

Ecological Impact Assessment



Trowbridge Leisure Project
12th February 2026



**Tyler
Grange**

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Admin QA	Author	Checked	Approved
VKC	Vicky King-Cline MSc BSc	Laura Hembrow BSc (Hons) MCIEEM	Rachel Chatting BSc MSc MCIEEM

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Summary

- S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Pellikaan Construction Ltd. It sets out the findings of an Ecological Impact Assessment for land off Bythesea Road, Trowbridge, BA14 8HR, hereafter referred to as 'the site', to inform the proposed construction of a leisure centre.
- S.2. This report was originally written to support the planning application PL/2024/08255 which was granted planning permission, subject to conditions, in December 2024. The report has been updated following changes to the Landscape General Arrangement, which have resulted in a positive change to the Biodiversity Net Gain (BNG) assessment. As such, this report has been updated to reflect the changes to the BNG assessment.
- S.3. An initial 'extended' phase I habitat survey, preliminary roost assessment and ground-level tree assessment were undertaken on 23rd October 2023. A summary of the results and recommendations are as follows:
- The site comprises hardstanding, areas of modified grassland, introduced shrub and ruderal vegetation, scattered trees, a line of mature trees and a small building;
 - Habitats within the site could support nesting birds and therefore an Ecological Clerk of Works (ECoW) will be required should these habitats be lost during the bird nesting season (see **Section 3** of this report);
 - The large horse chestnut *Aesculus hippocastanum* tree in the south of the site and the small group of rowan *Sorbus aucuparia* trees had substantial ivy *Hedera helix* growth, potentially obscuring suitable roosting features for bats. As these trees were removed as part of the proposals, the ivy was carefully stripped under the supervision of a bat licence-holder before removal (as detailed in **Section 3** of this report); and
 - Substantial ivy growth on the northwestern elevation of the small electrical substation within the site (ref B1 on plan **16262/P01b**) could have been obscuring suitable roosting features for bats. The ivy was therefore carefully stripped prior to demolition, under the supervision of a suitably-qualified ecologist.
- S.4. The data search identified three Natura 2000 sites within 10 km of the site boundary and one national statutory designated site within 2 km. Due to the distance from the sites and the nature of the proposed development (i.e. not residential), no impacts on these designated sites are expected to arise as a result of the site's development.
- S.5. Six non-statutory designated sites within 2 km of the site were returned by the data search. Due to the distance between them and the site, no impacts from construction phase of the proposed development are expected to arise. The operational phase of the development however could result in increased recreational pressure to Biss Meadow Country Park, located approximately 0.5 km east of the site, in the absence of appropriate mitigation measures, such as provision of alternative amenity space.
- S.6. To avoid impact to the River Biss, running adjacent to the northeastern site boundary, and the need for a pre-commencement condition, a Construction Environmental Management Plan



(CEMP) has been produced by Tyler Grange Group Ltd in August 2024 (ref: **16262_R04_CEMP_19082024**).

- S.7. With regard to biodiversity net gain, the post-development proposals end with a net gain of + 10.42% in habitat units (+ 0.87 units) and a net gain of + 10.10% in hedgerow units (+ 0.11 units) on site. In order to achieve a net gain of + 10% in watercourse units, an off-site contribution of 0.1 watercourse units (to be agreed through a Section 106 agreement or other appropriate planning mechanism, as detailed in **Section 4**) is to be secured from the Environment Bank.
- S.8. The mitigation and enhancement recommendations throughout this report can be actioned through the production of a Habitat Management and Monitoring Plan (HMMP) and sensitive lighting strategy, which can be secured through suitably worded planning conditions.



Section 1: Introduction and Context

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Pellikaan Construction Ltd. This report sets out the findings of an Ecological Impact Assessment for Land off Bythesea Road, Trowbridge, BA14 8HR (Ordnance Survey Grid Reference ST 85450 57735), hereafter referred to as 'the site', to support a planning application for the development of the site to Wiltshire Council. See **Figure 1.1** below for the indicative red line boundary.
- 1.2. This report was originally written to support the planning application PL/2024/08255 which was granted planning permission, subject to conditions, in December 2024. The report has been updated following changes to the Landscape General Arrangement, which have resulted in a positive change to the Biodiversity Net Gain (BNG) assessment. As such, this report has been updated to reflect the changes to the BNG assessment.

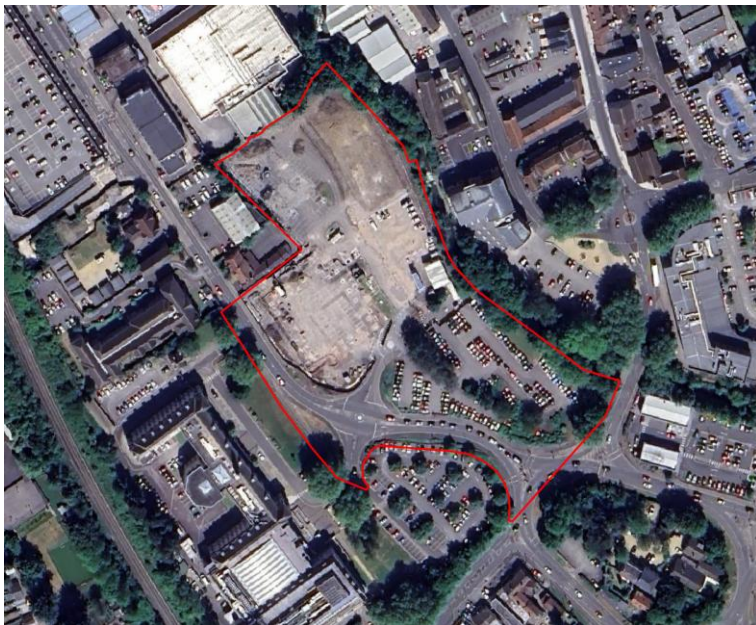


Figure 1.1: Indicative red line boundary (© Google Aerial Imagery 2026)

Site Context

- 1.3. The site measures approximately 2.58 ha in size and comprises hardstanding, areas of modified grassland, introduced shrub and ruderal vegetation, scattered trees, a line of mature trees and a small building. The site is located within the urban area of Trowbridge and is bordered by residences and businesses. The River Biss is located adjacent to the northeastern site boundary.
- 1.4. The proposals comprise the construction of a new leisure centre with associated car parking, as shown in the Landscape Masterplan in **Appendix 3**.



Purpose

- 1.5. This report:
- Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely "Zone of Influence"¹ (Zoi) of the proposed development;
 - Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's development.
 - Where appropriate, makes commitments for mitigation measures for adverse effects on ecological features as well as ecological enhancements, to ensure conformity with policy and legislation listed in **Appendix 1**; and
 - Can be used to inform a planning application for the site's development.
- 1.6. This assessment and the terminology used are consistent with the Guidelines for Ecological Impact Assessment². A full methodology is set out in **Appendix 2**.

Methodology

- 1.7. Full methods for the data search, phase I habitat survey, Preliminary Roost Assessment (PRA), Ground-level Tree Assessment (GLTA), BNG assessment and Modular River Physical (MoRPh) survey of the River Biss are described in **Appendix 2** of this report. These surveys were undertaken between October 2023 and July 2024 to inform the planning application submitted in December 2024.

Quality Control

- 1.8. All ecologists at Tyler Grange Group Limited are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) or are working towards membership, and act under the direction of members and abide by the Institute's Code of Professional Conduct³.

