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Biodiversity Net Gain

St Peters School
Marlborough
Wiltshire
SN8 1LQ

June 2024

Darwin Ecology Ltd
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This report remains valid for 12 months from date of issue. Survey data are valid for 12-24 months from the date the survey was undertaken.		

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The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

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APPENDICES

1. EXECUTIVE SUMMARY

1.1. This report has been produced to provide the results of the Biodiversity Net Gain calculation at the site of the former St Peters School, Marlborough, Wiltshire, SN8 1LQ (OS Grid reference SU 19059 69108) in order to ensure compliance with the *National Planning Policy Framework (2023)* regarding 10% net gain of biodiversity.

1.2. The survey was required to inform a planning application for the conversion of three former school buildings into residential use to provide two houses, four maisonettes and seven flats. In addition, the construction of a new combined refuse, re-cycling and bike storage building is proposed.

1.3. The majority of the site has been already developed under a previous application (PL/ 2021/03930). Most of the pre-development habitat has been removed under the previous application and replaced with new housing. Baseline calculations were informed from a combination of the site visit, post January 2020 aerial photography and the Malford Environmental Consulting report from March 2021.

1.4. Biodiversity Net Gain Assessments calculate the change in ecological value at a site by comparing the number of 'biodiversity units' within the site pre and post-construction, for both linear habitats and areas of habitat, and demonstrating measurable loss or gain. The ecological value of the site is expressed as a percentage change in total Biodiversity Units following implementation of the proposals. Various forms of the metric are available, the most current being *DEFRA: The Statutory Biodiversity Metric 4.0*, which has been used to complete this assessment.

1.5. Baseline habitats include g4 modified grassland amenity grassland (former amenity lawn), h2b non native and ornamental hedgerow, u1b developed land sealed surface. The site also includes 15 individual urban trees of mostly medium size and in varying conditions.

1.6. Proposed habitats includes u1d suburban mosaic of developed and natural surface, u1b developed land sealed surface and h2b non native ornamental hedgerow. Twenty two small trees are set to be planted as part of the landscaping plans.

1.7. This report extends to the boundaries marked on the baseline habitat map. It does not include the 10 metres of riparian habitat extending northwards from the river Kennet.

1.8. The results of the metric are summarised in table 1 below:

1.9. The Statutory Biodiversity Metric demonstrates a -0.74% change in habitats and +172.27% change in linear features.

1.10. Due to the nature of the development and the size of the site it is considered that the statutory 10% Biodiversity Net Gain can not be achieved fully on site.

1.11. **A further 0.97 BNG Units of g4 modified grassland (or similar same broad habitat or a higher distinctiveness habitat) is required to be created off-site for the proposed**

development to achieve 10 % net gain and be in compliance with the NPPF. The developer should therefore seek off-site habitat creation alternatives.

1.12. Changes to the final landscaping scheme could potentially reduce the amount of BNG Units to be purchased to achieve 10 percent net gain, it is not envisaged that landscaping changes on their own would be able to achieve the full 10 percent net gain requirement on site.

1.13. Suggestions to reduce BNG units required to be purchased off site comprise the inclusion of ground based green walls, ground level planters and and the creation of bio-diverse green roof's on facility buildings such as bike and refuse stores. The planting of extra trees on site would also fulfil some the BNG units required to achieve net gain.

1.14. Provided the proposed habitats are managed competently, the proposed development will be in compliance with the NPPF. It is recommended that a biodiversity management plan (BEMP) is written to ensure the habitats created meet their target score.

On-site baseline	*Habitat units*	2.29		
	Hedgerow units	0.06		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	1.55		
	Hedgerow units	0.15		
	Watercourse units	0.00		
On-site net change (units & percentage)	*Habitat units*	-0.74	-32.42%	On-site net gain is less than target set
	Hedgerow units	0.10	172.27%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.74		
	Hedgerow units	0.10		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.74		
	Hedgerow units	0.10		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-32.42%	Total net gain achieved is less than target set	
	Hedgerow units	172.27%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries			

Table 1. Summary of BNG metric results

2. INTRODUCTION AND BACKGROUND

2.1. This report has been produced to provide the results of the Biodiversity Net Gain calculation at the site of the former St Peters School, Marlborough, Wiltshire, SN8 1LQ (OS Grid reference SU 19059 69108) in order to ensure compliance with the *National Planning Policy Framework (2023)* regarding 10% net gain of biodiversity.

2.2. The proposals are for the conversion of three former school buildings into residential use to provide two houses, four maisonettes and seven flats. In addition, the construction of a new combined refuse, re-cycling and bike storage building.

2.3. This assessment is based on the landscape proposals as shown in **Appendix 1**.

Site Overview

2.4. The development works of this former school site have been mostly completed under permission from a previous application PL/2021/03930. This town centre site is situated amongst urban gardens, business units, roads and parking.

2.5. The property shares approximately 35m of its southern boundary with the The River Kennet and its riparian zone. The river Kennet at this point is a a priority habitat chalk stream and forms part of the Stonebridge Wild River Reserve (a Local Wildlife Site). **(Figure 1)**

2.6. This report extends to the boundaries marked on the baseline habitat map and does not include the 10 metres of riparian habitat extending northwards from the river Kennet.

