



Photograph 1:
h3h-1



Photograph 2:
h3h-2



Photograph 3:
u1b5-1



Photograph 4:
u1b5-2



Photograph 5:
u1c-1



Photograph 6:
u1f-1

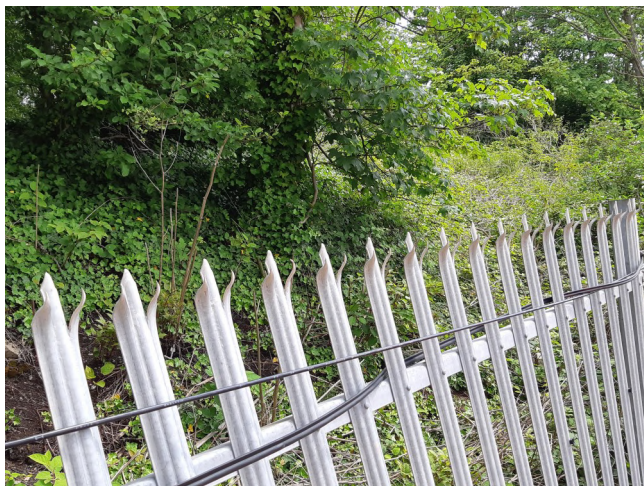
Client	LNT Construction Ltd	Drawing Ref LNT001-001/001/1		Thomson environmental consultants www.thomsonec.com enquiries@thomsonec.com
Figure Number	Figure 3a	Drawn MS	Checked CB	
Figure Title	Photographs of the Site	Date 31/07/2024		



Photograph 7:
TN1 - Trees with bat potential



Photograph 8:
TN1 - Trees with bat potential



Photograph 9:
TN3 - Japanese Knotweed area



Photograph 10:
TN2 - Japanese Knotweed point

Client	LNT Construction Ltd	Drawing Ref LNT001-001/001/1		Thomson environmental consultants www.thomsonec.com enquiries@thomsonec.com
Figure Number	Figure 3b	Drawn MS	Checked CB	
Figure Title	Photographs of the Site			
		Date 31/07/2024		

Figure 1: Site Location, Study Area and Desk Study Results

Figure 2: Extended UK Habitat Classification Survey Results

Figure 3a: Photographs of the Site

Figure 3b: Photographs of the Site

2. Introduction

2.1 Context

- 2.1.1** This report presents the findings of a Preliminary Ecological Appraisal (PEA) undertaken as an initial step to identify potential ecological constraints relating to the project proposal for the construction of a new care home on a 0.69ha site on Mendalgief road, Newport, South Wales.
- 2.1.2** During the ecological desk study, designated sites and priority habitats¹ for nature conservation are identified within a defined study area of the proposed works and the potential of the project to affect those sites and habitats is discussed. Records for protected species and species of conservation concern² are collated to identify potential effects of the project and inform requirements for further surveys if necessary. During the habitat survey undertaken by a suitably qualified ecologist, the habitats present on the site were identified and mapped to determine the baseline biodiversity metric value for the site and the suitability of the site to support protected species and species of conservation concern.
- 2.1.3** The report has been prepared by Thomson Environmental Consultants on behalf of LNT Construction Ltd.

2.2 Project Description

- 2.2.1** LNT Construction Ltd is preparing a planning proposal for the construction of a new care home on a 0.69ha site near Mendalgief road, Newport, NP20 2SH (central grid reference: ST 30876 86936). The project will require the demolition of existing small buildings and clearance of remaining scrub and sparsely vegetated land habitats on site.
- 2.2.2** The proposals are hereafter referred to collectively as 'the works'.
- 2.2.3** This project will require planning consent from Newport City Council.

2.3 Site Description

- 2.3.1** The site is 0.69ha and, at the time of survey, consisted of mixed scrub, old steel works associated buildings, sparsely vegetated urban land and artificial unvegetated unsealed surface shown on Figure 2. The site location is shown on Figure 1.
- 2.3.2** The area impacted by the works is hereafter referred to as 'the site'.

2.4 Ecology Background

- 2.4.1** Arup completed an Extended Phase 1 Habitat Survey (ARUP, 2014) on a large site that also encompassed the site detailed within this report. The summary of this report included the

¹ Priority habitats are habitats listed on the Section 41 list of the Natural Environment and Rural Communities Act 2006 (the NERC Act) as Habitats of Principal Importance in England or listed in local Biodiversity Action Plans.

² Species of conservation concern are species identified on published lists as being rare, vulnerable or declining. This includes priority species which are species which are listed on the Section 41 list of the NERC Act as Species of Principal Importance in England or species which are listed in local biodiversity action plans. Protected species are species protected under legislation.

requirement for further bat surveys but as the design was not completed at this stage no specific buildings were described. This survey did identify an artificial bat roost hibernacula that is approximately 330m from site. The site was also identified to have habitat that was suitable for breeding birds. The survey also identified the presence of invasive non-native plants.

