Ecological Impact Assessment
West Boldon School







October 2022

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Report Version	Status	Date	Changes	Author	Proof Read	Approved
R01	Draft	16.10.17	First Issue	HN	MW	MEM
R02	Final	22.02.19	Revision following comments from LPA	HN/RJW	-	ADM
R03	Update	27.8.19	Revised plan	MEM	-	RJW
R04	Update	25.02.21	Revised plan	RT/JW	JW	MEM
R05	Final	30.04.2021	Revised plan	GV	-	Client approved
R06	Update	12.08.2022	Updated surveys	JW	-	MEM
R07	Update	18.10.2022	Revision following comments from LPA and client	JW	-	Client approved

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A. SUMMARY

E3 Ecology Ltd was commissioned by George F White in January 2021 to undertake an updating Ecological Impact Assessment of the former West Boldon School. E3 previously surveyed this site in 2017. An updating walk-over and botanical survey was completed in July 2022.

It is proposed to develop the site for residential use comprising five units, with associated landscaping and access.

A search of the MAGIC website identified a single statutorily designated site within 2km of the site. West Farm Meadow Site of Special Scientific Interest (SSSI) is located 1.3km to the north east. Northumbria Coast Special Protection Area (SPA) and Ramsar site and Durham Coast Special Area of Conservation (SAC) and SSSI are also all located approximately 5.85km to the east. The site is located within an SSSI Impact Risk Zone which states any developments comprising of greater than 10 units should be assessed for any likely impacts on the coastal SPA/SAC sites and/or SSSIs; as this development is for fewer units, consultation with Natural England is not required. As it is located just inside of 6km from the coastal SPA/SAC (5.85km) developer contributions to the Coastal Mitigation Scheme will be required.

Consultation with the Local Records Centre (ERIC NE) identified 18 non-statutorily designated sites within 2km. The closest, River Don South Tyneside Local Wildlife Site (LWS), is located approximately 80m to the north of the site. A recreational walking route, The River Don Walk, has its start point on the opposite side of the road to the proposed development site entrance and runs north and east through the River Don South Tyneside LWS, then northward to the Tyne at Jarrow. The section of the walk within the LWS has a tarmac path and a series of footbridges over the River Don providing circular route options. The remaining sections of the LWS in proximity to the site do not have public access. Given the small number of residential units proposed, the urban location of the LWS and presence of existing recreational infrastructure, it is considered likely that a minor increase in recreational activity associated with new residents will not have a significant adverse effect on the LWS.

Records of the following species were also provided: great crested newt, dingy skipper, water vole, hedgehog, brown hare, otter, badger and common pipistrelle. Multiple bird records were also identified.

General land use in the surrounding area is residential development to the south and east. Pasture fields lie to the north and west of the site with the River Don located approximately 80m to the north. The site is dominated by ephemeral/ruderal vegetation that has developed after the school buildings were demolished in 2017. The area of ephemeral/ruderal vegetation was assessed against the criteria for open mosaic habitat (OMH) on previously developed land and is too small in area (0.22 ha) to meet the requirement (0.25ha); in addition, no wetland habitats were recorded to qualify for the priority habitat. The species recorded on site were not as diverse as would be expected of OMH and no pools, lichen, moss/liverwort or heathland communities were noted on site. Small areas of introduced shrub were noted and poor semi-improved grassland areas are present at the site boundaries and beginning to encroach further into the main body of site. A number of semi-mature trees, most with Tree Preservation Orders, lie around the south and east boundaries of the site and continue around the periphery of the former school field which extends to the north and west, outside of the site boundary; all will be retained. Montbretia, a Schedule 9 non-native invasive species, is present in the south of the site. Overall, the majority of the site is considered to be of local habitat value.

No structures are present within the site with suitability for roosting bats and periphery trees appear well–sealed also lacking in any potential roosting features. A small electricity substation hut is present on site but detailed inspection of the structure in 2022 indicated no evidence of

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bats and no suitable roosting features and is considered of negligible suitability. The trees will provide some foraging habitat for bats but are well lit from surrounding street lights. Habitats on site will provide some limited foraging opportunities. Better quality habitat lies to the west and to the north along the River Don and the site is considered to be of up to local value to bats.

Trees within the site will offer some nesting habitat to local bird populations and the site is likely to provide some foraging habitat for urban and garden bird species. Due to its enclosed nature, small size and poor sightlines, the site is considered unlikely to be used by ground-nesting species. The site is considered to be of local value to bird species.

Habitats on site lack good holt creation or foraging opportunities for otter. Whilst otter are known to be present along the River Don, approximately 80m to the north, and may forage on occasion within adjacent fields to the north, they are considered unlikely to use the site.

No field signs or badger setts were recorded within the site. The former school grounds are bordered by palisade fencing to the west and north, and a stone wall to the south and east. This will largely preclude any badgers from entering the grounds and whilst the species may be present within the wider area, it is considered unlikely to be found within the site.

The national priority species hedgehog is likely to use the surrounding area and may forage within the site on occasion, with some potential refuge areas within site. The site is considered to be of local value for this species.

Given the lack of suitable habitat within the site and the surrounding area, and the lack of known records, other protected or otherwise notable species are considered likely to be absent.

Potential impacts of the development are:

- Loss of habitats of local habitat value.
- Spread of invasive Montbretia
- Damage to roots and crowns of retained trees.
- Disturbance and/or harm to nesting birds should any vegetation clearance be undertaken during the bird breeding season (March to August inclusive).
- Loss of potential bird nesting habitat likely to be of low value.
- Loss of low suitability bat roosting features within the small hut.
- Low residual risk of harm to bats.
- Loss of bat foraging habitat of up to local value.
- Loss of local value hedgehog habitat.
- Increased levels of disturbance and light pollution due to occupants of the properties and their pets, following on from the development.
- Risk of harm to mammals through entrapment in works trenches.

