



ECOLOGICAL IMPACT ASSESSMENT (ECIA)

UNIT K6, NORTHFLEET INDUSTRIAL ESTATE

NORTHFLEET, KENT

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1. SUMMARY

- S.1 This report details an Ecological Impact Assessment (EcIA) undertaken in respect of proposed development at Unit K6, Lower Road, Northfleet, Kent, DA11 9BL.
- S.2 Proposals include the extension of the existing warehouse to provide office space, and the construction of a multi-storey car park and the addition of two ground level parking spaces to the front of Unit K6.
- S.3 A PEA site visit was undertaken by Native Ecology on 28th November 2023.
- S.4 Habitats within the application site include a single industrial building on large areas of tarmac hard standing, with small areas of gravel with ruderal growth, and a small isolated parcel of bramble scrub.
- S.5 Mitigation, without the requirement for further survey work, is recommended for designated sites, roosting bats in trees, foraging and commuting bats and nesting birds (detailed within Appendix 5).
- S.6 Section 10 includes recommended appropriate biodiversity enhancement measures which could be included within development proposals.
- S.7 Appendix 1 gives an overview of relevant legislation, which should be read in conjunction with this report.
- S.8 Appendix 3 provides a Habitat Plan.
- S.9 Appendix 4 provides detailed Avoidance and Mitigation Measures.

2. INTRODUCTION

- 2.1 This report details an Ecological Impact Assessment (EcIA) undertaken in respect of proposed development at Unit K6, Lower Road, Northfleet, Kent, DA11 9BL. Site centred at (TQ 61410 75040).
- 2.2 Figure 1, Section 3 provides a site location plan (topographical survey plan).

COMMISSION

- 2.3 Native Ecology was commissioned by Hill-Wood & Co Ltd. in November 2023 to undertake an Ecological Walkover Survey and write the subsequent Ecological Impact Assessment (EcIA) report.

APPLICATION SITE

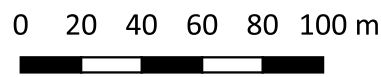
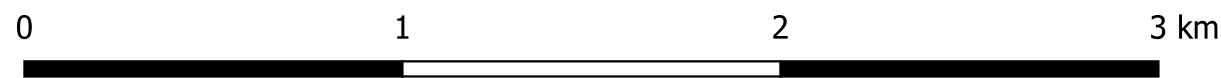
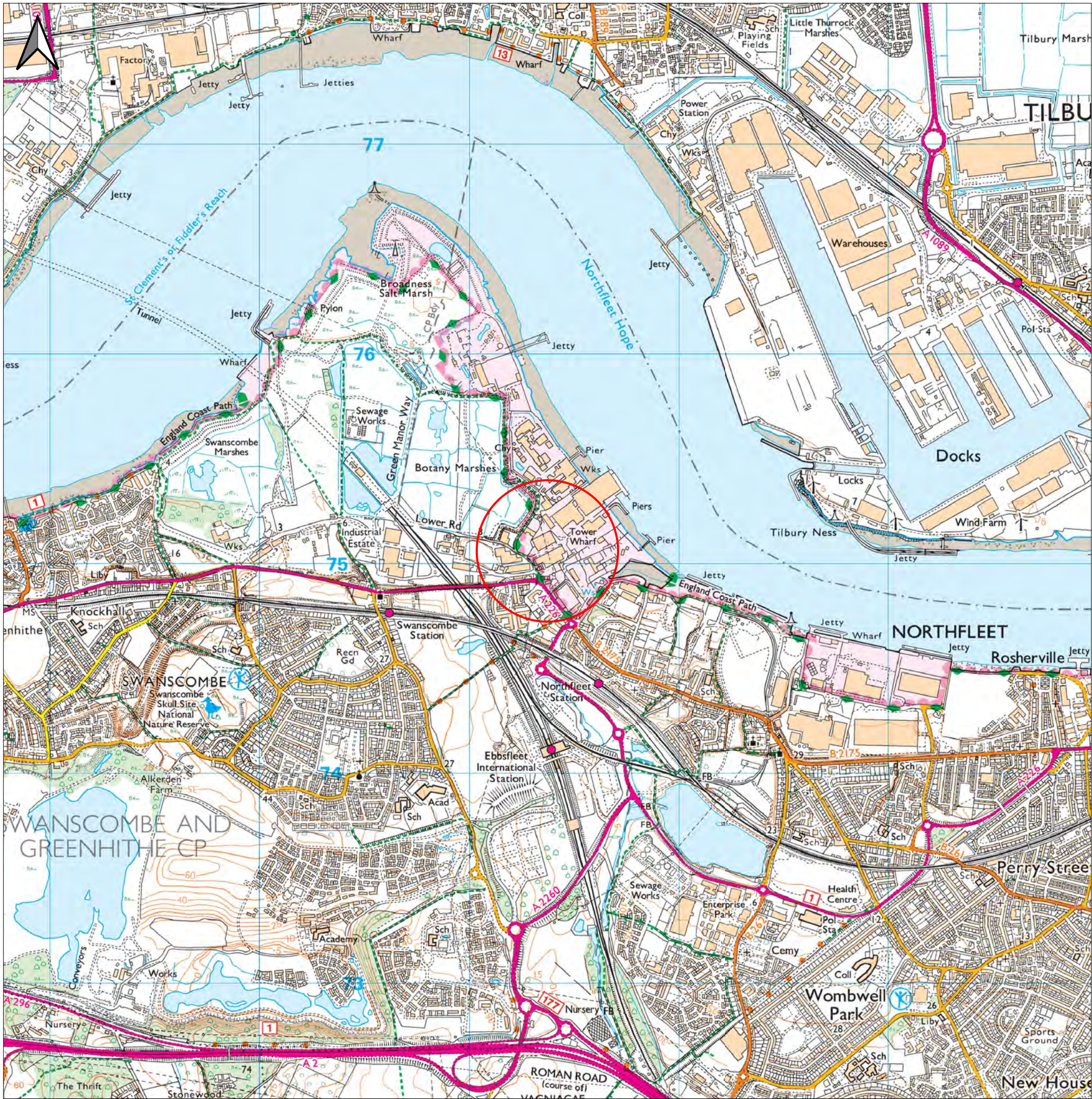
- 2.4 The application site, hereafter referred to as 'the Site', comprises a single industrial building on large areas of tarmac hard standing, with small areas of gravel with ruderal vegetation, and a small isolated parcel of bramble scrub.
- 2.5 The Site extends to approximately 0.2ha.
- 2.6 Figure 2, Section 4 provides an existing site plan (topographical survey plan).