2.5 The Brief and Objectives

2.5.1 Thomson Environmental Consultants Ltd were commissioned by LNT Construction Ltd on 21/05/24 to undertake a PEA for the project, including:

- An ecological desk study including identification of statutory and non-statutory designated sites within 2km of the study area and records of important species within 1km of the study area, using data purchased from the Local Biological Record Centre;
- A habitat survey of the site by a suitably trained ecologist using the UK Habitat Classification methodology. The survey will be "Extended" to include consideration of the potential for habitats on site to support important species;
- A report supported by appropriate digitised mapping that details the methods and results of the desk study and habitat survey. The report will include consideration of any relevant legislation and planning policies, with recommendations for necessary compliance measures and for any further surveys that are required.

2.5.2 The objective of the appraisal was to identify constraints and opportunities related to ecology and biodiversity with respect to the proposed development of the site as detailed in the project description.

2.6 Limitations

2.6.1 The species data collated during the desk study is mainly derived from records submitted by members of the public and *ad hoc* surveys undertaken by volunteers. Therefore, it should not be taken as a definitive list of the protected species and other species of conservation concern that occur in the local area.

2.6.2 Some species records (grid references) received from the local environmental records centre were only available at four figure resolution. As such it was not possible to say if they fall within the study area for this project. In the case of doubt, a cautious approach was taken and they were assumed to be within 1km of the site.

2.6.3 This report is based on the development boundary and layout shown on Drawing number *NP20 2NW-F-01* (13.03.24) shown in Appendix 1. Subsequent changes may result in a requirement to reassess the potential impacts of the development and the requirements for avoidance, mitigation and enhancement.

2.6.4 One area to the north of site withing the buffer was not accessible at the time of the survey due to that area being with the railway boundary. Further survey may be required to determine if the development will impact.

3. Planning Policy and Legislation

3.1.1 National legislation relating to ecology and biodiversity, relevant to the works, is summarised in this section.

3.1.2 This report refers to 'ecological features' which include:

- Statutory designated sites for nature conservation;
- Non-statutory designated sites for nature conservation;
- Priority habitats for nature conservation, including ancient woodland;
- Protected species;
- Species of conservation concern; and
- Invasive non-native species.

Designated Sites

3.1.3 Designated sites for nature conservation are protected under UK legislation. Sites can be classified according to their levels of conservation importance, and may be considered of international, national or local conservation importance. Internationally important sites receive the highest level of protection.

3.1.4 Statutory designated sites of international importance include **Special Areas of Conservation (SACs)**, **Special Protection Areas (SPAs)** and **Ramsar sites**³.

3.1.5 **SACs** are protected areas in the UK designated under **The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations)** in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters).

3.1.6 **SPAs** are protected areas for birds in the UK classified under the **Habitats Regulations** in England, Scotland and Wales.

3.1.7 Paragraph 6.4.30 of Planning Policy Wales (PPW) states that "*Sites which have been formally proposed as SPAs, SACs but which are not yet subject to legal protection under the Habitats Regulations, should be treated within the planning system in the same way as if they were legally designated. The same considerations should, as a matter of policy, be applied to proposed Ramsar sites*".

3.1.8 Statutory designated sites of national importance include **Sites of Special Scientific Interest (SSSIs)** which are protected under the **Wildlife and Countryside Act 1981 (as amended) (WCA)**, **Countryside and Rights of Way Act 2000 (CRoW Act)** and the **Environment (Wales) Act 2016**. **National Nature Reserves (NNRs)** are a selection of the very best parts of Wales's SSSIs, protected under the **WCA** and **CRoW Act**.

³ SACs and SPAs were formally known as European Sites forming part of the Natura 2000 site network. Following the UK's exit from the EU they are now referred to as National Sites and are part of the National Site Network. However, these sites can still be considered to be of international importance for nature conservation. Developments affecting these sites must be considered according to the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended).

- 3.1.9** **SSSIs** are protected by law and planning guidance. PPW states “*Development in a SSSI which is not necessary for the management of the site must be avoided*” and there is a presumption against such forms of development in a SSSI as a matter of principle, including developments not in a SSSI but likely to damage a SSSI. Local Planning Authorities (and other statutory undertakers) in Wales must consult Natural Resources Wales (NRW) on planning applications or proposed permitted developments that might affect SSSIs. Operations that could damage special interests require consent by Natural Resources Wales. Under the WCA it is an offence to damage, disturb or destroy land within a SSSI or disturb wildlife in a SSSI.
- 3.1.10** **National Parks** and **Areas of Outstanding Natural Beauty (AONB)** are also of national importance. PPW states that both National Parks and AONB must be “*afforded the highest status of protection from inappropriate developments...Proposals in National Parks and AONBs must be carefully assessed to ensure that their effects on those features which the designation is intended to protect are acceptable*”.
- 3.1.11** **Local Nature Reserves (LNRs)** are statutory designated sites of local importance that receive protection under the **National Parks and Access to the Countryside Act 1949**. Local Planning Authorities are required to consult Natural Resources Wales about all new proposals. An LNR can be given protection against damaging operations. It also has protection against development on and around it. This protection is usually given via the Local Plan, produced by the Local Planning Authority, and often supplemented by local by-laws. Unlike national designations, the level and type of protection afforded an LNR is decided locally and varies from site to site.
- 3.1.12** Non-statutory designated sites, such as **Sites of Importance for Nature Conservation (SINCs)** and **Local Wildlife Sites (LWSs)** are of local importance. These sites are not protected under legislation. However, local authorities take account of local sites when formulating local plans and when considering planning applications. PPW states these local sites “*make a vital contribution to delivering an ecological network for biodiversity and resilient ecosystems, and they should be given protection in development plans and the development management process*”.

