



PRELIMINARY ECOLOGICAL APPRAISAL

HINTON ADMIRAL RAILWAY STATION TO BOURNEMOUTH RAILWAY STATION VEGETATION CLEARANCE WORKS

REPORT FOR: ENVIRONMENTAL FORESTRY LIMITED

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EXECUTIVE SUMMARY

Naturally Wild were instructed to undertake a Preliminary Ecological Appraisal (PEA) along a stretch of railway line between Hinton Admiral Railway Station and Bournemouth Railway Station. The main objective of the assessment was to determine the suitability of the site to support protected species and to check for any evidence of the presence or protected species, as well as the presence of any protected or notable habitats. The proposed works involve carrying out vegetation clearance on behalf of Network Rail on both sides of the railway line for a number of health and safety-related reasons, including improving train driver and track worker visibility, ensuring there are positions of safety for track workers, and removing any dangerous trees that could fall on the line.

The PEA comprised two parts: a desktop study and a site survey. The desktop study collated available public information regarding the biodiversity of the area, the habitat structure of the surrounding area and any statutory and non-statutory designated sites, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource. The survey consisted of an assessment of all habitats on site and in the surrounding area to determine their ecological importance to protected species, conducted on Wednesday 15th and Thursday 16th November 2017 by [REDACTED]

Overall, the results of the assessment indicate that the proposed clearance works will have a low or negligible impact on protected species, although some areas of potential bat habitat and suitable bird nesting habitat were present. A number of invasive, non-native plant species were also present within the site extents. As a result, recommendations have been made in relation to mitigation and compensation measures for both birds and bats, as well as appropriate removal and management of the invasive species present.

Providing the recommendations of this report are implemented, Naturally Wild would conclude that there will not be a significant impact to protected species or habitats as a result of the proposed works.

PRELIMINARY ECOLOGICAL APPRAISAL, HINTON ADMIRAL TO BOURNEMOUTH

1 INTRODUCTION

Naturally Wild were instructed to undertake a Preliminary Ecological Appraisal (PEA) along a stretch of railway line between Hinton Admiral Railway Station and Bournemouth Railway Station (Figure 1). The main objective of the assessment was to determine the suitability of the site to support protected species and to check for any evidence of the presence or protected species, as well as the presence of any protected or notable habitats.

The proposed works involve carrying out vegetation clearance on behalf of Network Rail on both sides of the railway line for a number of health and safety-related reasons, including improving train driver and track worker visibility, ensuring there are positions of safety for track workers, and removing any dangerous trees that could fall on the line. In accordance with Network Rail's environmental policy and relevant UK legislation, an ecological assessment is required to determine if any legally protected, UK Biodiversity Action Plan (BAP) or other notable species/habitats are likely to be affected by the proposed works, and to show how any negative ecological impacts would be mitigated and compensated.

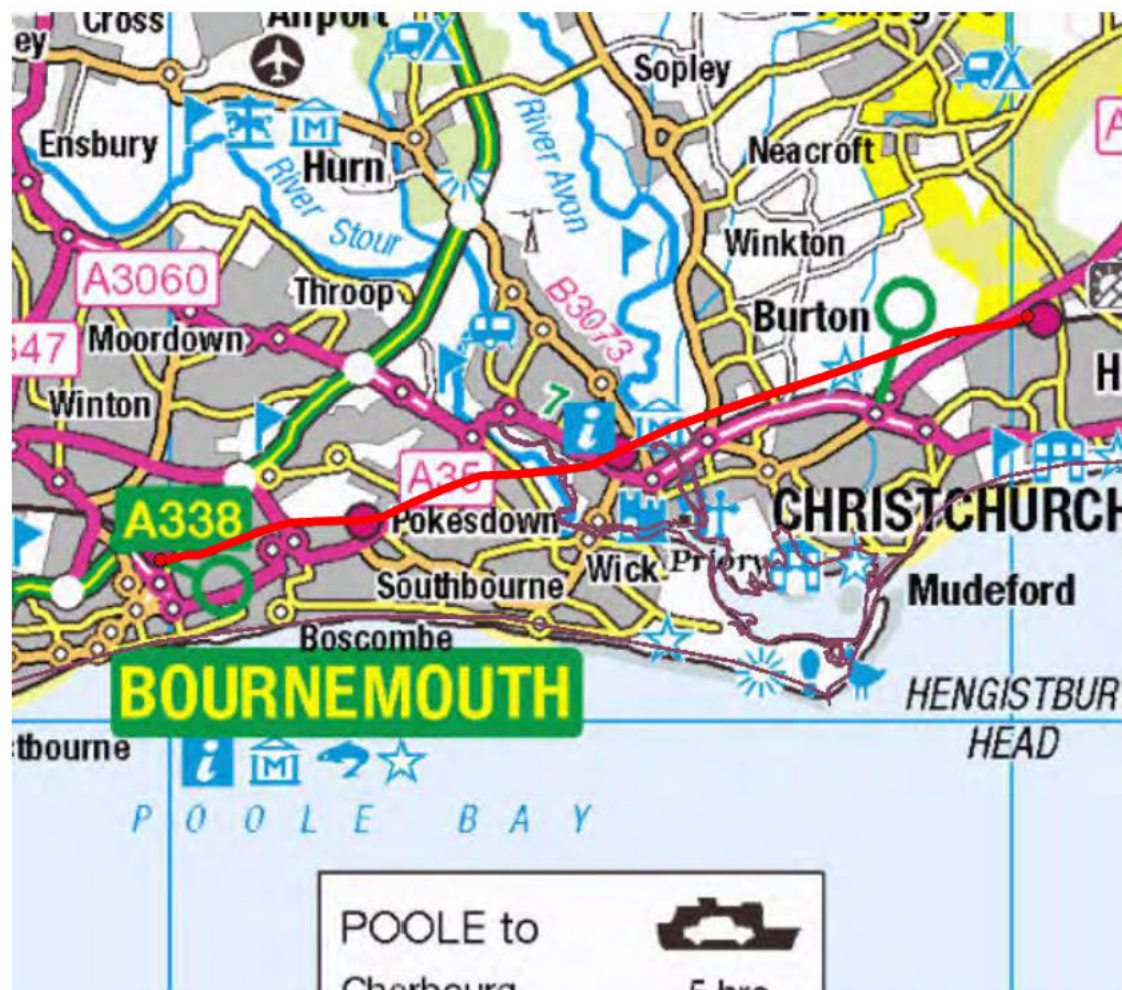


Figure 1. Site location plan. Red line shows the length of the proposed works.

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2 RELEVANT LEGISLATION

British wildlife is protected by a range of legislation, the most important being the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017. The Wildlife and Countryside Act as amended mainly by the Countryside Rights of Way Act protects species listed in Schedules 5 and 8 of the Act (animals and plants respectively) from being killed, injured, and used for trade. For some species, such as great crested newts and all bat species, the provisions of this Act go further to protect animals from being disturbed or taken from the wild and protects aspects of their habitats. The Act also stipulates that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. A recent change in this legislation means that the provisions of this act now complement those of the Wildlife and Countryside Act more. Species to which these provisions apply are the European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

Further details on the legislation protecting species of British wildlife relevant to this assessment can be found in Section 9.1 of this report.

4 METHODOLOGY

4.1 Overview

The PEA comprised a desktop study and a field survey. All survey and assessment work was completed with reference to official assessment guidelines produced by Natural England, the Chartered Institute for Ecology and Environmental Management (CIEEM) and British Standard document BS 42020: 2013 '*Biodiversity – Code of practice for planning and development.*'

4.2 Desktop Study

The desktop study collated available public information regarding the biodiversity of the area, the habitat structure of the surrounding area and any statutory and non-statutory designated sites on or surrounding the site, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource. In addition, existing biological records for the site and surrounding areas would normally be obtained from the local environmental records centres; however, in this case, due to the relatively low impact, localised nature of the works and limited amount of habitat loss to be taking place, it was not felt that biological records would provide any significant information additional to that obtained during the survey.

4.3 Field Survey

4.3.1 Habitat Assessment

The survey was carried out on Wednesday 15th and Thursday 16th November 2017 and consisted initially of an assessment of the habitats on site. The dominant vegetation structure was identified, where present, allowing the habitats on site to be classified in the standardised format provided by the Joint Nature Conservation Committee (2010). Following this, the habitats present were assessed for their suitability to support protected species and for the presence of any evidence of protected species.

4.3.2 Protected Species Risk Assessment

Based on the habitats present, the site was assessed with particular regard to determine the presence or otherwise of badgers (*Meles meles*), bats, dormice (*Muscardinus avellanarius*), great crested newts (GCNs) (*Triturus cristatus*), nesting birds, and reptiles. An overview of the survey methods used is outlined below.