2.7. The site presently comprises new build housing, hard standing, parking spaces, landscaped garden features and cleared ground.

2.8. Two small amenity lawns of modified grassland and a privet hedge exist on the northern boundary adjacent to the main building. Single specimen trees exist on -site, all of which are set to be retained under current proposals.

2.9. The wider landscape comprises the town of Marlborough. The environs of the town extend for approximately 1 km in each direction before giving way to arable farmland and areas of priority deciduous woodland (see **Figure 2**).



Figure 1: Site location within the local landscape (C) Googlemaps, 2024



Figure 2: Site location within the wider landscape (C)Googlemaps, 2024

3. LEGISLATIVE AND POLICY

National Planning Policy Framework (NPPF) 2021

3.1. The NPPF aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications:

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

174 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);

174 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;

Habitats and biodiversity

179. 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, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation 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.

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

if significant harm to biodiversity resulting from a development cannot be avoid (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;

development on land within or outside of Sites 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 feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

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

d) development whose primary objective is to conserved or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development 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.

General Wildlife Legislation

3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.

3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for PEA in the UK. The presence of protected species within a site are a material consideration during the planning process. PEAs (and any necessary further assessments) provide an ecological baseline for a site and evaluation of the potential impact of proposals.

3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

Relevant Legislation

3.4. The principal pieces of legislation relating to wildlife and of relevance to this report are:

1. *EU Habitats Directive (1992);*
2. *EU Birds Directive (1979);*
3. *Conservation of Habitats and Species (Amendment) Regulations 2012;*
4. *The Wildlife and Countryside Act 1981 (as amended);*
5. *The Natural Environment and Rural Communities Act 2006;* and
6. *The Protection of Badgers Act 1992* (extended under *The Hunting Act 2004*).

3.5. The above legislation aims to protect sites and species and give detailed descriptions of exactly how these features are protected and what actions would constitute an offence.

National Planning Policy

3.1. The *National Planning Policy Framework (2023)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.

3.2. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.

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

> *180 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);
>
> *180 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;
>
> *180 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;
>
> *181)* Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the lease 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;

182) 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 Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimise adverse impacts on the designated area.

3.4. Specific policies regarding habitats and biodiversity comprise:

185) 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, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation 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.

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

a) if significant harm to biodiversity resulting from a development cannot be avoid (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 of Sites 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 feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees)

should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserved or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development 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.

3.5. *Circular 06/05: Biodiversity and Geological Conservation* provides guidance on the application of the law relating to planning and nature conservation and complements the *National Planning Policy Framework*.

3.6. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* provides the *UK Biodiversity Action Plan* and country level biodiversity strategies for England, based on the list of habitats and species listed on *Section 41* of the *Natural Environment and Rural Communities Act 2006*. These are considered the habitats and species of principal importance requiring conservation action.

Local Planning Policy

3.7. The local planning policy for the site is the Wiltshire Core Strategy (adopted 2015), with relevant policies comprising:

Wiltshire Core Strategy (Adopted 2015)
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 (BAP) or River Basin/ Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Core Policy 51: Landscape

Development should protect, conserve and where possible enhance landscape character and must not have a harmful impact upon landscape character, while any negative impacts must be mitigated as far as possible through sensitive design and landscape measures. Proposals should be informed by and sympathetic to the distinctive character areas identified in the relevant Landscape Character Assessment(s) and any other relevant assessments and studies. In particular, proposals will need to demonstrate that the following aspects of landscape character have been conserved and where possible enhanced through sensitive design, landscape mitigation and enhancement measures:

i. The locally distinctive pattern and species composition of natural features such as trees, hedgerows, woodland, field boundaries, watercourses and waterbodies.
ii. The locally distinctive character of settlements and their landscape settings.
iii. The separate identity of settlements and the transition between man-made and natural landscapes at the urban fringe.
iv. Visually sensitive skylines, soils, geological and topographical features.
v. Landscape features of cultural, historic and heritage value.
vi. Important views and visual amenity.
vii. Tranquillity and the need to protect against intrusion from light pollution, noise, and motion. viii. Landscape functions including places to live, work, relax and recreate.
viii. Special qualities of Areas of Outstanding Natural Beauty (AONBs) and the New Forest National Park, where great weight will be afforded to conserving and enhancing landscapes and scenic beauty.

Proposals for development within or affecting the Areas of Outstanding Natural Beauty (AONBs), New Forest National Park (NFNP) or Stonehenge and Avebury World Heritage Site (WHS) shall demonstrate that they have taken account of the objectives, policies and actions set out in the relevant Management Plans for these areas. Proposals for development outside of an AONB that is sufficiently prominent (in terms of its siting or scale) to have an impact on the area's special qualities (as set out in the relevant management plan), must also demonstrate that it would not adversely affect its setting.

Local Biodiversity Action Plan

3.8. The local biodiversity action plan relevant to the site is the Wiltshire Biodiversity Action Plan. It aims to set out a long-term strategy for biodiversity conservation within Wiltshire and provide a series of objectives and actions for achieving successful conservation of habitats and species across the county.