Key mitigation measures include:

- Trees will be retained within the site.
- Any new lighting will be minimal, low level, low lumen, fitted with cowls to minimise upward light spill and directed and targeted towards hard standing/building areas and not directed towards the trees.
- Vegetation clearance will be undertaken outside of the bird nesting season (March to August inclusive) unless a checking survey by a suitably experienced ornithologist confirms the absence of active nests.
- As good working practice, works to demolish the small hut will be completed in accordance with a precautionary method statement.
- Works will proceed to an invasive species method statement for the removal of Montbretia to further prevent its spread within site.

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- In the unlikely event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler.
- Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.
- The roots and crowns of retained trees will be protected throughout the development through the provision of adequate construction exclusion zones in accordance with the guidance given by BS5837:2012.
- Landscape planting to include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.
- Close boarded fences will be avoided, or gaps 13cm x 13cm will be provided in fences between gardens and landscaped areas to allow hedgehogs to forage and commute across the site.
- Five integrated bird next boxes suitable for a range of urban bird species on elevations facing N, NE or NW
- Four integrated bat boxes suitable for crevice dwelling species on SW elevations

A separate biodiversity net gain assessment has been prepared.

The local planning authority is likely to require the means of delivery of the mitigation/enhancement to be identified. It is recommended that mitigation and enhancement proposals are incorporated into the planning documents.

If you are assessing this report for a local planning authority and have any difficulties interpreting plans and figures from a scanned version of the report, E3 Ecology Ltd would be happy to email a PDF copy to you. Please contact us on 01434 230982.

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B. INTRODUCTION

E3 Ecology Ltd was commissioned by George F White in February 2021 to undertake an updating Ecological Impact Assessment of the former West Boldon School. E3 originally surveyed the site in 2017 and an updating survey was completed in July 2022.

The purpose of this report is:

- To identify and describe all potentially significant ecological effects associated with the proposed development
- To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects
- To identify how mitigation measures will/could be secured
- To provide an assessment of the significance of any residual effects
- To identify appropriate enhancement measures

The site is located in West Boldon at an approximate central grid reference of NZ 34899 61149.

It is proposed to develop the site for residential use comprising five units, with associated landscaping and access. Current plans are shown in the figure below.

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FIGURE 1: DEVELOPMENT PROPOSALS (COURTESY OF NORR ARCHITECTS)

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C. Planning Policy and Legislative Context

C.1 National Planning Policy

The table below details the key paragraphs from the National Planning Policy Framework (NPPF)[1] relating to the natural environment:

Table 1: National Planning Policy Framework: Conserving and Enhancing the Natural Environment	
Statement	**Paragraph**
Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate	*174*
Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework[2]; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.	*175*
Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads[3]. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.	*176*
When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development[4] other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy; b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated	*177*
Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the	*178*

[1] National Planning Policy Framework (February 2019), Department for Communities and Local Government,
[2] Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.
[3] English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters.
[4] For the purposes of paragraphs 177 and 178, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.

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TABLE 1: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	
Statement	**Paragraph**
special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.	
To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity[5]; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation[6]; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.	*179*
When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons63 and a suitable compensation strategy exists; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.	*180*
The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites[7]; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.	*181*
The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.	*182*

Section 40 of the Natural Environment and Rural Communities Act 2006, places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.

Planning Practice Guidance[8] states:

[5] Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.
[6] Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.
[7] Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.
[8] Planning Practice Guidance: Natural Environment (www.planningguidance.communities.gov) Updated July 2019

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- Planning authorities need to consider the potential impacts of development on protected and priority species, and the scope to avoid or mitigate any impacts when considering site allocations or planning applications. (para. 016)
- Information on biodiversity and geodiversity impacts and opportunities needs to inform all stages of development (including site selection and design, pre-application consultation and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. (para. 018)
- Even where an Environmental Impact Assessment is not needed, it might still be appropriate to undertake an ecological survey, for example, where protected species may be present or where biodiverse habitats may be lost. (para. 018)
- As with other supporting information, local planning authorities should require ecological surveys only where clearly justified. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity. (para. 018)
- The National Planning Policy Framework encourages net gains for biodiversity to be sought through planning policies and decisions. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures. (para. 022)

C.2 PROTECTED SPECIES LEGISLATION

The table below details the relevant legislation for those protected species covered within the scope of the survey.

TABLE 2: SUMMARISED SPECIES LEGISLATION

Species	Relevant Legislation	Level of Protection
Bats (All species)	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended) • Bats are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • Intentionally kill, injure, or take any species of bat • Intentionally or recklessly disturb bats • Intentionally or recklessly damage destroy or obstruct access to bat roosts
Otter	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended) • Otters are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • intentionally kill, injure, or take otters • intentionally or recklessly disturb otters • intentionally or recklessly amage destroy or obstruct access to otter holts or any place used by the animal for shelter or protection
Great Crested Newt	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended)	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • intentionally kill, injure, or take great crested newts • intentionally or recklessly disturb great crested newts • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection

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TABLE 2: SUMMARISED SPECIES LEGISLATION		
Species	**Relevant Legislation**	**Level of Protection**
Red Squirrel	• Full protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Red squirrels are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) makes it an offence to: • intentionally kill, injure, or take red squirrels • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection or disturb red squirrels whilst they are using such a place.
Birds	• Protection under the Wildlife and Countryside Act (1981) as amended with the exception of some species listed in Schedule 2 of the Act	The WCA (1981) makes it an offence to (with exceptions for certain species): • Intentionally kill, injure or take any wild bird • Intentionally take, damage or destroy nests in use or being built (including ground nesting birds) • Intentionally take, damage or destroy eggs • Species listed on Schedule 1 of the WCA or their dependant young are afforded additional protection from disturbance whilst they are at their nests
White-clawed Crayfish	• Partially protected by the Wildlife and Countryside Act (1981)	The WCA (1981) makes it an offence to: • Take a white-clawed crayfish from its habitat • Sell, offer for sale, advertise for sale, possess or transport for the purposes of selling any live or dead white clawed crayfish
Badger	• Protection of Badgers Act 1992 • Badgers are also protected by the Wild Mammals (Protection) Act 1996	The Protection of Badgers Act (1992) makes it an offence to intentionally or recklessly: • Damage a badger sett or any part of it • Destroy a badger sett • Obstruct access to, or any entrance of a badger sett • Disturb a badger whilst it is occupying a badger sett
Water Vole	• Full protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Water voles are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) makes it an offence to: • intentionally kill, injure, or take water voles • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection or disturb water voles whilst they are using such a place
Common reptiles (Slow-worm, Adder, Grass Snake, Common Lizard)	• Partially protected by the Wildlife and Countryside Act	The WCA (1981) makes it an offence to: • intentionally kill or injure these animals • sell, offer for sale, advertise for sale, possess or transport for the purposes of selling any live or dead animals or part of these animals
Under the Countryside and Rights of Way Act 2000 (CROW Act) the offence in section 9(4) of the Wildlife and Countryside Act 1981 of damaging a place of shelter or disturbing those species given full protection under the act is extended to cover reckless damage or disturbance.		

