

Ecological Assessment



**Tyler
Grange**

**Toynbee Road and Romsey Close
8th June 2023**

TG Report No. 14910_R02e_JS_CW

Report No:	Date	Revision	Author	Checked	Approved
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Summary

- S.1 Tyler Grange Group Limited was instructed by Planning Issues in October 2022 to undertake an Ecological Assessment for a proposed retirement apartment complex at Toynbee Road and Romsey Close, Eastleigh, SO50 9DP, hereafter referred to as the 'site'. The site comprises eight semi-detached residential properties, along with their associated gardens and outbuildings.
- S.2 A planning application for the demolition of the existing buildings and the construct a new 83 unit retirement apartment with associated communal facilities, access, car parking and landscaping is to be submitted to Eastleigh Borough Council.
- S.3 The site is not covered by any statutory or non-statutory protection although a number of such sites are present within the local area. The closest statutory designated site to the site is the River Itchen SAC and SSSI, located approximately 750m east of the site.
- S.4 Due to the distance between the site and the River Itchen SAC and SSSI, there is the potential for impacts, such as run off during the construction phase of the development. As a result, standard construction safeguards will take place, such as those in relation to noise, vibration, dust and contaminated run-off, with further detail to be provided within a Construction Environmental Mitigation Plan (CEMP). These measures will ensure no impacts occur to any adjacent habitats, protected sites in the study area or other off-site receptors.
- S.5 In addition, the site falls within the Solent catchment area, an area that is vulnerable to an increase in nitrates. As such, any new development that may result in an increase in nitrates would be required to pay a habitats mitigation contribution as part of Eastleigh Borough Council's Nutrient Neutrality Offset Scheme to offset any increase in nitrates as a result of the development. With the adoption payments (£3,000 per credit offset, equivalent to 1 kg of nitrates per year) in place, there will be no impacts as a result of the development.
- S.6 The habitats within the site largely comprise buildings and hardstanding with vegetated gardens, consisting of amenity grassland, with ephemeral/perennial successional species, introduced shrub and small areas of scrub vegetation around the margins. Three scattered trees are located within the site boundary, and evidence of recent tree felling was recorded during the phase 1 survey. Overall, the habitats on site are considered to be of no more than site importance.
- S.7 The properties of numbers 2, 6 and 8 Toynbee Road were considered to offer moderate suitability for roosting bats, and number 4 Toynbee Road and 2-5 Romsey Close were considered to offer low suitability for roosting bats due to a number of visible external potential roosting features (PRFs) (refer to **Appendix 2 & 3**).
- S.8 As such, surveys for roosting bats will be required during the active season (May to September inclusive) to determine if any of the buildings on site are being used by roosting bats. All of the trees within the site boundary were considered to offer negligible potential for roosting bats, and no other suitable roosting features were identified on site.
- S.9 New native hedgerow, tree and shrub planting along with wildflower margins will maximise opportunities for wildlife and help the site to achieve a biodiversity net gain. The new habitat created on site will be managed to maximise opportunities for wildlife. To create additional ecological enhancements at the site the provision of bird and bat boxes is also recommended to improve opportunities for UK and local priority species.



- S.10 With the implementation of suitable mitigation and enhancement measures, the proposed development would be in conformity with relevant planning policy and legislation, as set out at in **Appendix 1**. The strategy could be controlled by appropriately worded planning controls.



Section 1: Introduction and Methodology

Introduction

- 1.1. Tyler Grange Group Limited was instructed by Planning Issues in October 2022 to undertake an Ecological Assessment for a proposed retirement apartment complex at Toynbee Road and Romsey Close, Eastleigh, SO50 9DP, hereafter referred to as the 'site'. The site comprises eight semi-detached residential properties, along with their associated gardens and outbuildings, centred on the National Grid Reference SU 45259 19265 (refer to **Plan 14910/P01**).
- 1.2. A planning application for the demolition of the existing buildings and to construct a new 83 unit retirement apartment with associated communal facilities, access, car parking and landscaping is to be submitted to Eastleigh Borough Council.
- 1.3. The purpose of this report is to:
 - Use available background data and results of field surveys, to describe and evaluate the ecological features present within the likely 'zone of influence' (Zoi)¹ of the proposed development;
 - Describe the actual or potential ecological issues and opportunities that might arise as a result of the Site's future development; and
 - Where appropriate, make recommendations for mitigation of adverse effects and ecological enhancement, to ensure conformity with policy and legislation.
- 1.4. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2019).