Priority Habitats

- 3.1.13** In this report priority habitats for nature conservation include:
- Habitats of Principal Importance listed under Section 7 of the Environment (Wales) Act 2016;
 - Habitats listed under Local Biodiversity Action Plans (LBAPs); and
 - Ancient woodland.
- 3.1.14** **Habitats of Principal Importance** are listed under Section 7 of the Environment (Wales) Act 2016. Under Section 7 of this Act, the Welsh Ministers will publish, review and revise lists of living organisms and types of habitats in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

3.1.15 Ancient woodland is any area that has been wooded continuously since at least 1600AD⁴. Ancient woodland, semi-natural woodlands, individual ancient, veteran and heritage trees and ancient hedgerows are “*irreplaceable natural resources, and have significant landscape, biodiversity and cultural value*” (PPW 2024). Section 6.4.43 of PPW states that “*Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must prevent potentially damaging operations and their unnecessary loss.*”

Protected Species

3.1.16 Rare and declining plant and animal species in the UK are generally protected under national legislation.

3.1.17 Species protected under the Habitat Regulations⁵ receive the highest level of protection in the UK. These species can be considered to be of international importance because they are rare or declining in Europe as well as in the UK. These species are not only protected from killing and injury, but their breeding sites and resting places are also protected. These species include:

- **Great crested newt** (*Triturus cristatus*), **natterjack toad** (*Epidalea calamita*) and **pool frog** (*Pelophylax lessonae*);
- **Sand lizard** (*Lacerta agilis*) and **smooth snake** (*Coronella austriaca*);
- All bat species;
- **Hazel dormouse** (*Muscardinus avellanarius*) and **otter** (*Lutra lutra*);
- **Large blue butterfly** (eggs, caterpillars, chrysalises and adults);
- **Fisher’s estuarine moth** (eggs, caterpillars, chrysalises and adults); and
- **Little ramshorn whirlpool snail**.

3.1.18 For the species listed above the Habitats Regulations make it an offence to:

- Deliberately kill, injure, disturb or capture them;
- Deliberately take or destroy their eggs;
- Damage or destroy their breeding sites and resting places⁶; and
- Possess, control or transport them (alive or dead).

3.1.19 The WCA also provides additional protection for species protected under the Habitats Regulations, including **great crested newt, sand lizard, smooth snake, bats, dormouse, otter, large blue butterfly, Fisher’s estuarine moths, little ramshorn whirlpool snails** whereby it is also an offence under the WCA to intentionally or recklessly:

- disturb while they occupy a structure or place used for shelter or protection; and
- obstruct access to a place of shelter or protection.

⁴ Ancient woodland includes ‘ancient semi-natural woodland’ (ASNW) and plantations on ancient woodland sites (PAWS).

⁵ These species are often referred to as European Protected Species (EPS) because the requirement to protect them under national legislation originally derives from the fact that these species are listed under the European Habitats Directive

⁶ This applies even if the species is not present at the time when the damage or destruction occurs.

- 3.1.20** The WCA also offers protections to other species⁷. Protection under this legislation is given to prevent intentional (or reckless in Scotland) killing and injury of the reptile species **common lizard** (*Zootoca vivipara*), **slow worm** (*Anguis fragilis*), **adder** (*Vipera berus*) and **grass snake** (*Natrix helvetica*).
- 3.1.21** All wild **birds**, are protected from being killed, injured or taken; it is also an offence to take, damage or destroy a nest that is in use or being built, and to take or destroy eggs. Additional protection applies to specific birds listed in Schedule 1 of the WCA, meaning it is also an offence to intentionally or recklessly disturb these species when: on, or near a nest containing eggs or young; when it is building a nest; or when the nest is active with dependent young.
- 3.1.22** **Water vole, freshwater pearl mussel and invertebrate species** listed under Schedule 5 are also protected under the WCA, making it an offence to intentionally:
- kill, injure or take them; and
 - possess or control them (alive or dead).
- It is also an offence to intentionally or recklessly:
- damage or destroy a structure or place used for shelter or protection;
 - disturb them in a place used for shelter or protection; or
 - obstruct access to a place used for shelter or protection.
- 3.1.23** **White-clawed crayfish** is partly protected under the WCA, which makes it an offence to capture this species without a licence and also prohibits trade in this species.
- 3.1.24** **Freshwater and migratory fish** and their habitats receive protection under the WCA and under the **Salmon and Freshwater Fisheries Act 1975** and **Eels (England and Wales) Regulations 2009**. These species include Atlantic salmon (*Salmo salar*), bullhead (*Cottus gobio*), lamprey (brook, river and sea) (Petromyzontiformes), spined loach (*Cobitis taenia*) and European eel (*Anguilla anguilla*).
- 3.1.25** **Badger** (*Meles meles*) receives protection under the **Protection of Badgers Act 1992** whereby it is an offence to take, injure or kill a badger - or attempt these actions; treat a badger cruelly; interfere with a badger sett; possess or control a live badger; and mark or ring a badger.
- 3.1.26** **Other mammal species** including **rabbit** (*Oryctolagus cuniculus*), **fox** (*Vulpes vulpes*) and **hedgehog** (*Erinaceus europaeus*) are protected under the **Wild Mammals (Protection) Act 1996**, which makes it an offence to inflict any unnecessary suffering, including crushing or asphyxiation of a wild mammal.
- 3.1.27** Under the WCA, it is an offence to intentionally uproot any **wild plant** without the landowner's consent. For plants, fungi and lichens listed on Schedule 8 of the WCA it is an offence to intentionally pick, uproot or destroy them, unless it could not be reasonably avoided (*i.e.* it was an incidental result of a lawful action).

