

# Draft Whitchurch Village Neighbourhood Plan

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Initial HRA Screening

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# Draft Whitchurch Village Neighbourhood Plan: HRA Screening

## Background

Under Regulations 102-105 of the Conservation of Habitats and Species Regulations 2010 (the Habitat Regulations) all strategic and local development plans must be assessed for their impacts upon a network of European wildlife sites (Special Areas of Conservation (SAC) and Special Protection Areas (SACs)). These regulations transpose the requirements the EC Habitats Directives into to UK law and are designed to protect the integrity of these European Sites. They require the assessment of impacts and avoidance of harm to the Conservation Objectives of European sites. The process is generally referred to as a Habitats Regulation Assessment (HRA).

HRA is an iterative, multi-staged process, which should be applied at points throughout the plan making process. It should be used to help shape, form, and refine Development Plans so that adopted policies and site allocations do not result in adverse impacts to the integrity of European sites.

The first stage of the process involves an assessment or screening of whether a plan is likely to have a significant effect on one or more European sites either alone or in combination. A precautionary approach should be used when assessing likely significant effect, and all opportunities should be taken to avoid or mitigate impacts, to prevent any likelihood of a significant effect. Where the likelihood of a significant effect cannot be excluded the process moves to the stage where an Appropriate Assessment is undertaken. This represents a more detailed investigation and assessment of possible impacts. Except in exceptional circumstances, where there are no alternative solutions and where there are imperative reasons of overriding public interest, Development Plans should only be adopted if the Appropriate Assessment ascertains that the plan will not adversely affect the integrity of any European Site.

