
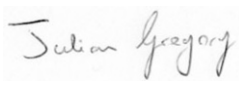
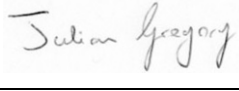


2025



**Landscape and Biodiversity –
Green Infrastructure Statement
Land adjacent to 10 Thompson
Avenue, Newport**



Document Information			
Project	Land Adjacent to No10 Thompson Avenue – Landscaping and Biodiversity Plan		
Location	10, Thompson Avenue, Lliswerry, Liswerry, Newport, Wales NP19 4SF. Grid ref: ST 33695 87423		
Title	Green Infrastructure Statement		
Document Ref	EV002407	Issue / Revision	0
File reference	EV002407		
Start Date	05.06.2025		
	Name	Signature	Date
Prepared	Charles Ryder		05.06.2025
Reviewed	Julian Gregory		26.06.2025
Authorised	Julian Gregory		26.06.2025

Document Control		
Rev.	Date	Description
0	06/25	ISSUE

Disclaimer

No part of this document may be copied or reproduced by any means without prior written permission from EcoVigour. If you have received this report in error, please destroy all copies in your possession or control.

This document has been prepared for the exclusive use of the commissioning party/parties and unless otherwise agreed in writing by EcoVigour, no other party may use, make use of, or rely on the contents of the report.

No liability is accepted by EcoVigour for any use of this document, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the document are on the basis of EcoVigour using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy.



1. Contents

1. Contents	2
Figures	2
1. Introduction	3
1.1 Project Background	3
1.2 Site Description	3
2. Ecological Baseline Assessment	5
3. Net Benefit for Biodiversity	11
3.1 Objectives for Net Benefit for Biodiversity and Planning Context	11
3.2 Proposed Biodiversity Enhancement.....	12
3.3 Wildflower Management Plan.....	13
3.4 In consideration of the DECCA Framework:	14

Figures

Figure 1 - Site Location.....	3
Figure 2 - Site Location / Extents	4
Figure 3 – Proposed Layout	4
Figure 4 – The site from Thompson Avenue	5
Figure 5 – Watercourse flowing along southern boundary in a west to east direction.....	6
Figure 6 – Tree Constraints Plan	7
Figure 7 – Watercourse headwall into culverted section.	8
Figure 8 – Trees along either side of the watercourse.	8
Figure 9 – Trees along watercourse on site boundary.....	9
Figure 10 – Grass verge in front of current garages.	10
Figure 11: Step-Wise Approach - Planning Policy Wales (Edition 12).....	12
Figure 12: Proposed Biodiversity Enhancements within the site.	12



1. Introduction

1.1 Project Background

1.1.1 The site is a plot of land off Thompson Avenue, Newport which currently has a block of 5 disused, dilapidated garages on it, it is proposed to demolish the garages and replace them with two residential properties with gardens and driveways.

1.1.2 EcoVigour have been instructed to prepare this Landscape and Biodiversity, Green Infrastructure Statement to fulfil the requirements of Planning Policy Wales (PPW 12), Chapter 6.

