

North London Reinforcement Project

Requirement 12: Stage 5 (f) – Ecological Management Strategy

National Grid
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October 2025

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1 INTRODUCTION

1.1 This document

- 1.1.1 This document comprises an Ecological Management Strategy for Stage 5f of the authorised development as part of the North London Reinforcement Project ('the Project') as required by Schedule 2, Requirement 12 of The National Grid (North London Reinforcement) Development Consent Order 2014 ('the DCO').
- 1.1.2 Requirement 12 of the DCO is as follows:
- 1.1.3 *"(1) No stage of the authorised development shall commence until a written ecological management strategy applicable to that stage, reflecting the ecological measures included in the environmental measures document, has after consultation with the Environment Agency, Natural England and, where it refers to any land within the boundary of the Lee Valley Regional Park, Lee Valley Regional Park Authority, been submitted to and approved by the relevant planning authority.*
- (2) Each ecological management strategy prepared in accordance with requirement 12(1) shall include an implementation timetable and must be carried out as approved unless otherwise agreed with the relevant planning authority."*
- 1.1.4 Consultation with Environment Agency, Natural England, Lee Valley Regional Park Authority and Epping Forest District Council was completed prior to the submission of this document.

1.2 Overview of the Project

- 1.2.1 The DCO was made by the Secretary of State for Energy and Climate Change for the Project on 16 April 2014 and came into force on 7 May 2014. The DCO provides powers to National Grid to carry out the Project, which comprises of the replacement of the existing 275kV overhead line (OHL) with a 400kV OHL from Waltham Cross substation in Epping Forest, through Enfield, and then to Tottenham substation in Haringey. The DCO also contains powers to carry out associated works to the substations at Waltham Cross, Brimsdown and Tottenham.
- 1.2.2 The Project falls within the administrative boundaries of, Epping Forest District Council, Enfield Council, the London Borough of Waltham Forest, and the London Borough of Haringey. The Project is also within the administrative boundaries of the Greater London Authority and Essex County Council, though these are not relevant planning authorities in relation to the Project.
- 1.2.3 The Project includes the following elements:
- Existing 275kV route uprating to 400kV for 14km from the Waltham Cross substation to Tottenham substation. This would comprise of:
 - The existing 275kV conductor cables (wires) to be removed and replaced (i.e. reconducted) with 400kV wires. This would use the existing pylons.

- An extension to the Waltham Cross substation to provide a new 400kV Gas Insulated Switchgear (GIS) substation and associated OHL entry modifications.
- The replacement of two 275/132 kV Super Grid Transformers (SGTs) at Brimsdown with two new 400/132kV SGTs, located both inside and partially outside the existing Brimsdown substation boundary, with underground cable connections between these new SGTs and the existing substation.
- Works to bypass Tottenham substation, including the construction of a new pylon (VC1R) and cable sealing end (CSE) compound south of the Tottenham substation, and the removal of the existing VC1 pylon.
- Associated works, for example, temporary access roads, highway works temporary construction compounds, scaffolds, work sites and ancillary works.

1.3 Stage 5f overview

- 1.3.1 A written scheme of stages (required by schedule 2, Requirement 3 of the DCO) was submitted to the following authorities:
- 1.3.2 Epping Forest District Council
- 1.3.3 London Borough of Waltham Forest
- 1.3.4 London Borough of Haringey
- 1.3.5 London Borough of Enfield
- 1.3.6 The written scheme of stages sets out the works that form part of stage 5. It is split into sub-stages which include stage 5a, 5b, 5c, 5d, 5e and 5f.
- 1.3.7 The proposed works at stage 5f of the Project are limited to:
- 1.3.8 Uprating of the existing ZBC overhead electric line to pylon ZBC43 from 275 kilovolts (kV) to 400kV including—
- (a) uprating the existing phase conductors, insulators and fittings;
 - (b) steel work replacement; and
 - (c) replacing existing earthwire.
- 1.3.9 The proposed works for stage 5f are within the administrative boundary of the London Borough of Haringey, therefore this Ecological Management Strategy will be submitted to them as the relevant authority.
- 1.3.10 DCO Work Plans and associated Access/Rights of Way Plans have also been provided as part of this application.
- 1.3.11 Early vegetation clearance will commence prior to February 2026.

1.4 Consultation

- 1.4.1 All comments received on the draft version of the document, including how these have been taken into consideration are set out in Table 1.

Table 1: Comments received from the relevant planning authorities on the draft document

Comment Theme	Comment	National Grid Response
Consultation with Lee Valley Regional Park Authority (LVRPA)	No comment received.	N/A
Consultation with Natural England	No comment received.	N/A

2 REQUIREMENTS CONTEXT

2.1 References to this document within existing DCO documents

- 2.1.1 The Ecological Measures included in the Environmental Measures document (National Grid, 2013) for DCO requirement 12 which are relevant to Stage 5f are provided in Table 2 below.

