Corsham
TOWN COUNCIL

JOHNS
ASSOCIATES

CORSHAM TOWN COUNCIL

Biodiversity Action Plan

DOCUMENT CONTROL

Report prepared for:

Corsham Town Council

Main contributors:

Helen Crome

Miles Sedgwick
Liz Smart

Reviewed by:

Matthew Johns

Green Tree House, 11 St. Margaret's Street, Bradford on Avon, Wiltshire, BA15 1DA
T: 01225 723652 | E: info@johnsassociates.co.uk | W: www.johnsassociates.co.uk

TABLE OF CONTENTS

CORSHAM TOWN COUNCIL

J01006 – Corsham Town Council

Biodiversity Action Plan

1 INTRODUCTION

Johns Associates was commissioned to produce a Biodiversity Action Plan (BAP) for Corsham Town Council, also referred to as The Council.

The aim was to create a systematic tool that will confirm current status and condition of Corsham's open space assets, support ongoing management and enhancement of open spaces, support nature recovery obligations under the Environment Act/Local Nature Recovery Partnerships and respond to the biodiversity and climate emergencies. The BAP will emphasise multiple benefits from its site-specific recommendations that will deliver integrated, biodiversity, carbon, landscape/streetscene, amenity, health, and other ecosystem services and solutions.

The BAP comprises the following elements:

- A survey and assessment of the larger/key sites with recommendations for improvement from a carbon reduction/biodiversity/ecological emergency standpoint;
- A review of the Council's Grounds Maintenance Contract Specification and production of a series of recommendations for improvement from a carbon reduction/ biodiversity/ ecological emergency standpoint;
- A series of advice notes on how better to manage and maintain the following categories of areas: footpaths; highway verges; small amenity sites; hedges; and trees;
- Relevant guidance on improving habitats through the installation or creation of: bug hotels, nest boxes, bat boxes, ponds and wildlife strips. Advice on which species to plant and other features appropriate to Corsham parish area and what damaging practices to avoid.

The outputs are:

- Full Corsham BAP, containing all of the prepared information;
- Summary BAP for public consumption;
- Site specific management guidance sheets, advice notes and guidance notes for site use.

2 BACKGROUND AND CONTEXT

2.1 CORSHAM TOWN COUNCIL – ROLE AND JURISDICTION

Corsham Town Council (CTC) is a parish Council with responsibility for various open spaces in the parish including allotments, amenity sites, cemeteries and play areas. It has recently taken on responsibility for other areas passing over from Wiltshire Council (WC), via asset transfer, the Town Council anticipates taking over more open spaces and verges in the coming years.

2.2 CLIMATE AND BIODIVERSITY EMERGENCIES

The Council fully acknowledges the Climate and Ecological Emergencies. The Council is committed to reducing the carbon footprint of its community in support of Government and Wiltshire Council targets to reduce carbon emissions. The Council are implementing a Climate Change Action Plan 2022-2030 (CCAP) for its own operations which will enable it to achieve net zero carbon emissions by 2030. The Council declared a Climate and Ecological Emergency on 11 October 2021, stating:

> *'Corsham Town Council fully accepts the need for urgent action in response to the climate and ecological emergencies that we face. We are committed to reducing the carbon footprint of our community in support of Government and Wiltshire Council targets to reduce carbon emissions. We are implementing a carbon reduction plan for our own operations which will enable us to achieve net zero carbon emissions by 2030. From 2022, we will implement a biodiversity action plan to protect and enhance our green and blue infrastructure'.*

2.3 CLIMATE CHANGE ACTION PLAN

A number of objectives and policies from the CCAP are relevant to this BAP and these are shown in the table below together with any synergies with biodiversity land management issues. These synergies include both carbon reduction measures as well as climate change adaptation measures (e.g. provision of shade in hotter summers). This is shown in Table 1 below.

Table 1: *Synergy with the CCAP: How this BAP can deliver carbon reduction and climate change adaptation*

CCAP objective/policy	***Synergy with biodiversity***
Our aim is to protect and enhance our own green spaces, making them more biodiverse and ensuring appropriate public access. We will manage Town Council-owned land in an environmentally sensitive way. This includes minimising pesticide use and significantly increasing planting of trees, shrubs and wildflowers and the creation of ponds.	*Managing for wildlife* *Minimise pesticide use* *Native tree and shrub planting* *Creation of wildflower meadows and ponds*
We will continue to protect our existing tree stock in order to store carbon, support nature, aid flood protection and deliver mental health benefits. Trees will only be felled where they pose an identifiable risk to people or property.	*Protection of existing trees and woodland*
Our goal is to ensure everyone has access to nature and to restore nature to help draw down carbon pollution from the atmosphere. Our Neighbourhood Plan seeks to reduce the need to own and use a car. *Transport - Our goal is to significantly increase the proportion of people that travel by walking, cycling and public transport through support of active travel initiatives. The benefits of this include improving local health and wellbeing; encouraging investment by promoting sustainable transport and making a cleaner environment.*	*Ensure people have easy access to nature and reduce need to travel to wild spaces*
As part of the review of the Corsham Neighbourhood Plan, we will ensure greater emphasis and focus on the environment and sustainability. The CNP Batscape Strategy will be reviewed and updated periodically. It will be used as a constraint to development and an indicator of the state of our natural environment.	*Ensure bat roosting sites and commuting/foraging habitats/corridors are protected and enhanced*
Our Biodiversity Action Plan will seek to increase the amount and quality of our green spaces and to restore nature and provide corridors connecting them for wildlife.	*Maintain and enhance green corridors throughout the Council area seeking to connect existing open spaces and wildlife habitats*
Droughts - hotter, drier summers are expected because of climate change. This will mean additional watering of trees, new planting and floral displays. The Town Council is reviewing the type of planting and changing to more drought resistant species. *Water - water is a valuable resource. Our aim is to further reduce consumption at our allotment sites and in our floral displays by rainwater harvesting, promoting water butts and using more drought-resistant plant varieties.* *Corsham Town Council is creating cooler spaces for people by creating tree shade or installing pergolas in parks and green spaces. Green canopies provide shade from direct sun and cooler air through transpiration. Pergolas have been installed at The Centenary Garden along Beechfield Road and in the play area in Neston Recreation Ground. The Town Council is exploring where else to create more shade, including at Springfield play area, to protect children and adults from the sun.*	*Moving towards use of drought resistant plant species in planting schemes. Reducing water consumption* *Water recycling in allotments and parks* *Maintaining shade in open spaces*

Grassfires - areas of long grass may become at risk of fire during heatwaves. Residents may raise concerns over wildflower meadows or areas near their property left to rewild. The Town Council will monitor and risk assess these areas during periods of extreme heat and cut them if necessary.	*Fire risk to be addressed in any design, creation and management of wildflower meadows*
Waste - Our goal is to be a sustainable community where all waste is minimised, recycled or reused as part of a circular economy approach.	*Green waste arisings from land management to be recycled on site (e.g. brash/log piles and hibernacula for invertebrates, reptiles and amphibians) or moved to green waste composting facilities (e.g. removing the cut arisings from wildflower meadows to reduce fertility)*
Vehicles, Plant and Grounds Equipment - We aim to deliver a transition of our own fleet and machinery to electric. The Town Council has purchased one electric vehicle which is used daily by the grounds team. When new vehicles are needed, they will be replaced with electric ones wherever possible. Several items of small machinery and plant have been replaced with electric versions. This includes chainsaws, strimmers and hedge cutters.	*Promotion of less energy/carbon consuming equipment in open space management*
Influencing Others - Addressing climate change requires action across the whole of society. By working together, we will be able to share resources and expertise and have a greater impact on cutting carbon emissions locally. Our goal is to encourage and support others with their contribution to addressing the climate and ecological emergencies. We will lobby Wiltshire Council and other local authorities and government for zero carbon planning and delivery of services.	*Use of appropriate signage in open spaces to communicate the climate emergency message and encourage carbon reduction activities*

2.4 BIODIVERSITY ACTION PLAN

This biodiversity action plan aims to protect and enhance the Council's green and blue infrastructure as a response to the biodiversity emergency.

The Council launched Corsham Environment Task Group in 2019 to reduce the carbon footprint of its community in support of Government and Wiltshire Council targets and commitments to reducing carbon emissions. The purpose of the Task Group is to influence, facilitate, communicate and carry out a wide range of projects that will result in a lower carbon footprint for Corsham parish area. Anybody is welcome to join the Task Group.

The Town Council has also instigated a Nature Conservation Volunteer Group. Contact Beth Searle, the Town Council's Environmental Project Officer (bsearle@corsham.gov.uk) if you would like to join the Group or want to know more about any aspect of the Town Council's environmental work.

2.5 COUNCIL ENVIRONMENT POLICY

The Council's Environment Policy includes the following elements (shown in Table 2) which have synergies with biodiversity.

Table 2: Synergies between Council's Environment Policy and managing spaces for biodiversity

Environment Policy	Synergy with biodiversity
Waste and recycling. Use recycled materials where appropriate and use companies with sustainability and environmental credentials such as Wiltshire Wood Recycling. Compost and shred garden waste. Do not dispose of waste by burning or bonfires. Mulch horticultural waste where possible. Eliminate the use of peat-based composts.	Use of recycled timber on site or from local sources Reuse green waste on site or compost locally No bonfires on site No use of peat based composts, use locally made compost
Chemical use. Assess chemicals used (e.g. cleaning/gardening), find environmentally friendly alternatives to harmful chemicals and ensure their appropriate safe disposal. Greatly reduce the use of harmful pesticides and find environmentally friendly alternatives where possible.	No use of pesticides on site
Planting. Increase the number of native trees planted in Corsham through the tree planting volunteer group and replant any trees felled due to Ash die back. Increase the number of wildflower meadows in recreational and play areas to improve biodiversity.	Increase native tree and shrub planting Undertake ash die-back survey and implement tree removal and replacement programme Create wildflower meadows
Policy. Create, enhance and protect wildlife habitats through a Biodiversity Action Plan that will be published in 2022. This will commit to planting more trees, creating wildflower meadows, building more ponds and bug hotels in the recreational spaces in Corsham. Regularly review ground maintenance regimes to improve practices to protect and enhance biodiversity.	Mostly covered above Renew grounds maintenance contracts regularly (see Section 4 below)

2.6 NEIGHBOURHOOD PLAN POLICIES

The Council have had a Neighbourhood Plan since November 2019. This Plan is mainly a land use plan relating to new development. Relevant policies include:

Policy CNP ED1. This is a policy aimed at new planning development, but is included here for background.

Policy CNP ED1–Proposals for development should take into account the Corsham Design Guide and Corsham Batscape Strategy. Applicants must demonstrate how their proposals will:

i) take account of the principles and guidance in the Corsham Batscape Strategy to help ensure that their development preserves and, where possible, enhances landscape permeability and connective habitats within the Corsham area (including details of measures to preserve and, where possible, enhance wildlife corridors, especially with regard to foraging areas, priority flight lines and maternity roosts); and

ii) be of high-quality design, reflecting the distinctive character and features of the local area (design, scale, materials, colours and proportion respect the prevailing historic context) identified in the Corsham Design Guide and, where possible, result in improvements to existing features that are considered to be detractors.

Policy CNP HW1–Development proposals should seek to protect, improve and extend Corsham's green infrastructure network as identified on … to support a healthy community. Innovative proposals that contribute to sustainable pedestrian/cyclist linkages between the town and its rural setting will be supported.

2.7 BATSCAPE STRATEGY

The Council's Batscape Strategy was issued in November 2019, produced by Johns Associates. Corsham's bat population includes three very rare species – Bechstein's, greater horseshoe and lesser horseshoe – which are so rare and threatened that they are protected under European legislation and live in only a handful of places in the UK. The wider landscape surrounding Box and Corsham is of international importance for bats. Locally, their habitat is protected through a Bat Special Area of Conservation (SAC) which is focused around the Box mine complex, just outside the Corsham Neighbourhood Plan boundary. However, essential foraging and commuting routes supporting this SAC extend for several kilometres outside the SAC boundary, including the entire Corsham Council area. Therefore, land management of open spaces and wildlife features within this area can have a significant negative impact on these species despite being situated a considerable distance from the SAC in areas of apparently low conservation value.

The following has been taken from Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire (Wiltshire Council, 2015):

> *"The internationally important designation of Bath and Bradford-on-Avon Bats SAC is comprised of a network of significant underground sites in both the Wiltshire and BANES administrative areas, including four nationally important Sites of Special Scientific Interest (SSSIs), namely Box Mine, Winsley Mines, Combe Down and Bathampton Down Mines, and Brown's Folly. These component sites comprise extensive networks of caves, mines and man-made tunnels which are used by bats for hibernation, breeding, mating and as a staging post prior to dispersal."*

What the Batscape Strategy means for the management of Corsham's open spaces

Corsham's parks and open spaces can form part of bat's foraging areas or commuting routes: semi-natural habitats such as woodlands, mature hedgerows, grazed pasture, rough grassland, watercourses and wetlands closest to bat roosts are most likely to be important to the bat populations, particularly for juveniles, in terms of foraging areas. Well vegetated, sheltered linear features, act as commuting routes between foraging areas and roosts and can include: hedgerows, stone walls and tree lines; woodland edges and scrub belts; riparian corridors e.g. rivers, stream, brooks, canals; and embankments and cuttings e.g. railways, roads, visibility bunds.

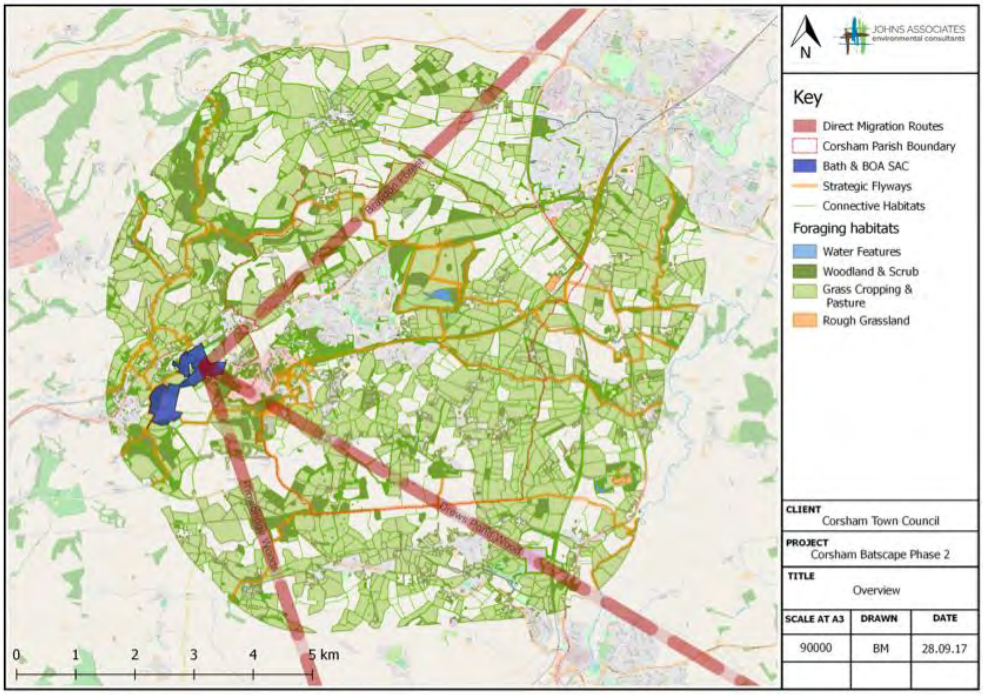
The rarer bat species have particular requirements which can be promoted and enhanced within the town's open spaces:

- Greater horseshoe bats (GH). Prefer to forage in grazed pasture, ideally cattle grazed. They use rides and footpaths when flying in woodland feeding areas (grassy rides and glades in woodland increase the range of food and provide opportunity for perch hunting). They feed on beetles and moths – tree species such as oak, willow and birch have large numbers of moths, whereas beech has small numbers even when compared to non-native species such as sycamore. Uniform stands of trees are poorer in invertebrates than more diversely structured woodland. Longer grass sward height in grasslands, including meadows kept for hay and silage; and flower-rich grasslands on road verges, grassy embankments and brownfield sites, benefit the larvae of noctuid moths such as large yellow underwing favoured by GHs. GH prefer well-developed hedgerows or lines of trees. Larger hedgerows are required for commuting as well as foraging. Substantial broad hedgerows with frequent emergent trees can provide suitable structure for foraging conditions for GH bats if woodland is scarce.
- Lesser horseshoe bats (LH). LHs are specialised for foraging in cluttered environments, particularly woodlands, wooded riparian corridors, and mature treelines and hedgerows, feeding within or below the canopy, mainly taking small flying insects including flies, crane flies and moths. Their most important landscapes contain a high proportion of woodland, parkland and grazed pasture, linked with linear features, such as overgrown hedgerows.
- Bechstein's bat. Bechstein's bats have been traditionally closely associated with deciduous woodland, especially wet woodlands. Recent radio tracking studies of the Bechstein's population in Green Lane and Biss Woods has shown that they will use standard trees and linear features beyond the boundary of the core woodland areas. It is likely that Bechstein's bats annually migrate between the Bath and Bradford-on Avon SAC and other hibernation and breeding sites that constitute the wider SAC network and will make use of foraging habitat around the SAC. Therefore, it is vitally important to preserve the connectivity across and beyond the Corsham Neighbourhood Plan boundary.