1.2 Site Description

1.2.1 The site is located on Thompson Avenue, Liswerry, Newport. NP19 4LX. NGR: ST 33691 87421.

1.2.2 The property location, boundary and proposed layout are shown in Figures 1 to 3 below.



Figure 1 - Site Location



Figure 2 - Site Location / Extents

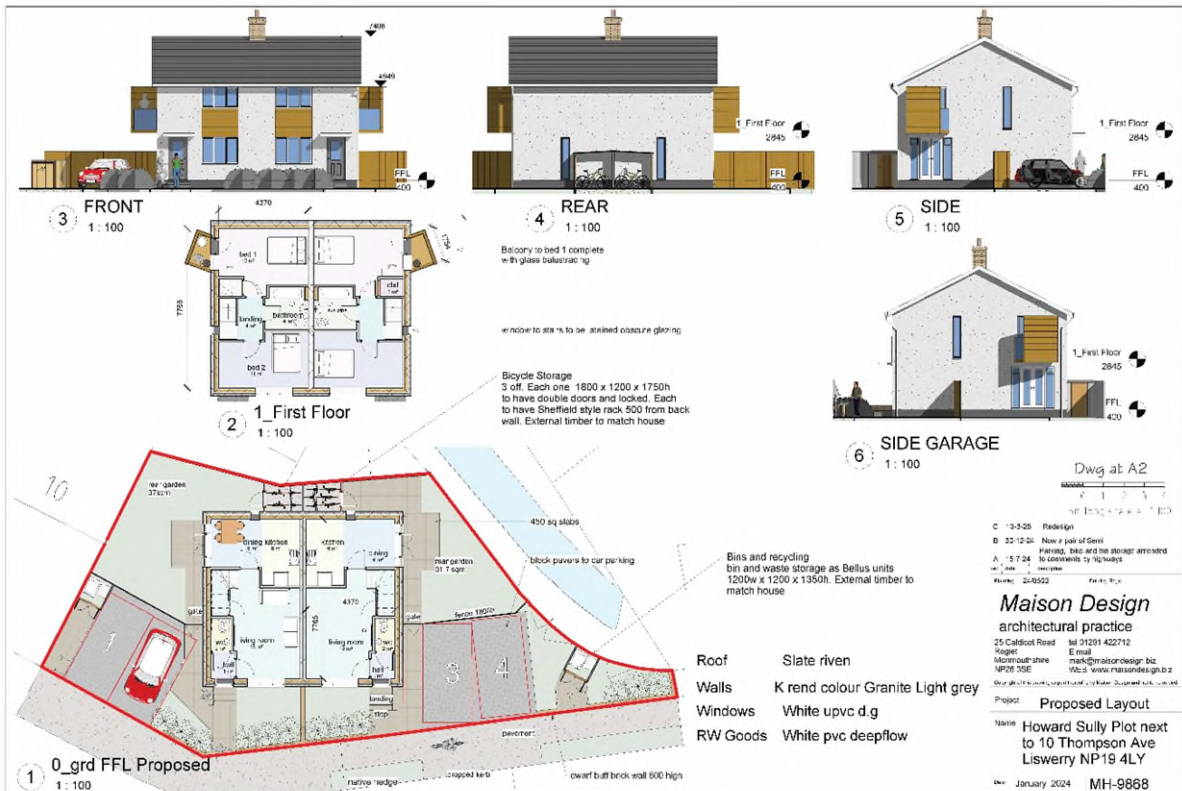


Figure 3 – Proposed Layout



- 1.2.3 The site lies opposite the junction of Thompson Avenue and Churchward Drive and covers an area of approximately 375m² and adjoins No10 Thompson Avenue. There is a watercourse flowing in a west to east direction, along the southern boundary of the site. This flows into a culverted section at the SW corner of the site. There is a palisade fence between the site and the watercourse, with a strip of land approximately 1.5 – 2m wide between the fence and the watercourse.



Figure 4 – The site from Thompson Avenue

2. Ecological Baseline Assessment

- 2.1.1 The site is predominantly covered by the garages, there is a stone surfaced area in front of the garages and a vegetated verge, between the stoned area and the Thompson Avenue footway. This vegetation is grass and ruderal vegetation which would have been historically maintained to a short sward but has been left to grow for at least one season.
- 2.1.2 There is a small area to the rear of the garages, which abut to No10 Thompson Avenue, which has been maintained as lawn by the resident of No10. A portion of this is included within the site.
- 2.1.3 There is a watercourse flowing in a west to east direction, along the southern boundary of the site. Flow in this appeared limited at the time of the survey, with floating debris observed on the water surface. The watercourse potentially originates from Liswerry Pond and then flows through a series of culverts until it emerges into an open engineered channel along the rear of properties on Thompson Avenue. The watercourse is culverted downstream of Thompson Avenue and passes beneath the road and the adjacent railway in a culvert. It is not known where the downstream end of the culvert terminates.



Figure 5 – Watercourse flowing along southern boundary in a west to east direction.