¹ Defined by the CIEEM (2018) Guidelines for Ecological Impact Assessment as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries

² CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

³ CIEEM (2022) Code of Professional Conduct, CIEEM, Winchester



Section 2: Ecological Features and Evaluation

Designated Sites

- 2.1. The data search was based on records purchased from Wiltshire and Swindon Biological Records Centre (WSBRC), as well as data from the Multi-Agency Geographic Information for the Countryside (MAGIC). See **Appendix 2** for full methodology.
- 2.2. The data search returned three Natura 2000 sites (encompassing Special Areas of Conservation, Special Protection Areas or Ramsar sites) within 10 km of the site and one national statutory designated site (encompassing National Nature Reserves, Sites of Special Scientific Interest or Local Nature Reserves) within 2 km. These sites are described in **Table 2.1** below.
- 2.3. The data search returned six non-statutory designated sites, known as Local Wildlife Sites (LWS) within Wiltshire, within 2 km of the site, also detailed in **Table 2.1**.

Table 2.1: Designated Sites

Site Name	Approximate Location	Reason for Designation	Ecological Importance
Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC)	6.5 km northwest of the site	Designated for its greater horseshoe bat <i>Rhinolophus ferrumequinum</i> and Bechstein's bat <i>Myotis bechsteinii</i> populations. The site also supports a lesser horseshoe bat <i>Rhinolophus hipposideros</i> population, although this is not a qualifying feature for the selection of the site.	International
Sailsbury Plain SAC	8.1 km southeast of the site	Designated for its lowland juniper <i>Juniperus communis</i> scrub on chalk and semi-natural dry grassland, supporting marsh fritillary <i>Euphydryas aurinia</i> butterfly.	International
Sailsbury Plain Special Protection Area (SPA)	8.1 km southeast of the site	Designated for its chalk downland supporting a breeding population of stone curlew <i>Burhinus oedichnemus</i> and wintering hen harrier <i>Circus cyaneus</i> .	International
Southwick Country Park Local Nature Reserve (LNR)	1.9 km southwest of the site	Designated for its grassland habitat with old hedgerows, copses and Lambrook Stream. The LNR supports fauna including water vole <i>Arvicola amphibius</i> , Bechstein's bats and greater horseshoe bats.	National
Biss Meadows Country Park LWS	0.5 km east of the site	Designated for its area of species-rich fen, grassland and scrub on the floodplain of the River Biss within the suburbs of Trowbridge.	Local



Site Name	Approximate Location	Reason for Designation	Ecological Importance
Lynwood Drive Pond LWS	1.2 km northwest of the site	Designated for its old field pond retained within housing development surrounded by open space.	Local
Widbrook Wood WWT Reserve LWS	1.6 km north of the site	Designated for its stretch of mixed young mixed broadleaf planation with meadow between the River Avon and Kennet and Avon canal.	Local
Kennet & Avon Canal LWS	1.6 km north of the site	Designated for its restored canal much used for recreation.	Local
Bristol Avon River LWS	1.9 km north of the site	Designated for being one of the main river systems draining northwest Wiltshire.	Local
Green Lane Wood & Meadow and Smith's Well Wood WWT Reserve LWS	1.9 km southeast of the site	Designated for its WWT reserve with ancient semi-natural broadleaved woodland and a small area of meadow.	Local

Habitats and Flora

- 2.4. The habitats present across the site are summarised below, along with a description of the composition of the main plant species present and an assessment of their ecological importance. The locations of the habitats are shown on the Habitat Features and Preliminary Bat Roost Assessment Plan (ref: **16262/P01b**), appended to this report.

Buildings

- 2.5. There is one building within the site boundary (referenced as B1 on plan **16262/P01b**), located in the east of the site and shown in **Photograph 2.1** below. B1 is a single-storey building of brick and concrete construction, with a flat concrete roof (with no roof spaces) and is currently used as an electrical substation.





Photograph 2.1: Electrical substation within the site boundary

- 2.6. Buildings have no inherent ecological value and this habitat type is therefore considered to be of negligible ecological importance.

Hardstanding

- 2.7. The majority of the site comprises a carpark, shown in **Photograph 2.2** below, currently in use and accessible to the public. Hardstanding provides no inherent ecological value and therefore this habitat type is of negligible ecological importance.



Photograph 2.2: Carpark

Introduced Shrub

- 2.8. There are some areas of ornamental planting within the site, as shown in **Photograph 2.3** below. Species present include boxwood *Buxus* sp., Darwin's barberry *Berberis darwinii* and small-leaved cotoneaster *Cotoneaster microphyllus*, the latter of which is an invasive species



listed on Schedule 9 of the Wildlife and Countryside Act 1981 and described in the invasive species section below.



Photograph 2.3: Introduced shrub within the site including cotoneaster

- 2.9. This habitat type is very common in the wider landscape and comprises predominately non-native ornamental plants. As such this habitat is considered to be of negligible ecological importance.

Modified Grassland

- 2.10. There are small areas of modified grassland present within the site, as shown in **Photograph 2.4** below, dominated by false oat-grass *Arrhenatherum elatius* with bristly oxtongue *Helminthotheca echioides* and dandelion *Taraxacum agg.* also present. This habitat is formed of common and widespread species and is a common habitat in the immediate surrounding landscape, and the UK overall. Modified grassland offers sub-optimal habitat for wildlife, being regularly mowed and disturbed. Consequently, this habitat was considered to be of negligible ecological importance.



Photograph 2.4: Modified grassland within the site

Native Species-poor Hedgerow

- 2.11. In the southwest of the site is a small length of native species-poor hedgerow comprising hazel *Corylus avellana*, bramble *Rubus fruticosus* agg. and holly *Ilex aquifolium*, shown in **Photograph 2.5** below and referenced as H1 on plan **16262/P01b**. This hedgerow, being species-poor, is not considered to meet the definition of Habitats of Principle Importance (HoPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006⁴. Additionally, this habitat is very common in the wider landscape and in the UK overall and as such is considered to be of negligible ecological importance.



Photograph 2.5: Native species-poor hedge in the southwest of the site

Ornamental Non-native Hedgerow

- 2.12. In the north and east of the site there are two small non-native coniferous hedges, shown in **Photograph 2.6** below and referenced as H2 and H3 on plan **16262/P01b**, with some hazel saplings. This habitat does not meet the HoPI definition and as such is considered to be of negligible importance.

⁴ UK priority habitats and species are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of SoPIs and HoPIs

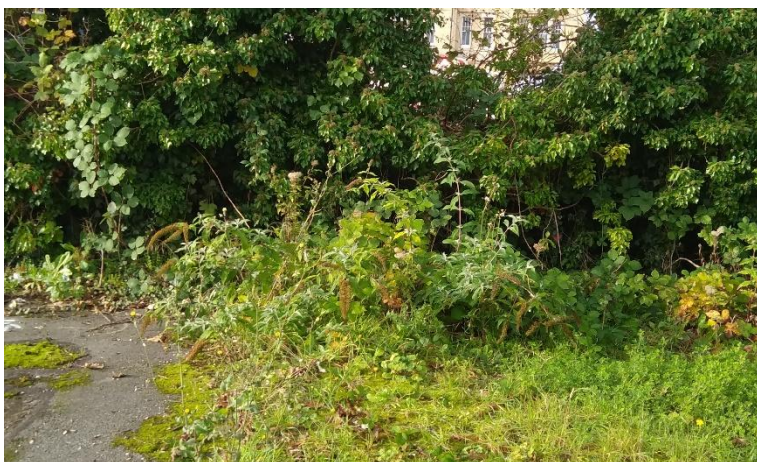




Photograph 2.6: Non-native coniferous hedge in the east of the site

Ruderal Vegetation

- 2.13. There is a strip of ruderal vegetation along the northwestern boundaries of the site, as well as a small patch adjacent to building B1, shown in **Photograph 2.7** below. Species present include black medic *Medicago lupulina*, bramble, buddleia *Buddleja davidii*, dogrose *Rosa canina*, field madder *Sherardia arvensis* and herb-robert *Geranium robertianum*, with elm *Ulmus procera* and sycamore *Acer pseudoplatanus* saplings.



