

Dogger Bank C and Sofia Onshore Converter Stations Access Road Ecological Report

1 Introduction

This report provides an appraisal of the ecological effects of a proposed construction access road (the 'Development'). The access road is required to access the onshore converter stations site (OCSs) of the onshore cable route by Doggerbank Offshore Wind Farm Project 3 Projco Limited (Projco 3) and Sofia Offshore Wind Farm Limited (SOWFL).

The Development is located directly south west of Wilton International and will provide access for construction traffic between the existing private southern access onto Wilton International and the OCSs. An initial ecological walkover to inform this report was conducted on 20th January 2020, with an additional targeted walkover of the Site conducted on 28th April 2020. Survey methods are detailed in Appendix B. The Development's extent (the 'Site') and the corresponding Ecology Survey Area are shown in Appendix A, Figure 1.

2 Effects of the Development

2.1 Habitats

Habitats within the Site comprise primarily immature mixed plantation woodland and smaller areas of bare ground (a track), arable land and neutral semi-improved grassland. East of the Site is a hardstanding private access road into Wilton International, lined with amenity grassland verges. Habitats are shown in Appendix A, Figure 2. The Development will result in the temporary loss of all habitats within the Site. Due to the limited extent of the Development footprint, combined with the low ecological value of the affected habitats, the subsequent temporary losses are considered not significant. Mitigation measures are identified within section 3.1.

2.2 Great Crested Newts and Other Amphibians

A single pond is located within 500 m of the Development and was not separated by any major barriers to the dispersal of great crested newts (GCN) (location shown in Appendix A, Figure 3). The A174 presents a significant barrier to dispersal and thus any ponds to its south are excluded from this appraisal. The pond had "Poor" suitability to support GCN due to its large size, the presence of water fowl and low quality terrestrial habitat in the immediate surroundings. Furthermore, presence- absence surveys conducted on waterbodies over the wider area during the 2020 survey season recorded no GCN (the pond within 500 m of the Site was not included within these presence-absence surveys due to its poor suitability to support GCN)¹. Consequently, GCN are considered to be absent from the Site and are not discussed further in this report.

2.3 Reptiles

No habitats with potential to support foraging or sheltering reptiles were recorded and, therefore, reptiles are not discussed further in this report.

¹ Arcus (2020) *Dogger Bank C/ Sofia, Alternative Cable Route Application, Ecology Report 2020*.

2.4 Bats

The majority of trees within the plantation were immature although some larger conifers were also present; however, no trees had potential to support roosting bats. The plantation woodland, which comprises the majority of the Development footprint, and in particular the woodland edge, had potential to support foraging and commuting bats, although it is limited in extent. Without mitigation, the Development has the potential to impact foraging and commuting bats due to the temporary loss of woodland habitat and construction disturbance. Given the small scale of the Development such adverse effects would be temporary, reversible and not significant; however, mitigation measures as per section 3.2 are proposed to further reduce these effects.

2.5 Badger

No active badger setts, latrines or snuffle holes were recorded. Although limited in extent, the plantation woodland is considered suitable for sett creation and foraging due to the variety of suitable habitat types (scrub, woodland and arable fields) in the wider area. Badgers are not currently utilising habitats within the Development footprint, however, they are a mobile species and known to be present within the local area^{Error!} and thus have the potential to utilise the Site in the future. Consequently, mitigation measures, as per section 3.3, are identified as required to reduce the likelihood of legal offences and to safeguard badgers during construction.

2.6 Breeding Birds

Surveys undertaken in line with development in the wider area recorded a diverse assemblage of breeding birds associated with a mosaic of habitats². The surveys did not record breeding birds within the Site and the nearest records (100–200 m from the Site) included: skylark, reed bunting, blackbird, dunnock, yellowhammer, willow warbler and meadow pipit. With the exception of blackbird, these species are Birds of Conservation Concern (BoCC; e.g. Amber- and Re-listed species) but are generally common and widespread and typical of the habitats in the local landscape. The habitats in the Site have the potential to support these and other common arable and farmland birds, including some BoCC, although the small size of the Site and the limited range and extent of its habitats will limit the breeding bird assemblage, in terms of both species and abundance. Given the potential of the Site to support breeding birds, mitigation, as per 3.4 below, is required to safeguard breeding birds and reduce the likelihood of legal offences during construction.

