scolopax rusticola*).
- 3.1.5 Twenty-four were Amber List species: bullfinch, black-headed gull (*Chroicocephalus ridibundus*), common gull (*Larus canus*), dunnock, great black-backed gull (*Larus marinus*), grey wagtail (*Motacilla cinerea*), greylag goose, kestrel, lesser black-backed gull (*Larus fuscus*), mallard (*Anas platyrhynchos*), meadow pipit (*Anthus pratensis*), moorhen (*Gallinula chloropus*), redwing, reed bunting, rook (*Corvus frugilegus*), snipe (*Gallinago gallinago*), song thrush, sparrowhawk, stock dove (*Columba oenas*), teal (*Anas crecca*), northern wheatear (*Oenanthe Oenanthe*), wigeon (*Anas Penelope*), woodpigeon (*Columba palumbus*), and wren (*Troglodytes troglodytes*).

Table 3.1: Summary list of species recorded during Wintering Bird Surveys

BTO code	Common name	Scientific name	BoCC status	Protection
B.	Blackbird	<i>Turdus merula</i>		
BC	Blackcap	<i>Sylvia atricapilla</i>		
BH	Black-headed gull	<i>Chroicocephalus ridibundus</i>	Amber	
BZ	Buzzard	<i>Buteo buteo</i>		
BT	Blue tit	<i>Cyanistes caeruleus</i>		
BF	Bullfinch	<i>Pyrrhula pyrrhula</i>	Amber	Section 41
C.	Carrion crow	<i>Corvus corone</i>		
CT	Coal tit	<i>Periparus ater</i>		
CH	Chaffinch	<i>Fringilla coelebs</i>		
CC	Chiffchaff	<i>Phylloscopus collybita</i>		
CD	Collared dove	<i>Streptopelia decaocto</i>		
CM	Common gull	<i>Larus canus</i>	Amber	
D.	Duncock	<i>Prunella modularis</i>	Amber	Section 41
FF	Fieldfare	<i>Turdus pilaris</i>	Red	Schedule 1
GB	Great black-backed gull	<i>Larus marinus</i>	Amber	
GR	Greenfinch	<i>Carduelis chloris</i>	Red	
GL	Grey wagtail	<i>Motacilla cinerea</i>	Amber	
GT	Great tit	<i>Parus major</i>		
GO	Goldfinch	<i>Carduelis carduelis</i>		
GJ	Greylag goose	<i>Anser anser</i>	Amber	
FP	Feral pigeon	<i>Columba livia</i>		
GS	Great spotted woodpecker	<i>Dendrocopos major</i>		
GC	Goldcrest	<i>Regulus regulus</i>		
H.	Grey heron	<i>Ardea cinerea</i>		
HG	Herring gull	<i>Larus argentatus</i>	Red	Section 41
HM	House martin	<i>Delichon urbicum</i>	Red	
HS	House sparrow	<i>Passer domesticus</i>	Red	Section 41
J.	Jay	<i>Garrulus glandarius</i>		
JD	Jackdaw	<i>Corvus monedula</i>		

BTO code	Common name	Scientific name	BoCC status	Protection
K.	Kestrel	<i>Falco tinnunculus</i>	Amber	
L.	Lapwing	<i>Vanellus vanellus</i>	Red	Section 41
LB	Lesser black-backed gull	<i>Larus fuscus</i>	Amber	
LR	Lesser redpoll	<i>Carduelis cabaret</i>	Red	Section 41
LI	Linnet	<i>Carduelis cannabina</i>	Red	Section 41
LG	Little grebe	<i>Tachybaptus ruficollis</i>		
LT	Long-tailed tit	<i>Aegithalos caudatus</i>		
MA	Mallard	<i>Anas platyrhynchos</i>	Amber	
MG	Magpie	<i>Pica pica</i>		
MP	Meadow pipit	<i>Anthus pratensis</i>	Amber	
M.	Mistle thrush	<i>Turdus viscivorus</i>	Red	
MH	Moorhen	<i>Gallinula chloropus</i>	Amber	
MS	Mute swan	<i>Cygnus olor</i>		
PE	Peregrine	<i>Falco peregrinus</i>		Schedule 1
PH	Pheasant	<i>Phasianus colchicus</i>		
PW	Pied wagtail	<i>Motacilla alba</i>		
RN	Raven	<i>Corvus corax</i>		
RL	Red-legged partridge	<i>Alectoris rufa</i>		
RE	Redwing	<i>Turdus iliacus</i>	Amber	Schedule 1
RB	Reed bunting	<i>Emberiza schoeniclus</i>	Amber	Section 41
R.	Robin	<i>Erithacus rubecula</i>		
RO	Rook	<i>Corvus frugilegus</i>	Amber	
SK	Siskin	<i>Carduelis spinus</i>		
S.	Skylark	<i>Alauda arvensis</i>	Red	Section 41
SN	Snipe	<i>Gallinago gallinago</i>	Amber	
ST	Song thrush	<i>Turdus philomelos</i>	Amber	Section 41
SH	Sparrowhawk	<i>Accipiter nisus</i>	Amber	
SG	Starling	<i>Sturnus vulgaris</i>	Red	Section 41
SD	Stock dove	<i>Columba oenas</i>	Amber	
SC	Stonechat	<i>Saxicola torquatus</i>		

BTO code	Common name	Scientific name	BoCC status	Protection
SL	Barn Swallow	<i>Hirundo rustica</i>		
T.	Teal	<i>Anas crecca</i>	Amber	
WA	Water rail	<i>Rallus aquaticus</i>		
W.	Northern wheatear	<i>Oenanthe oenanthe</i>	Amber	
WN	Wigeon	<i>Anas penelope</i>	Amber	
WK	Woodcock	<i>Scolopax rusticola</i>	Red	
WP	Woodpigeon	<i>Columba palumbus</i>	Amber	
WR	Wren	<i>Troglodytes troglodytes</i>	Amber	

- 3.1.6 Below is a brief account of notable species / flocks recorded during the wintering bird surveys at Dean Moor (which includes Section 41, Red List, and Amber List species). In the accounts below, the north section of the Site relates to Areas A and B, and the southern section of the Site to Area C. Where birds have been recorded off Site during the surveys but close enough that they may utilise habitats within it, they have been attributed to the 'survey buffer' as opposed to Areas A, B or C.
- 3.1.7 Schedule 1 species are not considered as the protection afforded to them and their inclusion within Schedule 1 of Wildlife and Countryside Act 1981 (as amended) relates to their breeding or nesting status, which is less relevant to a wintering bird survey for most species.
- 3.1.8 Black-headed gull – a flock of 15 were recorded on a single occasion in December (Survey No. 6 Figure 1L) in Area C of the Site within open grassland habitat. Black-headed gull is a qualifying species of the Solway Firth SPA.
- 3.1.9 Bullfinch – recorded on two occasions: once in September (Survey No. 2, Figure 1C) and again in March (Survey No. 9, Figure 1Q). The species was recorded in broadleaved woodland with a peak count of two birds on both occasions.
- 3.1.10 Common gull – recorded on seven occasions in November (Survey No. 5, Figure 1J) and December (Survey No. 6, Figure 1L) 2023 as well as January (Survey No. 7, Figure 1N) and March (Survey No. 9, Figure 1R)

2024. The species was recorded in grassland in Area C of the Site with a peak count of 40 in December and January. Common gull is a qualifying species of the Solway Firth SPA.

- 3.1.11 Dunnock – recorded throughout the survey season during every survey except Survey No. 8 in February. The species was recorded in both the north and south sections of the Site (Figures 1A-1N, 1Q and 1R) in hedgerows and grassland habitat with a peak count of one on each occasion.
- 3.1.12 Fieldfare – frequently recorded during five months of the survey season: October (Survey No. 3, Figure 1E), November (Survey No. 5, Figures 1I and 1J), December (Survey No. 6, Figures 1K and 1L) 2023, as well as January (Survey No. 7, Figure 1N), and February (Survey No. 8, Figures 1O and 1P) 2024. The species was recorded in grassland habitat throughout the Site with a peak count of 200 on both Survey No. 5 (north section, Figure 1I) and Survey No. 8 (south section, Figure 1P). Recorded on two occasions foraging during October (Survey No. 3, Figure 1E) in the north section of the Site.
- 3.1.13 Great black-backed gull – recorded during every survey month except February (Survey No. 8). The species was recorded in grassland habitat throughout the Site with a peak count of three in November (Survey No. 4, Figure 1H). Occasionally recorded flying over the Site.
- 3.1.14 Greenfinch – an individual was recorded on one occasion in September (Survey No. 2, Figure 1D) flying over grassland habitat in the south section of the Site.
- 3.1.15 Grey wagtail – recorded on three occasions during two survey months: September (Survey No. 2, Figure 1D) and October (Survey No. 3, Figures 1E and 1F) 2023. In September the species was recorded within woodland habitat in the south section of the Site. In October the species was recorded foraging offsite in the north section of the survey buffer immediately adjacent to the survey boundary within woodland habitat (Figure 1E). Also, in October the species was observed foraging in the south section of the Site within grassland habitat adjacent to woodland habitat (Figure 1F). A peak count of one was recorded on every occasion.

- 3.1.16 Greylag goose – an individual recorded on one occasion in March (Survey No. 9 Figure 1R) flying over the Site in the north-west corner of the south section of the Site.
- 3.1.17 Herring gull – Herring gull was frequently recorded within the survey area throughout the survey season, the species was recorded during every survey of the Site. Registrations included individuals and flocks over flying the site and foraging / roosting within the survey area (see figures 1A – 1R).
- 3.1.18 The majority observations within the northern half of the Site were over flights, and few herring gull were recorded foraging or roosting.
- 3.1.19 The largest concentration of herring gull throughout the survey period was a peak count of 200 during the January survey (Survey No. 7, Figure 1N) in Area C. Other notable flocks, include a flock of 63 (Survey No. 5, November, Figure 1J) and 50 (Survey No. 7, January, Figure 1N) both roosting in the southern part of the Site within improved grassland habitat. A flock of 60 individuals was recorded roosting during the December survey (Survey No. 6, Figure 1L). 38 individuals were recorded roosting during the January survey (Survey No. 7, Figure 1N). 40 individuals were recorded foraging during the March survey (Survey No. 9, Figure 1R). All of these notable flocks were recorded in the southern section of the Site. Herring gull is a qualifying species of the Solway Firth SPA.
- 3.1.20 House martin – two individuals recorded on a single occasion in September (Survey No. 1, Figure 1B). Recorded flying over grassland habitat along the western border of the south section of the Site.
- 3.1.21 House sparrow – four individuals recorded on a single occasion in October (Survey No. 3, Figure 1F) within grassland habitat near buildings on the eastern boarder of the south section of the Site.
- 3.1.22 Kestrel – recorded on five occasions throughout two survey months September (Survey No. 1, Figure 1B) and November (Survey Nos. 4 and 5, Figures 1H and 1J) 2023. Recorded within grassland habitat in the south section of the Site primarily in the south-west corner. A peak count of one on every occasion.

- 3.1.23 Lapwing – a large flock was recorded on a single occasion during January (Survey No. 7, Figure 1N) with a peak count of 26 individuals within grassland habitat in Area C. Lapwing is a qualifying species of the Solway Firth SPA.
- 3.1.24 Lesser black-backed gull – recorded on five occasions across two survey months: December 2023 (Survey No. 6, Figure 1K) and March 2024 (Survey No. 9, Figures 1Q and 1R). Recorded within grassland habitat primarily within the south section of the Site with a peak count of 10 individuals.
- 3.1.25 Lesser redpoll – recorded on eight occasions across five survey months: September (Survey No. 2, Figure 1D), October (Survey No. 3, Figure 1E), November (Survey No. 5, Survey 1J), December (Survey No. 6, Figure 1K) 2023, and January 2024 (Survey No. 7, Figure 1N). Recorded within coniferous and mixed woodland throughout the Site with a peak count of 12 during Survey No. 3 in October (Figure 1E). Occasionally recorded flying over the Site.
- 3.1.26 Linnet – species recorded on nine occasions during both September (Survey No's 1 and 2, Figures 1A-1D) as well as October (Survey No. 4, Figures 1E and 1F). Recorded within hedges, grassland, and woodland habitats and occasionally near watercourses. Peak count of seven during Survey No. 2 in September (Figure 1D).
- 3.1.27 Mallard – recorded on 13 occasions over six survey months: September (Survey No. 1, Figure 1A), October (Survey No. 3, Figure 1E), December (Survey No. 6, Figure 1K) 2023, as well as January (Survey No. 7, Figure 1M), February (Survey No. 8, Figure 1O) and March 2024 (Survey No. 9, Figure 1Q). Species recorded on and directly adjacent to ponds in the north section of the Site. A peak count of 11 was recorded in December; occasionally pairs recorded throughout the survey season.
- 3.1.28 Meadow pipit – abundantly recorded throughout all months of the survey season. Primarily found within grassland habitat throughout the Site with a peak count 14 during September (Survey No. 1, Figure 1B).

- 3.1.29 Mistle thrush – recorded on four occasions, all during September (Survey No. 2, Figure 1C) within broadleaved woodland habitat in the north section of the Site. Peak count of eight individuals.
- 3.1.30 Moorhen – recorded on seven occasions across six survey months: September (Survey No. 1, Figure 1A), October (Survey No. 3, Figure 1E), November (Survey No. 4, Figure 1G), December (Survey No. 6, Figure 1K) 2023, and February (Survey No. 8, Figure 1O) and March (Survey No. 9, Figure 1Q) 2024. Species recorded on ponds in the north section of the Site with a peak count of one individual each time.
- 3.1.31 Peregrine – a single male recorded on one occasion carrying prey flying over the north section of the Site heading south during the October (Survey No. 3) survey.
- 3.1.32 Redwing – frequently recorded throughout the Site across five months of the survey season: October (Survey No. 3, Figure 1E and 1F), November (Survey Nos. 4 and 5, Figures 1G, 1H, and 1J), December (Survey No. 6, Figures 1K and 1L) 2023, January (Survey No. 7, Figures 1M and 1N) and February (Survey No. 8, Figure 1P) 2024. Found within scrub, woodland, and hedgerows. Peak count of 200 individuals within broadleaved woodland offsite in the north section within the survey buffer during Survey No. 3 in October.
- 3.1.33 Reed bunting – the species was recorded on three occasions during November 2023 (Survey No. 4, Figure 1G) and March 2024 (Survey No. 9, Figure 1Q) with a peak count of one. Found within scrub and on the edge of broadleaved woodland near ponds in the north section of the Site.
- 3.1.34 Rook – frequently recorded during all survey months within open grassland habitat across Site. A peak count of 40 individuals was recorded on both November (Survey Nos. 4 and 5, Figures 1G, 1H, and 1J) surveys.
- 3.1.35 Skylark – frequently recorded during five survey months: September (Survey No. 2, Figures 1C and 1D), October (Survey No. 3, Figures 1E and 1F), November (Survey Nos. 4 and 5, Figures 1H and 1I) 2023, February (Survey No. 8, Figures 1O and 1P) and March (Survey No. 9,

Figures 1Q and 1R) 2024. Found throughout the Site within open grassland habitat with a peak count of 12 individuals flying over the Site during September.