PROPOSED WORKS

- 2.7 Proposals include the extension of the existing warehouse to provide office space, and the construction of a multi-storey car park and the addition of two ground level parking spaces to the front of Unit K6.
- 2.8 Figure 3, Section 5 provides a proposed site layout plan.

PURPOSE OF REPORT

- 2.9 The objectives of the report are to:
- Describe the baseline ecological conditions present within the Site.
 - Identify and describe all potentially significant ecological effects associated with the proposed development.
 - Provide appropriate mitigation, allowing significant ecological effects to be avoided or minimised, ensuring no net loss of biodiversity value within the site.
 - Identify appropriate enhancement measures; and
 - Set out the requirements for post-construction monitoring (if required).



 PROMOTING BIODIVERSITY INTEGRATION	
Site location plan	
Unit K6, Lower Road Northfleet, Kent DA11 9BL	
Drawing ref:	Figure 1
Revision:	-
Date:	11/12/2023
Scale:	1:20,000 (Main canvas)
Paper size:	A3

4. EXISTING SITE PLAN

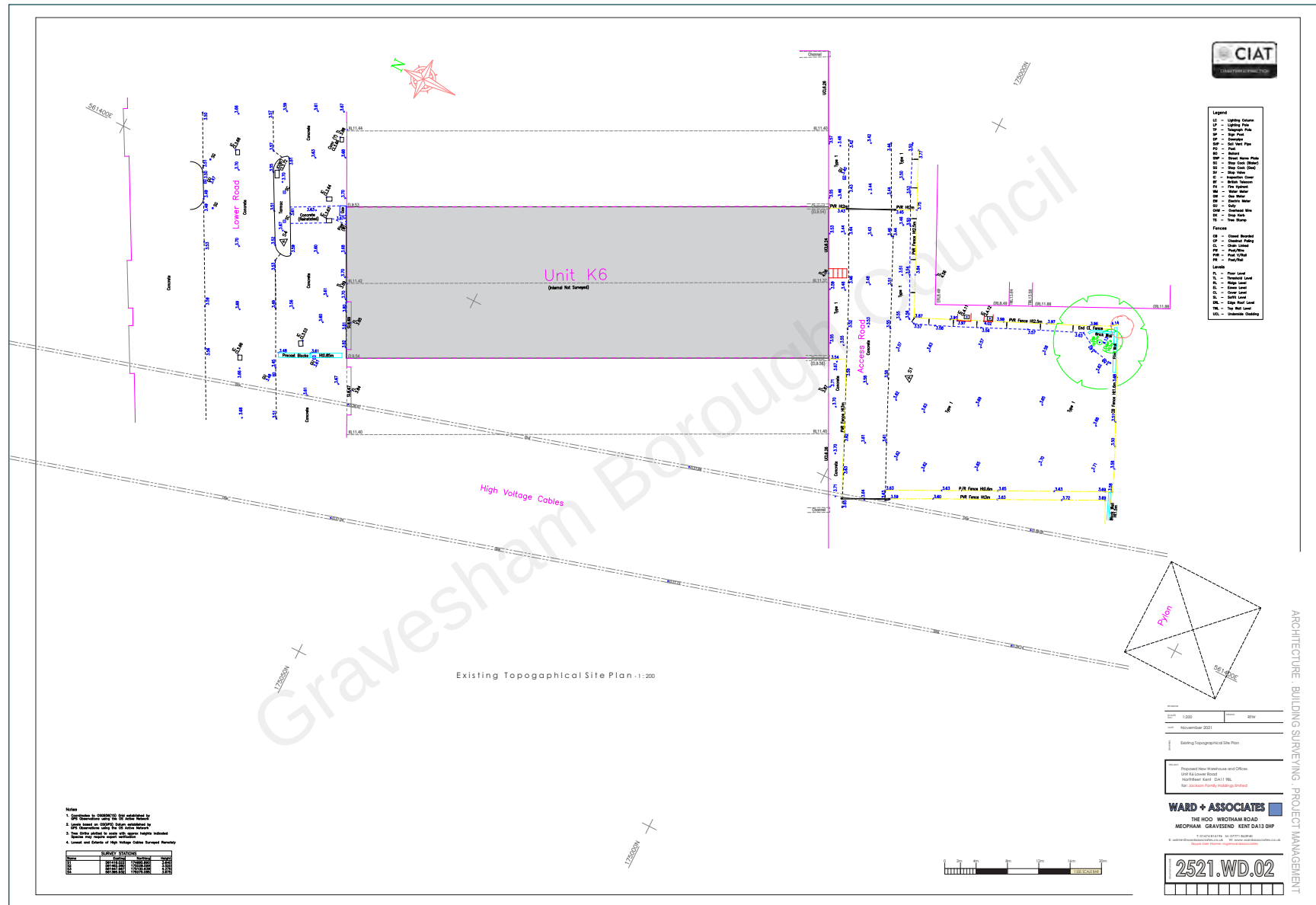


Figure 2. Existing site plan (Ward + Associates, Drawing No. 2521.WD.02, dated November 2021).