Badgers: An assessment of the clearance areas and surrounding habitats was carried out in order to identify any evidence of badgers, including:

- the presence of any setts
- well-used runs/tracks
- supplementary evidence, such as hairs or prints
- badgers themselves

Bats: A preliminary ground level roost assessment of any trees within the proposed clearance areas was carried out in order to identify the presence of any Potential Roosting Features (PRFs), such as split bark, woodpecker holes and other cavities for bats and/or evidence of roosting bats. All trees assessed were categorised in terms of their value in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2016), as shown in Table 1.

Table 1. Guidelines for assessing bat roosting potential of structures and trees.

Suitability	Habitat description	Further action required?
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further bat risk assessment effort or bat activity surveys are required.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	Structures: One bat activity survey is required to determine whether the structure is being utilised by roosting bats; this may be a dusk or dawn survey. This survey must occur between May and August. The discovery of a roosting bat during this single bat activity survey will require further survey effort.
	A tree of sufficient size and age to contain PRFs, but with none seen from the ground or features seen with only very limited roosting potential.	Trees: No further bat risk assessment effort or bat activity surveys are required.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection conditions and surrounding habitat, but unlikely to support a roost of high conservation status.	Two bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey. One survey must occur between May and August.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey, with an additional survey (either dusk or dawn). Two surveys must occur between May and August.

Evidence of roosting bats includes: bat droppings in, around or below an entrance hole; staining around an entrance hole; small scratches around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

The bat risk assessment was completed using binoculars and a powerful torch.

Dormice: An assessment of the clearance areas was carried out to determine their suitability for dormice in terms of their vegetation structure and species composition, along with identifying any evidence of dormice presence, such as characteristically chewed nuts, dormice nests or dormice themselves.

Great Crested Newts: An assessment of the habitats present on the site was carried out in order to determine their suitability to support GCNs and any natural or artificial refugia (such as logs, stones, discarded building materials etc.) present were also lifted to check for the presence of GCNs.

Nesting Birds: An assessment of the on-site buildings and of any vegetation on or adjacent to the site was carried out to identify the presence of any suitable nesting habitat and any signs of current nesting activity, such as the presence of any partially or fully-constructed nests or any birds carrying nesting material in their beaks.

Reptiles: The assessment for reptiles followed a similar methodology to that for GCNs, with an assessment of the habitats present carried out to determine their suitability to support reptiles, and with any refugia lifted to check for the presence of reptiles or evidence of reptiles, such as sloughs (shed skins).

Other Wildlife: In accordance with good practice, the site was checked for the presence of any other protected/notable species and for the presence of any invasive/non-native species.

5 RESULTS

5.1 Desktop Study

The clearance area passes through and/or adjacent to a couple of statutory designated sites. The River Avon runs underneath the railway line at SZ 156 934 (highlighted on Figure 5 in section 5.2, below). The river has a number of overlapping designations, which include (in descending order of geographical significance):

- Avon Valley Ramsar
- Avon Valley Special Protection Area (SPA)
- River Avon Special Area of Conservation (SAC)
- River Avon System Site of Special Scientific Interest (SSSI)
- Avon Valley (Bickerton to Christchurch) SSSI

In addition, areas of Iford Meadows Local Nature Reserve (LNR) are located adjacent to the work site (and partly underneath at SZ 146 930), as shown on Figure 7.

Although the MAGIC imagery indicates that these designations cover parts of the work site, the statutory designated sites will not actually be directly impacted by the works. Due to the relatively limited scale of the proposed works, which comprise above-ground vegetation clearance within a defined area of Network Rail land only, any potential impacts to these designated sites, either directly or indirectly, are considered to be negligible.

In addition to designated sites, some UK BAP Priority Habitats are present adjacent to the clearance areas. Some areas of woodland within and adjacent to the Network Rail boundary are designated as Deciduous Woodland UK BAP habitat (areas shaded pale green on Figures 2, 4, 5 and 7, below), and areas of Coastal and Floodplain Grazing Marsh were present outside of the railway boundary (shaded blue on Figures 4 and 5).

Due to the relatively limited scale of clearance works in the areas where these habitats are present, it is expected that the vast majority of the Deciduous Woodland habitat will remain unaffected, and the Grazing Marsh habitat is located outside of the railway boundary and thus will not be affected.

5.2 Site Assessment

For ease of reference, the results of the site assessment have been presented below as a series of annotated figures. Discussion of any evidence of – and potential impacts to – protected or notable species is provided in section 5.3. The figures below are presented in a geographical sequence, running from east to west between Hinton Admiral Station and Bournemouth Station.

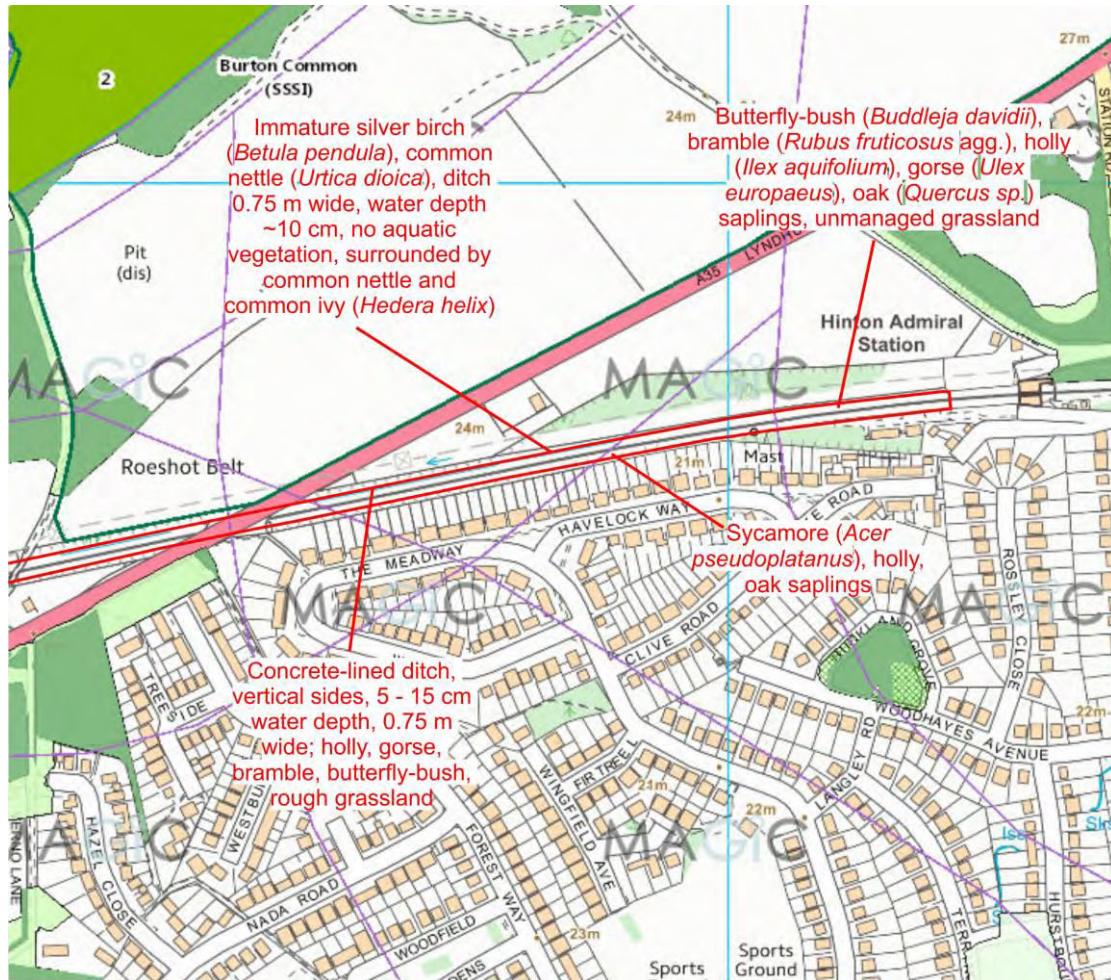


Figure 1. Survey results plan, showing the plant species and habitats present within the survey area.