- 3.1.36 Snipe – recorded during five of the survey months: September (Survey No. 2, Figure 1D), October (Survey No. 3, Figures 1E and 1F), November (Survey Nos. 4 and 5, Figures 1G-1J), December (Survey No. 6, Figures 1K and 1L) 2023 and January (Survey No. 7, 1M and 1N) 2024. Found within grassland habitats throughout the Site with a peak count of 22 individuals flying over the Site during October survey.
- 3.1.37 Song thrush – frequently recorded during all survey months. Found in woodland habitat within and immediately adjacent to the Site as well as hedgerows and open grassland within the Site with a peak count of one.
- 3.1.38 Sparrowhawk – an individual recorded on two occasions flying over open grassland habitat in the north section of the Site during January (Survey No. 7, Figure 1M) and February (Survey No. 8, Figure 1O).
- 3.1.39 Starling – frequently recorded during all survey months except March (Survey No. 9). Found throughout the Site in grassland habitat and occasionally recorded flying over and feeding on the Site. Peak count of 400 individuals observed during the December survey in the south section of the Site (Figure 1L).
- 3.1.40 Stock dove – recorded during five survey months: September (Survey No. 2, Figure 1C), November (Survey No. 5, Figure 1J), December (Survey No. 6, Figure 1L) 2023, February (Survey No. 8, Figure 1P) and March (Survey No. 9, Figure 1Q) 2024. Primarily observed within grassland habitat throughout the Site. Peak count of four individuals observed during both the November and March.
- 3.1.41 Teal – recorded on three occasions across three survey months: December (Survey No. 6, Figure 1K), January (Survey No. 7, Figure 1M) and February (Survey No. 8, Figure 1O). All observations are from one pond in the north section (offsite within the survey buffer) adjacent to the Site boundary. Peak count of seven individuals observed during the

December survey (Figure 1K). Teal is a qualifying species of the Solway Firth SPA.

- 3.1.42 Northern wheatear – recorded during both September surveys (Survey Nos. 1 and 2, Figures 1B and 1D) as well as October (Survey No. 3, Figures 1E and 1F). Primarily found in open grassland habitat in the south section of the Site. Peak count of two individuals recorded during both September surveys.
- 3.1.43 Wigeon – a flock of 19 individuals recorded during the March survey (Survey No. 9, Figure 1Q) from a single pond in the north section (offsite within the survey buffer) adjacent to the Site boundary.
- 3.1.44 Woodcock – an individual recorded on one occasion during the January survey (Survey No. 7, Figure 1N). Observed offsite along the north west boarder near woodland habitat immediately adjacent to the south section of the Site.
- 3.1.45 Woodpigeon – abundantly recorded throughout the Site and immediately adjacent to it during all survey months. Primarily found within woodland habitats or adjacent to them within the Site and offsite within the survey buffer. Occasionally observed flying over or foraging. A peak count of 30 individuals was recorded in December (Survey No. 6, Figure 1L).
- 3.1.46 Wren – abundantly recorded during all survey months. Observed in woodland habitat within the Site or immediately adjacent to it. Peak count of two individuals observed during November (Survey No. 4, Figure 1G).

3.2 Hen Harrier Survey

- 3.2.1 The surveys recorded no hen harrier.
- 3.2.2 Five species of raptors were recorded, these are: barn owl *Tyto alba*, buzzard, kestrel, merlin (*Falco columbarius*) and sparrowhawk.
- 3.2.3 Barn owl – recorded on four occasions during the following months: December, January, and February. Hunting observed on every occasion (three times at VP 1 and once at VP 2), onsite at VP 1 on one occasion and immediately adjacent to the Site boundary on all other occasions.

- 3.2.4 Buzzard – recorded on 37 occasions during all survey months. Often observed taking short flights, flying low, or perching on-Site and off-Site. Two possible pre-roost flights offsite were also recorded (one at each VP location). On one occasion foraging was observed off-Site (VP 1).
- 3.2.5 Kestrel – recorded on four occasions during every survey month except January during dawn surveys. Hunting observed on the Site on two occasions (both at VP 1).
- 3.2.6 Merlin – a single adult male was recorded flying north along the western boundary during the first November dusk survey at VP 2.
- 3.2.7 Sparrowhawk – recorded on three occasions during the following survey months: November, December, and February. On two occasions the species was observed flying, one of which was a low flight across the Site.
- 3.2.8 In total, 20 species (including the five raptor species) were recorded on-Site or off-Site within the land visible from both VP’s during the hen harrier surveys between November and March (Table 4).
- 3.2.9 Three were Schedule 1 species: barn owl, merlin, and whooper swan (*Cygnus cygnus*). Merlin and whooper swans were recorded in flight.
- 3.2.10 Three were Section 41 species: herring gull, lapwing and starling.
- 3.2.11 Four were BoCC Red List species: herring gull, lapwing, merlin, and starling.
- 3.2.12 Nine were Amber List species: common gull, greylag goose, kestrel, mallard, pink-footed goose (*Anser brachyrynchus*), snipe, sparrowhawk, whooper swan, and wigeon.

Table 3.2: Summary list of species recorded during Raptor Surveys

BTO code	Common name	Scientific name	BoCC status	Protection
BO	Barn Owl	<i>Tyto alba</i>		Schedule 1
BZ	Buzzard	<i>Buteo buteo</i>		
CG	Canada geese	<i>Branta canadensis</i>		
CM	Common gull	<i>Larus canus</i>	Amber	
CA	Cormorant	<i>Phalacrocorax carbo</i>		

BTO code	Common name	Scientific name	BoCC status	Protection
GP	Golden plover	<i>Pluvialis apricaria</i>		
H.	Grey heron	<i>Ardea cinerea</i>		
GJ	Greylag goose	<i>Anser anser</i>	Amber	
HG	Herring gull	<i>Larus argentatus</i>	Red	Section 41
K.	Kestrel	<i>Falco tinnunculus</i>	Amber	
L.	Lapwing	<i>Vanellus vanellus</i>	Red	Section 41
MA	Mallard	<i>Anas platyrhynchos</i>	Amber	
ML	Merlin	<i>Falco columbarius</i>	Red	Schedule 1
PG	Pink-footed goose	<i>Anser brachyrhynchus</i>	Amber	
RN	Raven	<i>Corvus corax</i>		
SN	Snipe	<i>Gallinago gallinago</i>	Amber	
SH	Sparrowhawk	<i>Accipiter nisus</i>	Amber	
SG	Starling	<i>Sturnus vulgaris</i>	Red	Section 41
WS	Whooper swan	<i>Cygnus cygnus</i>	Amber	Schedule 1
WN	Wigeon	<i>Anas penelope</i>	Amber	

Figures

Figure 1A – Wintering Bird Survey Visit 1 North Section

Figure1B – Wintering Bird Survey Visit 1 South Section

Figure1C – Wintering Bird Survey Visit 2 North Section

Figure1D – Wintering Bird Survey Visit 2 South Section

Figure1E – Wintering Bird Survey Visit 3 North Section

Figure1F – Wintering Bird Survey Visit 3 South Section

Figure1G – Wintering Bird Survey Visit 4 North Section

Figure1H – Wintering Bird Survey Visit 4 South Section

Figure1I – Wintering Bird Survey Visit 5 North Section

Figure1J – Wintering Bird Survey Visit 5 South Section

Figure1K – Wintering Bird Survey Visit 6 North Section

Figure1L – Wintering Bird Survey Visit 6 South Section

Figure1M – Wintering Bird Survey Visit 7 North Section

Figure1N – Wintering Bird Survey Visit 7 South Section

Figure1O – Wintering Bird Survey Visit 8 North Section

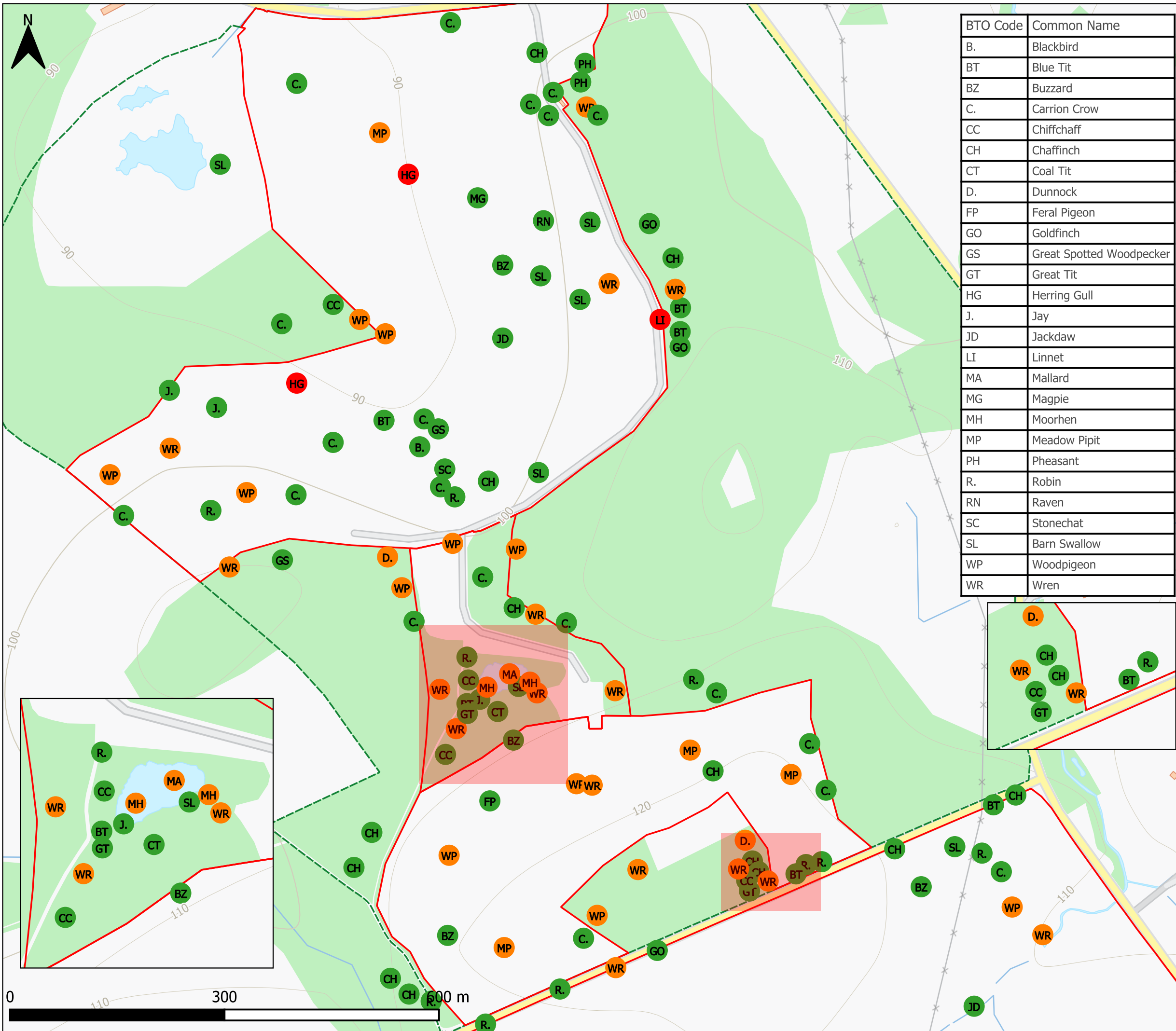
Figure1P – Wintering Bird Survey Visit 8 South Section

Figure1Q – Wintering Bird Survey Visit 9 North Section

Figure1R – Wintering Bird Survey Visit 9 South Section

Figure2a – Hen Harrier Survey Vantage Point 1 South Section

Figure2b – Hen Harrier Survey Vantage Point 2 North Section



BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CC	Chiffchaff
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FP	Feral Pigeon
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
J.	Jay
JD	Jackdaw
LI	Linnet
MA	Mallard
MG	Magpie
MH	Moorhen
MP	Meadow Pipit
PH	Pheasant
R.	Robin
RN	Raven
SC	Stonechat
SL	Barn Swallow
WP	Woodpigeon
WR	Wren