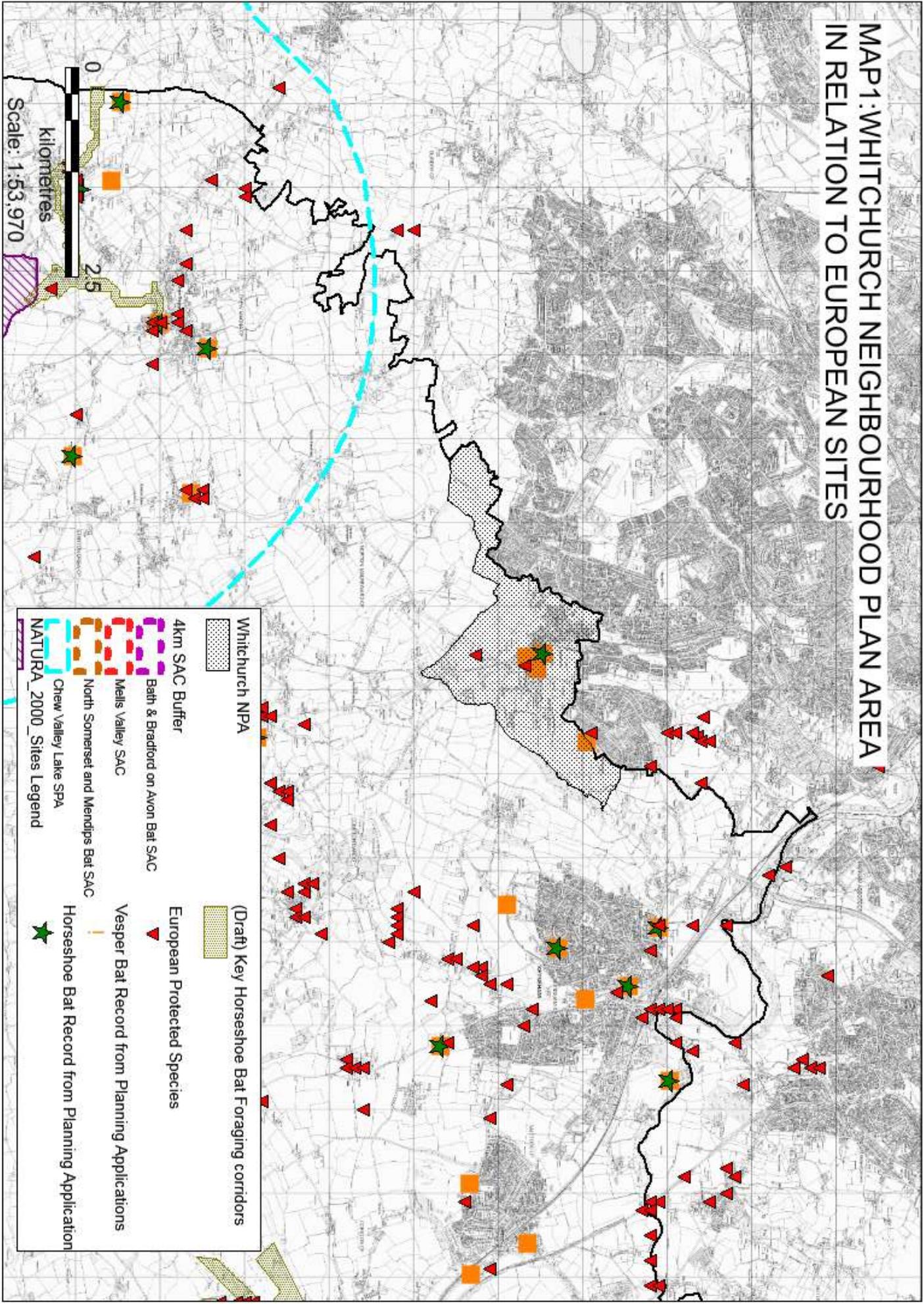
## Context

The Whitchurch Village Neighbourhood Plan (WVNP) covers the civil Parish of Whitchurch and this document sets out the approach and findings to an initial HRA Screening of the draft plan dated May 9th 2016. Map 1 shows the location of the parish in the context of the European sites that could feasibly be affected, and shows 4km buffer areas around them. The sites considered are Chew Valley Special Protection Area (SPA); the North Somerset and Mendip Bat Special Area of Conservation (SAC) and the Bath & Bradford on Avon Bat SAC.

The buffer areas shown on Map 1 identify those areas generally considered to be of most importance to the integrity of each individual site. These buffers can be used as initial alert areas for judging the likelihood of plans or projects having a significant effect on a European site. They indicate the areas considered most sensitive to land use change in terms of possible impacts to European sites.

The WVNP area is located roughly 1.3 km from the 4km buffer of the Chew Valley SPA. It is 8km from the 4km buffer of the North Somerset and Mendip Bat SAC, and about 9.2km from the Bath & Bradford on Avon Bat SAC 4km buffer. It is not therefore within a known high risk area. There are however a number of records for both Lesser and Greater Horseshoes bats for the parish. These species are associated with both Bat SACs.

# MAP 1: WHITCHURCH NEIGHBOURHOOD PLAN AREA IN RELATION TO EUROPEAN SITES



	Whitchurch NPA		(Draft) Key Horseshoe Bat Foraging corridors
	4km SAC Buffer		European Protected Species
	Bath & Bradford on Avon Bat SAC		Vesper Bat Record from Planning Applications
	Meis Valley SAC		Horseshoe Bat Record from Planning Application
	North Somerset and Mendips Bat SAC		
	Chew Valley Lake SPA		
	NATURA 2000 Sites Legend		

# European Site Details

## **Chew Valley Lake –**

Chew Valley Lake was created as a drinking water reservoir by damming the River Chew and flooding farmland. It is a large, shallow reservoir with peripheral areas of reedbeds, carr woodland and neutral grassland. Construction of the lake was completed in 1956 and it has become one of the most important inland waters for birds in Britain.

This site qualifies as a Special Protection Area (SPA) under Article 4.2 of the Birds Directive (79/409/EEC) by supporting internationally important populations of the Shoveler duck *Anas clypeata*, an over-wintering migratory species. The site has been recorded as supporting up to 1.3% of the wintering Northwestern/Central Europe population (5 year peak mean 1991/2 - 1995/6)

Shovelers are surface feeders with huge spatulate bills. They frequent shallow freshwater marshes, lakes, and ponds during the breeding season, and estuaries, mudflats, lakes, and lagoons during the winter. They are vulnerable to water level change, water quality issues, and habitat disturbance.

