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Breeding Bird Survey for proposed new prison on land adjacent to HMP Garth and HMP Wymott, Leyland

CGO Ecology Ltd
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14th June 2022

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Volume code: GHX0000 Project wide

Project: Garth Wymott 2

Document number: 608623-0000-CGO-GHX0000-XX-RP-X-0014

Issue number: P02

Suitability code: S3 Suitable for Review & Comment

Date of issue: 14/06/2022

Classification: Official

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Project: MoJ NPP Garth Wymott 2

Deliverable: Breeding Bird Survey of proposed new prison footprint

Our reference: ALRZ BBS

Version: 2

Date: 14th June 2022

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Issued to: Mace Ltd. Anticipated circulation includes Mace internal use, Ministry of Justice, other appointed consultancies, Chorley Council, Natural England, and other relevant stakeholders.

Version control:

Version	Date	Summary of changes
1	14/06/2022	n/a
2	14/06/2022	Amended figure 2

Non-technical summary

Introduction

CGO Ecology Ltd was instructed by Mace Ltd, on behalf of the Ministry of Justice (MoJ), to conduct a Breeding Bird Survey (BBS) on land adjacent to HMPs Garth and Wymott, Leyland, Lancashire. The MoJ proposes a new prison development under its New Prisons Programme on land centred on (SD 502 205). The Local Planning Authority (LPA) is Chorley Council.

Methodology

CGO subconsultant Knight Sky Ecology conducted three early-morning walkovers of the proposed new prison footprint and adjacent areas, from 24th May to 9th June 2022, following Bird Survey Guidelines methodology. Surveys began 30 minutes before sunrise, lasted up to four hours, and recorded all birds seen and heard. Plans were marked with bird positions and flight-paths, using British Trust for Ornithology notation. The surveyor was Ryan Knight. Timing constraints prevented a full six visits, and compressed the season, but the effort levels were sufficient to gather a robust dataset.

Results, impacts

A total of 40 species were recorded on or adjacent to the proposed prison site, including five Birds of Conservation Concern (BoCC) Red List species, and 12 Amber List species (Stanbury *et al*, 2021). Seven species are on the NERC Act s41 list (Priority Species), and 11 species are on the Lancashire Biodiversity Action Plan (BAP) long list. Almost all species were recorded as possible, probably, or confirmed breeders on site. Tawny owl was not recorded during the BBS (daytime surveys), but was heard on the new prison site in 2021.

Counts were relatively low in all cases. All species will be impacted in some way, through temporary or permanent loss of breeding and foraging habitat, and/or temporary or permanent displacement. Those displaced and losing breeding habitat include approximately seven starling pairs, and up to five pairs of house sparrow. Conversely, the gulls and oystercatcher breed on adjacent prison walls/roofs, and will not lose breeding habitat.

Mitigation, compensation and enhancement

All site clearance work, including demolition, tree felling and vegetation removal, will be conducted outside the March-August bird nesting season. Nestboxes suitable for the affected Red List and Amber List species will be erected in advance of the works where possible, including on retained trees and buildings. Additional nestboxes will be placed on the new buildings in due course, where appropriate and permitted.

Loss of breeding habitat for species which nest in trees, scrub, on the ground, and in buildings to be demolished will be fully compensated by new construction and planting within the prison development, and elsewhere on site, most notably in Biodiversity Net Gain areas to the south and west. The proposed development will create a net gain in breeding habitat for gulls and oystercatcher on the new prison roofs. Barn owl impacts are dealt with separately in other reports. No residual impacts are anticipated.

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1. Introduction

1.1. Background and proposed development

CGO Ecology Ltd (CGO) was instructed by Mace Ltd, on behalf of the Ministry of Justice (MoJ), to conduct a bat hibernation survey of building B15 (occupied by the Probation Office), adjacent to HMPs Garth and Wymott, Leyland, Lancashire. The MoJ proposes a development as part of its New Prisons Programme on land centred on (SD 502 205). The Local Planning Authority (LPA) is Chorley Borough Council.