Context

- 1.5. The site is located close to the centre of the town of Eastleigh, Hampshire. The site is surrounded by extensive areas of residential and commercial development. The western boundary of the site is defined by Toynbee Road, with the residential properties and a school playing field beyond. The eastern boundary is defined by Romsey Close road, which leads to the A335 roadway that runs south of the site. The northern boundary of the site is defined by a public right of way (PRoW) with the residential properties of Toynbee Close beyond. The wider area of the site is surrounded by extensive areas of built residential and commercial development in all directions.
- 1.6. The site comprises eight residential properties, with numbers 2, 4, 6 and 8 Toynbee Road along the western boundary, and 2, 3, 4 and 5 Romsey Close along the eastern boundary. The properties are separated by vegetated gardens at the rear of each building respectively. Several scattered trees are located within the garden boundaries, along with patches of scrub, introduced shrub and ephemeral / perennial vegetation (see **Plan 14910/P02**).
- 1.7. The 'site' is defined by the application redline boundary, refer to **Plan 14910/P01**. The 'study area' extends to a 2km radius for protected and priority species records, 2km for bat species, 2km for

¹ Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project (CIEEM, 2019).



non-statutory site designations and nationally designated statutory sites, and a 10km radius for European statutory designated sites.

Legislation and Planning Policy

Wildlife Legislation

- 1.8. The following wildlife legislation is relevant to the proposed development.
- Conservation of Habitats and Species Regulations 2017 (as amended);
 - Wildlife and Countryside Act 1981 (as amended);
 - Countryside and Rights of Way Act 2000; and
 - Natural Environment and Rural Communities Act 2006.
- 1.9. A summary of wildlife legislation with respect to species recorded in either the site and/or adjacent to or at the site boundary is provided in **Appendix 1**.

National Planning Policy

- 1.10. The National Planning Policy Framework (NPPF; 2021) includes the Government's policy on the protection of biodiversity through the planning system. A summary of the relevant paragraphs of the NPPF is provided in Appendix 1.

Local Planning Policy

- 1.11. The following policy of the adopted Eastleigh Borough Local Plan 2016 - 2036 (Adopted 2016) is relevant to the ecological assessment of the proposed development:
- Policy DM11, Nature Conservation
- 1.12. The relevant local policy text is included in **Appendix 1**.

Methodology

- 1.13. This Ecological Assessment has been informed by the following, with detailed methods provided in **Appendix 2**:
- Full desk study and records search;
 - Phase 1 habitat survey and Preliminary Bat Roost Assessment (PBRA); and
 - Badger survey.
- 1.14. The above scope of work has informed the description and assessment of importance of ecological features - in line with the 'Guidelines for Ecological Impact Assessment' published by the Chartered Institute for Ecology and Environmental Management (CIEEM) (CIEEM, 2019) - the consideration of opportunities and constraints to development, and mitigation and enhancement requirements to ensure conformity with legislation and policy (see Appendix 1). In addition, all work undertaken complies with British Standard's for Biodiversity – BS42020 (BSI Standards Publication 2013).



Quality Assurance

- 1.15. All ecologists at TG are members of CIEEM or are working towards their membership and abide by the Institute's Code of Professional Conduct.



Section 2: Ecological Features and Evaluation

- 2.1. Ecological features within the site are described below, together with an assessment of their importance using a geographical frame of reference advocated by CIEEM (2019).

Protected Sites

- 2.2. All statutory or non-statutory designation for nature conservation importance within the study area have been provided in **Table 2.1** below.



Table 2.1: Protected Sites

Designation	Site Details	Importance
European Protected Sites	There are four internationally designated sites within the 10 km of the site. River Itchen Special Area of Conservation (SAC) is located c. 750 m east of the site boundary and is designated for its classic sub-type 1 chalk river, Southern damselfly <i>Coenagrion mercurial</i>, and Bullhead <i>Cottus gobio</i>. Emer Bog SAC is located c. 5.5 km northwest of site and is designated for its Transition mires and quaking bogs, Annex 1 habitats. Solent & Southampton Water Ramsar site and Special Protected Area (SPA) is located, at its closest c. 6.2 km south of the site boundary and is designated for its populations of breeding common tern <i>Sterna hirundo</i>, little tern <i>Sterna albifrons</i>, Mediterranean gull <i>Larus melanocephalus</i>, roseate tern <i>Sterna dougallii</i>, sandwich tern <i>Sterna sandvicensis</i> and overwintering populations of black-tailed godwit <i>Limosa limosa islandica</i>, dark-bellied brent goose <i>Branta bernicla bernicla</i>, ringed plover <i>Charadrius hiaticula</i>, and teal <i>Anas crecca</i>. Solent Maritime SAC is located c. 9.1 km southeast of site and is designated for its Estuary, Spartina swards, and Atlantic salt meadows, Annex 1 habitats.	International
Sites of Special Scientific Interest (SSSI)	There is one SSSI within 2 km of the site. At its closest point the River Itchen SSSI is located 750 m east of the site and is designated for its classic chalk stream and river, with fen meadow, flood pasture and swamp habitats, in-channel vegetation dominated by crowfoot <i>Ranunculus spp.</i> and significant populations of nationally-rare invertebrates, otter <i>Lutra lutra</i>, water vole <i>Arvicola terrestris</i>, and breeding birds. The site lies within >10 SSSI impact risk zones, meaning all planning applications require consultation with the LPA and Natural England regarding likely risks from the development.	National