3.9. The Wiltshire Biodiversity Action Plan (BAP) was published in 2002 and reviewed in 2008 by the Wiltshire Wildlife Trust and over 40 delivery partners who make up the Wiltshire BAP Partnership. It includes habitat action plans for 11 of the most significant of the UK Priority Habitats in Wiltshire which include woodland, wood-pasture, parkland and ancient trees, hedgerows, calcareous grassland, neutral grassland, traditional orchards, farmland habitats, built environment, standing open water and rivers, streams and associated habitats. In addition, a bat species action plan has also been included, covering all bat species found in Wiltshire, while other priority species have been included under the appropriate habitat action plans.

3.10. The Wiltshire BAP species list includes both species having national priority under the UK BAP and also species having local importance in Wiltshire including county notables. A total of 260 species have been included on the Wiltshire BAP species list.

3.11. The Wiltshire BAPs aim to achieve the following:

- Enable prioritisation and define actions for priority habitats and species in Wiltshire.
- Create a plan of action that can be delivered through a partnership of statutory, private and third sector organisations.
- Provide a baseline of current knowledge and a tool to help monitor key habitats and species.
- To link objectives, targets and actions to report nationally and enable conservation work carried out in Wiltshire to contribute to national targets and reporting.

3.12. In 2012, a landscape scale framework for conservation in Wiltshire was developed, identifying 11 Landscape Biodiversity Areas across Wiltshire and Swindon, made up of a

number of priority habitats, designated sites and other areas of conservation significance. This aims to encourage landscape scale planning for species and habitat conservation across Wiltshire.

3.13. Wiltshire County Council (WCC), Natural England (NE) and local experts and researchers have jointly prepared the Bat Special Areas of Conservation (SAC) Planning Guidance for *Wiltshire (2015)*. It is aimed at applicants, agents, consultants and planners involved producing and assessing development proposals in the landscapes surrounding Wiltshire's most sensitive bat roosting sites, which are protected by European wildlife legislation and applies to all types of developments that are subject to planning control.

3.14. The guidance gives details on how to mitigate any potential impacts on Wiltshire Bat SACs and to ensure that any potential issues are identified as early in the planning process as possible to prevent unnecessary delays to development projects. The guidance also outlines the ecological documents and plans, which should be submitted in support of planning applications, so as to ensure that the council has all the information required to undertake a reliable Habitats Regulations Assessment (HRA) should one be required.

4. METHODOLOGY

Biodiversity Net Gain Assessment

4.1. Biodiversity Net Gain Assessments calculate the change in ecological value at a site by comparing the number of 'Biodiversity Units' within the site pre and post construction for both linear habitats and areas of other habitats. The ecological value of the site is expressed as a percentage change in total Biodiversity Units following the completion of the proposed development. This is an indicator of what the proposed development's impact would be on the site's existing ecological value and will establish if a net loss of biodiversity has been avoided.

4.2. The biodiversity calculations were undertaken using the The Statutory Biodiversity Metric 4.0, the User Guide, Technical Supplement and Condition Assessment Sheets.

Calculation Components

4.3. The Statutory Biodiversity Metric 4.0 takes account of all the habitats on site prior to development and post development using UK Habitat Classification System (UKHabs). Therefore, Phase 1 Habitat types have been converted to UKHabs Habitats for the purposes of this assessment. Using this metric, area habitats are measured in hectares and inputted to three decimal places. Linear habitats are measured in Kilometres to the nearest three decimal places.

4.4. The Biodiversity Metric further assesses all habitats using the following:

4.5. *Distinctiveness*- Habitats are automatically given a distinctiveness score based on habitat type. This ranges from 'High' to 'low'. 'High' distinctiveness habitats include those listed as Habitats of Principal Importance under the NERC act. Habitats of low wildlife value (such as ornamental planting) are given a 'low' distinctiveness score.

4.6. *Condition*- Habitat conditions are assessed for each individual habitat type using the technical supplement. Habitat condition uses criteria such as botanical diversity and invasive species cover.

4.7. *Strategic Significance*- This relates to the spacial location of a habitat type and if the location is 'ecologically desirable'. Habitats located in areas considered desirable are given larger weighting within the metric.

4.8. Once the post-development Biodiversity Units have been calculated, the mitigation hierarchy is applied. Application of the mitigation hierarchy is one of the guiding principles for biodiversity no net loss / net gain proposals. Through its application, the hierarchy highlights actions to avoid, minimise or restore biodiversity losses on site, and account for unavoidable losses off site.

4.9. The difference between the baseline Biodiversity Units and those calculated on the proposed development design indicate the number of units that would be needed to deliver

no net loss or a net gain for biodiversity. Using this information the habitat types and the size of the area that would be needed off site to deliver no net loss or net gain can be identified if required.

4.10. The area calculations of existing and proposed habitat areas are made using QGIS.

4.11. The proposed habitats were calculated from the site landscaping proposals.

4.12. The focus of the report extends to the boundaries marked on the baseline habitat map and does not include 10 metres of riparian habitat extending from the river Kennet.

