

Ecological Appraisal

Report for:

Havant Borough Council

Between New Brighton Road and Washington Road, Emsworth

New shared pedestrian / cycle track

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SUMMARY

This report constitutes an assessment of the potential impacts arising from the proposal and site set out below and provides recommendations to ensure that this proposal can reasonably avoid or mitigate such effects identified. If the proposal differs from that set out below, then this assessment and recommendations may not be applicable. Furthermore, the assessment and recommendations are based on surveys which may only be considered valid for up to two years following the date of this report.

- Havant Borough Council proposes the construction of a shared pedestrian and cycle way between Emsworth Station and Washington Road. An ecological appraisal of the proposals was undertaken.
- The proposed route comprises a little used over grown track way at the bottom of an embankment between the A27 dual carriageway and a railway.
- Habitats comprise unmanaged semi-improved grassland interspersed with ruderal vegetation with dense bramble scrub and plantation woodland on the adjacent embankments. These habitats are not considered to be of significant intrinsic ecological value.
- Ecological surveys have been undertaken at the site (and surrounding areas) to inform other development proposals which may affect the site at some stage in the future, although it is not clear when or if this will take place. These have included a reptile survey undertaken at the site which found moderate numbers of slow worm and low numbers of common lizard in areas overlapping with the proposal site.
- The following recommendations are made to minimise potential impacts to reptiles:
 - Replacement reptile habitat should be created by clearing some of the adjacent trees and scrub. Tussocky grassland seed could be sown in these areas or turfs removed to facilitate the works could be used to promote the establishment of appropriate habitat. Log piles could be used to create hibernacula;
 - Sensitive clearance methods should be followed including the avoidance of winter ground works and clearing habitat in a phased and directional manner.
- Any necessary clearance of shrub will need to avoid impacting nesting birds.
- A ditch containing water runs adjacent to the track. It should be retained and protected during development.

1 INTRODUCTION

1.1 Project Description

Hampshire County Council Ecology Team (HCCET) has been commissioned to carry out an Extended Phase 1 Ecological Survey at a site between New Brighton Road and Washington Road, Emsworth.

1.1.1 Proposal

Havant Borough Council proposes to construct a new shared pedestrian and cycle way between the north side subway at Emsworth Station to connect to Washington Road. The construction will be of a 'light', semi-temporary nature, the construction being a layer of Terram, 100mm of hydraulically bound recycled materials and 20mm of tarmac, with timber path edgings. The track would be approximately 250m in length.

1.1.2 Limitations to Report

There were no access or weather constraints during the survey.

1.2 Site Description

The surveyed area comprises an unmanaged tract of land located between two embankments, one carrying the A27 dual carriageway and the other a mainline railway line. The surveyed area is centred on grid reference SU 746 063.

1.3 Ecology Background

A range of ecological studies have been carried out at the site and adjacent areas in inform various development proposals, which may affect the surveyed area at some point in the future, although no development has yet been permitted, and it is therefore not known when or if development would proceed.

These included a Phase 1 habitat Survey (WYG, 2014) which recommended that a reptile survey be carried out. A subsequent reptile survey (ADAS, 2015) recorded a peak count of 22 slow worms and 2 common lizards in an area broadly overlapping with this proposal site.

2 METHODS

2.1 Desk-based Assessment

A desk-based assessment was carried out by HCCET on 9 August 2016. Geographical Information Systems (GIS) mapping was used in order to identify all records of protected species and habitats within a 500 metre (m) radius of the site. Given the localised nature of the proposals this search radius was considered sufficient for assessing risk to all ecological features. In addition, records were obtained of all statutory and non-statutory designated nature conservation sites within the search radius.

HCCET had full access to the extensive biological database held by the Hampshire Biodiversity Information Centre (HBIC). The data is aggregated to meet the HBIC Data Users Agreement and attention is drawn to paragraph 5 of the agreement which states: *'Whilst every reasonable effort is made to validate information supplied to and by the Hampshire Biodiversity Information Centre, owing to the dynamic and judgmental nature of information relating to wildlife, HBIC disclaims any responsibility for the accuracy or comprehensiveness of the information supplied, and accepts no liability for any indirect, consequential, or incidental damages or losses arising from use of the information'*.