Designation	Site Details	Importance
Sites of Importance for Nature Conservation (SINC)	There are 21 SINCS within 2km of the site. The closest of which to the site are the Swamp West of Recreation Grounds, Monks Brook, Flemming Park, and Boyatt Wood – Woodside avenue Extension. Swamp West of Recreation Grounds SINC, located c. 0.75km east of the site boundary. Designated as for the presence of the plant great yellowcress <i>Rorippa amphibia</i> (a Hampshire notable species). Monks Brook, Flemming Park SINC, located c. 1km south west of the site boundary. Designated as a site that supports water vole (a Hampshire notable species). Boyatt Wood – Woodside Avenue Extension SINC, located c. 1km north west of the site boundary. Designated as a wet woodland comprising alder <i>Alnus glutinosa</i>, willow <i>Salix spp.</i> and birch <i>Betula spp.</i> bog woods, which support a good diversity of woodland and/or marsh/swamp/mire species.	Local

Habitats and Flora

- 2.3. Habitats present within the site and adjacent to it, along with their ecological importance (CIEEM, 2019) are detailed in **Table 2.2** and shown on **Plan 14910/P02**.



Table 2.2: Habitat Features

Habitat	Description	Importance
Amenity Grassland	The majority of the front and back garden space of all properties (except No. 8 Toynbee Road) comprises manicured lawns that are dominated by perennial rye grass <i>Lolium perenne</i> and very low density of herbaceous cover (<10%), with the exception of 6 Toynbee Road, which comprised higher density of herbaceous cover than the other amenity lawns on-site with around six plant species per m ² estimated, although comprising common and widespread “weedy” species only. Species present within the amenity grassland gardens across the site included annual meadow-grass <i>Poa annua</i> , cat’s ear <i>Hypochaeris radicata</i> , cleaver’s <i>Galium aparine</i> , cock’s-foot <i>Dactylis glomerata</i> , common ragwort <i>Senecio jacobaea</i> , creeping buttercup <i>Ranunculus repens</i> , daisy <i>Bellis perennis</i> , dandelion <i>Taraxacum officinale</i> agg., Fleabane sp., <i>Erigeron</i> sp., greater plantain <i>Plantago major</i> , groundsel <i>Senecio vulgaris</i> , herb Robert <i>G. robertianum</i> , perennial rye-grass <i>Lolium perenne</i> , ribwort plantain <i>P. lanceolata</i> , scarlet pimpernel <i>Anagallis arvensis</i> , selfheal <i>Prunella vulgaris</i> , sow-thistle <i>Sonchus</i> sp., spear thistle <i>Cirsium vulgare</i> , <i>Speedwell</i> sp., <i>Veronica</i> sp., white clover <i>Trifolium repens</i> , yarrow <i>Achillea millefolium</i> and Yorkshire fog <i>Holcus lanatus</i> .	Site
Buildings and Hardstanding	The majority of the site comprises the eight semi-detached residential properties of No. 2, 4, 6, 8 Toynbee Road, and No. 2, 3, 4, 5 Romsey Close with associated outbuildings, driveways and pathways. This habitat type is of little inherent ecological interest with its potential to support fauna discussed below.	Negligible
Bare Ground	Bare ground is mapped on the northern boundary, within the rear garden of 5 Romsey Close. The bare ground looked to be the result of recent disturbance works, likely associated with the clearance of a shrub/tree belt running parallel to the northern boundary.	Negligible
Ephemeral / short perennial	Ephemeral/short perennial vegetation is located within the rear gardens of 8 Toynbee Road, 2 and 5 Romsey Close and makes up a small total area of the site. The species variety in this habitat is small and limited to a couple of species per are and is typically dominated by one species. Species included black nightshade <i>Solanum nigrum</i> , cleaver’s <i>Galium aparine</i> , field bindweed <i>Convolvulus arvensis</i> , ground elder, <i>Aegopodium podagraria</i> , groundsel <i>Senecio vulgaris</i> , herb Robert, ivy <i>Hedera helix</i> , sow-thistle, variegated yellow archangel <i>Lamium galeobdolon</i> subsp. <i>argentatum</i> .	Site