Photograph 2.7: Ruderal vegetation in the northwest of the site

- 2.14. This habitat is very common in the wider landscape and is limited in extent within the site. It is therefore considered to be of negligible ecological importance.

Scattered Trees and Line of Trees

- 2.15. There are several broadleaved trees within the site, including horse chestnut *Aesculus hippocastanum*, rowan *Sorbus aucuparia*, silver birch *Betula pendula* (shown in **Photograph 2.8** below), whitebeam *Sorbus aria* and yew *Taxus baccata*. The locations of these trees are shown on plan **16262/P01b** and are described in the Arboricultural Impact Assessment produced by Tyler Grange Group Ltd in August 2024 (ref: **16262_R02_AIA_08082024**).





Photograph 2.8: Silver birch trees in the east of the site

- 2.16. Along the northeastern site boundary, bordering the River Biss, is a line of mature trees including sycamore, cherry *Prunus* sp., hornbeam *Carpinus betulus*, poplar *Populus* sp., willow *Salix* sp., pine *Pinus* sp. and ash *Fraxinus excelsior*. The line of trees is shown in **Photograph 2.9** below.



Photograph 2.9: Line of mature trees along River Biss

- 2.17. These trees have inherent ecological value, as they provide habitat opportunities for flora and fauna, and as such are considered to be of local ecological importance.

Off-site Habitats

Running Water

- 2.18. The River Biss is a tributary of the River Avon and runs adjacent to the northeastern boundary of the site, as shown on plan **16262/P01b**. The section of the river adjacent to the site

boundary – shown in **Photograph 2.10** below – is approximately 5 - 7 m wide along its length adjacent to the site and slow-flowing with silt and stone substrate. The river's banks are covered with vegetation including common ivy *Hedera helix*, common nettle *Urtica dioica* and hedge bindweed *Calystegia sepium*.

- 2.19. As the site falls within the 10 m riparian zone of the River Biss, a MoRPh survey was required to assess the condition of the river. The MoRPh survey assessed the river as having a condition of 'fairly poor' with an index score of -0.457 (see Section 4 for full assessment).
- 2.20. The River Biss has inherent ecological value as it provides habitat opportunities for flora and fauna. It is considered to be of at least **district ecological importance** and could be of up to **county ecological importance**.



Photograph 2.10: River Biss running adjacent to the northeastern site boundary

Invasive species

- 2.21. Small-leaved cotoneaster was identified on-site during the Phase I habitat survey in October 2023. It is listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales. It is an offence to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9 of the WCA 1981. Target Notes (TN) 1 – 3 on plan **16262/P01b** show the locations of identified cotoneaster growth within the site.

Protected and Notable Species

- 2.22. Habitats within the site may offer opportunities for the following species groups. Species which are considered likely absent from the site based on professional judgement, following consideration of the habitats within the site, signs of species presence at the time of survey and data search records, are not discussed.

Amphibians

- 2.23. The data search returned 17 records of amphibians within 2 km of the site boundary, which are as follows:
- Four records of common frog *Rana temporaria* the nearest of which was recorded approximately 0.6 km north of the site in 2015;
 - Five records of common toad *Bufo bufo*, the nearest of which was recorded approximately 0.7 km southeast of the site in 2013; and
 - Eight records of great crested newt *Triturus cristatus*, the nearest of which was recorded approximately 0.8 km southwest of the site in
- 2.24. The majority of the site comprises hardstanding which does not offer habitat suitable for amphibians. Suitable habitat is limited to very small areas of ruderal vegetation and modified grassland. Due to the lack of suitable habitat on site, as well as the site being separated from areas of suitable breeding habitat by urban development including roads, amphibians are considered likely absent from the site and are not discussed further in this report.

Bats

- 2.25. The data search returned records for 14 bat species within 4 km of the site. The species returned by the data search are as follows:
- Barbastelle *Barbastella barbastellus*;
 - Bechstein's *Myotis bechsteinii*;
 - Brandt's *Myotis brandti*;
 - Brown long-eared bat *Plecotus auritus*;
 - Common pipistrelle *Pipistrellus pipistrellus*;
 - Daubenton's *Myotis daubentonii*;
 - Greater horseshoe bat *Rhinolophus ferrumequinum*;
 - Leisler's *Nyctalus leisleri*;
 - Lesser horseshoe bat *Rhinolophus hipposideros*;
 - Natterer's bat *Myotis nattereri*;
 - Noctule bat *Nyctalus noctula*;
 - Serotine *Eptesicus serotinus*;
 - Soprano pipistrelle *Pipistrellus pygmaeus*; and
 - Whiskered *Myotis mystacinus*.



- 2.26. The nearest of these was a record of common pipistrelle 0.2 km northwest of the site in 2017.
- 2.27. In addition, 12 granted EPS licences for bats were returned within a 4 km radius of the site. The closest licence was located 0.2 km southeast of the site (case reference: 2015-15090-EPS-MIT) and was granted for the destruction of a resting place of common pipistrelle and lesser horseshoe bats.

Bat Activity

- 2.28. The site lies within an urban context, with light pollution within and adjacent to site, and limited habitats for commuting and foraging bats in the wider landscape. It is assumed that light tolerant species, such as common and soprano pipistrelle, could forage within and adjacent to the site. The habitats on site, such as urban trees and native hedgerows, don't provide significant commuting and foraging opportunities for bats due to their small size and low diversity.
- 2.29. Overall, the assemblage of bats utilising the site for foraging and commuting is considered to be of negligible ecological importance.

Preliminary Roost Assessment and Ground-level Tree Assessment

- 2.30. A PRA and GLTA were conducted alongside the 'extended' Phase I habitat survey. These assessments were undertaken on the buildings within the site and trees on and directly adjacent to site, which are to be impacted by the development. See **Appendix 2** for methodology and **Table 2.2** below for results. The locations of the building and trees are shown on plan **16262/P01b**.

Table 2.2: Results of the PRA and GLTA

Building / Tree and Suitability	Feature and Description	Photograph
Building B1 – Negligible Suitability	Building of brick and concrete construction, with a flat concrete roof (with no roof spaces) and is currently used as an electrical substation. No suitable features for roosting bats were identified on/within the building during the external PRA on 23rd October 2023. However, the ivy growth (ref TN4 on plan 16262/P01b) on the northwestern elevation of the building could be obscuring a PRF, although unlikely due to the rest of the building being considered to have negligible suitability to support roosting bats. In addition, the building is not located near suitable bat habitat, making it unlikely	



Building / Tree and Suitability	Feature and Description	Photograph
	for any bats to be roosting within the building.	
Tree T2 – Horse chestnut Precautionary low suitability	A large horse chestnut (ref T2 on plan 16262/P01b) in the south of the site is to be removed as part of the proposals. There is a split in a damaged limb on the southwestern elevation of the tree, approximately 8m high. The feature however is considered unlikely to be a suitable roost space due to its contact with passing lorries, its urban setting with noise and light pollution, and due to the split being very shallow. Significant ivy cover, potentially obscuring features which could support a low number of crevice-dwelling species, present.	
Trees G2 – Rowan Precautionary low suitability	A small group of rowan trees in the north of the site (ref G2 on plan 16262/P01b) are covered by common ivy, potentially obscuring features which could support a low number of crevice-dwelling species such as pipistrelle bats. Although unlikely suitable features are present, as the trees are in good condition, not very mature and located in an urban context, the presence of such features cannot be ruled out as a precaution.	