- Legend
- CH Red
 - CH Amber
 - CH Green
 - Land ownership
 - Site boundary

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Project Title



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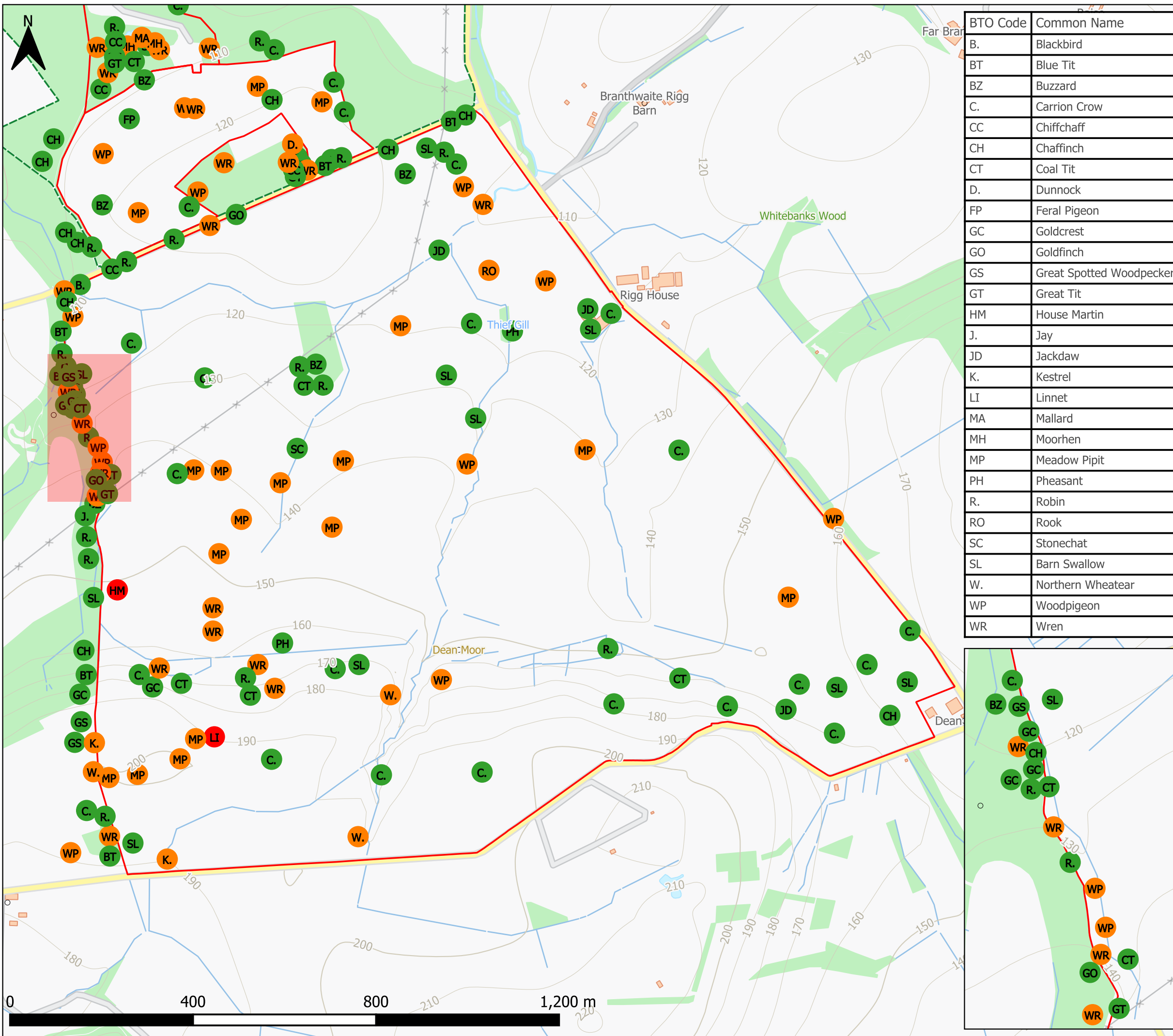
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1A: Wintering Bird Survey Visit 1 North Section (14/09/2023)

Scale: 1:5,100 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1A Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CC	Chiffchaff
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FP	Feral Pigeon
GC	Goldcrest
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HM	House Martin
J.	Jay
JD	Jackdaw
K.	Kestrel
LI	Linnet
MA	Mallard
MH	Moorhen
MP	Meadow Pipit
PH	Pheasant
R.	Robin
RO	Rook
SC	Stonechat
SL	Barn Swallow
W.	Northern Wheatear
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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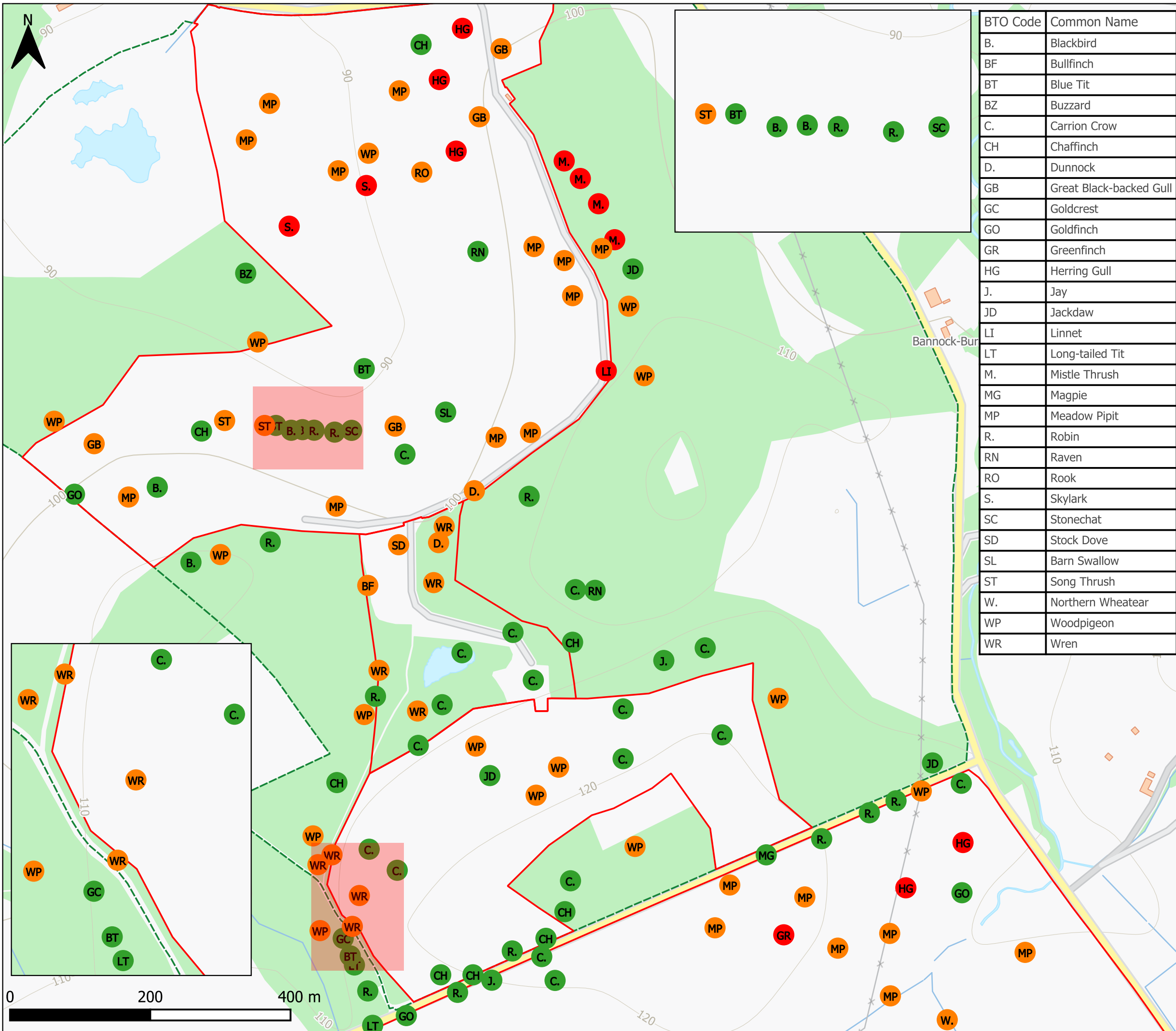
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DEVELOPMENT CONSENT ORDER
Figure 1B: Wintering Bird Survey Visit 1 South
Section (14/09/2023)

Scale: 1:8,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1B Rev:1.0





BTO Code	Common Name
B.	Blackbird
BF	Bullfinch
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
D.	Dunnock
GB	Great Black-backed Gull
GC	Goldcrest
GO	Goldfinch
GR	Greenfinch
HG	Herring Gull
J.	Jay
JD	Jackdaw
LI	Linnet
LT	Long-tailed Tit
M.	Mistle Thrush
MG	Magpie
MP	Meadow Pipit
R.	Robin
RN	Raven
RO	Rook
S.	Skylark
SC	Stonechat
SD	Stock Dove
SL	Barn Swallow
ST	Song Thrush
W.	Northern Wheatear
WP	Woodpigeon
WR	Wren

Legend

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- Site boundary

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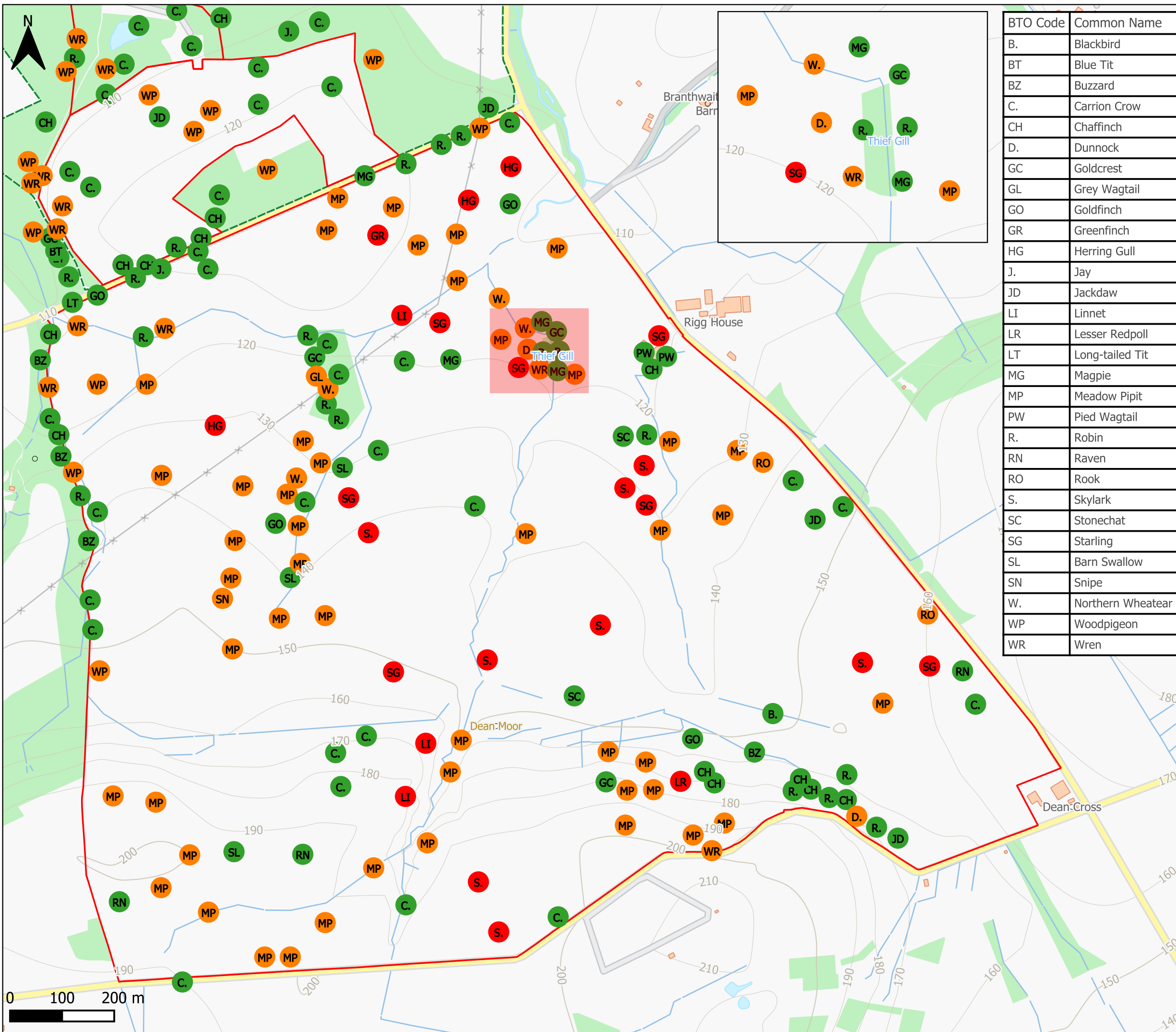
Figure 1C: Wintering Bird Survey Visit 2 North Section (29/09/2023)

Scale: 1:5,200 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1C Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
D.	Dunnock
GC	Goldcrest
GL	Grey Wagtail
GO	Goldfinch
GR	Greenfinch
HG	Herring Gull
J.	Jay
JD	Jackdaw
LI	Linnet
LR	Lesser Redpoll
LT	Long-tailed Tit
MG	Magpie
MP	Meadow Pipit
PW	Pied Wagtail
R.	Robin
RN	Raven
RO	Rook
S.	Skylark
SC	Stonechat
SG	Starling
SL	Barn Swallow
SN	Snipe
W.	Northern Wheatear
WP	Woodpigeon
WR	Wren