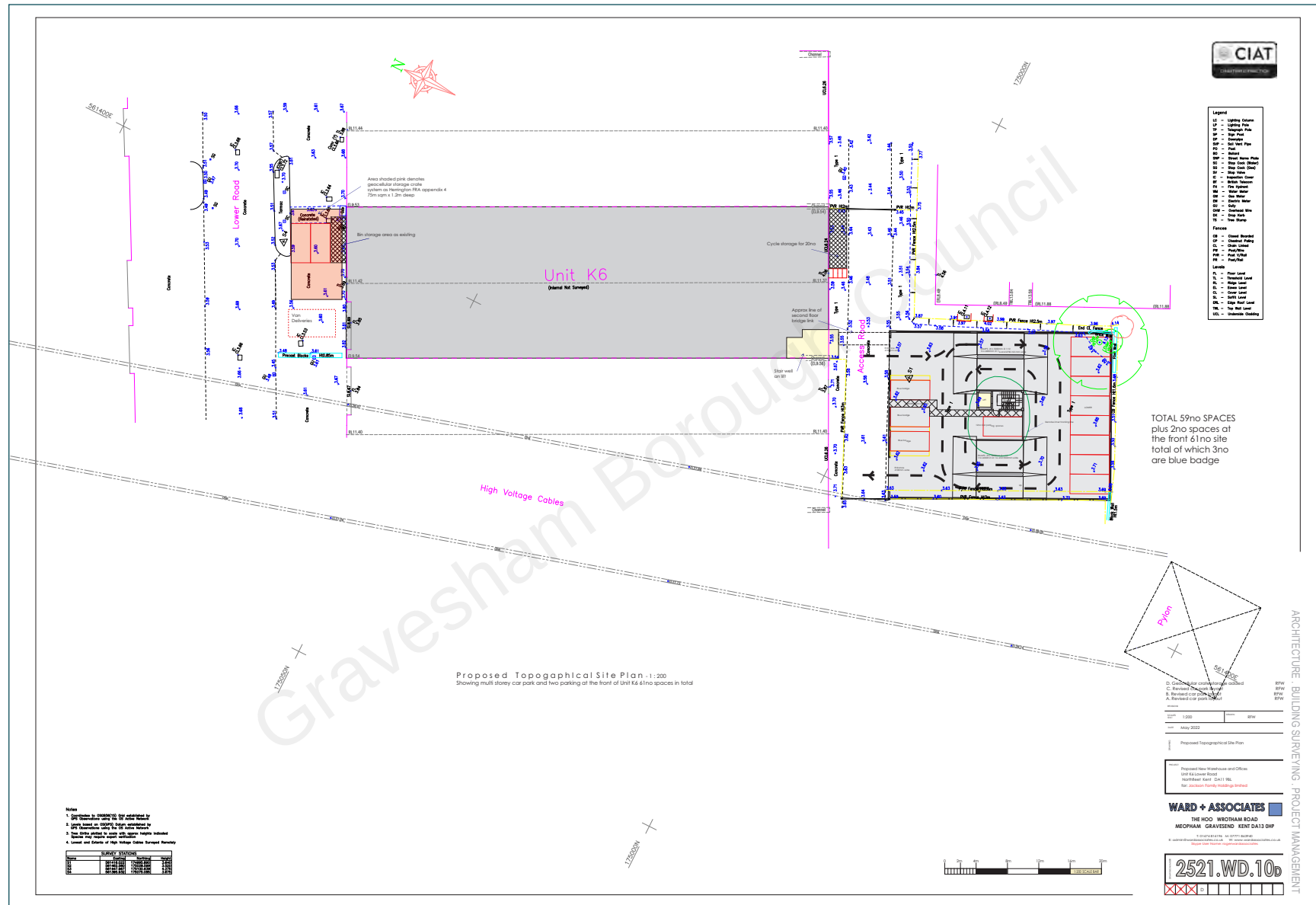


Figure 3. Proposed site layout plan (Ward + Associates, Drawing No. 2521.WD.10D, dated May 2022).

6. METHODOLOGY

ECOLOGICAL WALKOVER SURVEY

- 6.1 A Ecological Walkover Survey was undertaken by Tara Hall (BSc (Hons) ACIEEM of Native Ecology on 28th November 2023.

Table 1. Survey details

Survey date	28th November 2023
Surveyor	Tara Hall BSc (Hons) ACIEEM
Time on site	10:15 - 11:15
Weather	5°C, 0% cloud cover, B0, no rain, ground damp.

DESK STUDY

Zone of Influence

- 6.2 The 'zone of influence' for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2017a). This report provides an assessment of the effects of a proposed development on protected or ecologically valuable sites, habitats or species where these effects extend beyond the development boundary of the site.

Designated sites

- 6.3 Potential impacts to designated sites, including National Site Network (NSN) sites and SSSIs, have been considered.
- 6.4 The Multi Agency Geographic Information for the Countryside (MAGIC) website was used to obtain information about statutory designated sites of international importance such as Special Protection Areas (SPA) within 7.2km of the Site.
- 6.5 Information was obtained about statutory designated sites of national importance such as Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR) within 2km of the Site and ancient woodland within 500m of the Site.
- 6.6 Records were obtained from the Kent Reptile and Amphibian Group (KRAG) within 1km of the Site in November 2023.
- 6.7 Ordnance survey maps, the Multi Agency Geographic Information for the Countryside (MAGIC) website and aerial images were used to identify waterbodies within 250m of the Site boundary. MAGIC Map was also used to obtain information on locations where European Protected Species Mitigation (EPSM) Licences for great crested newt have been issued by Natural England within 1km of the Site.

UK Habitat Classification 2.0

- 6.8 Habitats within the Site were mapped and classified in accordance with the The Professional Edition of the UK Habitat Classification 2.0.
- 6.9 There are 5 levels of hierarchy, which provide an increasing level of detail. For the purpose of this assessment, habitats have been mapped for Primary Habitats up to Level 4.
- 6.10 Secondary codes have been assigned, where appropriate. These Secondary Codes allow recording of additional information, linked to the Primary Habitats. In some cases, habitat types are defined by a Secondary Code only, where Primary Habitats do not sufficiently represent the habitat present.

Protected species and habitats

- 6.11 During the survey the species and habitats identified within the Site were recorded. An assessment was also made as to the presence or potential presence of protected, important or Nationally Rare species.
- 6.12 Protected species and habitats considered include those listed under the Schedules of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and of the Wildlife and Countryside Act 1981.
- 6.13 In addition, an assessment has been made as to the possible impacts of the proposed development on nature conservation interests, in accordance with information relevant to the National Planning Policy Framework and Local Planning Policy.

Bats

Preliminary Roost Assessment (bats)

- 6.14 A systematic search of the exterior of buildings within the Site was undertaken to identify potential bat access points and roosting places and to locate any evidence of bats such as bat droppings, urine staining and fur-oil staining. The inspection included exterior features of the buildings, such as sills, window panes, walls and the ground beneath potential access points to look for signs of bats. Internal access to the buildings was unavailable at the time of the survey.
- 6.15 A ground level tree assessment within the Site was undertaken to determine whether trees possessed Potential Roost Features (PRFs) for bats. Where possible, trees were categorised as NONE (no PRFs visible or likely to be present), FAR (further assessment required to determine presence of PRFs), or PRF (potential roost features are present).
- 6.16 The suitability of roosting habitat and foraging and commuting habitat within the site was assessed following recommendations provided within Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition, Bat Conservation Trust (Collins, 2023) (see Appendix 2 for suitability assessment and survey effort required for structures and trees).