⁷ In addition to the protection described in this section, the WCA also protects many species from activities related to their sale, including: selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species (WCA Section 9 (5)).

- 3.1.28** Some plants are listed on Schedule 5 of the Habitat Regulations. For these species it is an offence to deliberately pick, collect, cut, uproot or destroy them; or possess, control or transport them (alive or dead).

Species of Conservation Concern

- 3.1.29** Other rare or declining species may not receive strict legal protection but may be recognised on published lists as species of conservation concern that should be protected as a matter of best practice.
- 3.1.30** Under Section 7 of the Environment (Wales) Act 2016, the Welsh Ministers must prepare and publish a list of the living organisms and types of habitats which in their opinion are of **principal importance** for the purpose of maintaining and enhancing biodiversity in relation to Wales. Planning authorities (and other statutory undertakers) *“must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions”*.
- 3.1.31** Species of principal importance or species listed on Local Biodiversity Action Plans (LBAPs) are often referred to as ‘priority species’.
- 3.1.32** Most protected species are also listed as species of principal importance, including:
- **Species of amphibian** not protected from killing and injury under the WCA but listed as species of principal importance include **common toad** (*Bufo bufo*);
 - All native **reptile species** in Wales;
 - **Otter, water vole, hazel dormouse, and several species of bat**;
 - Many **invertebrates**, including **white-clawed crayfish** (*Austropotamobius pallipes*); and
 - Many species of **fish, bird, plant, fungi and lichen**.
- 3.1.33** **Species of mammal** which are not strictly protected under legislation but are listed as species of principal importance include **hedgehog**.
- 3.1.34** Rare or declining **bird species** are listed as red or amber in **Birds of Conservation Concern (BOCC)** (Stanbury *et al.*, 2021) a list that is periodically updated. Some wild birds are listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016 and species may also be listed in Local Biodiversity Action Plans.
- 3.1.35** Many **species of fish** are listed as species of principal importance under Section 7 of the Environment (Wales) Act 2016.
- 3.1.36** Rare or declining **plant species** are listed under A Vascular Plant Red List for Wales (Dines, 2008). Species considered of local nature conservation importance may also be listed in Local Biodiversity Action Plans. Many plants, fungi and lichens are listed as species of principal importance under Section 7 of the Environment (Wales) Act.

Invasive Non-Native Plant Species

- 3.1.37** **Invasive non-native plants** are those listed as species of special concern because they cause severe problems for native UK plants and the environment.
- 3.1.38** The relevant legislation on invasive plant species is:

- Schedule 9 of the WCA; and
- Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019, which gives effect to EU regulations on the prevention and management of the spread of invasive alien species.

3.1.39 Both make it an offence to “plant or otherwise cause to grow in the wild” any plant species listed.

Biodiversity Net Gain

3.1.40 The Environment (Wales) Act 2016 places a ‘duty’ (the biodiversity and resilience of ecosystems duty) on public authorities (such as Local Planning Authorities and other statutory undertakers) to “*seek to maintain and enhance biodiversity in the exercise of its functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far is consistent with the proper exercise of those functions*”.

3.1.41 Paragraph 6.4.5. of PPW states that this means “*development should not cause any significant loss of habitats or populations of species*” and “*must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. A net benefit for biodiversity is the concept that development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long-term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site*”.

3.1.42 The Environment (Wales) Act 2016 introduces the Sustainable Management of Natural Resources¹⁴ (SNMR) and sets out a framework to achieve this as part of decision-making. Planning Policy Wales translates the principles of SMNR into use for the planning system. The key features of the SMNR approach include:

- Improving the resilience of ecosystems and ecological networks; and
- Halting and reversing the loss of biodiversity.

4. Desk Study

4.1 Methods

4.1.1 A study area was defined to cover the site and all land within a 2km buffer area. Records for designated sites, ancient woodland and priority habitats were sought for the full 2km study area. Records for protected species, species of conservation concern and invasive non-native species were sought for a 1km buffer area. An additional study area with a 250m buffer area was used for the identification of waterbodies. The site location and study areas are shown on Figure 1.

4.1.2 These search areas for biological records were deemed to be suitable based on the zone of influence for the works. The zone of influence for a project is defined as the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2017).

4.1.3 Sources of information were as follows:

Table 4.1: Sources of desk study data

Source	Summary of information provided
South East Wales Biodiversity Records Centre (SEWBRcC)	Non-statutory designated sites and species records. Requests for information were sent on 14/06/24 Results were received on 19/06/24
The Multi-Agency Geographical Information for the Countryside (MAGIC)	Locations of waterbodies, statutory designated sites, protected species licence returns and priority habitats (including ancient woodland).

4.1.4 Results were filtered to include only those relevant to the study area and only those recorded in the last ten years. Results are presented in the following section.