All three species are known to be extremely light-sensitive to the extent that bats will not cross well-lit roads and will cease to use otherwise suitable landscape features if they are subject to lighting. The introduction of new lighting is therefore a significant issue for bats. Lighting within the natural landscape may have additional significant detrimental effects on the behaviour of insect prey species. It is therefore vital that lighting of open spaces is kept to an absolute minimum and is carefully designed to avoid light spill onto surrounding habitats.

In summary, the majority of the Corsham Council area is covered by a core bat sustenance zone; and as such, all habitat within the area has been analysed and mapped on the Batscape Map. The Batscape Strategy is being updated but recommends that the following habitat features should be considered and enhanced:

- Roosts
- Foraging areas (Grass Cropping & Grazed pasture (particularly cattle grazed and especially in combination with suitable boundary/linear habitats); Rough Grassland and Woodland & Scrub)
- Connective habitat (Hedgerows; tree lines; woodland edges; scrub belts; riparian corridors e.g. rivers, stream, brooks, canals etc and well-vegetated embankments and cuttings e.g. rail- ways and to a lesser extent all other amenity and open space)
- Strategic flyways (well-vegetated and largely continuous dark linear corridors providing the most direct links to even larger commuting routes (such as the River Avon) north to south and east to west are of key importance)
- Direct migration routes (3 routes are identified – see Figure below taken from Batscape Strategy)
- Existing committed bat mitigation



The Batscape Strategy identifies the following relevant opportunities for enhancement and creation:

- Enhancement and creation of new connective habitat along the Direct Migration Routes;
- Creation of new connective habitat that would result in shorter direct routes between foraging areas; and
- Tree planting to provide stepping stones between existing woodland blocks; or even to establish a significant new woodland in areas devoid of this habitat.

2.8 LOCAL NATURE RECOVERY STRATEGY AND ENVIRONMENT ACT

Local Nature Recovery Strategies (or LNRS) are featured in the 2021 Environment Act, Part 6 and are intended to cover the whole of England through adjoining Local Authority area parcels. WC and Swindon Borough Council, although separate authorities, are working together on a joint LNRS.

The LNRS will highlight areas of priority where nature focus can add most value to the Nature Recovery Network and support resilient populations of wildlife as well as people. It is likely that the Wiltshire and Swindon LNRS will be used in part to guide:

- What actions by farmers would be most locally beneficial and attract payment under new post Brexit environmental land management schemes
- Where biodiversity lost to development should be replaced
- Which areas should be prioritised to be kept clear of development altogether
- How the targets for habitat creation and the Nature Recovery Network can be met most sustainably

Land management of Corsham's open spaces and wildlife habitats could contribute positively to achieve the 'bigger, better, more joined up' environmental outcomes intended by LNRS.

2.9 INTEGRATED BENEFITS – NATURE AND MENTAL HEALTH, EXERCISE, ENJOYMENT OF NATURE

Corsham's parks and open spaces are a vital resource for its residents and are used for a variety of informal and formal recreational purposes e.g. walking, dog walking, running, creative play, sports, exercise, enjoyment of wildlife and relaxation. They are therefore of prime importance for the population's mental and physical health and contribute positively to reducing negative health impacts.

The objectives for green space and the management of green space must balance these uses and ensure all residents are able to gain maximum enjoyment from their local areas. The BAP aims to promote integrated approaches to open space management which will deliver these multiple benefits – many are not mutually exclusive.

2.10 COST SAVINGS – REDUCING THE INTENSITY OF MANAGEMENT CAN REDUCE CARBON AND ALSO SAVE MONEY.

As a public body, the Council needs to make best use of public funds and seek efficiencies wherever possible. Adopting a more nature friendly approach to open space management can result in significant cost savings, e.g. creation of wildflower meadows in parks can reduce the mowing of grassland from 1-3 cuts every month March-October, down to two cuts a year. Rewildling of areas can improve wildlife and require non-intervention. Equally, closing the loop on green recycling can turn cut arisings from parks into locally available cheap compost.

3 SITES

A site walkover was conducted of each of the green spaces in Corsham – a brief note of the habitats and overall site usage is mentioned below.

Appendix A contains habitat plans and landscape management plans for all the sites mentioned below.

3.1 BEECHFIELD NATURE AREA

Beechfield wildlife area/green space to the north/northeast of Corsham and consists of grassland and woodland habitats with a small pond, butterfly glades and insect hotels. The site is well managed with a cut path around the circumference of the grassland, as well as coppicing of trees, all of which have been left as arisings to the edge of the site, creating habitat potential for fauna.

3.2 CHAPEL CEMETERY

This cemetery is directly south of Ladbrook Road Cemetery and southeast of Lacock Road Cemetery. This site consisted of overgrown areas of grassland, scrub and shrubs. Many native, scattered trees were located throughout this area. The un-managed nature of this area is favourable for plenty of fauna – birds, invertebrates and reptiles.

3.3 COPPERSHELL PLAY AREA

This play area is located just off Coppershell, southeast of Corsham consisting of green space/amenity grassland, children's play area and football posts. The site was home to native tree saplings and hedgerow species recently planted, as well as a wildflower area to the south.

3.4 CROSS KEYS ALLOTMENTS

Small area of well-kept, sheltered allotments to the north of Corsham. There was a strip of cut amenity grassland as an access route for vehicles/pedestrians along the southern edge. The site is sandwiched between arable fields to the north and a small area of woodland to the south.

3.5 DICKETTS ROAD PLAY AREA

Small, well managed amenity grassland green space with children's play area located in the southeast of Corsham. There is a well-connected hedgerow on the southern boundary as well as arable field to the south.

3.6 GARDEN OF REMEMBRANCE

The Garden of Remembrance is located within the centre of Corsham, as consists of well managed amenity grassland lawn, with associated flower/shrub beds and memorial stones. The site is well-kept for aesthetic purposes as it opens onto Station/Stokes Road.

3.7 GARDEN OF REMEMBRANCE ALLOTMENTS

These allotments are directly adjacent (to the east) and associated with the site above. The well-kept nature of the site above is mirrored here with smart allotments, surrounded in amenity grassland pathways, trees and hedges.

3.8 GROVE FIELD ALLOTMENTS

Grove Field Allotments are of moderate size, based in the centre of Corsham. Amenity grassland surrounds the allotment plots as well as an access route to the south. Hedgerow and walls surround the site to the east and west with a row of trees on the north and southern boundaries.

3.9 KATHERINE PARK – THE GREEN

This large open parkland space is located in eastern central Corsham, providing amenity grassland for use by dogwalkers and sports pitches. A children's play area is located in the centre of the site, as well as a ring of footpaths around the perimeter of the grassland. The site is home to a number of planted parkland trees which line the paths and enclose the grassland. The trees on site connect to the woodlands to the south, making a good green corridor.

3.10 KATHERINE PARK – THE LITTLE PLAY AREA

This green space, consisting of woodland, children's play area, parkland and paths is located in south Corsham near the trainline. Its regularly maintained grassland is in moderate condition and the woodland trees on site connect via green corridors to the woodlands south of the site.

3.11 LACOCK ROAD CEMETERY

The new cemetery at Lacock Road, to the immediate northwest of the old cemetery was a well-manicured site, consisting of low-cut amenity lawns, with hard standing pathways and roads throughout. A dense hedgerow with trees borders the east of the site and a newly planted hedgerow separates the site with arable fields to the west. A wildflower and ruderal area of habitat existed to the south of the site surrounding a roundabout.

3.12 LADBROOK LANE CEMETERY

This cemetery was located to the east of Corsham and is connected to Chapel Cemetery and Lacock Road Cemetery and consisted of managed areas of grassland, scrub and shrubs. Many native, scattered trees were located throughout this area as well as gravel paths throughout.

3.13 MERITON RECREATION GROUND

Meriton Recreation Ground, located centrally in Corsham consisted of a large, open amenity grassland space for activities and dog walking, with a childrens' play area on the north boundary. The well-managed, regularly cut grassland was surrounded with scattered trees around the perimeter.

3.14 MIDDLEWICK LANE ALLOTMENTS

Middlewick is a small, thin allotment site located next to Beechfield Nature reserve to the northwest of Corsham. Amenity grassland pathways regularly cut throughout the allotment plots and the site is surrounded in walls and a hedgerow with trees connects the northeast boundary to the wider green landscape.

3.15 NESTON RECREATION GROUND

Neston Recreation Ground is a large, open green space located in the south of Corsham. The amenity grassland site is surrounded by hedgerow, trees and residential garden walls. A children's play area is nestled in the east of the site and there is a wildflower area to the south.

3.16 NESTON TRIANGLE

Neston Triangle, a well-managed area of green space surrounded in roads, is located in the south of Corsham. The site is situated in front of the St Philip and St James church, so aesthetic appeal is of high priority. The amenity grassland were cut short, with shrubs and trees scattered throughout.

3.17 SPRINGFIELD RECREATION GROUND

One of the largest open, green spaces within Corsham with a focus on providing entertainment for locals, with children 's play areas, BMX tracks and skateparks dotted throughout. A hardstanding pathway surrounded the amenity grassland field in the centre. A mix of native and non-native trees and shrubs were situated around the circumference of the site with a wildflower area to the north.

3.18 ST BARTHOLOMEW'S CHURCHYARD

The churchyard at St Bartholomew's, situated beside Corsham Court to the east of the town consisted of a very overgrown area of shrubs, grassland and scrub. The unmanaged nature of the site is favoured by a range of pollinator species and birds. Cut amenity grassland paths created a route through the site. A southwest facing wall is situated on the west of the site and trees/woodland to the north and east created a sheltered area.

3.19 THE BATTERS

The only woodland site included in this BAP, the Batters is located to the southeast of Corsham alongside the trainline. The site consisted of a mixed, broadleaved woodland, with amenity grassland glades, pathways and a stream running northwest to east. There was no apparent woodland management, however the grassland areas were well kept and there was a diverse understorey to the woodland along the stream and northern section.

3.20 THE RIDGE ALLOTMENTS

This small plot of allotments located south of Corsham at The Ridge is surrounded with hedgerows, tree lines and woodland. There was an amenity grassland strip to the south of the site to allow access to all of the allotment plots with pathways throughout.

3.21 WESTWELLS PLAY AREA

This play area located in the south west of Corsham was a very small, amenity grassland plot, with a number of children's playground features. With a hedgerow on the south boundary and two trees, there was limited features for fauna.

The following wildlife enhancements are proposed for the sites (abbreviated – see key in Table 3) surveyed:

- Creation of wildflower strips/ wildflower sowing (BNA, CC, CPA, KPTLPA, KPTG, LLC, LRC, MRG, NRG, SBC, SRG).
- Install reptile hibernacula (SBC, GoRA, TB).
- Install bat boxes (BNA, MLA, CC, CKA, CPA, DRPA, GoRA, GFA, KPTLPA, KPTG, LLC, MRG, NRG, RA, SBC, SRG, TB, WPA).
- Install bird boxes (BNA, CC, CKA, CPA, DRPA, GoR, GoRA, GFA, LLC, KPTLPA, KPTG, MLA, MRG, NRG, NT, RA, SBC, SRG, TB, TG, WPA)
- Install bug hotel (BNA, MLA, CKA, GFA, KKTLPA GoRA, MRG, NRG, SBC, RA)
- Install dormouse boxes (BNA, TB)
- Woodland edge/glade management (SBC).
- Woodland management – thinning, creation of log piles, ash die back approach (BNA, TB).
- Creation/management of butterfly glade/ butterfly planting (BNA).
- Hazel coppicing (CKA).
- Plant pollinator strip (CC, GoRA, LRC, NT).
- Plant poppy wildflower mix (GoR).
- Creation of drought resistant rockery (DRPA, GoR, SRG).
- Native tree and shrub planting (BNA, MRG, TB).
- Revitalise wildlife/rewilding areas (NRG).
- New pond creation (CPA, FW, KPTLPA, MRG, NRG, SRG).
- Hedgerow strengthening (CKA, DRPA, MLA, NRG).
- New native hedge planting (DRPA).
- Creation of community orchard (MRG).
- Existing pond management (BNA)
- Existing stream management (TB).
- Creation of community beehives (SRG)

Further details of these enhancement and management approaches are given in Section 7 and Appendix A below.

Table 3: Key to Sites

BNA	Beechfield Nature Area	LLC	Ladbrook Lane Cemetery
CC	Chapel Cemetery	LRC	Lacock Road Cemetery
CKA	Cross Keys Allotments	MLA	Middlewick Lane Allotments
CPA	Coppershell Play Area	MRG	Meriton Recreation Ground
DRPA	Dicketts Road Play Area	NRG	Neston Recreation Ground
GoR	Garden of Remembrance	NT	Neston Triangle
GoRA	Garden of Remembrance Allotments	RA	Ridge Allotments
GFA	Grove Field Allotments	SBC	St Bartholomew's Churchyard
KPTLPA	Katherine Park – The Little Play Area	SRG	Springfield Recreation Ground
KPTG	Katherine Park – The Green	TB	The Batters
		WPA	Westwells Play Area

4 REVIEW OF GROUNDS MAINTENANCE CONTRACT

The original Grounds Maintenance Contract Specification set out by Corsham Town Council has been reviewed and a series of recommendations on how best to maintain areas whilst responding to carbon reduction, biodiversity and ecological emergencies has been set out in Appendix B.

5 ADVICE NOTES

A series of advice notes have been produced for the following: footpaths; highway verges; small amenity sites; hedges; trees. These are set out in Appendix C.

- Footpaths
- Highway verges
- Small amenity sites
- Hedgerows. Hedgerow strengthening
- Trees. Woodland edge/glade management
- Woodland management – thinning, creation of log piles, ash die back approach, hazel coppicing.
- Existing pond management
- Existing stream management
- Revitalise wildlife areas

6 PRIORITIES OF ENHANCEMENT TASKS

A table of suggested priorities is included in order to assist in the process of implementing the changes outlined.

7 HABITAT AND WILDLIFE ENHANCEMENT ADVICE

Corsham's open spaces and habitats can be enhanced further for wildlife, carbon storage and people's enjoyment of nature. The following guidance can be applied across the Council's open spaces.

7.1 WILDFLOWER STRIPS/ SOWING - SEE ALSO REINSTATEMENT/ OVERSEEDING

Where required, wildflower seed should be sown on low fertility soil in a sunny situation. Should the soil be fertile then the topsoil must be removed. The soil should be dug over to a depth of 15cm, raked to create a fine tilth and stones and unwanted perennials removed. The best time of year to sow is March to April, the second best is September to October.

7.2 NEW POND CREATION

Ponds are best situated in a warm sunny spot to be of the best value to wildlife. Much of the associated wildlife is found in the shallow water so some shallow areas and beaches should be included. This also allows easy access for wildlife and means of escape should animals fall in. To ensure public safely a life-ring should be provided.

During construction some cut turf should be kept for pond edges and for covering hibernacula. Logs placed near to the pond and plants around some of the pond edge and hibernacula nearby would support wildlife by creating microhabitats and safe spots for overwintering amphibians.

Pond planting should be a mix of native species for each of the following groups;

-Submerged oxygenating plants with floating leaves eg:

- Spiked water-milfoil (Myriophyllum spicatum)
- Rigid hornwort (Ceratophyllum demersum)
- Water violet (Hottonia palustris)
- Water lily (Nymphaea alba)
- Common water-crowfoot (Ranunculus aquatalis)
- Frogbit (Hydrocharis morsus-ranae)

-Emergents

- Water-forget-me-not (Myosotis scorpioides)
- Bogbean (Menyanthes trifoliata)
- Watermint (Mentha aquatica)
- Yellow Flag Iris (Iris pseudacorus)
- Lesser Spearwort (Ranunculus flammula)

-Marginal plants at pond edge/bog areas eg:

- Marsh marigold (Caltha palustris)
- Globeflower (Trollius europillworaeus)
- Pillwort (Pilularia globulifera)
- Brooklime (Veronica beccabunga)

7.3 BAT BOXES

Source: Schwegler

Available from Schwegler or Greenwoods Habitat, made of concrete/ woodpulp mix and made to last (25 years+). May have a lead in time of several weeks. Alternatives also available from Wildcare.co.uk. A design of bat box with an open base is recommended as these should be maintenance free, other designs would require cleaning out.

Where possible boxes may be best placed near hedges and dark tree lines, as bats use these to navigate.

Appropriate locations for installation of bat boxes to be determined by a suitably qualified Ecologist. To avoid strong, prevailing winds, bat boxes should be mounted facing south, south-east or south-west to receive 6-8 hours of direct sunlight, 4-10m above the ground. Locations should avoid structures that may allow predation by cats and artificial light sources which may also leave bats more vulnerable.