Good Practice Principles

4.13. Good practice principles for biodiversity net gain are set out in Table 1.1 of the Biodiversity Net Gain: Good Practice Principles for Development (Baker *et al, 2019).* The key principles include:

- Apply the Mitigation Hierarchy (CIEEM, 2018) and be additional by achieving outcomes that exceed existing obligations.
- Avoid losing biodiversity which cannot be off-sett elsewhere for example irreplaceable habitats such as ancient woodland.
- Address any risk (e.g. difficulty of achieving habitat creation or enhancement for net gain.
- Make a measurable net gain contribution for the site and ensure it is achievable.

Assumptions and Limitations

4.14. The accuracy of the habitat area measurements is limited by the form of the baseline data collection and resolution of development proposals plans. In this instance the baseline habitats for the site have been calculated by cross referencing, aerial imagery and observations recorded in the Malford ecology report from March 2021. Post development habitats have been measured using QGIS by geo-referencing the proposed layout to the baseline dataset.

4.15. The proposed habitat baseline is calculated using both the landscaping plans and professional opinion on the target conditions that can be attained for each habitat type with proficient management. Therefore, all proposed habitat types rely on implementation of a long-term management plan and planting in line with the provided landscape proposals. Further information on this is provided in the conclusion.

5. BIODIVERSITY NET GAIN ASSESSMENT

Pre-development Habitats/Baseline

5.1. Below is a summary of the habitats and condition assessments recorded on site during the Habitat Survey undertaken by Jonathan Bayliss BSc (Hons) on 10th April 2024.

g4 modified grassland

5.2. Two small areas of this habitat were present to the north of the main building, comprising approximately 0.0032 ha of uncut (30-40 cm sward) amenity lawn. Species here included rosebay willowherb *Chamerion angustofolium*, pendulous sedge *Carex pendula,* herb robert, ragwort *Senecio jacobaea*, dock *Rumex obtusifolius*, spear thistle *Cirsium vulgare*, yorkshire fog *Holcus lanatus*, and fescue *Festuca spp.*

5.3. These two areas of habitat pass 6 of 7 criteria, including the essential criteria for achieving good condition. They have been assessed as having **good condition.**

5.4. A further two parcels comprising approximately 0.089ha of modified grassland was identified using historical imagery and the habitat descriptions from the Malford 2021 report. The report described the south east section of amenity grassland as containing the following species; false oat grass *Arrhenatherum elatius*, Yorkshire fog Holcus lanatus, rye grass *Lolium perenne*, red fescue *Festuca rubra*, rough meadow grass *Poa trivialis* and couch grass *Elymus repens*. Forbs include broad-leaved plantain *Plantago major*, creeping buttercup *Ranunculus repens* and daisy *Bellis perennis*, hairy and broad- leaved willowherb *Epilobium hirsutum*, *E. montanum*, spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, hemp-agrimony *Eupatorium cannabinum*, ragwort *Jacobaea vulgaris* and rough hawkbit *Leontodon hispidus*.

5.5. The Malford report did not include the average densities of species per square metre. In the absence of any other evidence the **condition has been recorded as good.**

u1b developed land sealed surface

5.6. The majority of the site comprised 0.3811ha of sealed surface developed land formed by the former school buildings and hardstanding school yard/playgrounds around the site. The extent of the was determined from google aerial imagery from 2021.

5.7. Condition assessment for this habitat type is not applicable.

Linear Habitats

h2b non native hedgerow

5.8. Approximately 29m of privet hedge marks part of the boundary northern boundary adjacent to the main building.

5.9. This hedgerow does not contain enough woody species to be considered an important hedgerow under the Hedgerow Regulations (1997).

5.10. This habitat is allocated a pre-determined fixed condition score within the Metric and is therefore set at **poor condition.**

Baseline

5.11. The total area of pre-development habitat is 0.67 ha with a total of **2.29 baseline Habitat Units.** The proposals will retain 0.42ha of developed land sealed surface and modified grassland. Therefore, the proposals will result in the loss of 0.24ha of habitats which reduces the biodiversity value of the site by 1.25 habitat units.

5.12. 0.06km of hedgerows/ line of trees are present bounding the site which provide 0.06 linear units for the site. These are all proposed to be lost as a result of the development.

Post Development Habitats

5.13. The post-development proposals for the site comprise construction of residential buildings and creation of associated hardstanding, vegetated gardens, and non-native hedgerow planting.

Vegetated Gardens (u1d suburban mosaic of developed and natural surface)

5.14. Residential gardens will be created as part of the development.

5.15. Gardens are allocated a pre-determined fixed condition score within the Metric. Therefore, gardens have been set a **poor target condition.**

5.16. The proposed creation of habitats as part of this development will provide **0.26 habitat units.**

Individual Trees

5.17. Individual small urban trees will be planted as part of the post-development landscaping scheme. These trees are expected to achieve **moderate condition** within 27 years of planting.

5.18. The proposed planting trees as part of this development will provide **0.25 habitat units.**

u1b developed land sealed surface

5.19. Residential buildings and associated hardstanding have been constructed as part of the development.

5.20. Condition assessment for this habitat type is not applicable.

5.21. The creation of these habitats provide **0.00 habitat units**

h2b non native hedgerow

5.22. 0.158 km of non native hedgerow will be created as part of the post development landscape scheme.