4.1.5 Potential ecological constraints identified as a result of the desk study are presented in Section 7.

4.2 Results

4.2.1 The results of the desk study are summarised below and summarised on Figure 1.

Designated Sites

4.2.2 There are two statutory designated sites within the study area. The closest of which is 1km from site. Details of statutory designated sites are given in Table 4.2.

4.2.3 There are one non-statutory designated sites within the study area. The closest of which is 1.90km from site. Details of non-statutory designated sites are given in Table 4.2.

Table 4.2: Designated sites within the study area

Site Name	Designation	Central Grid Reference	Description	Distance (km) and orientation from site
International Sites (SPA, SAC and Ramsar)				
River Usk / Afon Wysg	SAC & SSSI	ST 31862 86357	This site is designated as a SAC due to the presence of the following features. Sea Lamprey (<i>Petromyzon marinus</i>) Brook Lamprey (<i>Lampetra planeri</i>), River Lamprey (<i>Lampetra fluviatilis</i>), Twaite shad (<i>Alosa fallax</i>), Atlantic Salmon (<i>Salmo salar</i>), bullhead (<i>Cottus gobio</i>) and European otter (<i>Lutra lutra</i>).	0.93 east
National Sites (SSSIs)				
Gwent Levels - St. Brides	SSSI	ST 3038 8515	The site is designated due to its wide range of wetland plants and insects.	1.69 south
Local Site (LNR)				
Allt-Yr-Yn	LNR	ST 29372 88693	This site is home to a variety of habitats, including woodland, meadows, and wetlands. Notable species include otter (<i>Lutra lutra</i>) and water vole (<i>Arvicola amphibius</i>).	1.90 north west

Ancient Woodland Outside Designated Sites

- 4.2.4** Three parcels of ancient woodland were recorded within the study area, the closest of which is Ancient woodland is 1.28km from site. Locations are shown on Figure 1.

Other Priority Habitats Outside Designated Sites

- 4.2.5** The habitats outside of the site but within the 2km buffer comprise of lowland fens and reedbeds, maritime cliff and slopes and lowland dry acidic grassland. The habitats are summarised in Table 4.3 and the locations are shown on Figure 1.

Table 4.3: Priority habitats within the study area

Priority Habitat Type	Grid Reference of Nearest Parcel	Distance to Site of Nearest Parcel (km)	Number of parcels within 1km
Lowland Fens and Reedbeds	ST 30715 85974	0.72	1
Maritime Cliff and Slopes	ST 32212 85733	1.17	1
Lowland dry acid grassland	ST 28970 86616	1.87	1

Waterbodies

- 4.2.6** The waterbodies within 250m and their locations are shown on Figure 1.

Table 4.4: Waterbodies recorded within the study area

Name	Grid Reference	Distance to Site (km)	Description
WB1	ST 30920 86549	0.25	Standing body of water.

Protected Species and Species of Conservation Concern

Table 4.5: Species records derived from the desk study

Common Name	Scientific Name	Habitats Regulations	WCA	National Priority Species ⁸	Local Priority/ BAP Species	BoCC	Red List ⁹	No. of Records	Year ¹⁰	Grid Ref. ¹¹	Dist. From Site (m) ¹⁶
Mammals											
Serotine	<i>Eptesicus serotinus</i>	Schedule 2	Schedule 5						2023	ST 3047 8722	526
Western European hedgehog	<i>Erinaceus europaeus</i>							15	2014	ST 3100 8681	151
Myotis sp.	<i>Myotis sp.</i>	Schedule 2	Schedule 5	Y					2018	ST 30881 87866	928
Noctule	<i>Nyctalus noctula</i>	Schedule 2	Schedule 5	Y				3	2023	ST 3050 8723	507
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Schedule 2	Schedule 5					7	2023	ST 3050 8723	507
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	Schedule 2	Schedule 5	Y				3	2023	ST 3050 8723	507
Birds											

⁸ Species of Principal Importance within the relevant country of the United Kingdom.

⁹ Near Threatened (NT), Vulnerable (VU), Endangered (EN) or Critically Endangered (CE). * = England, **=GB.

¹⁰ Of most recent record.

¹¹ Of closest record to site.

Swift	<i>Apus apus</i>					Red			2019	ST 306 875	666
Canada goose	<i>Branta canadensis</i>		Schedule 9						2019	ST 30 87	699
Black-headed gull				Y		Amber			2022	ST 30 87	699
Dartford warbler	<i>Curruca undata</i>		Schedule 1			Amber			2020	ST 31 87	809
Kestrel	<i>Falco tinnunculus</i>			Y		Amber			2022	ST 31 87	809
Herring gull	<i>Larus argentatus</i>			Y		Red		3	between 2013 and 2019	ST 38D	103
House sparrow	<i>Passer domesticus</i>			Y		Red		3	5 records, between 2013 and 2019	ST 38D	103
Black redstart	<i>Phoenicurus ochruros</i>		Schedule 1			Red		2	2015	ST 30 87	699
Dunnock	<i>Prunella modularis</i>			Y		Amber		2	between 2013 and 2019	ST 38D	103
Starling	<i>Sturnus vulgaris</i>			Y		Red			18/06/2022	ST 310 868	159
Redwing	<i>Turdus iliacus</i>		Schedule 1			Amber			2 records, between 2010 and 2023	ST 31 87	809
Song thrush	<i>Turdus philomelos</i>			Y		Amber			2024	ST 306 872	410
Reptiles											
Slow-worm	<i>Anguis fragilis</i>		Schedule 5	Y					2022	ST 3015 8713	786
Common lizard	<i>Zootoca vivipara</i>		Schedule 5	Y					2023	ST 3030 8710	633
Plants											