- 2.1.4 There are 4 multi-stem sycamores (*acer pseudoplatanus*) tree and a single stem sycamore growing along the edge of the watercourse. These appear to be self set as the planting location is not particularly appropriate and the trees are over large for the location. A review of historic aerial imagery shows the trees starting growth in approximately 2002. The trees appear to be in good health with good canopy cover, but the Arboricultural Assessment undertaken for the development by Treescene in Jan 2025, categorised T4 as Category U. It is understood that T4 will be removed and the remaining trees on the northern bank will be crown lifted and crown reduced to remove portions overhanging the site as part of the development.

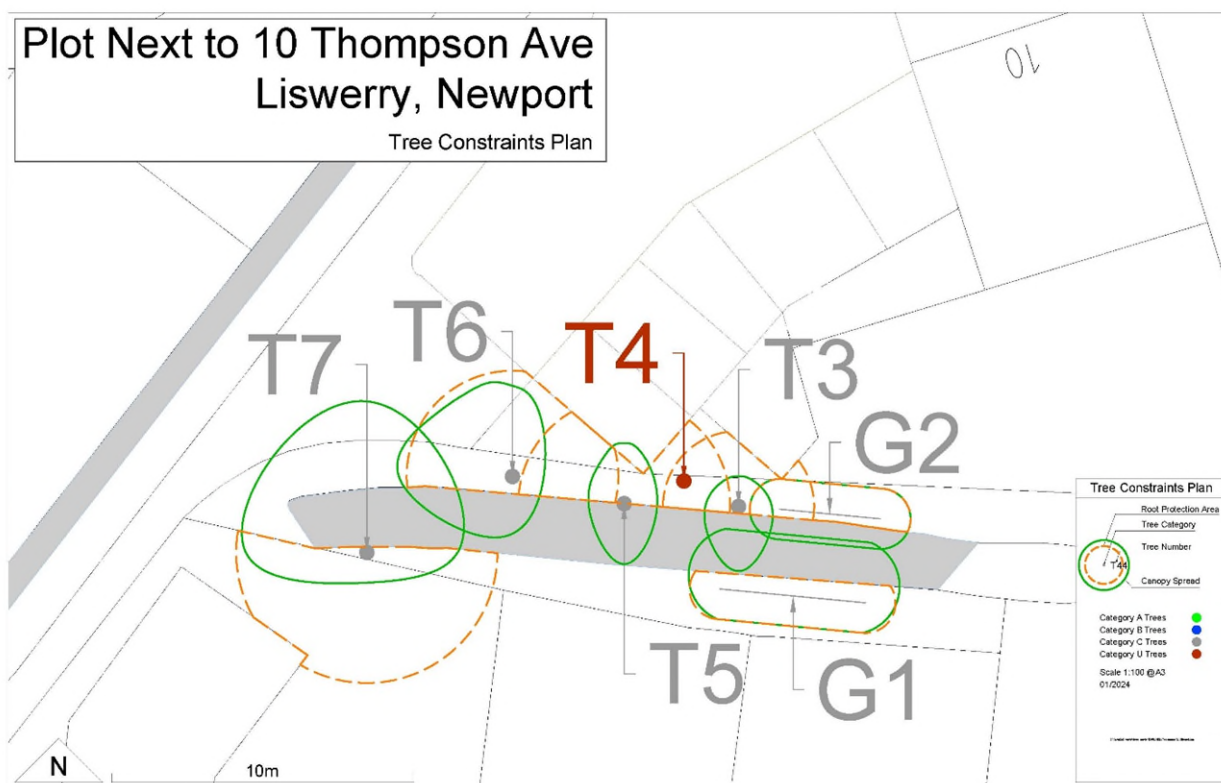


Figure 6 – Tree Constraints Plan

- 2.1.5 There is also a multi-stem sycamore on the opposite (southern) side of the watercourse and the canopy of this merges with the canopy of the trees on the opposite bank to form a contiguous canopy. No work is proposed to this tree.
- 2.1.6 These trees could provide nesting / perching habitat for birds and also form part of a green corridor along the line of the watercourse, which would provide some habitat value for invertebrates and potentially foraging bats, although the site lies within a large residential area. The trees are not particularly suitable for use by nesting birds due to their structure with few large branches, forming suitable breaks where birds can nest, although nesting cannot be ruled out.
- 2.1.7 The Newport Power Station Rail Spur lies approximately 35m west of the site. This is little used, as the power station has been closed for some time. The South Wales Mainline Railway lies approximately 200m north of the site, which provides some habitat value and a habitat corridor, although this has recently been subject to extensive vegetation clearance as part of the overhead lines electrification project. Liswerry Park lies approximately 300m to the NE of the site, with a large lake and a mixture of woodland blocks, scrub and grassland.
- 2.1.8 The area to the rear of the garages is laid to maintained lawn, currently adopted as part of the garden of No10 Thompson Avenue. Beyond this is an area of bramble and hawthorn scrub (it was not possible to obtain access to this as it is within a different ownership).