² Arcus (2020) *2020 Breeding Season Ornithology Report*, Sofia Cable Route, Innogy Renewables UK Limited

3 Mitigation

Mitigation was presented in the 2014 DCO ES to address potentially significant adverse effects and reduce the likelihood of legal offences. The following mitigation is consistent with the 2014 DCO ES and will be implemented in fulfilment of the corresponding DCO Requirements for each stage.

3.1 Habitats

- The working areas will be clearly marked out to prevent any unnecessary damage or disturbance to land outside the Development footprint. This will also help to safeguard other ecological features (e.g. nesting birds); and
- Following commissioning, habitats will be reinstated as soon as possible. Woodland will be replanted with native, regionally appropriate, canopy and understory species-rich planting of local provenance.

3.2 Bats

- Low pressure sodium lamps (instead of mercury or metal halide lamps) should be used for night-time lighting. The lighting should be directional and spill minimised through the use of hoods, cowls, louvres or shields. Ideally, movement sensors will be used to reduce the overall duration that lighting is on each night.

3.3 Badger

- A walkover survey will be undertaken by an ecologist within 50 m of all construction areas to ensure that no new badger setts have been constructed prior to works beginning;
- Should a badger sett be identified, appropriate mitigation (e.g. licensing) would be implemented prior to works commencing; and
- A means of escape (e.g. plank of wood) will be provided in any excavations left open overnight.

3.4 Breeding Birds

- Ideally, any vegetation clearance will be undertaken outside the breeding bird season (early March to end of August inclusive, with seasonal variation). If this is not possible, a suitably qualified ecologist or ornithologist will check the area prior to clearance for active nests;
- Should an active nest be found during construction, works will cease immediately and a minimum exclusion zone of 10 m will be set up around the nest until the young have fledged;
- If the bird is a Schedule 1 species (not anticipated since none have been recorded during surveys), then work will cease and Natural England consulted with regard to an appropriate course of action to avoid disturbance to this species; and
- Ensure construction plant and traffic activity is kept to designated access road to avoid disturbance to ground nesting birds.