5.23. Non native hedgerow is allocated a pre-determined fixed condition score within the Metric. Therefore, non native hedgerow has been set a **poor target condition.**

5.24. The proposed creation of non native hedgerow as part of this development will provide **0.15 habitat units.**

6. RESULTS AND EVALUATION

6.1. Overall, the proposed development will result in a **net loss of 32.42% for habitats** within the site based on the already completed development and current proposals as set out in Appendix. A summary of these results within the metric can be found below:

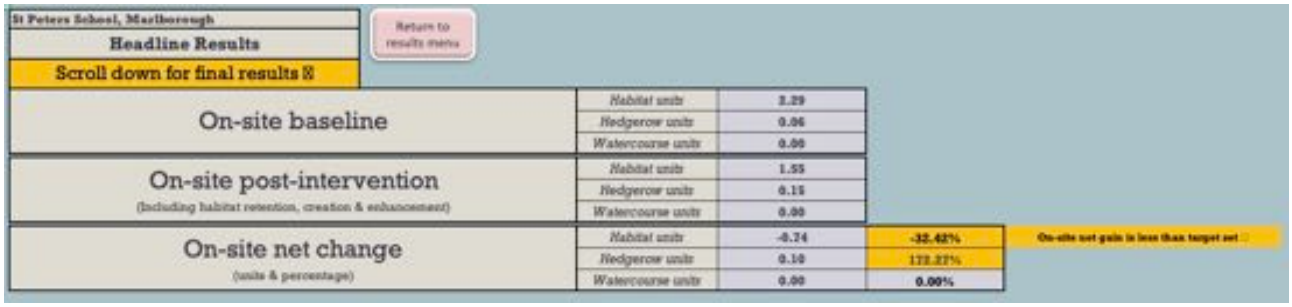
6.2. Due to the nature of this urban development and the size of the site it is considered that the statutory 10% Biodiversity Net Gain can not be achieved on site.

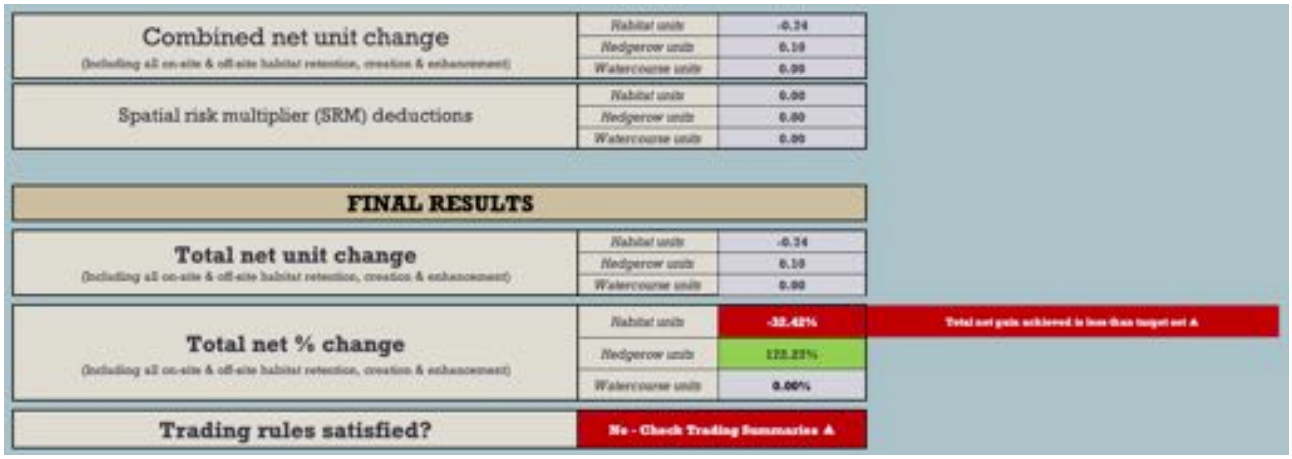
6.3. **A further 0.97 BNG Units of g4 modified grassland (or similar same broad habitat or a higher distinctiveness habitat) is required to be created off-site for the proposed development to achieve 10% net gain and be in compliance with the NPPF. The developer should therefore seek off-site habitat creation alternatives.**

6.4. The newly planted twenty two individual urban trees on site will be managed competently to achieve moderate condition, It is recommended that a biodiversity management plan (BEMP) these trees achieve the proposed moderate condition.

6.5. The Biodiversity Net Gain Principles document stipulates that habitats must be maintained over a period of at least 25-30 years, along with providing monitoring and review, therefore any management plan must take this into account.

6.6. The Statutory Metric in an excel spreadsheet will also be provided along with comments where deemed necessary.





Further Recommendations

6.7. Changes to the final landscaping scheme could reduce the amount of BNG Units to be purchased to achieve ten percent net gain although it is not envisaged that on site landscaping changes on their own would be able to achieve the full ten percent net gain requirement.

6.8. Suggestions to reduce BNG units required to be purchased off site comprise the inclusion of ground based green walls, ground level planters and and the creation of bio-diverse green roof's on facility buildings such as bike and refuse stores. The planting of extra trees on site would also fulfil some the BNG units required to achieve net gain.

