



ECOLOGICAL ADVICE SERVICE

TO: Rebecca Harrison

FROM: Emma England

DATE: 21 November 2024

SUBJECT: 20231313 / Eastcourt Marshes Electricity Distribution Site, Gravesend

The following is provided by Kent County Council's Ecological Advice Service (KCC EAS) for Local Planning Authorities. It is independent, professional advice and is not a comment/position on the application from the county council. It is intended to advise the relevant planning officer(s) on the potential ecological impacts of the planning application and if sufficient/appropriate ecological information has been provided.

Any additional information, queries or comments on this advice that the applicant or other interested parties may have must be directed in every instance to the planning officer, who will seek input from the EAS where appropriate and necessary.

SUMMARY

We have reviewed the additional ecological information submitted in support of this application (not yet available on the public register) and advise that sufficient ecological information has been provided.

Under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 and paragraphs 180 and 186 of the National Planning Policy Framework (NPPF) 2023, biodiversity should be maintained and enhanced through the planning system. Enhancement refers to providing net benefits for biodiversity over and above requirements for avoidance, mitigation and compensation. As such, if planning permission is granted, we advise the conditions below are included.

Construction Ecological Management Plan

We suggest that the below wording is included as a condition for a Construction Ecological Management Plan (CEMP – biodiversity) if planning permission is granted. This will mitigate for impacts to biodiversity and help ensure compliance with relevant legislation.

We advise that the below suggested wording does not cover all aspects usually covered within a Construction Environmental Management Plan (CEMP) (such as pollution control, noise, lighting etc. during construction). Therefore, this wording should either form part of

any larger CEMP / Construction Management Plan (CMP) condition required or should form a separate stand-alone condition for a Biodiversity Method Statement.

Suggested Condition Wording:

No development shall be undertaken (including any site/vegetation clearance) before a construction ecological management plan (CEMP - biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP - biodiversity shall be based on the avoidance, mitigation and compensation measures indicated within the ecological information submitted with the planning application. The CEMP – biodiversity shall include the following:

- *Risk assessment of potentially damaging construction activities;*
- *The identification of biodiversity protection zones and the use of protective fences, exclusion barriers and warning signs. This shall include a suitable buffer zone(s) (as set out by a suitably qualified ecologist) for relevant protected and priority species;*
- *Extent and location of proposed works shown on appropriate scale maps and plans for all relevant species and habitats;*
- *Practical measures (both physical measures and sensitive working practises) to avoid or reduce impacts during construction (may be provided as a set of species or habitat-specific method statements);*
- *The location and timing of sensitive works to avoid harm to biodiversity features;*
- *Timetable for implementation, demonstrating that works are aligned with the proposed phasing of construction;*
- *The times during construction when specialist ecologists need to be present on site to oversee works;*
- *Reference to or inclusion of a minimum 10-year Japanese knotweed management and removals plan;*
- *Details of any necessary protected species licences or reference to other relevant documents as required (e.g., Arboricultural Method Statement/ updated species survey reports/ecological design strategy);*
- *Responsible persons and lines of communication; and*
- *The role and responsibilities on site of an ecological clerk of works (ECow) or similarly competent person.*

The approved CEMP - biodiversity will be adhered to and implemented throughout the construction period (and beyond if required) in accordance with the approved details.

Ecological Design Strategy

No development shall be undertaken (including any site/vegetation clearance) before an Ecological Design Strategy (EDS) has been submitted to and approved in writing by, the local planning authority. The EDS shall ensure that on-site compensatory habitat is provided for relevant protected and priority species (as determined by a suitably qualified ecologist). The EDS shall ensure that both on and off-site compensatory habitat is provided for the projected permanent and temporary loss of reptile habitat (as identified in the AECOM Technical Note: Response to Ecological Points Raised in KCC Advice to Gravesham BC Dated 27th February 2024 (24th July 2024 Rev02). The EDS shall ensure the mitigation and compensation measures with regards to habitat improvements proposed, and the area of land required, are based on available scientific research and government standing advice. If the proposed compensation site already has an existing population of the relevant species and/or is already proposed as compensation for other

development, evidence shall be provided to demonstrate that the measures proposed are additional. The EDS shall include the following:

- Up-to-date survey data carried out in accordance with best practice for the both the development site and the proposed off-site compensation site(s);
- Purpose and conservation objectives for the proposed works;
- Review of site potential and constraints;
- Description and evaluation of features to be managed;
- Detailed design(s) and/or working method(s) to achieve stated objectives. This shall include a detailed methodology for the movement of reptiles and measures to prevent reptiles returning to the site prior to and during the development. This shall also include details of how any receptor sites will be enhanced and be in a suitable condition to support the likely number of animals which will be moved, prior to any animals being moved, and details of the management of the compensation site(s) in perpetuity.
- Full details of soft landscape works, to include species, size and location of new habitats (e.g., trees, shrubs, hedges and grassed areas to be planted) with the extent and location/area of proposed works shown on appropriate scaled maps and plans;
- Full details of the proposed ecological features. For habitat boxes details shall include numbers, make and model, locations to include height, aspect and mounting location shown on scaled landscaping plans suitable for construction. For log piles and hibernacula details shall include materials, size, shape and construction methodology. Locations shall be shown on scaled landscaping plans suitable for construction;
- Extent and location/area of proposed works on appropriate scale maps and plans;
- Full details of the extent of appropriate buffers (as set out by a suitably qualified ecologist) for protected and priority species;
- Type and source of materials to be used where appropriate, e.g. native species of local provenance;
- Timetable for implementation demonstrating that works are aligned with the proposed phasing of development;
- Details of the body or organisation(s) responsible for implementing the EDS and the mechanisms for securing the mitigation/compensation land and its management for the lifetime of the development;
- Details of initial aftercare and appropriate management prescriptions for relevant protected and priority species and habitats (as identified by a suitably qualified ecologist and in accordance with information submitted as part of the application) for the lifetime of the development within a Landscape and Ecological Management Plan;
- Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period);
- Details for monitoring (to be undertaken by a suitably qualified ecologist(s)) and remedial measures.

The EDS shall be implemented in accordance with the approved details. All features shall be retained as approved thereafter, unless remedial measures are required. Approval for any remedial measures shall be sought from the local planning authority in writing and thereafter implemented as approved.

Wildlife Sensitive Lighting

Prior to operation of the development, a lighting design plan for biodiversity shall be submitted to and approved in writing by the local planning authority. The plan shall include the following:

- *The identification of areas/features on-site where disturbance could occur to bat and invertebrate roosting/nesting/sheltering sites and/or foraging/commuting routes;*
- *The provision of an appropriate plan(s) to show how and where external lighting will be installed;*
- *The provision of technical specifications for the external lighting;*
- *The provision of lighting contour plans to show expected lux levels, so that it can be clearly demonstrated that areas to be lit will not disturb bat/invertebrate activity.*

All external lighting shall be installed prior to first operation of the development in accordance with the specifications and locations set out in the plan, and these shall be maintained thereafter in accordance with the plan.

Detailed comments and explanation for the suggested conditions are provided below.

Detailed Comments

Reptiles

Reptiles are protected through the Wildlife and Countryside Act 1981 (as amended). All British reptiles are also [listed as rare and most threatened species](#) under Section 41 of the Natural Environment and Rural Communities Act (2006) and local planning authorities are required to have regard for the conservation of Section 41 species as part of planning decisions under their [biodiversity duty](#).

We note that the project ecologists indicate that 1.1 ha of moderate quality reptile habitat will be retained, protected and enhanced during construction. There will be a permanent loss of 2.6ha of reptile habitat in 2024/2025 (1.2 ha of moderate quality) and a further 3.2 ha of reptile habitat (of which 2.6 ha has been assessed to be of moderate quality by the project ecologists) temporarily lost due to the works to the overhead line in 2028. The temporary habitat clearance is expected to take around 12 weeks to complete, and the project ecologists indicate the habitat will return to its original condition within 6-24 months. Together this habitat loss could have a profound impact on the reptile population on-site in the short to medium term as a minimum.