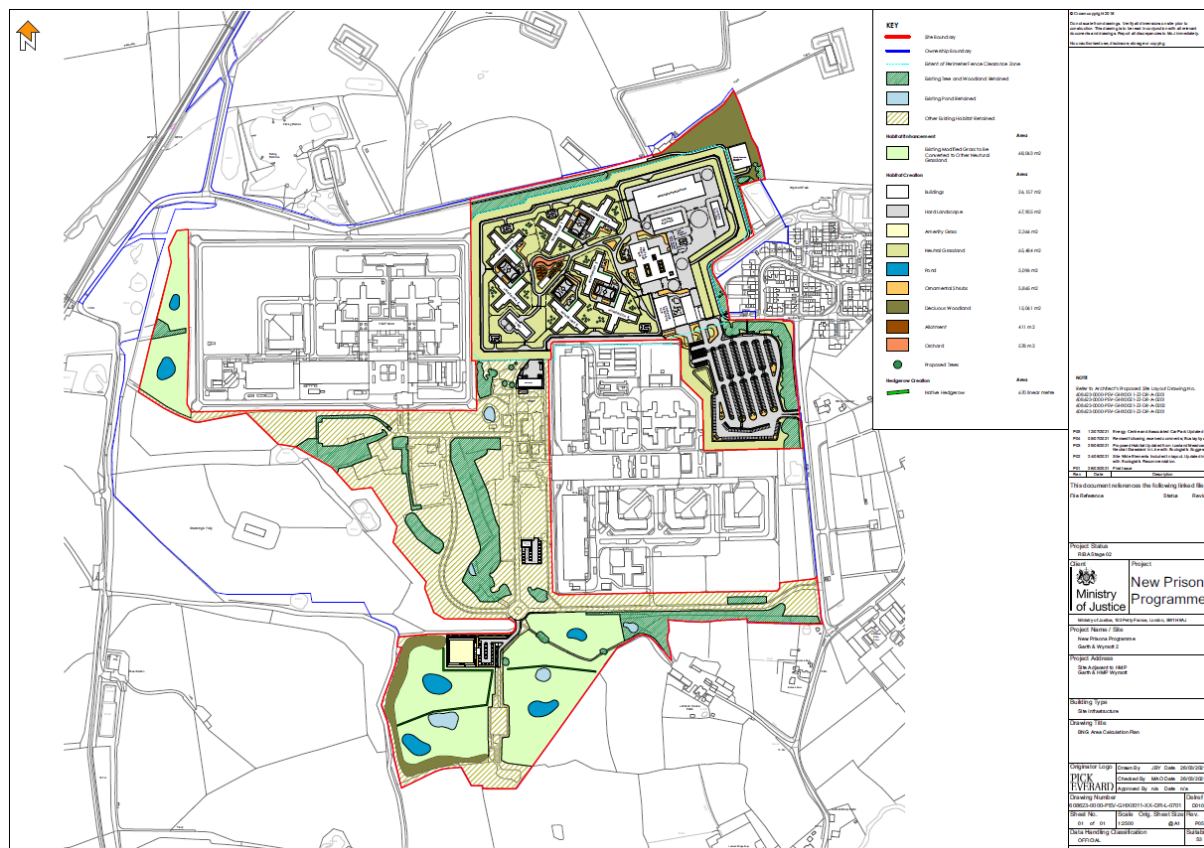


Figure 1 – Proposed development and landscaping. The new prison will occupy the northeast part of the site, east of HMP Garth, north of HMP Wymott. Biodiversity Net Gain enhancements/offsetting are proposed in areas of undeveloped land to the south and west, within the MoJ estate.

All native UK nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended) (WCA). Some have stricter protection via Schedule 1 of the WCA and/or the Habitats Regulations 2017 (as amended) originating from the Birds Directive 2009. Introduced game species are protected outside the shooting season by the Game Act 1831 (as amended). Many birds receive *de facto* protection through the planning system as ‘Priority Species’ owing to their the Natural Environment and Rural Communities Act 2006 (NERC Act) section 41 list.

Ecological evidence was gathered by CGO in the form of Preliminary Ecological Appraisal (PEA) and phase 2 surveys conducted by CGO and its subconsultant Haycock and Jay Associated Ltd (HJA) in 2021 and 2022. These are summarised in the Proof of Evidence (PoE) note submitted as part of the current Planning Appeal (Gleed-Owen, 2022).