Figure 7 – Watercourse headwall into culverted section.



Figure 8 – Trees along either side of the watercourse.

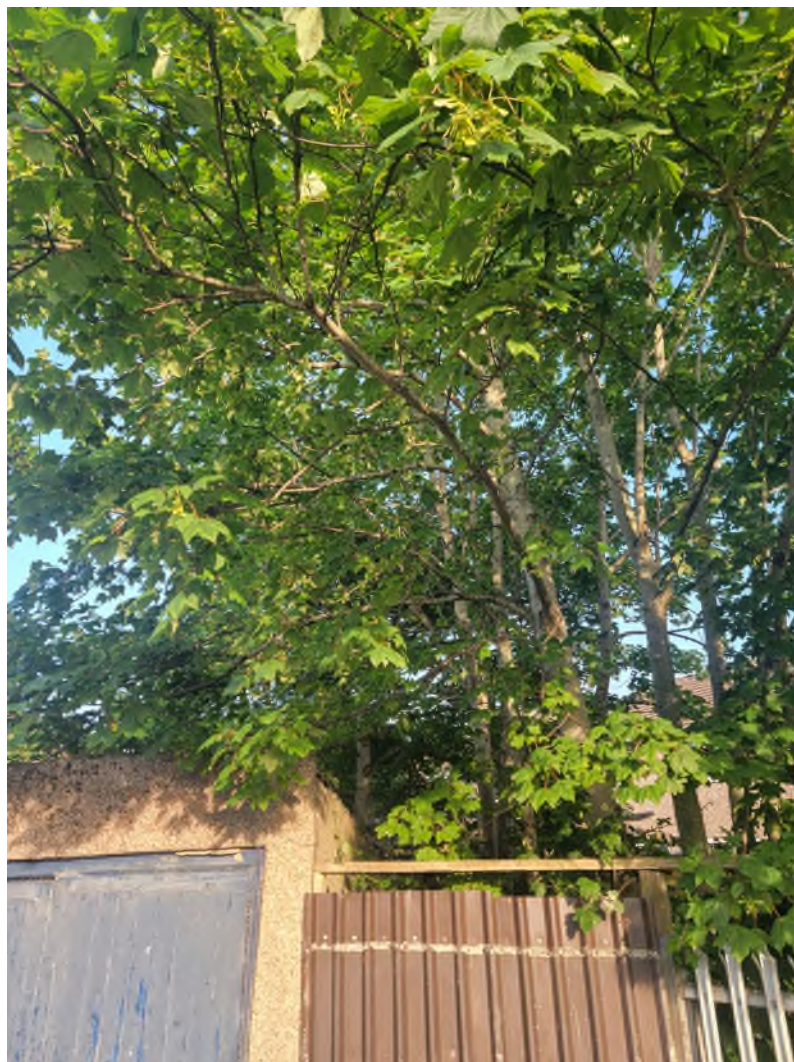


Figure 9 – Trees along watercourse on site boundary



Figure 10 – Grass verge in front of current garages.

2.1.9 Key habitat loss to be compensated, will be:

- ◆ Reduction in tree cover, with associated loss of potential nesting sites – low potential for use by nesting birds due to structure of the trees with multiple stems, with few breaks offering nesting opportunities.
- ◆ Loss of grass verge to front of site – small isolated area, which has been previously maintained to a short sward and offers little habitat value.
- ◆ Lawn to the rear of the garage adjacent to No10 Thompson Avenue – maintained lawn with little habitat value.
- ◆ Potential for a reduction in water quality within the watercourse due to pollution from the development, if sufficient controls are not put in place.