Habitat	Description	Importance
Introduced Shrub	Introduced shrub borders the majority of the front and rear garden boundaries of the eight properties on-site. Introduced shrub boundaries varied from thick and dense to sparse and scraggly. Native species are included within the introduced shrub habitat, however, non-natives dominate. Species include bamboo <i>Bambusa</i> sp., beech <i>Fagus sylvatica</i> , box honeysuckle <i>Lonicera nitida</i> , buddleia <i>Buddleja davidii</i> , californian lilac <i>Ceanothus</i> sp., camellia sp. cherry laurel <i>Prunus lauroceracus</i> , comfrey <i>Symphytum officinale</i> , conifer (dwarf and non-dwarf varieties), cotoneaster sp., cypress spurge <i>Euphorbia cyparissias</i> , elephant ears <i>Bergenia</i> sp., elm sp. <i>Ulmus</i> sp., evergreen spindle <i>Euonymus japonicus</i> , fern (varieties), infortune's spindle <i>Euonymus fortune</i> , fuchsia sp., geranium sp., gladioli sp. <i>Gladiolus</i> sp., glossy abelia <i>Abelia x grandiflora</i> , golden privet <i>Ligustrum ovalifolium</i> , hazel <i>Corylus avellana</i> , hellebore <i>Helleborus</i> sp., holly <i>Ilex aquifolium</i> , holly "variegated" <i>Ilex aquifolium</i> "variegated", hydrangea sp., italian lords and ladies <i>Arum italicum</i> , japanese laurel <i>Aucuba japonica</i> , japanese maple <i>Acer palmatum</i> , jasmine sp. <i>Jasminum</i> sp., lemon balm <i>Melissa officinalis</i> , lungwort <i>Pulmonaria</i> sp., mexican orange <i>Choisya</i> sp., montbretia <i>Crocsmia x crocosmiiflora</i> , palm (variety), pendulous sedge <i>Carex pendula</i> , periwinkle <i>Vinca</i> sp., privet sp. <i>Phillyrea</i> sp., red currant <i>Ribes rubrum</i> , red robin <i>Photinia x fraseri</i> 'Red Robin', rose <i>Rosa</i> sp., saxifrage sp. <i>Saxifraga</i> sp., sowbread <i>Cyclamen purpurascens</i> , snow in summer <i>Cerastium tomentosum</i> , spirea sp. <i>Spiraea</i> sp., st John's wort sp. <i>Hypericum</i> sp., tree heather <i>Erica arborea</i> , viburnum sp., wild cherry (young) <i>P. avium</i> .	Site
Pond	A small (1m x 0.5m) garden pond is located within the rear garden of 6 Toynbee Road. The pond is lined and comprises 100% cover of duckweed <i>Lemna minor</i> and had a mesh covering.	Site
Scattered trees	Three scattered trees are located within the site boundary, two of which are located in the garden of No. 2 Toynbee Road, comprising a single large conifer on the southern boundary, and a small wild cherry <i>Prunus avium</i> , and the third is located in the garden on No. 3 Romsey Close comprising a non-native conifer. Evidence of recent tree felling was observed during the phase 1 habitat survey, indicating that there were more trees on site previously.	Site
Scrub	The scrub on-site makes up a small total area and is located within 2 and 8 Toynbee Road and 5 Romsey Close. The scrub in both 5 Romsey Close and 2 Toynbee Road is relatively scraggly and low-lying bramble <i>Rubus fruticosus</i> agg. within the scrub in 5 Romsey Close there is also pendulous sedge <i>Carex pendula</i> and hazel <i>Corylus avellana</i> and within 2 Toynbee Close the scraggly scrub included buddleia <i>Buddleja davidii</i> and tree saplings. 8 Toynbee Close scrub was denser and comprised overgrown shrubs of buddleia, walnut (young) <i>Juglans regia</i> , cherry laurel <i>Prunus lauroceracus</i> , hawthorn <i>Crataegus monogyna</i> , elder <i>Sambuca nigra</i> and dogwood <i>Cornus sanguinea</i> , as well as bramble.	Site
Off-site habitats	The off-site habitats that surround the site are largely consistent with those found on the site, comprising residential properties, hardstanding roads and paths and vegetated gardens in all directions	Local



Protected and Priority Fauna

- 2.4. Records of protected and priority fauna held by Hampshire Biodiversity Information Centre (HBIC) for the study area as well as the results of the Phase 1 survey works completed are detailed in **Table 2.3** below.

Table 2.3: Protected and Priority Fauna

Fauna	Desk Study	Site survey	Importance
Amphibians	HBIC hold 17 records of common toad <i>Bufo bufo</i> within 2km of the site boundary. The nearest to the site was located c.750m north of the site in 2007. There are no records of great crested newts (GCN) <i>Triturus cristatus</i> within 2km of the site in the last 20 years.	A single small (1m x 0.5m) artificial pond was recorded on site. No evidence of GCN or other amphibians were recorded within the pond during the Phase 1 survey. No ponds or other waterbodies are located 500m of the site. Due to the limited habitat opportunities on site and barriers to movement GCN is not considered to utilise the site and as a result are not considered any further within this assessment. Common amphibians may be present within the hedgerow bases; however, given the limited scale of the suitable habitats on site, the site is unlikely to support anything more than one or two individuals using it as part of a wider foraging resource.	Negligible
Eurasian Badger	No records of Eurasian Badger <i>Meles meles</i> were returned by HBIC within 2km of the site in the last 20 years.	The site offers limited opportunities for badger although they could forage in the gardens on occasion though no field signs or setts were recorded during the Phase I Habitat Survey. Habitats within the wider area are largely unsuitable for badger.	Negligible