Breeding Bird Survey (BBS) other than barn owl (*Tyto alba*), and Wintering Bird Survey (WBS) were scoped out by the LPA’s ecology adviser, Greater Manchester Ecology Unit (GMEU). However, as part of a Planning Appeal, CGO was instructed in mid-May 2021 to conduct a Breeding Bird Survey (BBS) for the proposed new prison footprint.

This report aims to follow CIEEM (2017) report-writing guidance, and to provide sufficient information to assist an EclA conforming to CIEEM (2018) guidance.

1.2. Site context

The development site comprises predominantly land north of HMP Wymott, currently used as a sheep (*Ovis aries*) farm, stables, bowling club, boiler house, and utility buildings. The part within HMP Wymott is a sports field and disused assault course. The new boiler house will be between the existing prisons. The new bowling club will be on farmland to the south. Some woodland will be lost for the new prison development. Larger areas of woodland will remain.

The surrounding area is intensively farmed for a mixture of livestock and arable crops, but there are significant areas of woodland and other land uses. A large area of woodland lies to the southwest of the site, extending around the west and north of HMP Garth. This will be retained unaffected.

There are major urban areas to the northeast (Leyland and Preston), and a network of minor roads, railway lines, villages, hamlets, and farms in all directions.

1.3. Proposed works

The proposed development is a hybrid planning application seeking: Outline planning permission (with all matters reserved except for access, parking and landscaping) for a new prison (up to 74,531.71m²) within a secure perimeter fence following demolition of existing buildings and structures and together with associated engineering works; Outline planning permission for a replacement boiler house (with all matters reserved except for access); and Full planning permission for a replacement bowling green and club house.

Planning consent was refused by Chorley Borough Council in December 2021. A Planning Appeal is currently being prepared by Cushman and Wakefield on behalf of Mace and the MoJ. To aid the appellant's case, this BBS was instructed in mid-May 2022, to be completed by mid-June 2022 when final PoEs must be submitted to the Planning Inspectorate, prior to the Appeal hearing in July 2022.

2. Methodology

2.1. Breeding Bird Survey

CGO subconsultant Knight Sky Ecology (KSE) undertook three early-morning walkovers of the proposed new prison development site and immediately-surrounding areas on 24th May 2022, 1st June 2022, and 9th June 2022. The walkovers followed the same transect, but the direction was varied. Visit 1 was walked clockwise from the farmyard and Laing O'Rourke site cabin. Visit 2 was walked anti-clockwise. Visit 3 was walked clockwise. The wider MoJ Garth-Wymott estate was not included.

Methodology followed the Bird Survey Guidelines methodology (Bird Survey & Assessment Steering Group, 2022). The surveys began just after sunrise, lasted 2-3 hours, and recorded all birds seen and heard. A plan was marked with all bird positions and flight-paths, using standard (traditional) British Trust for Ornithology (BTO) notation. The surveyor was experienced ornithologist Ryan Knight. The lead author is Dr Chris Gleed-Owen MCIEEM, Director and Principal Ecologist of CGO, project manager for the Garth Wymott 2 ecology submissions.

Visit	Date	Times	Sunrise	Weather
1	24/05/2022	05:15-07:30	04:56	Temp 10°C, cloud 75%, wind 1. Light rain shower 06:55-07:10.
2	01/06/2022	05:05-07:25	04:48	Temp 7-9°C, cloud 60-70%, wind 0-1, dry.
3	09/06/2022	5:05-07:30	04:42	Temp 13-14°C, cloud 80% reducing to 20%, wind 1-2, dry.

Table 1 – Details of the survey visits.