Bat boxes should not require maintenance and, as bats are protected under UK law, the boxes may only be opened by a licensed professional.

7.4 BIRD BOXES

Source: Schwegler

Source: Wildcare

These can be obtained from the RSPB and Wildcare, if sourced elsewhere they must **not** be made from CCA pressure treated timber. The longest lasting bird boxes are made of woodcrete and made by Schwegler and/or Woodstone.

Different hole sizes will attract different species:

Hole Sizes	Height of Install	Species Preference
25mm	2-4m	Blue tits, marsh tits, coal tits
28mm	2-4m	Great tits, tree sparrows and pied flycatchers (2-5m)
32mm	2-4m, 6m high	House sparrows and nuthatches (mature trees)
45mm	2-4m	Starling
60mm high open panel	2-4m	Spotted flycatcher
100mm high open front	2-3m well hidden in vegetation	Robin
140mm high open front	<2m well hidden in vegetation	Wren

Bird boxes are best fixed to trees with aluminium nails/screws as these do not rust and damage trees. Suppliers usually provide fixings.

Bird boxes require cleaning out and should be carefully taken down for cleaning once no longer in use in September.

Unhatched eggs can only be removed legally between September and January. It is important to check that the nest is no longer active as some species can nest right through September.

Boiling water should be used to kill parasites and the box thoroughly dried. No insecticides or other chemicals should be used. A small handful of clean hay (not straw) or wood shavings in the box, once thoroughly dry, may attract roosting birds or small mammals to hibernate.

7.5 BUG HOTELS

Shelters for invertebrates may be made from recycled items such as clay pipes and tiles, pine cones, teasel seedheads, tree prunings etc, in a stable structure. Natural materials such as hollow stems, bark, dead grass, dried leaves and seed heads make safe, dry microhabitats. The framework structure may be simply wooden pallets filled with smaller items, or one could be constructed from untreated wood or other suitably strong, inert materials which have not come into contact with chemicals. If pallets are used then these should be untreated wood marked DB. EPAL, KD and HY markings identify pallets safely kiln- or heat-treated rather than using toxic chemicals. Obtain from reputable suppliers and check they have not been used to supply toxic chemicals.

Suitable locations for bug houses are in dry, sunny, south facing positions, securely fixed, at varying heights above, or on, the ground.

7.6 DORMOUSE BOXES

These are available from NHBS, Wildcare and Ark Wildlife. If sourced elsewhere they must be made of untreated wood.

Dormice naturally live in scrub and hedgerows and like a dense understorey with plants which link the shrub and canopy layer. Preferred habitats are varied with dense hedgerows and a mosaic of varying structure of vegetation offering a wide range of food.

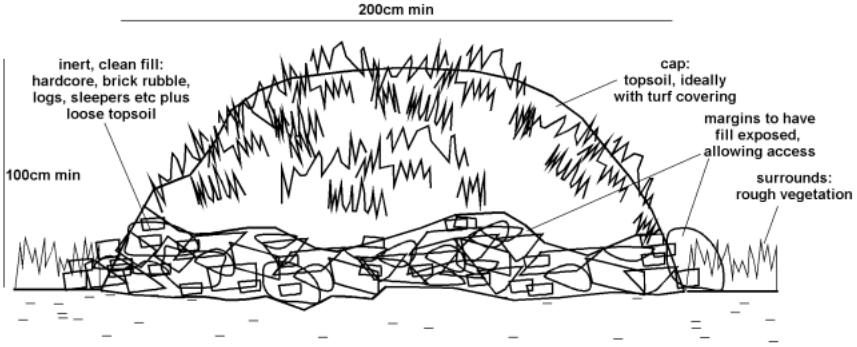
Suitable planting includes hazel, honeysuckle, wild clematis and ivy. Good dormouse habitat may contain log piles, coppiced and veteran trees, rotten wood and trees such as oak which supply large quantities of insects. Dormouse food varies with the season and includes flowers from hawthorn, oak, sycamore, willow, honeysuckle and bramble. Other suitable food includes nuts, caterpillars, aphids, blackberries and other fruit.

Nesting boxes must be untreated and situated away from possible disturbance. Boxes must be positioned far away from paths, roads and public access in amongst interconnected trees so dormice can travel without touching the ground. A suitable height for boxes is usually 1.5m. Boxes should be attached with the hole facing the tree, with wire coated in rubber or hose to avoid damage to the tree. Boxes should be cleaned out in Oct-Nov but must be left if bats are found to be roosting inside.

Dormice and their breeding and resting sites are legally protected.

7.7 INSTALL REPTILE HIBERNACULA AND REFUGIA

Source: English Nature: Great Crested Newt Mitigation Guidelines 2001



Hibernacula are underground shelters which amphibians and reptiles use in winter to shelter from the cold. Natural hibernacula might include tree roots, deep leaf litter and log piles. Sites such as allotments with mixed piles of soil, rubble and grass are ideal. Over tidying of sites can result in loss of suitable microhabitats and should be avoided.

A good hibernaculum would have a mixture of rubble, natural wood and soil. The best location is part sun, part shade, near shrubs so as to provide a winter and summer refuge and protective cover. This also provides the option to move into sun or shade at any part of the day.

To build the shelter, a 50cm deep hole should be dug, 1.5m across and the soil and turf kept to cover the finished structure. The inner shelter should include rubble, wood and soil and may include tree roots, mulch, compost etc. The material should be mixed and some may come through any cover.

The hibernacula can be covered with remaining turf and soil, in an uneven way to provide a variety of microhabitats. In areas where disturbance is a potential problem, a covering of thorny branches or bramble plants may be a deterrent. Any areas compacted during construction should be loosened up afterwards.

7.8 CREATION AND MANAGEMENT OF BUTTERFLY GLADE/ BUTTERFLY PLANTING

Butterfly glades may be either sown from scratch or improved by overseeding. Locally sourced seed mixes should be used if available. Otherwise Emorsgate Meadow Mixture for Chalk and Limestone soils EM6 supplied by Emorsgate Seeds or equivalent.

Butterflies need flowers to provide nectar throughout the butterfly season, March to October - spring flowers for butterflies coming out of hibernation and autumn flowers to help butterflies build up their reserves for winter. Food plants are also required as suitable sites for butterflies to lay their eggs. Butterflies may have very specific food plants, or even a sole species on which they are completely reliant. When it is desirable to support a specific species, suitable seed mixes may be chosen, or supplemented by additional seed or plug planting.

Plug planting can be useful to introduce species which have unreliable germination or grow very slowly from seed and can incorporate wild harvested seed of local origin. When plugs are used care must be taken to prevent them drying out. Best planted in September or October at a density of 2-4 plugs per sqm. Plugs can be planted in May or June but would require watering for six weeks. Establishment can be improved by keeping the grass immediately around the plugs short for the first year.

Management of glades can improve habitat diversity especially when grass is cut on longer rotations, allowing the grass to grow uncut in some areas for one, two or three years. This leaves some areas undisturbed, keeping habitats intact for long enough for invertebrates to complete their whole lifecycle

By varying mowing regimes in one area, different heights of vegetation are established Where practical, areas to be cut may be divided into two with one cut at a time to ensure a remaining grass sward for wildlife.

7.9 REINSTATEMENT / OVER-SEEDING


Source: Emorsgate Seeds

Where reinstatement is necessary, allow local grass species to colonise naturally, chain harrow or similar wildflower area during August/ September in order to create new spaces for the wildflowers to establish.

Alternatively, a suitable grass mix matching the specified seed mix should ideally be sown in autumn to increase the likelihood of yellow rattle germinating. This should not require management until early spring (February) when tall vegetation may be cut to 50mm if required. All arisings/ cut material to be removed.

Any spring-sown meadow should be cut after approximately six weeks, and then only when the vegetation exceeds 200mm. A spring meadow cut helps the early blooming season of spring wildflowers from May onwards. This cut should not be left later than April.

To allow for the successful establishment of wildflower species, removal of grass cuttings will help to reduce soil fertility levels and therefore the competition from dominant grass species. Care to be taken when removing arisings, so as not to disturb fauna or their habitats.

In areas where competitive grass species have taken hold at the expense of diversity, sowing with yellow rattle seed may be considered. Yellow rattle is parasitic and will derive its water and nutrients from the surrounding vigorous grasses and so, by weakening them, the less competitive species are more able to flourish. Sowing of yellow rattle is most successful in areas of exposed soil.

Suitable seed mix: Emorsgate Meadow Mixture for Chalk and Limestone soils EM6 supplied by Emorsgate Seeds.

7.10 PLANT POLLINATOR STRIP

In the UK the majority of pollination is carried out by bees, wasps, beetles, moths and butterflies and flies such as hoverflies. Eight species of butterfly are listed as high priority in the south west England RCS Conservation Priority 2016-25; The Lulworth Skipper, Wood White, Pearl-bordered Fritillary, High Brown Fritillary, Marsh Fritillary, Heath Fritillary, Duke of Burgundy and Large Blue.

Some of the required larval foodplants of these species are included in the recommended seed mix (in bold), others which could be considered for seeding/ planting, where appropriate are shown in Table 4 below.

Table 4 below: *Butterfly Foodplants for High Priority Species, and More Commonly Found Species*

Butterfly Species - High Priority in south west	**Food plants including Key Flowering Species**
Lulworth Skipper	Tor-grass
Wood White	Bitter-vetch, **common bird's-foot-trefoil**, greater bird's-foot-trefoil, meadow vetchling, **tufted vetch**
Pearl-bordered Fritillary	Common dog-violet, heath dog-violet, marsh-violet
High Brown Fritillary	Common dog-violet, hairy- violet, heath dog-violet, pale dog-violet
Marsh Fritillary	Devil's-bit scabious, field scabious, **small scabious**
Heath Fritillary	Common cow-wheat, foxglove germander speedwell
Duke of Burgundy	**Cowslip**, false oxlip, primrose
Large Blue	**Wild marjoram**
Butterfly Species - More commonly found in SW	**Food plants including Key Flowering Species**
Brown Argus	Rock-rose, Dove's foot crane's bill, stork-bill
Common Blue	**Bird's foot trefoil**, **black medick**, common restharrow, greater bird's foot trefoil, lesser trefoil
Marbled White	Cock's-foot, **red fescue,** sheep's fescue, Timothy grass, tor-grass, Yorkshire fog
Small Copper	Common sorrel, sheep's sorrel, broad leaved dock
Small tortoiseshell	Common nettle, small nettle
Speckled wood	Cock's foot, Common couch, false brome, Yorkshire fog

Tussocky grass, woodland edge, hedgerows and other dense vegetation provide good nesting habitat for bumblebees. Hoverflies feed on nectar from flowers with an open flower with easily accessible nectar and pollen such as poppies. Their larvae may rely on dead wood or hoverfly lagoons. Beetles can be encouraged by log piles and semi buried wood, bug houses and leaf piles.

In ornamental areas native species such as musk mallow, common honeysuckle, guelder rose, primrose and roses may be included. Some areas might also include non-native species such as, rosemary, Bergenia, Echinacea, catmint, Mahonia, sweet box and lavender. A good reference is the RHS 'Plants for Pollinators' list.

7.11 PLANT POPPY WILDFLOWER MIX


Source: Emorsgate Seeds

With its open flowers, which are easily accessible to pollinators, the common poppy was once thought of as a weed. It is now in decline due to intensive agricultural practices.

Poppy seed is best sown on exposed soil in autumn as chilling is required for germination. Seeds require a disturbed soil so the area would require aggressive scarification in autumn each year if self seeded plants are to survive. This would however disturb surrounding meadow plants so is not suitable for areas of plug planting for instance. If the sward closes up and soil is not disturbed then poppy seeds cannot germinate.

Poppy seed is available from Emorsgate Seeds, but as with all seed, the more locally harvested, the better.

7.12 CREATION OF DROUGHT RESISTANT ROCK GARDEN

A rock garden would provide protection to small mammals, reptiles and amphibians whilst attractive planting could provide a protective habitat and food for pollinators.

A suitable location for a rock garden would be a sunny site where shade is not cast by trees, shrubs or buildings and without any pernicious weeds. Local reclaimed stone is preferable ,if available. The larger rocks should be arranged around the planned shape

of the rock garden forming a bed into which a layer of rubble may be placed, to form a well drained soil, and to provide support to stone above and prevent sinkage. A woven geotextile should be placed over the drainage layer, and a free draining soil laid on top generally to a minimum depth of 300mm where possible. The rock garden can then be built up using stone decreasing in size with height, leaving pockets of soil open for planting, and soil layered as the work progresses. Soil should be free draining and may be a mixture of topsoil, grit and organic matter.

Drought resistant planting could include low maintenance plants such as ornamental grasses which provide shelter for moths over winter and drought tolerant herbs such as marjoram, rosemary and fennel which are attractive to pollinators. Other suitable plants might include lavender, Sedum, Scabious, ground cover geraniums and Verbena bonariensis. A proportion of evergreen planting would offer some protection in winter and could include a mix of native planting such as holly and yew and ornamentals such as Berberis, Bergenia and Mahonia.

7.13 NATIVE TREE AND SHRUB PLANTING

In addition to wildlife benefits, trees sequester carbon, provide shade, act as a natural windbreak, help reduce rainwater runoff, reduce air pollution and act as a visual screen whilst increasing the impact of public green spaces. Many produce pollen and nectar and are therefore very valuable to pollinators (e.g. willow, maple, lime).

New tree planting can add structure to public spaces as well as seasonal interest. As the limiting factor in bird populations is often lack of nesting sites, addition of trees can increase availability of potential nesting sites and offer space for roosting along with a rich source of food.

Where damage to trees may be a risk, larger extra heavy standard trees should be specified. Younger trees tend to establish faster and eventually overtake others and may be very cost effective on sites less prone to damage.

The addition of native shrub planting can create protected spaces for wildlife, along with food, nesting sites and protected routes through sites. Planting may be selected specifically to provide food for pollinators, or for birds or perhaps as a new species to a site to bulk up existing hedging and increase biodiversity. Evergreen shrubs such as yew and holly can offer winter habitat and protection. There is an opportunity to plant less commonly seen plants such as common juniper which may be planted in sunny areas, or barberry which is vital for the threatened barberry moth and provides excellent protective wildlife habitat.

7.14 REVITALISING WILDLIFE/ REWILDING AREAS

Taking steps to rewild sites e.g. relaxing mowing regimes and reducing disturbance to habitats, will create an instant wildlife reserve. If the lifecycles of wildflowers, and likewise that of invertebrates, can simply be left uninterrupted then population numbers will naturally increase. Provision of hibernacula, nest boxes, log piles and other features can all have a positive effect on a wide range of species. Signage and information on rewilding can help involve the public and increase understanding, and enjoyment, of the process of rewilding on Corsham's public sites.

Rewilding sites offer the opportunity to inform and encourage the public to become interested and involved in the process. Such sites may develop wildlife trails, or interactive information boards (e.g. the award winning Salisbury Bee Trail). Rewilding initiatives can be a welcome positive response to concerns about our climate and biodiversity and potentially generate positivity, increased wellbeing, and spark further initiatives on other sites, both public and private.

In suitable locations, e.g. near seating, information and signage can illustrate the value of nearby bug houses, new habitats, or rarer species present on the site. Schools or community groups may have the opportunity to become involved in designing signage, or constructing some of the wildlife features giving a sense of ownership and relevance to rewilding efforts.

7.15 NEW NATIVE HEDGE PLANTING

Hedges provide shelter, breeding sites, a protected route for wildlife, a means of navigation for bats and a varied source of food. Through the year, hedges offer leaves, flowers, nectar, seeds, nuts, fruit, invertebrates and small vertebrates as food supply. More berries and fruit will be carried on informal hedges and those hedges allowed to grow for longer between pruning. Pruning in early spring or late winter allows wildlife to benefit from winter food sources.

Mixed hedges of native species will provide the most varied food sources and should include climbers such as ivy, Clematis vitalba, and honeysuckle amongst species such as blackthorn, hawthorn, beech, hornbeam, holly, field maple and wayfaring tree.

Best planted from November to March, more economical bare root hedging could be used, avoiding freezing or waterlogged conditions. Containerised stock would be required at other times.

Additional benefits include reduction of air pollution and reduced noise levels, visual screening of roads from green spaces and protection from winds which is particularly beneficial to butterflies.

In the first spring after planting, cutting hedge plants back to 45-60cm will encourage a more dense hedge to develop. Planting in a double or triple row at 30cm spacing will also increase hedge thickness.

If skills are available, the use of traditional hedgelaying techniques can further increase the wildlife value of hedges. Hedgelaying can be beneficial if a hedge has lost its bushy base, and is sufficiently young to be cut in the required way. Older hedgerows may potentially be coppiced instead. Whichever method is used, it is best not to treat an area extensively at once as it causes disturbance to wildlife.