4 Conclusion

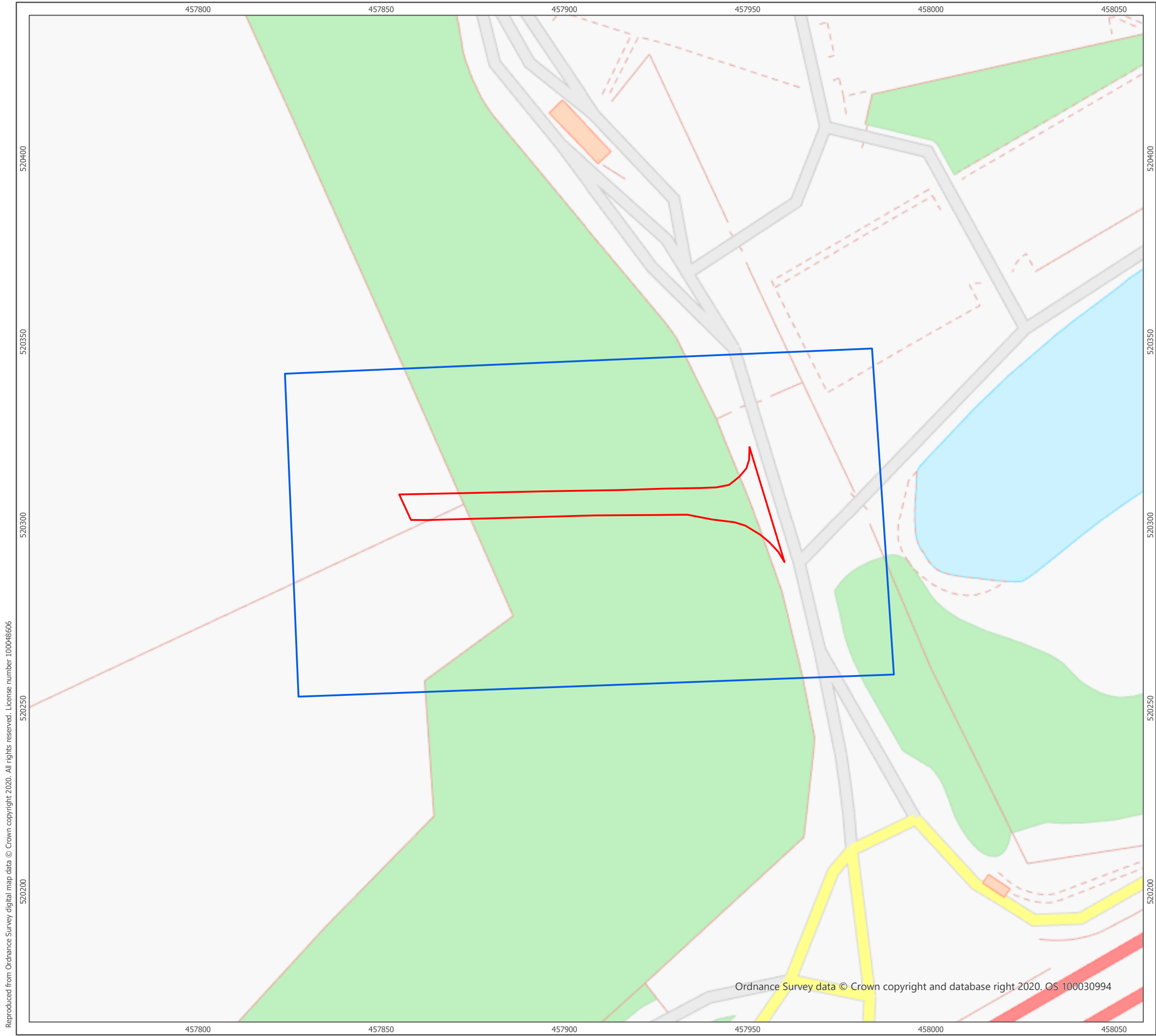
Several ecological features have the potential to be negatively affected by the Development in the absence of mitigation, although none of these effects are considered to be significant. These features include habitats, bats, badger and breeding birds. Mitigation measures have been recommended to reduce the limited ecological effects and to reduce the likelihood of legal offences, in line with standard good practice for safeguarding ecological features during construction. The reinstatement of woodland with native canopy and understorey species has the potential to provide a net gain in the ecological value of the woodland and to benefit birds, bats and badger.

Appendix A. Figures

Figure 1 – Temporary OCS Access Road Location

Figure 2 – Temporary OCS Access Road Phase 1 Map

Figure 3 – Temporary OCS Access Waterbodies within 500 m



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- OCS Access Ecological Survey Area
- Temporary OCS Access Road