The applicant has now provided proposals for an on and off-site reptile mitigation strategy. ~0.56 ha of largely unsuitable reptile habitat has been proposed for improvement, and ~0.78ha of suitable reptile habitat enhanced off-site. This totals ~1.34 ha of land. This falls short of the 2.6 ha of reptile habitat to be lost permanently and 3.2 ha to be temporarily lost. We understand that not all of the habitat to be lost permanently or temporarily is optimal for use by reptiles. If the 0.6 ha of less suitable habitat to be temporarily lost is improved in the long-term to benefit reptiles, then 1.94 ha of land will have been created or improved as compensation for the loss of reptile habitat. This is still short of the 2.6 habitat to be permanently lost, although greater than the estimated 1.2 ha of moderate quality habitat to be permanently lost. Based on the rough estimates of habitats to be lost, created and improved, we consider that sufficient information is available to conclude that over the long-term, the local reptile population can be safeguarded. A detailed reptile mitigation strategy should be secured by condition if planning permission is granted. This strategy

can be included within a wider ecological design strategy to ensure a holistic approach to protected and priority species mitigation and compensation.

Non-statutory Designated Sites and Biodiversity Net Gain

Local Wildlife Sites (LWSs) are important for the conservation of wildlife at the county level. These are non-statutory designations which are generally recognised by local authorities and given weight and protection by inclusion in development plan policies in accordance with paragraphs 181 and 185 of the National Planning Policy Framework (NPPF) 2023.

Proposals lie within the Canal and Grazing Marsh, Higham Local Wildlife Site (LWS). This LWS has been designated for its managed and unmanaged grazing marsh, dykes, sea wall, salt marsh and a long stretch of the Thames and Medway Canal. The site lies adjacent to the South Thames Estuary & Marshes Site of Special Scientific Interest (SSSI) and adds to the overall importance of this stretch of the North-West Kent Marshes.

The NPPF 2023 states under paragraph 180 that: *“Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);...d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”*.

Where applicants choose to provide a quantitative assessment of biodiversity net gain, but are not required to under legislation, appeal decisions¹ have clarified that:

- *“Paragraph 174 [now 180] of the Framework [the NPPF encourages applicants to], ... seek a net gain in biodiversity without identifying a specific percentage...”*
- The relevant Core Strategy may *“...seek a net gain in biodiversity without identifying a specific percentage...”*; and
- *“A net gain of just 1% would be policy compliant....”*

Therefore, in line with planning policy, the aim would be to achieve simply a biodiversity net gain, with no specific % target, in line with the NPPF. We acknowledge that the applicant has internal policies for at least a 10% biodiversity net gain.

Gravesham Borough Council's Local Plan states within Policy CS12: Green Infrastructure:

“5.7.23 Sites designated for their biodiversity value will be protected, with the highest level of protection given to internationally designated Special Protection Areas, Special Areas of Conservation and Ramsar sites, followed by nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and then by other areas of more local importance for biodiversity.

5.7.24 There will be no net loss of biodiversity in the Borough, and opportunities to

¹ Planning Inspectorate (2022). Appeal Decisions APP/Y3940/W/21/3278256, APP/Y3940/Q/21/3278923, APP/Y3940/W/21/3282365

enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas shown on the Strategic Green Infrastructure Network map and within new development.

5.7.25 Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.”

Based on the current plans for the Site, the proposed development (including Tilbury), with habitat compensation at two off-site areas in Kent, is predicted to result in a biodiversity net gain of 11.88%.

We note that Policy CS12: Green Infrastructure indicates that *‘there will be no net loss of biodiversity in the Borough’*. The applicant has clarified that proposals meet this policy through off-site compensation at the Shorne Reedbeds within Gravesham Borough.

If planning permission for proposals is granted, the on-site biodiversity measures (including detailed soft landscaping plans), and off-site net gain site should be secured through planning obligation/condition. We can provide some suggested wording on request.

A detailed landscape and ecological management plan for both the on-site and off-site habitats should also be secured by a suitably worded condition/planning obligation if planning permission is granted to ensure that the proposed habitats can be effectively created and managed into the future. This Plan could be secured as part of a condition for an ecological design strategy if planning permission is granted to ensure a holistic approach to protected and priority species mitigation and compensation.