- 2.31. All other trees within the site are either to be retained as part of the proposals or were assessed as having negligible suitability to support roosting bats. These trees are therefore not detailed in the table above. Descriptions of the trees can be found in the Arboricultural Impact Assessment (**16262/R02**) produced in August 2024.



Birds

- 2.32. The data search returned a number of records of protected and notable birds species within 2 km of the site. Of these, some species of relevance to the site include herring gull *Larus argentatus*, house sparrow *Passer domesticus*, and starling *Sturnus vulgaris*.
- 2.33. Habitats within the site, including the ivy on the northwestern elevation of building B1, as well as the introduced shrub, hedgerows and scattered trees, have potential to support common and widespread nesting birds.
- 2.34. It is considered the assemblage of birds that may use the site for foraging and breeding is of negligible ecological importance. Notwithstanding this, consideration for nesting birds to avoid a breach of legislation is discussed in **Section 3** of this report.

Reptiles

- 2.35. The data search returned five records of reptiles within 2 km of the site, which are as follows:
- One record of grass snake *Natrix helvetica*, recorded approximately 2 km northwest of the site in 2014; and
 - Four records of slow worm *Anguis fragilis*, the nearest of which was recorded approximately 0.1 km southwest of the site in 2016.
- 2.36. Ruderal vegetation offers habitat suitable for common reptiles such as slow worm, however due to the limited extent of this habitat within the site, as well as the site's urban setting, reptiles considered likely absent from the site are not discussed further within this report.



Section 3: Ecological Impacts, Mitigation, and Enhancement

Proposed Development

- 3.1. The proposals comprise the construction of a new leisure centre with associated carparking, as shown in the Landscape Masterplan in **Appendix 3**.
- 3.2. The potential impacts at this site, as a result of the proposed works, are set out below with reference to relevant legislation and planning policy, which is summarised in **Appendix 1**.

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 give 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 Wiltshire Council to take measures to protect species or habitats from the adverse effects of development, where appropriate, by using planning conditions or obligations. Planning authorities should refuse permission where harm to the species or their habitats would result, unless the need for, and benefits of, the development clearly outweigh the harm.
- 3.4. The National Planning Policy Framework (NPPF) 2023 requires that the planning system should contribute to and enhance the natural and local environment, minimising impacts on biodiversity and providing net gains, as well as local planning policy, a summary of which is provided in **Appendix 1**.

Designated Sites

Statutory Designated Sites

- 3.5. The data search identified three Natura 2000 sites within 10 km of the site boundary and one national statutory designated site within 2 km. Due to the distance from the site and the nature of the proposed development (i.e. not residential), no adverse direct or indirect impacts on these designated sites are expected to arise as a result of the site's development and therefore no specific mitigation is required.

Non-statutory Designated Sites

- 3.6. Six non-statutory designated sites within 2 km of the site were returned by the data search. Due to the distance between them and the site, no impacts from construction phase of the proposed development are anticipated.

- 3.7. However, given the change of use of the site, the operational phase of the development could result in an increased number of visitors to Biss Meadow Country Park, located approximately 0.5 km east of the site. Therefore, increased recreational pressure as a result of the development could occur if appropriate mitigation measures, such as provision of alternative amenity space, are not implemented.

Habitats and Flora

- 3.8. Through application of the mitigation hierarchy, the proposals have been designed to ensure the majority of habitats within the site (hardstanding and small areas of modified grassland, introduced shrub and ruderal vegetation) that will be lost are of negligible ecological importance and hence their losses require no specific mitigation.
- 3.9. Habitats of local ecological importance, namely the lines of mature trees and scattered broadleaved trees, are mostly to be retained. Retained trees and their roots and hedgerows will require safeguarding where appropriate or where works are within root protection areas in accordance with the British Standard for trees and construction, BS 5837:2012 and in line with the requirements of the Arboricultural Impact Assessment (AIA) report (ref: **16262_R02**).
- 3.10. Some trees within the site are to be removed, namely T1 – 3, T6, T17 – 19, G1, G2, G7 and G9, to facilitate the proposals. The loss of these trees will be compensated for through the planting of 129 native trees, as well as native mixed scrub, native hedgerows and ornamental shrub planting as shown on in the Landscape Masterplan in **Appendix 3**.
- 3.11. The River Biss, as a tributary of the River Avon, is of up to county ecological importance and therefore mitigation measures will be implemented to avoid impact to the river by the development. There will be a 5 m buffer zone, where no development will occur. During the construction phase of the proposed development, there is a risk of direct impacts to the river via run-off, noise/vibration impacts, dust etc. Standard best practice pollution prevention⁵ has therefore been incorporated into a Construction Environmental Management Plan (CEMP). These potential impact pathways will thus be controlled and impacts to the River Biss avoided.
- 3.12. A biodiversity net gain (BNG) assessment has been completed and is discussed in **Section 4** of this report.
- 3.13. Management to ensure ecological value of retained and created habitats within the site should be controlled through a Habitat Management and Monitoring Plan (HMMP), expected to be secured via a suitably worded planning condition. This should support the scheme to comply with the National Planning Policy Framework (NPPF) framework.

Protected and Notable Species

Bats

- 3.14. As European protected species, all UK bat, as well as their breeding sites and resting places, receive legal protection in England under the Conservation of Habitats and Species Regulations 2018 (as amended) and Schedule 5 of the Wildlife and Countryside Act (WCA)

⁵ CIRIA (2015) Construction Work Sector Guidance for Designers. Fourth edition



1981 (as amended), making it an offence to capture, injure or kill a bat or to disturb or obstruct access to a bat roost. In addition, planning policy set out in the National Planning Policy Framework (December 2023) requires planning authorities to consider bats (alongside other protected species) when determining planning applications and to ensure that development proposals do not lead to an adverse effect on the conservation status of bats or other protected species.

- 3.15. The PRA of the site found building B1 to have negligible suitability to support roosting bats and therefore no further surveys are needed. The building however had substantial ivy growth on its northwestern elevation, potentially obscuring suitable roosting features for bats. It is therefore recommended, as a precautionary approach, the ivy was carefully stripped prior to its demolition under the supervision of a suitably-qualified ecologist.
- 3.16. The GLTA found tree T2 and the group of rowan trees (G2) to have significant ivy growth on the trunks, potentially obscuring suitable roosting features for bats. A potentially suitable feature for roosting bats was also identified in tree T2 (see **Table 2.2** for details). As these trees were removed as part of the proposals (in February 2025), the ivy was carefully stripped under the supervision of a bat licence-holder before removal.
- 3.17. The site is already subject to high levels of artificial lighting at night and has negligible suitability to support foraging and commuting bats. However, given the site's proximity to the River Biss, offering suitable habitat for foraging and commuting bats adjacent to the site, a lighting scheme should be designed (in accordance with BCT guidance note 08/23⁶) to ensure lighting levels post-construction are not greater than current levels and direct lighting of retained and proposed vegetation should be avoided.
- 3.18. To enhance the site for roosting bats, two bat boxes are recommended to be incorporated within scheme in suitable locations determined by an ecologist by either using integrated bat boxes on the proposed building or externally erected bat boxes on retained trees or the proposed building (expected to be secured via a suitably worded planning condition), in line with Core Policy 50 of the Wiltshire Core Strategy.