1:1,000 Scale @ A3
0 10 20 m

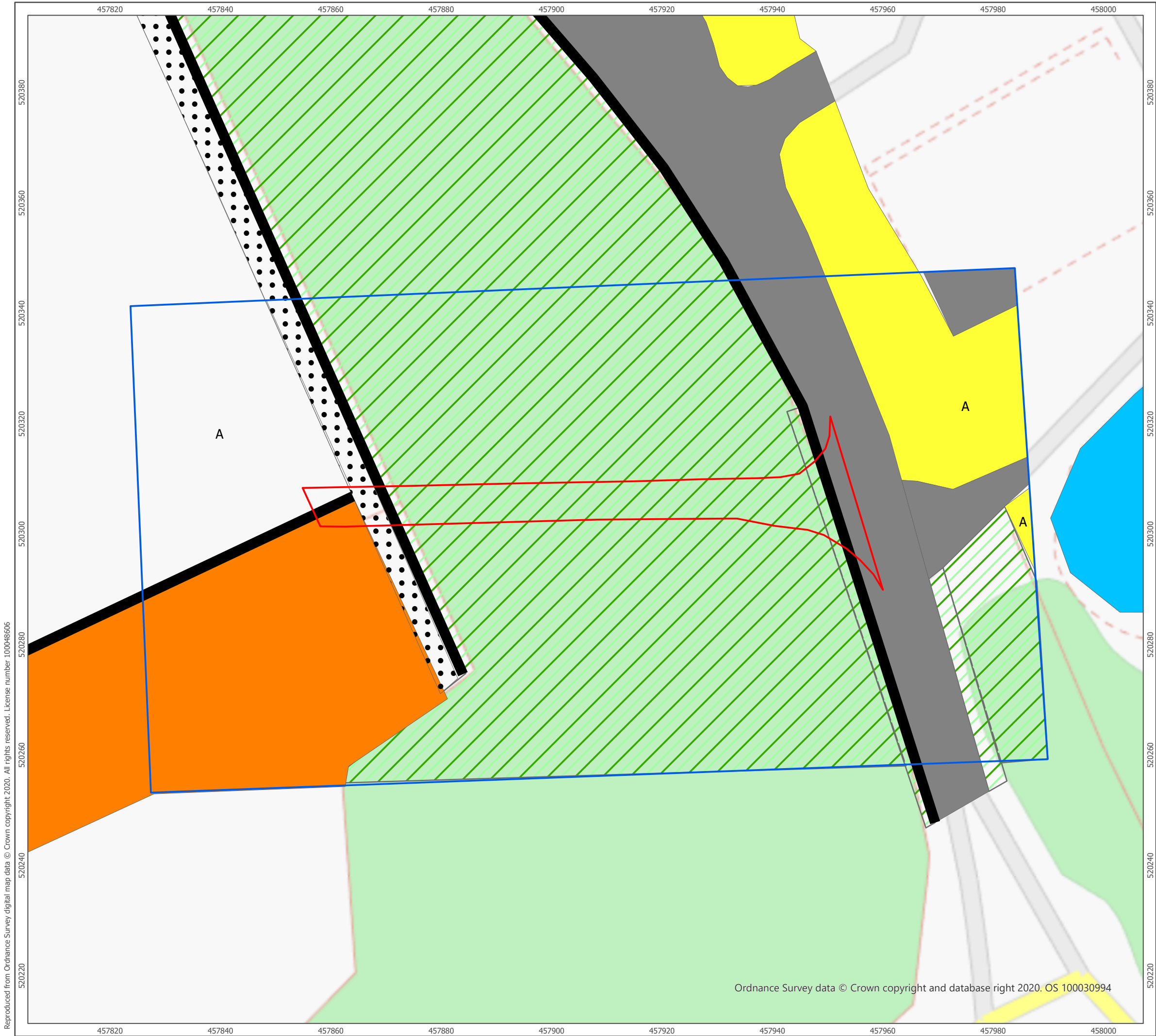


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Temporary OCS Access Road Location
Figure 1

Dogger Bank C and Sofia Onshore
Converter Stations Access Road
Ecological Report



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- OCS Access Ecological Survey Area
- Temporary OCS Access Road
- Fence
- Mixed woodland - plantation
- Neutral grassland - semi-improved
- Standing water
- Cultivated/disturbed land - arable
- Cultivated/disturbed land - amenity grassland
- Built-up areas
- Bare ground