Shovelers are resident across most of Britain although those in the north migrate south to avoid harsh northern winters. The largest UK populations are found in East Anglia and central England. The birds range across most of southern and central Europe, Finland and Russia including Siberia, and are also found in central and western parts of the USA and Canada. Most of the birds that breed in northern latitudes migrate south during the winter.

Shoveler Duck receives general protection under the Wildlife and Countryside Act (as amended) in the UK, and is included in the Birds of Conservation Concern Amber List (medium conservation concern).

The following types of impact will need to be considered for this site:

- Damage to habitat through reduction of water levels
- Damage to habitat through changes to water quality
- Disturbance to birds
- Disruption/ fragmentation of flight lines

## **North Somerset & Mendips Bat Special Area of Conservation-**

Greater Horseshoe Bats *Rhinolophus ferrumequinum* and Lesser Horseshoe Bats *Rhinolophus hipposideros* are the primary reasons for the designation of this SAC. The limestone caves of the Mendips provide a range of important hibernation sites for both species.

### **Greater Horseshoe Bats –**

The Greater Horseshoe Bat is classified as Endangered in the UK. It is listed under Appendix II of the Bonn Convention, Appendix II of the Berne Convention, Annexes II and IV of the EC Habitats Directive, Schedule 2 of the Conservation Regulations 1994 and protected in the UK under Schedule 5 of the Wildlife and Countryside Act (as amended).

The foraging behaviour of Greater horseshoe bats is quite well understood. They forage on a range of insects depending upon availability and accessibility. Their preferred food is large beetles, such as cockchafers and dung beetles, large moths and caddis flies. Different insect prey are available at different times of year and from different habitat types, and a bats ability to forage depends upon its age and experience. Studies suggest that they prefer to forage within broadleaved woodland and adjacent pastures in spring, and then move further afield to meadows and pastures in the summer. They seek the best feeding opportunities to achieve greatest foraging efficiency. Most adult foraging occurs within 4km of the main breeding roost (Roost Sustenance Zone). Ransome (2009) reports adults generally forage between 3-5km of the main breeding roost in mid-summer and much smaller distances in Spring and Autumn, generally less than 1Km. Greater Horseshoe bats prefer cattle grazed permanent pastures which have a well-developed vegetation structure. Young bats are typically restricted to a 1km radius of their breeding roost (Young sustenance zone) (Duverge 1996).

### **Lesser Horseshoe Bats –**

In Britain the lesser horseshoe bat has become extinct in the Midlands and in the south-east and is now restricted to south-west England and Wales. European populations are listed under Appendix II of The Bonn Convention , Appendix II of the Bern Convention, and Annexes II and IV of the EC Habitats and Species Directive. In the UK it is protected under Schedule 5 of the Wildlife and Countryside Act 1981, and Schedule 2 of the Conservation Regulations 1994.

The foraging behaviour of Lesser Horseshoe bats is less well understood than for Greaters, but they are considered to have quite similar requirements. When hunting, the lesser horseshoe bat flies close to the ground, usually below five metres around bushes and shrubs with fast, agile flight. They glean their prey from stones and branches; favourite prey items include flies, moths and spiders. Studies indicate they prefer to forage within broadleaved woodland in close proximity to their roost (<2km) (Knight 2006).

## Site details and vulnerabilities

This site is selected for special protection under the Habitat Regulations on the basis of the size of Horseshoe bat population represented (3% of the UK greater horseshoe bat *Rhinolophus ferrumequinum* population) and its good conservation of structure and function, having both maternity and hibernation sites. The site contains an exceptionally good range of the sites used by the population, comprising two maternity sites in lowland north Somerset and a variety of cave and mine hibernation sites in the Mendip Hills. Summer and winter roosts for Greater horseshoe Bats are usually less than 20-30 km apart. The bats are vulnerable to the loss of foraging habitat that can arise for a variety of reasons, including a decline in insect food supplies due to insecticide use, changing farming practices (reduction in grazing through the year), the loss of broad-leaved tree-cover, the loss or fragmentation of linear habitat features, and to the loss or disturbance of underground roost sites. Their use of the landscape can also be compromised by artificial light spill onto key habitat features.