Birds

- 3.19. All birds, their nests and eggs, are protected by law and as such it is an offence to intentionally kill, injure, or take any wild bird; intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built; and intentionally take or destroy the egg of any wild bird.
- 3.20. To avoid triggering the legislation protecting nesting birds, clearance of suitable habitat (the trees, introduced shrub, ruderal vegetation and hedgerow) should be timed outside the nesting bird season (generally taken as March to September inclusive, though this is not defined in law and birds may nest outside of this time). If any clearance works to nesting habitats are required during the nesting season, then pre-removal checks for nesting birds must be carried out by a suitably experienced Ecological Clerk of Works (ECoW), no more than 48 hours prior to the works commencing. If any nesting birds are found to be present, an appropriate buffer zone will be implemented, within which works are excluded for the

⁶ Bat Conservation Trust 'Bats and Artificial Lighting at Night' ILP Guidance Note



duration of the breeding attempt. Any active nests will need to be left in situ until a suitably experienced ecologist confirms that the chicks have fledged and the nest is no longer active.

- 3.21. Habitat creation in the form of native scrub, hedgerow and tree planting, as shown in the Landscape Masterplan (**Appendix 3**), will provide nesting opportunities on site. Additionally, two swift boxes (AfS General 1 – S Brick Polymer Swift Box, or similar) will be erected on the northwest elevation of the proposed building, as shown on the Biodiversity Enhancement Plan (ref: **16262/P05a**) appended to this report.
- 3.22. In addition to the swift boxes, three general purpose bird boxes can be incorporated within the scheme, to be erected on a north to eastern elevation of the retained trees bordering the northern site boundary, as shown on plan **16262/P05a**, in line with Core Policy 50 of the Wiltshire Core Strategy.



Section 4: Biodiversity Net Gain Assessment

- 4.1. Core Policy 50 of the Wiltshire Core Strategy (adopted January 2015), as well as the NPPF, requires developments to demonstrate a net gain in biodiversity (see Appendix 1). In addition, the Town and Country Planning Act mandates a 10% net gain of biodiversity units, mandatory from February 2024.
- 4.2. A development achieves biodiversity net gain when the total biodiversity units present post-development is higher than that of the biodiversity units present on site prior to development. Defra's Statutory Biodiversity Metric has been used to calculate the biodiversity value of the site before and after development in terms of "biodiversity units" to calculate an overall biodiversity net gain or loss.

Strategic Significance

- 4.3. All habitats within the site both pre- and post-development, with the exception of the river, are classified as being of low strategic significance – "Area / compensation not in local strategy", as they are not located within areas identified as important for biodiversity within the Wiltshire and Swindon Local Nature Recovery Strategy (LNRS) and do not otherwise meet the definitions for high or medium strategic significance. The river is formally identified within the LNRS.

Existing Habitats

- 4.4. The following habitats and linear features, detailed in **Tables 4.1 - 4.3**, are present within the red line boundary of the site. These habitats are summarised in **Section 2** of this report and are shown on Habitat Features Plan **16262/P01b**. The rationale for condition assessments is detailed within the metric **16262_BNG Statutory Metric_10022026**.



Table 4.1: Baseline Habitats and Areas Retained and Enhanced

Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Area retained (hectares)	Area enhanced (hectares)	Area lost (hectares)
Urban	Developed land; sealed surface (hardstanding)	1.903	Very low	Condition Assessment N/A	0	0	1.903
Urban	Introduced shrub	0.071	Low	Condition Assessment N/A	0	0	0.071
Sparsely vegetated land	Ruderal vegetation	0.311	Low	Good	0	0	0.311
Sparsely vegetated land	Ruderal vegetation	0.145	Low	Moderate	0.079	0	0.066
Grassland	Modified grassland	0.145	Low	Poor	0.064	0.043	0.038
Individual trees	Urban tree	0.398	Medium	Good	0.329	0	0.069
Individual trees	Urban tree	0.073	Medium	Moderate	0.012	0	0.061
Individual trees	Urban tree	0.016	Medium	Poor	0	0	0.016



Table 4.2: Baseline Hedgerows and Lengths Retained and Enhanced

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	Length retained (km)	Length enhanced (km)	Length lost (km)
H1	Native hedgerow with trees	0.023	Low	Poor	0	0	0.023
H2 & H3	Ornamental hedgerow	0.052	Very low	Poor	0	0	0.052
L1	Line of trees	0.249	Low	Moderate	0.249	0	0

Table 4.3: Baseline Watercourse Lengths Retained and Enhanced

Watercourse Type	Length (km)	Distinctiveness	Watercourse encroachment	Extent of Encroachment (both banks)	Condition	Length retained (km)	Length enhanced (km)	Length lost (km)
Other rivers and streams	0.25	High	Major	Major/Major	Fairly Poor	0	0.25	0



River Condition Assessment

- 4.74. As part of the BNG assessment, the level of encroachment into both the watercourse and 10m riparian zone was assessed both in terms of the existing baseline but also the post-development change. **Table 4.4** below provides a summary of the MoRPh 5 survey results. A full breakdown of the river condition assessment is available in Excel format on request.

Table 4.4: Results of MoRPh 5 river survey condition assessment

Index	Scores
Positive Index Average	1.158
Negative Index Average	-1.165
Preliminary Score (Positive Index + Negative Index)	-0.457
River Type	Straight/sinuuous
Condition Score (Preliminary Score + River Type)	Fairly Poor

- 4.75. Given the fact that the River Biss does not fall within the site boundary and the proposals will not result in any encroachment into the watercourse, no direct impacts to the river will occur. The watercourse position outside of the site boundary and ownership control, also means that no direct improvements to the watercourse condition of Fairly Poor can be implemented (see table 4.4 below).
- 4.76. The extent of existing manmade and heavily modified habitats in the 10 m riparian zone (including areas of hardstanding, roads and recreation spaces), was assessed as being "major" on both banks, due to the presence of hardstanding pathways, building and hardstanding carpark immediately adjacent to the top of each river bank, and the watercourse itself is confined by artificial re-shaped banks with rock gabion cages.
- 4.77. Enhancement to habitats within the riparian zone adjacent to the development will take place as part of the development, however the proposals do not sufficiently reduce the extent of encroachment into the riparian zone that is already present, nor do they create new habitats of value enough to uplift the condition of this feature in combination. As a result the condition of the watercourse habitat following enhancement remains as "Fairly Poor", and as such, no measurable gain in respect to the BNG metric is calculated, despite enhancements to the habitats adjacent to the watercourse being provided by the proposals.

Proposed Habitats

- 4.78. The proposals, as shown within **Appendix 3**, have been used to calculate the proposed habitat areas. The rationale for target condition assessments is detailed within the metric **16262_BNG Statutory Metric_10022026**.