Hedgelaying requires experience and involves cutting partway through stems and pushing the hedge diagonally or downwards, causing it to become more dense. Higher up, the stem may be cut at an angle, and this grows back vigorously. Stakes may be driven in for support. Traditional methods vary and many areas may have developed a distinctive local style of hedgelaying. Usually hedgelaying is completed from September to March.

7.16 CREATION OF COMMUNITY ORCHARD

Orchards require a sunny area without strong winds. On more exposed sites a shelter belt may be beneficial. Strong winds may affect ease of access by pollinators and therefore also cropping. Trees can include apple, pear, cherry, plums, damsons gages, mulberry, medlar and nuts. For practical purposes these proposals include apple and pear trees.

The ideal soil for fruit trees is uncompacted, well drained loamy soil of pH6 (slightly acidic). Soil ameliorants such as well rotted manure or compost may be added into the tree pit to encourage the roots to establish well.

Trees are best planted between December and March when trees are fully dormant. This allows less expensive bare root stock to be used. When planting at other times containerised stock should be obtained, and must be kept sufficiently watered as roots will have less time to establish in new soil. Planting should be avoided when the ground is frozen or wet and sticky.

Tree sizes will depend on rootstock. A suitable sized tree for a community orchard would typically be Semi-vigorous root stocks (M116, MM106 for apples) Smaller Semi-dwarf rootstocks might also be used but these would produce smaller trees. With fruit trees the larger the tree generally the longer lived, and as veteran trees are of most wildlife value the larger sized trees may be more appropriate. Larger trees may also be less susceptible to damage. Trees may be spaced between 3.5-4.5m.

Pollination Group is important when choosing apple trees. Trees are divided into groups (A-F), trees can be pollinated by any tree in the same or adjacent groups, so a tree in Group C can pollinate, or be pollinated by, a tree in Groups B, C or D.

Species can be selected to include different flavours of fruit, differing cropping times, or include old Wiltshire varieties or rare trees, though there may be issues with availability and some may require preordering for grafting onto rootstock.

Annual pruning will produce larger fruit, any such work should be completed by a skilled and knowledgeable operative. 5cm of organic compost should be added annually around the tree in autumn, leaving 15cm space from the tree trunk.

7.17 DAMAGING PRACTICES TO AVOID

No pesticides, herbicides or fertilisers to be used in the ongoing management and maintenance of the sites.

Weed control should be kept to a minimum, and when necessary, by mechanical methods or hand pulling. Care should be taken to avoid damage to adjacent vegetation.

Any vegetation clearance should be avoided in March-September to avoid the bird nesting season. Groundworks should be avoided during the winter hibernation period - mid October to March - to prevent harm to reptiles and amphibians.

Strimmers should be used on sensitive sites to prevent soil compaction and shrub damage from being caused by machinery. Care should be taken to avoid any damage to orchard planting, and any operations near trees to be completed using hand tools.

7.18 REFERENCES AND FURTHER INFORMATION

Corsham Climate Change Action Plan 2022-2030

https://www.corsham.gov.uk/wp-content/uploads/2022/10/MASTER-Climate-Change-Action-APPROVED-October-2022.pdf

Council Environment Policy

https://www.corsham.gov.uk/wp-content/uploads/2022/11/Environmental-Policy-2023.pdf

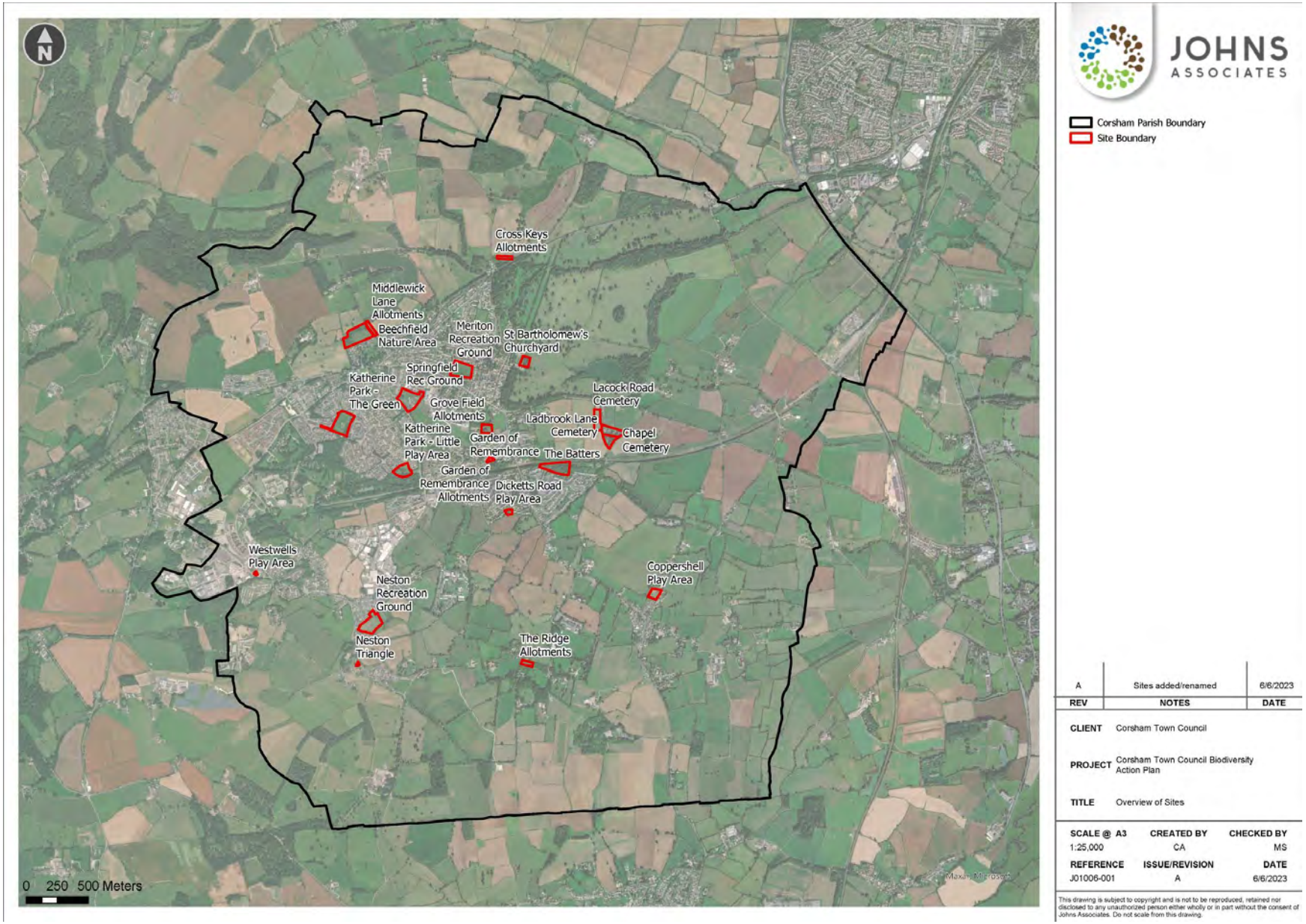
Neighbourhood Plan

https://www.corshamneighbourhoodplan.co.uk

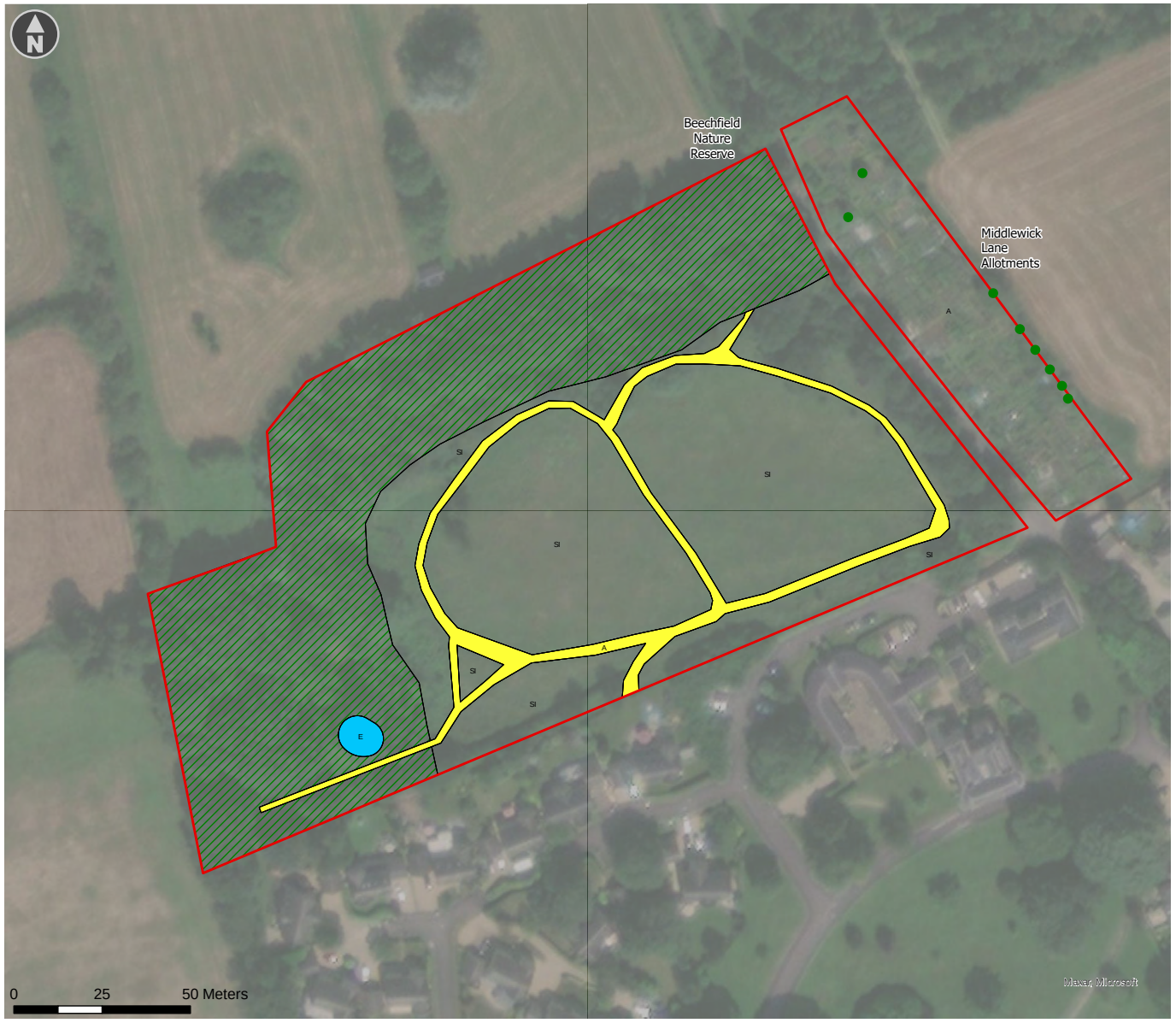
Wiltshire and Swindon Local Nature Recovery Strategy

https://www.wiltshirewildlife.org/wiltshire-swindon-local-nature-recovery-strategy

APPENDIX A – ALL SITES: ECOLOGICAL VALUE AND OPPORTUNITIES / HABITAT MAPS



Beechfield Nature Reserve & Middlewick Allotments Habitat Plan



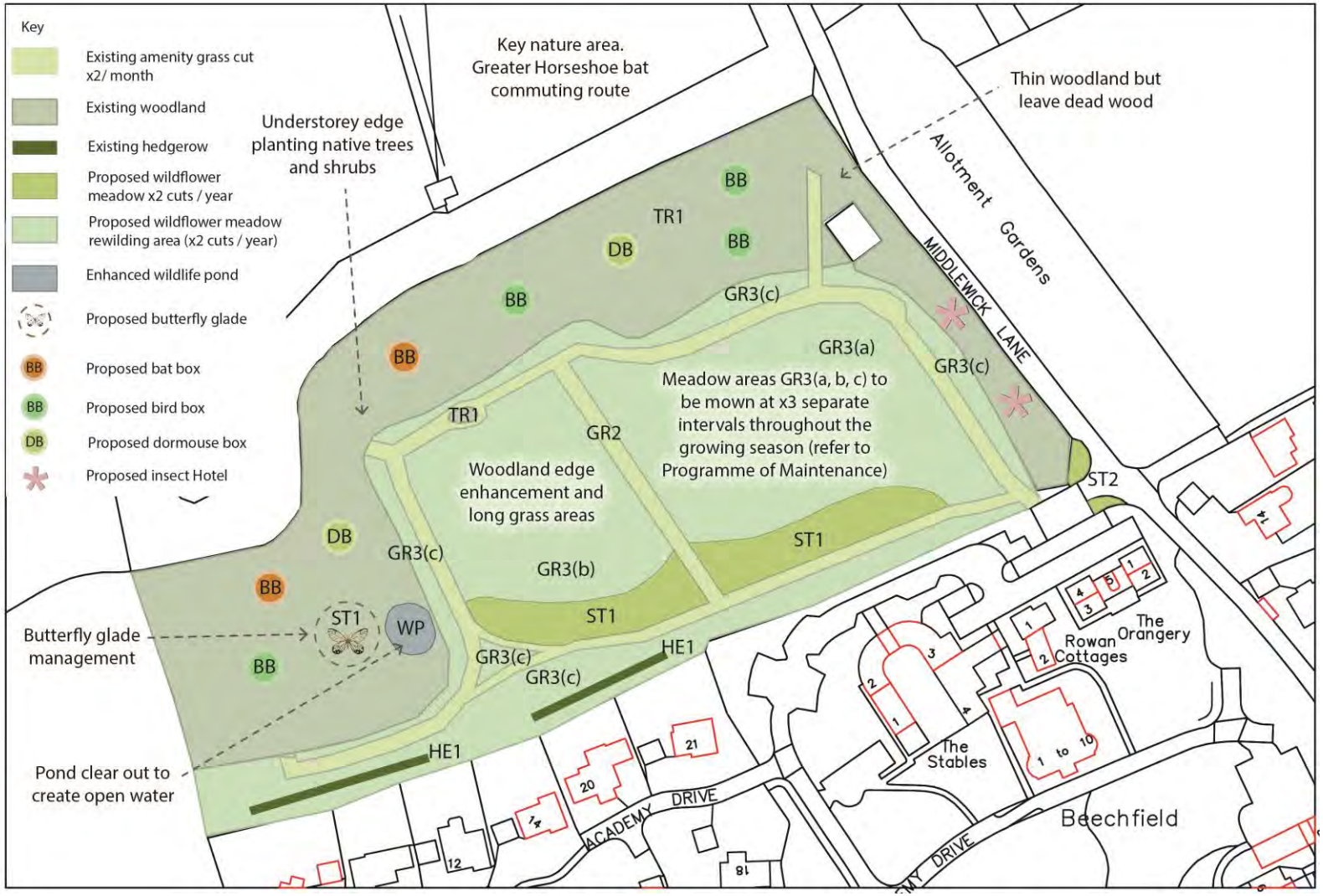
JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A1.1.2 - Broadleaved woodland - plantation
- B6 - Poor semi-improved grassland
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Beechfield Nature Reserve & Middlewick Lane Allotments

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-002		17/1/2023

Beechfield Nature Reserve Strategy Plan



Middlewick Lane Allotments Strategy Plan

Coppershell Play Area Habitat Plan

JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- SI B6 - Poor semi-improved grassland
- A J1.2 - Cultivated/disturbed land - amenity grassland
- J5.1 - Hardstanding
- J2.1.2 - Intact hedge - species-poor
- J2.3.2 - Hedge with trees - species-poor
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Coppershell Play Area