Badger

- 6.17 During the site survey any badger field signs observed were recorded and mapped. These included; sett entrances, latrines, pathways, snuffle holes, footprints, and push-throughs.

Reptiles

- 6.18 The suitability of habitats within the Site to support reptiles was assessed during the Preliminary Ecological Appraisal site visit. Any incidental sightings were recorded.

Hazel dormice

- 6.19 The suitability of habitats within the Site to support hazel dormice was assessed during the Preliminary Ecological Appraisal site visit. Any incidental sightings or field signs, such as natural nests, were recorded.

Great crested newt

- 6.20 The level of survey effort and data collection required to support a Planning Application or European Protected Species Mitigation (EPSM) Licence for great crested newts is relative to the potential impact. For EPSM Licence applications, typically ponds within 250m of the construction zone are surveyed for the presence (and population assessment) of great crested newts.
- 6.21 Following the guidance of Natural England (2021) waterbodies located beyond 250m from the development are only surveyed if all of the following conditions are met:
- Ponds have potential to support a large great crested newt population;
 - The development footprint contains particularly favourable habitat, especially if it constitutes the majority available locally;
 - The development would have a substantial negative effect on that habitat; and
 - There is an absence of dispersal barriers.
- 6.22 Based on the listed criteria above, a proportionate survey area for the Site includes the assessment of any ponds within 250m of the construction zone.

Riparian mammals

- 6.23 The suitability of habitats within the Site to support riparian mammals (such as beaver, otter and water vole) was assessed during the Preliminary Ecological Appraisal site visit. Any incidental sightings or field signs were recorded.

Habitats and Species of Principal Importance

- 6.24 An assessment was made as to the likely presence of Habitats and Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and birds on the Red and Amber lists of birds of conservation concern.

LIMITATIONS

- 6.25 This report aims to provide general advice on ecological constraints associated with the development of the site, it does not include detailed information on particular species or species groups but instead makes recommendations for further, species-specific surveys required.
- 6.26 In accordance with CIEEM guidance, consideration should be given to the validity of survey data after a period of 12 month from the date of the survey. This may require a site visit to assess whether ecological conditions within the site have changed and may require further ecological survey work due to the transient nature of some protected species.

7. BASELINE ECOLOGICAL CONDITIONS

DESIGNATED SITES

Statutory Sites of International Importance

- 7.1 There is one Ramsar and one Special Protected Area (SPA) located within 7.2km of the Site.

Table 2. Details of Statutory Sites of International Importance within 7.2km of the site boundary.

Designation	Site name	Distance and direction from site	Qualifying features
Ramsar	Thames Estuary & Marshes	5.7km east	Qualifies under Criterion 2 for supporting one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates. Qualifies under Criterion 5 for supporting large assemblages of waterfowl of international importance in winter. Qualifies under Criterion 6 for supporting species/populations of wetland birds that occur at levels of international importance. (JNCC, 2000)
SPA	Thames Estuary & Marshes	6.7km east	Article 4.1 of the Habitats Directive for supporting populations of European importance of over wintering hen harrier (<i>Circus cyaneus</i>) and breeding avocet (<i>Recurvirostra avosetta</i>). Article 4.2 of the Habitats Directive for supporting dunlin (<i>Calidris alpina alpina</i>), red knot (<i>Calidris canutus</i>), black-tailed godwit (<i>Limosa limosa islandica</i>), grey plover (<i>Pluvialis squatarola</i>) and redshank (<i>Tringa totanus</i>). The site regularly support on passage common ringed plover (<i>Charadrius hiaticula</i>). Article 4.2 of the Habitats Directive for supporting an internationally important assemblage of birds. (JNCC, 2015)

- 7.2 According to the Impact Risk Zones for Ramsar Sites, Special Areas of Protection (SPA), SACs and SSSIs shown on Natural England's MAGIC map application, the planning application type means there is no requirement for the Local Planning Authority to consult with Natural England during the planning process regarding statutory designated sites.
- 7.3 No further survey work or mitigation is required for Statutory Sites of International Importance.

Statutory Sites of National Importance

7.4 There are two Site of Special Scientific Interest (SSSI) located within 2km of the survey area.

Table 3. Details of Statutory Sites of National Importance within 2km of the site boundary.

Designation	Site name	Distance and direction from site	Qualifying features
SSSI	Swanscombe Peninsula	0.2km north-west	Swanscombe Peninsula SSSI is of special interest for the following nationally important features: Populations of the plants divided sedge <i>Carex divisa</i>, yellow vetchling <i>Lathyrus aphaca</i>, slender hare's-ear <i>Bupleurum tenuissimum</i>, Bithynian vetch <i>Vicia bithynica</i> and round-leaved wintergreen <i>Pyrola rotundifolia</i> subsp. <i>maritima</i>; Assemblages of invertebrates associated with bare sand and chalk, open short swards, open water on disturbed mineral sediments and saltmarsh and transitional brackish marsh; Two diverse assemblages of breeding birds, one associated with lowland open waters and their margins, lowland fen and lowland damp grassland, the other with lowland scrub. (Natural England, 2021)
SSSI	Swanscombe Skull Site	1.7km south-west	Barnfield Pit, Swanscombe, the only site in the UK to yield unquestionable Lower Palaeolithic human remains, is probably the most famous and arguably the most important site in the British Pleistocene. (Natural England, 1988)

7.5 According to the Impact Risk Zones for SSSIs shown on Natural England's MAGIC map application, the planning application type means there is no requirement for the Local Planning Authority to consult with Natural England during the planning process regarding statutory designated sites.

7.6 However, due Swanscombe Peninsula SSSI being located 0.2km from the Site, indirect impacts may occur during the construction phase of the development.

