

Ecological Baseline Report - Hedgerows

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Executive summary

The A358 Taunton to Southfields Dualling scheme would provide a dual carriageway along the length of the A358 between Taunton and Ilminster in Somerset, connecting the M5 motorway to the A303 at Ilminster to the south.

Hedgerow surveys were part of the suite of habitat and protected species surveys commissioned in relation to the scheme. This report presents the results of the hedgerow surveys undertaken between 2017 and 2021 and aims to inform the ecology baseline for the scheme.

The objectives of this report are to assess hedgerows in accordance with the Hedgerow Regulations 1997 criteria to determine which are classified as 'important' and provide species composition and hedgerow location information which, along with the hedgerow importance/species-richness assessment, should be used to inform appropriate mitigation and enhancement.

The Hedgerow Regulations 1997 protect important hedgerows from damage or destruction. The key principle of the hedgerow regulations is that hedgerows in the countryside are often ancient features that have been part of the landscape for many centuries. Their age, combined with the fact that they are valuable assets in ecological terms, means that important hedgerows merit a degree of protection. Hedgerows are also listed as a habitat of 'principal importance for the conservation of biodiversity in England' in accordance with Sections 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Based on the desk study information and the detailed field surveys undertaken, 267 hedgerows (out of a total of 290 hedgerow features) qualify as 'important' in accordance with the Hedgerow Regulations 1997 and 173 hedgerows were classed as species-rich in their composition.

Hedgerows throughout the study area form key landscape and biodiversity features. These hedgerows offer connectivity between other key habitats such as woodlands, watercourses and ponds and provide opportunities for wildlife movement and dispersal. Given the prevalence of hedgerows identified as supporting hazel dormouse, it is clear that these are a key habitat for this species within the study area. Hedgerows are also likely to be of importance as a foraging and commuting resource for a large number of other species in the predominantly arable landscape, particularly acting as links between woodlands.

1 Introduction

1.1 Purpose and scope of this document

- 1.1.1 The A358 Taunton to Southfields Dualling scheme (hereafter referred to as 'the scheme') would provide a dual carriageway along the length of the A358 between Taunton and Ilminster in Somerset, connecting the M5 motorway to the A303 at Ilminster to the south. Hedgerow surveys were part of the suite of habitat and protected species surveys commissioned in relation to the scheme.
- 1.1.2 This report presents the results of the hedgerow surveys and aims to inform the ecology baseline for the scheme.
- 1.1.3 The objectives of this report are to:
 - assess hedgerows in accordance with the Hedgerow Regulations 1997 criteria and to determine which are classified as 'important'
 - identify hedgerows which may not meet any of the criteria for 'importance' under the Hedgerow Regulations, but which are considered to be species-rich
 - provide species composition and hedgerow location information which, along with the hedgerow importance/species-richness assessment, should be used to inform appropriate mitigation and enhancement

1.2 Scheme overview

- 1.2.1 The scheme is part of a programme of improvements planned along the A303/A358 corridor aimed at improving connectivity between London, the southeast and the south-west. The A303, alongside the A30, forms part of the strategic road network (SRN) and together with the A358, provides the link between London, the south-east and the south-west.
- 1.2.2 The programme of improvements, as set out in the Government's *Road Investment Strategy* [1] made a commitment to, "...upgrade all remaining sections of the A303 between the M3 and the A358 to dual carriageway standard, together with creating a dual carriageway link from M5 at Taunton to the A303".
- 1.2.3 The scheme directly addresses this long-term commitment and would provide a new rural all-purpose dual carriageway link from the M5 at Taunton to the A303 at Southfields roundabout. The new dual carriageway would comprise new and upgraded stretches of the existing A358 road. Full details of the scheme will be provided in Chapter 2 *The Project* of the Environmental Statement (ES). Please refer to Figure 1-1 for scheme plan.

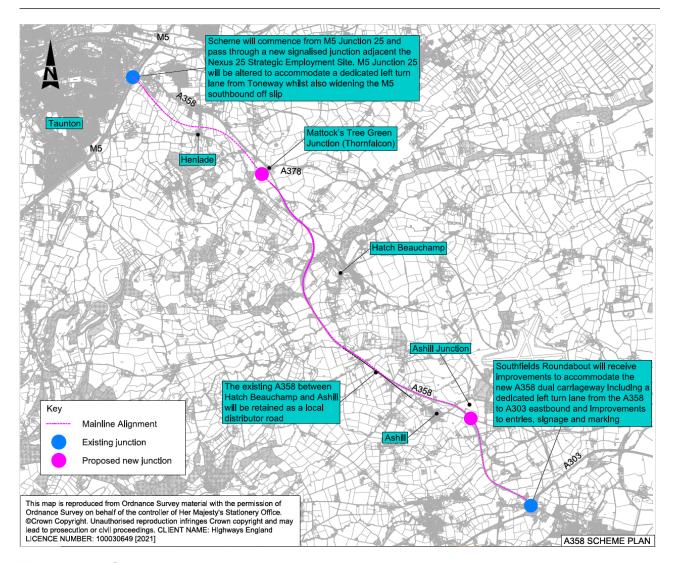


Figure 1-1 Scheme plan

1.3 Study area and zone of influence

- 1.3.1 The Chartered Institute for Ecology and Environmental Management (CIEEM) Guidelines for Ecological impact Assessment [2] recommend that all potentially important ecological features that occur within the Zone of Influence (ZoI) for a scheme are investigated. The ZoI for hedgerows includes:
 - areas to be directly within the land take for the scheme
 - areas that would be temporarily affected during construction
- 1.3.2 The ZoI depends on the ecological features concerned. For this hedgerow assessment, the ZoI has been defined as land within a 50 metre buffer of the defined ecology survey zone, which comprises the footprint of the scheme and associated site clearance area. This ZoI is hereafter referred to as the study area.

1.4 Legislation

1.4.1 The Hedgerow Regulations 1997 protect important hedgerows from damage or destruction. The key principle of the hedgerow regulations is that hedgerows in the countryside are often ancient features that have been part of the landscape for many centuries. Their age, combined with the fact that they are valuable assets in ecological terms, means that important hedgerows merit a degree of protection.

- 1.4.2 The removal of countryside hedgerows (excluding garden hedges) is prohibited without first submitting a hedgerow removal notice to the local planning authority (LPA). In considering the removal notice, the LPA can order the retention of 'important' hedgerows. The regulations set out the criteria under which hedgerows are considered important.
- 1.4.3 A hedgerow is defined within the *Hedgerow Survey Handbook* [3] as "any boundary line of trees or shrubs over 20 metres long and less than 5 metres wide at the base, provided that at one time the trees and shrubs were more or less continuous". This includes shrubby hedgerows, lines of trees and very gappy hedgerows, where each section may be less than 20 metres long, but where each gap is less than 20 metres in extent.
- 1.4.4 For the purposes of the Hedgerow Regulations 1997, a hedgerow is classified as 'important' if it, or the hedgerow of which it is a stretch of:
 - has existed for 30 years or more
 - satisfies at least one of the criteria listed in the 'Wildlife and landscape' section of Part II of Schedule 1. This criterion is discussed in Section 2.
- 1.4.5 Hedgerows can also qualify as 'important' through meeting criteria in the 'Archaeology and history' section of Part II of Schedule 1 of the Hedgerow Regulations. Assessment of hedgerows against these criteria will be presented in Chapter 8 *Biodiversity* of the ES, and this report considers 'Wildlife and landscape' criteria only.
- 1.4.6 All native hedgerows (including species-poor) are listed as habitats of principal importance (HPI) in accordance with Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and are considered to be of high conservation value.