6.9. A biodiversity management plan should be written for the site to ensure that all habitats created obtain their target scores. The Biodiversity Net Gain Principles document stipulates that created habitats must be maintained over a period of at least 25-30 years, along with providing monitoring and review, therefore any management plan must take this into account.

7. REFERENCES

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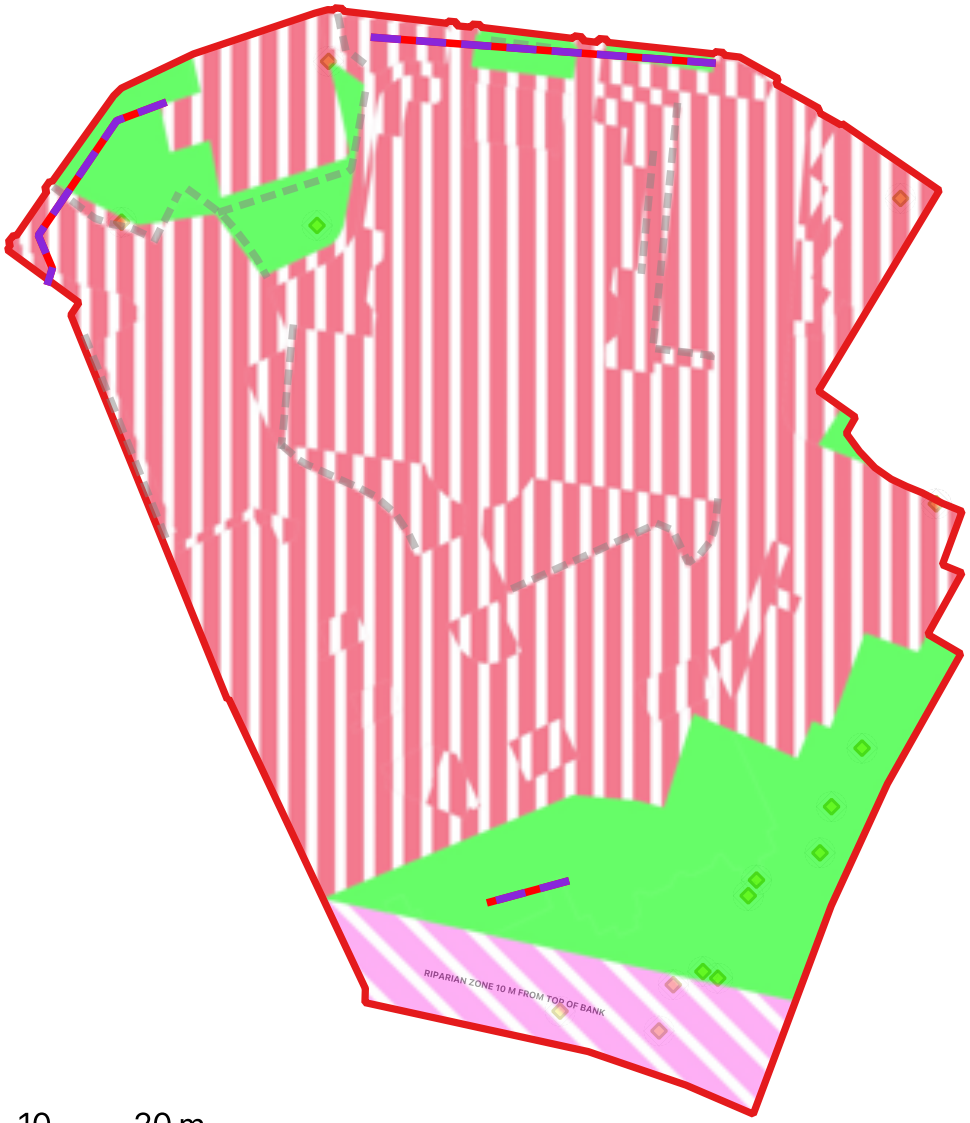

0 10 20 m

Legend

Red Line Boundary

INDIVIDUAL TREES

Existing Medium Urban Tree

HEDGEROWS

Non-native and ornamental hedgerow

HABITATS

Riparian Zone, not BNG Assessed

Developed land; sealed surface

Modified grassland

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Figure: Baseline Habitat Map