Fauna	Desk Study	Site survey	Importance
Bats	The following bat species were identified within 2km of the site from the HBIC data set: Common pipistrelle <i>Pipistrellus pipistrellus</i>; Soprano pipistrelle <i>Pipistrellus pygmaeus</i>; Nathusius's pipistrelle <i>Pipistrellus nathusii</i>; Noctule <i>Nyctalus noctula</i>; Serotine <i>Eptesicus serotinus</i>; Brown long-eared <i>Plecotus auratus</i>; Daubenton's bat <i>Myotis daubentonii</i>; and Whiskered bat <i>Myotis mystacinus</i>. The closest record was that of a common pipistrelle and noctule bat in flight, c. 120m south of the site boundary in 2019. The nearest confirmed roost is that of an unconfirmed pipistrelle bat c. 190m east of the site in a residential property. No records of bats were recorded within the site boundary.	The properties of 2, 6 and 8 Toynbee Road were considered to offer moderate suitability for roosting bats, and 4 Toynbee Road and 2 to 5 Romsey Close were considered to offer low suitability for roosting bats due to a number of visible external potential roosting features (PRFs) (refer to Appendix 2 & 3). No evidence of bats was recorded during the internal inspections. As such, surveys for roosting bats will be required during the active season (May to September inclusive) to determine if any of the buildings on site are being used by roosting bats. All of the trees within the site boundary were considered to offer negligible potential for roosting bats, and no other suitable roosting features were identified on site. The habitats within and surrounding the site provide suitable foraging and commuting habitat for urban and light tolerant species, such as common pipistrelle.	Local



Fauna	Desk Study	Site survey	Importance
Birds	HBIC holds the records of 108 notable bird species within the 2 km of the site boundary. Of relevance to the habitats within the site; • House sparrow <i>Passer domesticus</i> (Priority Species and Red Listed); • Tree sparrow <i>Passer montanus</i> (Priority Species and Red Listed); • Pied flycatcher <i>Ficedula hypoleuca</i> (Red Listed); • Starling <i>Sturnus vulgaris</i> (Red Listed); • Song thrush <i>Turdus philomelos</i> (Red Listed); and • Mistle thrush <i>Turdus viscivorus</i> (Red Listed) were identified. No records of notable bird species were returned from HBIC within the site boundary.	The buildings within the site offer potential nesting habitat for some species, such as house sparrow. The trees and hedges provide potential foraging and nesting habitat for a variety of species, though the areas are small in extent. Whilst some Birds of Conservation Concern (BoCC)² could use the site, an important assemblage of birds would not be expected or to be solely reliant upon it, and there are greater opportunities within the wider landscape.	Negligible
Dormouse	No records of hazel dormouse were identified within the desk study data set.	The site does not support any suitable habitat for dormice, and as such they are not considered within this report any further.	N/A

² Birds of Conservation Concern, British Trust for Ornithology, available at: <https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf> (Accessed 10/11/2022)



Fauna	Desk Study	Site survey	Importance
Invertebrates	The desk study identified numerous records of notable species within the study area, however none were within the site boundary. The nearest notable species relevant to the application included white-letter hairstreak <i>Satyrrium w-album</i> c.120m south-east of the site boundary.	The habitats on site offer limited habitat for invertebrates, with the suitable areas confined to the ornamental plants and introduced shrub around the margins of the garden.	Negligible
Plants	Numerous notable species have been recorded within the 2km study area, however none are located within the site boundary. There are numerous records of invasive plant species within the study area including: • Giant hogweed <i>Heracleum mantegazzianum</i>; • Indian balsam <i>Impatiens glandulifera</i>; • Japanese knotweed <i>Fallopia japonica</i>; • Buddleja; and • Wall cotoneaster <i>Cotoneaster horizontalis</i>.	No notable or protected plant species were recorded within the site during the Phase 1 survey. The Schedule 9 species buddleja was recorded on site within the area of introduced shrub in the garden of No. 2 Toynbee Road. In addition, a cotoneaster species was recorded among the introduced shrub, however it is uncertain if the species recorded is the invasive variety listed in Schedule 9 of the Wildlife and Countryside Act.	Negligible
Reptiles	The desk study identified records of adder <i>Vipera berus</i>, grass snake <i>Natrix helvetica</i>, slow-worm <i>Anguis fragilis</i> and common lizard <i>Zootoca vivipara</i> within the study area. The nearest were for grass snake and slow worm located c.750m north of the site in 2007.	The habitats present on site offer sub-optimal habitat for reptiles in the hedgerow bases. There is some connectivity to suitable habitat in the wider area; however, considering the limited ecological resources available to reptiles on site; the lack of connectivity to wider areas due to fencing around the site, and management of the gardens, dispersal opportunities may be limited and reptiles are considered likely absent from the site. It is extremely unlikely that the site alone could support anything more than a couple of individual reptiles, given the size of suitable habitat available, but they could be part of a larger population present in the local area of up to local ecological importance.	Negligible



Fauna	Desk Study	Site survey	Importance
Other species	Numerous records of hedgehog were present within the desk study for hedgehog <i>Erinaceus europaeus</i>. The closest of which was c.50m north-west of the site along Toynbee Road in 2007. 156 records of water vole <i>Arvicola amphibius</i> were present within the search area, with the nearest located c. 700m east of the site within the River Itchen. 41 records of otter <i>Lutra lutra</i> were identified within the study area, with the closest c.800m south of the site, within the River Itchen. 16 records of harvest mouse <i>Micromys minutus</i> were identified within the study area, with the nearest recorded c. 1.6km south of the site in 2007. One record of water shrew <i>Neomys fodiens</i> was identified c. 1.5km south of the site in 2015. One record of yellow-necked mouse <i>Apodemus flavicollis</i> was identified c. 1.6km south of the site in 2014.	The amenity grassland and hedgerow represent some limited foraging and sheltering opportunities for hedgehogs. It is considered that any population would not be reliant on the site alone due to the suitable habitats present in the wider area. There are no other habitats present on site that could support protected species.	Negligible