1.5 Status of hedgerows at national level

1.5.1 Hedgerows are also listed under the now succeeded UK Biodiversity Action Plan (UK BAP) and continue to be regarded as a conservation priority in the subsequent *UK Post-2010 Biodiversity Framework* [4]. All hedgerows that are composed of at least 80% of one or more UK native species are covered by the priority habitat and it is estimated that 84% of countryside hedgerows in Great Britain would be included.

1.6 Status of hedgerows at county level

- 1.6.1 As a predominantly agricultural county, Somerset has a well-developed hedgerow network throughout, though varying in character depending on the historic land uses in each area of the county. In the central and southern regions of the county, which includes the scheme, the hedgerow network is characterised by a high prevalence of traditional ancient and species-rich hedgerows, as well as locally distinctive features such as vegetative composition, associated ditches, mounds and the number of standard trees [5].
- 1.6.2 Historically, hedgerows in the county have been lost to changes in land use from agricultural intensification, with further losses from the mid-twentieth century as a result of urban expansion and the development of roads and canals. Diseases of characteristic woody component species, namely Dutch Elm disease and Ash dieback, in hedgerows have also altered the composition of the Somerset

- hedgerow network. Mismanagement and neglect remain significant pressures resulting in continued losses of hedgerows in the county [5].
- 1.6.3 Hedgerows are covered by several key pieces of local planning policy, which are summarised below.

The Taunton Deane Local Plan (2004-2011)

1.6.4 The Taunton Deane Local Plan (2004-2011) [6] forms the detailed part of the Development Plan for Taunton Deane. It provides a realistic and comprehensive basis for development, investment and related decisions for the Borough for the period 2004 to 2011. Following the adoption of subsequent plans, predominantly the Taunton Deane Borough Council Adopted Core Strategy 2011-2028 Core Policy 8, many of the policies no longer apply. However, a small number of policies have been retained and are being reviewed as part of an ongoing update to the Local Plan.

<u>Policy EN6: Protection of Trees, Woodlands, Orchards and Hedgerows, is of particular relevance to this report.</u>

1.6.5 Policy EN6 aims to prevent development that would harm trees, woodlands, orchards, historic parklands and hedgerows unless adequate provisions are made to compensate losses, with good management of these features for the purposes of nature conservation should be sought.

The Taunton Deane Borough Council Adopted Core Strategy (2011-2028)

1.6.6 The Taunton Deane Borough Council Adopted Core Strategy (2011-2028) [7] sets out the vision for Taunton Deane and the strategic objectives, spatial strategies and policies for meeting that vision. It specifies the locations and quantity of growth to be accommodated within the Borough up to 2028 and identifies the strategic site allocations for developments over five hectares, including mixed-use urban extensions. Hedgerows are covered by Core Policy 8: Environment, which ensures developers give due consideration to hedgerows as priority habitats and landscape features contributing to a network of green infrastructure.

The South Somerset Local Plan (2006-2028)

- 1.6.7 The South Somerset Local Plan (2006-2028) [8] is a collection of policies which set out the long-term vision and strategic context for managing and accommodating growth within South Somerset up to 2028. The local plan was adopted from 2015.
- 1.6.8 The key policy relevant to hedgerows is EQ4, summarised below.

Policy EQ4: Biodiversity

- 1.6.9 Policy aims protect key biodiversity receptors, including all designated sites, protected and priority habitats and species from impacts arising from development. This includes through the maintenance of coherent ecological networks, as well as the identification of opportunities to enhance and restore biodiversity features both within developments and the wider landscape.
- 1.6.10 The policy outlines that all developments should be informed by robust survey and impact assessment of the likelihood of impacts to biodiversity features, with a sequential approach to design prioritising avoidance is required, followed by minimising impacts, with compensatory actions a last resort. Developments that

cannot demonstrate it will not result in detriment to key biodiversity receptors will not be permitted.

2 Methodology

2.1 Desk study

- 2.1.1 A desk study was undertaken to identify all hedgerows that were located partially or entirely within the study area. The following information was reviewed:
 - Aerial imagery [9]
 - The Multi-Agency Geographic Information for the Countryside (MAGIC) database [10]
 - The A358 Taunton to Southfields Dualling Hedgerow Technical Report (March 2021) [11]
- 2.1.2 All hedgerows that were located partially or entirely within the study area were identified. The *A358 Taunton to Southfields Dualling Hedgerow Technical Report* [11] presents the findings of hedgerow surveys carried out in 2017, 2019 and 2020. The full details and timings of these surveys, which were reviewed as part of the desk study (and for which the survey results are presented within this report in order to provide a full, detailed picture of all hedgerows within the study area) can be found within the corresponding report [11].
- 2.1.3 Given that hedgerows are unlikely to alter their 'importance' status over relatively short periods of time, the status of hedgerows within the study area that were previously subject to complete survey were retained. Where the previous surveys were constrained (outside of optimal survey period, survey incomplete or access restricted) or where gaps in the survey information were identified, hedgerows were then subject to a detailed field survey as specified in Section 2.2.
- 2.1.4 Data provided in January 2021 by the Somerset Environmental Record Centre (SERC) on protected and notable species within a 2 kilometre radius of the scheme was also reviewed. In addition, the following protected species reports were also reviewed for relevant records of protected species associated with the hedgerows within the study area:
 - A358 Taunton to Southfields Dualling Scheme Ecological Baseline Report Breeding Birds (which will form Appendix 8.12 of the ES)
 - A358 Taunton to Southfields Dualling Scheme Ecological Baseline Report Hazel Dormouse (which will form Appendix 8.15 of the ES)
 - A358 Taunton to Southfields Dualling Scheme Ecological Baseline Report Bat Roosts (which will form Appendix 8.8 of the ES)
- 2.1.5 Through this exercise, information on hedgerow importance and species composition, hedgerow position in the landscape and records of species listed in Schedules 1 (birds), 5 (animals) or 8 of the Wildlife and Countryside Act 1981 was compiled. All hedgerows that were located either partially or entirely within the study area were subject to this exercise.

2.2 Field study

2.2.1 All identified hedgerows (those identified through the desk study and surveyed in 2017, 2019 and 2020, and those subject to field survey in 2021) were surveyed in accordance with the 'Wildlife and Landscape Criteria' in the Hedgerow Regulations 1997.

- 2.2.2 Each hedgerow was sampled according to the following criteria:
 - Where the length of the hedgerow did not exceed 30 metres the whole hedgerow was surveyed.
 - Where the hedgerow exceeded 30 metres, but no more than 100 metres, the central 30 metre section was surveyed.
 - Where the hedgerow exceeded 100 metres, but no more than 200 metres, 30 metre sections within the centre of each half of the hedgerow were surveyed.
 - Where the hedgerow exceeded 200 metres the central 30 metre section within each third of the hedgerow was surveyed.
- 2.2.1 The field surveys were conducted at various dates in June and August 2021. Each survey was completed by survey teams consisting of two ecologists, with lead ecologist experienced with botanical species identification required for hedgerow surveys. Surveys were led by Jacob Haddon and Marie Fleming, who are both members of CIEEM and experienced with botanical species identification.
- 2.2.2 Survey dates are given below:
 - 21 and 22 June 2021
 - 18 and 19 August 2021
 - 24 and 25 August 2021
- 2.2.3 Electronic handheld devices were utilised to map hedgerows accurately in the field, recording their start and end points (as defined within the *Hedgerow Survey Handbook* [3]), as well as total length.
- 2.2.4 The ecological attributes of each 30 metre sample, and the entire hedgerow where appropriate, were recorded in accordance with the *Hedgerow Survey Handbook*. Ecological attributes included woody species (both those listed in Schedule 3 of the Hedgerow Regulations and additional woody species), woodland ground flora species (listed in Schedule 2 of the Hedgerow Regulations within the whole hedge and within 1 metre of the outermost edges of the hedgerow), ditches, walls, banks, parallel hedges, connections and standard and rare trees. Species lists were compiled, and any signs of notable fauna recorded.