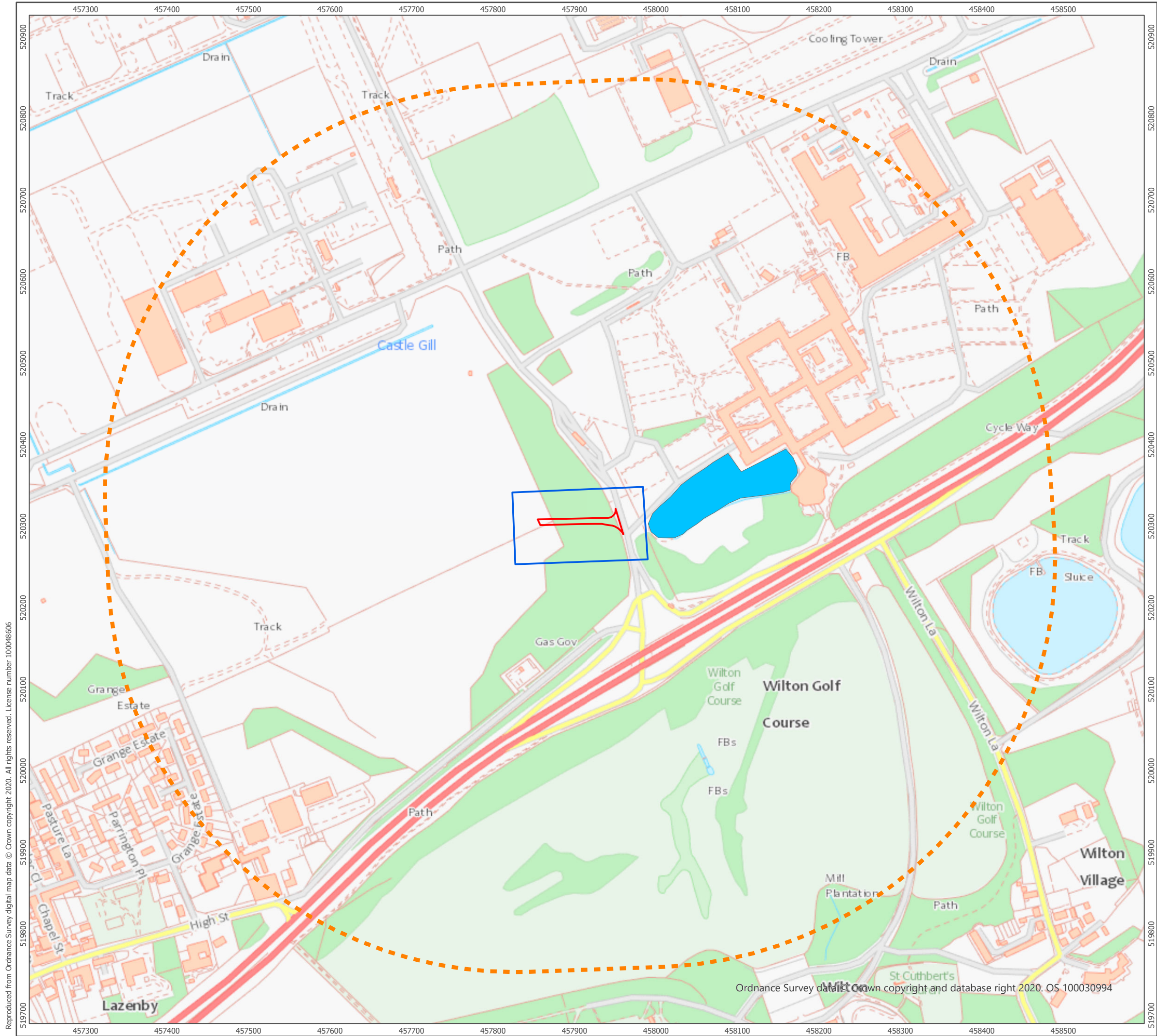
1:665 Scale @ A3
0 10 20 m



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**Temporary OCS Access Road
Phase 1 Map
Figure 2**

**Dogger Bank C and Sofia Onshore
Converter Stations Access Road
Ecological Report**



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- 500 m Buffer (Survey Area)
- OCS Access Ecological Survey Area
- Temporary OCS Access Road
- Standing water

1:4,500 Scale @ A3
0 80 160 m
NORTH

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Temporary OCS Access Road Waterbodies within 500m
Figure 3

Dogger Bank C and Sofia Onshore Converter Stations Access Road Ecological Report

Appendix B. Survey Methodologies

Extended Phase 1 Habitat Survey

Phase 1 habitat survey is a standard method for classifying and mapping British habitats. The aim of this survey was to identify potential ecological constraints to inform the design and planning process. The survey was carried out following the Guidelines for Preliminary Ecological Appraisal³, with an assessment of habitat suitability for protected species, including mammals, nesting birds and herptiles (amphibians and reptiles).