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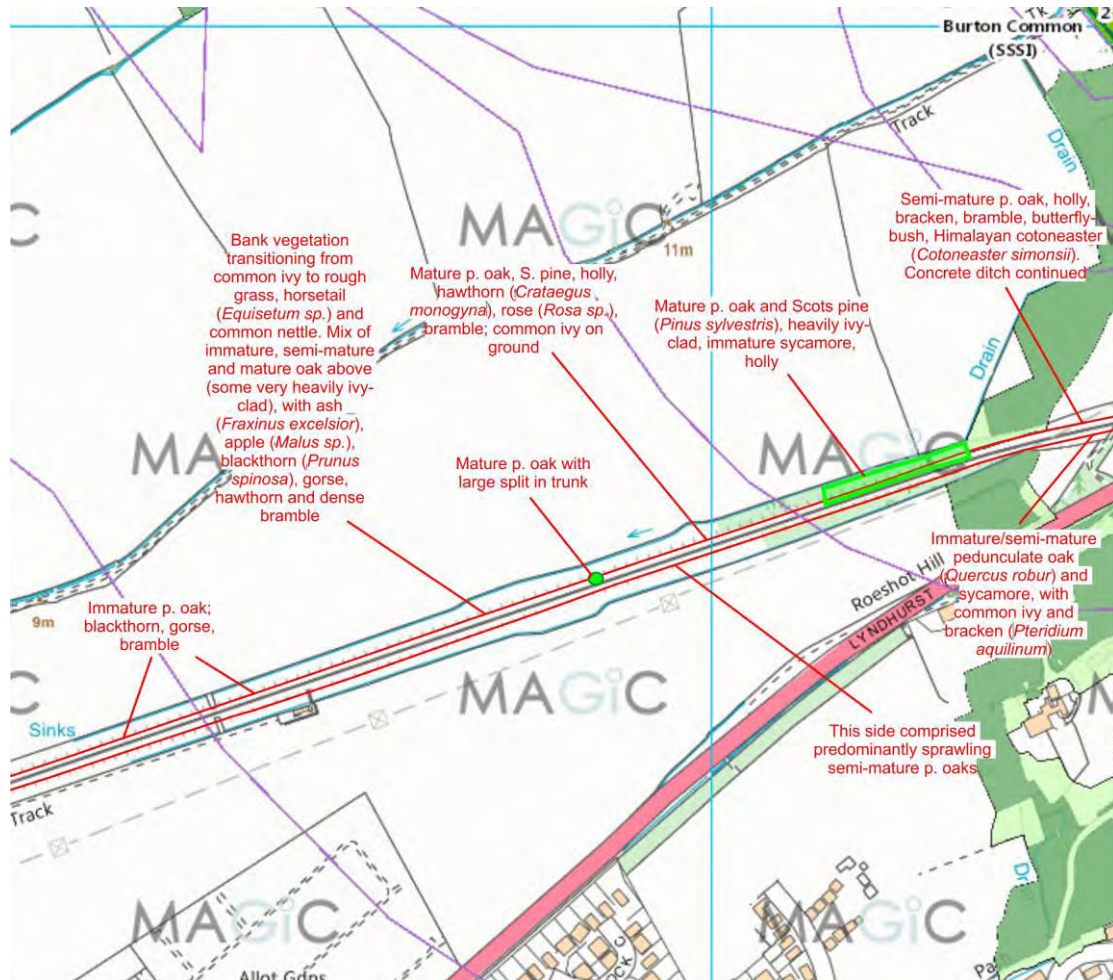


Figure 2. Survey results plan.

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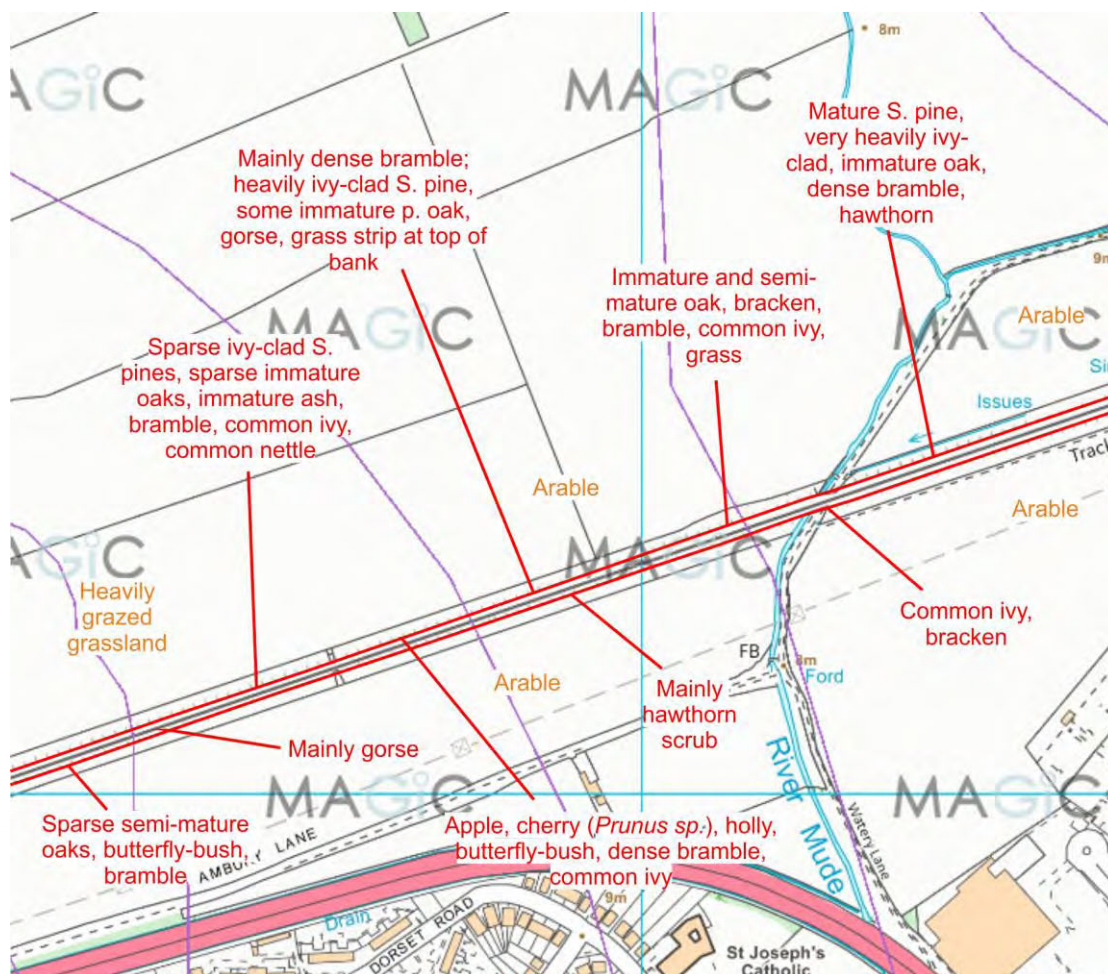


Figure 3. Survey results plan. Red text indicates species and habitats present within the work site and railway boundary, and orange text indicates adjacent habitats.

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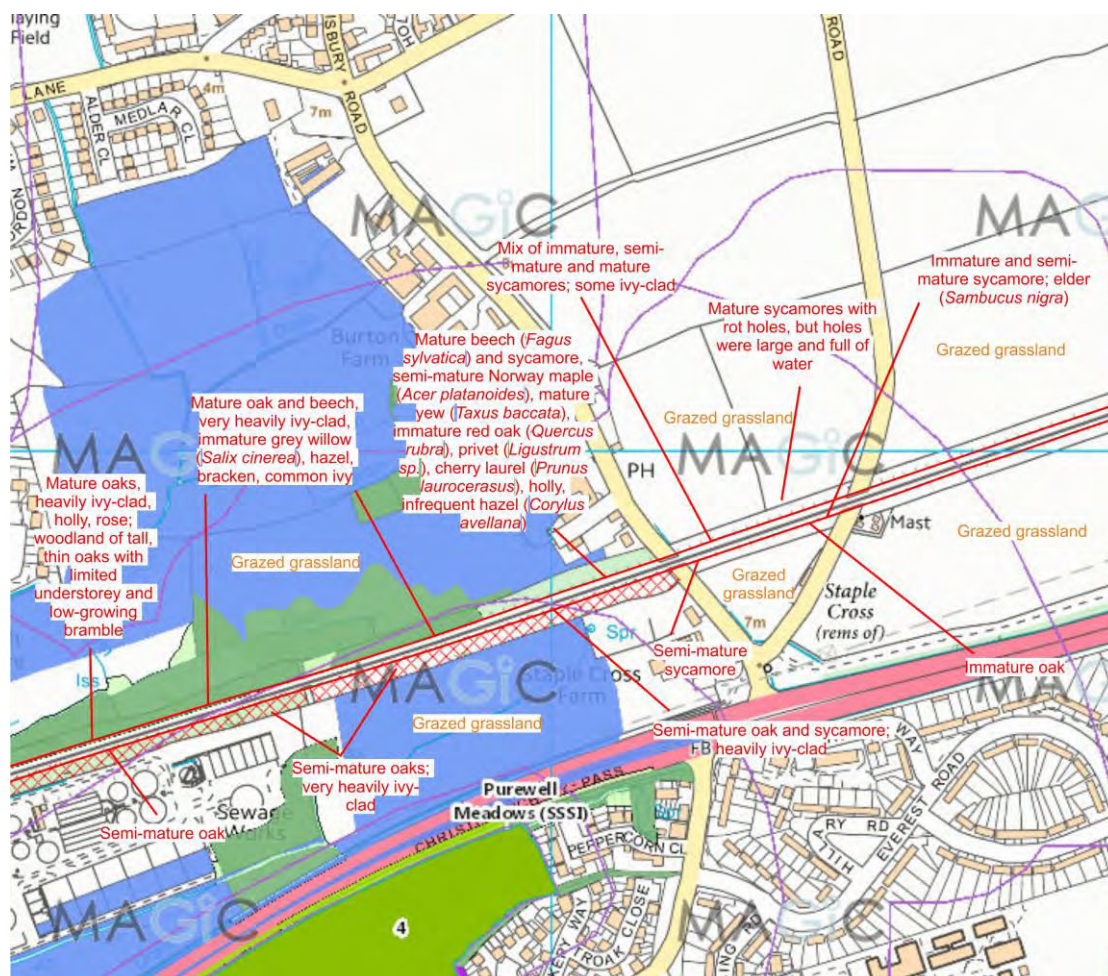