2.3 Hedgerow assessment

- 2.3.1 All hedgerows were assessed to determine if they met the classification criteria as 'important' hedgerows in accordance with the Hedgerow Regulations 1997, and to determine if they were species-rich (contained five or more woody species per 30 metre length).
- 2.3.2 To qualify as 'important' a hedgerow must be over 30 years old and satisfy at least one of the following criteria:
 - At least seven woody species per 30 metres
 - At least six woody species per 30 metres and at least three features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) to (i)
 - At least six woody species per 30 metres including any one of native black poplar (*Populus nigra*), large-leaved lime (*Tilia platyphyllos*), small-leaved lime (*Tilia cordata*) or wild service tree (*Sorbus torminalis*)
 - At least five woody species and at least four features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) to (i)

- Supports or has desk study results of birds listed in Schedules 1, animals listed in Schedule 5 or plants listed in Schedule 8 of the Wildlife and Countryside Act 1981
- Adjacent to a bridleway/footpath plus at least four woody species and at least two features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) to (g)
- 2.3.3 Where hedgerows are under 30 years old, they are classified as unimportant regardless of other qualifying criteria.
- 2.3.4 Features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) to (i) include the following:
 - A bank or wall which supports the hedgerow along at least one half of its length
 - Gaps which in aggregate do not exceed 10% of the length of the hedgerow.
 - Where the length of the hedgerow does not exceed 50 metres, at least one standard tree
 - Where the length of the hedgerow exceeds 50 metres but does not exceed 100 metres, at least two standard trees
 - Where the length of the hedgerow exceeds 100 metres, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50 metres
 - At least three woodland species (listed in Appendix A)
 - A Woodland species relevant to hedgerow regulations) within 1 metre, in any direction, of the outermost edges of the hedgerow
 - A ditch along at least one half of the length of the hedgerow
 - Connections scoring four points or more in accordance with sub-paragraph (5). A connection with another hedgerow scores one point and a connection with a pond or a woodland in which the majority of trees are broad-leaved trees scores 2 points; and a hedgerow is connected with something not only if it meets it but also if it has a point within 10 metres of it and would meet it if the line of the hedgerow continued
 - A parallel hedge within 15 metres of the hedgerow

2.4 Assumptions and limitations

- 2.4.1 Several hedgerows were not subject to field survey in 2021, but sufficient information existed (raw data associated with The *A358 Taunton to Southfields Dualling Hedgerow Technical Report (March 2021)* [11]) to allow these hedgerows to be listed as important (with their importance qualifying criteria recorded but not the associated features) or classified as important through supporting species listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981. These hedgerows (hedgerows 88, 142, 143, 149, 151, 153, 154, 267, 268, 272A, 305A, 308, 309 and 310) were precautionarily considered to be species-rich and the lack of survey is not considered to be a significant limitation.
- 2.4.2 Access was denied to three hedgerows (hedgerows 317, 326 and 330); therefore, these three hedgerows could not be surveyed. As hedgerows 326 and 330 directly linked to a hedgerow with evidence of Schedule 5 hazel dormouse (*Muscardinus avellanarius*) recorded, therefore qualifying as important, this was not considered a significant limitation. As Hedgerow 317 could not be attributed an importance status through either desk study or field survey, this is considered a significant limitation.

- 2.4.3 The optimal survey season for hedgerows is June and July, particularly for assessment of associated ground flora, but extends from April to October [3]. Most surveys were undertaken within the optimal period, but several hedgerows were surveyed in August 2021 due to an expansion of the study area to incorporate design changes. Given that associated ground flora species were still visible for the majority of these hedgerows at this time, this was not considered a significant limitation.
- 2.4.4 Best practice for hedgerow surveys is to survey both sides of the hedgerow [3]. Owing to land access restrictions, this was not possible for all hedgerows. However, given that the majority of hedgerows surveyed in this manner were identified as species-rich and associated ground flora were identified, this was not considered to have significantly impacted the reliability of results.
- 2.4.5 A number of hedgerows were identified during field assessments which were not apparent from the desk study exercise. These hedgerows were positioned alongside blocks of woodland and therefore obscured beneath their canopies from aerial imagery. These hedgerows were included within the hedgerow field survey.

3 Results

3.1 Desk study

- 3.1.1 The desk study identified 227 hedgerow features within the study area. Of these, one hedgerow (175) was found not constitute a hedgerow, instead comprising a linear bank of scrub.
- 3.1.2 214 of the hedgerows identified in the desk study qualified as 'important' in accordance with the Hedgerow Regulations 1997, with numerous hedgerows qualifying through several criteria. 132 hedgerows were classed as species-rich in their composition.
- 3.1.3 Of the important hedgerows identified:
 - 35 qualified as important due to a composition of an average seven woody species listed in Schedule 3
 - 38 qualified as important due to a composition of an average six woody species listed in Schedule 3, and at least three associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 8 qualified as important due to a composition of an average six woody species listed in Schedule 3, including one of native black poplar, large-leaved lime, small-leaved lime or wild service tree. Each of these hedgerows contained wild service tree
 - 27 qualified as important due to a composition of an average five woody species listed in Schedule 3, and at least four associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 95 qualified as important due to a composition of an average four woody species listed in Schedule 3, at least two associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4), and sits adjacent to a bridleway/footpath
 - 202 qualified as important due to either records of supporting species listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981, all records of hazel dormouse from surveys (172 hedgerows) or qualifying through direct connectivity with a hedgerow or woodland supporting hazel dormouse (30 hedgerows)
- 3.1.4 Hedgerows bordering the existing A358 to the south of the scheme, including those summarised above, did not appear on historical maps [11] and were likely to have been planted with the construction of the A358. This habitat comprised typical highways estate planting specifications species mixes of native trees and shrubs but were well established, with the existing A358 constructed and upgraded between the 1960s and 80s [12].

3.2 Field study

- 3.2.1 Sixty-three hedgerows were identified for field survey in 2021, with three hedgerows (317, 326 and 330) not accessed due to access being denied.
- 3.2.2 Hedgerow 109 was deemed to form part of hedgerow 108, with the connecting length obscured by a parallel length of canopy. Hedgerow 109 was therefore not considered further.
- 3.2.3 Fifty-three of the hedgerows subject to field survey qualified as 'important' in accordance with the Hedgerow Regulations 1997, with numerous hedgerows

qualifying through several criteria. 42 hedgerows were classed as species-rich in their composition.