C.3 INVASIVE SPECIES LEGISLATION

The table below details the legislation in relation to invasive species and lists those invasive species most likely to be found in this region.

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TABLE 3: SUMMARISED INVASIVE SPECIES LEGISLATION		
Relevant Legislation	**Description of Offence**	**Species** *(Covered by the Legislation and most likely to be found in this Region)*
Listed on Part II of Schedule 9 of the Wildlife and Countryside Act (1981 as amended)	Section 14 of the WCA (1981) states: • if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence.	Himalayan balsam Cotoneaster Montbretia Japanese knotweed Giant hogweed Rhododendron

C.4 PROTECTED SITE LEGISLATION

Details of the legislation surrounding protected sites are provided in the appendices.

C.5 PRIORITY SPECIES

Although not afforded any legal protection, national priority species (species of principal importance, as listed in Section 41 of the NERC Act (2006)), and local and regional priority species, as detailed within the relevant biodiversity action plans, are material considerations in the planning process and as such have been assessed accordingly within this report.

The table below details the local biodiversity action plan relevant to the area within which this site lies, and the species/species groups and habitats listed as priorities within the plan.

TABLE 4: BIODIVERSITY ACTION PLAN					
Durham Biodiversity Action Plan					
Species			**Habitats**		
Barn Owl	Coastal Birds	Farmland Birds	Native Hedgerows	Veteran Trees, Parkland and Wood Pasture	Woodland and Scrub
Nightjar	Spotted Flycatcher	Upland Birds	Ponds, Lakes & Reservoirs	Lowland Fen	Rivers & Streams
Urban and Garden Wildlife	Freshwater Fish	Grass Snake	Blanket Bog and Upland Wet Heath	Calaminarian Grassland	Upland Calcareous Grassland
Great Crested Newt	Reptiles	Chalk Carpet Moth	Upland Dry heath and Acid Grassland	Upland Haymeadows	Upland Screes and Rock Habitats
Cistus Forrester	Dark Green Fritillary	Dingy Skipper	Brownfield Sites	Built Structures	Coastal Habitats
Glow Worm	Grayling	Green Hairstreak	Lowland Heath	Lowland Meadows & Pasture	Magnesian Limestone Grassland
Least Minor Moth	Mud Snail	Northern Brown Argus	Transport Corridors	Waxcap Grassland	
Northern Dart	Round Mouthed Whorl Snail	Small Pearl-bordered Fritillary			
White Clawed Crayfish	White-letter Hairstreak	Badger			
Bats	Brown Hare	Dormouse			
Harvest Mouse	Hedgehog	Otter			
Pine Marten	Polecat	Red Squirrel			
Water Vole	Water Shrew	Black Poplar			
Juniper	Pale Bristle-Moss	Yellow Marsh Saxifrage			

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D. METHODOLOGY

D.1 SCOPE OF STUDY

The scope of the study, in terms of the survey area and the desk study area, is based on professional judgement. The likely zone of influence of the proposal has been considered, including both potential direct effects such as habitat loss and potential indirect effects such as disturbance. Consideration has been given to potential effects both during the construction and operational phases of the development.

For this site the survey area comprised the green line boundary as defined within the figure below. The desk study included an assessment of land-use in the surrounding area and a data search covering a 2km buffer zone (see below for further detail).

The following types of ecological receptors have been considered:

- Statutorily designated sites for nature conservation
- Non-statutorily designated sites for nature conservation
- Species protected by law
- Species and/or habitats listed under the NERC Act (2009) as being of principal importance for conservation of biodiversity
- Species and/or habitats listed in relevant local biodiversity action plans

The figures below illustrate the site boundary and, to provide context, the broad habitats present on site and within an approximate 500m buffer zone.



FIGURE 2: SITE BOUNDARY
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FIGURE 3: SITE AND SETTING
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D.2 DESK STUDY

Initially, the site was assessed from aerial photographs and 1:25,000 Ordnance Survey maps. Following this, a data search was submitted to the Local Records Centre in February 2021, requesting data relating to protected or otherwise notable species and non-statutory sites for nature conservation within 2km of the survey area. In addition, a search was made of the Multi Agency Geographic Information for the Countryside (MAGIC) website[9] for all statutorily protected sites for nature conservation within 2km of the survey area.

D.3 PRELIMINARY FIELD SURVEY METHODOLOGY

D.3.1 PHASE 1 HABITAT SURVEY

D.3.1.1 SURVEY METHODS

The field survey of the proposed site was conducted using the methodology of the Joint Nature Conservation Committee's Phase 1 Habitat Survey, as outlined in their habitat-mapping manual[10]. Each parcel of land was assessed by a trained surveyor and classified as one of ninety habitat types. These were then mapped and the habitat information supplemented by dominant and indicator species codes and target notes where appropriate. Where areas within

[9] Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)
[10] Handbook for Phase 1 habitat survey, A Technique For Environmental Audit, JNCC, 2010

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the study area do not fall into the Phase 1 Habitat Survey classification, alternative methods of classification have been used.