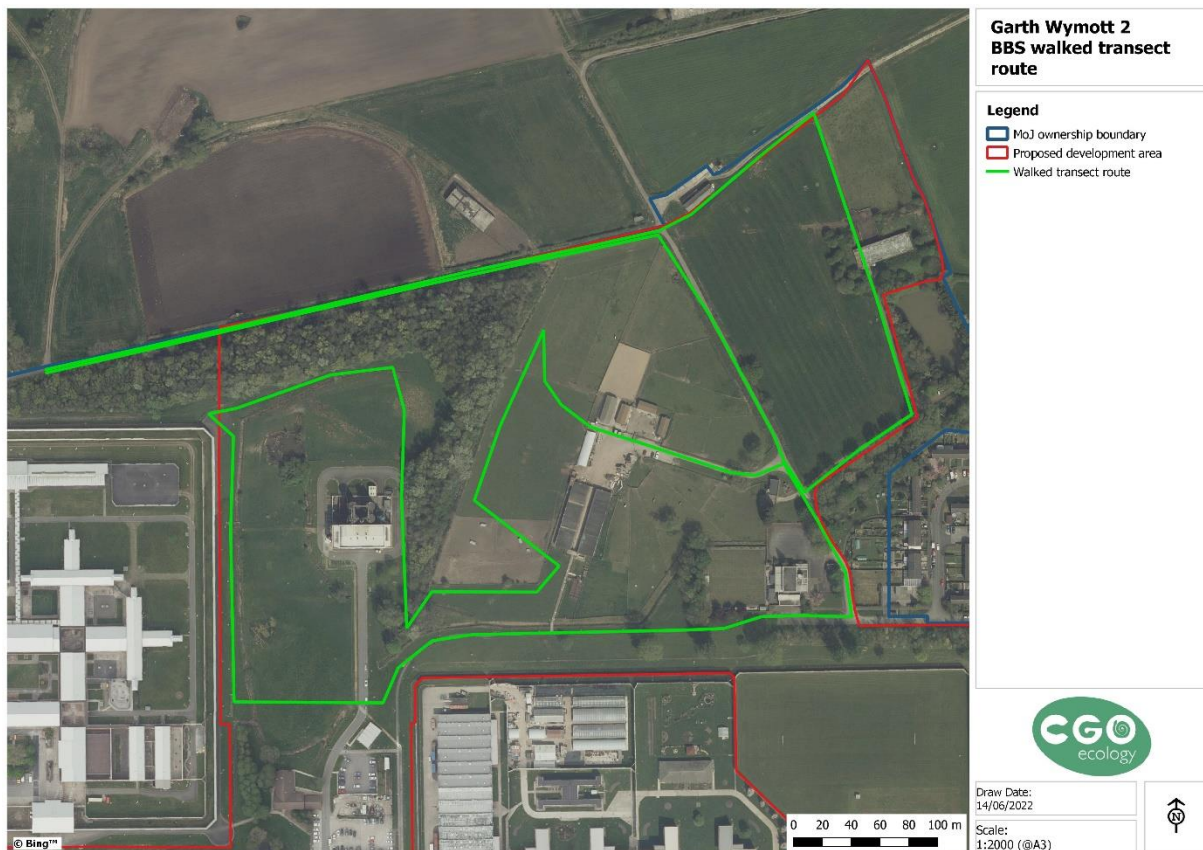


Figure 2 – BBS walked transect route.

2.2. Incidental observations

Any incidental observations of non-target taxonomic groups, such as mammals and insects, were recorded.

2.3. Bird plans

Maps were drawn up for each BBS visit. These show all the species observed. Annotations follow standard British Trust for Ornithology (BTO) notation and nomenclature conventions for species name initialisms, flight arrows, underlining (calling), and circling (male singing). Plans were digitised by CGO Geographical Information System (GIS) officer Jack Parker.

2.4. Limitations

There were no weather or logistical constraints on the three survey visits conducted. Regular dogwalkers, walkers, and birdwatchers were seen on publicly-accessible paths and tracks from approximately 06:00 onwards, but this did not cause noticeable disturbance, and was not a significant limitation.

The only constraint was the compressed seasonal window. The mid-May start, and the mid-June deadline for Proofs of Evidence for the planning appeal, meant that only three visits were possible in the available window. This compares to the six visits normally required between mid-March and early July, according to the Bird Survey Guidelines methodology (Bird Survey & Assessment Steering Group, 2022). Nevertheless, the effort levels were sufficient to gather a robust dataset.