Table 4.5: Created and Enhanced Habitats

Broad Habitat	Proposed habitat	Area (ha)	Created/enhanced	Baseline condition	Distinctiveness	Target condition
Urban	Developed land; sealed surface	1.767	Created	NA	Very low	Condition Assessment N/A
Urban	Introduced shrub	0.105	Created	NA	Low	Condition Assessment N/A
Urban	Rain garden	0.025	Created	NA	Low	Moderate
Grassland	Modified grassland	0.104	Created	NA	Low	Poor
Grassland	Other neutral grassland	0.043	Enhanced from modified grassland	Poor	Medium	Moderate
Grassland	Other neutral grassland	0.363	Created	NA	Medium	Moderate
Heathland and scrub	Mixed scrub	0.016	Created	NA	Medium	Moderate
Individual trees	Urban tree	0.452	Created	NA	Medium	Moderate
A net gain of 0.87 habitat units, +10.42%						

Table 4.5: Created and Enhanced Hedgerows

Proposed habitat	Length (km)	Created/enhanced	Baseline condition	Distinctiveness	Target condition
Native hedgerow	0.108	Created	NA	Low	Poor
A net gain of 0.11 linear habitat units, +10.1%					

Table 4.6: Created and Enhanced Watercourses

Proposed habitat	Length (km)	Created/enhanced	Baseline condition	Distinctiveness	Target condition
Other rivers and streams	0.25	Enhanced	Fairly Poor	High	Fairly Poor
A net gain of 0 watercourse habitat units, +0%					



Results Summary

- 4.79. As described within the Defra Statutory Biodiversity Metric **16262_BNG Statutory Metric_10022026** and summarised below in **Figure 4.1**, based on the habitats present on site that will be lost and those to be created, the development would result in a net gain of 0.87 habitat units, a gain of 0.11 hedgerow units. This is a percentage gain of + 10.42% in habitat units and gain of + 10.1% in hedgerow units. The trading rules of the metric have been satisfied through the creation of low distinctiveness and medium distinctiveness habitats, including the planting of 111 trees.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.87
	<i>Hedgerow units</i>	0.11
	<i>Watercourse units</i>	0.10
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	10.42%
	<i>Hedgerow units</i>	10.10%
	<i>Watercourse units</i>	10.30%
Trading rules satisfied?	Yes ✓	

Figure 4.1: BNG assessment results summary, taken from the Defra Statutory Biodiversity Metric

- 4.80. In order to achieve a net gain of + 10% in watercourse units, an off-site contribution of 0.1 watercourse units (to be agreed through a Section 106 agreement or other appropriate planning mechanism, as detailed in **Section 4**) is to be secured from the Environment Bank.
- 4.81. In order to demonstrate the generation of the required units, details of the proposed off-site watercourse enhancement are detailed in the metric **16262_BNG Statutory Metric_10022026**. This comprises the enhancement of an existing ditch feature from poor to good condition and would be delivered at Environment Bank site reference BGS-111024001.

Management

- 4.82. The results of the Defra Statutory Biodiversity Metric are based on the habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by Defra.
- 4.83. Details of habitat establishment and long-term management will be provided through the production of an HMMP. The HMMP will set out the prescriptions for the establishment and maintenance of the habitats on site for 30 years.



Section 5: Conclusions

- 5.1. With the implementation of the mitigation and enhancements described in **Section 3**, and provided a net gain of 10% of habitat units is achieved, it is considered that the proposed development will conform with relevant legislation, national planning policy and local planning policy as detailed in **Appendix 1**.
- 5.2. No impacts on statutory designated sites are considered likely as a result of the proposed development. Biss Meadow Country Park is located approximately 0.5 km from the site and could therefore face potential impacts from increased recreational pressure as a result of the development if appropriate mitigation is not implemented.
- 5.3. A CEMP has been prepared (ref: **16262/R04**) prior to the submission of a planning application (to avoid the requirement for a pre-commencement condition) to prevent direct impacts to the River Biss as a result of chemical run-off, dust, noise, vibration etc from the construction works.
- 5.4. The current post-development proposals give a net gain of + 10.42% in habitat units (+ 0.87 units) and a net gain of + 10.1% in hedgerow units (+ 0.11 units) on site. In order to achieve a net gain of + 10% in watercourse units, an off-site contribution of 0.1 watercourse units (to be agreed through a Section 106 agreement or other appropriate planning mechanism, as detailed in **Section 4**) is to be secured from the Environment Bank.
- 5.5. Habitats within the site offer suitable habitat for nesting birds. Any vegetation removal should be undertaken outside of the core nesting bird season (March-August, inclusive). Where this is not possible, a pre-works check by an ECoW should be undertaken to determine whether active birds' nests are present. If nest(s) are present, no nests, eggs or young should be destroyed and an appropriate buffer must be instated until the chicks have been confirmed as fledged by an ECoW.
- 5.6. Trees T2 and G2 and building B1 had substantial ivy growth, potentially obscuring suitable roosting features for bats. As these trees and building were removed (in February and March 2025) as part of the proposals, the ivy was carefully stripped under the supervision of a bat licence-holder before removal/demolition.
- 5.7. It has been recommended that proposed mitigation and enhancements are secured through the production of an HMMP and a sensitive lighting strategy. These can be secured through suitably worded planning conditions.



Appendix 1: Legislation and Planning Policy

Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Environment Act 2021;
 - The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way (CROW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006;
 - The Hedgerows Regulations 1997; and
 - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CROW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

Environment Act 2021: Upcoming Town and Country Planning Act

- A1.5. The Environment Act gained Royal Assent in November 2022. As of 12th February 2024, it is mandatory for developments (with a small number of exceptions) to achieve at least a 10% gain in biodiversity units under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).



National Planning Policy

National Planning Policy Framework, December 2024

- A1.6. The NPPF was published in December 2024 and sets out the Government's planning policies for England and how these should be applied. It replaces the previous National Planning Policy Framework published in March 2012 and December 2023.
- A1.7. Paragraph 11 states that:
- "Plans and decisions should apply a presumption in favour of sustainable development."*
- A1.8. Section 11 of the NPPF, paragraph 125, sub-section a states that planning policies and decisions should:
- a) *"encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains - such as developments that would enable new habitat creation or improve public access to the countryside;*
 - b) *recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production"*
- A1.9. Section 15 of the NPPF (paragraphs 187 to 195) considers the conservation and enhancement of the natural environment.
- A1.10. Paragraph 187 states that planning 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; and*
 - 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs"*
- A1.11. Paragraph 188 states that 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; 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.



A1.12. Paragraph 192 states that in order 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 biodiversity⁷; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁸; 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."*

A1.13. When determining planning applications, Paragraph 193 states that 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 reasons⁹ 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."*

A1.14. As stated in paragraph 187 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 sites¹⁰; 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."*

⁷ Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

⁸ 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.

⁹ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

¹⁰ 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.



A1.15. Paragraph 195 states that

"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".

Local Planning Policy

A1.16. The adopted Local Plan for Wiltshire Council is the Wiltshire Core Strategy (WCS), adopted in 2015. This incorporates saved policies from former District Local Plans that are not replaced by the WCS.

Wiltshire Core Strategy¹¹ (adopted January 2015)

A1.17. Policies relating to ecology and nature conservation are listed under Strategic Objective 5: Protecting and enhancing the natural, historic and built environment, specifically Core Policy 50 which is summarised below.

A1.18. Core Policy 50: Biodiversity and Geodiversity

Protection

"Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource, and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy."

Biodiversity enhancement

"All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the Biodiversity Action Plan

¹¹ Wiltshire Core Strategy (2015) [Online] Available at: <https://www.wiltshire.gov.uk/media/372/Wiltshire-Core-Strategy-adopted-2015/pdf/Wcs.pdf?m=637099399373530000> [Accessed 02/11/2023]



(BAP) or River Basin/ Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.”

Local sites

“Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

- i) cannot reasonably be avoided;
- ii) are reduced as far as possible;
- iii) are outweighed by other planning considerations in the public interest; and
- iv) where appropriate compensation measures can be secured through planning obligations or agreements.

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term.”