7.7 Statutory Sites of National Importance are considered further in Section 9.

Non-statutory sites

Local Wildlife Sites (LWS)

7.8 There are two non-statutory sites, such as Local Wildlife Sites (LWS) located within 1km of the Site.

- Botany Marshes LWS is located approximately 0.2km north-west; and
- Ebbsfleet Marshes LWS is located approximately 0.3km south.

7.9 It is unlikely that the proposed development will impact the LWS either directly or indirectly due to the small scale and nature of proposals and the distance between sites.

7.10 No further assessment or mitigation is proposed for Local Wildlife Sites.

Ancient Woodland

7.11 There are no parcels of ancient woodland located within 500m of the Site boundary. No further assessment or mitigation is proposed in relation to ancient woodland.

HABITATS WITHIN THE SITE

Habitats of Principal Importance

7.12 There are no habitats of principal importance located within the Site or immediately adjacent to the Site.

Other habitats

Buildings

7.13 There is one building present within the Site. Table 4 below provides photographs and building descriptions.

Table 4. Description of buildings within the Site.

Building no. & name	Description	Photograph
B1	The Building B1 is a large metal warehouse with brick foundations, with a pitched corrugated metal roof, connected to additional units on the eastern and western elevations. The structure is currently in use for industrial purposes.	

7.14 Table 5 overleaf describes the habitats present within the Site in accordance with UK Habitat Classification 2.0.

Table 5. Habitat types present within the Site, including level (UKHab), size and description.

HABITAT TYPE				DESCRIPTION
Level 2 label	Level 3 label	Level 4 label	Level 5 label / Secondary codes	
Urban (u)	Built-up areas and gardens (u1)	Developed land; sealed surface (u1b)	Buildings (u1b5)	For full building descriptions see Table 4.
			Other developed land (u1b6)	At the north and south of Building B1 are areas of tarmac hard standing.
		Sparsely vegetated urban land (u1f)	Unmanaged (521)	Located in the south-west section of the Site is a small area of unsealed gravel, with ruderal / ephemeral vegetation present throughout. Species present include: buddleja (<i>Buddleja davidii</i>), sowthistle (<i>Sonchus</i> sp.), creeping fescue (<i>Festuca rubra</i>), moss (<i>Bryophyta</i>) and willowherb (<i>Epilobium</i> sp.).
			Ruderal / ephemeral (81)	
			Scattered trees (33)	Two trees are present within the south-east corner of the Site. Tree T1 is a large oak tree (<i>Quercus robur</i>) and Tree T2 is a young elder tree (<i>Sambucus nigra</i>).
Heathland and shrub (h)	Dense scrub (h3)	Mixed scrub (h3h)	Scattered scrub (10)	A small area of bramble (<i>Rubus fruticosus</i> agg) scrub is located in the southern section of the Site.

SURROUNDING HABITATS

- 7.16 The Site is situated within an urban area within Swanscombe. Surrounding habitats consist of industrial structures, roads and residential dwellings. Approximately 0.4km east is the River Thames.

PROTECTED AND NOTABLE SPECIES

Bats - Roosting habitat

- 7.17 According to MAGIC map application there has been one recent EPSM licence obtained for bats within 1km of the Site.
- 2016-21327-EPS-MIT was obtain in 2016 for the destruction of a common pipistrelle resting place.

*Buildings - Preliminary Roost Assessment**Table 6. Results of Preliminary Roost Assessment (buildings)*

Building	Potential roost features	Suitability for roosting bats
B1	No features were identified that offer any suitable roosting opportunities.	None

7.18 No further survey work or mitigation is required for roosting bats in buildings.

*Roosting bats - Trees**Table 7. Results of Preliminary Roost Assessment (trees)*

Building	Potential roost features	Suitability for roosting bats
T1 - Oak	There are desiccation fissures, associated with the deadwood located in the canopy of the tree. These fissures are very narrow.	Low
T2 - Elder	No features were identified that offer any suitable roosting opportunities.	None

7.19 No visible potential roost features were recorded in the tree T2 that will be impacted by the proposed development.

7.20 Tree T1 was assessed over all as providing low suitability for roosting bats.

7.21 Roosting bats in trees are considered further in Section 9.

Foraging and commuting habitat

7.22 The urban habitats within the Site, including areas of tarmac and gravel with a small areas of scrub are assessed overall as providing low-negligible suitability for foraging and commuting bats.

7.23 Foraging and commuting bats are considered further in Section 9.

Hazel dormice

7.24 According to MAGIC map application there have been no recent EPSM licences obtained for hazel dormice within 1km of the Site.

7.25 There is no habitat suitable for hazel dormice within, or in close proximity the Site.

7.26 No further survey work or mitigation measures are required for hazel dormice.

Riparian mammals

7.27 There is no habitat suitable for otter, beaver or water vole within, or in close proximity the Site. No further survey work or mitigation is required for riparian mammals.

Badger

- 7.28 During the survey, no signs of badger were present within the Site and no badger setts were recorded within the accessible 30m of the Site boundary. Given its location within an urban area, it is unlikely that badger will enter the Site whilst foraging/commuting.
- 7.29 No further survey work or mitigation measures are required for badger.

Hedgehog

- 7.30 During the survey, no signs of hedgehog were present within the Site, and no hedgehogs were found. Habitats within the Site and surrounding area including urban hard standing do not provide suitable habitat for hedgehog.
- 7.31 No further survey work or mitigation measures are required for hedgehog.

Birds

- 7.32 Due to the habitats present, no Schedule 1 birds are expected to nest within the Site.
- 7.33 The building and trees within the Site provide suitable nesting habitat for a number of common birds, and some red and amber list species such as redstart (Amber).
- 7.34 Birds are considered further in Section 9.

Reptiles

- 7.35 The urban hardstanding present within the Site provides negligible suitability for reptiles.
- 7.36 No further survey work or mitigation is required for reptiles.

Great crested newt

- 7.37 The urban hardstanding present within the Site provides negligible suitability for great crested newt.
- 7.38 No further survey work or mitigation is required for great crested newt.

Invertebrates

- 7.39 Habitats within the Site, such as the trees and scrub provide suitable habitat to support a range of common and widespread invertebrates. Protected or rare invertebrates are unlikely to be present due to the habitat types present.
- 7.40 No further survey work or mitigation is recommended for invertebrates.