- 3.2.4 Of the important hedgerows identified:
 - 8 qualified as important due to a composition of an average seven woody species listed in Schedule 3
 - 17 qualified as important due to a composition of an average six woody species listed in Schedule 3, and at least three associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 2 qualified as important due to a composition of an average six woody species listed in Schedule 3, including one of native black poplar, large-leaved lime, small-leaved lime or wild service tree. Each of these hedgerows contained wild service tree
 - 10 qualified as important due to a composition of an average five woody species listed in Schedule 3, and at least four associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 1 qualified as important due to a composition of an average four woody species listed in Schedule 3, at least two associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) and sits adjacent to a bridleway/footpath
 - 43 qualified as important due to either records of supporting species listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981, all records of hazel dormouse from surveys (15 hedgerows) or qualifying through direct connectivity with a hedgerow or woodland supporting hazel dormouse (28 hedgerows)

3.3 Summary of results

- 3.3.1 Woody species most frequently encountered within the hedgerows included blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), English elm (*Ulmus procera*), dogwood (*Cornus sanguinea*), dog rose (*Rosa canina*) and ash (*Fraxinus excelsior*). Other commonly occurring species included field maple (*Acer campestre*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), wayfaring tree (*Viburnum lantana*), field rose (*Rosa arvensis*), guelder rose (*Viburnum opulus*), holly (*Ilex aquifolium*), oak (*Quercus robur*) and wild privet (*Ligustrum vulgare*). Wild service tree was encountered infrequently throughout the study area.
- 3.3.2 Additional woody hedgerow species not recognised by the Hedgerow Regulations 1997 encountered included sycamore (*Acer pseudoplatanus*) and European turkey oak (*Quercus cerris*).
- 3.3.3 Oak and ash were the most frequently encountered standard trees within hedgerows, including numerous mature and over mature individuals.
- 3.3.4 Hedgerows were frequently associated with ditches throughout the study area. This association was most notable at the southern extent of the study area, where hedgerows border the numerous ditch systems that drain watercourses such as the River Isle, River Ding and Cad Brook. Many of these hedgerow ditches retained water for much of the year and were consequently associated with diverse marginal vegetation.
- 3.3.5 Where present, woodland ground flora most frequently included hart's tongue fern (*Asplenium scolopendrium*), herb-Robert (*Geranium robertianum*), wood false-

brome (*Brachypodium sylvaticum*), lords-and-ladies (*Arum maculatum*), enchanter's nightshade (*Circaea lutetiana*), dog's mercury (*Mercurialis perennis*), ramsons (*Allium ursinum*), and wood avens (*Geum urbanum*). Infrequently occurring important woodland ground flora included sweet woodruff (*Galium odoratum*), wood spurge (*Euphorbia amygdaloides*), bugle (*Ajuga reptans*) and giant fescue (*Festuca arundinacea*). Woodland ground flora was most frequently encountered where hedgerows adjoined mature woodlands, or where they were associated with established ditch systems. In increasingly arable settings, woodland indicative ground flora was less prevalent, with ground flora generally characteristic of species-poor grassland, with Yorkshire fog (*Holcus lanatus*), perennial rye-grass (*Lollium perenne*) and cock's foot (*Dactylis glomerata*) dominant.

- 3.3.6 Compiled results for all hedgerows are presented in Appendix B *Hedgerow* survey results.
- 3.3.7 The hedgerow classifications and their locations are shown in Appendix C Hedgerow survey results plan.
- 3.3.8 A total of 290 hedgerow features were identified within the study area. Hedgerow 175 was deemed not to qualify as a hedgerow and hedgerow 109 was deemed to form part of the wider hedgerow 108. A further three hedgerows were subject to desk study only (317, 326 and 330).
- 3.3.9 Based on the desk study information and the detailed field surveys 267 hedgerows qualified as 'important' in accordance with the Hedgerow Regulations 1997, with numerous hedgerows qualifying through several criteria. 173 hedgerows were classed as species-rich in their composition.
- 3.3.10 Of the important hedgerows identified:
 - 43 qualified as important due to a composition of an average seven woody species listed in Schedule 3
 - 55 qualified as important due to a composition of an average six woody species listed in Schedule 3, and at least three associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 10 qualified as important due to a composition of an average six woody species listed in Schedule 3, including one of native black poplar, large-leaved lime, small-leaved lime or wild service tree. Each of these hedgerows contained wild service tree
 - 37 qualified as important due to a composition of an average five woody species listed in Schedule 3, and at least four associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4)
 - 96 qualified as important due to a composition of an average four woody species listed in Schedule 3, at least two associated features listed in Hedgerow Regulations 1997 Part 11 Paragraph 7(4) and sits adjacent to a bridleway/footpath
 - 245 qualified as important due to either records of supporting species listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981, all records of hazel dormouse from surveys (187 hedgerows) or qualifying through direct connectivity with a hedgerow or woodland supporting hazel dormouse (58 hedgerows)
- 3.3.11 Two hedgerows (216 & 354) qualified through all criteria for 'important' hedgerows for 'wildlife and landscape criteria' in the Hedgerow Regulations 1997.

- 3.3.12 Of the 245 hedgerows qualifying as important through supporting species listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981, 114 qualified through this criterion alone.
- 3.3.13 Hedgerows form an important part of the character of the local agricultural landscape [5]. The landscape character within the study area is dominated by agricultural land, interspersed with occasional woodland blocks. Woodlands associated with the existing A358 corridor are connected by the hedgerow network, including direct connections between ancient woodland sites such as Bickenhall Wood and Ashill Wood/Every's Copse to other woodlands in the wider landscape. Woodland linkages are generally fewer at the increasingly agricultural northern end of the study area, but hedgerows still form an important link between woodled riparian corridors and the wider landscape. Hedgerows also provide links between other high biodiversity value habitat within the landscape, notably ponds and watercourses.
- 3.3.14 The hedgerow network was fairly contiguous throughout the study area, except where minor roads leading off the existing A358 break these connections. This continuity is interrupted where the A358 meets the A303 in the south and the M5 in the north.

4 Conclusions

- 4.1.1 Hedgerows within the study area were subject to assessment during 2017, 2019, 2020 and 2021. 290 hedgerows features were identified for assessment within the study area, of which two features were confirmed not to be hedgerows.
- 4.1.2 All other hedgerows were assessed on species diversity and the criteria as set out within the Hedgerow Regulations 1997.
- 4.1.3 Of the 288 hedgerows assessed, 267 were classified as important. Many hedgerows qualified as important through several criteria, due in part to a large proportion of hedgerows within the study area (245) qualifying as important through supporting species listed on Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981, all relating to hazel dormouse.
- 4.1.4 Species-rich hedgerows were also prevalent throughout the study area with 173 hedgerows recorded as containing five or more woody species relevant to the Hedgerow Regulations 1997 (average per 30 metre section). Most hedgerows comprised blackthorn, hawthorn, English elm and dog rose, with hazel, dogwood, ash, elder, wayfaring tree and field maple also frequently encountered. Wild service tree was infrequently identified within hedgerows throughout the study area. Ash and oak comprised the primary standard trees identified, including mature and over mature individuals.
- 4.1.5 Hedgerows throughout the study area form key landscape and biodiversity features. These hedgerows offer connectivity between other key habitats such as woodlands, watercourses and ponds and provide opportunities for wildlife movements and dispersal, particularly when associated with ditches. Assessment of scheme impacts on hedgerows should therefore take into account hedgerow conservation value, hedgerow importance and hedgerow connectivity within the landscape.
- 4.1.6 Given the prevalence of hedgerows identified as supporting hazel dormouse, it is clear that these are a key habitat for this species within the area. Hedgerows are also likely to be of importance as a foraging and commuting resource for a large number of other species in the predominantly arable landscape, particularly acting as links between woodlands.