3. Results

3.1. Overview

A total of 40 species were recorded on or adjacent to the proposed prison site, including five Birds of Conservation Concern (BoCC) Red List species, and 12 Amber List species (Stanbury *et al*, 2021). Seven species are on the NERC Act s41 list (Priority Species), and 11 species are on the Lancashire Biodiversity Action Plan (BAP) long list.

Conservation status category	Number of species
Green list (BoCC5)	22
Amber list (BoCC5)	12
Red list (BoCC5)	5
Unclassified	1
Lancashire BAP long list	11
Schedule 1 (WCA)	1
Annex I (Habs Regs)	0
Section 41 (NERC Act)	7
Total number of species	40

Table 2 – Summary of species and conservation status categories.

3.2. Annex I species

No Birds Directive 2009 Annex I species were recorded.

3.3. Schedule 1 species

One WCA 1981 Schedule 1 species was recorded: barn owl. This is dealt with separately in the PoE note (Gleed-Owen, 2022) and contributing reports.

3.4. Red List species

Five BoCC 4 Red List (Stanbury *et al*, 2021) species were recorded: herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), starling (*Sturnus vulgaris*), and yellowhammer (*Emberiza citrinella*).

3.5. Amber List species

12 BoCC Amber List species were recorded: black-headed gull (*Chroicocephalus ridibundus*), dunnoek (*Prunella vulgaris*), lesser black-backed gull (*Larus fuscus*), mallard (*Anas platyrhynchos*), moorhen (*Gallinula chloropus*), shelduck (*Tadorna tadorna*), song thrush (*Turdus philomelos*), stock dove (*Columba oenas*), whitethroat (*Sylvia communis*), wood pigeon (*Columba palumbus*), and wren (*Troglodytes troglodytes*).

3.6. Green List species

22 BoCC Green List species were recorded. These include the WCA Schedule 1 protected species: barn owl. None of the Green List species produced high counts that would increase their significance.

3.7. Introduced species

Canada goose (*Branta canadensis*) was recorded. This is a WCA Schedule 9 invasive species.

Common name	Scientific name	WCA Sch 1	Red List	Amber List	Green List	Non-native
Barn owl	<i>Tyto alba</i>				Green	
Blackbird	<i>Turdus merula</i>				Green	
Blackcap	<i>Sylvia atricapilla</i>				Green	
Black-headed Gull	<i>Chroicocephalus ridibundus</i>			Amber		
Blue Tit	<i>Cyanistes caeruleus</i>				Green	
Buzzard	<i>Buteo buteo</i>				Green	
Canada Goose	<i>Branta canadensis</i>					Non-native
Carrion Crow	<i>Corvus corone</i>				Green	
Chaffinch	<i>Fringilla coelebs</i>				Green	
Chiffchaff	<i>Phylloscopus collybita</i>				Green	
Dunnock	<i>Prunella modularis</i>			Amber		
Feral pigeon	<i>Columbo livia domestica</i>				Green	
Goldcrest	<i>Regulus regulus</i>				Green	
Goldfinch	<i>Carduelis carduelis</i>				Green	
Great Spotted Woodpecker	<i>Dendrocopos major</i>				Green	
Great Tit	<i>Parus major</i>				Green	
Grey Heron	<i>Ardea cinerea</i>				Green	
Herring Gull	<i>Larus argentatus</i>		Red			
House Sparrow	<i>Passer domesticus</i>		Red			
Jackdaw	<i>Corvus monedula</i>				Green	
Jay	<i>Garrulus glandarius</i>				Green	
Lapwing	<i>Vanellus vanellus</i>		Red			
Lesser Black-backed Gull	<i>Larus fuscus</i>			Amber		
Long-tailed Tit	<i>Aegithalos caudatus</i>				Green	
Magpie	<i>Pica pica</i>				Green	
Mallard	<i>Anas platyrhynchos</i>			Amber		
Moorhen	<i>Gallinula chloropus</i>			Amber		
Nuthatch	<i>Sitta europaea</i>				Green	
Oystercatcher	<i>Haematopus ostralegus</i>			Amber		
Pied Wagtail	<i>Motacilla alba</i>				Green	
Robin	<i>Erithacus rubecula</i>				Green	
Shelduck	<i>Tadorna tadorna</i>			Amber		
Song Thrush	<i>Turdus philomelos</i>			Amber		
Starling	<i>Sturnus vulgaris</i>		Red			
Stock Dove	<i>Columbo oenos</i>			Amber		
Swallow	<i>Hirundo rustica</i>				Green	
Whitethroat	<i>Sylvia communis</i>			Amber		
Woodpigeon	<i>Columbo polumbus</i>			Amber		
Wren	<i>Troglodytes troglodytes</i>			Amber		
Yellowhammer	<i>Emberiza citrinella</i>		Red			