Biodiversity Action Plan for Wiltshire¹²

A1.19. The Biodiversity Action Plan (BAP) for Gloucestershire outlines action plans for the following habitats and species:

Habitats	Species
• Woodland • Wood-pasture, parkland and ancient trees • Ancient and/or species-rich hedgerows • Traditional orchards • Farmland habitats • Calcareous grassland • Unimproved neutral grassland • Rivers, streams and associated habitats • Standing open water • Lowland heathland • Built environment	• Barbastelle • Bechstein’s bat • Greater horseshoe bat • Common pipistrelle • Soprano pipistrelle • Lesser horseshoe bat • Natterer’s bat • Brown long-eared bat • Serotine • Brandt’s bat • Daubenton’s bat • Whiskered bat • Noctule • Nathusius’ pipistrelle • Leisler’s bat

¹² Wiltshire Biodiversity Action Plan (2008) [Online] Available at: <https://www.wiltshirewildlife.org/sites/default/files/2022-08/wiltshirebap2008%281%29.pdf> [Accessed: 02/11/2023]



Appendix 2: Methodology

Data Search

- A2.1. A desk-based study was conducted whereby records of designated sites and records of protected and priority species were purchased and interrogated for the site and the surrounding landscape. The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- A2.2. The following resources were consulted/contacted:
- Multi-Agency Geographic Information for the countryside (MAGIC) website¹³;
 - Wiltshire & Swindon Biological Records Centre (WSBRC)¹⁴; (Data ordered on 19th September 2023 and received on 2nd October 2023);
 - Wiltshire Council website¹⁵;
 - Joint Nature Conservation Committee (JNCC) website¹⁶;
 - Natural England (NE) designated sites website¹⁷;
 - Ordnance Survey mapping; and
 - Google Maps, including aerial photography.
- A2.3. The following areas of search around the boundary of the site boundary were applied:
- 4 km for bat records;
 - 2 km for protected and priority species, national statutory designated and non-statutory sites; and
 - 10 km for European statutory sites.

'Extended' Phase I Habitat Survey

- A2.4. An 'extended' phase I survey was carried out on 23rd October 2023 by Vicky King-Cline BSc MSc, a suitably experienced ecologist and qualifying member of CIEEM. The methods used during the walkover survey broadly followed methods used in an 'extended' phase I habitat survey¹⁸ and

¹³ <https://magic.defra.gov.uk/> [Accessed 02/10/2023]

¹⁴ <https://www.wsbrc.org/>

¹⁵ <https://www.wiltshire.gov.uk/> <https://www.redbridge.gov.uk/planning-and-building/planning-policy/> [Accessed 02/11/2023]

¹⁶ <http://jncc.defra.gov.uk/ProtectedSites/> [Accessed 02/10/2023]

¹⁷ <https://designatedsites.naturalengland.org.uk/> [Accessed 02/10/2023]

¹⁸ Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.



entailed recording the main plant species and classifying and mapping habitat types with reference to the Habitat Definitions provided by the UK Habitat Classification Working Group¹⁹.

- A2.5. Additionally, the habitats identified were evaluated for their potential to support legally protected and notable fauna species. Where access allowed, adjacent habitats were also considered in order to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- A2.6. All habitats were assessed utilising the relevant condition criteria for the relevant habitat type under Defra's Statutory Biodiversity Metric, which included confirming 'pass' / 'fail' criteria taken from the UK Habitat/Phase 1 methodology where necessary. These conditions have been detailed in the BNG assessment.

Preliminary Roost Assessment (PRA)

- A2.7. A PRA was undertaken on trees and buildings of relevance to this assessment. The assessment was undertaken on 23rd October 2023 in conjunction with the phase I habitat survey. All surveys were daytime inspections and the conditions for all surveys was considered optimal. All trees and buildings were inspected from the ground using binoculars for accessible features. In relation to trees, such features may include woodpecker holes, frost cracks, deadwood, knot holes and limb wounds.
- A2.8. The potential of each tree and building at the site and immediately adjacent to the site to support roosting bats have been categorised against the criteria described in **Table A2.1**.

Table A2.1: Roost Assessment Criteria²⁰

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for long periods of time due to their size, shelter, protection conditions and surrounding habitat.

- A2.9. Results of the PRA are shown in **Section 2** of this report.

¹⁹ Butcher, B., Carey, P., Edmons, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions V1.1

²⁰ Adapted from Collins, J. (ed.) 2023. Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6



Ground-level Tree Assessment

- A2.10. A ground-level tree assessment (GLTA) of all trees within the site was also carried out by Vicky King-Cline to determine the respective suitability of each tree for roosting bats. The GLTA was carried out during the day and the conditions for the survey were considered optimal. The location of the trees within the site are shown on plan **16262/P01b**.
- A2.11. All trees were inspected from the ground using binoculars and a high-powered torch. PRFs that may be used by bats, as defined within the Bat Conservation Trust (BCT) good practice guidelines²¹, were sought. PRFs of interest include as detailed in **Table A2.2** below.

Table A2.2: PRF types than can be exploited by bats and how they form, adapted from Collins, 2023²²

PRFs Formed by Disease and Decay	PRFs Formed by Damage	PRFs Formed by Association
Woodpecker Holes Squirrel holes Knot holes Pruning cuts Tear outs Wounds Cankers Compression Forks Butt rots	Lightning strikes Hazard beams Subsidence Cracks Shearing cracks Transverse snaps Welds Lifting bark Desiccation Fissures Frost cracks	Fluting Ivy

- A2.12. The potential of trees to support roosting bats was assessed using the criteria shown in **Table A2.3** below.

Table A2.3: Assessment of Tree Suitability Criteria, adapted from Collins, 2023²³

Roost Suitability	Description of Roosting Habitat
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

- A2.13. The potential of each tree within and immediately adjacent to the site to support roosting bats have been categorised against the criteria described in **Table A2.3**. Results of the GLTA are shown in **Section 2** of this report.

²¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

²² Adapted from: Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

²³ Adapted from: Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6



Modular River Physical (MoRPh) Survey

- A2.14. A watercourse is present directly adjacent to the site's northeastern boundary, with the 10m riparian zone extending within the site, and therefore a MoRPh survey was therefore undertaken. This survey was completed by Joe Small, an accredited MoRPh surveyor at Tyler Grange on 30th July 2024.
- A2.15. The methodology was based upon that set out in The MoRPh Survey Technical Reference Manual 2022²⁴ and is used to gather information on short lengths (or modules) of a river that are used to assess overall river condition. The data recorded in each module to assess condition is comprised of 32 condition indicators, split between four morphological features (Bank Top, Bank Face, Channel-Water Margin and Channel Bed). MoRPh surveys included the river and all habitat within a radius of 10 m of the watercourse.
- A2.16. This survey is designed to cover at least 20% of the total river length adjacent to the site, and is broken down into sub-reach surveys comprised of five contiguous MoRPh modules. The length of each module for a navigable river/canal is 50m and as such the total length of the MoRPh survey was 250m.
- A2.17. In addition to the field survey, a desk based assessment is also completed to determine river type and to inform the completion of the condition assessment.

Biodiversity Net Gain Assessment

- A2.18. Defra's Statutory Biodiversity Metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) – the 'unit' value associated with each habitat type is calculated based on the following parameters:
- Size (in hectares)/Length (in km);
 - Distinctiveness (i.e. how rare/valuable a given habitat is);
 - Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat); and
 - Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).
- A2.19. When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the 'unit' value of a given habitat and these are:
- Time to reach the target condition of each habitat; and
 - Difficulty category for the creation of a given habitat.
- A2.20. A calculation has been undertaken using the baseline habitats identified during habitat condition assessment survey, which was carried out on 23rd October 2023, alongside the 'extended' phase I

²⁴ Gunnell, A. and Shuker, L. (2022) The MoRPh survey: Technical reference Manual 2022 version.



survey above. All surveys were carried out by Vicky King-Cline BSc MSc, a suitably experienced ecologist and qualifying member of CIEEM.