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-010		26/1/2023

Coppershell Play Area Strategy Plan

Cross Keys Allotments Habitat Plan

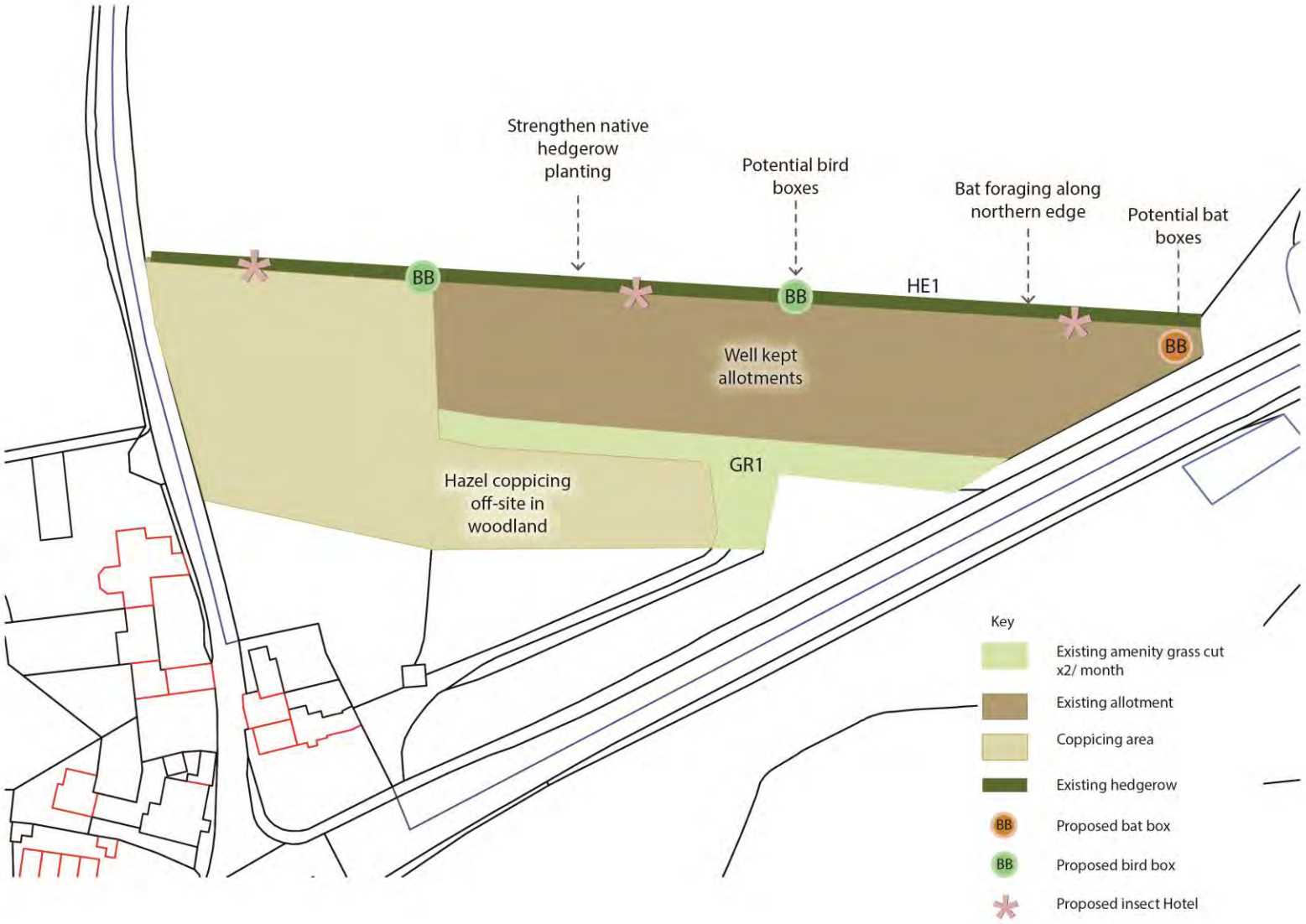
JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A J1.1 - Cultivated/disturbed land - arable
- A J1.2 - Cultivated/disturbed land - amenity grassland

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Cross Keys Allotments

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-003		17/1/2023

Cross Keys Allotments Strategy Plan



Dicketts Road Play Area Habitats Plan

JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- J4 - Bare ground
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Dicketts Road Play Area

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-011		26/1/2023

Dicketts Road Play Area Strategy Plan

Garden of Remembrance and Allotments Habitats Plan

JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J4 - Bare ground
- J2.1.2 - Intact hedge - species-poor
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Garden of Remembrance and Allotments

SCALE @ A3	CREATED BY	CHECKED BY
1:500	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-012		17/1/2023

Gardens of Remembrance Allotments Strategy Plan

Gardens of Remembrance Strategy Plan

Grove Field Allotments Habitats Plan

JOHNS ASSOCIATES

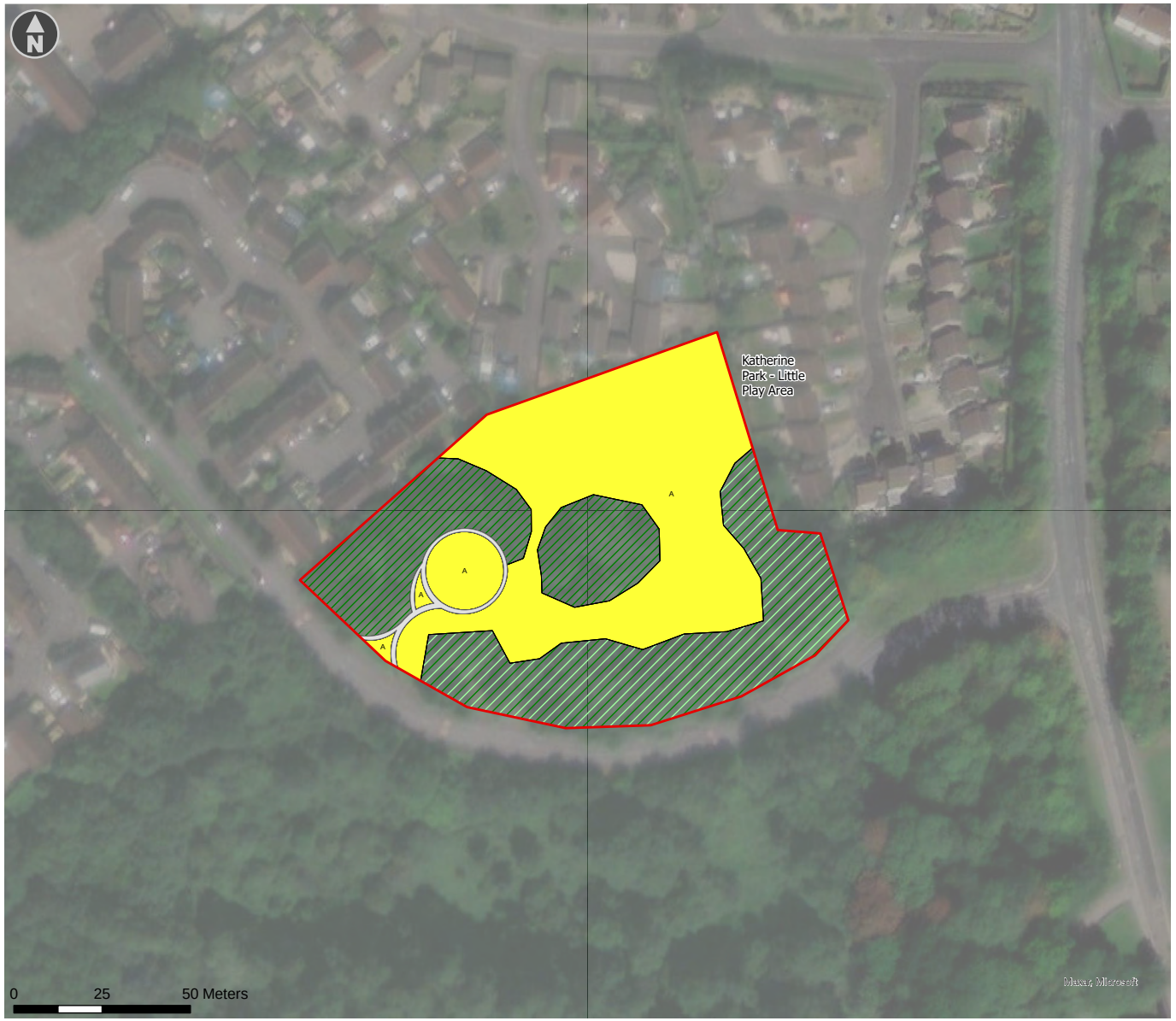
- Corsham Parish Boundary
- Site Boundary
- A J1.1 - Cultivated/disturbed land - arable
- A J1.2 - Cultivated/disturbed land - amenity grassland
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Grove Field Allotments

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-004		17/1/2023

Grove Field Strategy Plan

Katherine Park – The Little Play Area Habitats Plan



JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A1.1.2 - Broadleaved woodland - plantation
- A1.3.2 - Mixed woodland - plantation
- A — J1.2 - Cultivated/disturbed land - amenity grassland
- J5.1 - Hardstanding

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Katherine Park - Little Play Area

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-018		17/1/2023

Katherine Park – The Little Play Area Strategy Plan

Katherine Park – The Green Habitats Plan

JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- J5.1 - Hardstanding
- A3.1 - Broadleaved Parkland/scattered trees
- J2.4 - Fence

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Katherine Park - The Green

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-017		17/1/2023

Katherine Park - The Green Strategy Plan

Ladbrook Lane Cemetery, Lacock Road Cemetery and Chapel Cemetery Habitats Plan

JOHNS ASSOCIATES

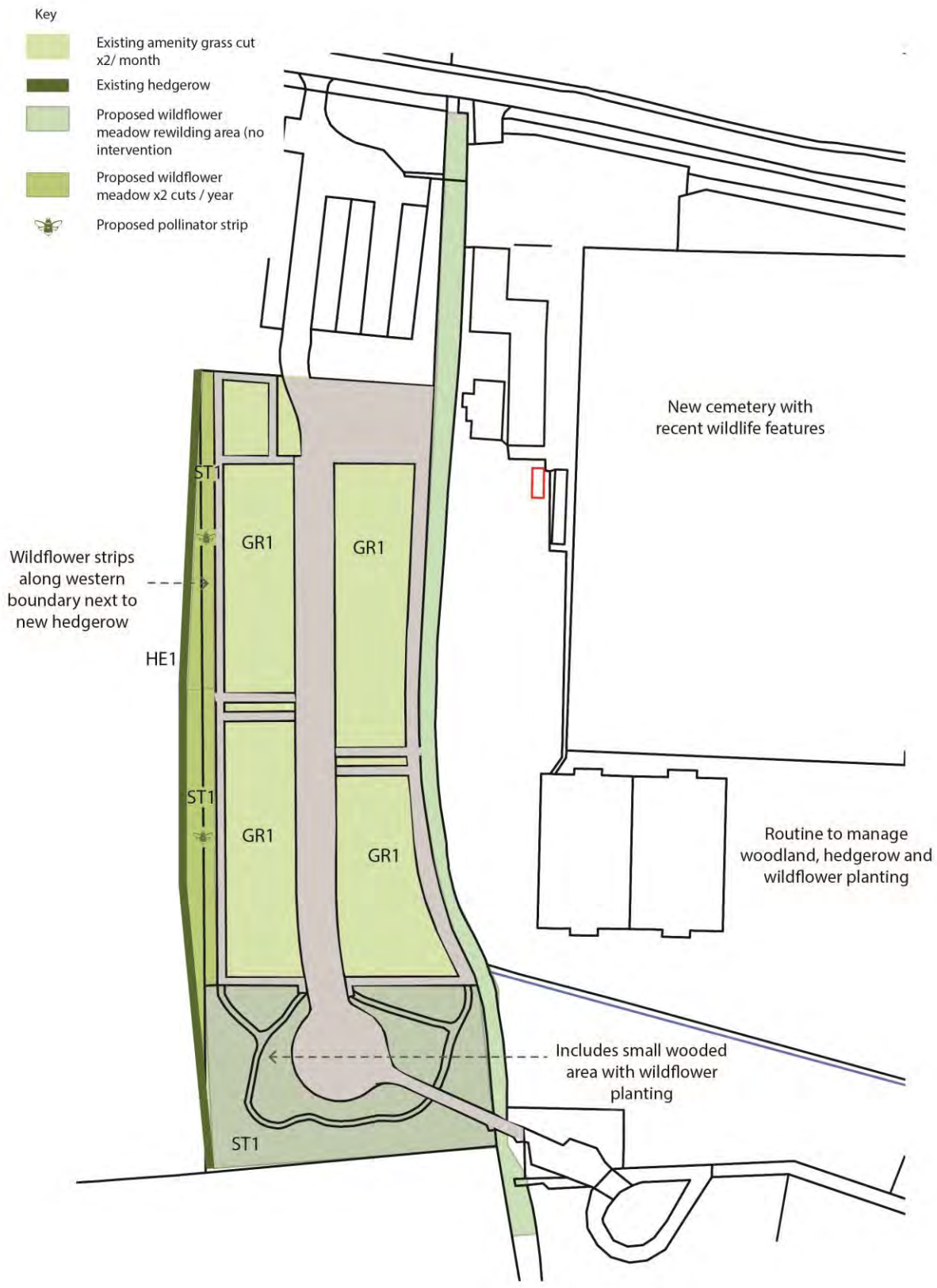
- Corsham Parish Boundary
- Site Boundary
- A1.1.2 - Broadleaved woodland - plantation
- C3.1 - Other tall herb and fern - ruderal
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J5.1 - Hardstanding
- J2.1.2 - Intact hedge - species-poor
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Ladbrook Lane Cemetery

SCALE @ A3	CREATED BY	CHECKED BY
1:1,500	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-005		17/1/2023

Ladbrook Lane Cemetery and Chapel Cemetery Strategy Plan

Lacock Road Cemetery Strategy Plan



Meriton Recreation Ground Habitats Plan

JOHNS ASSOCIATES

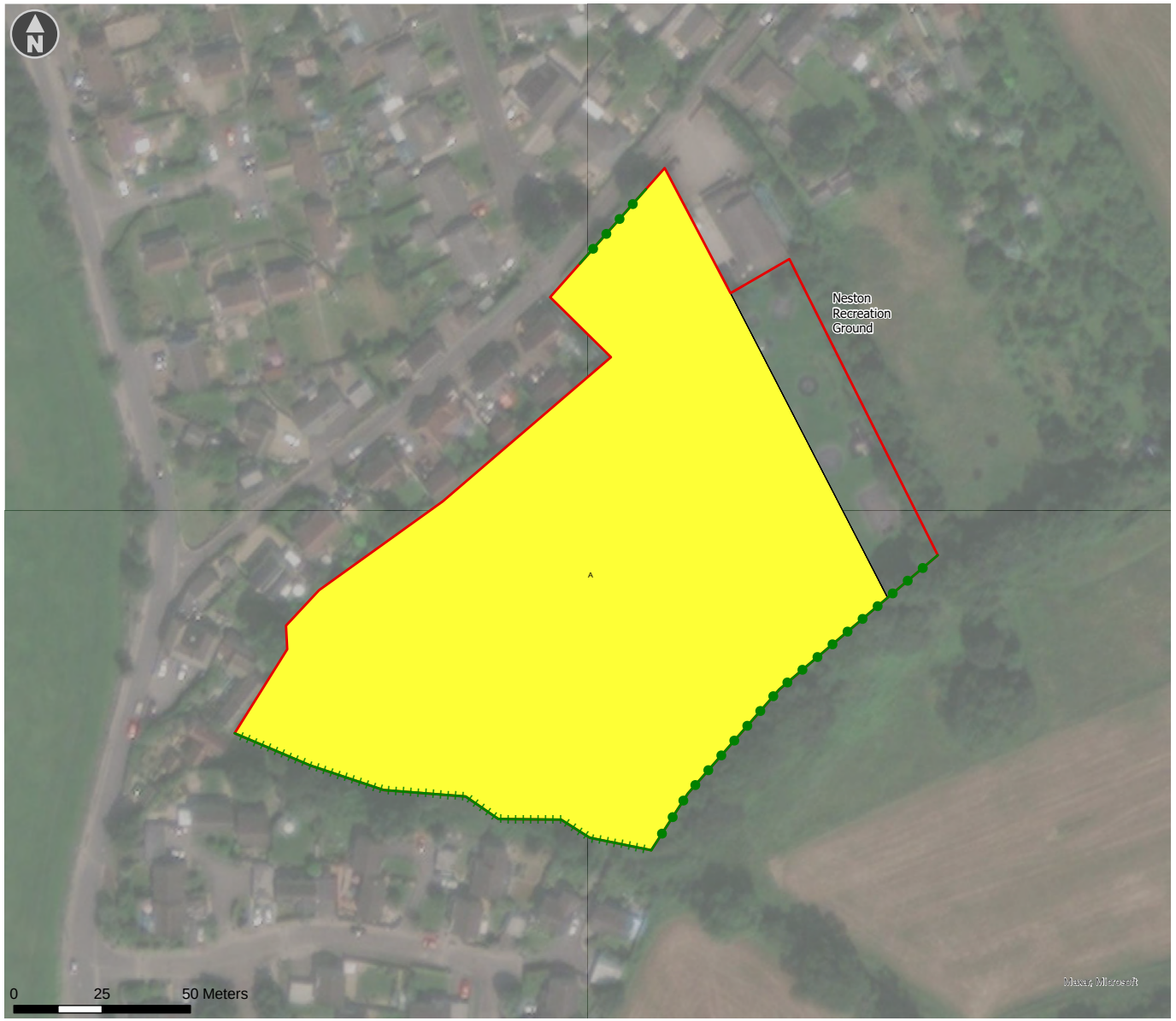
- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- J2.4 - Fence
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Meriton Recreation Ground

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-006		17/1/2023

Meriton Recreation Ground Strategy Plan

Neston Recreation Ground Habitats Plan



JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- J5 - Other habitat
- A3.1 - Broadleaved Parkland/scattered trees
- J2.3.2 - Hedge with trees - species-poor