D.3.2 PRELIMINARY PROTECTED AND PRIORITY SPECIES APPRAISAL

D.3.2.1 SURVEY METHODS

Where there is a risk of legally protected species and/or otherwise notable species[11] being present, an initial appraisal was completed to inform the proposals. This appraisal included the following key elements:

- Structures and trees were assessed for the risk of supporting roosting bats (see below).
- Wetlands, where present, were reviewed for their potential use by great crested newt, otter and water voles,
- If present, any trackways regularly used by badger were noted and any badger sett usage assessed by the presence of freshly dug earth or bedding at the entrance.
- The suitability of the suite of habitats present for use by reptiles was assessed.
- Likely use of the site by birds was assessed from the species seen during the survey, and the habitats present.
- Potential use by otherwise notable species was determined based on the broad habitat types present on site, any recent records obtained through the desk study and the geographical distribution of the species. Where specific habitat requirements for notable species have been recorded on site these have been noted, and used as part of this appraisal. The species groups assessed are limited to birds, freshwater fish, amphibians, reptiles, terrestrial mammals, butterflies and dragonflies.

A preliminary assessment, was made of any trees affected by the proposed development. Trees were inspected and assessed for their potential to support roosting bats and were categorised as negligible, low, moderate or high suitability for roosting bats based on guidelines provided within the Bat Conservation Trust Bat Survey: Good Practice Guidelines[12] and detailed within Table 5.

TABLE 5: GUIDELINES FOR ASSESSING THE POTENTIAL SUITABILITY OF PROPOSED DEVELOPMENT SITES FOR BATS, BASED ON PRESENCE OF ROOSTING HABITAT FEATURES (TREES)
(TO BE APPLIED USING PROFESSIONAL JUDGEMENT, TABLE 4.1 BAT SURVEY GUIDELINES)

Suitability	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A tree with one or more potential roost site that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

The assessment is based upon the age and species of the tree, the presence of features with potential to support roosting bats and the location of the tree and habitats present in the

[11] To include national priority species as listed in Section 41 of the NERC Act (2006) and local or regional priority species as listed within the relevant Biodiversity Action Plan
[12] Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

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surrounding area. Any potential roosting locations and field signs that could indicate bat use, such as droppings, staining and scratch marks were noted.

Where it is considered likely that there is a significant risk of protected or otherwise notable species being affected or where habitats are of particularly high value additional specialist survey work has been recommended. Further survey work may also be recommended where development proposals have the potential to affect statutorily designated sites in the vicinity.

D.3.3 ENVIRONMENTAL CONDITIONS

The table below details the environmental conditions during the ecological appraisals.

TABLE 6: SURVEY CONDITIONS

Date	Temperature	Cloud Cover	Precipitation	Wind Conditions
13.10.17	17ºC	70%	0	3-4SW
23.02.21	9	80	10	4SW
20.07.22	20	40	0	1

D.3.4 SURVEY CONSTRAINTS

The 2021 survey was undertaken in February, outside of the optimum botanical survey period. Updating botanical assessment was completed in July 2022 to address this constraint.

D.4 PERSONNEL

The table below details the personnel who undertook the survey work.

TABLE 7: PERSONNEL

Name	Position	Professional Qualifications	Natural England Survey Licence Numbers
Jessica Wilson	Senior Ecologist	BSc MSc ACIEEM	2015-16469-CLS-CLS (GCN*) 2019-40053-CLS-CLS (Bats)
Richard Thompson	Ecologist	BSc MSc	
*GCN – Great Crested Newt.			

Further details of experience and qualifications are available at www.e3ecology.co.uk.

D.5 ASSESSMENT METHODOLOGY

The relative value of the ecological receptors (habitats, species and designated sites) was assessed using a geographical frame of reference. For designated sites this is generally a straightforward process with the assigned designation generally being indicative of a particular value, e.g. Sites of Special Scientific Interest are designated under national legislation and are therefore generally considered to be receptors of national value. The assignment of value to non-designated receptors is less straightforward and as recognised by the Guidelines for Ecological Impact Assessment produced by the Chartered Institute of Ecology and Environmental Management[13], is a complex and subjective process and requires the application of professional judgement.

When assessing the value of species and habitats, relevant documents and legislation are considered including the lists of species and habitat of principal importance annexed to the NERC Act (2006) and those provided within relevant local Biodiversity Action Plans. Data

13 Chartered Institute for Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal

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provided through consultation is also considered. These data sources can provide context at a local, regional and national scale.

The table below provides examples of receptors of value at different geographical scales.

TABLE 8: ECOLOGICAL RECEPTOR VALUATION	
Level of Value	**Examples**
International	An internationally designated site or candidate site.
	A site meeting criteria for international designation.
	A substantial* area of a habitat listed on Annex I of the EC Habitats Directive or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population with internationally important numbers (i.e. >1% of the biogeographic population)
National	A nationally designated site.
	A substantial* area of a habitat listed as a Habitat of Principal Importance within Section 41 of the NERC Act (2006) or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population with nationally important numbers (i.e. >1% of the national population)
Regional	An area of habitat that falls slightly below the criteria necessary for designation as a SSSI but is considered of greater than county value.
	The site is of functional importance** to a species population with regionally important numbers (i.e. >1% of the regional population)
County	A Local Wildlife Site (LWS) or equivalent, designated at a County level
	A substantial* area of a habitat listed within the relevant County Biodiversity Action plan or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population of county value (i.e. >1% of the county population)
District	A Local Wildlife Site (LWS) or equivalent, designated at a District level
	A substantial* area of a habitat listed within the relevant District Biodiversity Action plan or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population of district value (i.e. >1% of the district population)
Parish	Area of habitat or species population considered to appreciably enrich the habitat resource within the context of the parish.
	Local Nature Reserves
Local	Habitats and species that contribute to local biodiversity but are not exceptional in the context of the parish.
Low	Habitats that are unexceptional and common to the local area.
**Substantial defined as 'of considerable size or value within that area based on professional judgement, rather than a small, inconsequential area'*	
*** Functional importance defined as 'a feature which, based on professional judgement, is of importance to the day to day functioning of the population, the loss of which would have a detectable adverse effect on that population',*	

E. RESULTS

E.1 DESK STUDY

E.1.1 PRE-EXISTING INFORMATION

ORDNANCE SURVEY MAPPING AND AERIAL PHOTOGRAPHY

Figures in section D show that the general land use in the surrounding area is residential development to the south and east. Pasture fields are present to the north and west of the site with the River Don located approximately 80m to the north.