Figure 4. Survey results plan.

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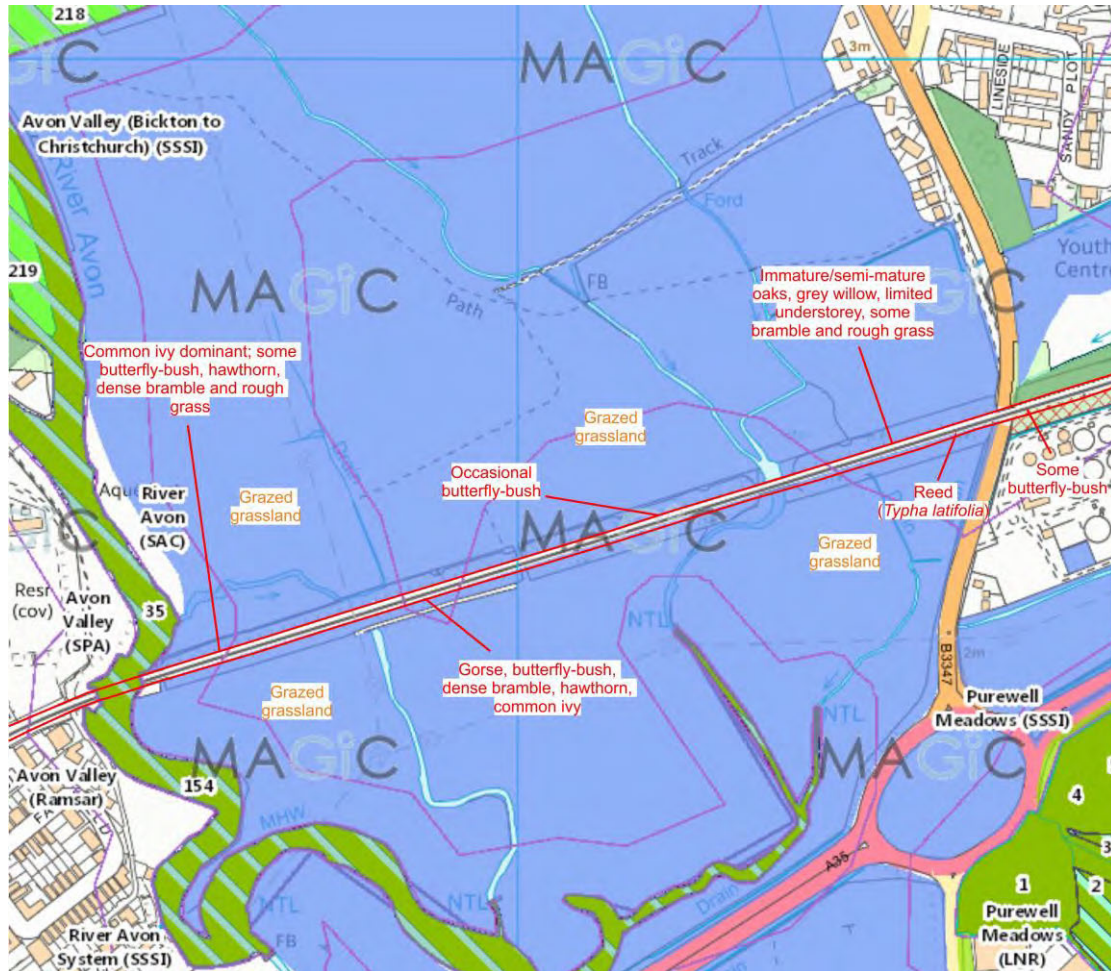


Figure 5. Survey results plan.

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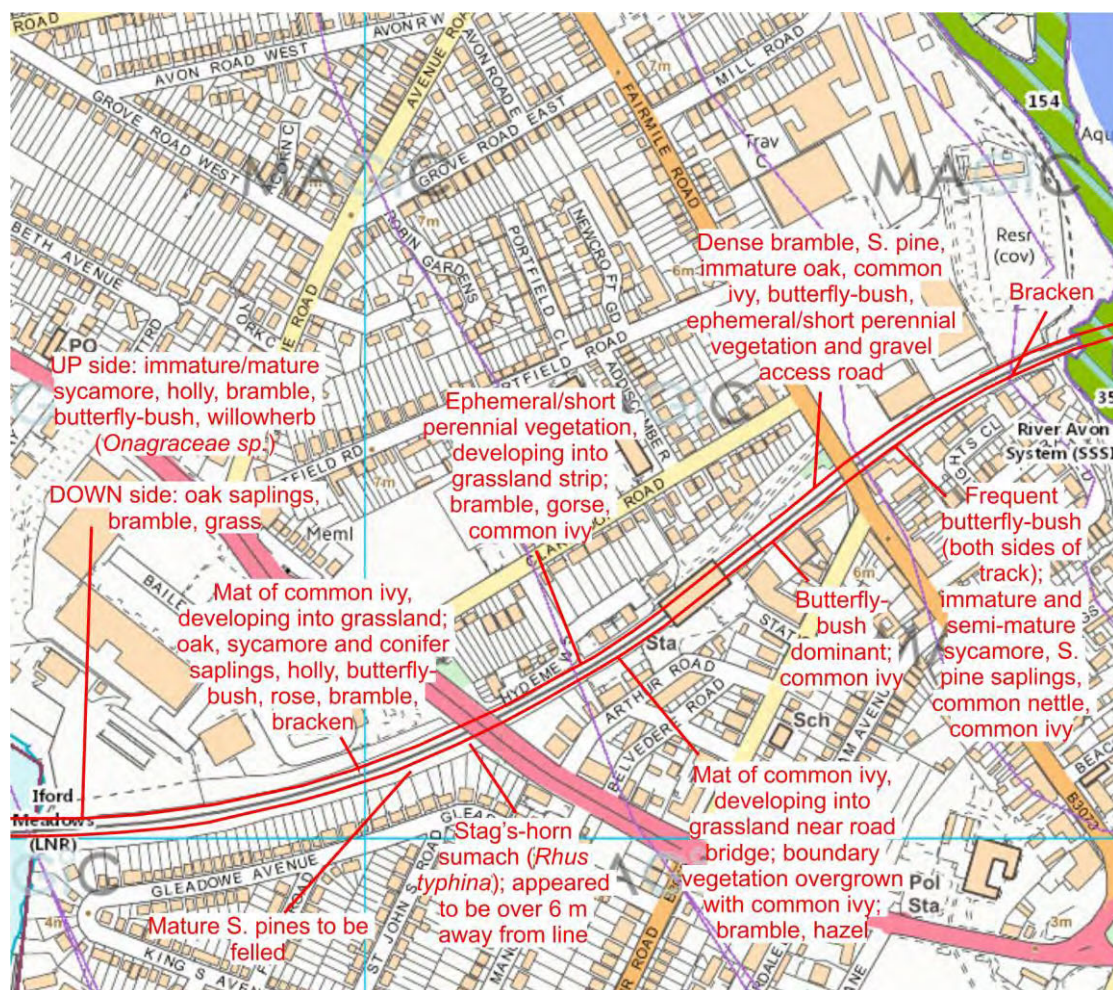


Figure 6. Survey results plan.