The limestone caves of the Mendips provide a range of important hibernation sites for lesser horseshoe bat *Rhinolophus hipposideros* as well. Summer and winter roosts are usually less than 5-10 km apart. These bats are vulnerable to the loss or disturbance of both summer and winter roost sites and the removal and fragmentation of linear habitat corridors. Their use of the landscape can also be compromised by artificial light spill onto key habitat features.

## Potential effects to Bat sites

Potential Issues
Increased recreational pressures
Increased noise and light pollution
Traffic generated air pollution
Increased urban-fringe pressures (domestic cats; noise; disturbance –potentially reducing agricultural viability)
Reduced viability and potential loss of existing agricultural landuse
Potential Effects
Reduction of habitat quality and function close to some sites (including function as foraging grounds or access ways)
Habitat loss close to some sites
Habitat fragmentation

## Bath & Bradford on Avon Bat SAC

Greater Horseshoe Bats and Bechstein's Bats are the primary reasons for the designation of this SAC. Lesser Horseshoe bats are also a qualifying feature.

### Greater Horseshoe Bats –

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The foraging behaviour of Greater horseshoe bats is quite well understood. They forage on a range of insects depending upon availability and accessibility. Their preferred food is large beetles, such as cockchafers and dung beetles, large moths and caddis flies. Different insect prey are available at different times of year and from different

habitat types, and a bats ability to forage depends upon its age and experience. Studies suggest that they prefer to forage within broadleaved woodland and adjacent pastures in spring, and then move further afield to meadows and pastures in the summer. They seek the best feeding opportunities to achieve greatest foraging efficiency. Most adult foraging occurs within 4km of the main breeding roost (Roost Sustenance Zone). Ransome (2009) reports adults generally forage between 3-5km of the main breeding roost in mid-summer and much smaller distances in Spring and Autumn, generally less than 1Km. Greater Horseshoe bats prefer cattle grazed permanent pastures which have a well-developed vegetation structure. Young bats are typically restricted to a 1km radius of their breeding roost (Young sustenance zone) (Duverge 1996).

#### **Lesser Horseshoe Bats –**

In Britain the lesser horseshoe bat has become extinct in the Midlands and in the south-east and is now restricted to south-west England and Wales. European populations are listed under Appendix II of The Bonn Convention , Appendix II of the Bern Convention, and Annexes II and IV of the EC Habitats and Species Directive. In the UK it is protected under Schedule 5 of the Wildlife and Countryside Act 1981, and Schedule 2 of the Conservation Regulations 1994.

The foraging behaviour of Lesser Horseshoe bats is less well understood than for Greater, but they are considered to have quite similar requirements. When hunting, the lesser horseshoe bat flies close to the ground, usually below five metres around bushes and shrubs with fast, agile flight. They glean their prey from stones and branches; favourite prey items include flies, moths and spiders. Studies indicate they prefer to forage within broadleaved woodland in close proximity to their roost (<2km) (Knight 2006).

#### **Bechstein's Bats –**

The Bechstein's bat is a rare tree-dwelling bat, mostly associated with old growth broadleaved woodland. A few individuals are found in underground sites during hibernation, but it is likely that most individuals roost in trees all year (BCT 2011). The Bath & Bradford on Avon Bat SAC is used by small numbers of these bats for hibernation but no maternity roosts are known locally.

A recent study of the foraging range of Bechstein's bats in Grafton wood SSSI, Worcestershire concluded "Irrespective of season, all but one of the bats tracked stayed within 1.5km of their day roosting sites".

#### **Site Details and Vulnerabilities**

This site in southern England includes the hibernation sites associated with 15% of the UK greater horseshoe bat *Rhinolophus ferrumequinum* population and is selected for protection under the Habitat Regulations on the basis of the importance of this exceptionally large overwintering population.