Abbreviations List

Please refer to Environmental Statement Chapter 17 Abbreviations.

Glossary

Please refer to Environmental Statement Chapter 18 Glossary.

References

- [1] Department for Transport, "Road investment strategy: 2015 to 2020," March 2015. [Online]. Available: https://www.gov.uk/government/publications/road-investment-strategy-for-the-2010-to-2020-road-period. [Accessed January 2021].
- [2] CIEEM, "Guidelines for Ecological Impact Assessement in the UK and Ireland: Terrestrial, freshwater, coastal and marine version 1.1," Chartered Institute for Ecology and Environmental Management, Winchester, 2018.
- [3] Defra, "Hedgerow Survey Handbook: A standard procedure for local surveys in the UK," London, 2007.
- [4] Joint Nature Conservation Committee, "UK Post-2010 Biodiversity Framework | JNCC Adviser to Government on Nature Conservation," 2012. [Online]. Available: https://jncc.gov.uk/our-work/uk-post-2010-biodiversity-framework/. [Accessed October 2021].
- [5] Somerset Wildlife Trust, "Hedgerows in Somerset," [Online]. Available: https://www.somersetwildlife.org/sites/default/files/2021-09/Hedgerows%20in%20Somerset.pdf. [Accessed January 2022].
- [6] Taunton Deane Borough Council, "Taunton Deane Local Plan," 2004. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1063/taunton-deane-local-plan.pdf. [Accessed October 2021].
- [7] Taunton Deane Borough Council, "Adopted Core Strategy 2011-2028," 2011. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1061/adopted-core-strategy-2011-2028.pdf. [Accessed October 2021].
- [8] South Somerset District Council, "South Somerset Local Plan (2006-2028)," 2015. [Online]. Available: https://www.southsomerset.gov.uk/media/1306/south_somerset_local_plan_2006-2028_adoption_version_march_2015.pdf. [Accessed October 2021].
- [9] Google, "Google Maps," 2021. [Online]. Available: https://www.google.co.uk/maps/@50.9777003,-3.0263405,12.5z.
- [10] Defra, "Multi-Agency Geographic Information for the Countryside," [Online]. Available: https://magic.defra.gov.uk/. [Accessed October 2021].
- [11] Highways England, "A358 Taunton to Southfields Dualling Scheme Preliminary Environmental Information Report, chapter 8: Appendix 8.4," Highways England, 2021.
- [12] Highways England, "A358 Taunton to Southfields Dualling Scheme Technical Appraisal Report," 2018.

Appendices

Appendix A Woodland species relevant to Hedgerow Regulations

Table A-1 Woodland ground flora species relevant to Hedgerow Regulations 1997.

Common name	Scientific name
Barren strawberry	Potentilla sterilis
Bluebell	Hyacinthoides non-scripta
Broad buckler-fern	Dryopteris dilatata
Broad-leaved helleborine	Epipactis helleborine
Bugle	Ajuga reptans
Common cow-wheat	Melampyrum pratense
Common dog violet	Viola riviniana
Common polypody	Polypodium vulgare
Dog's mercury	Mercurialis perennis
Early dog violet	Viola reichenbachiana
Early purple orchid	Orchis mascula
Enchanters nightshade	Circaea lutetiana
Giant fescue	Festuca gigantea
Goldilocks buttercup	Ranunculus auricomus
Herb Robert	Geranium robertianum
Hairy brome	Bromus ramosus
Hairy wood-rush	Luzula pilosa
Herb Paris	Paris quadrifolia
Hart's tongue	Phyllitis scolopendrium
Hard shield fern	Polystichum aculeatum
Lady fern	Athyrium filix-femina
Lords-and-ladies	Arum maculatum
Male fern	Dryopteris filix-mas
Moschatel	Adoxa moschatellina
Narrow buckler fern	Dryopteris carthusiana
Nettle-leaved bellflower	Campanula trachelium
Oxlip	Primula elatior
Pignut	Conopodium majus
Primrose	Primula vulgaris
Ramsons	Allium ursinum
Sanicle	Sanicula europaea
Scaly male-fern	Dryopteris affinis
Soft shield fern	Polystichum setiferum

Common name	Scientific name
Sweet violet	Viola odorata
Sweet woodruff	Galium odoratum
Toothwort	Lathraea squamaria
Wild strawberry	Fragaria vesca
Wood anemone	Anemone nemorosa
Wood avens	Geum urbanum
Wood false-brome	Brachypodium sylvaticum
Wood horsetail	Equisetum sylvaticum
Wood meadow-grass	Poa nemoralis
Wood millet	Milium effusum
Wood sage	Teucrium scorodonia
Wood sedge	Carex sylvatica
Wood sorrel	Oxalis acetosella
Wood speedwell	Veronica montana
Wood spurge	Euphorbia amygdaloides
Yellow archangel	Lamiastrum galeobdolon

Appendix B Hedgerow survey results

Table B-1 Hedgerow survey results

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
76		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Present		Yes	-					
76A	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes						Yes
77	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-	Yes				
78		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
79		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
80	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					Yes
81	Yes	Yes	Present	Present	Absent	Present	Absent	Present	Present	Absent	Present		Yes	-				Yes	Yes
84	Yes	Yes	Present	Absent	Absent	Present	Absent	Present	Absent	Absent	Present		Yes	-		Yes		Yes	Yes
85			Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Yes		Yes					
86		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes						
87			Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Yes		Yes					
88		Yes	-	-	-	-	-	-	-	-	-			Yes					
89		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
92	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-	Yes				
96		Yes	Absent	Present	Present	Absent	Absent	Absent	Present	Absent	Absent		Yes	-					
97	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-	Yes				
98	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-	Yes				
100A	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present			Yes		Yes			Yes
100B	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					Yes
101		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent			Yes					
103		Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Present	Present		Yes	-					Yes
104		Yes	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent			Yes					
105		Yes	Absent	Present	Absent	Present	Absent	Absent	Present	Absent	Absent		Yes	-					
106			Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present								

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
107		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
108	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent			Yes					
109	Forms pa	art of wider	hedgerow 10)8				'									·		
110	Yes		Present	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent								
111		Yes	Present	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent		Yes	-					
112		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
113			Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent								
115		Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent		Yes						
116	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Present	Present							Yes	
117	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present				Yes	Yes			Yes
118	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present				Yes	Yes			Yes
119	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Present	Present	Absent					Yes	Yes	Yes	Yes
120A		Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Present	Absent								Yes
120B		Yes	Absent	Absent	Absent	Absent	Present	Present	Absent	Present	Present			Yes					Yes
121		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
122	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-		Yes			
123		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					
124	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Present			Yes	ļ.,			Yes	Yes
125A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-	Yes	Yes		Yes	Yes
125B	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-	Yes	Yes		Yes	Yes
126	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-	-				
127		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-	1				
128		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	- \/ -					
129		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Va-	Yes	-				
130	V.	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-	-				
131	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Present		Yes	<u> -</u>					