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The most recent aerial photograph of the site indicates that habitats on site are dominated by ephemeral vegetation which has grown since the demolition of the school buildings in 2017. Historic imagery suggests that between 2001 and 2017 the site remained largely unchanged; however, the school was demolished within 2017 having been disused since 2009.

MULTI AGENCY GEOGRAPHIC INFORMATION FOR THE COUNTRYSIDE WEBSITE[14]

The table below details the internationally and nationally statutorily designated sites within 2km of the survey area. Natura sites within 6km have also been included.

TABLE 9: DESIGNATED SITES

Designation	Site Name	Reason for Designation	Distance from Survey Area
Special Protection Area	Northumbria Coast	The site consists of mainly discrete sections of rocky shore with associated boulder and cobble beaches. The SPA also includes parts of three artificial pier structures and a small section of sandy beach. In summer, the site supports important numbers of breeding Little Tern *Sterna albifrons*, whilst in winter the mixture of rocky and sandy shore supports large number of Turnstone *Arenaria interpres* and Purple Sandpiper *Calidris maritima*.	5.85km
Special Area of Conservation	Durham Coast	The Durham Coast is the only example of vegetated sea cliffs on magnesian limestone exposures in the UK. These cliffs extend along the North Sea coast for over 20 km from South Shields southwards to Blackhall Rocks. Their vegetation is unique in the British Isles and consists of a complex mosaic of paramaritime, mesotrophic and calcicolous grasslands, tall-herb fen, seepage flushes and wind-pruned scrub	5.85km
Ramsar	Durham Coast	As above	5.85km
Site of Special Scientific Interest	West Farm Meadow	West Farm Meadow, Boldon, is important as one of very few surviving semi-natural hay meadows in the coastal plain between the Rivers Tyne and Tees. Although once widespread such species-rich fields are now severely restricted in distribution because of extensive urbanisation and agricultural intensification.[15]	1.3km
	Durham Coast	As above	5.85km

The site is within 6km of the Durham and Northumbria coast. It is also within an SSSI Impact Risk Zone for which this type of development does not require the Local Planning Authority to consult with Natural England on the application.

E.1.2 CONSULTATION

LOCAL RECORD CENTRE

[14] Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk
[15] https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1004259.pdf-

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The table below summarises the records provided by the local records centre. The full data search results can be provided on request.

TABLE 10: CONSULTATION RECORDS

Taxon	Species	No. of Records within Search Area	Records of Particular Note
Amphibian	Great crested newt	3	All pre-2000
Bird	Sparrow hawk	6	-
	Kingfisher	5	190m away in 2009
	Buzzard	3	-
	Little ringed plover	1	-
	Corncrake	2	-
	Kestrel	6	-
	Little Bittern	1	-
	Curlew	5	-
	Grey Partridge	6	-
	Green shank	1	-
	Barn Owl	3	-
	Lapwing	6	-
	White Stork	1	1 count from 2017
Priority Butterfly	Dingy Skipper	7	All at least 1.2km away
Terrestrial Mammal	Water Vole	132	Numerous records from River Don. Most recent in 2019 from 200m away.
	Hedgehog	35	60m away in 2007
	Brown Hare	14	All over 1km away
	Otter	52	Numerous records from River Don. 190m away in 2009.
	Badger	3	Four figure grid reference
	Common pipistrelle	15	3 roosts 1.8km from site in 2020; closest record 260m away in 2012

In addition, the records centre provided information relating to the following non-statutory designates sites which lie within the search area:

- River Don South Tyneside Local Wildlife Site (LWS) ~80m North
- Boldon Lake LWS ~500m west
- Mount Pleasant Marsh LWS ~500 west
- Make-Me- Rich LWS ~1km southeast
- Elliscope Farm/ Hylton Bridge LWS ~1.7km south west
- Calf Close Burn LWS ~1.8km west
- Downhill Old Quarry South Tyneside LWS & South Tyneside LGS ~1km south
- Downhill Meadows Sunderland LWS ~1.2km south
- Tilesheds Burn LWS ~2km north east
- Tilesheds Local Nature Reserve (LNR) ~ 2 km north east
- Boldon Crossings Pond (LNR)~1.8km north east
- Boldon Colliery Former Railway Line ~1.7km North
- Newton Garths LWS ~1.75km north
- Station Burn LWS ~1.8km north west
- Hedworth Dene LWS ~1.95km north west
- Inverness Road LWS~ 1.95km north west
- Turner's Hill LWS ~1.1km south east
- Black Planation LWS ~1.6km south east

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Given the small number of units proposed and the good local footpath infrastructure, no impacts on these sites are anticipated. Their locations are shown in the figure below:

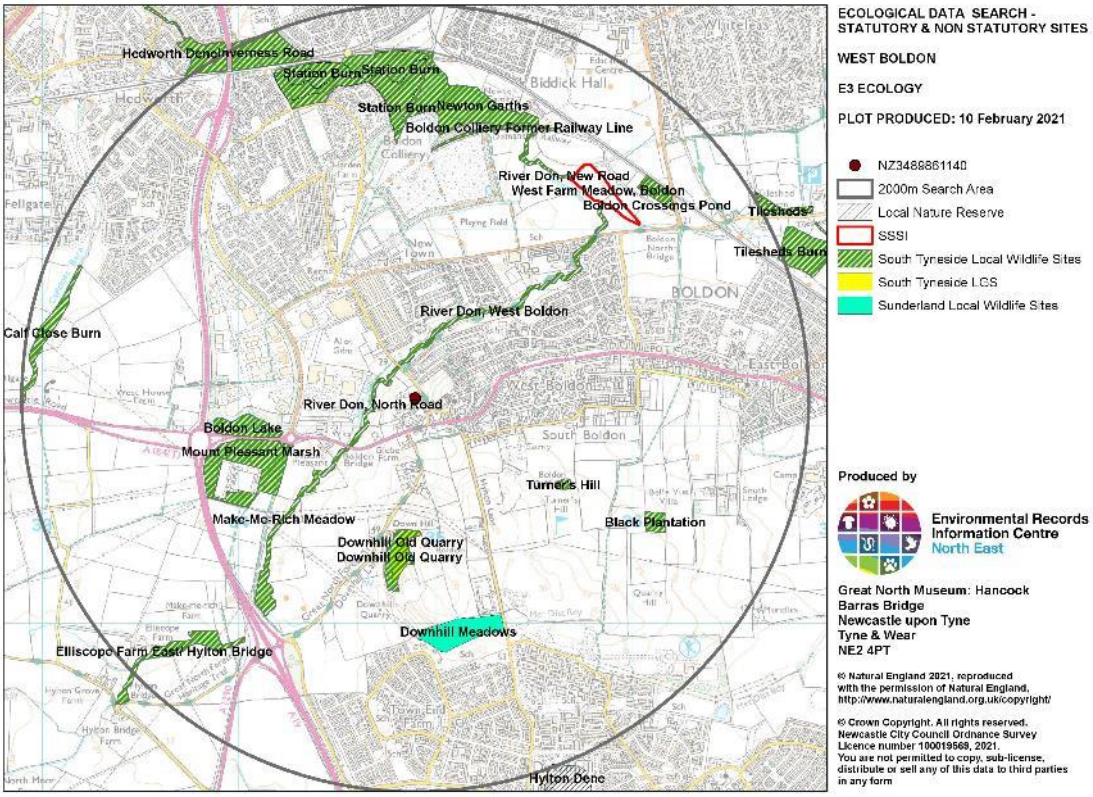


FIGURE 4: CONSULTATION RESULTS: ERIC NE 2021

E.2 FIELD SURVEY

E.2.1 HABITATS

The site is dominated by ephemeral/tall ruderal vegetation with grassland and bare ground patches. Small areas of introduced shrub are present, indicating the presence of former ornamental beds. A number of semi-mature trees, many with Tree Preservation Orders, are present around the south and east of the site and continue around the periphery of the former school field extending to the north and west, outside of the site boundary.

The habitats present within the survey area are illustrated within the figure below and described in more detail below.

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FIGURE 5: HABITAT MAP
(Reproduced under licence from Google Earth Pro)

EPHEMERAL/RUDERAL VEGETATION

The main body of the site is dominated by a mixture of ephemeral and tall ruderal vegetation. This vegetation has colonised over what was classified as bare ground in the 2017 report () though approximately 25% of this area remained bare ground in 2021. Within the main body of the site there are also a number of spoil heaps that have become vegetated. During the 2021 visit, there was about 75% plant cover with species recorded including creeping buttercup *Ranunculus repens*, ribwort plantain *Plantago lanceolata*, buddleia *Buddleja* sp., perennial ryegrass *Lolium perenne*, broad-leaved dock *Rumex obtusifolius*, creeping thistle *Cirsium arvense*, common hogweed *Heracleum sphondylium*, rosebay willowherb *Chamerion angustifolium*, daisy *Bellis perennis*, ragwort *Jacobaea vulgaris* and spear thistle *Cirsium vulgare*. During the 2022 survey, vegetation had further colonised the centre of site with more grassland species recorded. Additional species recorded include false oat grass *Arrhenatherum elatius*, Yorkshire fog *Holcus lanatus*, fescues *Festuca* sp, tufted hair grass *Deschampsia*





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cespitosa, perennial rye *Lolium perenne*, black medick *Medicago lupulina*, greater willowherb *Epilobium hirsutum*, self heal *Prunella vulgaris*, creeping cinquefoil *Potentilla reptans*, curled dock *Rumex crispus*, mullein *Verbascum thapsus*, melilot *Melilotus officinalis*, sow thistle *Sonchus oleraceus,* coltsfoot *Tussilago farfara* and dandelion *Taraxacum* agg. Scattered *Buddlei* scrub is present in the north.







SPECIES POOR SEMI-IMPROVED GRASSLAND

At the eastern and south boundaries, semi-improved grassland is present. It has a poor species mix and a high ratio of grass to forbs, 90% to 10%, respectively. This habitat was, in 2017 survey, recorded as amenity grassland but lack of management since then has caused its succession to semi-improved grassland with more coarse, tussocky grassland. In 2021, an area of poor semi-improved grassland was present near the centre of the site, amongst the ephemeral/ruderal vegetation; however, in 2022, this patch is no longer distinctive and has spread more into the surrounding areas. In 2021, it had an average sward height of 20cm and included species such as fescue grass, cocksfoot grass *Dactylis glomerata,* and perennial ryegrass with forbs including creeping buttercup, ribwort plantain, dandelion, snowdrop *Galanthus nivalis*, common sorrel *Rumex acetosa*, ragwort *Senecio jacobaea* and deadnettle *Lamium* sp. Updating 2022 surveys recorded an average of 6sp/m2 with false oat grass and Yorkshire fog as the dominant grasses with fescue, perennial rye, cocksfoot and tufted hair grass also present and forbs consisting of creeping thistle, ragwort, red clover, dandelion,



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ribwort plantain, coltsfoot, spear thistle and elder *Sambucus nigra*.

AMENITY GRASSLAND

Running off site to the north is a track (4m wide) of amenity grassland than leads to an off-site amenity grassland sports pitch adjacent to the north western boundary. The track has a sward of about 5-10cm high and is regularly mown. Species recorded here include perennial ryegrass, daisy, ribwort plantain and ragwort.



INTRODUCED SHRUBS

Across the site there are a number of introduced shrubs and plant species. These species were likely introduced as part of the former school grounds. Species include Wilson's honeysuckle (*Lonicera nitida*), dog rose (*Rosa canina*) and ornamental rose *(Rosa* sp.).



TREES

The north, east and south of the site is bordered by semi-mature broadleaf trees. This tree line continues west around the former school field, outside of the site boundary. Species include silver birch (*Betula pendula*), sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*), wild cherry (*Prunus avium*), and Swedish whitebeam (*Sorbus intermedia*).