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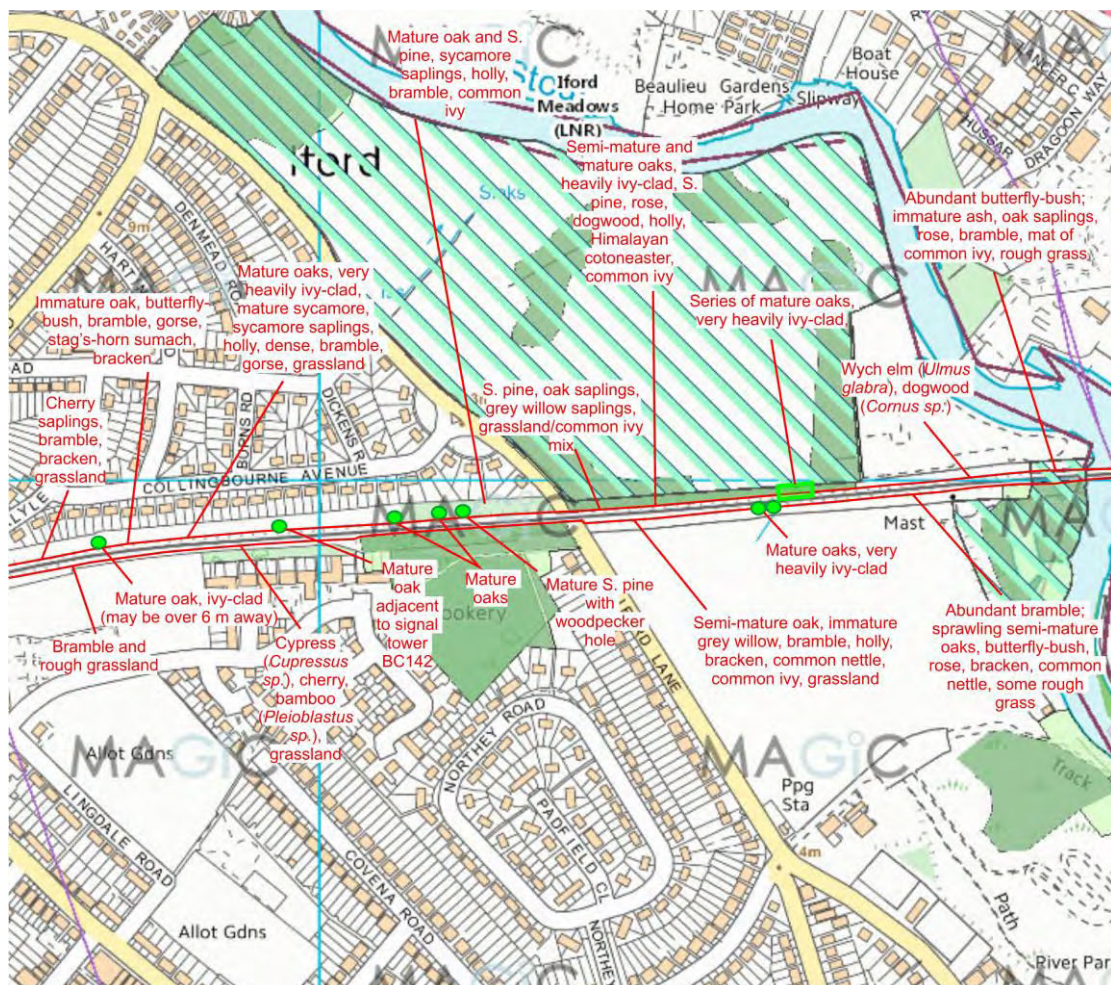


Figure 7. Survey results plan.

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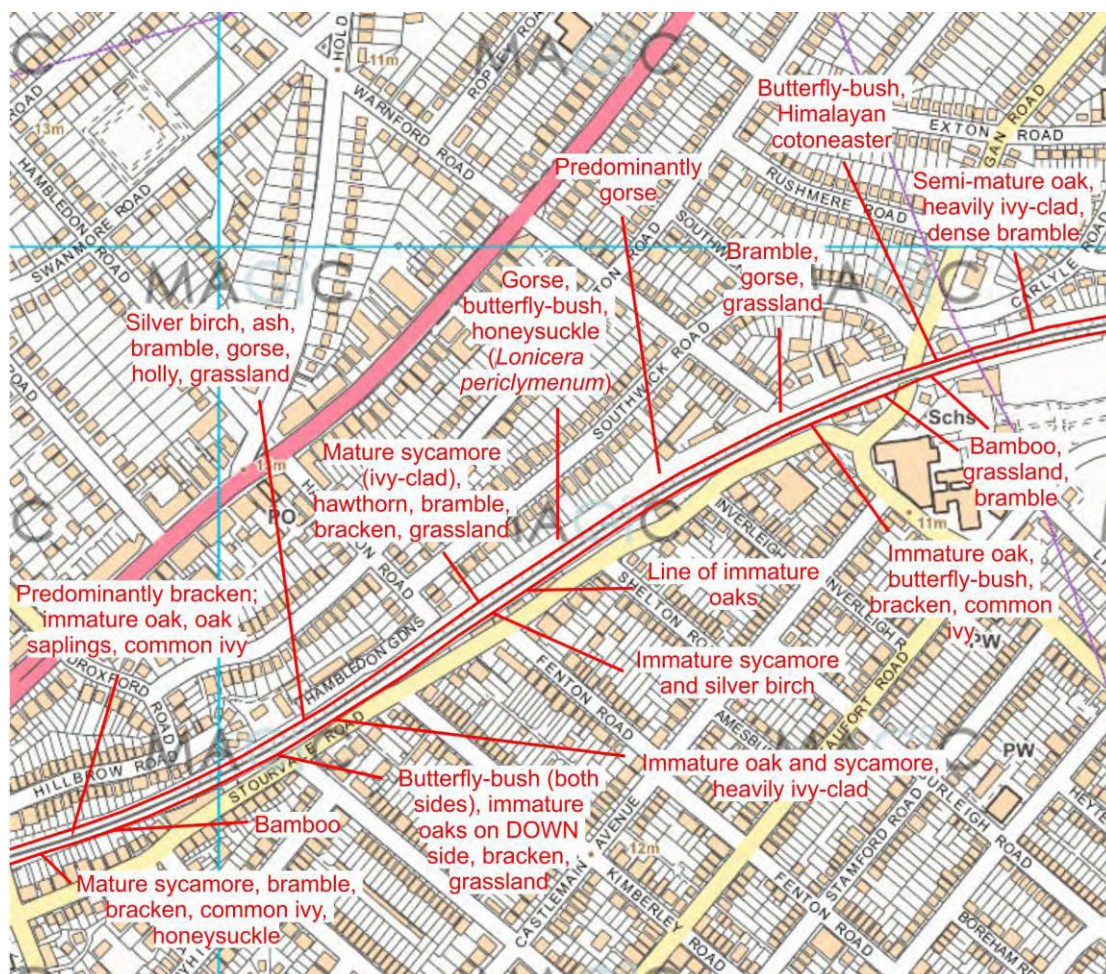


Figure 8. Survey results plan.

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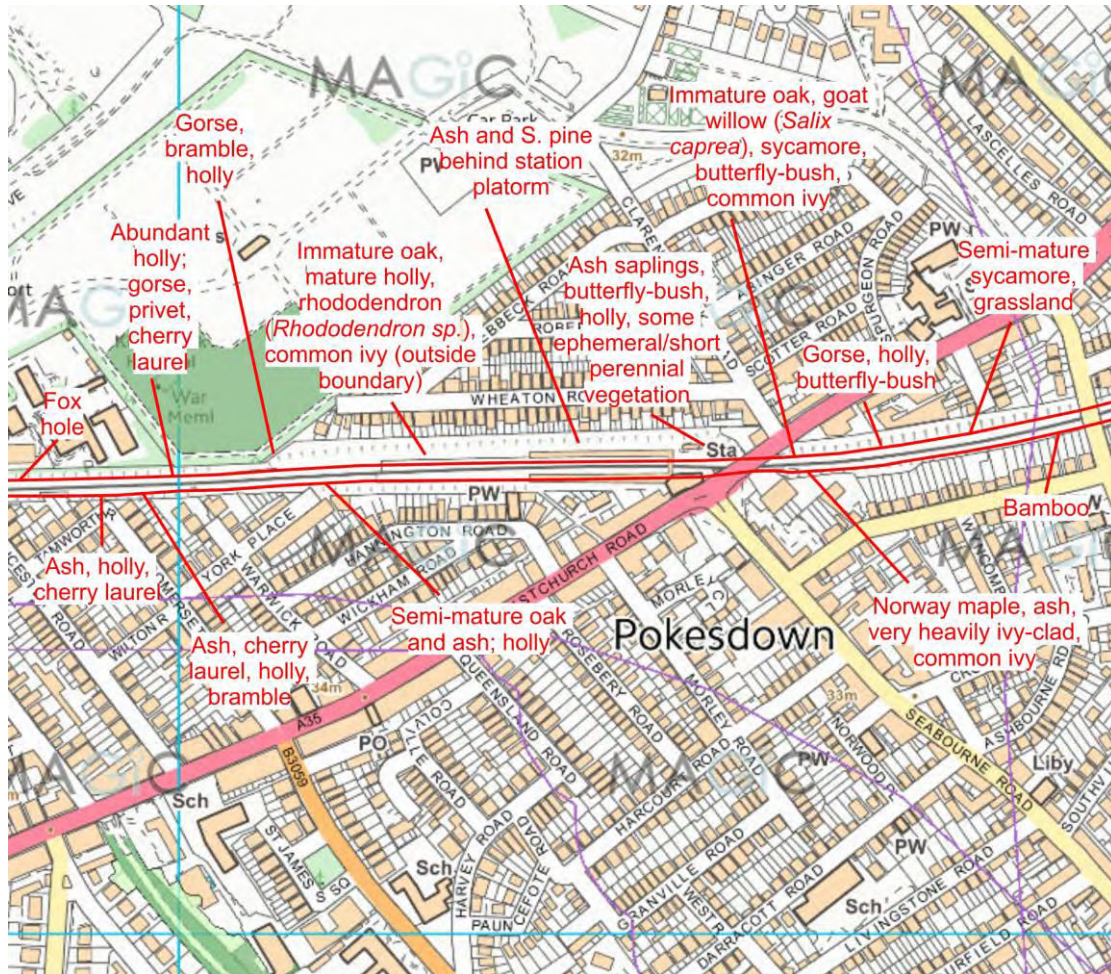