Badger Survey

As part of the Extended Phase 1 Habitat Survey, a thorough inspection of the Ecology Survey Area and surrounding habitat within 250 m, where access was possible, was carried out. Particular attention was paid to dense areas of vegetation to check for evidence of badger activity, including:

- Presence of holes with evidence of badger, such as footprints, discarded hair, etc.;
- Presence of dung pits and latrines;
- Presence of well-used runs with subsidiary evidence of badger activity; and
- Presence of other indications of badger activity, such as signs of foraging and footprints.

Badger setts are classified in accordance with the following scheme⁴:

- **Main** – normally the focal sett for a badger social group. Generally occupied continuously, main setts usually have several active holes with radiating tracks, latrines and other signs of activity. The actual number of holes can vary greatly, depending on social group size and soil conditions.
- **Annexe** – a secondary sett, close to the main sett. It will normally be connected to the main sett with very obvious tracks. Annexes may not be occupied constantly, even when the main sett is very active.
- **Subsidiary** – occurring at a greater distance from the main sett and not as clearly linked to it as an annexe. These setts will fall clearly within the territory of a social group and may be seasonally used by badgers.
- **Outlier** – less frequently used, these setts may be colonised by other species when not in use by badgers. Outliers may represent a temporary sett, or a habitation for migrating individuals, or those excluded from a social group.

In addition to classifying each sett, the number of holes was counted and their status recorded using the following criteria:

- **Well-used** – being clear of any debris or vegetation, are obviously in regular use and may or may not have been excavated recently.
- **Partially-used** – not in regular use and have debris such as leaves and twigs in the entrance, or have moss and/or other plants growing in or around the entrance. Partially-used holes could be in regular use after a minimal amount of clearance.
- **Disused** – not been in use for some time, are partially or completely blocked and could not be used without a considerable amount of clearance. If the hole has been disused for some time, all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap, which may be covered in moss or other vegetation.

Preliminary Daytime Bat Assessment

During the Extended Phase 1 Habitat Survey, a preliminary assessment of the potential of on-site features to support bat roosts and/or provide suitable commuting or foraging habitat was conducted. The bat assessment work and

³ CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

⁴ Harris, S., Cresswell, P. and Jefferies, D. (1991) *Surveying Badgers*, The Mammal Society, London.

recommendations followed guidelines produced by the Bat Conservation Trust (BCT)⁵. This initial bat assessment informs whether or not further surveys are required to assess the potential impact of the Development on bats. Features subject to assessment included the adjacent habitats, the grassland and individual trees. The individual trees were classified according to their 'Roost Suitability'. Trees were surveyed from ground level, utilising binoculars where appropriate. Trees were classified in line with the following scheme defined by the BCT:

- **Negligible** – Negligible habitat features on site likely to be used by roosting bats.
- **Low** – A tree of sufficient size and age to contain potential roosting features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.
- **Moderate** – A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type).
- **High** – A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Great Crested Newt Surveys

Habitat Suitability Index (HSI) Assessment

During the Extended Phase 1 Habitat Survey, a Habitat Suitability Index (HSI) assessment was carried out on waterbodies (where accessible) within 500 m of the Site. This was undertaken by a suitably qualified, GCN licenced ecologist and following a method based on Oldham R.S *et al* 2000⁶. It is used by surveyors to demonstrate whether or not a pond is suitable for great crested newts (*Triturus cristatus*) (GCN) and requires detailed survey. The HSI considers all the features which are valued by newts; e.g., the size of the pond, the extent of shading, the abundance of aquatic plants, the presence of fish and the quality of surrounding habitat. A low suitability/HSI score does not necessarily preclude further surveys, however, in general, ponds with a high HSI score are more likely to support GCN than those with lower scores. Pond suitability for GCN is classified according to the scale shown in Table 1.

Table 1: HSI scores and GCN pond suitability

HSI score	Pond suitability
< 0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
> 0.8	Excellent

⁵ Collins. J. (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London. ISBN- 13 978-1-872745-96-1

⁶ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143–155.