3. Net Benefit for Biodiversity

3.1 Objectives for Net Benefit for Biodiversity and Planning Context

3.1.1 Planning Policy Wales (PPW 12), Chapter 6 sets objectives for maintaining and enhancing biodiversity, through the planning process, including

- ◆ GREEN INFRASTRUCTURE: stronger emphasis on taking a proactive approach to green infrastructure, the submission of a proportionate green infrastructure statement with planning applications and signposting Building with Nature standards.
- ◆ NET BENEFIT FOR BIODIVERSITY AND THE STEP-WISE APPROACH: further clarity is provided on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and the need to consider enhancement and long-term management at each step. The use of the green infrastructure statement as a means of demonstrating the stepwise approach is made explicit. A simplified diagram of the policy approach has been developed (included within PPW12). The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.
- ◆ PROTECTION FOR SITES OF SPECIAL SCIENTIFIC INTEREST: strengthened approach to the protection of SSSIs, with increased clarity on the position for site management and exemptions for minor development necessary to maintain a 'living landscape'. Other development is considered unacceptable as a matter of principle. Exceptionally, a planned approach may be appropriate where necessary safeguards can be secured through a development plan
- ◆ TREES AND WOODLANDS: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place.

3.1.2 For this assessment we have applied the DECCA Framework:

- ◆ **Diversity:** maintaining and enhancing diversity at every scale, including genetic, structural, habitat and between-habitat levels. This supports the complexity of ecosystem functions and interactions that deliver services and benefits.
- ◆ **Extent:** incorporating measures which maintain and increase the area of semi-natural habitat/features and linkages between habitats. In general, smaller ecosystems have reduced capacity to adapt, recover or resist disturbance.
- ◆ **Condition:** The condition of an ecosystem is affected by multiple and complex pressures acting both as short term and longer-term types of disturbance. Both direct and wider impacts should be considered, for example avoiding or mitigating pressures such as climate change, pollution, invasive species, land management neglect etc.
- ◆ **Connectivity:** This refers to the links between and within habitats, which may take the form of physical corridors, stepping stones in the landscape, or patches of the same or related vegetation types that together create a network that enables the flow or movement of genes, species and natural resources. Developments should take opportunities to develop functional habitat and ecological networks within and between ecosystems, building on existing connectivity.
- ◆ **Aspects of ecosystem resilience** (adaptability, recovery and resistance): ecosystem resilience is a product of the above four attributes. Adaptability, recovery and resistance to/from a disturbance are defining features of ecosystem resilience.

3.1.3 This NBB assessment uses the following industry recognised best practice methodologies:

- ◆ CIEEM Briefing Paper – Welsh Government's Approach to Net Benefits for Biodiversity and the DECCA Framework in the Terrestrial Planning System – September 2022;
- ◆ Natural England (2019). Biodiversity Metric 2.0 – Auditing and Accounting for Biodiversity;



3.1.4 A list of principles which local planning authorities should follow when determining planning applications is included in the DECCA, with a summary of the step wise approach illustrated in the drawing below.