Flora

- 7.41 Due to the past and present management of the Site, the areas of habitat are unlikely to support protected plant species. No evidence of Schedule 9 plants was found during the Site survey.
- 7.42 No further survey work or mitigation is recommended for flora.

8. PHOTOGRAPHS



Photograph 1. Small parcel of scrub located along the eastern boundary.



Photograph 2. Tree T1 located within the Site with low suitability for roosting bats.



Photograph 3. Tarmac hardstanding located at the front of Building B1.



Photograph 4. Gravel areas located at the south of the Site.

9. ECOLOGICAL CONSTRAINTS

- 9.1 The potential impacts of the proposed development on those Ecological Features that have not been scoped out in Section 7 are considered below.

DESIGNATED SITES

Statutory Sites of National Importance

Swanscombe Peninsula

- 9.2 Located approximately 0.2km north-west of the Site, Swanscombe Peninsula SSSI is an area that contains various important populations of flora and invertebrates, and two assemblages of breeding birds, such as marsh harrier and bearded tit.
- 9.3 The urban habitats within the Site do not provide suitability for breeding birds or the rare birds found in Swanscombe Peninsula. Therefore, proposed plans are unlikely to directly impact the SSSI.
- 9.4 However, due to the close proximity of the sites indirect impacts such as air pollution during the construction phase is possible. To avoid any indirect impacts to the SSSI precautionary mitigation measures will be implemented, detailed within Appendix 4.

PROTECTED AND NOTABLE SPECIES

Roosting bats in trees

- 9.5 The Tree T1 was assessed as providing low suitability for roosting bats. Tree T2 was assessed as providing 'none' suitability for bats.
- 9.6 Proposals include impact to the Tree T1.
- 9.7 Tree T1 will be retained by proposals, however indirect impacts to roosting bats may occur through management to the tree and spillage of artificial lighting associated with parking and building within the Site post-construction.
- 9.8 Precautionary mitigation to avoid impacts through the careful design of lighting is detailed within the precautionary mitigation outlined in Appendix 4.

Foraging and commuting bats

- 9.9 Proposals do not include the severance of any potential foraging or commuting corridors for bats.
- 9.10 Habitats within the Site, including urban habitats and the mature oak tree are assessed overall as providing low-negligible suitability for foraging and commuting bats. The Site is relatively isolated from other larger areas of suitable habitat.
- 9.11 Development proposals are unlikely to impact on foraging and commuting bats and no further survey work is recommended.

- 9.12 Bats are nocturnal and rely on dark habitat corridors for foraging and commuting, therefore indirect impacts could occur through spillage of artificial lighting associated with parking and buildings within the Site post-construction.

Precautionary mitigation to avoid impacts through the careful design of lighting is recommended within Appendix 4.

Nesting birds

- 9.13 Given the small area of suitable bird nesting habitat within the Site, it is unlikely that development proposals will impact bird populations within the locality. No further survey work for nesting birds is recommended.
- 9.14 The trees and building provide suitable nesting habitat for common and widespread bird species, as well as those listed as Red and Amber within the Birds of Conservation Concern such as redstart (Amber).
- 9.15 The trees will be impacted as part of proposals. The building will be retained as part of development proposals.
- 9.16 Mitigation measures to avoid impacts to nesting birds through the timing of works are outlined within Appendix 4. Enhancement measures, outlined within Section 10, have the potential to improve the value of habitats within the Site for birds.

10. ECOLOGICAL ENHANCEMENT MEASURES

- 10.1 Ecological enhancement measures are included as part of development proposals. Habitat enhancement measures are outlined below.

NATIVE AND NECTAR RICH PLANTING PLAN

- 10.2 Planting plans around the new multi-storey parking structure will include native, flower rich species, including those that flower in the late and early seasons to enhance the biodiversity value of the site.
- 10.3 The inclusion of climbing plants will add sheltering opportunities for invertebrates and birds. They can also produce nectar rich flowers for butterflies, bees and hover flies and fruit for birds and small mammals.
- 10.4 The inclusion of herbs, such as lavender and sage, will provide nectar for an array of invertebrate species, including bees, butterflies and moths. Providing a range of herb plants would ensure flowering throughout the seasons. The inclusion of plants that produce scent at night will attract night flying invertebrates and as such will also provide foraging opportunities for bats.

BIRD BOXES

- 10.5 2no. woodcrete exterior terrace boxes for house sparrows will be incorporated into the new structure. Boxes should be located 2-4m in height and arranged so that loose colonies of house sparrows are encouraged. Bird boxes should be located close to eaves and on the north or east elevations to avoid direct sunlight

11. REFERENCES

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12. APPENDIX 1: SUMMARY OF PLANNING POLICY AND LEGISLATION

12.1 Species afforded protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 are also known as European Protected Species. European Protected Species include all species of bats, beaver, otter, hazel dormice, great crested newt.

12.2 European Protected Species relate to those listed within the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and are afforded the highest level of protection. These species are also protected under the Wildlife and Countryside Act 1981. Taken together this level of protection makes it an offence to:

- Deliberately capture, injure or kill any wild animal of a European protected species,
- Deliberately disturb wild animals of any such species
- Deliberately take or destroy the eggs of such an animal
- Damage or destroy a breeding site or resting place of such an animal

12.3 Disturbance of animals includes in particular any disturbance which is likely:

- To impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
- In the case of animals of a hibernating or migratory species, impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species to which they belong

12.4 The legislation requires that any derogation be dealt with by licensing through an appropriate licensing body (Natural England in England). In determining whether a licence can be granted the licensing body must apply the requirements of Regulation 53, and in particular, the three tests:

1. Regulation 55(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.

2. Regulation 55(9) states: The relevant licensing body must not grant a licence under this regulation unless it is satisfied—

(a) that there is no satisfactory alternative; and

(b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

PLANTS

12.5 A number of plant species are protected under Schedule 8 of the Wildlife and Countryside Act 1981. This Schedule lists plant species that are protected under Section 13, which protects from picking and sale of plants or parts of plants listed in Schedule 8.