Figure 9. Survey results plan.

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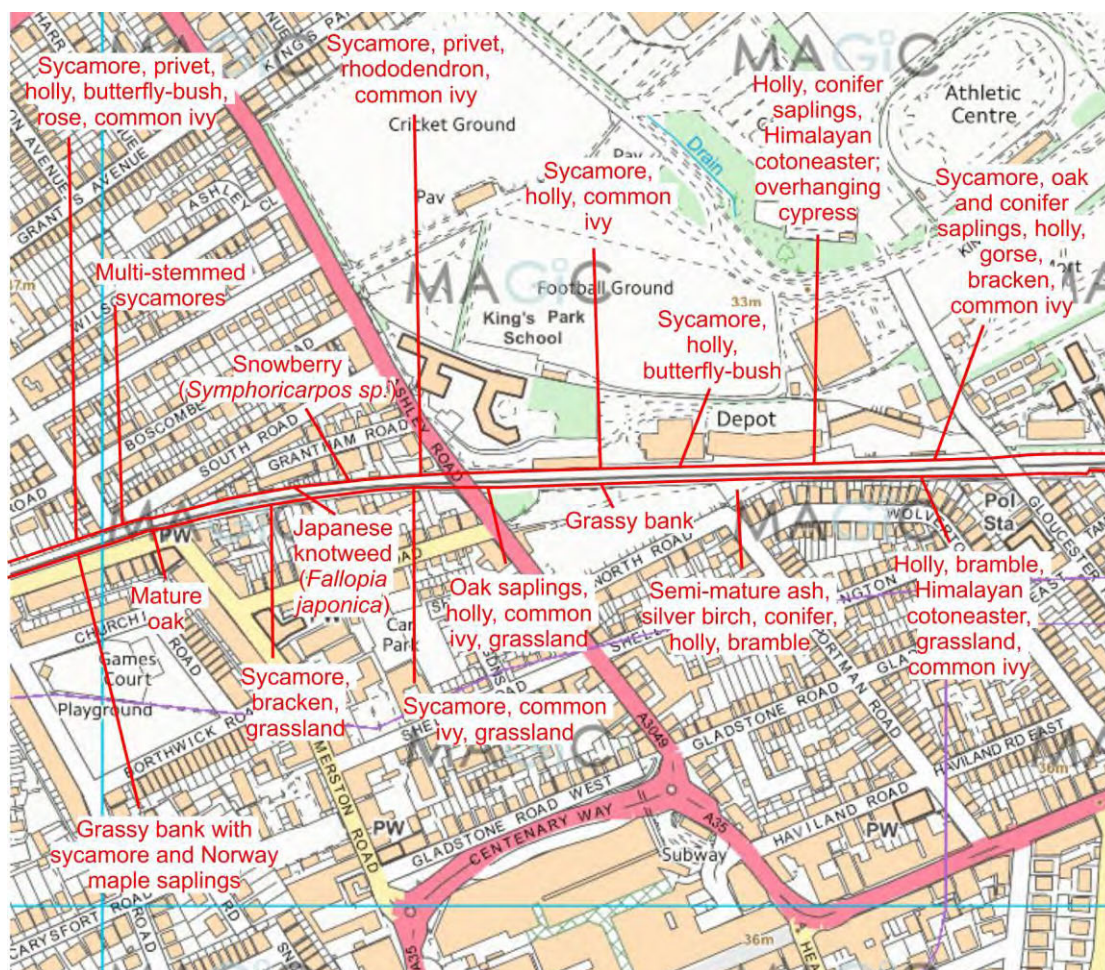


Figure 10. Survey results plan.

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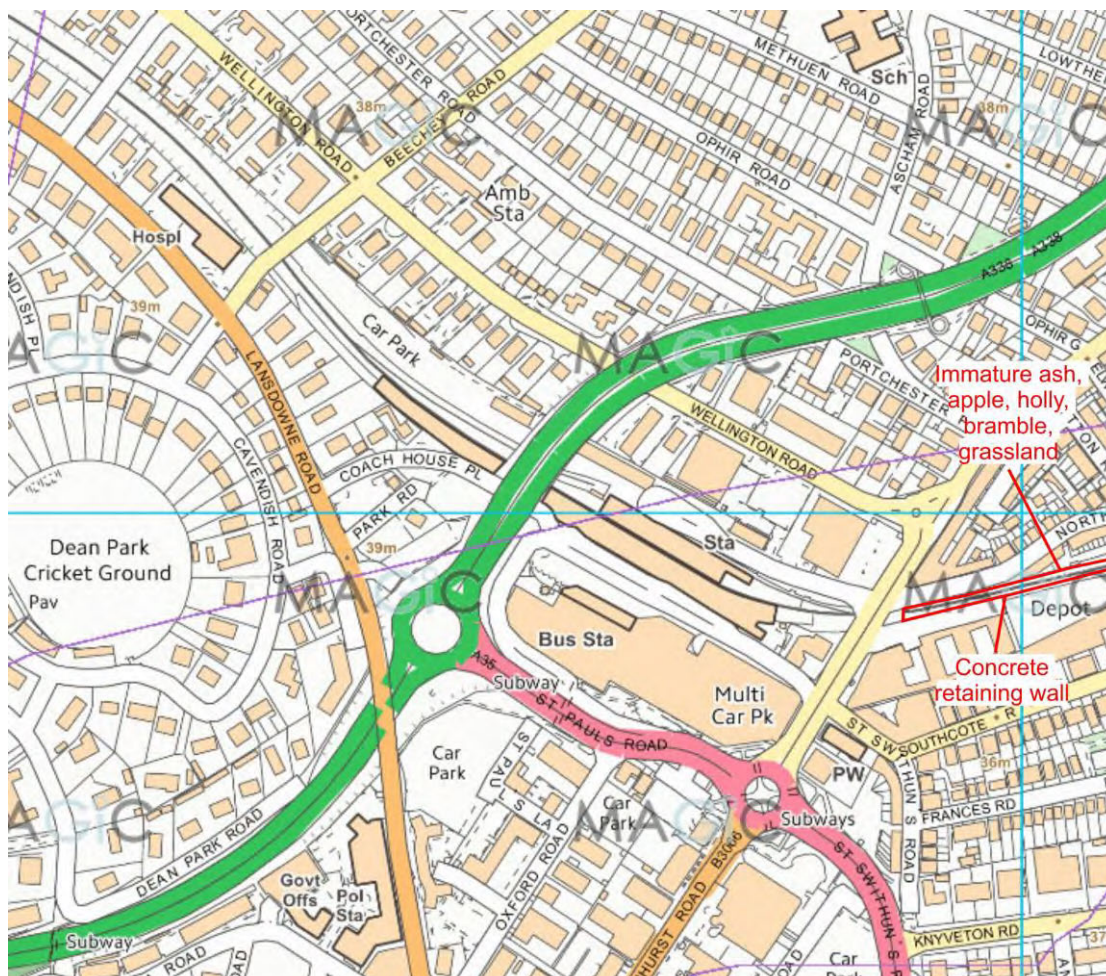


Figure 12. Survey results plan.