Section 3: Potential Impacts, Mitigation and Enhancement

Proposed Development

- 3.1. The proposals for the site include the demolition of the existing residential buildings on site and the construction of new buildings which includes 83 retirement apartment with associated communal facilities, access, car parking and landscaping.
- 3.2. The proposals have been designed to avoid impacts to wildlife and protect and retain the habitats present on site where possible, and to provide enhancements post-development through the planting of a new native hedgerow, trees and shrub and wildflower meadow margins, which will provide a gain in native habitats post-development (see **Appendix 4**).

Potential Impacts and Requirement for Mitigation

- 3.3. Both the Countryside and Rights of Way (CRoW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006 gives the importance of conserving biodiversity a statutory basis, requiring government departments (which includes Local Planning Authorities) to have regard for biodiversity in carrying out their obligations (which includes determination of planning applications) and to take positive steps to further the conservation of listed species and habitats. These articles of legislation require Mid Suffolk Council to take measures to protect species or habitats from the adverse effects of development, where appropriate, by using planning conditions or obligations.
- 3.4. Where there are potential impacts in the construction and/or operational phases of the development to the ecological resources described and evaluated in **Section 2**, these are described below. Where potential impacts would trigger legislation or planning policy (as set out in **Appendix 1**), the requirement for mitigation is noted.
- 3.5. The mitigation and enhancement strategy would be controlled through the provision of:
 - A Construction Environmental Management Plan (CEMP), which will set out the measures to protect retained features through appropriate fencing and site best practice to avoid impacts to off-site receptors, such as from contaminated run-off.

Protected Sites

- 3.6. There are four internationally designated sites within the 10 km Zone of Influence of the site.
- 3.7. The closest statutory designated site is the River Itchen SAC and SSSI, located approximately 750m east of the site. This protected site is separated from the development site by roads, built development and open countryside.
- 3.8. Due to the distance between the site and the River Itchen SAC and SSSI, there is the potential for impacts, such as run off during the construction phase of the development. As a result, standard construction safeguards will take place, such as those in relation to noise, vibration, dust and



contaminated run-off, with further detail to be provided within a CEMP (BS42020:2013). These measures will ensure no impacts occur to any adjacent habitats, protected sites in the study area or other off-site receptors.

- 3.9. Whilst no direct hydrological links are present between the site and any protected sites, construction would be undertaken in accordance with CIRIA good practice guidance (Charles, 2015), to protect adjacent habitats. Where appropriate, method statements would also be produced for high-risk activities, such as refuelling and use of concrete.
- 3.10. Dust created during construction is generally considered to only have a significant impact within 20 metres where heavy soiling of vegetation can occur (Holman et al, 2014) and as such given the distances involved, dust is not considered to be a significant issue with regards to any of the protected sites within the study area. In addition, the measures detailed above with regards to run-off will also help to minimise airborne dust levels.
- 3.11. Any potential adverse effects from noise and vibration will be mitigated through standard engineering practice, adhering to current guidance and legislation, and given the distances involved no impacts as a result of noise or vibration will occur at any of these sites.
- 3.12. In addition, the site falls within the Solent catchment area, an area that is vulnerable to an increase in nitrates. As such, any new development that may result in an increase in nitrates would be required to pay a habitats mitigation contribution as part of Eastleigh Borough Council's Nutrient Neutrality Offset Scheme³ to offset any increase in nitrates as a result of the development. With the adoption payments (£3,000 per credit offset, equivalent to 1 kg of nitrates per year) in place, there will be no impacts as a result of the development.

Impact Risk Zones

- 3.13. The site is located within the Impact Risk Zone (IRZ) for the River Itchen SSSI and SAC, and the site proposals meet the criteria for the type and scale of development ('all planning applications') identified within IRZ, therefore there may be adverse impacts on the SSSI's that could be a constraint on development. However, the measures that will be detailed in a CEMP, as detailed above, will also help to prevent impacts to the SSSI during construction, although consultation with LPA and Natural England will also likely be required as part of the planning process.

Non-statutory Sites

- 3.14. No non-statutory designated sites are located within the site boundary, with the closest, Swamp West of Recreation Grounds SINC, located c. 0.75km east of the site. This SINC is separated from the site by existing residential and commercial buildings, road and the Eastleigh trainline.
- 3.15. Due to the distance of the site from this and the other non-statutory designated SINCs, there are unlikely to be impacts as a result of the proposed development. Furthermore, the measures detailed to prevent impacts occurring during construction, such as from run-off, dust and noise, as detailed above, will also ensure that no impacts occur to any non-statutory designated sites.