Date: 22/05/2024

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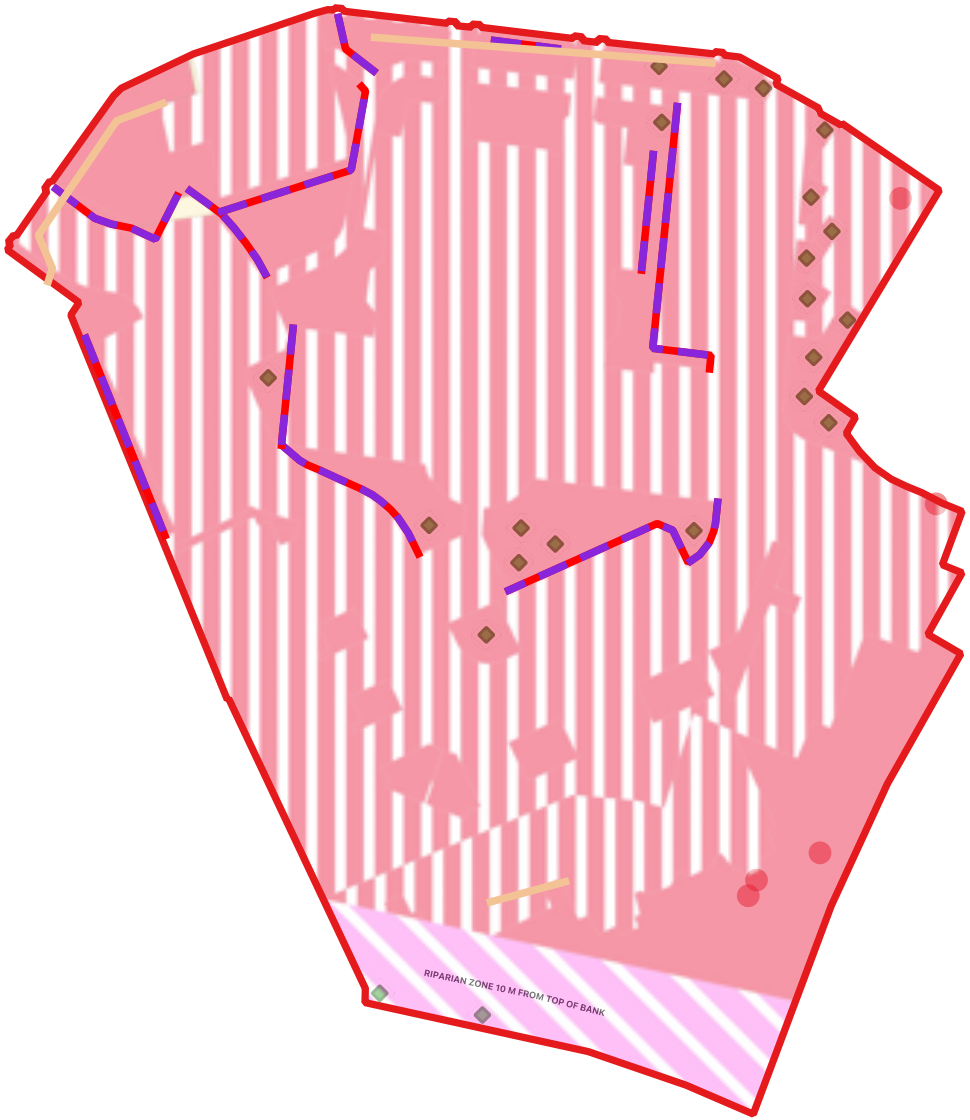

Legend

Red Line Boundary

INDIVIDUAL TREES

Individual tree Proposed (EDIT ME) copy

Proposed Small Urban Tree

HEDGEROWS

Non-native and ornamental hedgerow

HABITATS

Habitats Proposed EDIT ME

Riparian Zone,Not assessed for BNG

Developed land; sealed surface

Vegetated garden

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Figure: Post Development Habitat Map

Date: 22/05/2024

Contains Googglemaps data © Copyright (2024) ***NOTE:*** *Areas are indicative and are not shown to exact scale.*

Specimen Shrub Species

Ref.	Scientific name	Common name	Min. Pot Size (L)	Planting Centres (m)	No.
Dp	*Daphne pontica*	Twin-flowered daphne	1.5	1	4
Ef	*Euonymus fortunei* 'Emerald Gaiety'	Spindle 'Emerald Gaiety'	2	1	2
Hh	*Hypericum* x *hidcoteense* 'Hidcote'	St John's wort 'Hidcote'	2	1	2
Mn	*Mahonia nitens* 'Cabaret'	Oregon grape 'Cabaret'	3	1	2
Ra	*Ruscus aculeatus* 'John Redmond'	Butcher's broom 'John Redmond'	1.5	0.5	11
Sc	*Skimmia* x *confusa* 'Kew Green'	Skimmia 'Kew Green'	2	1	6
Vd	*Viburnum davidii*	David viburnum	2	1	6

Ornamental Planting – Shaded Areas Mix '3'

Scientific name	Common name	Min. Pot Size (L)	Density m²	%	No.
Alchemilla mollis	Lady's mantle	9cm	4	10	7
Adiantum venustrum	Evergreen maidenhair	0.5	2	25	8
Campanula persicifolia	Fairy bellflower	2	4	40	27
Dryopteris erythrosora	Japanese shield fern	2	2	25	8
Planting beds will be underplanted with *Eranthus hyemalis* to be planted at a depth of 5cm with 5 bulbs per m².					84
Planting beds will be underplanted with *Cyclamen hederifolium* 'Stargazer' to be planted at a depth of 5cm with 5 bulbs per m².					84

Ornamental Planting – Partial Shaded Areas Mix '4'