Bluebell	<i>Hyacinthoides non-scripta</i>		Schedule 8						2018 and 2021	ST 30 87	699
Invertebrates											
The rustic	<i>Hoplodrina blanda</i>			Y					2023	ST 3102 8683	149
The lackey	<i>Malacosoma neustria</i>			Y				2	2023	ST 3102 8683	149
Dark brocade	<i>Mniotype adusta</i>			Y					2023	ST 3102 8683	149
Buff ermine	<i>Spilosoma lutea</i>			Y					2023	ST 3102 8683	149

Invasive Non-Native Species

- 4.2.7** There are 55 records of just one species for invasive non-native species recorded within the study area. These records are summarised in Table 4.6.

Table 4.6: Invasive non-native species

Common Name	Scientific Name	WCA	Distance to Site (km)
Japanese knotweed	<i>Reynoutria japonica</i>	Schedule 9	On site

5. Habitat Survey

5.1 Methods

- 5.1.1** A survey area was defined as an area that encompassed by the red line boundary. The survey area is shown on Figure 2.
- 5.1.2** A survey using the UK Habitat Classification system (UKHab) (UKHab Ltd, 2023) was conducted throughout the survey area. This is a nationally recognised habitat classification system that is compatible with the Defra statutory metric for calculating biodiversity net gain values (Defra, 2023a).
- 5.1.3** The UKHab has five hierarchical levels and includes the identification of priority habitats and Annex I habitats as listed under the European Habitats Directive. The five levels are:
- Level 1 - Biomes/major ecosystems (terrestrial, freshwater and coastal);
 - Level 2 - Ecosystem types (i.e. woodland, grassland, heathland and scrub);
 - Level 3 - Broad Habitats, based on those of the UK Biodiversity Action Plan (UKBAP);
 - Level 4 - Habitats, including priority habitats; and
 - Level 5 - Habitats, including Annex I habitats.
- 5.1.4** In addition, non-hierarchical secondary codes were used to provide supplementary information.
- 5.1.5** During the field survey, the habitats in the survey area were mapped to the highest level possible
- 5.1.6** Table 5.1 below shows the meta-data used for this survey.

Table 5.1: Habitat survey meta-data

Scope and purpose of the survey	Preliminary Ecological Appraisal (PEA)
Area surveyed	Figure 1
Edition of UKHab used	UKHab-Professional (V2)
Minimum Mapping Unit (MMU)	25m ² for areas, 5m for linear features
Level of UKHab Primary Hierarchy used	Level 5, where possible
List of Secondary Code groups recorded	All secondary codes
Map projection and units	Figure 2
Date of survey	17/06/24
Organisation and individual undertaking the survey	Thomson Environmental Consultants, Aaron Meijer
References for any existing datasets that have been used	South East Wales Biodiversity Records Centre (SEWBRc), www.magic.gov.uk

5.1.7 The dominant and readily identified species of higher plant species from each habitat type within the survey area were recorded and their abundance was assessed on the DAFOR scale:

- D Dominant;
- A Abundant;
- F Frequent;
- O Occasional; and
- R Rare.

5.1.8 These scores represent the abundance within the defined area only and do not reflect national or regional abundances. Plant species nomenclature follows Stace (2019).

5.1.9 Target notes were made for any features which were too small to map but were of particular ecological interest.

5.1.10 Incidental records of fauna were also made during the survey and the habitats identified were evaluated for their potential to support protected species and other species of conservation concern, including priority species. However, no specific faunal surveys were undertaken.

An additional buffer of 50m was selected as the area over which the development could contravene the law and policy protecting biodiversity (i.e. the zone of influence of the

development). A survey buffer aim is to pick up additional potential constraints such as badger setts <30m of the works or bat roosts that could be disturbed.

5.2 Results

Habitats and Flora

5.2.1 The habitats recorded on site are described below, with secondary codes given in brackets, and their distribution is given on Figure 2.

- *u1b5 - Buildings*
- *u1c - Artificial unvegetated unsealed surface*
- *u1f - Sparsely vegetated urban land*
- *h3h - Mixed scrub*

u1c-1 - Artificial unvegetated unsealed surface

5.2.2 An area of approximately 1.2ha across most of the survey area, this parcel is exclusively bare ground with no flora or fauna species present.

u1b5 - 1 Buildings

5.2.3 An area of approximately 0.001ha across most of the survey area, This is an old building that is partially obscured by ivy (*Hedera helix*) growth.

u1b5 - 2 Buildings

5.2.4 An area of approximately 0.003ha across most of the survey area, This is an old building that is partially obscured by scrub h3h-2.