³ <https://www.eastleigh.gov.uk/planning-and-building/water-quality-issues-in-the-solent-catchment-area>



Habitats and Flora

Habitats

- 3.16. The site habitats are of low ecological importance being dominated by hardstanding and buildings. Whilst small areas of scrub and trees present, these are small in extent, comprise common species and are common locally and as such there is significant potential to enhance the site for wildlife post-development through the creation of suitable habitats that are not available on site currently (see **Plan 14910/P03** and **Appendix 4**).
- 3.17. The proposed habitat creation includes the planting of new native trees, new native hedgerow and wildflower grassland along with amenity spaces which would include areas of amenity grassland and extensive ornamental shrub planting.
- 3.18. The new native hedgerow planting will provide both an aesthetic value to the built form, as well as new habitat, refugia and sources of food for wildlife, including invertebrates, small mammals and birds. This new planting will comprise a diverse species mix and will increase biodiversity and opportunities for wildlife.
- 3.19. To improve their condition and importance, as well as increase biodiversity and opportunities for wildlife, all new hedgerows are to be subject to sensitive management to create thick and dense vegetation with increased species diversity. Such measures would include cutting hedges outside the breeding bird season and in late winter, after most of the berries have gone to provide food for birds over winter. Rotational cutting would also allow hedge plants to produce flowers and berries and thereby provide further foraging resource for birds, invertebrates and a range of other wildlife.
- 3.20. Tree planting that will comprise native species and those species of known wildlife importance, is proposed across the site, increasing species diversity and providing enhanced opportunities and connectivity for wildlife, such as bats and birds, through the site.
- 3.21. Areas of amenity grassland with ornamental shrub planting are also proposed across the site and will provide foraging, refugia and nesting opportunities for a range of wildlife. Areas of wildflower grassland and bulb drifts are also proposed in conjunction with the amenity grassland, which will create a diverse new habitat which is not currently present at the site and providing new opportunities for wildlife particularly, birds and invertebrates.
- 3.22. All newly created habitats will be subject to specific management measures with the aim of maximising their potential for wildlife and their biodiversity importance.
- 3.23. The proposals will therefore seek to provide better quality habitats which are of known value for wildlife and with greater ecological importance than that which is currently within the redline.
- 3.24. Overall, the measures detailed above will more than compensate for any losses that occur and will assist with improving biodiversity at the site post-development.



Fauna

Amphibians

- 3.25. A precautionary approach will be adopted during habitat removal (to be controlled via the CEMP), with scrub and hedgerow removal to be undertaken under supervision of a suitably qualified ecologist to prevent harm to any other amphibian species that may be present, for example common toad.
- 3.26. The planting of new hedgerows and native shrub will provide amphibians with new areas of suitable habitat across the site post development.

Bats

Roosting

- 3.27. No bat roosts or evidence of bats was recorded during the internal inspections of the buildings on site and all trees on site were considered to offer negligible suitability, however several PRFs were recorded on the buildings during the external PBRA. As a result, emergence surveys will be required in the active season of 2023 (May – September inclusive) to confirm if any buildings on site are being used by roosting bats, and determine the level of mitigation required.
- 3.28. If no bats are observed emerging from any of the buildings on site during the emergence surveys which indicates that roosting bats are not present on site, then the development can proceed without the need for further mitigation.
- 3.29. If a bat is recorded emerging from any of the buildings on site during any of the emergence surveys then a further Roost Characterisation Survey will be required, and a European Protected Species Licence (EPSL) or low impact class licence may be needed for the development to proceed once consent is granted, to control appropriate mitigation and compensation.
- 3.30. Regardless, a precautionary approach will be adopted during the demolition of the buildings on site. During the soft strip works to the buildings, a Suitably Qualified Ecologist (SQE) will be present to supervise the removal of the key roost features such as the removal of the ridge tiles, eaves and along the gable ends. In the unlikely event that a bat is discovered the area where the roost is present will be left and a Licence sought from Natural England to allow the destruction of the roost feature. Should the bat be in any risk of injury then it would be moved to a bat box or kept safe and released at dusk.
- 3.31. To further enhance the site for bats, three bat bricks (Vivara Pro Build-in Woodstone or similar) should be provided and installed on suitable areas of the building and be subject to sensitive lighting. This will provide roosting opportunities for crevice dwelling species most likely to utilise the site, including common pipistrelles.

Foraging and commuting

- 3.32. The proposals have been designed to minimise disturbance to bats that may forage or commute within the site, and provide an enhancement post-development. The landscape proposals, including the creation of wildflower grassland and native shrubs, would enhance foraging and commuting opportunities for bats within the site post-development. Furthermore, the new



planting will ensure connectivity is maintained to suitable foraging/commuting habitat in the wider area.