Summer and winter roosts of Greater horseshoe Bats are usually less than 20-30 km apart. The bats are vulnerable to the loss of foraging habitat and flightlines that can arise for a variety of reasons, including a decline of insect food supplies due to insecticide use, changing farming practices, the loss of broad-leaved tree-cover, the loss or fragmentation of linear habitat features, and to the loss or disturbance of underground roost sites. Their use of the landscape can also be compromised by artificial light spill onto key habitat features.

For Lesser Horseshoe bats summer and winter roosts are usually less than 5-10 km apart. The bats are vulnerable to the loss or disturbance of both summer and winter roost sites and the removal and fragmentation of linear habitat corridors. Their use of the landscape can also be compromised by artificial light spill onto key habitat features.

Small numbers of Bechstein's bats *Myotis bechsteinii* have been recorded hibernating in abandoned mines in this area, though maternity sites remain unknown. The species is closely associated with mature deciduous woodland and appears to select old woodpecker holes or rot holes in trees for breeding. It also occurs in coniferous woodland

in some areas. Maternity colonies may move between suitable crevices within a small area, such as a piece of woodland. Bechstien's bats are believed to hibernate in hollow trees and sometimes in underground localities.

### **Potential effects to Bat sites**

<b>Potential Issues</b>
Increased recreational pressures
Increased noise and light pollution
Traffic generated air pollution
Increased urban-fringe pressures (domestic cats; noise; disturbance –potentially reducing agricultural viability)
Reduced viability and potential loss of existing agricultural landuse

<b>Potential Effects</b>
Reduction of habitat quality and function close to some sites (including function as foraging grounds or access ways)
Habitat loss close to some sites
Habitat fragmentation

## Screening approach

The policies drafted for the Neighbourhood Plan have been screened for possible issues and impacts for European Site protection in the context of HRA and the information set out above. The plan includes Development Plan policies to be used through the planning system. No specific sites are allocated for development and no quantum of development is proposed. Given the limited nature of the policies proposed, the specific Environmental Policies included, and the location of the Parish in the Context of the European Sites, the overall risk of the plan having any significant effect on any European site appears very low. Screening is used to verify this assessment.

The screening approach used is based on the approach set out in The Habitat Regulations Assessment Handbook 2013 as updated, and involves use of the screening categories and codes set out below. NE will be consulted on this screening.

Screening categories	Code	Screening categories	Code
A general statement of policy	A	do not propose change, but control approach (eg design)	F
Policy listing general criteria for testing proposals	B	no conceivable effect	G
proposals referred to but not proposed by the plan	C	actual or theoretical effects cannot undermine conservation objectives	H
environmental protection policies	D	LSE on a site alone	I
steering change away from positive sites	E	no LSE alone but an effect - check in combination	J
		no LSE even in combination	K

**Any policy or site allocated screening category I or L and highlighted in yellow will require action / amendment. Recommendations to address these issues are listed in the screening matrices and will require a response from plan authors**

## Screening of WVNP Policies

PLAN POLICIES	Screening Code	Notes
<b>OBJECTIVE 1: <i>Maintain the Green Belt buffer</i></b>		
Policy WV 1. 1: Preventing Coalescence between Whitchurch Village and Bristol	D	
Policy WV 1.2: Development proposals, particularly where sited on the edge of Whitchurch Village must maintain visual connections with the countryside.	F	
Policy WV 1.3: The visual impact of new development on views from the countryside must be minimised.	F	
Policy WV 1.4: Wildlife Corridors	D	
<b>OBJECTIVE 2: <i>Maintain the village identity and increase sustainability</i></b>		
Policy WV 2.1. – Village Design All proposals for new development shall comply with Whitchurch Village Character Assessment Document (2015).	F	
Policy WV 2.2: Provide a mix of housing types	F	
Policy WV 2.3: Allocation of Affordable Housing	G	
<b>Employment</b>		
Policy WV 2.4: Protection of Employment	G	
Policy WV 2.5: <i>Employment and Enterprise</i>	G/J	This does allow for new development but it would be of a scale and location that should mitigate against any likelihood of any significant effects, however limited potential for ecological networks to be damaged or disrupted (hedgerow removal; extra lighting etc). Wildlife Corridor policy needs strengthened / rewording to prevent harm (from habitat loss; damage or disturbance, including from impacts of lighting) to local ecological networks (not just formally mapped). The key features of any green field site developed will then be protected.
<b>Community Facilities</b>		
Policy WV 2.6 : Assets of Community Value	H	
Policy WV 2.7 : Local Green Spaces	D	