Water Voles

We are satisfied that effects on water vole can be adequately dealt with through conditions for a construction ecological management plan and ecological design strategy, attached to any granted planning permission.

Invertebrates and Birds

A number of invertebrate (hornet robberfly, shrill carder-bee; brown-banded carder-bee, and small heath butterfly) and bird species found at the Gravesend site,^{2,3} are listed under Section 41 of the Natural Environment and Rural Communities Act (2006) and local planning authorities are required to have regard for the conservation of Section 41 species as part of planning decisions under their [biodiversity duty](#)⁴. Paragraph 84 of the ODPM Circular 06/2005 states that “...*The potential effects of a development, on habitats or species listed as priorities... are capable of being a material consideration in the ... making of planning decisions*”.

² [Invertebrates: advice for making planning decisions - GOV.UK \(www.gov.uk\)](#)

³ [Wild birds: advice for making planning decisions - GOV.UK \(www.gov.uk\)](#)

⁴ [Complying with the biodiversity duty - GOV.UK \(www.gov.uk\)](#)

The applicant should take appropriate measures to avoid, mitigate and, as a last resort, compensate for any negative effects on Section 41 species in the development proposal, in accordance with relevant government standing advice.

Submitted information appears to indicate that there will be a permanent reduction in semi-natural habitats as a result of proposals. Submitted information indicates that in the long-term, taking into consideration mitigation and compensation measures, this is expected to result in a negligible effect on the invertebrate populations of District importance, and bird populations of District and Local importance. The comments from Buglife suggest that the project ecologists have undervalued the site's importance for invertebrates. Buglife stated in its comments dated 27th February 2024 that survey data available for the site has led to the site being incorporated into the Thames Estuary South Important Invertebrate Area (IIA). This indicates that the site is nationally^{5,6} important for its invertebrate assemblage, and linkages to the wider landscape, including South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI).

We note that Buglife has made the following comments: *"All the site ditches will be retained along with a 'minimum buffer of 5m'. As this is the only habitat to be retained on-site, Buglife would hope to see this buffer increased and ideally a phased approach to loss or modification of habitats rather than the whole area being cleared within a short time frame. It would also like to see a clear commitment to reinstating habitats as soon as possible after their initial disturbance"*.

Buglife has also indicated that commercial seed mixes should not be used at the site to avoid any potential negative effects on the nearby SSSI.

Under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 and paragraphs 180 and 186 of the National Planning Policy Framework (NPPF) 2023, biodiversity should be maintained and enhanced through the planning system. If planning permission is granted for the project, we recommend that conditions for a construction ecological management plan and ecological design strategy is included to ensure invertebrate and bird populations at the site are not only protected in the long-term, but also to ensure that the project is able to deliver net gains to the local invertebrate and bird populations.

Statutory Designated Sites, Bats, Badgers, Protected/Notable Plant Species, Japanese Knotweed, Marine Mammals, Veteran Tree

Following a review of the submitted information, we are satisfied that should planning permission be granted, that a detailed Construction Environmental Management Plan (CEMP) secured by condition, and including noise fencing around the construction site, will be sufficient to avoid and mitigate for impacts upon bats, badgers, protected/notable plant species, Japanese knotweed, marine mammals, veteran trees, the Thames Estuary and Marshes SSSI, SPA and Ramsar and the Medway Estuary and Marshes SPA and Ramsar during construction.

⁵ [IIAs-A0-poster_Royal-Entomological-Society-Conference-2023-.pdf \(buglife.org.uk\)](#)

⁶ [Lower Thames Crossing - Buglife](#)

Lighting and Biodiversity

We note that operational lighting has the potential to have adverse impacts upon biodiversity (e.g., bats and invertebrates). Local authorities have a duty to ensure impacts upon legally protected species are avoided and impacts upon bats are a material consideration in any planning permission under the NERC Act 2006 and through the NPPF 2023.

Therefore, to mitigate against potential adverse effects on biodiversity, the Bat Conservation Trust/Institute of Lighting Professional's 'Guidance Note 08/23 Bats and Artificial Lighting at Night'⁷ and Buglife's 'Bug-Friendly Lighting' advice⁸ should be consulted in the lighting design of the development.