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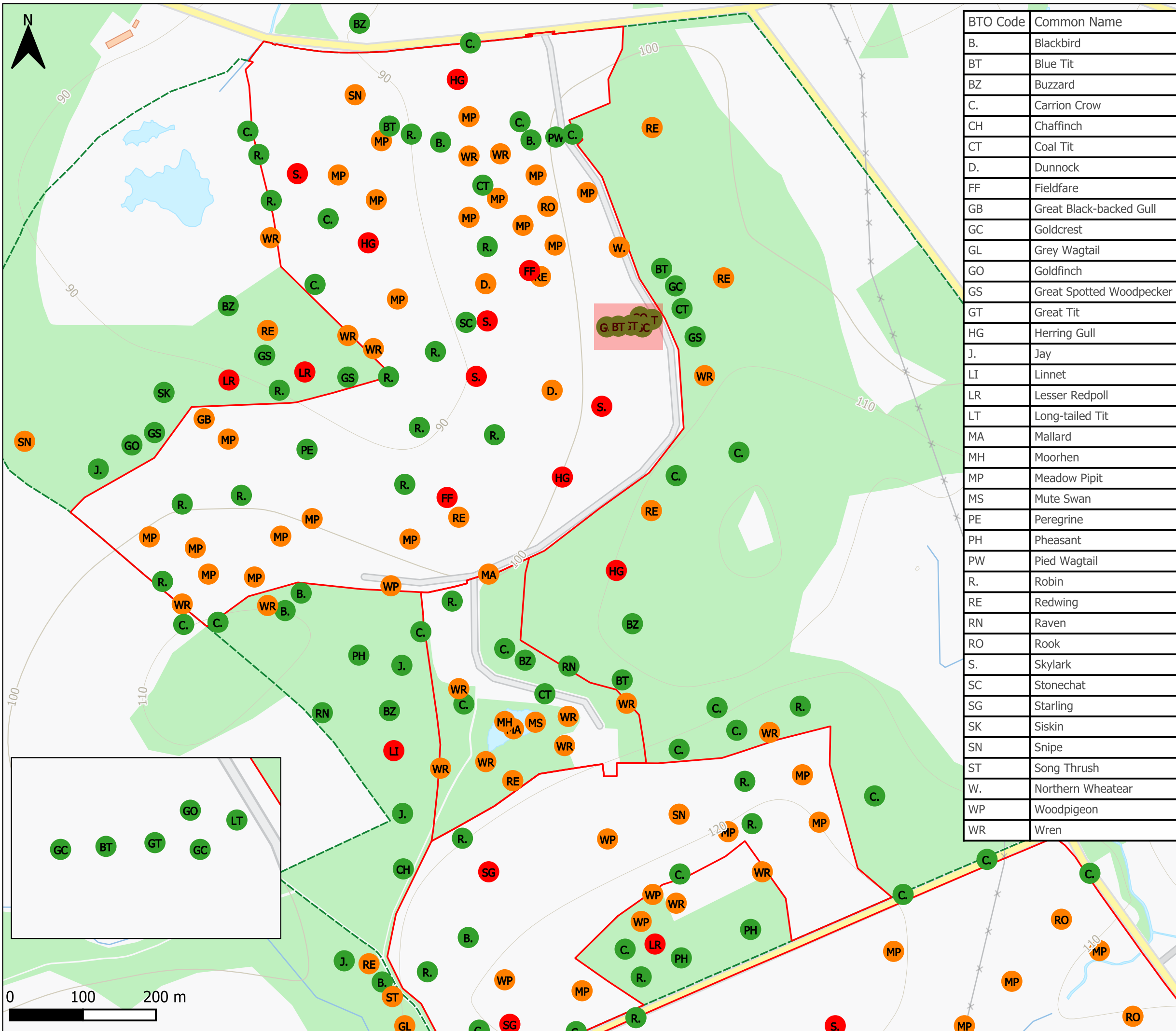
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Figure 1D: Wintering Bird Survey Visit 2 South Section (29/09/2023)

Scale: 1:7,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1D Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
GL	Grey Wagtail
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
J.	Jay
LI	Linnet
LR	Lesser Redpoll
LT	Long-tailed Tit
MA	Mallard
MH	Moorhen
MP	Meadow Pipit
MS	Mute Swan
PE	Peregrine
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RE	Redwing
RN	Raven
RO	Rook
S.	Skylark
SC	Stonechat
SG	Starling
SK	Siskin
SN	Snipe
ST	Song Thrush
W.	Northern Wheatear
WP	Woodpigeon
WR	Wren

- Legend
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 - CH Green
 - Land ownership
 - Site boundary

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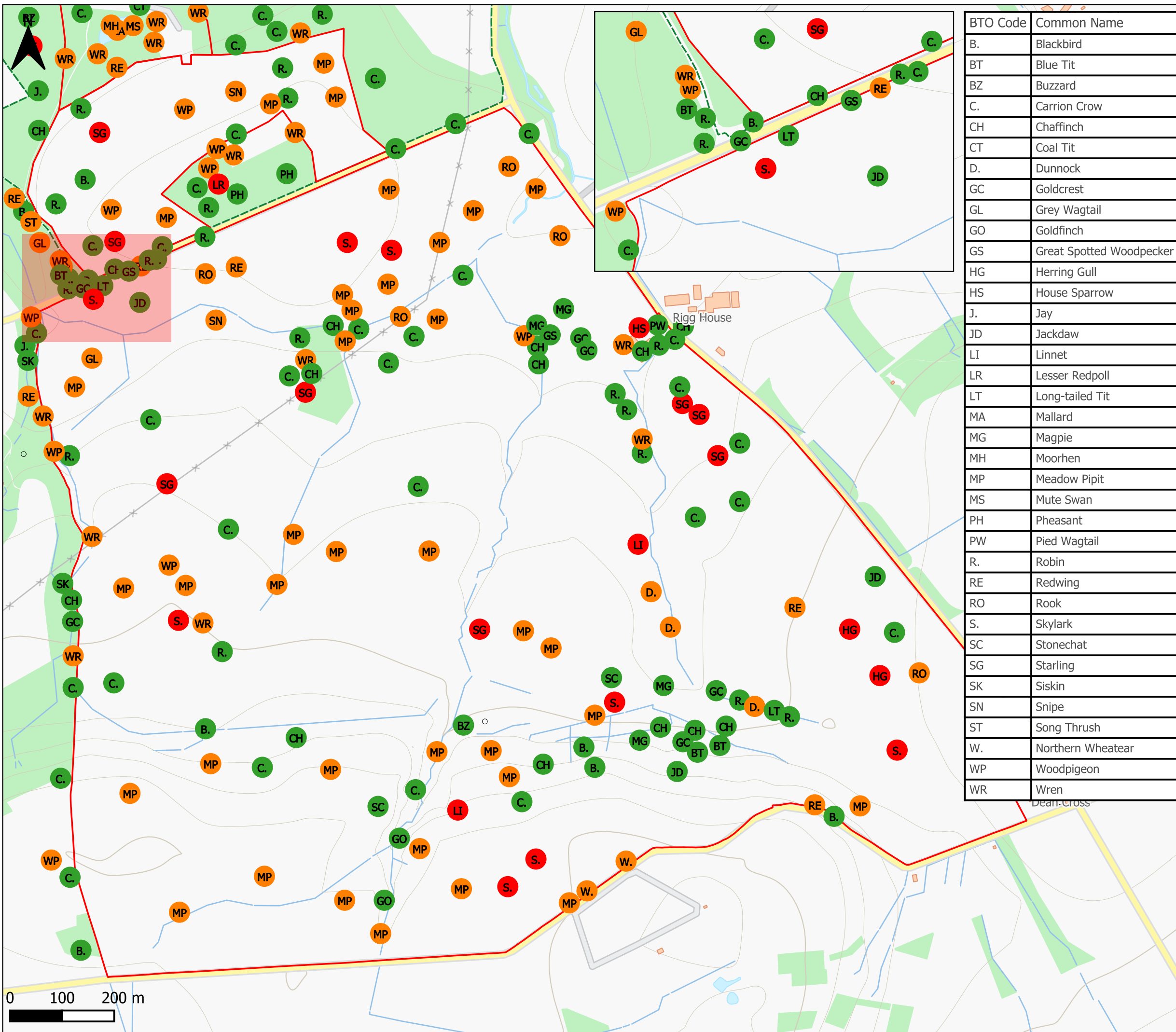
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DEVELOPMENT CONSENT ORDER
Figure 1E: Wintering Bird Survey Visit 3 North
Section (09/10/2023)

Scale: 1:5,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1E Rev:1.0






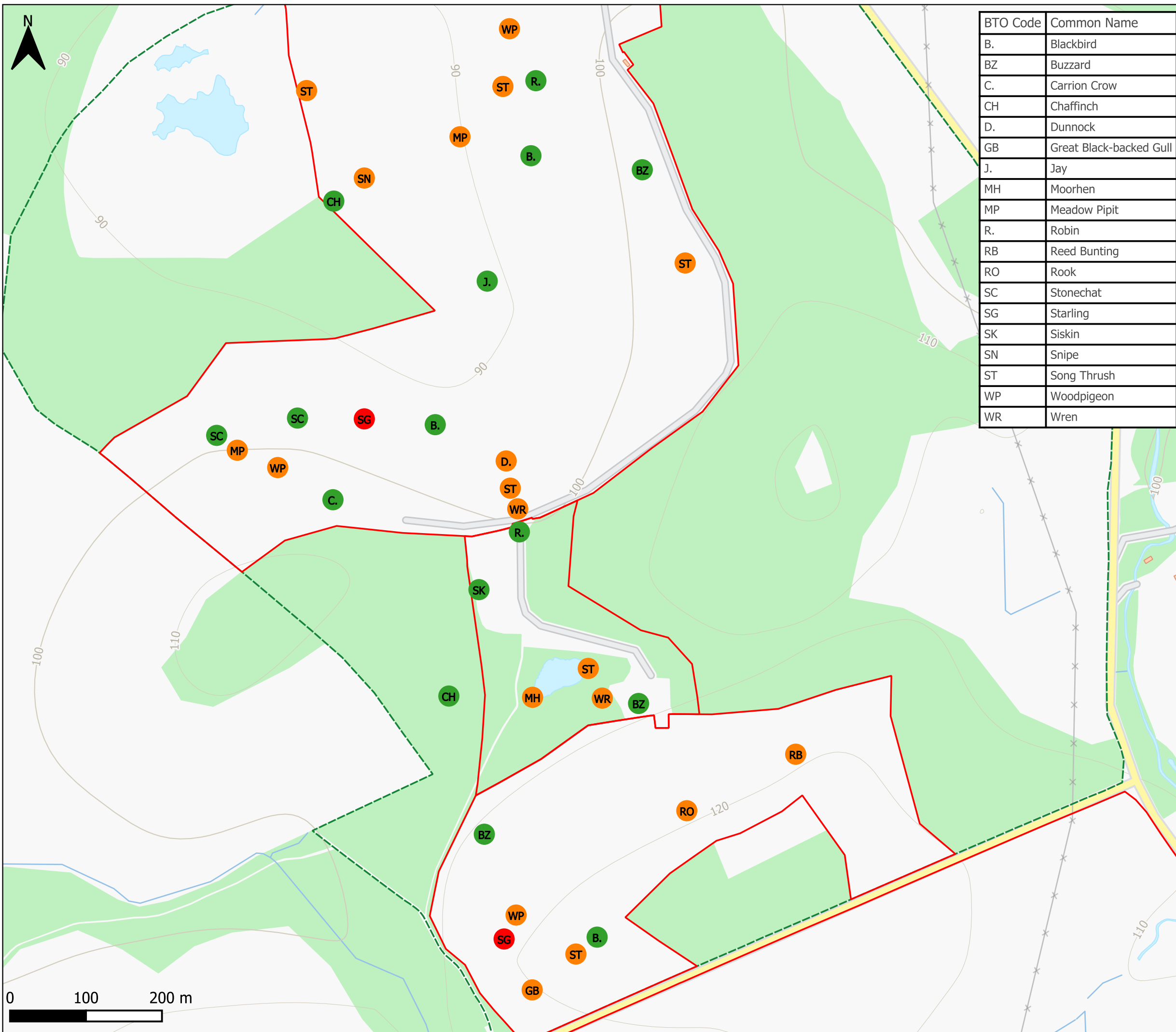
BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
GC	Goldcrest
GL	Grey Wagtail
GO	Goldfinch
GS	Great Spotted Woodpecker
HG	Herring Gull
HS	House Sparrow
J.	Jay
JD	Jackdaw
LI	Linnet
LR	Lesser Redpoll
LT	Long-tailed Tit
MA	Mallard
MG	Magpie
MH	Moorhen
MP	Meadow Pipit
MS	Mute Swan
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RE	Redwing
RO	Rook
S.	Skylark
SC	Stonechat
SG	Starling
SK	Siskin
SN	Snipe
ST	Song Thrush
W.	Northern Wheatear
WP	Woodpigeon
WR	Wren

- Legend
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 - Green
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 - Site boundary

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Title	DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER Figure 1F: Wintering Bird Survey Visit 3 South Section (09/10/2023)	
Scale: 1:7,000	Date: 18/04/2024	
Drawn: SL	Checked: JMG	
Figure: 1F	Rev:1.0	






BTO Code	Common Name
B.	Blackbird
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
D.	Dunnock
GB	Great Black-backed Gull
J.	Jay
MH	Moorhen
MP	Meadow Pipit
R.	Robin
RB	Reed Bunting
RO	Rook
SC	Stonechat
SG	Starling
SK	Siskin
SN	Snipe
ST	Song Thrush
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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Sources: BSG Ecology survey data

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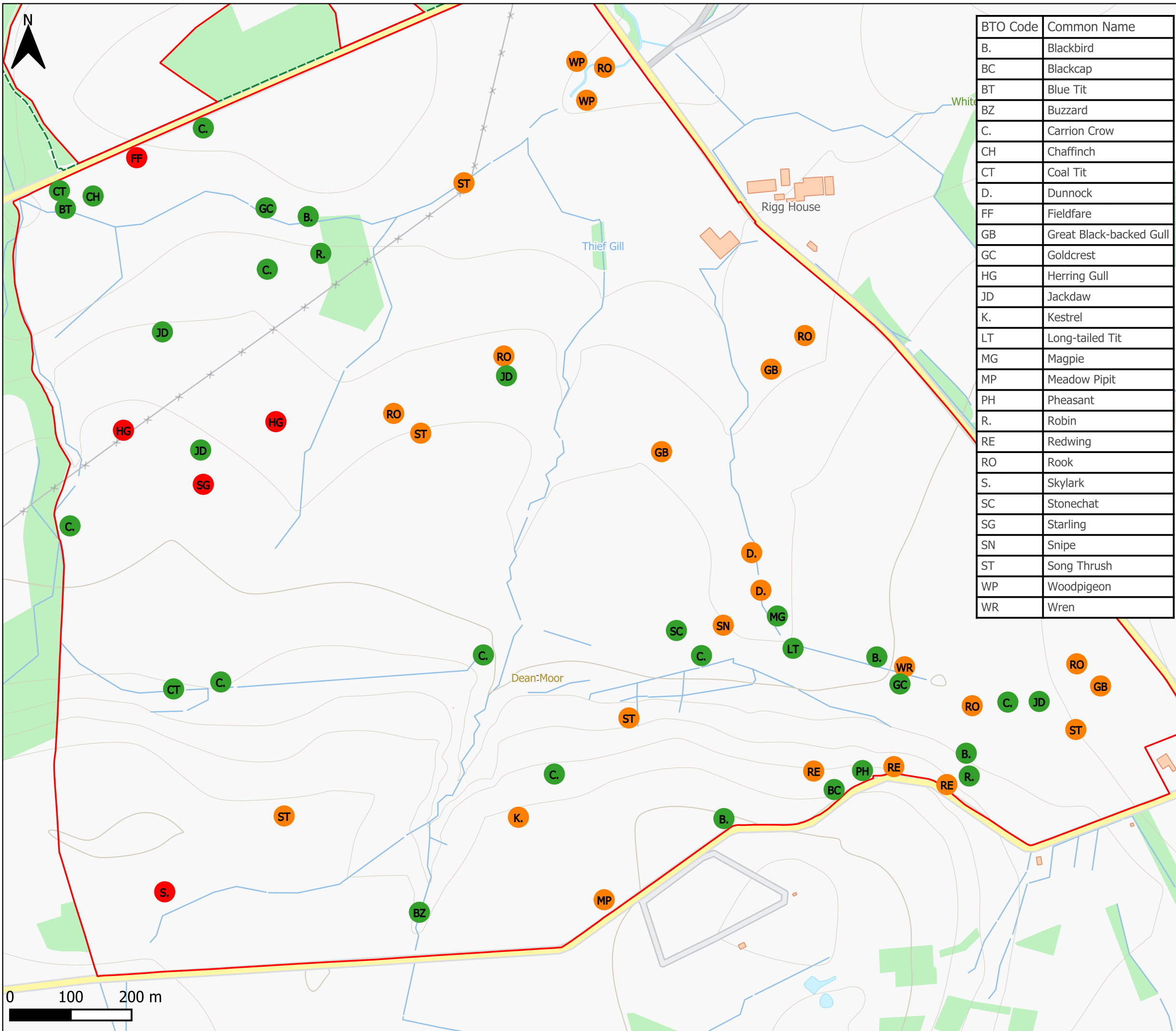
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Figure 1G: Wintering Bird Survey Visit 4 North
Section (10/11/2023)