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Neston Recreation Ground

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-013		26/1/2023

Neston Recreation Ground Strategy Plan

Neston Triangle Habitats Plan

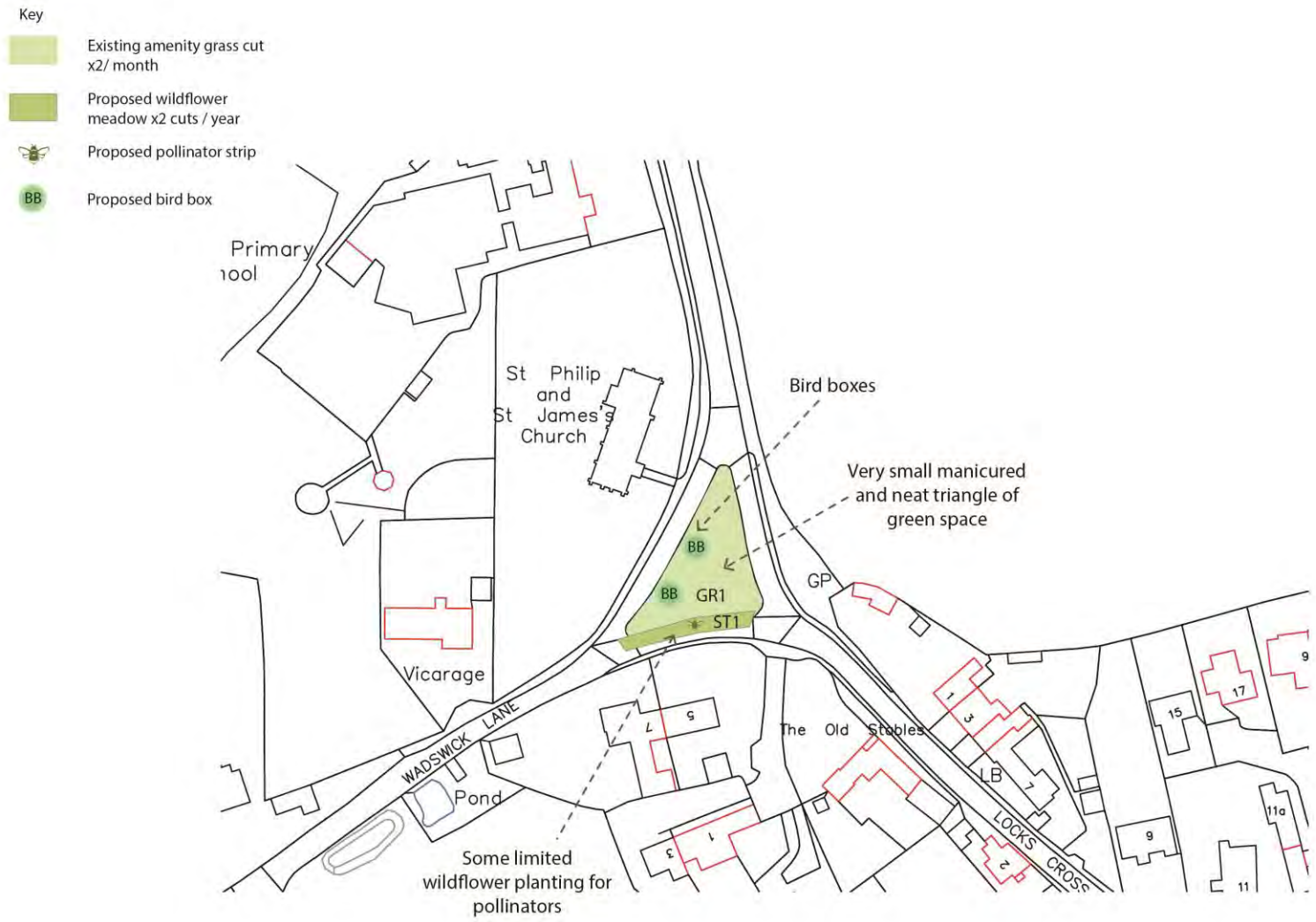
JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- A3.1 - Broadleaved tree

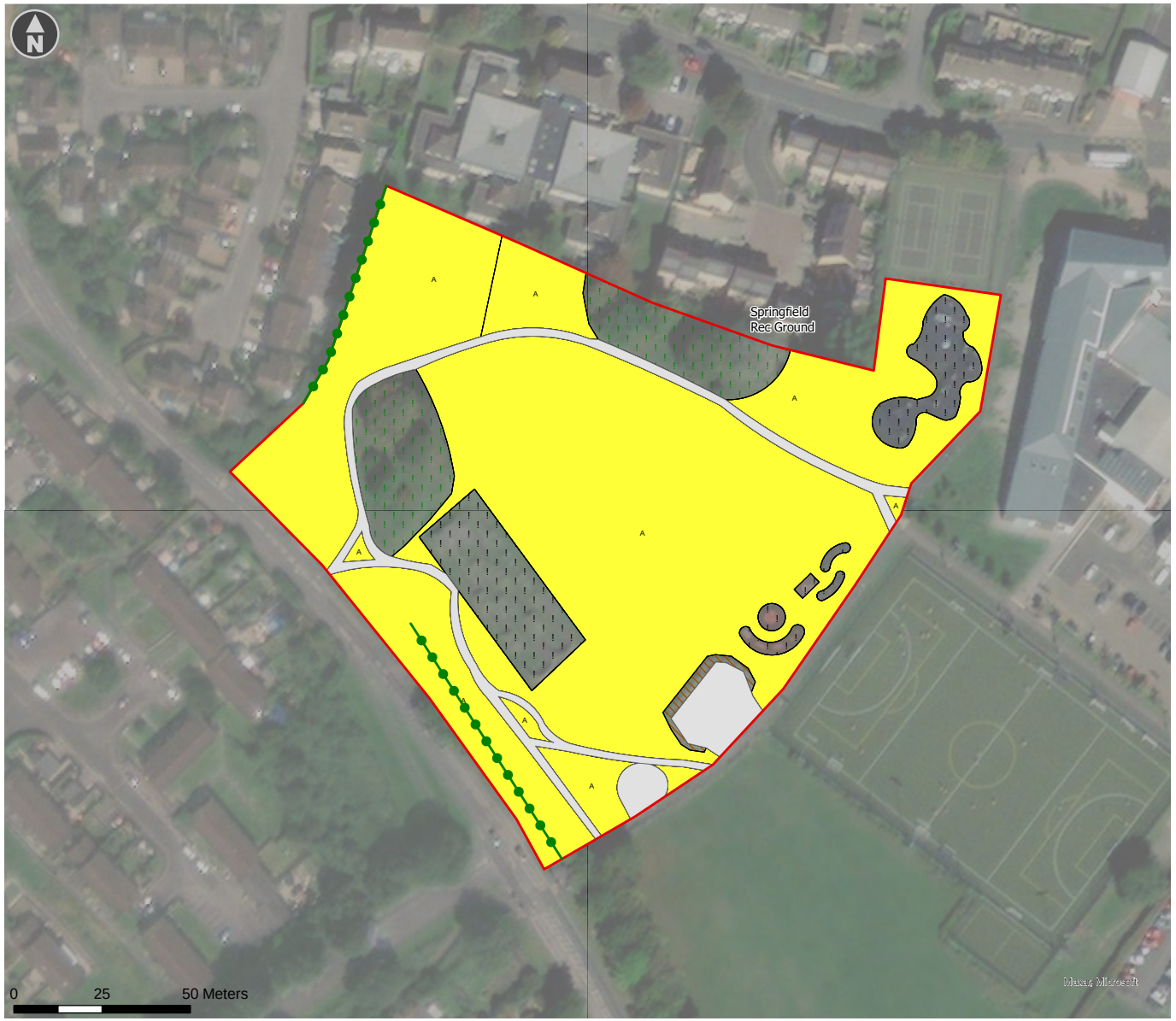
CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Neston Triangle

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-007		17/1/2023

Neston Triangle Strategy Plan



Springfield Recreation Ground Habitats Plan



JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A3.1 - Broadleaved Parkland/scattered trees
- C3.1 - Other tall herb and fern - ruderal
- J1.2 - Cultivated/disturbed land - amenity grassland
- J4 - Bare ground
- J5.1 - Hardstanding
- A3.1 - Broadleaved Parkland/scattered trees

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Springfield Recreation Ground

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-014		26/1/2023

Springfield Recreation Ground Strategy Plan

St Bartholomew's Churchyard Habitats Plan

JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A1.1.2 - Broadleaved woodland - plantation
- J1.2 - Cultivated/disturbed land - amenity grassland

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	St Bartholomew's Church

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-008		17/1/2023

St Bartholomew's Churchyard Strategy Plan

The Batters Habitats Plan

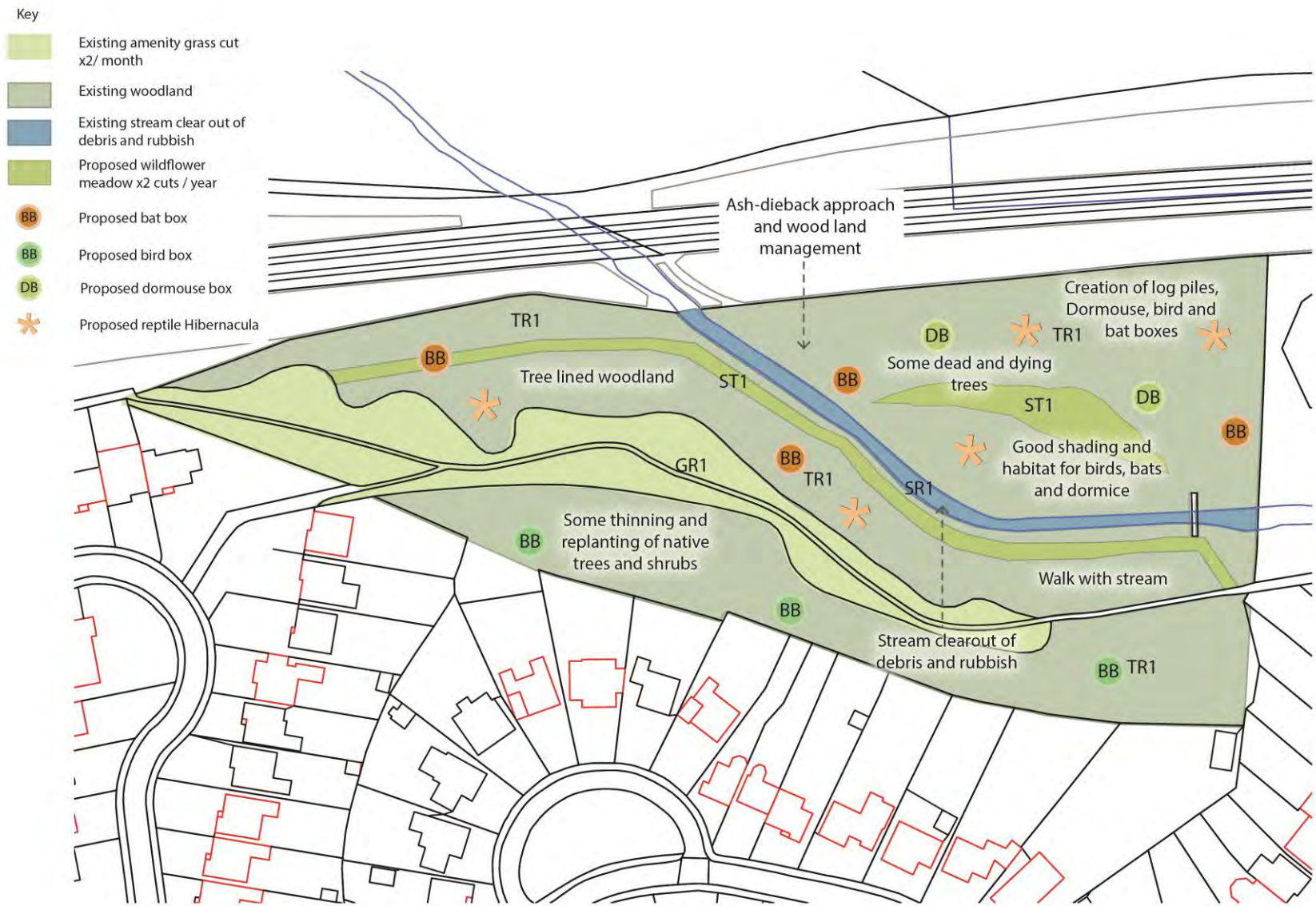
JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- A1.1.2 - Broadleaved woodland - plantation
- J5.1 - Hardstanding
- G2.1 - Running water - eutrophic

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	The Batters

SCALE @ A3	CREATED BY	CHECKED BY
1:1,000	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-009		17/1/2023

The Batters Strategy Plan



The Ridge Allotments Habitats Plan

JOHNS ASSOCIATES

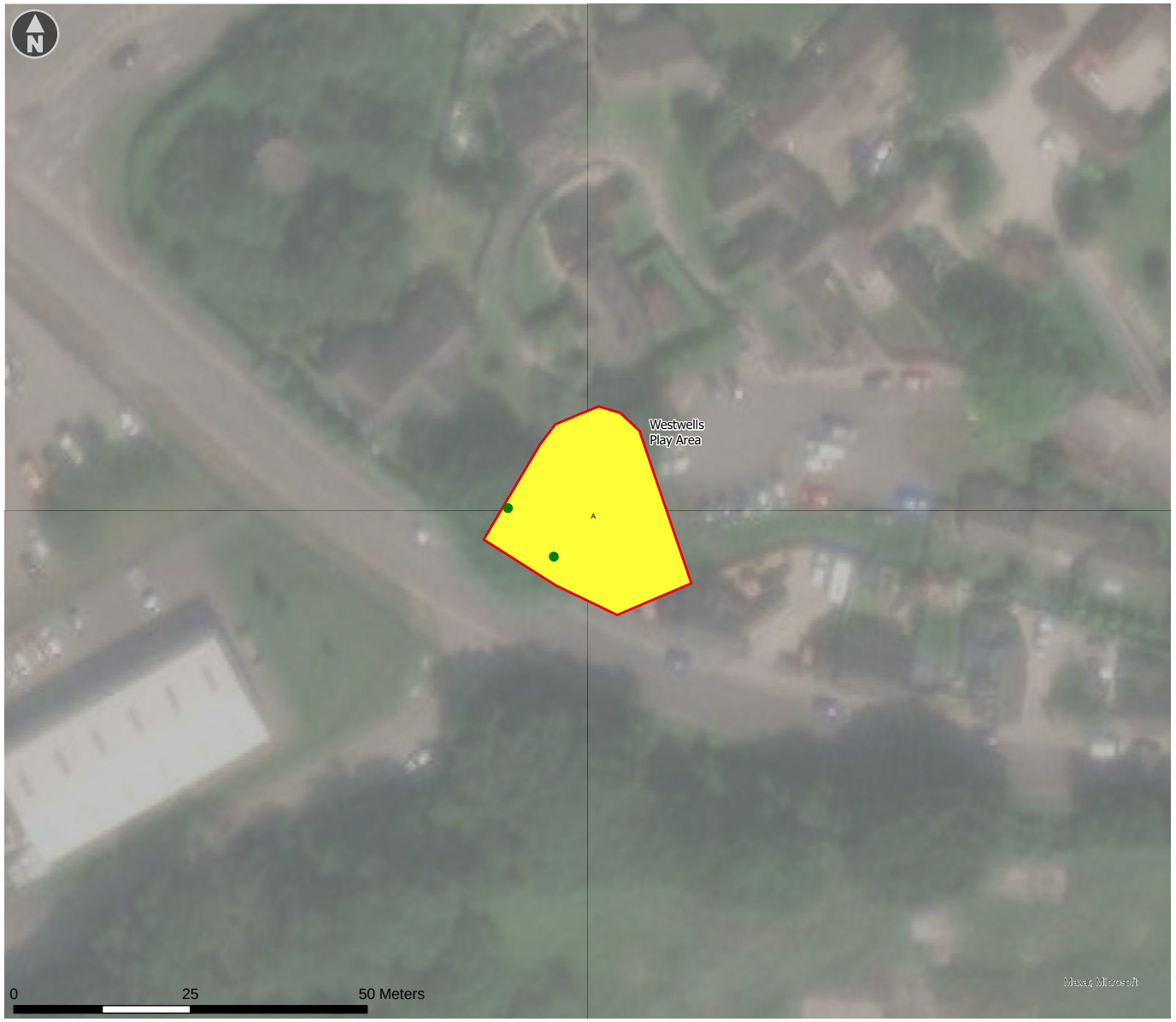
- Corsham Parish Boundary
- Site Boundary
- A J1.1 - Cultivated/disturbed land - arable
- A J1.2 - Cultivated/disturbed land - amenity grassland

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	The Ridge Allotments

SCALE @ A3	CREATED BY	CHECKED BY
1:800	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-015		26/1/2023

The Ridge Allotments Strategy Plan

Westwells Play Area Habitats Plan



JOHNS ASSOCIATES

- Corsham Parish Boundary
- Site Boundary
- J1.2 - Cultivated/disturbed land - amenity grassland
- A3.1 - Broadleaved tree

CLIENT	Corsham Town Council
PROJECT	Corsham Town Council Biodiversity Action Plan
TITLE	Westwells Play Area

SCALE @ A3	CREATED BY	CHECKED BY
1:500	CA	MS
REFERENCE	**ISSUE/REVISION**	**DATE**
J01006-016		17/1/2023

Westwells Play Area Strategy Plan

APPENDIX B REVIEW OF GROUNDS MAINTENANCE CONTRACT

Pesticide, Herbicide and Fertiliser

NB: No pesticides, herbicides, or fertilisers to be used in the ongoing management and maintenance of Sites unless otherwise approved by the (Suitably Qualified Ecologist (SQE) / Client Representative (CR).