2.2 Field-based Assessment

An Extended Phase 1 Ecological Survey was carried out on 01 June 2016. The survey entailed a single surveyor undertaking a methodical investigation of all areas of the site in order to identify the presence of, or habitat considered suitable for supporting, legally-protected species. A brief description of the survey methods used is provided below.

2.2.1 Vegetation

All broad habitat types were identified and a list was compiled of characteristic plant species within each habitat type.

2.2.2 Badger

All areas of the site were inspected for field signs of badger activity. This includes badger setts, latrine sites, dung piles, well-used trails, prints and hairs.

2.2.3 Bats – Trees

Formal inspection of trees was not undertaken although consideration was given to the likelihood of roosting bats occurring within trees adjacent to the trackway.

2.2.4 Hazel dormouse

An assessment was made of the suitability of habitat on site to support hazel dormice. Key habitats are woodland, scrub and hedgerows, particularly where these offer dense vegetation within which to nest/hibernate and key resources such as hazel nuts, fruiting/nectar-rich plants (e.g. hawthorn, bramble) and honeysuckle (for nesting material). Of key importance is the presence of landscape-scale habitat linkages such as hedgerows.

2.2.5 Birds

An assessment was made of the site's suitability to support breeding and wintering bird species. Nesting birds will utilise a broad range of habitats, including: built structures; trees; scrub; isolated shrubs; dense herbaceous vegetation (terrestrial and aquatic) and open grassland.

2.2.6 Reptiles

An assessment was made of the site's suitability to support reptile populations. Key habitat features include: tussocky/patchy grassland; scrub edge; linear watercourses; ponds; compost heaps; brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated/fragmented habitats even within urban areas.

2.2.7 Amphibians

An assessment was made of all waterbodies and terrestrial habitat within the site for their suitability to support populations of amphibians. Aerial photography and ordinance survey mapping was checked for potential breeding waterbodies in the vicinity of the site.

2.2.8 Protected Species Assessment

The surveyed site has been assessed for its potential to support the above-named protected species based upon the criteria in **Table 1**.

Table 1 Protected Species Grading Criteria

Grading Criteria	Justification
Confirmed Presence	Species confirmed on site through direct sighting, presence of field signs (e.g. scat, hair, prints, nest, eggs, habitation etc.) or through desk-based assessment.
High Potential	Presence of optimal habitat features for species. Surveyed site within known range/close to known occurrence. Excellent connectivity to optimal habitat. No justification for discounting presence of species.
Moderate Potential	Presence of some suitable habitat features for species. Surveyed site within/close to known range or known occurrence but factors such as isolation/fragmentation may reduce potential. Presence of species is more likely than not.
Low Potential	Minimal suitable habitat present or, if present, highly degraded/fragmented. Minimal linkage to suitable habitat beyond site. Presence of species unlikely.
Negligible Potential	Site is entirely unsuitable for species. Presence of species highly unlikely.

3 RESULTS

3.1 Desk-based Assessment

3.1.1 Designated Sites

Four locally-designated Sites of Importance for Nature Conservation (SINC) occur within 500m of the site. **Table 2** provides details of these sites.

Table 2 Designated sites located within 500m of the site

Site Name	Distance and Direction from Site (km)	Reason for Designation
Lumley Meadow SINC	100m SE	Contains agriculturally unimproved grassland including notable plant species.
Stream West of Emsworth Recreation Ground SINC	200m NW	Supporting a notable aquatic plant species
Westbrook Stream, Bridge Road	200m South	Supporting a notable aquatic plant species
Land West of Emsworth Recreation Ground SINC	350m NW	Grassland of ecological interest

3.1.2 Protected Species

A review of the biological database held by HBIC, as well as records of protected species submitted in association with local planning applications, revealed the presence of a small number of protected and notable species within a 500m radius of the site. Relevant records are shown in **Table 3**.