Scale: 1:4,800 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1G Rev:1.0





BTO Code	Common Name
B.	Blackbird
BC	Blackcap
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
HG	Herring Gull
JD	Jackdaw
K.	Kestrel
LT	Long-tailed Tit
MG	Magpie
MP	Meadow Pipit
PH	Pheasant
R.	Robin
RE	Redwing
RO	Rook
S.	Skylark
SC	Stonechat
SG	Starling
SN	Snipe
ST	Song Thrush
WP	Woodpigeon
WR	Wren

Legend

- CH Red
- CH Amber
- CH Green
- Land ownership
- Site boundary

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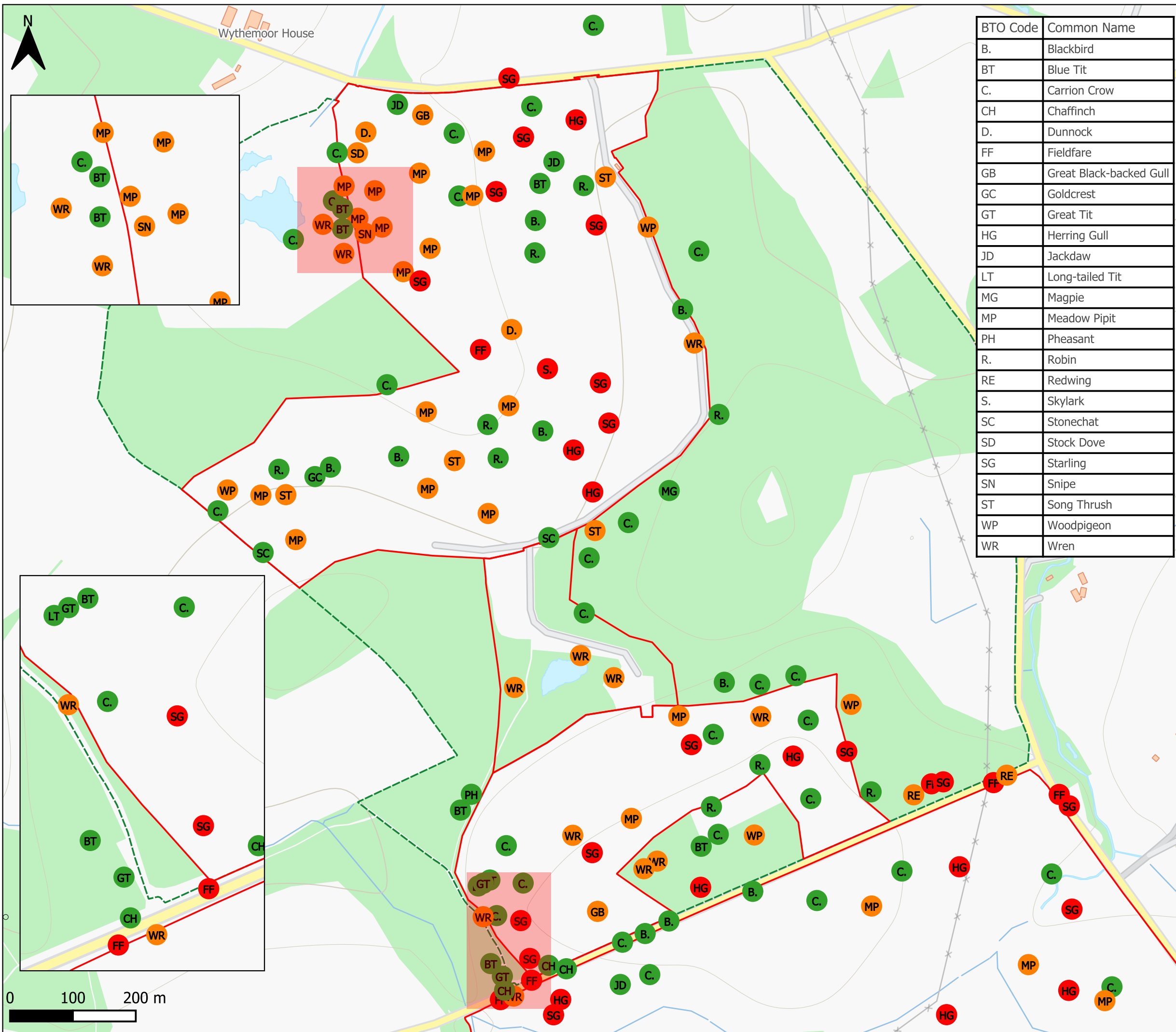
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Figure 1H: Wintering Bird Survey Visit 4 South
Section (10/11/2023)

Scale: 1:6,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1H Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
C.	Carrion Crow
CH	Chaffinch
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
GT	Great Tit
HG	Herring Gull
JD	Jackdaw
LT	Long-tailed Tit
MG	Magpie
MP	Meadow Pipit
PH	Pheasant
R.	Robin
RE	Redwing
S.	Skylark
SC	Stonechat
SD	Stock Dove
SG	Starling
SN	Snipe
ST	Song Thrush
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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Sources: BSG Ecology survey data

Project Title



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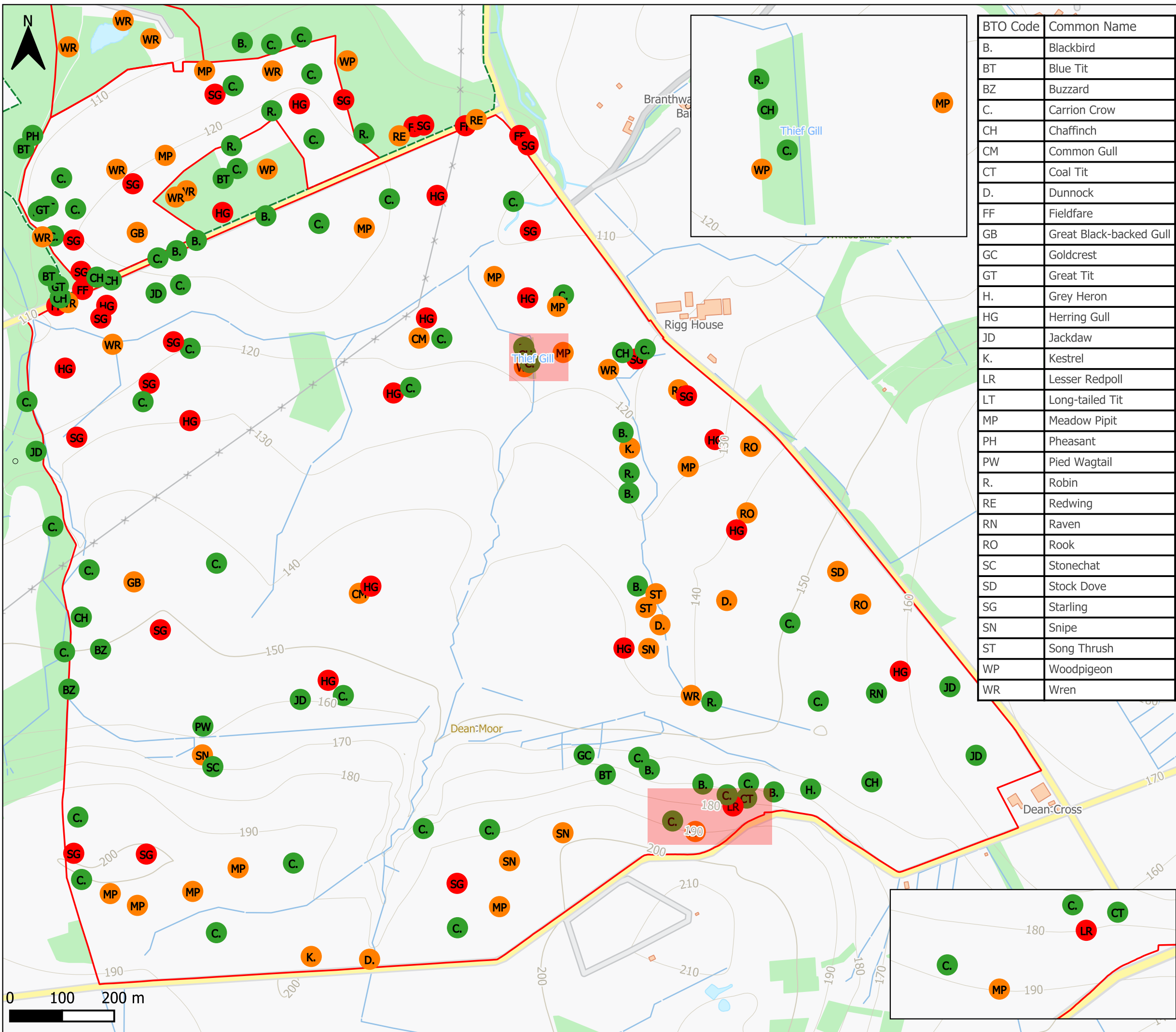
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 1I: Wintering Bird Survey Visit 5 North
Section (23/11/2023)

Scale: 1:5,800 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1I Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CM	Common Gull
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
GT	Great Tit
H.	Grey Heron
HG	Herring Gull
JD	Jackdaw
K.	Kestrel
LR	Lesser Redpoll
LT	Long-tailed Tit
MP	Meadow Pipit
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RE	Redwing
RN	Raven
RO	Rook
SC	Stonechat
SD	Stock Dove
SG	Starling
SN	Snipe
ST	Song Thrush
WP	Woodpigeon
WR	Wren

Legend

- CH Red
- CH Amber
- CH Green
- Land ownership
- Site boundary

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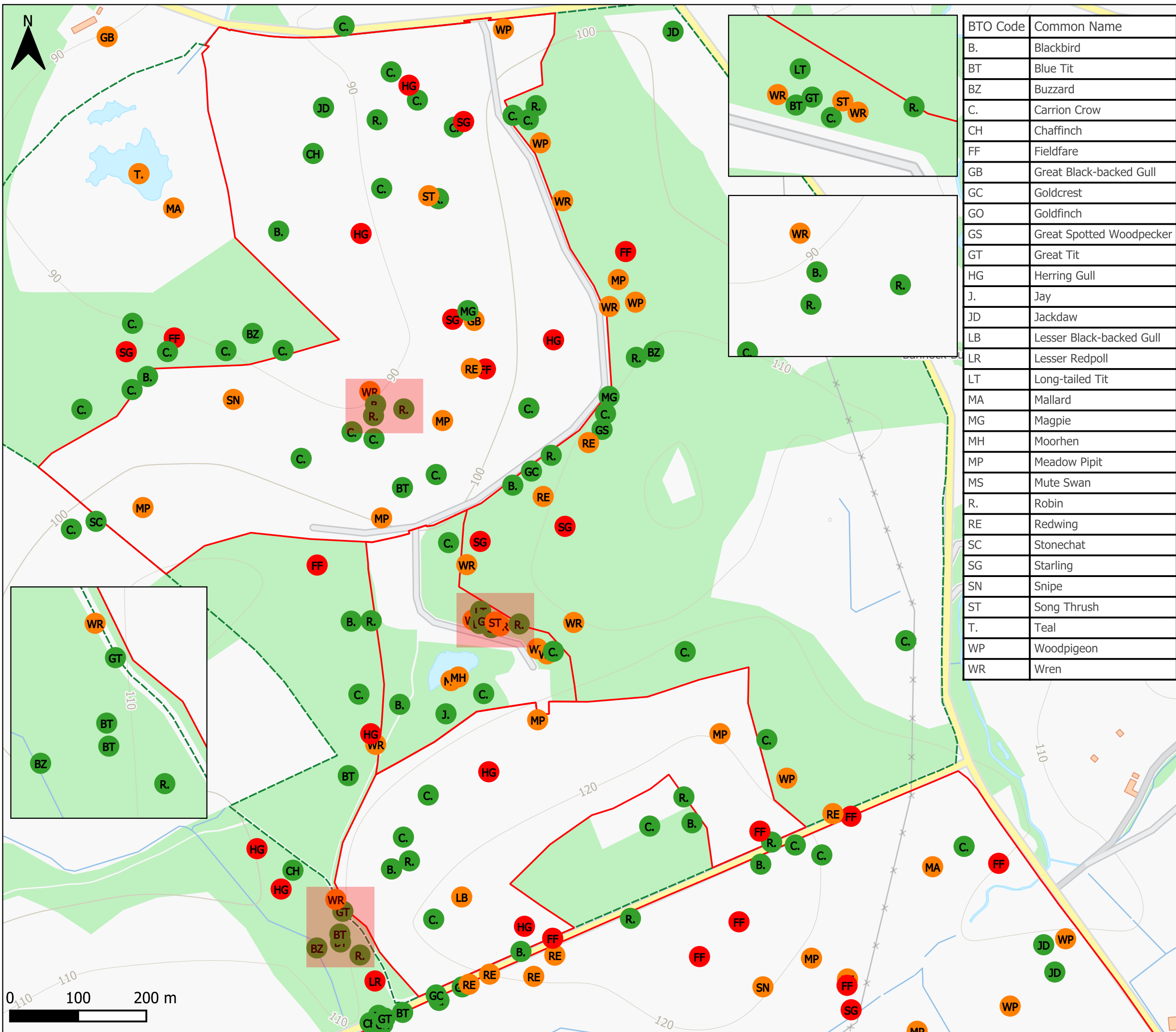
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 1J: Wintering Bird Survey Visit 5 South
Section (23/11/2023)