- 3.33. The sensitive management of the new hedgerows and areas of new planting will help to enhance opportunities for bats by improving the quality of cover and connectivity.
- 3.34. Lighting within the site will be designed to minimise disturbance of bats and to maintain dark corridors. This would be achieved by using the following design measures to reduce light spill where appropriate (ILP, 2018):
- The use of luminaires that lack UV elements;
 - LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
 - A warm white spectrum (ideally <2700Kelvin) should be adopted and luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats;
 - Internal luminaires should be recessed in proximity to windows to reduce light spill;
 - The use of specialist bollard or low-level downward luminaires to retain darkness above can be considered as directed by a lighting professional;
 - Column heights should be carefully considered to minimise light spill;
 - Only luminaires with an upward light ratio of 0% and with good optical control should be used;
 - Luminaires should always be mounted on the horizontal, i.e. no upward tilt;
 - Any external security lighting should be set on motion-sensors and short (1min) timers; and
 - As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
- 3.35. The creation of new hedges and tree planting on the boundaries of the site will assist with maintaining dark corridors and connectivity for bats across the site and to the wider area. In addition, some bat species are likely to forage around new lighting within the development as well as within residential gardens (Voigt et al, 2018).
- 3.36. Overall, it is considered that the measures detailed would maintain and improve roosting and foraging opportunities for bats, creating an enhancement post development.

Birds

- 3.37. All wild birds, their nests and eggs are afforded protection under the Wildlife and Countryside Act (WCA) 1981 (as amended). In order to avoid a breach in the legislation, removal of buildings and vegetation, should be undertaken outside the nesting bird season (March to August inclusive), although the nesting birds season is not defined in law and some species may nest all year round.
- 3.38. Should this not be possible, a thorough search of the vegetation would need to be completed by an Ecological Clerk of Works (ECoW) immediately prior to demolition, to check for signs of active



bird nests. If an active nest is found to be present, an appropriate buffer will need to be retained until the young have fledged and the nest is no longer active, as confirmed by an ECoW.

- 3.39. The recommended planting would increase the overall habitat available for nesting and foraging birds. As such the majority of bird species anticipated to be present would likely continue to use the site post-development. The improved habitats will provide increased foraging opportunities and may attract an increased species complement compared to existing habitats.
- 3.40. There may, however, be some partial displacement though this is considered to be insignificant especially given the extent of suitable habitat in the wider area that will remain unaffected by the proposals.
- 3.41. To create a further enhancement for birds nesting opportunities would be created through the provision of two nest boxes (Vivapro or similar) incorporated into the new buildings, or on suitable retained trees, with such features positioned so as to provide easy access to linear features or grouped as some bird species prefer.
- 3.42. Overall, it is considered that the measures detailed would maintain and improve nesting and foraging opportunities for birds, creating an enhancement post-development.

Reptiles

- 3.43. All reptiles are afforded protection under the WCA 1981 (as amended) although it is important to note that this legislation protects the species, but not their habitat. As such, mitigation would be based around ensuring that no reptiles are harmed during works that could impact habitats in use by them.
- 3.44. The majority of habitats on site are not suitable for reptiles, although the scrub and hedgerow bases provide some suitable habitat, though this is limited in its extent. To ensure no offence takes place to reptiles specific measures will be implemented during any vegetation clearance.
- 3.45. Any refuge areas such as logs or stones would be checked by the supervising ecologist before the manipulation works commence, removed and placed within retained habitat. Any caught reptiles or amphibians will also be removed to suitable retained habitat by the supervising ecologist.
- 3.46. The cleared parts of the site would then be kept in a cleared state to ensure no reptiles recolonise prior to any works commencing.
- 3.47. The mitigation undertaken will ensure that no adverse effects to reptiles will occur.
- 3.48. The planting of new hedgerows and native shrub will provide reptiles with new areas of suitable habitat across the site post development.

Other Species

- 3.49. Regard will be had for any other protected or notable species that may be present within the site and in particular, hedgehog, a UK Priority Species, which could be affected during the construction phase, if present. Prior to site clearance work, any obvious piles of leaves or brash will be cleared by hand and should any hedgehogs be found, they will be carefully moved to other areas of suitable habitat, away from the proposed development.



Section 4: Conclusions

- 4.1. No features of significant ecological importance have been identified within the site.
- 4.2. Surveys for roosting bats are required during the active season (May to September inclusive) to determine if any of the buildings on site are being used by roosting bats and the suitable level of mitigation required based upon the survey results.
- 4.3. Measures outlined in this report to protect retained habitats and mitigation strategies to ensure no impacts to protected and priority species are minimised and can be controlled via a CEMP as a condition of the planning consent.
- 4.4. The scheme has been designed to include a landscape planting scheme which would provide species that would benefit wildlife. The newly created habitat will also be managed to maximise opportunities for wildlife post-development.
- 4.5. The mitigation and enhancement strategy could be controlled by appropriately worded planning controls devised to:
 - Secure a mitigation strategy, including a CEMP (BS42020:2013), to avoid impacts to retained habitats of importance, and badgers, bats, breeding birds, reptiles, amphibians and hedgehog; and
 - Implement a sensitive lighting strategy.
- 4.6. With the implementation of the mitigation and enhancement strategy described above, the proposed development would be in conformity with relevant planning policy and legislation (see **Appendix 1**).



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