Table 3 Protected and Notable species located within 500m of the site

Species	Details	Distance and Direction from Site of nearest record
Pipistrelle bat species <i>Pipistrellus pipistrellus/pygmaeus</i>	Numerous records, predominately to the east.	50m E
Serotine	Single record of in flight bat	400m SE
Noctule <i>Nyctalus noctula</i>	Single record of in flight bat	200m E
Water vole <i>Arvicola amphibius</i>	Numerous records on River Ems	200m E

3.2 Field Survey

3.2.1 Vegetation

The surveyed area comprises a little-used trackway at the bottom of embankments leading to the A27 dual carriageway to the north and the railway to the south. The northern embankment is vegetated with dense and relatively immature plantation broadleaved woodland, including species such as ash *Fraxinus excelsior*, hawthorn *Crataegus monogyna* and willow *Salix* spp.

The trackway itself is around 4-5m wide. The eastern end is vegetated with a range of grassland and ruderal species, including cock's foot *Dactylis glomerata*, red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus*, rough meadow grass *Poa trivialis*, bird's-foot trefoil *Lotus corniculatus*, red clover *Trifolium pratense* and perforate St John's-wort *Hypericum perforatum*. This vegetation is also present on the southern embankment for approximately 40m where scrub has been cleared before it grades into dense bramble scrub and plantation woodland successively. The vegetation on the trackway gradually becomes more dense further west with wet grassland species such as common fleabane *Pulicaria dysentrica*, and hard rush *Juncus inflexus* becoming more prevalent as it becomes more overshadowed with plantation woodland on both sides. Docks *Rumex* spp. are prevalent throughout.

A ditch containing water is located to the north of the pathway. It was relatively shallow (c.25cm) and contained aquatic emergent vegetation including hemlock water-dropwort *Oenanthe crocata* and water figwort *Scrophularia auriculata*.

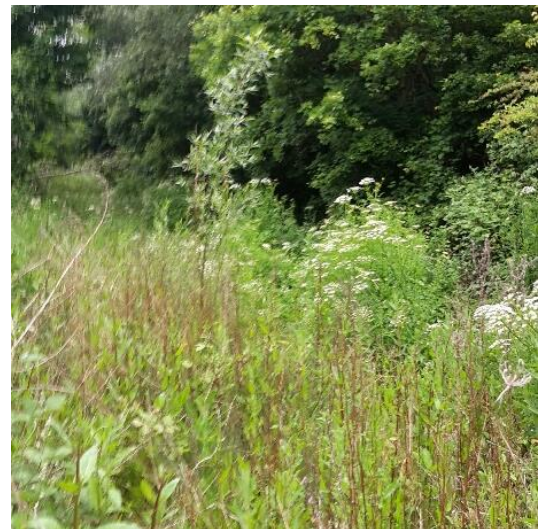


Figure 1 & 2: Habitats at the site comprise tall ruderal/ rough grassland vegetation enclosed by scrub and plantation woodland.

3.2.2 Badger

No evidence of badger activity was recorded within the surveyed areas although habitats at the site are suitable for supporting badger. It is considered that there is **moderate potential** for this species to occur.

3.2.3 Bats – Trees

Trees adjacent to the trackway are not generally of sufficient age or size to support roosting bats.

3.2.4 Hazel Dormouse

The site contains sub-optimal dormouse habitat, comprising bramble scrub and young plantation woodland. Review of aerial photography indicates the site has poor connectivity to more extensive areas of suitable habitat, with the A27 road and railway major isolating factors. No records occur within the search area. It is therefore concluded there is **negligible potential** for dormice to occur.

3.2.5 Birds

The woody vegetation on site provides opportunities for birds to nest, and birds will certainly use adjacent scrub and woodland habitats for nesting to some extent. Overall, the site is considered to exhibit **high potential** for supporting small numbers of common and widespread breeding birds.

3.2.6 Reptiles

Reptile surveys completed in 2015 confirmed relatively high numbers of slow worm and low numbers of common lizard at the site. These species are therefore **confirmed present** at the site.

It should be noted that the western half of the survey area is quite heavily overgrown and overshadowed, and is therefore considered to be sub-optimal reptile habitat. Slow worm were recorded under refugia to the west although a greater number of refugia were used to the east.