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5.3 Protected Species

5.3.1 Badgers

The habitats adjacent to the line along much of the survey area were considered suitable for sett creation and foraging; however, despite this, no evidence of badgers was recorded during the survey. A number of mammal holes were recorded in certain areas, as shown on Figures 9 and 11, but these were all considered to be indicative of fox (*Vulpes vulpes*) rather than badger, due to their shape and the presence of the characteristic scent of fox around the holes. Notwithstanding this, due to the nature of the works, which predominantly involve above-ground vegetation clearance only, no mammal holes (badger or otherwise) would be directly impacted by the works. Therefore, overall, the clearance works are expected to have a negligible impact on badgers.

5.3.2 Bats

The majority of the vegetation within the clearance area was considered to be of negligible roosting value for bats, due to an absence of suitable PRFs. However, there were a number of mature oak trees and a single mature Scots pine that were assessed to be of 'low' value for roosting bats due to their size and covering of ivy, potentially obscuring PRFs. Their locations are highlighted in green on Figures 2 and 7. A

large number of the trees within the survey area were ivy-clad, but many of these were very heavily clad, to the point where the covering of ivy is likely to completely cover any potentially PRFs that could be present, rendering them unusable for bats. In addition to the low value trees, one mature oak was assessed to be of 'moderate' value due to the presence of a large crack up the trunk, which could provide roosting opportunities for bats, including potential hibernation opportunities. The location of this tree is highlighted in green on Figure 2 and was located approximately at grid reference SZ 188 945.

The habitats within the railway boundary that comprise largely well-established trees and shrubs (primarily present to the east of Pokesdown) offer suitable commuting and foraging habitat. As clearance works within this area will only be carried out up to 6 m from the running rail, it is expected that, although some trees and shrubs will be lost, including some mature trees, the vast majority of existing habitat will be retained and remain largely unaffected by the works.

Overall, providing appropriate mitigation measures are implemented, the works are expected to have an overall low impact on bats.

5.3.3 Dormice

None of the areas within the work site or directly adjacent were considered to be of high value for dormice due to a sub-optimal habitat structure and/or species mix throughout. The areas of woodland habitat present on the embankments generally lacked a suitable understorey and species composition (notably with a general lack of hazel) to provide nesting and foraging habitat for dormice, and western extent of the work site through Pokesdown and Bournemouth was generally considered to be of low or negligible value, due to both the habitat and species composition resulting in a lack of shelter, foraging and nesting habitat. Nut searches were carried out in any areas where accumulations of acorns or hazelnuts were present, with no evidence of dormice feeding found, and no other evidence of dormice, such as nests was found.

Due to a combination of the above reasons, the works are expected to have an overall negligible impact on dormice.

5.3.4 Great Crested Newts

There were no waterbodies present within the clearance areas for much of the length of the site; however, sections of ditch were present on one or both sides of the line between an area of the west of Hinton Admiral Station (SZ 198 947) and the River Mude (SZ 181 942), shown on Figures 1 – 3. None of these ditch sections were found to be of any significant value for GCNs, generally being found to have low water levels and a lack of suitable vegetation for egg-laying. In addition, there were a lack of ponds within the surrounding area. Of those that were present, the majority of them were cut off from the railway line by major roads or built-up urbanised areas, resulting in a lack of connectivity between the site and the ponds. There were some areas of terrestrial habitat on the embankments that were considered to provide suitable foraging habitat and some shelter for GCNs; however, generally, a lack of suitable hibernacula (sheltering and hibernating habitat) were present within the clearance area or directly adjacent habitats. In addition, the nature of the works, comprising above-ground vegetation clearance carried out over winter, is highly unlikely to result in any significant impacts to GCNs in the low likelihood that they are present.

Overall, due to a combination of the above factors, it is expected that the works will have a negligible impact on GCNs.

5.3.5 Nesting Birds

Suitable bird nesting habitat was consistently present throughout the survey area – particularly in the eastern half (Figures 1 – 7), with vegetation towards the Bournemouth end generally considered to be of lower value. Notwithstanding this, although the survey was carried out outside of the nesting season, no nests of any description were noted within the clearance area.

Although the works will result in the temporary or permanent loss of vegetation within the clearance area, the loss is considered to be relatively minor relative to that within the railway boundary as a whole and that which will be retained. This will result in nesting bird habitat being retained during and following the works. In addition, the works are due to be carried out over the winter, meaning that no nesting birds will be directly impacted.

Overall, providing suitable mitigation measures are implemented, the works are expected to have a low impact on nesting birds.

5.3.5 Reptiles

Although some suitable areas of reptile habitat were present within the clearance areas, in the form of the strips of unmanaged grassland with adjacent scrub, the predominant vegetation generally comprised trees and shrubs, resulting in a lack of suitable basking opportunities and, in turn, an increased likelihood of reptiles being absent. The adjacent habitats also generally comprised those which tend to be unsuitable for reptiles, including arable land, heavily-grazed grassland, and built-up urbanised areas, which reduce the likelihood of reptiles being present and reduce connectivity between the railway corridor and areas of suitable reptile habitat, again limiting the likelihood of reptiles accessing the site. In addition, again, the nature of the works, comprising above-ground vegetation clearance over the winter, carried out when reptiles are hibernating below ground or in suitable shelter, means that reptiles are highly unlikely to be directly impacted by the works. Furthermore, in the long term, the clearance works will result in increased areas of open habitat, which would be of benefit to any basking reptiles that are present or later colonise the site.

Overall, the works are expected to have a negligible impact on reptiles.

5.3.6 Other Wildlife

No other protected or notable species were recorded during the survey; however, a number of invasive, non-native species, including Japanese knotweed, Himalayan cotoneaster, hollyberry cotoneaster, rhododendron, butterfly-bush, and snowberry were recorded. Japanese knotweed and the two cotoneaster species are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), which makes it illegal to plant or otherwise cause them to grow in the wild. There are three species of rhododendron also listed on Schedule 9; however, at the time of the survey it was not possible to determine which species was present within the clearance area; therefore, the precautionary principle was employed and it was assumed to be invasive. In addition to these, butterfly-bush and snowberry are

not listed on Schedule 9, but are considered as invasives species that can have a significant negative ecological impact on areas that they colonise. Without appropriate mitigation, management of these species could lead to their spread within the railway boundary and into adjacent habitat. This is likely to have a significant negative ecological impact, as well as potentially leaving Network Rail liable to potential legal action from adjacent landowners with regard to the Schedule 9 species.

6 CONCLUSIONS AND RECOMMENDATIONS

Overall, the results of the assessment indicate that the proposed clearance works will have a low or negligible impact on protected species, although some areas of potential bat habitat and suitable bird nesting habitat were present. A number of invasive, non-native species were also present within the site extents. Following the site assessment and in view of the findings, Naturally Wild would recommend the following:

6.1 Mitigation

- One mature oak tree that may be required to be felled as part of the works was assessed to be of moderate value for roosting bats. In accordance with the BCT guidelines, it is recommended that two bat activity surveys are carried out on this tree before it is felled, in order to establish the presence or likely absence of roosting bats. The surveys would comprise one dusk emergence survey and one pre-dawn return to roost survey, with both surveys carried out between May and September (inclusive), and at least one of the surveys carried out between May and August (inclusive). In addition, the surveys must be spaced a minimum of two weeks apart. If bats are confirmed to be present, it will be necessary to obtain a licence from Natural England to permit the destruction of a bat roost, with appropriate mitigation measures implemented during the felling works, details of which would be provided in the licence application documentation.
- In addition, as a number of mature trees were assessed to be of low value for roosting bats, although no further survey effort is required on the trees, it is recommended that those that are highlighted in the results section are felled in sections, with any limbs or sections of trunk that have cavities in them lowered carefully to the ground and left for a 24-hour period to allow any bats to escape, in the unlikely event that they are present. The felled sections can then be removed from site.
- The vast majority of the works are due to take place outside of the nesting season and, therefore, it is expected that the work can be carried out without having a significant impact on nesting birds. However, if the works carry on into the nesting season, it is recommended that a follow-up nesting bird inspection (or series of inspections) is carried out on the remaining vegetation to be cleared, to ensure that no active nests are present. Any vegetation to be cleared within the nesting season should have been surveyed for nests within the previous 48 hours prior to clearance; therefore, depending on the amount of remaining clearance work required, a series of follow-up inspections may be required. In the event that any active nests are encountered, a suitable exclusion zone (minimum of 5 m) should be placed around the nest, with no clearance work taking place in this area until the nest can be confirmed as no longer active, after which the exclusion zone can be removed and the area can be cleared.
- Although some areas of the site were considered to provide suitable commuting and foraging habitat for bats, the works will be carried out over the winter, when bats are hibernating. However, if the works extend into the spring and any night works are required, any artificial lighting used should be installed to minimise any unnecessary spill and subsequent disturbance to commuting and foraging bats in the area.