Table 2: Ecological measures to be included in this Ecological Management Strategy

Ecological measures from the Environmental Measures document for DCO Requirement 12	Relevant to Stage 5f
Vegetation removal/site preparation will account for reptiles and, if appropriate, reptiles will be removed and/or excluded from working areas in situation where it is likely that they could be killed or injured by the works.	A two-stage vegetation clearance will be carried out in accordance with a Precautionary Method of Working (PMoW), incorporating sensitive techniques such as hand searching by a suitably qualified ecologist and the delivery of toolbox talk to site operatives to ensure awareness and compliance with reptile legislation.
Provision of 40 bird boxes erected in suitable locations in the Lee Valley Country Park. In woodland close to ZBC 19 and within Tottenham Marshes.	The type and location of bird boxes will be determined post-construction and agreed with LVRPA to target any local species of conservation concern.

Ecological measures from the Environmental Measures document for DCO Requirement 12	Relevant to Stage 5f
Control of invasive species, e.g. Japanese knotweed, Himalayan balsam and giant hogweed (within and up to 50m outside working areas).	Removals will be undertaken by manual removal like digging or chemical treatment via stem injection.
Removal of vegetation from working areas to be undertaken outside of the bird breeding season (mid-March to end-July). Where this is not possible, vegetation clearance will be undertaken under the supervision of a suitably qualified ecologist. If any active nests are found within the vegetation to be cleared, clearance works will be delayed until the young have fledged.	Vegetation clearance will take place prior to February 2026. An Ecological Clerk of Works will be present on site during the vegetation clearance.
Further targeted surveys will be completed prior to the works for bats, badger, otter and water vole, together with surveys of birds breeding on pylons.	Relevant surveys for Stage 5f have been undertaken across the 2025 survey season, including a ground level tree assessment for bat roosts, badger walkover for presence of setts, searches for signs and evidence of otter and water vole and the presence of invasive species. In addition, ongoing breeding bird monitoring has been undertaken to inform advice on mitigation and licencing, if required.
Biodiversity enhancements will be provided elsewhere in the Local Wildlife Site (LWS) and LVRP which will increase the quality of the site for visitors (see chapter 9 of the Environmental Statement).	Any ecological enhancements may include habitat creation, improved management, and increased ecological connectivity, all designed to benefit local wildlife and public amenity. All measures will be agreed with the LVRPA.
Biodiversity enhancements will be provided elsewhere in the Site of Metropolitan Importance for Nature Conservation (SMINC) will increase the	Any ecological enhancements may include habitat creation, improved management, and increased ecological connectivity, all designed to benefit local

Ecological measures from the Environmental Measures document for DCO Requirement 12	Relevant to Stage 5f
quality of the site for visitors (see chapter 9 of the Environmental Statement).	wildlife and public amenity. All measures will be agreed with the LVRPA.
The majority of the Site of Borough Importance for Nature Conservation (SBINC) will be restored once construction is complete (see chapter 9 of the Environmental Statement).	All measures will be agreed with the LVRPA and / or local authority.

3 ECOLOGICAL MANAGEMENT STRATEGY

3.1 Purpose of this document

- 3.1.1 This document has been prepared to discharge requirement 12 of the DCO in respect of Stage 5f of the Project.

3.2 Background

- 3.2.1 An Environmental Statement (ES) and a Habitat Regulations Assessment (HRA) was produced for the DCO application and should be referred to alongside this EMS.

3.3 Current Site Conditions

- 3.3.1 A UK Habitat Classification (UKHab) survey was undertaken in August 2025, to map habitats at the footprint of the pylon (ZBC043) and within 100m.
- 3.3.2 The habitats within 100m of the pylon have been mapped and are shown in **Figure 1**. The proposed vegetation clearance areas are shown in **Figure 2**.
- 3.3.3 An assessment was also made of the Site to support legally protected species, as detailed below:

Tower	Site Conditions
ZBC 043	Bats The survey did not record any trees with suitable PRFs. The trees did not present any knot holes, splits or other crevices that may be considered suitable to support individual or groups of bats, and as such were scoped out of the assessment. All trees were inspected from ground level only. No trees adjacent to the towers or access routes have been scoped in for further assessment. The habitats adjacent to the tower (e.g. Pymmes Brook river corridor and woodland edge) have potential to support commuting and foraging bats. Badger There is negligible potential for sett building below tower base. Low potential for foraging and commuting badgers. Surveys to date have found no evidence of badgers within ~30m. Breeding birds (including Schedule 1 bird species) Schedule 1 species: Suitable habitat for nesting Cetti's warbler close to tower base (within 20m) though none have been recorded to date. Non-Schedule 1 bird species: habitats adjacent have the potential to support a variety of breeding birds, e.g. the woodland along Pymmes Brook river corridor. Great crested newts There are no ponds within 250m of the tower or proposed access that are connected by suitable habitat with the tower and working area. GCN can be scoped out of the assessment. Dormouse No records of dormice within 1km. The woodland habitat adjacent, although only of low suitability is small in area and only connected to other habitat within Tottenham Marshes, which also offers limited opportunities for this species. Dormouse can be scoped out of the assessment. Otter and water vole The watercourse (Pymmes Brook) on Site is a deeply canalised watercourse with steep concrete sides and base, which makes it largely unsuitable for use by otter and water vole. The terrestrial habitats present on Site are of some limited suitability to support commuting and resting otter in the form of tree and scrub habitats, however no evidence has been recorded to date on any previous site visits. As such, it is considered that otter and water vole are absent from the Site. Reptiles The adjacent woodland as well as the scrub and grassland habitats associated with Tottenham Marshes are suitable for common and widespread reptiles e.g. grass snake. However, the base of the tower and access routes have negligible potential to support reptiles, due to the habitats present i.e. hardstanding. Invasive non-native species INNS have not been recorded at this location to date.

3.4 Ecological Management Strategy

- 3.4.1 The Ecological Management Strategy below applicable to Stage 5f. This reflects specific ecological measures included in the wider environmental measures document to mitigate effects of the proposed works on the ecological features on Site.

Mitigation of effects

Habitats adjacent to the Site

- 3.4.2 The Site boundary must be clearly de-lined from the adjacent habitats and the contractors must be fully aware of the Site boundary, ensuring that all works are contained within the development footprint. Under no circumstances will the surrounding habitats be disturbed or impacted by the works to prevent a contravention of the legislation.

- 3.4.3 All vehicles/machines must be stored within the agreed works area.

Bats

- 3.4.4 No trees with potential to support roosting bats have been identified as requiring removal. The trees did not present any knot holes, splits or other crevices that may be considered suitable to support individual or groups of bats, and as such were scoped out of the assessment.
- 3.4.5 If the scope of works changes, and trees with features considered suitable to support roosting bats require removal, topping, siding or trimming, further assessment, mitigation and / or licencing may be required before the proposed works can be undertaken.
- 3.4.6 However, habitats within the Site boundary, and adjacent to the Site boundary are identified as having potential to support foraging and commuting bats. No works are to be undertaken between the hours of sunset and sunrise to avoid direct impacts to bats during the course of the works.
- 3.4.7 Should security lighting be required on Site overnight during the construction and operational phases of the proposed yard, a sensitive lighting strategy will be designed by a lighting specialist to take into account nocturnal species, including bats, taking into account principals as outlined in Guidance Note 8 Bats and Artificial Lighting.

Badger

- 3.4.8 No surveys to date have confirmed the presence of badgers or their setts on Site. As such, no mitigation measures are proposed for badger.

Breeding birds

- 3.4.9 Habitats adjacent to the tower are considered suitable to support common and widespread breeding bird species. There is also suitable habitat for nesting Cetti's warbler close to the tower base (within 20m), although this species has not been recorded here to date.
- 3.4.10 Should any additional areas of woodland / scrub be required, this will be completed as far as possible outside the breeding bird season (March – August (inclusive)). If this is not possible, any areas of habitat requiring clearance will be

subject to a pre-works check by a suitably qualified ecologist. If a nest is identified, it will be subject to a period of monitoring to determine if it is active. If deemed active, the supervising ecologist will implement a minimum of a 2m buffer around the nest to ensure it is retained in-situ until any eggs have hatched and any young have fledged, or until such time as the nest is deemed to have failed, as assessed by a qualified ecologist.

Otter and water vole

- 3.4.11 The Pymmes Brook watercourse is located adjacent to the Site boundary. However, this aquatic habitat is not suitable to support otter and water vole, due to the heavily canalised and modified appearance of this water course i.e. steep concrete sides and base and lack of vegetation cover. As such, no mitigation measures are proposed for otter or water vole.

Reptiles and great crested newts

- 3.4.12 The habitats beneath the base of the tower and access routes are not suitable for reptiles. As such, no mitigation measures are proposed for reptiles and great crested newts.

Invasive non-native species

- 3.4.13 It is illegal to cause an invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) to grow or live in the wild.
- 3.4.14 It is strongly recommended that an invasive species specialist is consulted in relation to the removal of any Japanese Knotweed, as simple vegetation removal practices could potentially lead the spread of this species, resulting in a breach of biosecurity. Any vegetated areas near to tower ZBC043 should be checked for invasive species prior to any proposed works.
- 3.4.15 Biosecurity measures and a robust sediment management plan should be implemented during any construction works on Site or near to the watercourse (Pymmes Brook) adjacent to Site. The Site should be checked for any invasive plant species prior to construction works, and any found should be disposed of appropriately.