Scale: 1:7,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1J Rev:1.0






BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
J.	Jay
JD	Jackdaw
LB	Lesser Black-backed Gull
LR	Lesser Redpoll
LT	Long-tailed Tit
MA	Mallard
MG	Magpie
MH	Moorhen
MP	Meadow Pipit
MS	Mute Swan
R.	Robin
RE	Redwing
SC	Stonechat
SG	Starling
SN	Snipe
ST	Song Thrush
T.	Teal
WP	Woodpigeon
WR	Wren

- Legend
- CH Red
 - CH Amber
 - CH Green
 - Land ownership
 - Site boundary

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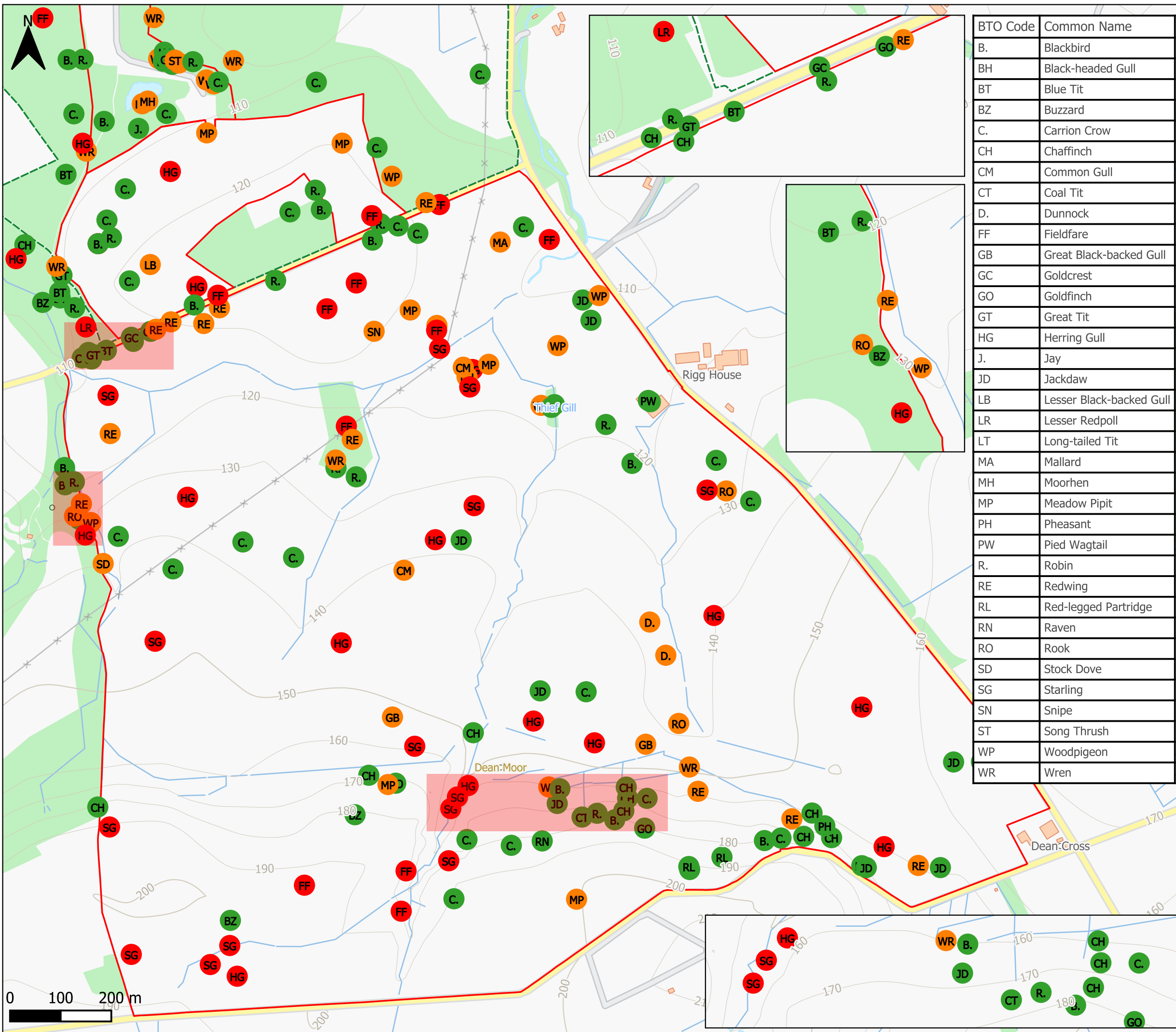
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1K: Wintering Bird Survey Visit 6 North Section (18/12/2023 and 19/12/2023)

Scale: 1:5,350 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1K Rev:1.0





BTO Code	Common Name
B.	Blackbird
BH	Black-headed Gull
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CM	Common Gull
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GC	Goldcrest
GO	Goldfinch
GT	Great Tit
HG	Herring Gull
J.	Jay
JD	Jackdaw
LB	Lesser Black-backed Gull
LR	Lesser Redpoll
LT	Long-tailed Tit
MA	Mallard
MH	Moorhen
MP	Meadow Pipit
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RE	Redwing
RL	Red-legged Partridge
RN	Raven
RO	Rook
SD	Stock Dove
SG	Starling
SN	Snipe
ST	Song Thrush
WP	Woodpigeon
WR	Wren

Legend

- CH Red
- CH Amber
- CH Green
- Land ownership
- Site boundary

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Project Title



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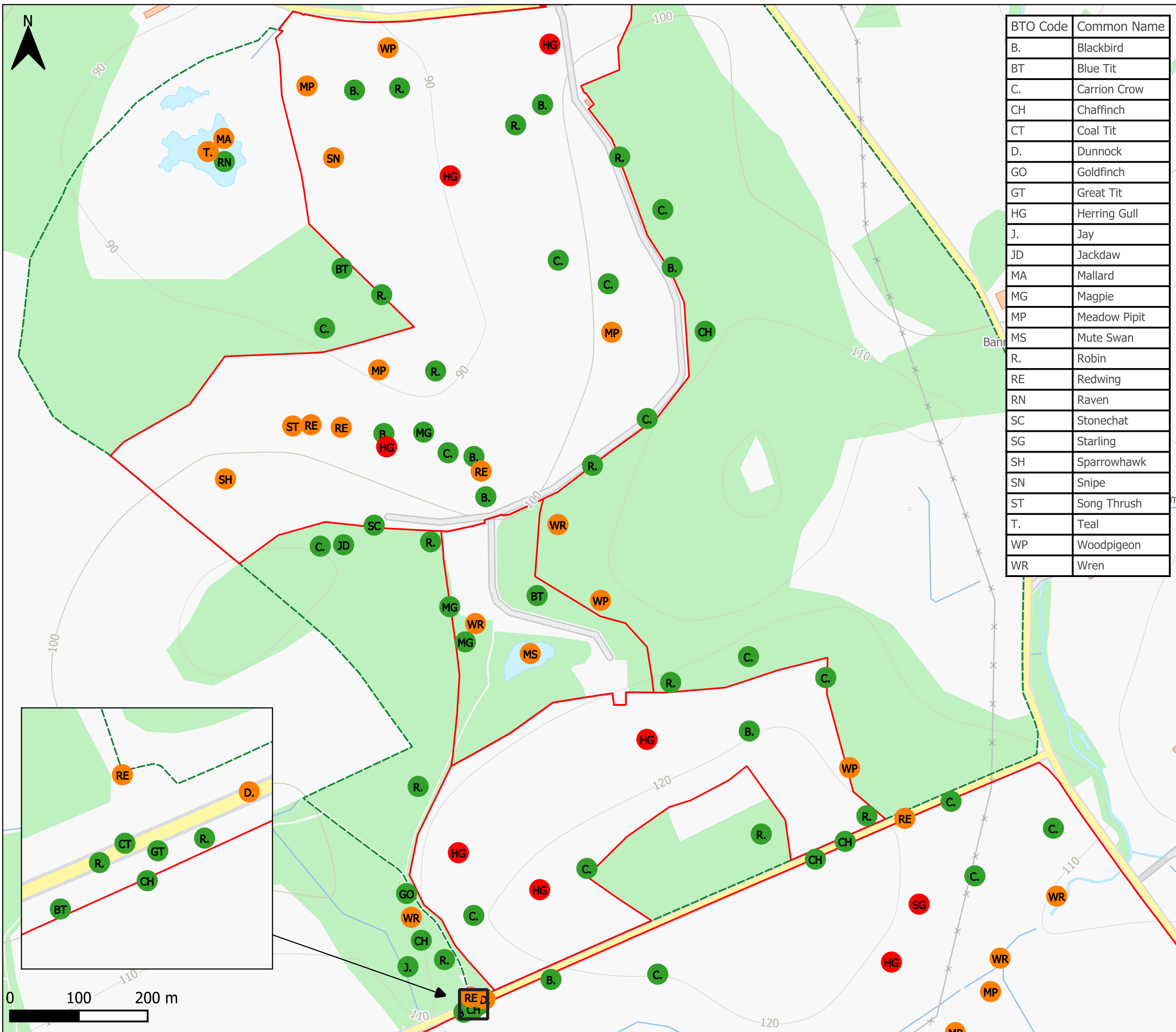
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1L: Wintering Bird Survey Visit 6 South Section (18/12/2023 and 19/12/2023)

Scale: 1:7,200 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1L Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
GO	Goldfinch
GT	Great Tit
HG	Herring Gull
J.	Jay
JD	Jackdaw
MA	Mallard
MG	Magpie
MP	Meadow Pipit
MS	Mute Swan
R.	Robin
RE	Redwing
RN	Raven
SC	Stonechat
SG	Starling
SH	Sparrowhawk
SN	Snipe
ST	Song Thrush
T.	Teal
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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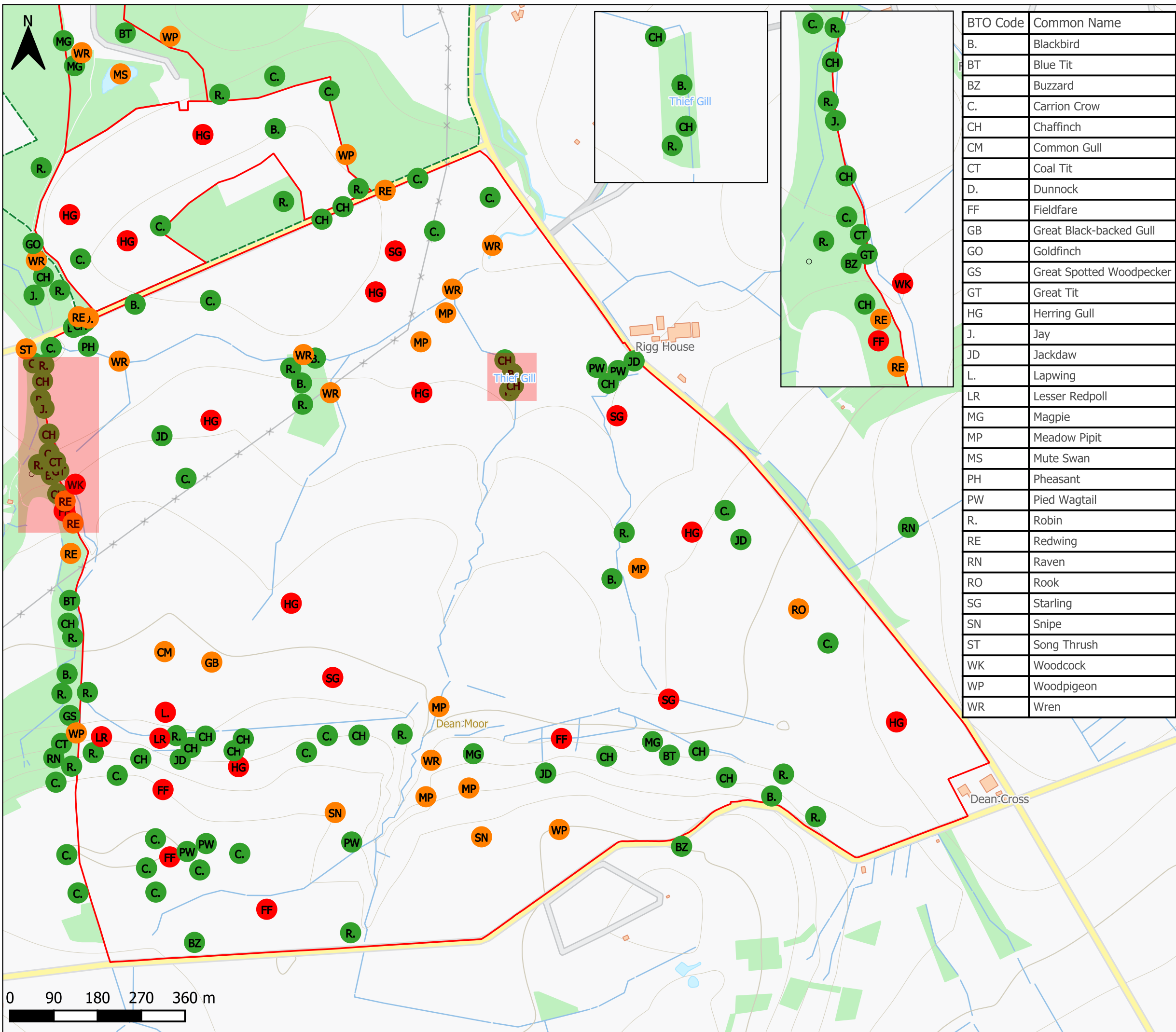
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 1M: Wintering Bird Survey Visit 7 North
Section (29/01/2024 and 30/01/2024)