- Several invasive, non-native plant species were recorded within and adjacent to the clearance areas. It is not a legal requirement to remove these plants or control them within the land owned by Network Rail (<https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants>); however, in order to avoid any contravention of current legislation or long-term liability relating to their spread onto adjacent land under separate ownership, it is recommended that plant material or soil from the Japanese knotweed, rhododendron and cotoneaster species that may be removed as part of the works should be properly removed off site by a registered waste carrier for disposal at a landfill site that is authorised to accept invasive plant material. In addition, due to its potential to have a significant negative impact both ecologically and structurally, it is recommended that a full treatment programme is carried out to eradicate the Japanese knotweed from the area where it is present. Naturally Wild can provide details of suitable treatment options, if required. In the long term, it would be desirable from both an ecological and infrastructure perspective to fully treat and remove all of the invasive, non-native species present, if feasible to do so.

6.2 Enhancement

As the habitat to be lost is being removed and the areas will be maintained as vegetation-free for health and safety reasons, it is not considered appropriate to provide compensatory planting within the relatively limited areas of railway land available. However, nesting and roosting habitat for birds and bats could be maintained and enhanced by installing a series of bird and/or bat boxes. It is recommended that any boxes to be installed are located in areas of existing suitable nesting, roosting and foraging habitat for both species, which would primarily be the areas highlighted as woodland on Figures 2, 4, 5 and 7. More detailed guidance on the installation of boxes is readily available, but Naturally Wild can provide this, if required.

Providing the recommendations of this report are implemented, Naturally Wild would conclude that there would not be a significant impact to protected species or habitats as a result of the proposed works.

7 SITE IMAGES



Image 1. West of Hinton Admiral Station.



Image 2. West of Hinton Admiral Station, including a section of concrete ditch (right).



Image 3. Himalayan cotoneaster.



Image 4. Area to the west of Lyndhurst Road bridge (shown on Figure 2).



Image 5. Area to the west of Lyndhurst Road bridge (shown on Figure 2).

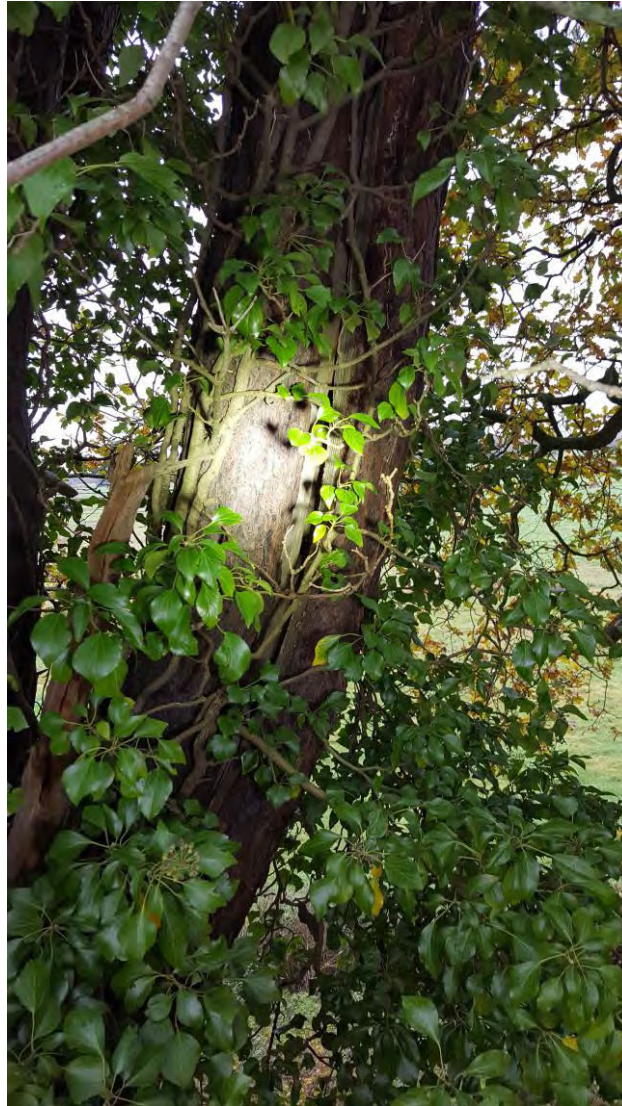


Image 6. Crack in oak tree assessed to be of moderate value for roosting bats.



Image 7. Area shown in Figure 3.



Image 8. Area shown in Figure 4.



Image 9. Area shown in Figure 5.



Image 10. Area east of Christchurch Station (Figure 5).



Image 11. Area east of Christchurch Station (Figure 5).



Image 12. Area west of Christchurch Station.



Image 13. Area west of Christchurch Station (Figure 6), including mature Scots pines to be removed (top left).



Image 14. Between Iford Lane and the River Stour (Figure 7).



Image 15. Between Iford Lane and the River Stour (Figure 7).



Image 16. Area east of Iford Lane (Figure 8).



Image 17. Area east of Iford Lane (Figure 8).



Image 18. Area shown in Figure 8.



Image 19. Area shown in Figure 8.



Image 20. Area shown in Figure 8.



Image 21. Area east of Pokesdown Station (Figure 9).



Image 22. Area east of Pokesdown Station (Figure 9).



Image 23. Area west of Pokesdown Station (Figure 9).



Image 24. Area west of Pokesdown Station (Figure 10).



Image 25. Area west of Pokesdown Station, west of Ashley Road.



Image 26. Snowberry.



Image 27. Japanese knotweed.



Image 28. Japanese knotweed.



Image 29. Area shown in Figure 10 (western extent).



Image 30. Area shown in Figure 11.



Image 31. Area shown in Figure 11, to the north of the business park.



Image 32. Hollyberry cotoneaster.



Image 33. Area shown in Figure 11 (western extent).



Image 34. Far western extent of the works, to the east of Bournemouth Station.

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9 APPENDICES

9.1 Additional Information for the Legislation of Other Protected Species

Badgers: The badger is geographically widespread across the UK; however, they are still vulnerable to baiting, hunting and detrimental impacts of development to their habitat.

Both the badger and its habitat are protected under the Protection of Badgers Act (1992), Schedule Six of the Wildlife and Countryside Act (1981) an Appendix Three of the Bern Convention. Therefore, badgers have legal protection against deliberate harm or injury and it is an offence to:

- Interfere with a badger sett by damaging or destroying it
- Kill, injure, take or possess a badger
- Cruelly ill-treat a badger
- Obstruct access to a badger sett
- Disturb a badger whilst it is in a badger sett

Bats: All British bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore afforded protection under Section 9 of this Act. In addition, all bat species are listed in Schedule 2 of The Conservation (Natural Habitats, &c.) Regulations 1994 (SI 1994 No. 2716) (as amended) (known as the Habitats Regulations) and are therefore protected under Regulation 39 of the Regulations. These Regulations make provision for the purpose of implementing European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992, under which bats are included on Annex IV. The Act and Regulations makes it an offence, *inter alia*, to:

- Intentionally kill, injure, take (handle) or capture a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not) - under the Habitats Regulations it is an offence to damage or destroy a breeding site or resting place of any bat; or
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection - under the Habitats Regulations it is an offence to deliberately disturb a bat (this applies anywhere, not just at its roost) in such a way as to be likely to affect its ability to survive, breed, reproduce, rear or nurture their young or hibernate.

Further details of the above legislation, and of the roles and responsibilities of developers and planners in relation to bats, can be found in Natural England's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

Birds: Birds receive protection under the Wildlife and Countryside Act also. It is an offence to intentionally or recklessly kill, injure or take any wild bird; take, damage or destroy a nest of a wild bird whilst it is in use or being built; or to take, damage or destroy an egg of a wild bird. The bird-nesting season is defined as being from 1st March until 31st August with exceptions and alterations for some species.

Great Crested Newts: Great crested newts are a European Protected Species, listed on Annex II and IV of the EEC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora, receiving protection under The Conservation of Habitats and Species Regulations 2010. This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (WCA 1981) and Schedule 2 of the Conservation (Natural Habitats etc.) Regulations 1994 (Regulation 38). Under such legislation it is an offence to:

- Intentionally or recklessly kill, injure or capture a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

**Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.*

To undertake surveys for great crested newt it is necessary to hold an appropriate licence issued by Natural England.

Reptiles: All native British species of reptile (of which there are 6) are listed in Schedule Five of the Wildlife and Countryside Act (1981) and as such are protected from deliberate killing, injury or trade. Therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without an appropriate licence.