TARGET NOTES

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1 – WATERLOGGED DEPRESSION
Near the centre of the site there is a small depression, around 2 by 8 m in size, in the footprint of a former building. The depression had approximately 10cm of water and no aquatic vegetation in 2021 and was dry in 2022.



2 – POSSIBLE REFUGES
To the north of the site were a number of thick mats, likely leftover from demolition works.



3 – SMALL HUT
To the south east of the site is a small building or hut. This was assessed for bat risk and judged to be of low bat roosting suitability, with no evidence of bats recorded. Detailed external and internal inspection was completed in 2022 and no roosting features or bat evidence was recorded.





4 – MONTBRETIA
Montbretia, a Schedule 9 non-native invasive species, is present in the south of the site.



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5 – COMMON KNAPWEED (*Centaurea nigra*)
A single common knapweed plant in east of site.

E.2.2 SPECIES

BATS
No structures suitable for roosting bats are present within the main body of site and the periphery trees appear well–sealed, lacking in any potential roosting features. The small hut on site is deemed to be of negligible suitability for bats as it is very small in size, the stonework is generally well sealed, there is a street light adjacent to/over the structure and the security mesh allows light ingress to the internal area. Internal inspection indicated single skinned walls with no evidence of bats. The trees will provide limited foraging habitat for bats but are well lit from surrounding street lights. Habitats on site will provide some foraging opportunities for bats. Better quality habitat is present to the west and to the north along the River Don.

OTTER
Habitats on site lack good holt creation or foraging opportunities for otter. Whilst otter are known to be present along the River Don, approximately 80m to the north, and may forage on occasion within adjacent fields to the north, they are considered unlikely to use the site.

GREAT CRESTED NEWT
There are no known ponds from aerial imagery or Ordnance Survey maps within 500m of the site. There were three records of great crested newt provided, all historic from 1960-1983 and more than 900m from site. The ephemeral area of water found on site in 2021 is considered likely to have developed due to recent snow and rainfall as this was not previously recorded in 2017 and was holding around 10cm of water but was dry by 2022. This standing water did not contain any aquatic vegetation or invertebrates. Given the lack of suitable aquatic habitat within the surrounding area, the ephemeral nature of the shallow standing water on site and the lack of recent records, this species in considered likely to be absent from the site.

BIRDS
Trees and denser shrubs within the site offer nesting habitat to local bird populations and a nest was recorded in one of the trees in the north of the site. The site is likely to provide some foraging habitat for urban and garden bird species present within the area whilst due to its enclosed nature, small size and poor sightlines, it is unlikely to be used by ground nesting species.

BADGER
No field signs or badger setts were recorded within the site. The former school grounds are bordered by palisade fencing to the west and north, and a stone wall to the south and east. This will largely preclude any badgers from entering the grounds and whilst the species may be present within the wider area, it is considered unlikely to be present within the site.

WATER VOLE & WHITE-CLAWED CRAYFISH
The site lacks a watercourse, with the closest being the River Don, approximately 80m to the north. Given the distance from the site, water vole and white clawed crayfish are considered likely to be absent.

REPTILES
The site has developed some mosaic habitats but is very small in size and given the lack of records within 2km, this taxa is considered likely to be absent.

RED SQUIRREL
No squirrel dreys were recorded within the site and red squirrel is not known to be present within the area. As such, this species is considered unlikely to be present.

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PRIORITY BUTTERFLIES

Some red fescue, the larval food plant of the priority species grayling, has been recorded within the site however not in significant quantities and no record of the species were provided by ERIC NE. No other larval food plants of other priority butterflies were recorded within the site and it is considered unlikely that habitats would support a breeding population. The buddleija on site may provide some foraging resources for adult butterflies in the area.

NATIONAL PRIORITY AND LOCAL BAP SPECIES

The national priority species hedgehog is likely to be present within the surrounding area and may forage within the site on occasion.

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F. SITE ASSESSMENT

F.1 HABITATS

Habitats on site are considered to be of local value. The area of ephemeral/ruderal vegetation was assessed against the criteria for open mosaic habitat (OMH) on previously developed land and is too small in area (~0.22 ha) to meet the requirement (0.25 ha); in addition there is no wetland habitats to qualify for the priority habitat. The species recorded on site were not as diverse as would be expected of OMH, possibly due to the short period since clearance of around 5 years, and no pools, lichen, moss/liverwort or heathland communities were noted on site. The site is transitioning to more mosaic/mixed habitats with further grassland encroachment evident since the 2021 survey and the site may increase in value over time if left undeveloped though no notable plant species have been recorded to date. Trees around the periphery are also considered to be of local habitat value; many of these were covered by a TPO in 2019 and all are now to be retained

F.2 NOTABLE SPECIES

The site is considered unlikely to be of greater than local value to bats given the lack of roosting opportunities and small foraging habitats. Trees around the periphery will provide some limited foraging areas used by small numbers of bats whilst habitats to the west and north of the site will be of higher value to bats.

Peripheral trees will provide nesting habitat for birds that are likely to be locally common urban and garden species. The majority of the site lacks mature vegetation however and will offer only limited foraging opportunities. Ground nesting bird species are considered unlikely to utilise the site and overall it is likely to be local ornithological value.

The national priority hedgehog may forage within the site on occasion and the occasional potential refuge areas make the site to be of local value to hedgehogs.

Given the lack of suitable habitat within the site and/or the surrounding area, and the lack of known records, other protected or otherwise notable species are considered likely to be absent.

F.3 LIMITATIONS

Survey was undertaken in February 2021, outside of the optimum botanical survey period. Multiple plant species were still present however with other plants identifiable from remains. Updating botanical survey was completed in July 2022 to address this constraint.

G. IMPACT ASSESSMENT

The likely effects of the proposed development, without appropriate targeted mitigation and/or compensation, are detailed below.

G.1 POTENTIAL IMPACTS AND/OR EFFECTS[16]

G.1.1 HABITATS

- Loss of habitats of local habitat value.
- Spread of invasive Montbretia
- Damage to roots and crowns of retained trees.

[16] An impact is defined as an action resulting in changes to an ecological feature. For example, construction works removing a hedgerow. An effect is defined as the outcome to an ecological feature from an impact. For example, the effect on a dormouse population of the loss of a hedgerow.