Scale: 1:5,300 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1M Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CM	Common Gull
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GB	Great Black-backed Gull
GO	Goldfinch
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
J.	Jay
JD	Jackdaw
L.	Lapwing
LR	Lesser Redpoll
MG	Magpie
MP	Meadow Pipit
MS	Mute Swan
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RE	Redwing
RN	Raven
RO	Rook
SG	Starling
SN	Snipe
ST	Song Thrush
WK	Woodcock
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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Sources: BSG Ecology survey data

Project Title



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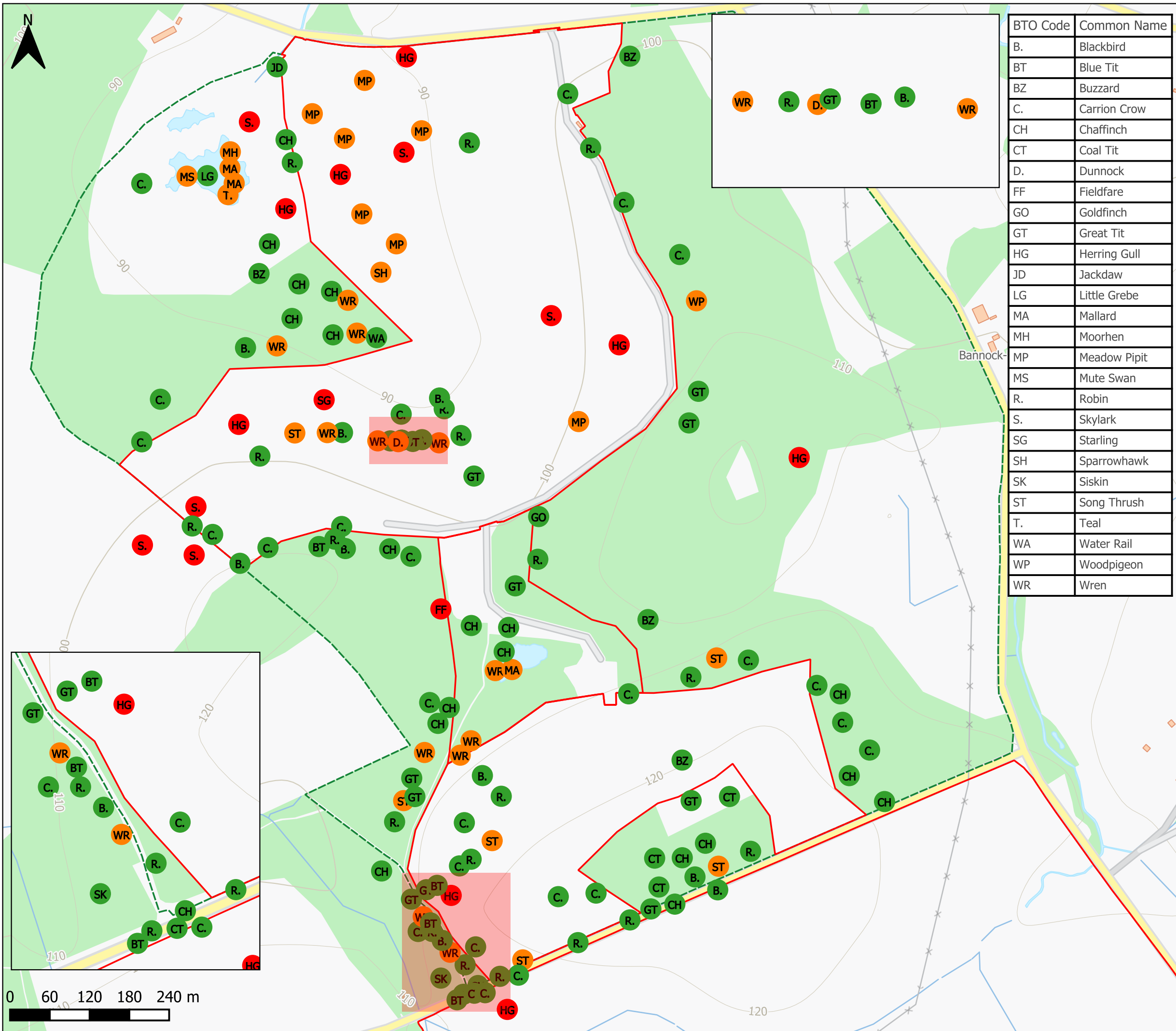
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1N: Wintering Bird Survey Visit 7 South Section (29/01/2024 and 30/01/2024)

Scale: 1:7,500 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1N Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GO	Goldfinch
GT	Great Tit
HG	Herring Gull
JD	Jackdaw
LG	Little Grebe
MA	Mallard
MH	Moorhen
MP	Meadow Pipit
MS	Mute Swan
R.	Robin
S.	Skylark
SG	Starling
SH	Sparrowhawk
SK	Siskin
ST	Song Thrush
T.	Teal
WA	Water Rail
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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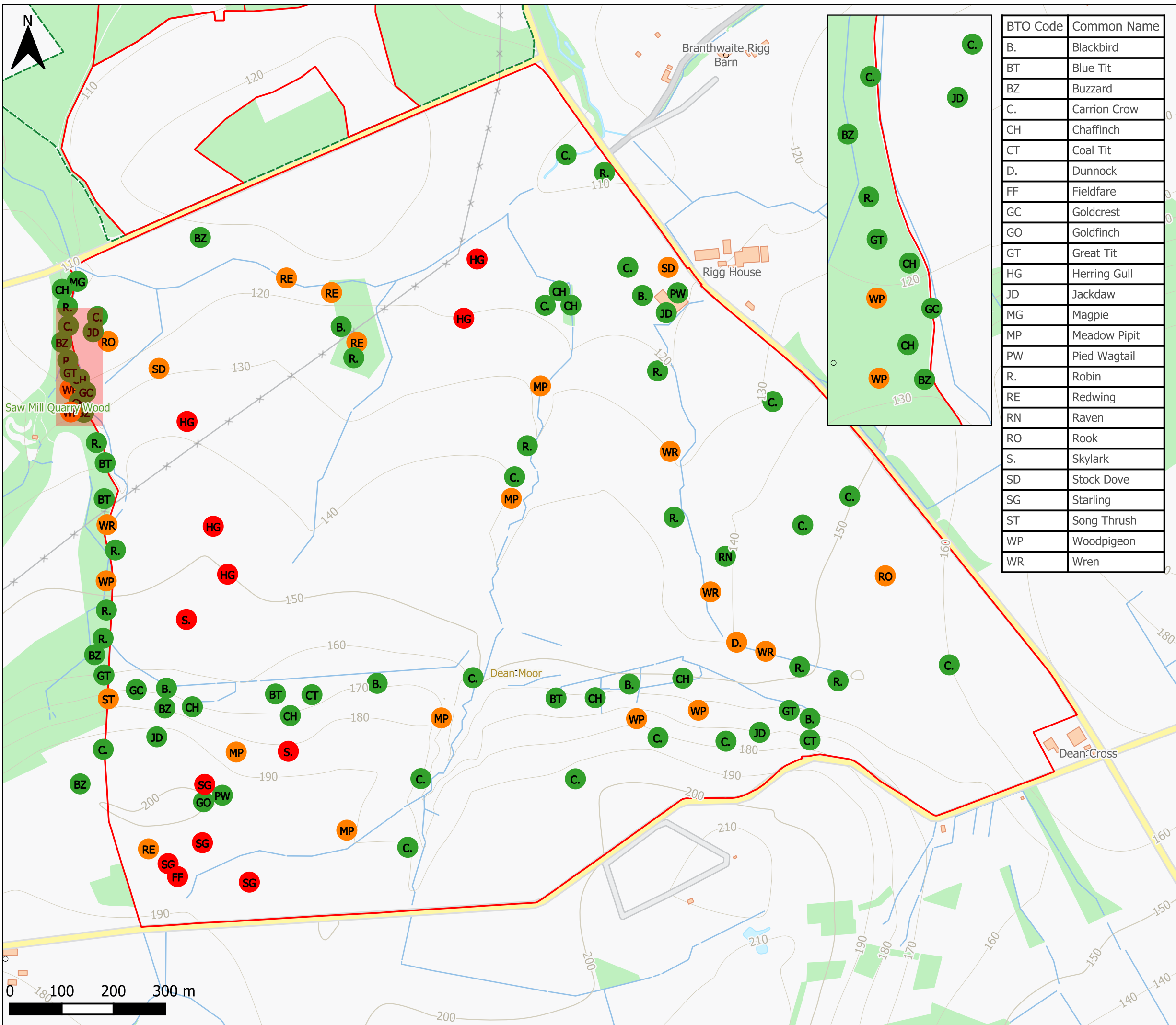
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 10: Wintering Bird Survey Visit 8 North
Section (22/02/2024)

Scale: 1:5,500 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 10 Rev:1.0





BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FF	Fieldfare
GC	Goldcrest
GO	Goldfinch
GT	Great Tit
HG	Herring Gull
JD	Jackdaw
MG	Magpie
MP	Meadow Pipit
PW	Pied Wagtail
R.	Robin
RE	Redwing
RN	Raven
RO	Rook
S.	Skylark
SD	Stock Dove
SG	Starling
ST	Song Thrush
WP	Woodpigeon
WR	Wren

- Legend
- CH Red
 - CH Amber
 - CH Green
 - Land ownership
 - Site boundary

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Project Title



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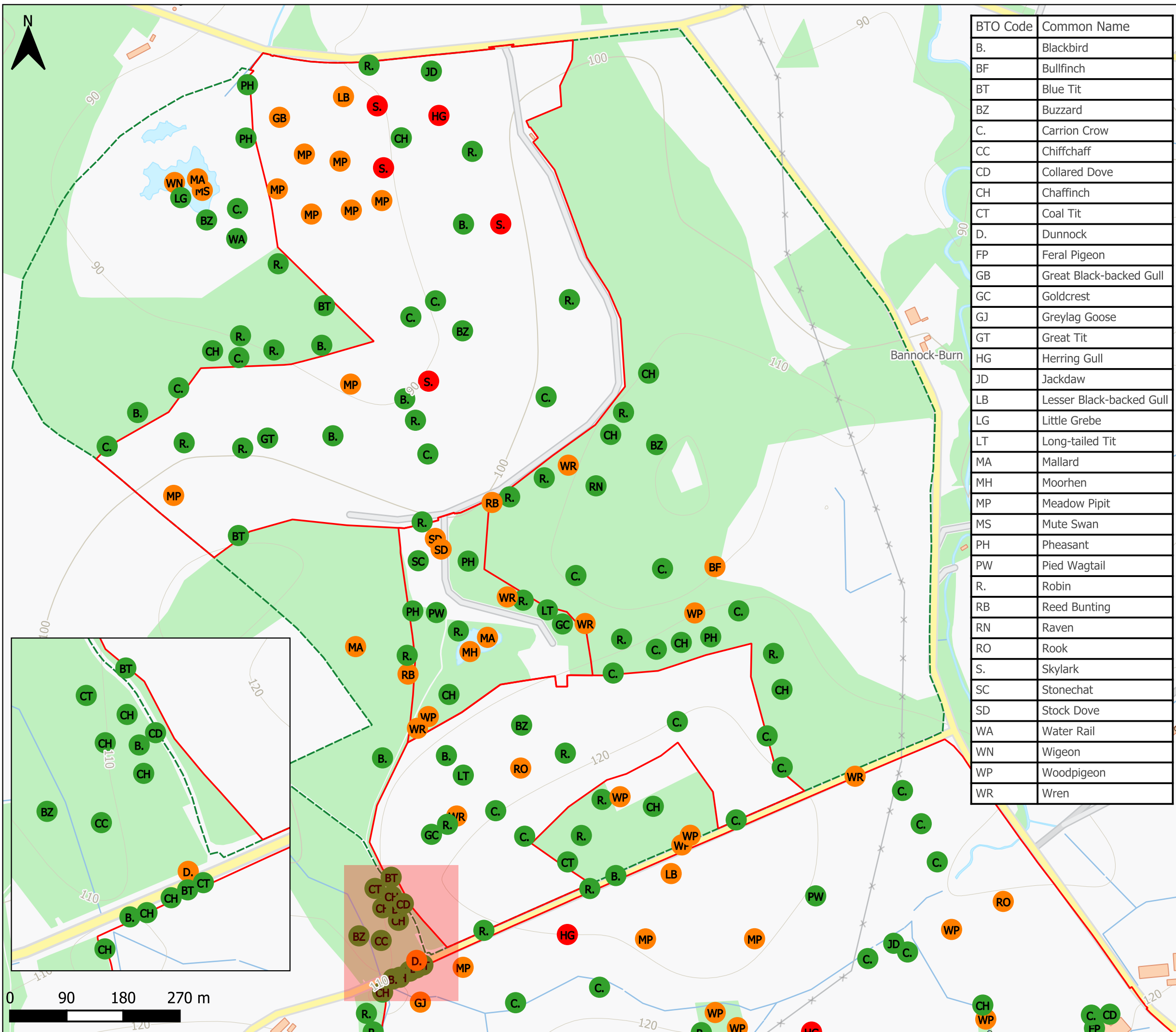
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1P: Wintering Bird Survey Visit 8 South Section (22/02/2024)

Scale: 1:7,000 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1P Rev:1.0





BTO Code	Common Name
B.	Blackbird
BF	Bullfinch
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CC	Chiffchaff
CD	Collared Dove
CH	Chaffinch
CT	Coal Tit
D.	Dunnock
FP	Feral Pigeon
GB	Great Black-backed Gull
GC	Goldcrest
GJ	Greylag Goose
GT	Great Tit
HG	Herring Gull
JD	Jackdaw
LB	Lesser Black-backed Gull
LG	Little Grebe
LT	Long-tailed Tit
MA	Mallard
MH	Moorhen
MP	Meadow Pipit
MS	Mute Swan
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RB	Reed Bunting
RN	Raven
RO	Rook
S.	Skylark
SC	Stonechat
SD	Stock Dove
WA	Water Rail
WN	Wigeon
WP	Woodpigeon
WR	Wren