BIRDS

12.6 All nesting birds are protected under the Wildlife and Countryside Act 1981. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds;
- Take, damage or destroy the nest of wild birds while in use or being built;
- Take or destroy the eggs of wild birds;
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Birds of Conservation Concern

12.7 After reviewing the status of all bird species in the UK, the leading non-governmental bird conservation organisations agreed priorities for bird conservation. This led to the publication of a list of Birds of Conservation Concern. Bird species are either listed as red, amber or green, depending on their status and conservation objectives. Birds listed as red require urgent, effective conservation action.

BADGERS

12.8 Badgers are protected under the Protection of Badgers Act 1992. Under this legislation it is an offence to:

- Wilfully kill, injure or take a badger (or attempt to do so).
- Cruelly ill-treat a badger.
- Dig for a badger.
- Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it.
- Cause a dog to enter a badger sett.
- Disturb a badger when it is occupying a sett.

COMMON REPTILES

12.9 All common and widespread reptiles, which include viviparous lizard, slow worm, grass snake and adder are protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Intentionally or recklessly kill or injure reptiles
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell any reptile.

INVERTEBRATES

12.10 A small number of invertebrates are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, relating to the designation of SACs, including white-clawed crayfish and Desmoulin's whorl snail.

12.11 A number of invertebrate species also protected under the Wildlife and Countryside Act, such as the heath fritillary and fairy shrimp. Species listed under Schedule 5 are protected from one, some or all of the following:

- Intentional killing, injuring, taking
- Possession or control (live or dead animal, part or derivative)
- Damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection
- Disturbance of animal occupying such a structure or place
- Offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative)
- Advertising for buying or selling live or dead animal, part or derivative

STATUTORY PROTECTED SITES

12.12 Special Protection Areas and Special Areas of Conservation are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

12.13 Sites of special scientific interest (SSSIs) are protected under the Wildlife and Countryside Act 1981. Natural England is responsible for notifying SSSIs, ensuring they are managed appropriately and assessing and monitoring their condition.

12.14 National Nature reserves are created to protect important wildlife habitats, while also providing a resource for scientific research and recreation. Declared under the National Parks and Access to the Countryside and the Wildlife and Countryside Act 1981.

NON-STATUTORY PROTECTED SITES

Ancient Woodland

12.15 Land with continuous woodland cover since at least 1600AD. Ancient woods are recognised in UK planning policy, but do not have statutory protection.

NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

12.16 Following consultation with Natural England, the Secretary of State identified species and habitats considered to be of principal importance for the conservation of biological diversity in England. These species and habitats are listed under Section 41 of the Act. The list is to be kept under review and revisions are made as necessary as part of the progress reports on the Biodiversity Strategy for England.

12.17 Following the Biological Diversity in Japan, 2012, a new initiative in England, 'Biodiversity 2020', replaced the former UK Biodiversity Action Plan Species aiming to reinforce the protection of Section 41 habitats and species.

THE NATIONAL PLANNING POLICY FRAMEWORK

12.18 The National Planning Policy Framework was revised in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied. Within this document, Chapter 15 is titled Conserving and Enhancing the Natural Environment.

12.19 Of particular relevance within this chapter are the following statements:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

- *Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*

To protect and enhance biodiversity and geodiversity, plans should:

- *Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

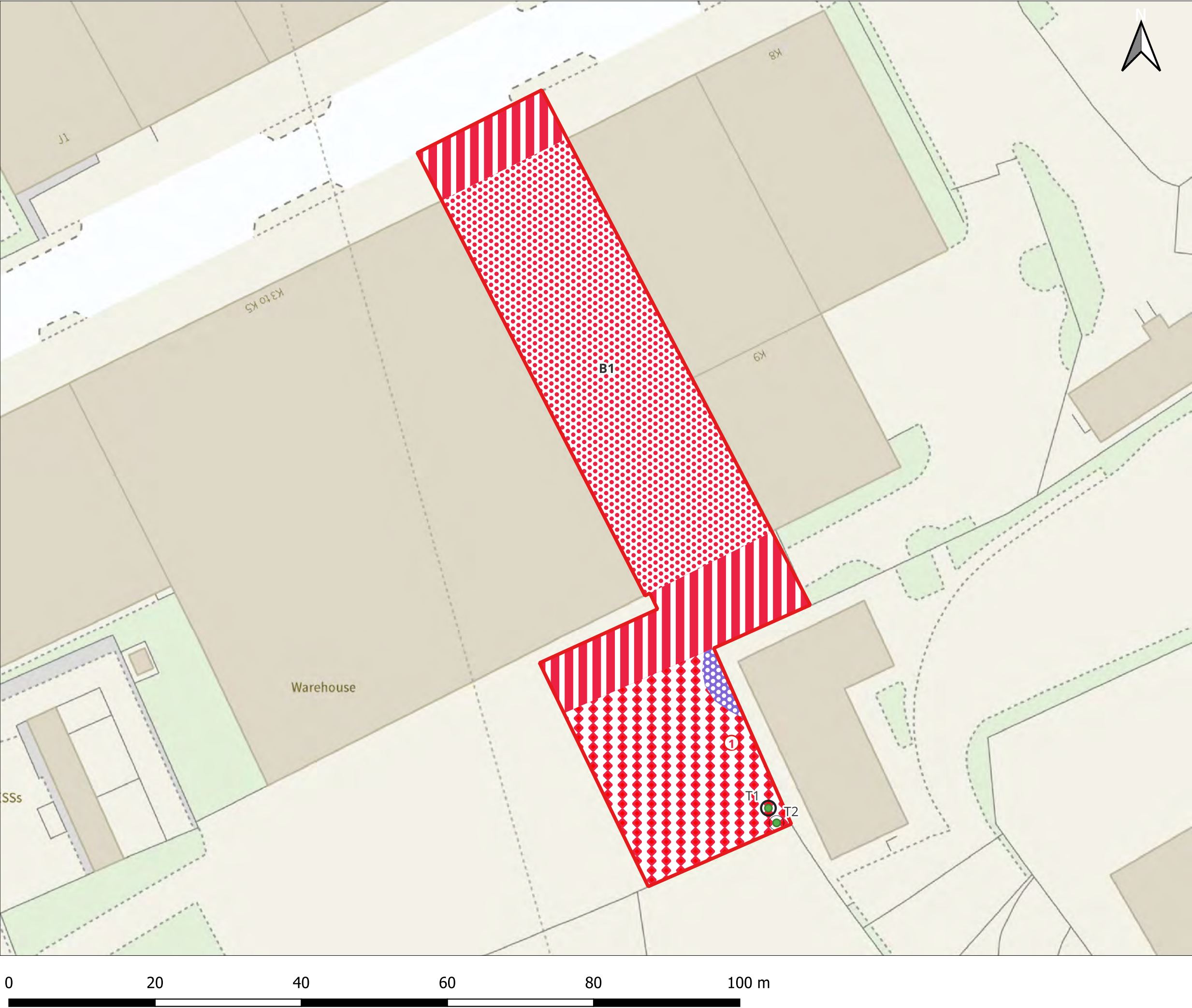
d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