Table 3 – Species list, legal protection status, and BoCC5 threat status.

Species	BoCC5 status	V1 count	V2 count	V3 count	NERC s41	Lancs BAP	Breeding status	Pairs
Barn owl	Green			1			Confirmed	
Blackbird	Green	5	6	9			Probable	4
Blackcap	Green	1	1	2			Probable	2
Black-headed gull	Amber	4	1			Yes	Non-breeding	
Blue tit	Green	2	1	2			Confirmed	2
Buzzard	Green		1				Non-breeding	
Canada goose	n/a	5	2	9			Non-breeding	
Carrion crow	Green	3	2	3			Possible	2
Chaffinch	Green	3	4	3			Probable	3
Chiffchaff	Green	2	2	2			Probable	2
Dunnock	Amber	2	1		Yes	Yes	Probable	2
Feral pigeon	Green		6	1			Possible	4-5
Goldcrest	Green	1					Possible	1
Goldfinch	Green	3	4	8			Probable	4
Great spotted woodpecker	Green	1	2	2			Possible	2
Great tit	Green	4		6			Confirmed	3
Grey heron	Green		1			Yes	Non-breeding	
Herring gull	Red	2		1	Yes	Yes	Possible	2
House sparrow	Red	1	4	1	Yes	Yes	Probable	3-5
Jackdaw	Green		12				Non-breeding	
Jay	Green		1	2			Probable	1
Lapwing	Red	2	1	3	Yes	Yes	Probable	2+
Lesser black-backed gull	Amber	5	6	6		Yes	Probable	4-6
Long-tailed tit	Green		1				Possible	1
Magpie	Green	3	3	3			Probable	2
Mallard	Amber	5	2	3			Confirmed	3
Moorhen	Amber	1		1			Possible	1
Nuthatch	Green			1			Confirmed	1
Oystercatcher	Amber	8	5	2		Yes	Probable	4
Pied wagtail	Green	1	2	1			Probable	2
Robin	Green	3	4	1			Confirmed	3
Shelduck	Amber						Non-breeding	
Song thrush	Amber	1	2	2	Yes	Yes	Confirmed	2
Starling	Red	10	4	14	Yes	Yes	Probable	
Stock dove	Amber	1					Non-breeding	
Swallow	Green	3	2	2			Probable	2
Whitethroat	Amber	2	1	1			Probable	2
Wood pigeon	Amber	12	14	13			Probable	3-5
Wren	Amber	5	6	11			Probable	5
Yellowhammer	Red	1	1	1	Yes	Yes	Probable	1

Table 4 – Species counts, policy status, and breeding status.



Figure 3 – Flight paths of barn owl on visit 3. Seen entering through roof of building B10 at 05:20 (red line). Seen hunting and carrying a field vole (*Microtus agrestis*) back to B10 at around 05:40-06:05 (blue line).

4. Baseline Ecological Conditions

The BBS recorded 40 species on or adjacent to the proposed new prison site, including five Red List species, and 12 Amber List species. Seven species are on the NERC Act section 41 list, and 11 species are on the Lancashire Biodiversity Action Plan long list. Counts were generally low. BoCC Red List species starling was the most numerous, with 14 seen on visit 3, and on-site breeding probable. On the Amber List, wood pigeon (14) and wren (11) were most numerous, with both being probable breeders. Barn owl was the only WCA Schedule 1 species.

The BBS 2022 results together with incidental data from other ecology surveys in 2021 show that Red List and Amber List birds breed in the existing prisons, including oystercatcher on the roof of HMP Garth, and gulls on the roof of HMP Wymott. This is an important observation, as it shows that the prisons have inadvertently provided breeding habitat to threatened bird species.