Where the use of pesticide/herbicide is deemed necessary for the removal of injurious or invasive species they are only to be used with prior agreement of the SQE/CR. Any pesticides/herbicides to be applied by appropriately certified contractors. If herbicide controls are to be used then spot/targeted treatments are the preferred method.

Detailed records of any such applications must be kept in accordance with relevant legislation. These records shall be available for viewing during normal working/office hours by any person wishing to see them.

In situations where plants require nutrients to ensure survival of the plant then biological and sustainable methods are preferred such as use of peat-free compost or mycorrhizal fungi.

Weed Control

Weed control is to be kept to a minimum, and to be restricted to planting stations, trackways, hard standing areas, and those areas immediately adjacent unless otherwise specified. In all other areas, weed control is to be restricted to the control of injurious and invasive species and highly competitive weeds, unless otherwise instructed. When weeding, ensure that the methods used cause the minimum of damage to adjacent plants/vegetation, including trees and grass, as well as to animal species. Preferred method of removal of all encroaching scattered scrub/weeds is by mechanical/biological methods or hand pulling weeds as required.

Hand Weeding

Remove all weeds, including roots, by hand using hoes, trowels or forks, taking care to remove not more than a minimum quantity of soil, causing minimum disturbance to neighbouring plants and leaving the area in a neat, raked, clean condition.

Weed Cutting by Hand or Machine

Cut down completely and cleanly all undesirable grass, brambles, herbaceous growth, etc. to a maximum height of 75mm.

Weeding Around Tree and Plant Stems

Do not allow nylon filament rotary cutters or other mechanical tools closer than 100 mm to the stem of any tree or shrub to be retained. Complete operations close to stems using hand tools.

Herbicide Application

To be carried out only as a last resort to control invasive weed species and following approval of the SQE/CR. Application rate as per manufacturer's instructions.

If herbicide controls are to be used then spot/targeted treatments are the preferred method. Spray or spot-treat individual plants when the plant is in its active phase. Spot-treat new plants as they appear and re-treat in August/September as necessary. Application to be carried out as per manufacturers' recommendations. Apply herbicide in calm and dry weather conditions and at the appropriate time of the year, ensuring no rain is forecast for 2-3 days following treatment.

NB: General systemic weed killers will kill/ damage all plant matter that it touches. Care must be taken to cover any adjacent plant material with polythene or similar to protect it from spray drift.

Verge Maintenance

Verges can provide important habitat for insects and wildlife. To enhance the use of verges as grassland habitat reduce verge cuts to twice annually, or where possible once a year in September to help protect wildflowers. Cutting should be avoided during the main flowering season (early May-late August), except for where safety maybe compromised.

Perform a safety cut in spring (May-July). Mow areas of long grass that affect visibility of road users and pedestrians along visibility splays, towards approaches of junctions, tight bends, areas of high pedestrian traffic including school and pedestrian crossings, signage, street furniture, clear routes for pedestrian, cyclist and horse use.

A serviceability cut to be carried out in September on all verge areas, cutting verges by 1m width to reduce verge encroachment where necessary.

Additional cuts to be carried out where inspections identify growth as a potential hazard.

Wildflower Grassland

Most of the wildflower grassland areas will be managed as a summer-flowering grassland and typically mown twice annually when weather is dry, once in the early season in March and again once in late summer from mid July to August. These areas will be cut to c.50mm in the late summer cut and dried on Site, turning it to assist drying and dispersing seeds over 3-5 days before removing arisings from Site. A further cut in late autumn should be avoided if at all possible as it would be detrimental to butterflies.

Where possible, continuity of flowering plants could be provided by mowing a single area in two parts. For example a mid July cut may be the least damaging to butterflies, but by mowing half an area in June and the remainder later in July, a supply of nectar can be maintained. The principal of managing an area with slightly differing mowing regimes can be applied to benefit invertebrates where resources allow and may result in a richer mix of plant species.

Wildflower Grassland Margins

Top the grass in early March and then a later cut in dry weather from the end of August, when native flora has set seed. Cut again in late September to early October to lower soil fertility and increase chances of wildflower establishment.

The cutting of wildflower grassland areas within 300mm of tree trunks is to be undertaken by hand.

Mown grass paths and margins to gravel paths where shown are to be cut to a height of c.75mm with arisings removed to maintain a neat and tidy appearance.

Remove or hand pull non-native scrub and noxious weeds where necessary.

Any flushes of annual weeds should be controlled by mechanical topping.

Do not apply herbicide other than to spot treat problem weed species if required.

Do not apply fertiliser.

Remove all arisings from Site or deposit in specified location to compost for reptile/invertebrate habitat.

Overseed if required with local seed-mix or similar approved in spring (February-March) including a 1g per m2 of yellow rattle Rhinanthus minor to reduce the prevalence of dominant grasses and to facilitate the colonisation of a diverse herb community. The sowing rate is subject to agreement with the SQE; Seed dispersal to be by hand/pedestrian broadcaster.

Weed Control

Maintain a 500mm weed-free area around the base of plants by hand weeding and light hoeing until plants have fully established. Fork over as necessary to keep soil loose, with gentle cambers and no hollows.

Removal of aggressive weed species that have invaded and are suppressing intended species:

Use hand methods to remove roots of thistle, docks & other undesirable weeds. If a particular undesirable weed starts to dominate spot treat grass areas with an appropriate herbicide. Apply herbicide in calm weather conditions and at the appropriate time of the year.

Regular Grass Mown Areas

Regularly mown areas of grass are required for access and safety reasons including: access paths, furniture, signage and recreation spaces. Regular mowing to commence with one cut in late March, then twice a month every month until Mid October.

Hedge Management

General maintenance

Hedgerows to be managed to a height and depth appropriate to the setting (see area specific information) in the interests of visual mitigation and ecological enhancement.

- Inspect, adjust and remove any guards/shelters as needed and replace/re-set as required.
- Replace dead, dying or damaged trees as agreed with the SQLA/CR for the first 5 years.
- Replacement plants will be of the same species and specification as any failed plants.

Cutting

Pruning/trimming is to be carried out to the highest horticultural standards using secateurs, approved mechanical hedge cutters and hand saws. Trimming and shaping will be conducted according to species, variety, season, state of growth and visual effect.

For deciduous, informal hedgerows pruning/trimming to be undertaken once a year in January-February before bud break. For more formal aesthetic hedgerows cut again in late August to September. Evergreen and formal hedgerows e.g. yew and box to be trimmed late August to September before first frosts.

Hedgerows adjacent to roadsides, footpaths and highways drainage features may require more regular cutting for safety and functional purposes.

For any newly planted informal hedgerow, intervention during the first 5 years will be limited to targeted thinning/formative pruning. No box cutting to front edges. This will allow the shape and habit of the hedge species to develop. However, some localised lateral cutting may be required to prevent encroachment onto adjoining footpaths or other areas in the interim.

Any works to hedgerows will ideally take place outside the bird nesting season (March – Early September) and are best planned during the winter months. If works are to be undertaken for health and safety reasons then the area should be inspected for nesting birds by a suitably qualified Ecologist. If nesting birds are present then works within 5m radius will need to be delayed until the chicks have left the nest.

Pruning

An annual assessment of the need for selective/formative pruning to remove any dead branches will be made at the end of each growing season with work carried out in the following winter or spring depending on species and undertaken to promote healthy new growth. Inspections and assessment are to be carried out by a suitably qualified arborist.

Dead foliage and branches are to be removed by cutting back to an outward facing bud.

Suckers are to be removed by cutting back to their source on the affected plant.

Arisings

To be distributed evenly as a mulch following prior discussions with SQLA/CR. Care to be taken to check for hedgehogs/ reptiles/amphibians etc. before leaf removal.

Establishment of new/replacement planting

Replace defective planting at the earliest opportunity, with any defective planting replaced at the end of the first year (or before).

Fertiliser applications (if required) to planting pits to be approved by SQLA/CR prior to application.

Planting time and fertiliser application to be approved by SQLA/CR.

Weed Control

Individual planting stations (c.500mm dia.) or hedge lines to be kept weed-free for at least the first 3 years or until the canopy closes. Selective weed control to be undertaken beyond this period as required.

The development of a herbaceous layer other than pernicious weeds and/or weed species such ragwort, dock and thistles will be encouraged in the interests of biodiversity.

Risk Management

All work is to be undertaken by suitably qualified operatives who are appropriately trained and hold the relevant certificates of competence for the operations they carry out.

Watering

During the first twelve months of any replacement planting, plants are to be well watered and well firmed in, if subject to heave or wind rock.

Existing Trees and Woodlands

Regular inspection of existing trees and hedgerows (every year) for risk management. Prune/trim as required with consideration for bats and birds.

These points are to be observed when undertaking any work to existing trees/vegetation on Sites:

- Bird nesting season: no cutting or clearance work is to be carried out if it would impact on nesting birds;
- Identify any opportunities for creating additional deadwood/log pile habitats or retaining standing deadwood if possible. Deadwood could be retained in undisturbed areas to create hibernacula to enhance refugia for small mammals, reptiles and amphibians. See below for specific site opportunities.
- Management to be phased over time to maintain/create a varied age structure where possible.

Any cavities discovered within existing trees will require inspection by a SQE/CR prior to any works, for the potential to accommodate roosting bats. This will include potential roosting features such as lifted bark, cracks, tears, holes in the tree/bark/branches. Following this, and where approved by the ecologist, clear away rubbish, and rotten wood. Probe the cavity to find the extent of any decay, report to the SQE/CR and await instructions. Unless instructed, do not drain water-filled cavities, or remove wood from inside cavities.

Tree Felling/ Tree Works

Removal of individual decaying trees within existing wooded areas can open up the canopy letting light into the understorey to encourage new vegetation to establish. Any removed trees are to be section-felled and trunks cut to be left in wooded areas to create log piles, bug hotels and other potential habitat for existing wildlife.

All tree work to comply with BS3998:2010 Tree Work Recommendations.
All tree work should be undertaken by an ARB Approved Contractor. :

https://www.trees.org.uk/Accreditation/Become-an-ARB-Approved-Contractor

An ARB Approved Contractor has been assessed by the Arboricultural Association.

Further accreditations may be sought when selecting a contractor, such as BALI (British Association of Landscape Industries).

landscape directory - British Association of Landscape Industries (bali.org.uk)

Arisings

To be distributed evenly as a mulch in tree planting areas following prior discussions with SQLA/CR. Care to be taken to check for hedgehogs/reptiles/amphibians etc. before leaf removal.

Risk Management

Inspections and assessment are to be carried out by a suitably qualified arborist appointed by CR. All works to be undertaken by suitably qualified operatives who are appropriately trained and hold the relevant certificates of competence for the operations they carry out.

Remedial Works

The CR will prioritise works arising from the tree inspection and recommendations of the tree survey. Specialist tree work will be carried out by an approved tree surgeon/contractor.

Ash Dieback

With the current prevalence of ash dieback across the UK and within the local area it is important to minimize its impact by slowing the spread of the disease.

Notices to be erected where there is a presence of ash dieback to spread public awareness to clean shoes, wheels etc. before leaving or entering sites to reduce spread of contamination.

Remove leaf litter and debris from infected trees from site and dispose of through correct methods that avoid further contamination.

With the exception of public safety felling of living ash trees should be avoided as there is good evidence a small proportion of the trees will tolerate ash dieback, and some will recover to good health.

Under circumstances where ash trees are to be replaced, trees of a close relative should be chosen. Good alternatives include the disease resistant elms (e.g. 'Wingham' and 'Resista' varieties), aspen and sycamore.

Specimen trees and tree groupings

Pruning

An annual assessment of the need for selective pruning to remove any dead branches will be made at the end of each growing season, with work carried out in the following winter or spring depending on species.

Pruning will be limited to the minimum necessary to maintain good form, vigor and to remove dead wood or diseased and dying branches. Pruning is to be carried out to the highest horticultural standards using mechanical equipment, secateurs, loppers and hand saws.

Dead foliage and branches are to be removed by cutting back to an outward facing bud. Suckers are to be removed by cutting back to their source on the affected plant.

Crown pruning and lifting

Where required and agreed, the Contractor shall remove dead branches and reduce selected side branches by one-third, in each case cutting back to live wood to preserve a well-balanced head. All cuts over 75mm diameter and bruises and scars on the bark, the injured cambium shall be traced back to living tissue and removed. Wounds shall be smoothed so as not to retain water and the treated area shall be coated with an approved compound in accordance with BS 3998.

New tree planting

The Contractor shall ensure throughout the management plan period that the following operations are undertaken:

Firming in of all trees and stakes following frost or strong winds.

Where necessary replacement of all broken ties and correctly positioning/tensioning of other ties.

Where necessary replacement of broken stakes and straightening of any other stakes.

Where necessary removal of ties and stakes to established trees.

Weeding

Maintain a 500mm weed-free area around the base of trees using hand weeding or light hoeing methods. Any mulched areas (if included) are to be topped up on an annual basis as required. This will obviate the need for mowing machinery to be used around the base of the trees and thus protect them from mower damage.

Risk management

Inspections and assessment are to be carried out by a suitably qualified arborist appointed by the CR. All works to be undertaken by suitably qualified operatives who are appropriately trained and hold the relevant certificates of competence for the operations they carry out.

Pond

Ponds proposed will have potential to provide additional ecological value. The management objectives are:

- To create a 'Good' condition pond;
- To create a Section 41 Priority Habitat;
- To develop habitat to potentially support a range of species, including;

  - Aquatic and terrestrial invertebrates;

  - Native aquatic plants;

  - Amphibians; and

  - Birds.

This is to be achieved through the following measures:

Establish low growing wetland grass, emergent and marginal wetland herbs and rushes, submerged and floating vegetation which shows good growth structure and form and maintains a varied structure and composition of plant communities;

Maintain a variety of water depths and opportunities;

Minimise pollution exposure;

Employ hand techniques to avoid the use of chemicals in close proximity to the watercourse;

Promote the growth of plants to ensure the banks of the watercourse remain stable to help prevent erosion and siltation; and

Selective thinning/ removal of marginal and aquatic vegetation to maintain areas of open water.

Weed growth should be cut back regularly in the first year to encourage the establishment of good perennial ground cover.

Keep approx. 25% of open water available. Remove any excess duckweed/ blanket weed from the pond in spring, scooping up by running a net across the surface or using a cane or stick.

Monitor water levels regularly and advise SQE/CR if water levels are low.

Remove any excess aquatic or marginal plants in the winter (November to January inclusive). If marginals become too big in the summer, these can be cut back as required. Where possible rinse the removed plants and put the rinse water back into the pond. This will allow wildlife that may have been living within the removed plants back into the pond.

Any vegetation to be left on the side of the host feature for 48 hours before removal to designated compost area.

When removing vegetation, do not focus on one plant community but evenly remove throughout. Ensure not just one habitat or one entire species within the pond is removed at any given time.

Remove leaf litter to prevent the build up of organic matter. Remove non-native or other unwanted plants, these are to be disposed of (recycled/composted) off-Site.

Monitor the pond for non-native and invasive species and implement an eradication programme if identified.

Hard Surface Areas

Sweep hard surfaces to keep free of litter, leaves, mud, silt, and other debris.

Remove all arisings.

Any defects to hard landscapes, surfacing etc. to be reported to SQLA/CR.

Weed Control

Keep hard surfaces free from weeds. Herbicides to be used only as a last resort and with SQLA/CR's approval only, and alternative methods to be employed in the first instance, such as mechanical weeding, foam weeding or flame weeding.

Where herbicide application is required apply a suitable foliar acting or residual herbicide. Allow recommended period before clearing arisings. To be applied as per manufacturer's instructions.

Remove all arisings from Site or as otherwise agreed.

Leaf removal

Collect excess accumulations of drifted leaves. Removal of leaves to be by the most efficient means. Care to be taken to check for hedgehogs etc. and around existing planting.

Arisings are to be distributed evenly as a mulch if required. Any excess to be removed from Site or placed in designated compost areas.

Bat Boxes

Bat boxes should not require any maintenance. Should repair or tree works be required, pre-works checks will be undertaken by the SQE to avoid disturbing or harming roosting bats.

Bird boxes

If any birdboxes are present, check if empty after September, making sure that the nest is no longer in use. Some birds can continue nesting into September so take care to check boxes are not being used. To be emptied, cleaned with boiling water and no chemicals, then thoroughly dried. Once thoroughly dried, add handful of wood shavings or clean hay (not straw). If being used by bats birdboxes must not be disturbed.

Hibernacula and Refugia

Grass and brash arisings from management of Sites will be located in suitable habitat areas specified by a SQE.