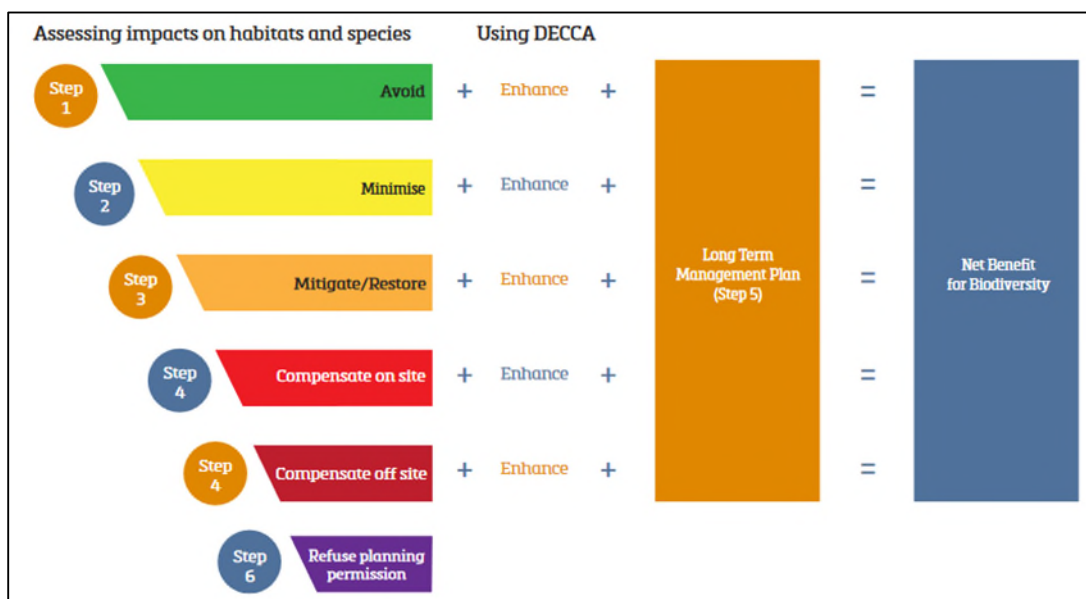


Figure 11: Step-Wise Approach - Planning Policy Wales (Edition 12).

3.2 Proposed Biodiversity Enhancement

3.2.1 The following ecological mitigation / enhancements will be implemented as part of the development:

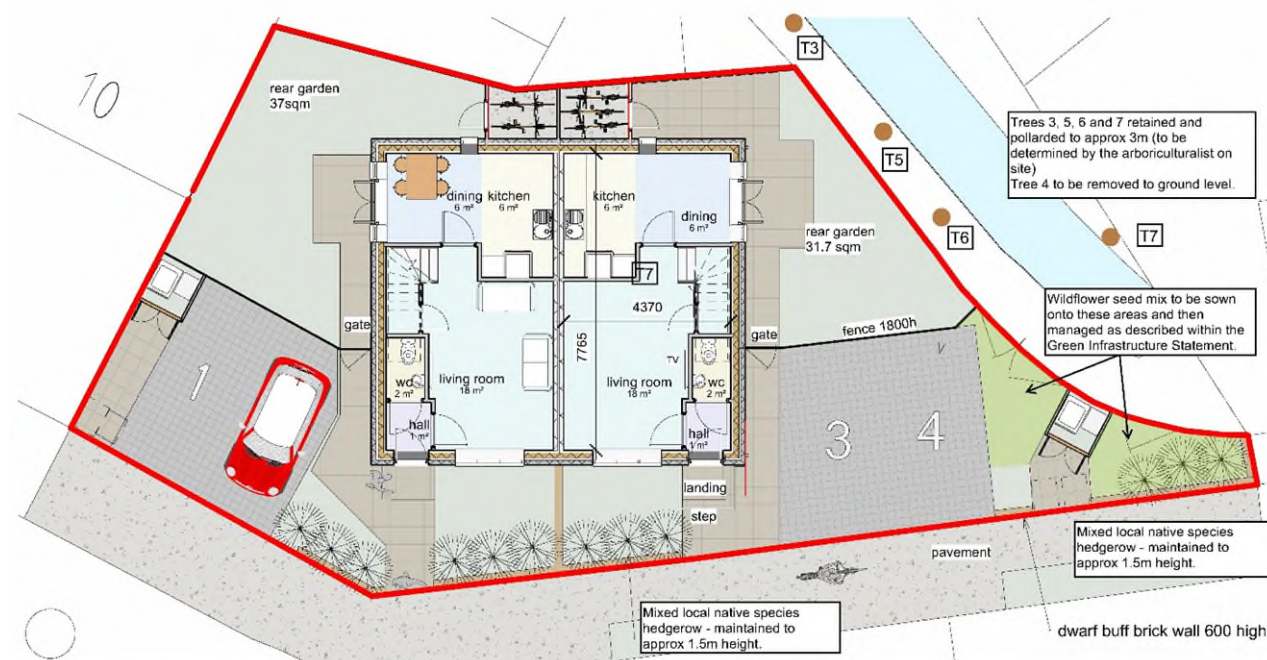


Figure 12: Proposed Biodiversity Enhancements within the site.