Amber List tawny owl (*Strix aluco*), which was not recorded during the daytime BBS visits, was recorded incidentally in 2021 within the new prison area. It is possible that a breeding pair nests within the belt of woodland to be lost. This takes the species list to 41 for the new prison footprint. No little owl (*Athene noctua*) has been recorded.

A hobby (*Falco tinnunculus*) was recorded at the Prince Albert Angling Society fishing lakes to the north of HMP Garth in 2021 during other CGO/HJA surveys. This species is protected on WCA Schedule 1. It is not likely to breed in the new prison area.

Other BoCC Red List species that are absent from the new prison area, but were recorded incidentally elsewhere on the MoJ estate are cuckoo (*Cuculus canorus*), linnet (*Linaria cannabina*), and tree sparrow (*Passer montanus*).

5. Impact Assessment

All 41 species that breed or could breed in the new prison area will be impacted in some way, through temporary or permanent loss of breeding and foraging habitat, and/or temporary or permanent displacement. Those displaced and losing breeding habitat include approximately seven starling pairs, and up to five pairs of house sparrow. Conversely, the gulls and oystercatcher breed on adjacent prison walls/roofs, and will not lose breeding habitat.

No Annex species will be affected. One WCA Schedule 1 species, barn owl, is dealt with separately (Gleed-Owen & Trewick, 2021).

Construction will cause permanent loss of nesting and foraging habitat for a range of birds, including relatively-low numbers of Red List and Amber List species. It would also cause destruction of nests, and killing and injury of chicks in the absence of mitigation.

For some Red List and Amber List species which nest on roofs, such as herring gull, great black-backed gull, and oystercatcher, the construction of new prison buildings will be a positive impact.

6. Mitigation and compensation

All site clearance work will be conducted outside the March-August bird nesting season. This includes demolition, tree felling, hedge removal, shrub/scrub removal, and enabling works such as cutting or driving over long grass, infilling ponds, or clearing debris. If any work must commence within the nesting season, it will be preceded by an ecologist nest check prior to issue of the all-clear to proceed. Any active nests will be safeguarded with a 5m stand-off using road pins and hazard tape or fencing until the all-clear to proceed is given by an ecologist.

Nestboxes targeting as many affected Red List and Amber List species as possible will be erected in advance of the works, including on retained trees and buildings. Additional nestboxes will be placed on buildings within the new prison in due course, where appropriate and permitted.

For those species which nest in trees, scrub, on the ground, and in buildings to be demolished, the loss of breeding habitat will be fully compensated. For gulls, oystercatcher, and commensal species such as house sparrow, this will be via new construction. For tree and hedge-nesting species, this will be via new planting within the prison development, and elsewhere on site, most notably in BNG areas to the south and west of the existing prisons.

Provision of habitat offsetting and enhancement will commence prior to loss of breeding habitat in the new prison footprint. For example, new hedgerow will be planted, and heavily-grazed pasture will be reverted to meadow grassland before the equivalent habitat is lost.

Barn owl impacts are dealt with separately (Gleed-Owen & Trewick, 2021).

Short-term breeding habitat compensation will be provided where possible by installation of suitable nestboxes in other areas of the site. The number and types will reflect the species and estimated numbers of territories affected.

7. Residual effects and enhancements

No permanent residual impacts are anticipated. All impacts will be fully mitigated and/or compensated. Short-term impacts will be mitigated/compensated as far as possible by early commencement of offsetting/BNG habitats provisions, and early provision of nestboxes.

The proposed development will create a net gain in breeding habitat for Red-List and Amber-List gulls and oystercatcher on the new prison roofs.

Nestboxes will be provided for additional species which do not currently nest on site, such as swift (*Apus apus*) and house martin (*Delichon urbicum*), both currently Red-Listed (Stanbury *et al*, 2021).

8. References

Bird Survey & Assessment Steering Group. (2022). *Bird Survey Guidelines for assessing ecological impacts, v.0.1.0.* <https://birdsurveyguidelines.org> [accessed 15/05/2022].