We advise that the incorporation of sensitive lighting design for biodiversity is submitted to the local planning authority and secured via an attached condition with any planning permission. Dark buffer zones should be used to separate habitats or features from lighting. Where 'complete darkness' on a feature or buffer is required, we will consider this to be where illuminance is below 0.2 lux on the horizontal plane and below 0.4 lux on the vertical plane.

We note that the project ecologists have indicated that they consider that no dark buffer zones will be required for this development. We would disagree with this position. Although, the project ecologists have indicated that they do not consider the site of significant importance for bats, the site has been identified to be of national importance for invertebrates which can also be adversely affected by artificial lighting^{9,10}. Based on submitted information, achieving darkness throughout most of the site for most of the time seems very possible.

If you have any queries regarding our comments, please do not hesitate to get in touch.

Emma England
Biodiversity Officer

This response was submitted following consideration of the following documents:

AECOM (July 2024) Technical Note: response to ecological points raised in KCC advice to Gravesham BC dated 27th February 2024.

AECOM (July 2024) National Grid Cable Tunnel Replacement Project. Biodiversity Net Gain Assessment and Strategy Report (Revision 1).

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume IV. Chapter 15 Biodiversity – Gravesend.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Biodiversity Net Gain Assessment and Strategy Report.

⁷ ['Bats and Artificial Lighting at Night' ILP Guidance Note update released - News - Bat Conservation Trust](#)

⁸ [Buglife - Bug-friendly Lighting Sheet PROOF R2](#)

⁹ [Light Pollution - Buglife](#)

¹⁰ [Impact of artificial light on invertebrates Final_docx \(buglife.org.uk\)](#)

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.10 – Marine Assessment Screening.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.9 – National Vegetation Classification Survey Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.8 – Invertebrate Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.7 – Reptile Survey Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.6 – Badger Survey Report. CONFIDENTIAL.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.5 – Otter and Water Vole Survey Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.4 – Bat Survey Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.3 – Great Crested Newt eDNA Surveys.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.2 – Ornithological Baseline Report.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 7.1 – Preliminary Ecological Appraisal.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Outline Landscape and Ecological Management Plan.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Environmental Statement Volume VI. Appendix 3.1 – Outline Construction Environmental Management Plan.

AECOM (December 2023) National Grid Cable Tunnel Replacement Project. Report to inform Habitats Regulations Assessment.

Buglife (February 2024) By e-mail only. RE: Proposed construction of a new cable tunnel beneath the River Thames between Gravesend and Tilbury to provide additional transmission capacity. Above-ground infrastructure in the form of a new Cable Sealing End compound and a new head house building along with associated electricity infrastructure, access, parking, boundary treatment and two overhead gantry structures for future overhead lines. Temporary compound for the duration of the project to provide parking, staff welfare facilities, delivery vehicle parking, and equipment and machinery storage,

including boundary treatment and lighting. Eastcourt Marshes Electricity Distribution Site Mark Lane Gravesend Kent DA12 2HN.

McGregor, K (September 2024) NG Tunnel Application – biodiversity comments. Email dated Friday 20th September 2024 at 17:24. With three pdf attachments labelled Reptile Enhancement Strategy, Photos of Existing Reptile Habitats and BNG Clarification.

National Grid (October 2023) Gravesend Headhouse – Planning – Site Plan. PDD-100116-LAY-053 P03.

National Grid (January 2024) Gravesend Headhouse Compound Block Plan – Existing (Planning Drawing). PDD-100116-LAY-233 P01.

Natural England (February 2024) Planning Consultation: Proposed construction of a new cable tunnel beneath the River Thames between Gravesend and Tilbury to provide additional transmission capacity. Aboveground infrastructure in the form of a new Cable Sealing End compound and a new head house building along with associated electricity infrastructure, access, parking, boundary treatment and two overhead gantry structures for future overhead lines. Temporary compound for the duration of the project to provide parking, staff welfare facilities, delivery vehicle parking, and equipment and machinery storage, including boundary treatment and lighting. Location: Eastcourt Marshes Electricity Distribution Site , Mark Lane, Gravesend, Kent DA12 2HN.