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
132	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
133	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-	Yes	Yes			
134	Yes	Yes	Present	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent		Yes	-		Yes			
135		Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes	-					
136	Yes	Yes	Absent	Present	Present	Present	Absent	Absent	Present	Absent	Present		Yes	-		Yes			
137	Yes	Yes	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present			Yes					Yes
138A	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
138B		Yes	Present	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent		Yes	-					Yes
138C	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-		Yes			Yes
138D		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-					
139		Yes	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
140		Yes	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent		Yes	-					
141	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		\\\-	Yes	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
142	Yes	Yes	-	-	-	-	-	-	-	-	-		Yes		Yes	Yes			
143	Yes	Yes	-	-	-	-	-	-	-	-	-		Yes		Yes				
149 151		Yes	- -	-	-	-	 	-	-	 -	 		Yes	Yes					
152		Yes	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
153		Yes	-	- NOSCIIL	-	-	-	-	-	-	-		Yes	103					
154		Yes	-	-	-	-	-	_	-	 -	 -		Yes		+				Yes
155	Yes	Yes	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present		Yes	-	Yes	Yes			Yes
156	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Present	Present		Yes	-	Yes	Yes		Yes	Yes
156D	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-	Yes				Yes
157		Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
158		Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
159	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					Yes

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
160		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-					
161	Yes	Yes	Absent	Present	Absent	Absent	Absent	present	Present	Absent	Present		Yes	-					Yes
162	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent	Present								Yes
163A	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent								Yes
163B	Yes		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent								
163C			Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent								
164		Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					Yes
165			Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent								
166	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-				Yes	Yes
167	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-	Yes				
168A	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
169A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-		Yes			Yes
169B	Yes	Yes	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent		Yes	-					Yes
170		Yes	Present	Absent	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-					Yes
171	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Present	Present	Absent		V	Yes					Yes
172A	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
173	Yes	Yes	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent		Yes	- Yes					
174 175	Not a hed		Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Absent			168					
176	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present			Yes					Yes
177B	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-					Yes
178	100	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes						100
179A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-	+		Yes		+
179B	Yes	Yes	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent		Yes	-			1.55		Yes
183A	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-	+			Yes	Yes
183B	Yes	Yes	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent		Yes					1.00	Yes
1000	163	1 53	VNOCIII	VNSCIII	1 1696111	Vnaciii	Unscill	i ieseiit	Vnacili	Vnacur	VN9CIII		169	1-					169

							1							1			1	1	
Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
183C	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-					Yes
184A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-				Yes	Yes
184B		Yes	Present	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent		Yes	-					Yes
185		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
186	Yes	Yes	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent		Yes	-		Yes			
187	Yes	Yes	Present	Present	Present	Absent	Absent	Present	Present	Absent	Absent		Yes	-	Yes			Yes	
188	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Present	Absent		Yes	-				Yes	
189A	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					Yes
189B	Yes	Yes	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent		Yes	-					Yes
189C	Yes	Yes	Absent	Present	Present	Absent	Absent	Absent	Present	Absent	Absent		Yes	-	Yes	Yes			Yes
190	Yes	Yes	Present	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent		Yes	-					
191		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
192A		Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					
192B		Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					
193	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-	Yes	Yes			
194		Yes	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					Yes
195	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Present			Yes					Yes
196	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Present	Absent		Yes	-				Yes	Yes
197B	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-	Yes	Yes			Yes
198A	Yes	Yes	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent		Yes	-	Yes				Yes
198B	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					Yes
199		Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent		Yes	-					
200		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
201A	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
201B	Yes	Yes	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					Yes
201C	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
202A	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes	-	Yes				
202B	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
203	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-	Yes	Yes	Yes		
204	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Present		Yes	-		Yes			Yes
205	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent	Present		Yes	-	Yes				Yes
206	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes	-	Yes				
207		Yes	Present	Present	Absent	Absent	Absent	Present	Present	Present	Present		Yes	-					
208	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Present		Yes	-	Yes	Yes		Yes	Yes
209A	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent		Absent	Present		Yes	-					Yes
209C	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Present	Present		Yes	-		Yes		Yes	Yes
210	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-	Yes				
211A	Yes	Yes	Absent	Present	Absent	Absent	Present	Present	Absent	Absent	Absent		Yes	-					
211B	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-		1			
211C	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Absent		Yes	-					Yes
212	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Present		Yes	-		Yes			
213	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-		1			
214A		Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present			Yes					
214B	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Yes		\\\-	V		Yes
215	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present		Yes	-	\\\.	Yes	Yes	V-	Yes
216	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Present	Present	Present		Yes	-	Yes	Yes	Yes	Yes	Yes
217A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent			V		1			Yes
217B	V	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent		Vas	Yes		V			V
218	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Present	Present	Absent		Yes	-		Yes			Yes
219		Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent		Yes			\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	V-		
220	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes		Yes	Yes	Yes		
221A	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent				Yes	Yes			Yes

Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
	Yes	Present	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-					
	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent		Yes						
Yes	+	Absent	Present	Absent	Absent	Present	Absent	+	Absent	Present								Yes
		Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent		+	-					
		Absent						 	Absent	+			-					Yes
Yes	+	Absent	1	Absent	Absent	Absent	Absent		Absent	Absent		Yes	-					Yes
	-		+		+			1		+								Yes
			_					+		+								Yes
∕es		Absent			Absent	Present	Absent	Absent	Absent			Yes	-					Yes
					Absent	+			Absent	+								
								 		+			Yes					
						1		_	1	+			-					
			-			1			Absent	+			-					
				+	1	+		 	Absent	+		Yes	-					
res	1	Absent			Absent			+	1	+								Yes
		1	+			1_			Absent	+		\	Yes				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		1	+			1		_		+			-	V				Yes
		1			1	_		_	1	+			-	res	res		res	Yes
r es						+		_	1	+			-					Yes
		1	+					+	1	+			-					
	1		+			1				+		res	-					Yes
		+			1	1		_	+	+		Voc					Voc	
162		1				1			+	+			-				168	Yes
								_	1	+			-				Vos	Yes
	Yes Yes	Yes Yes	Yes Absent Yes Present Yes Absent Yes Present Yes Present Yes Present Yes Present Yes Absent Yes Present Yes Absent Yes Present Yes Absent Yes Absent Yes Absent Yes Absent Yes Present Yes Absent	Yes Absent Present Yes Present Absent Yes Present Present Yes Absent Present Yes Present Present Yes Absent Present Yes Absent Present Yes Present Absent Yes Present Present	Yes Absent Present Absent Yes Present Absent Present Absent Yes Present Present Absent Yes Absent Absent Absent Yes Present Absent Absent Yes Present Absent Absent Yes Present Absent Absent Yes Present Absent Absent Absent Yes Present Present Absent Absent	Yes Absent Present Absent Absent Absent Present Absent Absent Present Absent Absent Absent Absent Present Absent Absent Absent Absent Absent Absent Present Absent A	Yes Absent Present Absent Absent Absent Present Yes Absent Present Absent Absent Absent Absent Absent Yes Absent Present Absent Absent Absent Absent Yes Absent Absent Absent Absent Absent Absent Yes Absent	Yes Absent Present Absent Absent Absent Absent Yes Present Present Absent Absent Absent Absent Absent Yes Absent Present Absent Absent Absent Absent Absent Yes Absent Present Absent Absent Absent Absent Absent Yes Absent Absent Absent Absent Absent Absent Absent Yes Absent Present Absent	Yes Absent Present Absent Absent Absent Absent Present Absent Present Absent Absent Present Absent Present Absent Absent Absent Absent Present Absent Present Absent Absen	Yes Absent Present Absent Absent Absent Absent Absent Present Present Present Present Absent Absent Absent Present Absent Present Absent Present Absent Present Absent Present Absent Absent Present Absent Present Absent	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Present Absent Present Absent Absent Present Absent Absent Absent Present Absent Absent Present Absent Absent Absent Present Absent Absen	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Present Absent Absent Present Absent A	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Present Present Present Present Absent Present Absent Present Absent Present Absent Present Absent Present	Yes Absent Present Absent Absent Absent Absent Absent Absent Present Absent Yes - Yes Absent Present Absent Absent Absent Absent Present Absent Yes - Yes Absent Present Absent Absent Absent Absent Absent Absent Present Absent Yes - Yes Absent Present Absent Absent Absent Absent Absent Absent Present Yes - Yes Absent Absent Absent Absent Absent Absent Absent Absent Absent Yes - Yes Absent Present Absent Absent Absent Absent Absent Absent Present Absent Absent Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Absent Absent Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Present Absent Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Present Absent Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Yes - Yes Yes Absent Present Absent Absent Absent Absent Absent Yes - Yes Present Absent Absent Absent Absent Absent Absent Yes - Yes Present Absent Absent Absent Absent Absent Present Absent Yes - Yes Present Absent Absent Absent Absent Absent Present Absent Yes - Yes Present Absent Absent Absent Present Absent Absent Present Yes - Yes Present Present Absent Absent Present Absent Absent Present Yes - Yes Present Present Absent Absent Present Absent Absent Present Yes - Yes Present Present Absent Absent Present Absent Absent Present Yes - Yes Present Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Absent Absent Present Yes - Yes Absent Present Absent Absent Absent Present Absent Present Yes - Yes Absent Present Absent Absent Absent Pres	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Absent Present Present Absent Present Present Absent Present Present Absent Present Present Present Absent Present Present Present Absent Present Presen	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Present Absent Present Absent Present Absent Absent Present Absent Absent Present Absent Absent Present Absent Absent Present Absent Present Absent Present Present Present Present Present Present Absent Present Absent Present Present Present Present Present Present Absent Present Absent Present Present Present Present Absent Present Absent Present Present Present Present Absent Present Absent Present Present Present Present Absent Present Absent Present Present Present Present Absent Present Absent Absent Present Pre	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Absent Absent Yes -	Yes Absent Present Absent Absent Absent Absent Absent Absent Absent Present Present Present Absent Present Absent

Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
241			Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent								
242A	Yes	Yes	Present	Absent	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-		Yes	Yes	Yes	
242B	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-	Yes	Yes	Yes		
244A	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-					Yes
244B		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					
267	Yes	Yes	-	-	-	-	-	-	-	-	-			Yes	Yes				
268		Yes	-	-	-	-	-	-	-	-	-			Yes					
269	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	Yes				Yes	Yes
269A	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-		Yes			Yes
270	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
270A	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
271	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
272	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-				Yes	Yes
272A	Yes	Yes	-	-	-	-	-	-	-	-	-			Yes	Yes				
275		Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					
276	Yes	Yes	Absent	Present	Absent	Present	Absent	Absent	Present	Absent	Absent		Yes	-		Yes			Yes
277	Yes	Yes	Absent	Present	Absent	Present	Absent	Present	Present	Absent	Absent		Yes	-					Yes
278	Yes	Yes	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					Yes
285		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
286		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
287	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					
287A			Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Yes	Yes	-					
288	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-				Yes	
289	Yes	Yes	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent		Yes	-					
289A		Yes	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent		Yes	-					
290		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					

							1		1			1		1			1		
Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
291	Yes	Yes	Absent	Present	Absent	Absent	Present	Present	Present	Absent	Absent		Yes	-		Yes		Yes	
292		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-					
292A	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
293	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent			Yes					
294	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
295			Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present								
296	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent		Yes	-					Yes
298A			Absent	Present	Absent	Absent	Present	Absent	Absent	Present	Present								
298B	Yes	Yes	Present	Present	Absent	Present	Absent	Absent	Absent	Present	Present		Yes					Yes	Yes
299			Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent								
300A		Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Present	Absent		Yes	-					
300B	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Present	Present		Yes	-					Yes
300C	Yes	Yes	Present	Present	Absent	Absent	Present	Absent	Absent	Present	Present		Yes	-					Yes
301	Yes	Yes	Present	Present	Absent	Absent	Absent	Present	Absent	Present	Absent		Yes	-				Yes	Yes
302		Yes	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent		Yes	-					
303		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present		Yes	-	1				Yes
304		Yes	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent		Yes	-	1				
305A	Yes	Yes	-	-	-	-	-	-	-	-	-			Yes					
307		Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes	-					
308		Yes	-	-	-	-	-	-	-	-	-		Yes						
309		Yes	-	-	-	-	-	-	-	-	-		Yes						
310	Yes	Yes	-	-	-	-	-	-	-	-	-		Yes		Yes				
311	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent		Yes	-					Yes
312	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present	Present		Yes	-	Yes	Yes			Yes
313		Yes	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent	Absent		Yes	-	1				
314		Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent		Yes	-					

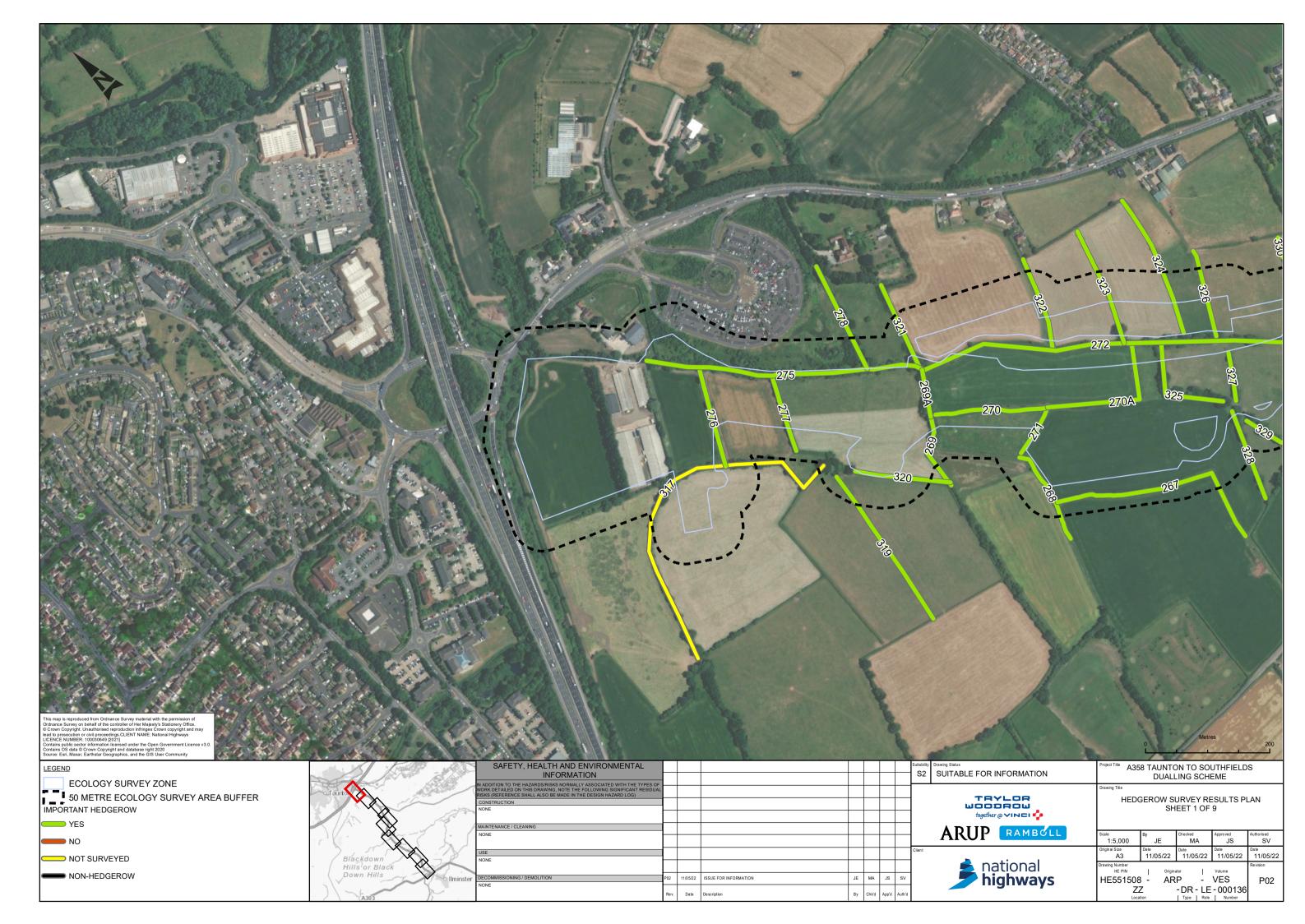
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315		Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent		Yes	-					
316		Yes	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes	-					
317	No Acces	S			•	•	•						•		•	•			-
318	Yes	Yes	Present	Present	Present	Absent	Absent	Absent	Present	Absent	Absent			Yes		Yes			
319	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
320	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent		Yes	-		Yes			
321	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent		Yes	-					
322	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes					
323	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent			Yes					
324	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent			Yes					
325	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent			Yes					
326		Yes	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-
327	Yes	Yes	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent			Yes					
328	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-		Yes			
329	Yes	Yes	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent		Yes	-		Yes		Yes	
330		Yes	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-
331	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent			Yes	<u> </u>				
332		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent			Yes	1				
333		Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes	-				
334			Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent								
335			Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent								
336		-	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent				-				+
337	Vs -	V = -	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Va-	-				
338	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent			Yes	-				+
339	Yes	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present					\ <u>\</u>			+
340	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present					Yes			