PLAN POLICIES	Screening Code	Notes
<b>OBJECTIVE 3: <i>Ensure the new developments are integrated within the village</i></b>		
Policy WV 3.1: Traffic and Safety	G/J	This does allow for new development but at a scale and location that should mitigate against any likelihood of any significant effects, however limited potential for ecological networks to be damaged or disrupted (hedgerow removal; extra lighting etc). Wildlife Corridor policy needs strengthening/ rewording to prevent harm (from habitat loss; damage or disturbance, including from impacts of lighting) to local ecological networks (not just formally mapped). The key features of any green field site developed will then be protected.
Provide new facilities	G/J	This does allow for new development but at a scale and location that should mitigate against any likelihood of any significant effects, however limited potential for ecological networks to be damaged or disrupted (hedgerow removal; extra lighting etc). Wildlife Corridor policy needs strengthening/ rewording to prevent harm (from habitat loss; damage or disturbance, including from impacts of lighting) to local ecological networks (not just formally mapped). The key features of any green field site developed will then be protected.
Policy WV 3.2: Pedestrian and cycle routes must link together potential destinations, such as new housing and Whitchurch village school	G/J	This does allow for new development but at a scale and location that should mitigate against any likelihood of any significant effects, however limited potential for ecological networks to be damaged or disrupted (hedgerow removal; extra lighting etc). Wildlife Corridor policy needs strengthening / rewording to prevent harm (from habitat loss; damage or disturbance, including from impacts of lighting) to local ecological networks (not just formally mapped). The key features of any green field site developed will then be protected.
<b>Objective 4: <i>Seek improvements for the community arising from the growth</i></b>		
Policy 4.1: New Shop	G/J	This does allow for new development but at a scale and location that should mitigate against any likelihood of any significant effects, however limited potential for ecological networks to be damaged or disrupted (hedgerow removal; extra lighting etc). Wildlife Corridor policy needs strengthening/ rewording to prevent harm (from habitat loss; damage or disturbance, including from impacts of lighting) to local ecological networks (not just formally mapped). The key features of any green field site developed will then be protected.
Policy 4.2: Play and Recreational Area		NO POLICY DETAILS
Policy 4.3: Contributions required from developers of new housing to fund additional healthcare facilities.	G	

## **Conclusions and recommendations**

The WVNP draft screened did not include any policy wording for Policy 4.2: Play and Recreational Area , and so this policy area has not been screened.

The policies screened do not raise significant concerns with respect to the Habitat Regulations. There are however a few areas where the plan promotes or supports new development that could potentially result in the loss or damage of habitat of importance to Horseshoe bats. Adopting a precautionary approach, this leads to the possibility of implications to the Bat SACs described. The plan would be improved and could avoid this possibility if the wildlife corridor Policy is tightened up / reworded to ensure protection of natural habitat features of importance for foraging species and where part a local or strategic ecological network.

To avoid any concern under the Habitat Regulations it is therefore recommended that policy WV D1.4 is amended to address this issue. Possible wording is suggested here:

Policy WV 1.4: Wildlife Corridors / Ecological Networks (this ties in with place making policy NE5)

Development must avoid harming existing ecological assets i.e. the habitats and dependent local biodiversity, including any features of importance for foraging and for maintaining habitat connectivity (including local and strategic Ecological Networks). Any development must submit evidence which shows how development will not harm these attributes. This shall be in the form of a Landscape and Ecological Mitigation and Management Plan.

## **References:**

Tyldesley, D and Chapman, C (2013) The Habitats Regulations Assessment Handbook, DTA Publications Limited