u1f-1 - Sparsely vegetated urban land

5.2.5 An area of approximately 0.09ha to south of the survey area, this parcels ground flora is comprised of Frequent annual beard-grass (*Polypogon monspeliensis*), Occasional bristly oxtongue (*Helmintothea echioide*), Prickly Sow-thistle (*Sonchus asper*), mayweed sp. (*Triplospermum sp.*), rare lesser trefoil (*Trifolium dubium*), beardless rabbitsfoot grass (*Polypogon viride*) and Yorkshire fog (*Holcus lanatus*).

h3h-1 - Mixed scrub

5.2.6 An area of approximately 0.01ha to north east of the survey area, this parcels flora is comprised of frequent bramble (*Rubus fruticosus agg.*), willow (*Salix sp*), occasional butterfly bush (*Buddleja davidii*), sycamore (*Acer psuedoplatanus*), bittersweet (*Solanum dulcamara*) and rare St. John's wort (*Hypericum sp.*).

h3h-2 - Mixed scrub

- 5.2.7** An area of approximately 0.01ha to south east of the survey area, this parcels flora is comprised of frequent bramble (*Rubus fruticosus*) and willow (*Salix sp*), occasional nettle (*Urtica dioica*), butterfly bush and red valerian (*Centranthus ruber*).

Fauna

- 5.2.8** The following species were recorded onsite during the survey:

- Carrion crow (*Corvus corone*);
- House sparrow (*Passer domesticus*); and
- Blackbird (*Turdus merula*)

Target Notes

- TN1 - Unidentified multi-stemmed dead tree with loose bark.
- TN2 - Japanese Knotweed
- TN3 - Japanese Knotweed

5.3 Potential of the Site to Support any Protected Species or Species of Conservation Concern

- 5.3.1** Scrub (h3h-1 & h3h-2) may provide suitable refugia and basking habitat for reptiles and amphibian species.

- 5.3.2** The adjacent woodland has the potential to provide the following:

- Foraging, basking and commuting opportunities for reptiles and amphibians; and
- Foraging and commuting opportunities and shelter (inc. sett creation) for badger, hazel dormouse (*Muscardinus avellanarius*), hedgehog, polecat (*Mustela putorius*) and other small mammals.

- 5.3.3** Scrub, buildings and woodland has the potential to support breeding birds; BoCC Red and Amber listed, as well as Schedule 1 species.

- 5.3.4** Buildings (u1b5-1 and u1b5-2) and trees (TN1) have the potential to support roosting bats.

6. Constraints, Opportunities and Recommendations

6.1 General Recommendations

6.1.1 A Species Enhancement Plan (SEP) is recommended to ensure the development maximises its potential benefits for biodiversity post-construction. This document would include recommendations such as:

- Bird and bat boxes to be fitted to the buildings on the development to benefit priority and local action plan species such as house sparrow, swift and soprano pipistrelle. Ideally, bird boxes should face between north and east while bat boxes should be placed facing south, south-east or south-west. Boxes should be placed above three metres from the ground to avoid disturbance but remain sheltered from strong wind.
- The lighting regime to be as sensitive as possible to minimise light spill onto semi-natural habitats.
- Hedgehog highways, to provide safe access in and out of the site. these can be created by cutting appropriate sized holes in fencing to allow the hedgehog to pass freely.
- Bug hotels, compost heaps and other refugia to be create within a variety of locations across the site. These could be created from arisings from on-site vegetation management.

6.2 Designated Sites

6.2.1 The River Usk SAC is within 1k of site, It is unlikely that the proposed works will cause damage to the special interest of the sites because:

1. The works are temporary in nature and small in scale;
2. The works will not result in a change of land use or otherwise increase recreational pressure on the designated site; and
3. The works will not result in significant or long-term increases in emissions to air or from wastewater.

6.2.2 Gwent Levels SSSI is within 1km of site. Natural Resources Wales is not required to be contacted if the activity happens outside the SSSI boundary and there is no damage expected to the special interest of the site.

6.2.3 For the same reasons in 6.2.1, the works should not have direct impacts on the remaining designated sites that are present within the study area.

6.2.4 Best practice measures should be implemented to prevent any contamination of soil or air. This includes prevention of emissions of sediment, dust and chemicals.

6.3 Ancient Woodland

- 6.3.1 It is considered reasonably unlikely that the works will have an effect on any of the ancient woodland identified during the desk study. This is because of their distance from the site (1.28km), the small-scale and temporary nature of the works, and the absence of direct pathways for damage.

6.4 Priority Habitats

- 6.4.1 It is considered reasonably unlikely that the works will have an effect on any of the priority habitats identified during the desk study and field survey. This is because of their distance from the site (0.72km, lowland fens and reedbeds), the small-scale and temporary nature of the works, and the absence of direct pathways for damage.

6.5 Waterbodies

- 6.5.1 It is considered reasonably unlikely that the works will directly affect the standing waterbody (0.25km away from the site), recorded by the desk study due to their distance from the site.

6.6 Protected Species and Species of Conservation Concern

Badger

- 6.6.1 Despite the desk study not returning and records of badger there is suitable habitat (woodland within railway boundary withing the buffer north of site) directly adjacent to the site for badger foraging and sett building. No badger setts were recorded during the habitat survey; however, some parts of the site could not be thoroughly checked due to access constraints. If badger are present there is the risk of damage/disturbance to setts, entrapment and contact with chemicals.
- 6.6.2 Badger and their setts are protected under legislation as set out in Section 3 and Appendix 1.
- 6.6.3 To prevent harm to badgers or other mammal species visiting the works area during the construction phase the following precautions are recommended:
- Secure storage of materials and chemicals within a designated area.
 - Deep excavations should be covered at night or a suitable escape ramp should be provided to prevent animals becoming trapped.
 - Task lighting should be purposefully directed away from retained habitats and focussed on the work area to reduce potential impacts or disturbance to badger.