- ◆ Retention of Trees G1 – G2, T1 – T3 and T6 and T7. T4 has been categorised as Category U and will be removed. T3, T5 and T6 will be crown lifted to remove overhanging branches and crown reduced, as they have become overlarge for the location. This will have the benefit of allowing sunlight onto the watercourse corridor, which will improve water quality and increase aquatic invertebrate habitat. These works should be undertaken by an experienced tree surgeon, who is able to place cuts in locations where the tree is likely to re-shoot to form a low canopy. These works should be undertaken outside the bird nesting season (October – February)
- ◆ The planting of mixed native species hedgerow, along the new property frontages in 3 locations (please refer to Figure 12 for a proposed locations). Total length of hedgerow proposed is 12m. Hedge plant spacing to be at 0.3m intervals in a single rows. Species used should include:
 - Wild Privet (*Ligustrum vulgare*) – 70%
 - Pyracantha – 10%
 - Wild Cherry (*Prunus avium*) – 15%
 - Dog Rose (*Rosa canina*) – 5%
- ◆ The seeding of mixed, native species flowering plants for the benefit of pollinators, within communal lawn areas. The mix chosen will also provide a variety of flowers throughout the year. This mix will include: - Area in green on figure 12:
 - Meadow cranesbill (*Geranium pratense*)
 - Purple loostrife (*Lythrum salicaria*)
 - Birds-foot trefoil (*Lotus corniculatus*)
 - Hemp agrimony (*Eupatorium cannabinum*)
 - Yarrow (*Achillea millefolium*),
 - Vipers bugloss (*Echium vulgare*),
 - Yellow rattle (*Rhinanthus minor*)
 - Red clover (*Trifolium pratense*),
 - White clover (*Trifolium repens*),
 - Kidney vetch (*Anthyllis vulneraria*).

3.3 Wildflower Management Plan

- 3.3.1 A During the first year, it is essential to get the mowing regime right. Cut to 5-7 cm whenever the height reaches 10-20 cm. The number of mows required can range from one to four. Control weeds like thistles (*Cirsium vulgare*), nettles (*Urtica dioica*) and docks (*Rumex acetosa*) by hand-weeding.
- 3.3.2 After this, two cuts a year should be enough. Once in late July/early August and then again in early autumn. After mowing, always leave the clippings for a couple of days to drop any seed, then rake up and remove to keep soil fertility down.
- 3.3.3 **Ground Preparation** - Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. First remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface.
- 3.3.4 **Sowing** - Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow into overlapping sections. Do not incorporate or cover the seed but firm in with a roll, or by treading, to give good soil/seed contact.
- 3.3.5 **First Year Management** - Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So, resist



cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

- 3.3.6 **Management Once Established** - In the second and subsequent years sowings can be managed in several ways. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing.
- 3.3.7 Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to approx. 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to approx. 50mm and again in spring if needed.

3.4 In consideration of the DECCA Framework:

- ◆ **Diversity between and within ecosystems:** The site is currently dominated by the garages and the stone surfaced frontage. The site currently has low potential for biodiversity. The proposed development will result in a decrease in covered area and more open aspect to the site. Trees 3, 5, 6 and 7 will be retained as part of the scheme with T3, 5 and 6 being coppiced to retain a linear feature, encourage ground cover vegetation and a low dense canopy. Small lengths of flowering hedgerow will be planted along the property frontage to provide flowers for pollinator species and habitat for invertebrates. Small areas of wildflower seeding will be undertaken in communal lawn areas to provide habitat for pollinators.
- ◆ **Extent:** The area of habitat will be increased as part of the development from 26m² to 103m² and the diversity will be increased. The developer has no control of the way in which the property gardens will be managed and it is to the residents discretion as to whether they hard surface them. This could result in a loss of habitat area, but the developer will lay these areas to lawn.
- ◆ **Condition:** The condition of the habitat will be moderately improved, through planting of native species flowering plants. Pollarding of the trees along the edge of the watercourse will allow more light onto the watercourse, which will improve the habitat quality for aquatic invertebrates.
- ◆ **Connectivity:** will be unchanged by the project, with connectivity into the surrounding landscape being retained.
- ◆ **Aspects of ecosystem resilience** (adaptability, recovery and resistance): It is anticipated that the ecosystem of the area surrounding the site will be unaffected.