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G.1.2 SPECIES

- Disturbance and/or harm to nesting birds should any vegetation clearance be undertaken during the bird breeding season (March to August inclusive).
- Loss of potential bird nesting habitat of local value.
- Loss of low suitability bat roosting features within the small hut.
- Low residual risk of harm to bats.
- Loss of bat foraging habitat of up to local value.
- Loss of local value hedgehog habitat.
- Increased levels of disturbance and light pollution due to occupants of the properties and their pets, following on from the development.
- Risk of harm to mammals through entrapment in works trenches.

G.2 POTENTIAL IMPACTS AND/OR EFFECTS ON STATUTORY AND NON STATUTORY SITES DESIGNATED FOR NATURE CONSERVATION

The site is within 6km of SPA/SAC sites associated with the Durham and Northumbria coast and developer contributions to the Coastal Mitigation Scheme will be required.

Consultation with the Local Records Centre (ERIC NE) identified 18 non-statutorily designated sites within 2km. The closest, River Don South Tyneside Local Wildlife Site (LWS), is located approximately 80m to the north of the site. A recreational walking route, The River Don Walk, has its start point on the opposite side of the road to the proposed development site entrance and runs north and east through the River Don South Tyneside LWS, then northward to the Tyne at Jarrow. The section of the walk within the LWS has a tarmac path and a series of footbridges over the River Don providing circular route options. The remaining sections of the LWS in proximity to the site do not have public access.

Given the small number of residential units proposed, the urban location of the LWS and presence of existing recreational infrastructure, it is considered likely that a minor increase in recreational activity associated with new residents will not have a significant adverse effect on the LWS.

H. RECOMMENDATIONS

The mitigation strategy aims to minimise effects on biodiversity by:

- avoiding significant negative impacts where possible through good design; and
- developing approaches to mitigate any remaining unavoidable impacts.

Where any significant residual impacts on biodiversity are anticipated, compensation may then be proposed. This approach is in-line with CIEEM recommendations[17].

H.1 FURTHER SURVEY

No further survey work is recommended

H.2 AVOIDANCE AND MITIGATION STRATEGY

SITE DESIGN

- Trees will be retained within the site.

[17] Chartered Institute for Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal

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- Any new lighting will be minimal, low level, low lumen, fitted with cowls to minimise upward light spill and directed and targeted towards hard standing/building areas and not directed towards the trees.
- Close boarded fences will be avoided, or gaps 13cm x 13cm will be provided in fences between gardens and landscaped areas to allow hedgehogs to forage and commute across the site.
- Landscape planting to include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

TIMING OF WORKS

- Vegetation clearance will be undertaken outside of the bird nesting season (March to August inclusive) unless a checking survey by a suitably experienced ornithologist confirms the absence of active nests.

WORKING METHODS AND BEST PRACTICE

- As good working practice, works to demolish the small hut will be completed in accordance with a precautionary method statement for bats.
- Works will proceed to an invasive species method statement for the removal of Montbretia to further prevent its spread within site.
- In the unlikely event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler.
- Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.
- The roots and crowns of retained trees will be protected throughout the development through the provision of adequate construction exclusion zones in accordance with the guidance given by BS5837:2012.
- Mats and any potential refuge areas will be checked for the presence of hedgehog prior to removal.

H.3 COMPENSATION STRATEGY

The following compensation strategy is proposed:

- Retained grassland under the tree lines will be enhanced with additional woodland shade seed mix and native species-rich hedging will be incorporated into the development. A separate biodiversity net gain assessment has been prepared.
- Five integrated bird next boxes suitable for a range of urban bird species on elevations facing N, NE or NW
- Four integrated bat boxes suitable for crevice dwelling species on SW elevations

H.4 MONITORING

Given the nature of the proposed mitigation and/or compensation strategies, no monitoring is proposed.

I. CONCLUSIONS

Provided that the recommendations in this report are implemented, it is anticipated that proposals may proceed with no significant adverse effect on notable species and/or habitats. The proposals provide an opportunity for ecological benefit through landscaping and bat and bird nest box provision, contributing to local and national conservation targets.

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APPENDIX 1. STATUTORILY AND NON-STATUTORILY DESIGNATED SITES

A1.i Statutorily Designated Sites

Ramsar Sites
Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention recognizes wetlands as important ecosystems and includes a range of wetland types from marsh to both fresh and salt water habitats. The wetlands can also include additional areas adjacent to the main water-bodies such as river banks or coastal areas where appropriate.

Special Protection Areas (SPAs)
SPAs are classified by the UK Government under the EC Birds Directive and comprise areas which are important for both rare and migratory birds.

Special Areas of Conservation
SACs are designated under the EC Habitats Directive and are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the Conservation of Habitats and Species Regulations 2010 (as amended) unless they are offshore.

Sites of Special Scientific Interest
SSSIs are designated as sites which are examples of important flora, fauna, or geological or physiographical features. They are notified under the Wildlife and Countryside Act 1981 with improved provisions introduced by the Countryside and Rights of Way Act 2000.

National Nature Reserves (NNRs)
NNRs are designated by Natural England under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 and support important ecosystems which are managed for conservation. They may also provide important opportunities for recreation and scientific study.

Country Parks
Country Parks are statutorily designated and managed by local authorities in England and Wales under the Countryside Act 1968. They do not necessarily have any nature conservation importance, but provide opportunities for recreation and leisure near urban areas.

A1.ii Non-Statutorily Designated Sites

Local Nature Reserves (LNRs)
LNRs are designated under the National Parks and Access to the Countryside Act 1949 by local authorities in consultation with Natural England. They are managed for nature conservation and used as a recreational and educational resource.

Non-Governmental Organisation Property
These are sites of biodiversity importance which are managed as reserves by a range of NGOs. Examples include sites owned by the RSPB, the Woodland Trust and the Wildlife Trusts.

Local Wildlife Sites (LWSs)
These are sites defined within the local plans under the Town and Country Planning system and are material considerations of any planning application determination. They are designated by the local authority although criteria for designation can vary between authorities.

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