Reptiles

- 6.6.4 The desk study returned records of reptile species within the 1km study area. Suitable refugia habitat (h3h-1 and 2) and basking for reptiles was recorded to be present on the site. Removal of habitat suitable for supporting reptiles could result in the killing or injury of reptiles which would be an offence in the absence of appropriate mitigation.
- 6.6.5 The legal protection afforded to reptiles is summarised in Section 3.

- 6.6.6** Further survey of the site for reptiles is recommended including a detailed habitat suitability assessment and presence/ likely absence surveys to determine the species present and their status on the site. Survey results will inform the avoidance and/or mitigation measures required to ensure the works do not result in the killing or injury of reptiles.

Birds

- 6.6.7** Records of common breeding bird species were returned in the desk study; breeding bird species were recorded on site and there is suitable habitat (h3h-1 & 2) and the disused building present for nesting birds.
- 6.6.8** As summarised in Section 3.1 all bird species are protected, including active nests.
- 6.6.9** The site also has the potential to support bird species listed under Schedule 1 of the WCA, including black redstart. These species have additional protection that means disturbance at the nest would also be an offence.
- 6.6.10** Suitable habitat for nesting birds should be retained where possible or removed outside of the breeding birds season, i.e. removed between September and February, inclusive. If suitable nesting habitat is scheduled for removal during the bird breeding season it should be checked first for the presence of nesting birds and if nesting birds are found to be present the works should be delayed until the nest is no longer active.
- 6.6.11** Further survey is recommended of the site, plus a 50m buffer, for the presence of nesting Schedule 1 bird species.

Bats

- 6.6.12** Records of bat species were found within the 1km study area and there are buildings on the site with the potential to support roosting bats. The woodland adjacent on site also have potential to support foraging and commuting bats, with connectivity to the wider landscape.
- 6.6.13** The legal protection afforded to bats is summarised in Section 3.
- 6.6.14** Further survey is required to assess the buildings and TN3 on the site to support roosting bats and to record the location of potential roosting features. Where potential roosting features are recorded or further assessment of the tree or building is necessary and an impact cannot be avoided, further survey is likely to be required to determine presence or absence of roosting bats. Mitigation is likely to be required if bat roosts will be directly impacted or indirectly impacted by disturbance.
- 6.6.15** Works at night should be avoided. If works at night are necessary, any lighting used to facilitate the works should be implemented using a sensitive lighting regime. This should be designed in consultation with a suitably qualified ecologist and include the focus of lighting to be on the works area only and directed away from suitable habitat for commuting and foraging bats (hedgerow). Any light spill in the surrounding habitats should be minimised to prevent disturbance to any foraging or commuting bats that may be present.
- 6.6.16** It is recommended that lighting strategy should be included within the ECMP, ensuring that retained and created suitable bat foraging and commuting habitat is protected from increased

illumination during and post development. The lighting strategy should be produced according to ILP Guidance Note GN08/23.

Hedgehog

- 6.6.17 Records of hedgehog were returned within the desk study. Suitable habitat for hedgehog was recorded on the site (h3h on Figure 3).
- 6.6.18 Although hedgehog is not a protected species it is a species of conservation concern.
- 6.6.19 It is recommended that any habitat suitable for sheltering hedgehog, that is subject to clearance, should be checked prior to works. Any suitable refugia on site, such as log piles, should be retained wherever possible. Should hedgehogs be discovered on site at any time during their active period (April to October inclusive), they should be allowed to move away on their own volition or if in danger moved carefully with gloved hands to a sheltered area (e.g. dense scrub). Should hedgehogs be discovered on site outside of the active season (April to October inclusive), an ecologist should be contacted for advice on how to proceed.

Great Crested Newt (GCN)

- 6.6.20 No records of GCN were returned in the desk study. A single waterbody (WB1) was recorded within the 250m buffer of the development site. WB1 resides within Belle Vue Park, located north of the B4237.
- 6.6.21 The B4237 road is deemed an ecological barrier to GCN due to its size and linkage to other roads within Newport.
- 6.6.22 The desk study returned no further water bodies within the 250m buffer. No further assessment is required towards GCN and the species is not considered further in this report.

6.7 Invasive Plant Species

- 6.7.1 The desk study found 55 records of Japanese Knotweed within the study area, and Japanese Knotweed was recorded on site during the habitat survey.
- 6.7.2 Further survey of the site, conducted during the summer months, is recommended to determine the extent and precise locations of invasive non-native species. If invasive plant species are found to be present in the works area appropriate measures should be put in place to ensure that the works do not result in the spread of the species.

7. Conclusion

- 7.1.1 Provided the recommended further surveys are conducted, alongside mitigation, it is considered reasonably unlikely that the works would result in any impact on the identified ecological features and the works should remain in-line with legislation and policy.

8. References

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Appendix 1: Development boundary and layout. Drawing number
NP20 2NW-F-01 (13.03.24)