13. APPENDIX 2: SUITABILITY ASSESSMENT OF ROOSTING HABITAT (STRUCTURES AND TREES)

Table 8. Assessing potential suitability of roosting habitat (structures and trees) for bats and survey effort required. Adapted from Bat Surveys for Professional Ecologists, Good Practice Guidelines 4th Edition (Collins, 2023).

Suitability	Description of roosting habitat	Survey effort* and timing
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices / suitable shelter at all ground / underground levels).	None required.
Negligible	No obvious habitat features on site likely to be used by roosting bats; however,, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	None required
Low	A structure or tree with one or more PRF-I roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	Buildings/structures: One survey visit. One dusk emergence survey (or dawn re-entry survey if appropriate). Timing: May to August. Trees: None required.
Moderate	A structure or 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 only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Two separate dusk emergence surveys (or dawn re-entry surveys if appropriate). Surveys should be spaced a minimum of three weeks apart. Timing: May to September with at least one survey undertaken between May - August.
High	A structure or tree with one or more PRF-M 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.	Three separate dusk emergence survey visits (or dawn re-entry surveys if appropriate). Surveys should be spaced a minimum of three weeks apart. Timing: May to September with at least two surveys undertaken between May - August.

* Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures and trees.



Legend

-  Site boundary
-  Target notes
-  Large tree
-  Medium tree
-  Developed land; sealed surface
-  Buildings
-  Sparsley vegetated urban land
-  Bramble scrub

Note:

Habitats mapped based on UK Habitat Classification following Preliminary Ecological Appraisal site visit undertaken on 28/11/2023.

Target Notes:

1. Shipping container

	
Habitat Plan	
Unit K6, Lower Road Northfleet, Kent DA11 9BL	
Drawing ref:	1471_DR01
Revision:	-
Date:	11/12/2023
Scale:	1:500
Paper size:	A3

15. APPENDIX 4: AVOIDANCE AND MITIGATION MEASURES

THE MITIGATION HIERARCHY

- 15.1 A process will be adopted within the design stage of the project to avoid, mitigate and compensate for potential negative ecological impacts, this process is known as the 'mitigation hierarchy'.
- 15.2 Negative ecological impacts will be avoided wherever possible, for example by making amendments to the proposed layout. Where avoidance is not possible, mitigation to reduce the impact should be considered, for example through the avoidance of sensitive seasons, such as the bird nesting season.
- 15.3 Avoidance and mitigation is most effective when considered as early as possible within a scheme, allowing for measures to be integrated into the design, an appropriate time line to be developed and for alternatives to be considered.
- 15.4 If all measures have been considered for avoidance and mitigation, as last resort compensation measures should be proposed to address unavoidable and residual impacts.

DESIGNATED SITES

Statutory Sites of National Importance

Swanscombe Peninsula

- 15.5 To avoid any potential indirect impacts associated during the construction phase of the development, a Construction Environmental Management Plan (CEMP) will be produced. The CEMP will detail the measures needed, including pollution prevention protocols, to ensure the development does not indirectly impact the nearby designated site

PROTECTED AND NOTABLE SPECIES

Roosting bats - Trees

- 15.6 To avoid potential post development impacts to roosting bats caused by lighting, the following mitigation will be implemented:
- Any external artificial lighting will be directed away from the retained boundary vegetation.
- 15.7 Precautionary mitigation is detailed below for impacts to Tree T1 that will reduce the risk of the destruction of a bat roost or the killing or injury of individual bats from low to negligible.
- The arborist who is to carry out works under the instruction of the Client will be alerted to the possibility of bats being present.
 - The arborist will liaise with an appropriate Ecological Clerk of Works (ECoW) with respect to the need for vigilance during felling activities.

- Tree impacts will be undertaken between late August and early October or between March and April (depending on the presence of nesting birds).
- Work will be undertaken in a sensitive manner. Any potential roost features identified will not be sawn. Any potential roost features within limbs will be lowered to the ground and left at the base of the tree for at least 48 hours.
- In the unlikely event that a bat is found during works, arboricultural works will cease and a licenced bat ecologist contacted immediately.

Foraging and commuting bats

Careful lighting design

15.8 In order to reduce a low potential, indirect impact on foraging and commuting bats to negligible, mitigation to reduce any effects of artificial lighting will be implemented, as far as possible and where applicable, in accordance with guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals (ILP, 2023):

- All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component.
- Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
- Internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill.
- Column heights will be carefully considered to minimise light spill and glare visibility.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, will be considered.
- Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting will be set on motion- sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- Where appropriate, use a Central Management System (CMS) with additional web-enabled devices to light on demand.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged.
- If all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

Nesting Birds

Avoid impact to nesting birds

- 15.9 Should the vegetation and buildings within the Site be left to grow or should the boundary vegetation be impacted the following mitigation will be implemented to avoid impact to nesting birds:
- Works to any vegetation and buildings will be undertaken outside of the bird nesting season where ever possible.
- 15.10 If impacts to vegetation and buildings are unavoidable between March and September, then the following mitigation will be undertaken:
- A nesting bird survey will be undertaken by a suitably experienced ecologist within at least 48hours prior to any impacts.
 - A watching brief will be carried out by a suitably experienced ecologist during any works that impact suitable vegetation and buildings within the site.
 - If nesting/nest-building birds are found, no works will commence/continue that are likely to damage or significantly disturb a nest until the young have fully fledged.
- 15.11 Works undertaken during the bird nesting season may result in significant delays to the development programme if activities need to cease due the presence of an active nest. It is important to note that many bird species, such as blackbirds and robins are multiple brooders and may therefore nest within the Site for a number of months.