- Legend
- Red
 - Amber
 - Green
 - Land ownership
 - Site boundary

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Project Title



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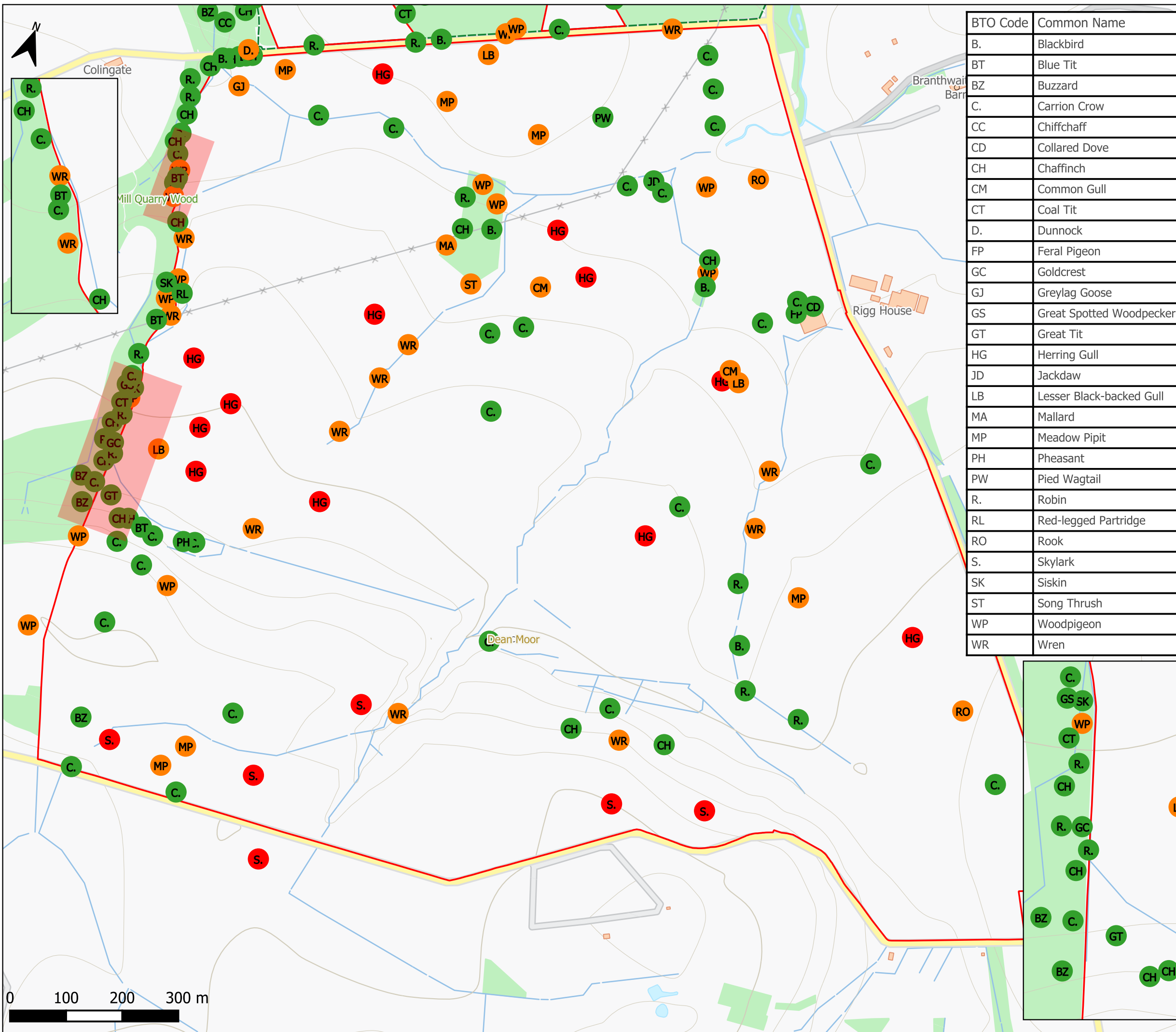
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 1Q: Wintering Bird Survey Visit 9 North
Section (21/03/2024 and 22/03/2024)

Scale: 1:5,800 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1Q Rev:1.0






BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CC	Chiffchaff
CD	Collared Dove
CH	Chaffinch
CM	Common Gull
CT	Coal Tit
D.	Dunnoch
FP	Feral Pigeon
GC	Goldcrest
GJ	Greylag Goose
GS	Great Spotted Woodpecker
GT	Great Tit
HG	Herring Gull
JD	Jackdaw
LB	Lesser Black-backed Gull
MA	Mallard
MP	Meadow Pipit
PH	Pheasant
PW	Pied Wagtail
R.	Robin
RL	Red-legged Partridge
RO	Rook
S.	Skylark
SK	Siskin
ST	Song Thrush
WP	Woodpigeon
WR	Wren

- Legend
- CH Red
 - CH Amber
 - CH Green
 - Land ownership
 - Site boundary

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Sources: BSG Ecology survey data

Project Title



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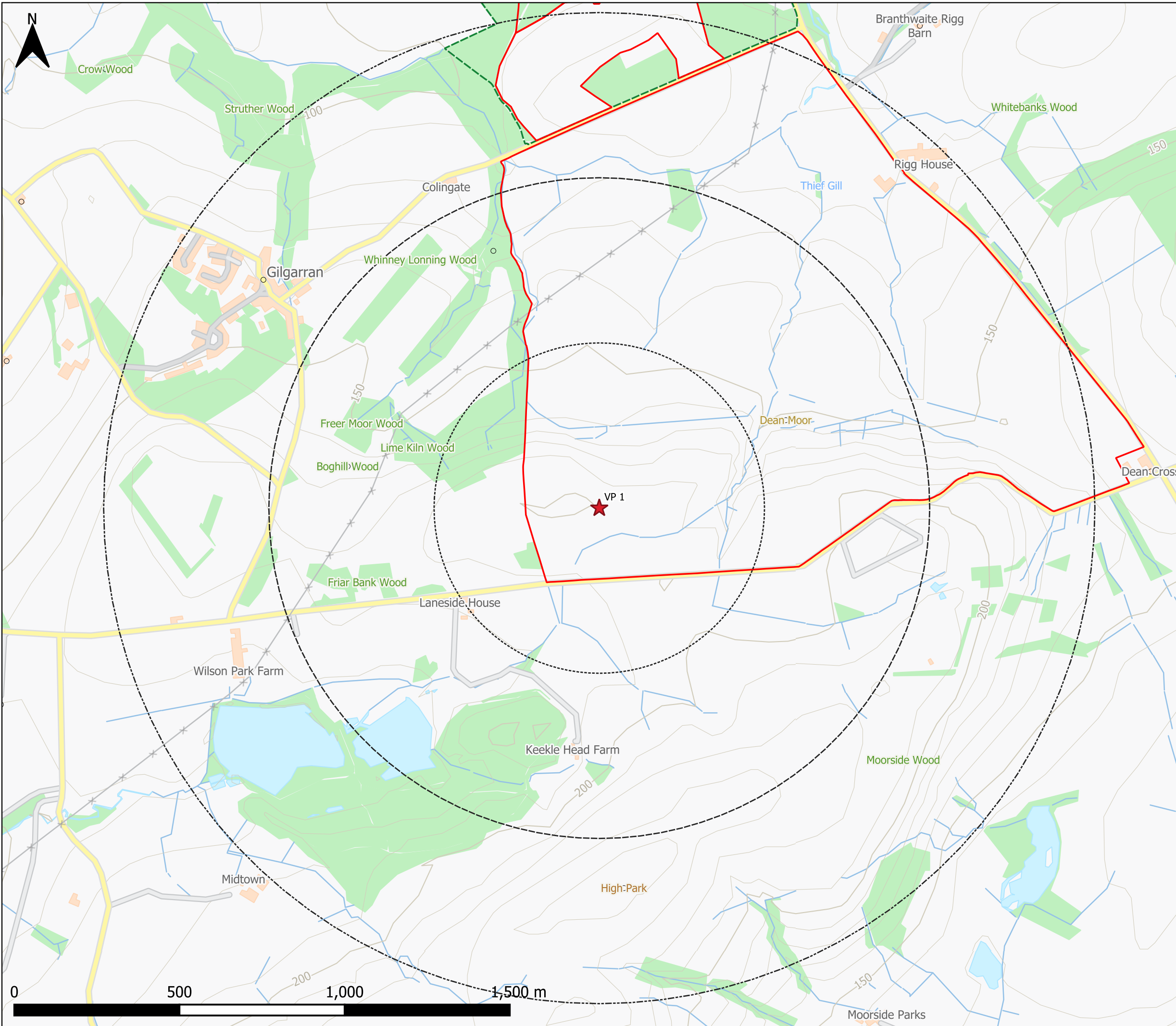
Title
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER
Figure 1R: Wintering Bird Survey Visit 9 South Section (21/03/2024 and 22/03/2024)

Scale: 1:6,500 Date: 18/04/2024

Drawn: SL Checked: JMG

Figure: 1R Rev:1.0






- Legend**
- ★ Vantage Point/Viewing Station
 - 500m arc
 - 1000m arc
 - 1500 m arc
 - ▭ Land ownership
 - ▭ Site boundary

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Sources: BSG Ecology survey data

Project Title



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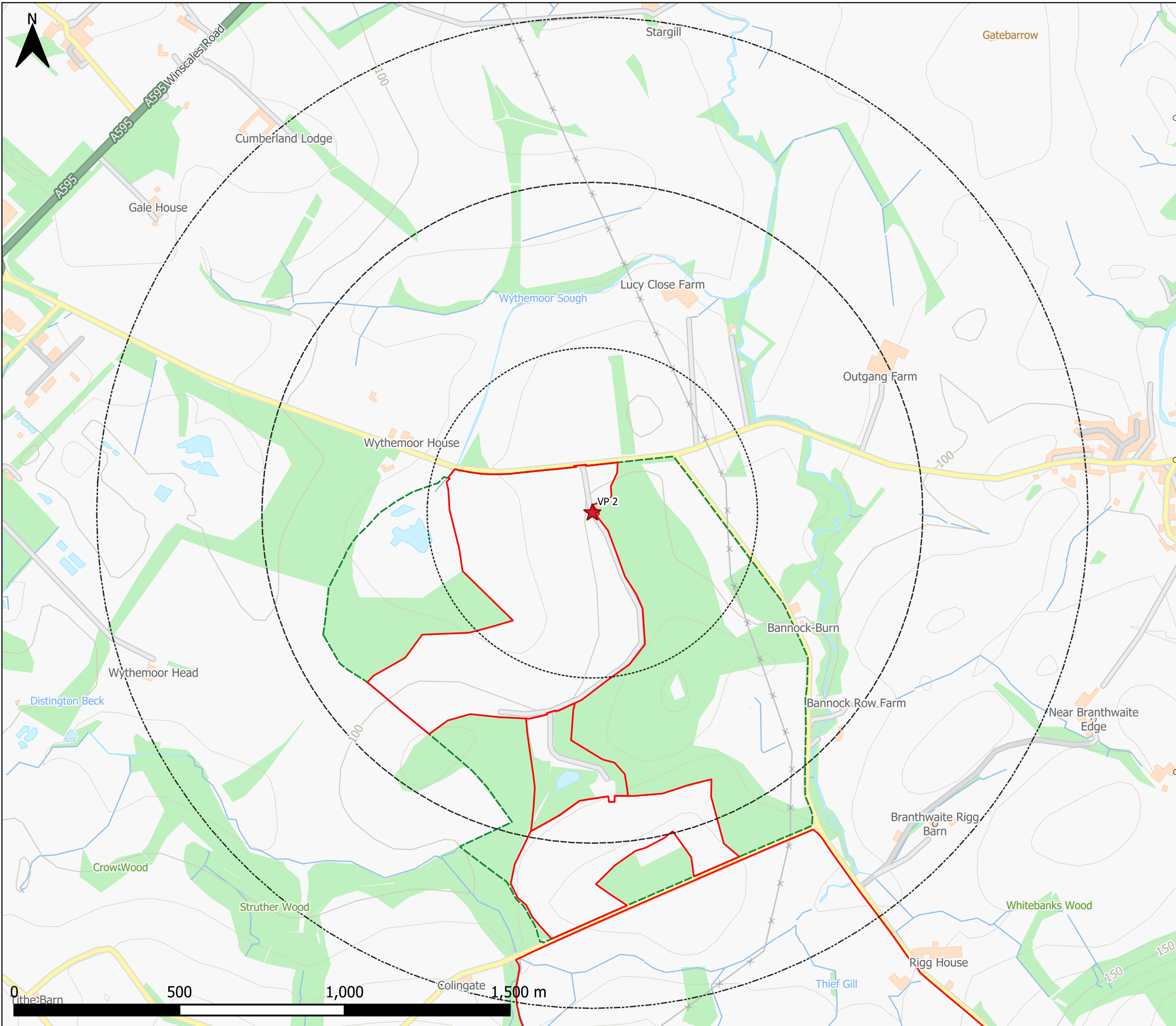
Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 2a: Hen Harrier Survey Vantage Point 1
South Section

Scale: 1:11,000 Date: 20/06/2024

Drawn: SL Checked: JMG

Figure: 2a Rev:1.2






- Legend**
- Vantage Point/Viewing Station
 - 500m arc
 - 1000m arc
 - 1500 m arc
 - Land ownership
 - Site boundary

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Sources: BSG Ecology survey data

Project Title



Client
FVS Dean Moor Limited

Title
DEAN MOOR SOLAR FARM
DEVELOPMENT CONSENT ORDER
Figure 2b: Hen Harrier Survey Vantage Point 2
North Section

Scale: 1:11,000 Date: 20/06/2024

Drawn: SL Checked: JMG

Figure: 2b Rev:1.1