Scientific name	Common name	Min. Pot Size (L)	Density m²	%	No.
Hypericum calycinum	Rose of Sharon	1	1	25	1
Tiarella 'Spring Symphony'	*Foam flower 'Spring Symphony'*	9cm	8	40	7
Vinca minor f. *alba* 'Gertrude Jekyll'	Small white periwinkle 'Gertrude Jekyll'	1	4	35	3
Planting beds will be underplanted with *Fritillaria meleagris* 'Alba' to be planted at a depth of 8cm with 10 bulbs per m².					23



KEY:

- Site
- Section 1 - Drawing No. WHL-1226-02 - Detailed Soft Landscaping

Existing Vegetation

- Tree

Proposed Vegetation

- Tree
- *Prunus* 'Otto Luyken' hedge
- *Berberis* 'Rose Glow' hedge
- Climbing shrub planting
- Formal lawn
- Shade tolerant lawn
- Planting bed detailed on WHL-1226-02
- Ornamental planting beds
- Specimen shrubs
- Bulb planting

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Original base plan provided by the ARCHITECTURE PRACTICE
Drawing Title: Proposed Site: General Arrangement
Drawing Number: 1428/WS/101 CS

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Project: St Peter's School, Marlborough		
On behalf of: Sherbourne Developments		
Drawing title: Detailed Soft Landscaping		
Drawing number: WHL-1226-03	Rev: C	Date: Dec 23
Scale: 1:75 @ A1	DB: ES	CB: WH

Ornamental Planting - Full Sun Areas Mix '1'

Scientific name	Common name	Min. Pot Size (L)	Density m²	%	No.
Cytisus x beanii	Bean's broom	3	2	10	2
Fuchsia 'Mrs Popple'	Fuchsia 'Mrs Popple'	2	2	15	3
Santolina chamaecryparissus	Lavender cotton	1	6	20	13
Verbena bonariensis	Verbena	2	8	40	34
Vinca minor 'Azorea Flore Pleno'	Double-flowered azure periwinkle	9cm	4	15	6
Planting beds will be underplanted with *Tulipa fosteriana* 'Exotic Emperor' to be planted at a depth of 15cm with 10 bulbs per m².					106

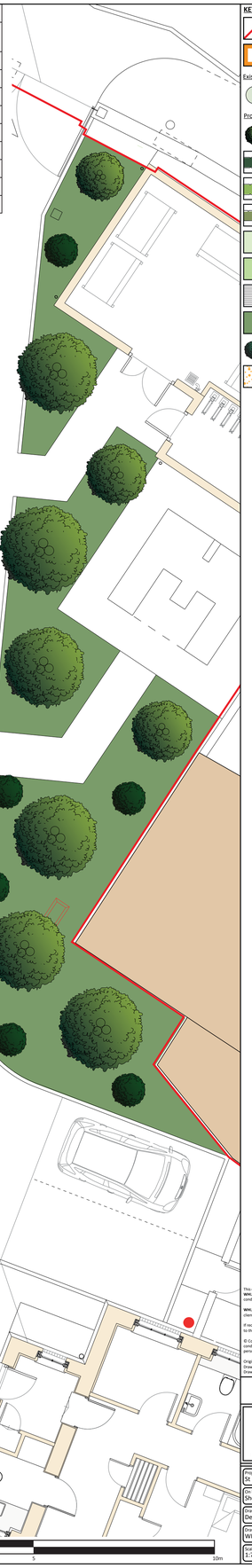
Ornamental Planting – Partial Shaded Areas Mix '2'

Scientific name	Common name	Min. Pot Size (L)	Density m²	%	No.
Alchemilla mollis	Lady's mantle	9cm	4	10	5
Campanula persicifolia	Fairy bellflower	2	4	30	7
Hosta 'Frances Williams'	Hosta 'Frances Williams'	2	2	15	2
Rudbeckia fulgida var. *deamii*	Deam's cornflower	9cm	3	20	4
Vinca minor f. *alba* 'Gertrude Jekyll'	Small white periwinkle 'Gertrude Jekyll'	1	4	25	6
Planting beds will be underplanted with *Fritillaria meleagris* 'Alba' to be planted at a depth of 8cm with 10 bulbs per m².					59

Specimen Shrub Species

Ref.	Scientific name	Common name	Min. Pot Size (L)	Planting Centres (m)	No.
BO	*Berberis* 'Orange Rocket'	Japanese barberry 'Orange Rocket'	3	1	10
Ef	*Euonymus fortunei* 'Emerald Gaiety'	Spindle 'Emerald Gaiety'	2	1	5
Hh	*Hypericum* x *hidcoteense* 'Hidcote'	St John's wort 'Hidcote'	2	1	6
La	*Lavandula angustifolia* 'Munstead'	English lavender 'Munstead'	2	1	7
Ma	*Mahonia aquifolium* 'Apollo'	Oregon grape 'Apollo'	3	1	7
Mn	*Mahonia nitens* 'Cabaret'	Oregon grape 'Cabaret'	3	1	1
Ra	*Ruscus aculeatus* 'John Redmond'	Butcher's broom 'John Redmond'	1.5	0.5	7
Rs	*Ribes specoisum*	Fuchsia-flowered gooseberry	3	1	3
Sc	*Skimmia* x *confusa* 'Kew Green'	Skimmia 'Kew Green'	2	1	5





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