Table One Job reference

Job Reference	*Job Description*	*Height of Cut*	*Maximum Height*
BB	Clean out Bat and bird boxes	N/A	N/A
GR1	Mow (30/75) general amenity areas/playing fields	30mm	75mm
GR2	Footpaths	50mm	N/A
GR3	Rough cut wildlife conservation areas	50mm	N/A
HE1	Cut Hedgerows	N/A	N/A
SR/WP	Watercourse clear out	N/A	N/A
ST1	Strim	50mm	N/A
ST2	Strim/mow paths	40mm	N/A
TR1	Reduce tree canopy	N/A	N/A

Refer to Programme of Maintenance table below for locations and timings of maintenance works.

Corsham Town Council - Ground Maintenance Contract 2023 - Programme of Maintenance

SITES	JAN LITTER	JAN TREES (TR1)	FEB LITTER	FEB HEDGE (HE1)	MAR MOW (GR1/2)	MAR MOW (GR3)	MAR STRIM (ST2)	MAR STRIM (ST1)	MAR HEDGE (HE1)	MAR FOOT PATHS	APR MOW (GR1/2)	APR MOW (GR3)	APR STRIM (ST2)	APR STRIM (ST1)	APR HEDGE (HE1)	APR FOOT PATHS	MAY MOW (GR1/2)	MAY MOW (GR3)	MAY STRIM (ST2)	MAY STRIM (ST1)	MAY HEDGE (HE1)	MAY FOOT PATHS	JUN MOW (GR1/2)	JUN MOW (GR3)	JUN STRIM (ST2)	JUN STRIM (ST1)	JUN HEDGE (HE1)	JUN FOOT PATHS	JUL MOW (GR1/2)	JUL MOW (GR3)	JUL STRIM (ST2)	JUL STRIM (ST1)	JUL HEDGE (HE1)	JUL FOOT PATHS	AUG MOW (GR1/2)	AUG STRIM (ST2)	AUG STRIM (ST1)	AUG HEDGE (HE1)	AUG FOOT PATHS	SEPT MOW (GR1/2)	SEPT MOW (GR3)	SEPT STRIM (ST2)	SEPT STRIM (ST1)	SEPT HEDGE (HE1)	SEPT FOOT PATHS	OCT MOW (GR1/2)	OCT MOW (GR3)	OCT STRIM (ST2)	OCT STRIM (ST1)	OCT HEDGE (HE1)	OCT FOOT PATHS	NOV MOW (GR1/2)	NOV STRIM (ST1)	NOV HEDGE (HE1)	NOV FOOT PATHS	NOV BOXES (BB)	NOV POND/STREAM (SR1/WP)	DEC MOW (GR1/2)	DEC STRIM (ST1)	DEC HEDGE (HE1)	DEC FOOT PATHS
CEMETERIES & CHURCHYARDS																																																													
LACOCK LANE CEMETERY				1	1			1			2						2						2						2						2		1	1		2						2										1					
LADBROOK ROAD AND CHAPEL CEMETERY				1	1			1			2						2						2						2						2		1			2						2										1					
ST BARTHOLOMEWS		1			1			1			2						2						2						2						2		1			2						2										1					
FOOTPATHS																																																												
BLACK PATH NORTH					1			1			1						1						1						1						1		1			1						1															
BLACK PATH SOUTH								1																													1																								
BLACK PATH CENTRE								1																													1																								
CEMETERY TO LACOCK ROAD								1																													1																								
TIMBERLEAZE PATH GASTARD								1																													1																								
GARDEN OF REMEMBRANCE					1			1			2						2						2						2						2			1		2			1			2										1					
BEECHFIELD PATHS					1			1			1						1						1						1						1		1	1		1						1															
BEECHFIELD HEDGES				1																																																								
BEECHFIELD MEADOW						1(c)	1	1											1											1(a)							1				1(b)	1																			
BEECHFIELD BUTTERFLY GLADE																																					1																								
BEECHFIELD WOODLAND		1																																																						1					
BEECHFIELD WILDLIFE POND																																																									1				
PLAY AREAS																																																												
SPRINGFIELD					1	1	1	1			2						2		1				2						2						2		1			2		1				2	1									1	1				
MERITON REC					1	1					2						2						2						2	1					2					2						2										1	1				
WESTWELL REC					1						2						2						2						2						2			1		2						2										1					
NESTON REC				1	1	1		1			2						2						2						2	1					2		1			2						2										1	1				
COPPERSHELL REC				1	1			1			2						2						2						2						2		1			2						2										1	1				
DICKETTS ROAD				1	1			1			2						2						2						2						2		1			2						2										1					
KATHERINE PARK PLAY AREA					1						2						2						2						2	1					2					2						2										1	1				
ALLOTMENTS																																																												
CROSS KEYS				1	1						2						2						2						2						2					2						2										1					
GARDEN OF REMEMBRANCE					1			1			2						2						2						2						2		1	1		2						2										1					
GROVE FIELD					1						2						2						2						2						2			1		2						2										1					
MIDDLE WICK LANE				1	1						2						2						2						2						2					2						2										1					
THE RIDGE					1		1				2						2		1				2						2						2			1		2		1				2										1					
OTHER AMENITY AREAS																																																												
THE BATTERS		1			1			1			2						2						2						2						2		1			2						2										1	1				
NESTON TRIANGLE					1			1			2						2						2						2						2		1			2						2										1					
KATHERINE PARK THE GREEN					1			1			2						2						2						2						2		1			2						2										1					
VERGES																																																												
BIDDESTONE ROAD					1						1						1						1						1						1					1						1															
BRADFORD ROAD					1						1						1						1						1						1					1						1															
LACOCK ROAD					1						1						1						1						1						1					1						1															
PROSPECT					1						1						1						1						1	1					1					1						1															
LITTER																																																												
SPRINGFIELD	4		4		4						4						4						4						5						4					4						4						5						4			
MERITON	4		4		4						4						4						4						5						4					4						4						5						4			

APPENDIX C
ADVICE NOTES

Footpaths

Use of herbicide should be avoided and removal of any adjacent vegetation, where necessary, to be completed by hand. Habitat edges tend to be the most diverse so damaging operations should be avoided. Where vegetation adjacent to paths requires maintenance, scalloping the edges of glades and undergrowth creates more habitat diversity rather than trimming in straight lines.

Highway verges

Roadside verges can form valuable ecological corridors which can connect natural habitats to create bee highways, habitat and food for wildlife as well as seasonal interest.

Wildflowers need to complete their full lifecycle through to setting seed, providing flowers for pollinators and seeds for the seedbank and wildlife.

Grass mowing can be reduced to two cuts a year, allowing the wild flowers and grasses to mature and set seed. This provides increased seed for foragers in addition to the seed bank.

By dividing a verge into two or more areas, mown at different times, more diversity of habitat can be provided for invertebrates. The two areas may also develop differing wildflowers and grasses as a result of the different mowing times.

Arisings should be removed from site to maintain low nutrient soil.

Small amenity sites

Allowing grasses to grow to seed where possible creates seasonal interest as grass seed heads and wildflowers can grow to their full height and add texture and movement to a public space. Visitors may enjoy the space more, and become more engaged in their natural environment.

Seedheads can not only look good but also provide valuable winter food and attract many more birds such as goldfinch to the site. Hummocky grasses create overwintering space for invertebrates such as moths, which in turn provide food for birds and bats.

Even small sites may offer opportunities for nest boxes, log piles and bug boxes to be installed.

Hedgerows: Hedgerow strengthening

Hedgerows provide shelter, food and nesting sites for birds, mammals and invertebrates. They provide flowers for pollinators, fruit, nuts and insects as food for wildlife. Hedgerows are also important wildlife corridors and provide protection to a wide range of species.

Taller and thicker hedgerows provide better value for wildlife. Cutting hedges every two years, instead of annually, results in increased food availability for wildlife and encourages more pollinators. Any gaps can be filled with native species, providing an opportunity to increase the diversity of hedge planting. Taller and wider hedges provide more shelter and nesting sites. The reduction of disturbance by reducing the frequency of maintenance activities is also an advantage to wildlife.

Slower growing species such as hawthorn hedges may be cut every three years.

Trees: Woodland edge/glade management

Glades provide the best biodiverse habitat when they are sunny and provide a diverse mix of species at the woodland edge, which adds variety to the main woodland tree species. They should be wide enough for the south facing woodland edge to be sunny, and contain a mix of species providing a variety of structure, ideally with trees of different ages. A mix of both coppiced and single stemmed trees, scrubby vegetation and other microhabitats such as leaf litter can all increase the diversity of the habitat. Creating uneven edges will create more diversity than straight margins.

Glades and rides are good feeding corridors for some species of bat and dragonfly, and protected sunny spots on the edge of scrub are valuable to reptiles.

When maintenance is necessary the cuttings can be used to create 'dead hedges' around glade edges. These provide more shelter for invertebrates and small vertebrates. Scrubby growth should be cut by a third every three years to maintain sufficient cover whilst preventing species like brambles from taking over. Long grass can also be maintained on a three year cycle, creating a carpet of vegetation suitable for reptiles and insects such as the carder bee which like to nest in the vegetation (unlike bumble bees that burrow into the soil). One reason carder bees are often scarce is that grasslands are cut too often.

Cutting machinery can compact vegetation and soils in marginal areas and may crush wildlife, so the use of a strimmer is best for sensitive sites. The aim is to create diversity of habitat to encourage the widest possible range of wildlife from burrowing animals, to amphibians, reptiles and anthills which may not usually be seen as beneficial.

Woodland management

Coppicing can help to create a mosaic of habitats particularly when done in rotation eg every three years. Hazel can be coppiced by cutting growth back to close to ground level with an angled cut. This allows sunlight to flood the ground and allows other species to naturally regenerate. Dormant seeds stored in the seedbank from plants such as primroses, bugle and violet are then able to grow.

Thinning may be necessary if more space is needed for some trees to grow. Usually, a few trees are thinned at once and further thinning may take place every five or ten years.

If ash dieback is evident, trees need to be made safe as they can become structurally fragile. When tree maintenance is required, resulting dead wood can be left to decompose or used to create a hibernaculum, beetle pyramid or log piles to create a range of microclimates.

Existing pond management

Optimal plant cover in summer is 60-85%.

Pond plants can often grow quickly and any which become dominant and overgrown can be gently removed in autumn and left to rest on the pond edge to allow invertebrates to return to the pond before plant material is composted. Should algae overgrowth (over 5% of the pond area) be problematic due to excess nutrients then barley straw in netted bags can be used to remove the unwanted nutrients.

Tree cover may be problematic if over 50% of the edge is overshadowed or over 20% of the southern side.

Most pond species occur in the shallower water and emergent plants are especially valuable for dragonflies. Smaller vertebrates such as newts and frogs can be encouraged by providing a hibernaculum nearby. Protection for beetles and other invertebrates could be created with log piles and bug hotels in the area.

Existing stream management

Streams form important wildlife corridors of high biodiversity. To maximise wildlife value, invasive species that have become dominant and threaten to narrow the stream should be carefully controlled. As a guide 1/3 of the channel should be kept open in spring-summer and 1/2 in the autumn-winter. Submerged weed may be controlled by removal in summer and bank vegetation in September to avoid erosion caused by later maintenance. Any arisings from cutting should be removed.

Streams are important habitats for kingfishers and providing suitable perches would be beneficial.

Revitalise wildlife areas

Opportunities to improve existing wildlife areas may include the provision of new structures such as hibernacula, log piles, bird boxes and increasing the existing variety of planting, or maintenance, to maximise the contrast within habitats. A variety of texture in planting, height and edge treatments will all help add value to the natural habitat and enhance the diversity of wildlife supported.

There may also be an opportunity to engage the public by use of signage to inform of any changes to maintenance regime and the resulting benefits to wildlife, biodiversity and climate. Takeaway facts and ideas for visitors to try at home could improve their engagement with the natural world and spread the benefits to wildlife far beyond the site itself.

Drought Resistant Planting

The Town Council organises hanging baskets in the town during the summer. These can be demanding of resources, especially in hot weather. Possible improvements might include:

Biochar/ Soil ameliorants: Soil water retention may be increased by the use of Biochar (which may also improve nutrient retention). Biochar should be obtained from a local source if possible. Other suitable products include biodegradable water retaining granules. Hydrogels which are not biodegradable could risk long term environmental pollution.

Improved planters: Larger planters may be more efficient at collecting/ storing rain and irrigation water. It may be more efficient to increase the size of planters whilst decreasing the number, and prioritising certain sites. Integration of a reservoir within the planters could also reduce maintenance requirements.

Irrigation: More sophisticated irrigation systems which remotely monitor soil moisture could be incorporated. The possibility of harvesting rainwater could be considered where possible. Reduced irrigation requirements may also be achievable by using more drought tolerant species - see below.

Biodiversity and sustainability are also considerations, not only when choosing plants for schemes, but in the use of all products. Peat free products should be used, ideally locally sourced, rather than using imported products such as coir. Plants purchased should not have been sprayed with insecticide by suppliers. The lifecycle of all products used should be considered, including their afteruse.

Alternative schemes:

Edible planting such as trailing nasturtiums/ tomatoes could be incorporated in a scheme, or drought tolerant herbs such as thyme and rosemary. Emphasising the edible might encourage more people to grow their own and provide fresh herbs to passers by. An edible theme may also encourage more interest and interaction from the public, as the value of planting would go beyond the visual and engage people more deeply through the senses.

Alternative Blooms: Perhaps instead of living plants, local artists could create works along the theme of blooming flowers and pollinators. Some alternative or artistic designs for bug houses could be incorporated. A 'Sustainable Trail' could be created with maps available at Tourist Information for tourists and locals to explore. Local businesses may become involved and the trail could include participating shop windows etc.

A garden of blooms: Instead of hanging baskets, a new garden could be created in an existing park for example a Winter Garden for winter colour or to provide food for winter pollinators, or a garden with stimulating ideas for residents and visitors to inspire creation of sustainable gardens at home.

Drought resistant plants:

Grasses:

Stipa tenuissima - provides structure and year round interest

Calamagrostis x acutiflora ‘Karl Foerster’ – tall, upright and useful as a screening plant creating a low maintenance alternative to a hedge.
Pennisetum alopecuroides or fountain grass - decorative ornamental grass producing beautiful pink-tinged flowerheads like little squirrels’ tails.

Shrubs/ Groundcover:

Abelia - masses of tubular flowers in pink white or cerise

Aubretia - drought tolerant once established , evergreen mat with purple blooms, good in rockeries and over walls

Ceanothus - evergreen, good for height in border, attractive to pollinators

Erigeron - for dry soils, walls and rockeries, long flowering with white and pink flowers

Geranium - drought tolerant, good foodplant for bees

Lavandula - Scented and great for pollinators

Lithidora - Evergreen for front of bed or rock garden eg L. diffusa 'Heavenly Blue' with vivid blue flowers

Wild Marjoram - drought tolerant, excellent foodplant for bees including priority species

Nepeta - attractive to bees especially short-tongued Bumblebees and honeybees

Rock rose - colourful evergreen

Rosemary 'Corsican' - will tumble over walls/ from containers in a sunny spot

Russian sage - attractive feathery blue flower attractive to pollinators

Salvia - nectar rich flowers for months

Sedum - tolerate full sun, flowers attract many bees

Sparteum junceum - fragrant yellow flowers

Stachys - eg S. byzantia forms a dense mat of ground cover with pink/ purple flowers in summer

Thyme - matt forming, containers or rock gardens

Verbena - eg V. bonariensis is attractive to pollinators and provides height with transparency

APPENDIX D
PRIORITIES OF ENHANCEMENT TASKS

Table 5: Relative Priorities of Enhancements

Improvements	**Relative value high/low**	**Impact small/ large**	**Relative Priority**
Planting of trees	High	Large	High
Creation of ponds	High	Large	High
Creation of community orchard	High	Large	High
Planting of shrubs and hedges, enhancement of wildlife corridors	High	Large	High
Install reptile hibernacula	High	Large	High
Install bug hotel	High	Large	High
Install dormouse boxes	High	Large	High
Existing pond/ stream management	High	Large	High
Install bat boxes	High	Large	High
Hazel coppicing	High	Large	High
Install bird boxes	High	Large	High
Creation of drought resistant rockery	High	Large	High
Creation of wildflower strips/ wildflower sowing	Medium	Medium	Medium
Creation of butterfly glade/ butterfly planting	Medium	Medium	Medium
Woodland edge/ glade management	Medium	Medium	Medium
Woodland management	Medium	Medium	Medium
Plant pollinator strip	Medium	Medium	Medium
Revitalise wildlife/ rewilding areas	Medium	Medium	Medium
Plant poppy wildflower mix	Medium	Low	Low

Document Prepared for Corsham Town Council by Johns Associates Ltd. © June 2023.

Johns Associates Ltd

Green Tree House,

11 St Margaret's Street,

Bradford on Avon,

Wiltshire, BA15 1DA

T: 01225 723652

W: johnsassociates.co.uk