3.2.7 Amphibians

The waterbody within the survey area is of highly sub-optimal suitability for supporting the strictly-protected great crested newt. Review of aerial photography and ordinance survey mapping suggests few potential breeding waterbodies occur within the vicinity of the site offsite and given the lack of connectivity the site has to the wider landscape it is considered there is **negligible potential** for great crested newt to occur. Common (not legally protected) amphibians could occur.

4 ASSESSMENT OF IMPACTS AND RECOMMENDATIONS

4.1 Introduction

This section is supported by the results of the Extended Phase 1 Ecological Survey and presents the likely impacts, in the absence of any mitigating actions, on protected and notable habitats and species associated with the proposed development. Only those features confirmed as present on site or considered to have from low to high potential for occurrence on site have been taken forward for further assessment. In addition, all designated sites located within 500m of the site have been taken forward for further assessment.

4.2 Impacts

4.2.1 Designated Sites

Given the limited scale of the works, it is considered that there is no potential for any of the designated sites identified in the search radius to be affected by the works.

4.2.2 Habitats/Vegetation

The main habitats which will be directly impacted are grassland and ruderal vegetation. These are composed of common and widespread species and considered to be of low ecological value. The ditch represents an additional habitat contributing the habitat diversity of the site and should be retained and protected during site clearance and construction works.

4.2.3 Badgers

Although badger could occur within the survey area, as no setts were identified, it is considered that there is negligible potential for badgers to be affected by the works.

4.2.4 Birds

In order to avoid impacting nesting birds (all species of which, including active nests and eggs, are legally protected), necessary clearance of scrub and trees should be undertaken outside of the breeding bird season which is typically defined as March-August inclusive. If this is not possible active nests must be checked for and retained.

4.2.5 Reptiles

Insensitive site clearance and construction works could result in reckless killing and injury of reptiles, which is prohibited under the Wildlife and Countryside Act (1981) as amended. Furthermore, the works would result in the loss of approximately 600m² of reptile habitat, approximately 300m² of which is sub-optimal quality due to over-shading. Although reptile habitat is not legally protected *per se*, slow worm and common lizard are *Priority Species* for the conservation of biodiversity as identified under Section 41 of the Natural Environment and Rural Communities (NERC) act. Section 40 of this legislation requires all public bodies to have regard to the conservation of biodiversity in exercising their functions. In order to minimise potential impacts to reptiles and avoid legal offences being committed recommendations are made below.

Habitat Creation

Replacement habitat should be provided of comparable, although not necessarily equivalent given the sub-optimal nature of some of the habitat being lost, size. This could be achieved by clearing some of the scrub and woodland adjacent to the trackway and promoting the establishment of grassland/ ruderal habitat. A tussocky grass seed mix (such as *Emorsgate EM10 Tussock mixture*) could be sown, which would require appropriate ground preparation and ongoing management. Alternatively it may be possible to translocate turfs from the area being cleared, although note recommendations made below with respect to site clearance. Felled trees and cleared scrub could be used to create log piles which would also benefit reptiles.

Habitat Clearance

The following approach is recommended to ensure that reptiles are not killed or injured during the site clearance:

- Works involving excavations or other ground works should be avoided during the winter hibernation season (indicatively November-March, weather dependent).
- Clearance of habitat during the active season should be undertaken in a phased and directional manner. The habitat to be cleared should be cut initially down to a height of approximately 300mm and left overnight in order to encourage animals to retreat. On the successive day, habitat should be cleared down to ground level and maintained as such until construction commences. Clearance should be undertaken in a directional manner working toward areas of retained habitat in order to displace animals which may be present these areas.

4.2.6 Amphibians

Following the above measures should ensure that common amphibians will not be affected by the works, should they be present.

5 REFERENCES

ADAS (2015) *Land Adjacent to A27 Emsworth* Bat and Reptile Surveys

Institute of Ecology and Environmental Management (2012). *Guidelines for Preliminary Ecological Appraisal*. IEEM, Winchester.

Collins (2016) *Bat Surveys: Good Practice Guidelines*, 3rd edition, Bat Conservation Trust

WYG (2014) *Land Adjacent to A27(T), Emsworth, Hampshire* Extended Phase 1 Habitat Survey