A2.21. The UK Habitat Classification was used to identify habitat types. Note that the calculation is completed separately for non-linear and linear habitats. Habitat areas entered into the Defra Statutory Metric in hectares were rounded to three decimal places.

Evaluation

A2.22. The evaluation of habitats and species is defined in accordance with published guidance²⁵. The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county, and local. Below these are features considered to be of negligible importance.

A2.23. Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.

A2.24. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Impact Assessment

A2.25. The assessment of impacts identifies impacts and their effects as a result of the proposed development on important ecological features. This includes consideration of impacts at all relevant stages of the development, including construction and operation/occupation [include decommissioning and restoration, if relevant – it won't be for most projects]. The assessment includes reference to legislation and policy, and supplementary planning guidance where relevant.

Application of Mitigation Hierarchy

A2.26. Application of the mitigation hierarchy is fundamental to the ecological impact assessment process. This requires consideration of the following measures, in order of priority, for all potential impacts, to determine the most appropriate mitigation, compensation and enhancement strategy for the project. This is taken into account within **Section 3** of this report and set out below:

- Avoidance – measures to avoid harm to ecological;

²⁵ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.



- Mitigation – measures to avoid or minimise potential impacts as part of the design or guaranteed by planning controls;
- Compensation – measures required to offset significant residual negative effects following avoidance and mitigation; and
- Enhancement – measures over and above requirements for avoidance, mitigation and compensation to provide biodiversity net gain.



Appendix 3: Landscape Masterplan



KEY

Sewer easement

SOFT LANDSCAPE

- Existing trees (with root protection areas)
- Existing vegetation to be retained, and improved through thinning / pruning and removal of invasive species
- Proposed public realm trees (non native)
- Proposed native trees
- Proposed feature trees
- Proposed flowering lawn
- Proposed ornamental planting
- Proposed native hedges
- Proposed native scrub planting
- Proposed wildflower meadows
- Proposed swales
- Proposed mounds with c.1:3 sides, smooth contours and rounded top
- Proposed woodland understory mix

HARD LANDSCAPE

- Resin bonded gravel surfacing
Colour: Buff. With galvanised steel edging or similar approved
- Paving flags - entrance plaza
Tobemore Manhattan - 600mm x 150mm
Colour: Silver Grey
- Block paving - entrance spaces
Tobemore Fusion - 300mm x 200mm
Colour: Mid grey
- Hoggin footpath (informal)
Supplier: Allgreen or equal and approved
Somerset Buff Saltbinder 0-14mm
- Tarmac surfacing - buff to engineer's spec
- Tarmac surfacing - standard to engineer's spec
- Existing Tarmac surfacing to be retained
- Parking bays
Forterra - Charities Block Paving
Colour: Charcoal
- Crossing points
Forterra - Charities Block Paving
Colour: Fenment
- Seating walls - bespoke 600mm high PCC walls with integrated timber seating - colour and finish TBC
- Cycle stands
Vestra VROOM large cycle stand or equal and approved
Colour: dark grey
- Bollards
Marshalls RB101 or equal and approved
Colour: dark grey - powder coated
- Removable bollards
Marshalls RB101 or equal and approved
Colour: dark grey - powder coated
- Picnic bench
Browap Land Picnic Bench - BX31 2002 or equal and approved
- Accessible picnic bench
Browap Land Picnic Bench - BX31 2002 - EXT or equal and approved
- Seating
Browap Nation Rustic 4 Slat Seat - BX17 4055 or equal and approved
- Waste bins
Anform Urban Furniture - Box Litter Bin RAL colour TBC
- Electric vehicle spaces
- Family spaces
- Accessible parking
- Stepping stones
Tobemore Mayfair Slabs - 450mm x 450mm x 40mm
Colour: Silver
- Watering points - to have removable tap heads
- Wayfinding locations
- Information lectern
- Natural play locations
- Geocellular system- for footpath section with RPAs. To arboriculturalists recommendations
- Post and rail fencing - nailed half round post and rail fencing by Jacksons Fencing or similar approved
- Knee rail fencing - treated timber knee rail fencing by Jacksons Fencing or similar approved
- Location of Solar Car Ports



This line should measure 70mm when printed correctly

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Rev	Date	By	Chk	Description
P01	19.06.2025	TH	TH	Issued for Review and Comment
P02	23.06.2025	TH	TH	Issued for Review and Comment
P03	24.06.2025	TH	TH	Issued for Review and Comment
P04	08.07.2025	TH	TH	Issued for Review and Comment
P05	16.07.2025	TH	TH	Issued for Review and Comment
P06	11.08.2025	TH	TH	Issued for Review and Comment
P07	27.10.2025	TH	TH	Kerbs amended due to coach tracking
P08	30.10.2025	TH	TH	Crossing amended
P09	24.11.2025	TH	TH	Various amends to western car park
P10	25.11.2025	TH	TH	Minor amends for dwg issue
P11	11.12.2025	TH	TH	Planting amended
P12	16.01.26	TH	TH	Parking amended for solar car ports
P13	19.01.26	TH	TH	Parking amended for solar car ports
P14	20.01.26	TH	TH	Solar car port amended
P15	22.01.26	TH	TH	Tree numbers and positions amended
P16	28.01.26	TH	TH	S278 works updated
P17	11.02.26	TH	TH	S278 works updated

RL

Roberts Limbrick

03333 405 500
mail@robertslimbrick.com
robertslimbrick.com

Registered Office England No. 09165629

Project Name

Trowbridge Leisure Centre

Client Name

Wiltshire County Council

Drawing Title

LANDSCAPE GENERAL
ARRANGEMENT - Whole Site

Scale

1:500 • A1

Project No.

11120

Status

S3 Issued for Review and Comment

Project	Org	Vol	Level	Form	Role
11120	RL	XX	ZZ	DR	L

Number

08003

Revision

P17

Plans:

Plan 1: Habitat Features and Preliminary Roost Assessment Plan
16262/P01b

Plan 2: Biodiversity Enhancement Plan **16262/P05a**





Legend

Site boundary

Building

Introduced shrub

Modified grassland

Hardstanding

Ruderal vegetation

Scattered trees

Line of trees

Native Species-poor Hedge

Non-native Hedge

Target Notes

T1 - T3: Small-leaved cotoneaster growth

T4: Ivy growth on building

River Biss

River Biss 8m buffer

River Biss 15m buffer



0 10 20 m

Project	Pellikaan Trowbridge
Drawing Title	Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	16262/P01b
Date	September 2024
Checked	VKC/RC



Runway East, 101 Victoria Street, Bristol, BS1 6PU
T: 0121 828 4045 E: hello@tylergrange.co.uk W: www.tylergrange.co.uk



- Legend
- Site boundary
 - Swift boxes to be erected on northwest elevation of the proposed building
 - General purpose bird boxes to be erected onto a north to eastern elevation of retained trees



Project	Pellikaan Trowbridge
Drawing Title	Biodiversity Enhancement Plan
Scale	As Shown (Approximate)
Drawing No.	16262/P05b
Date	February 2026
Checked	VKC/RC



Runway East, 101 Victoria Street, Bristol, BS1 6PU
T: 0121 828 4045 E: hello@tylergrange.co.uk W: www.tylergrange.co.uk



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