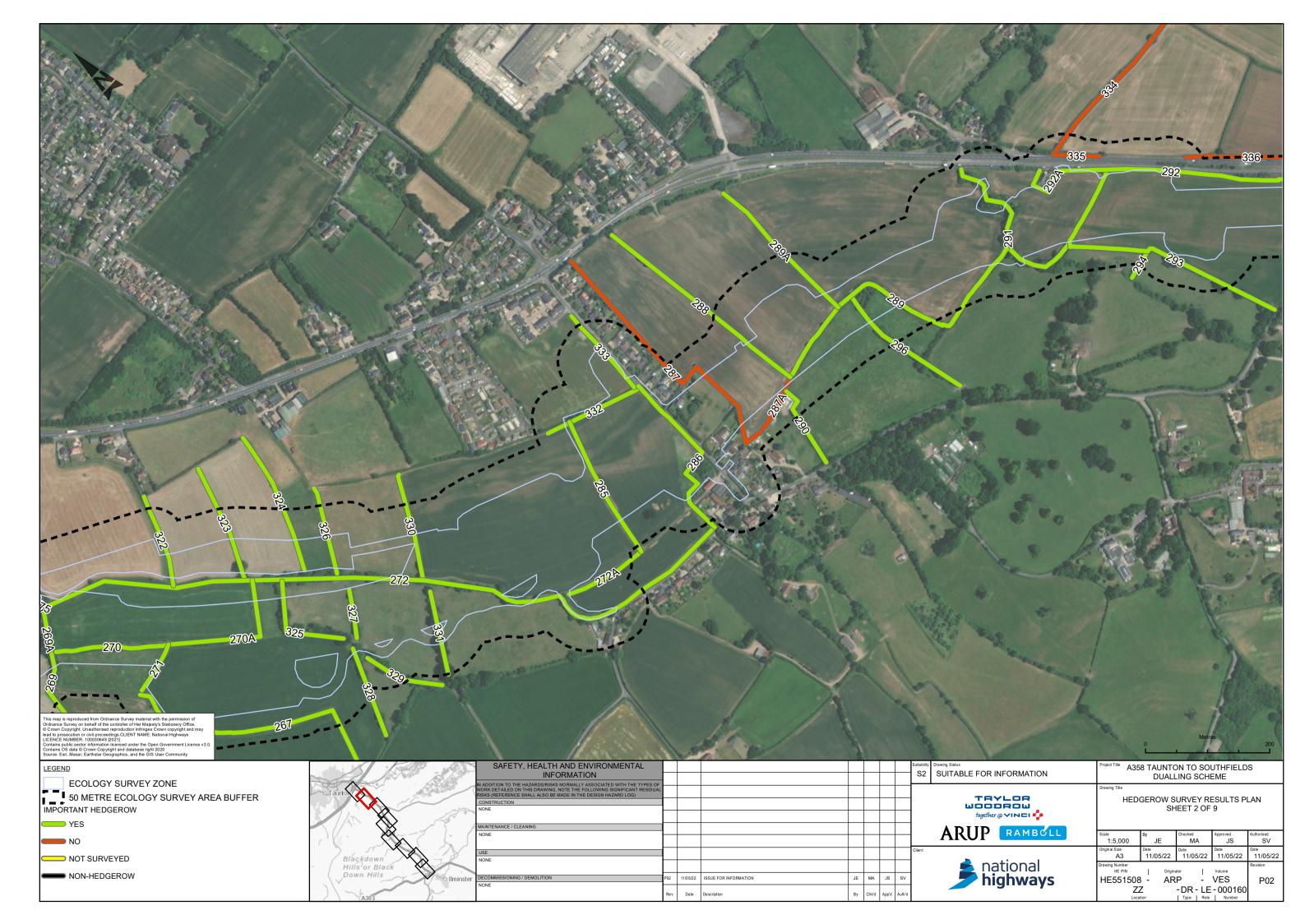
Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
341	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent					Yes			
342	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Present	Absent		Yes	-	Yes		Yes		
343	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent			Yes	Yes	Yes			
344	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Absent			Yes		Yes			
345		Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent			Yes					
346		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent			Yes					
347		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent			Yes					
348	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes					Yes	
349	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent			Yes					
350		Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present		Yes						
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352	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Present				Yes	Yes		Yes	
353			Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent								
354	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Present			Yes	Yes	Yes	Yes	Yes	Yes
355	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Present					Yes			
356	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present			Yes					
357	Yes	Yes	Present	Present	Absent	Absent	Absent	Absent	Present	Absent	Present			Yes				Yes	
358	Yes	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
359	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present	Present		Va-	Yes		Yes			
360	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Present	Absent		Yes						
361	Vaa	Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent		Yes	Voc	Voc	Voc		-	
362	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Present	Absent			Yes	Yes	Yes			
363	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent			Yes	1 68				+
364	Voo	Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent			168		Voc		Voc	
365	Yes	Yes	Absent	Present	Absent	Absent	Present	Present	Present	Present	Absent					Yes		Yes	
366	Yes	Yes	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent					Yes			

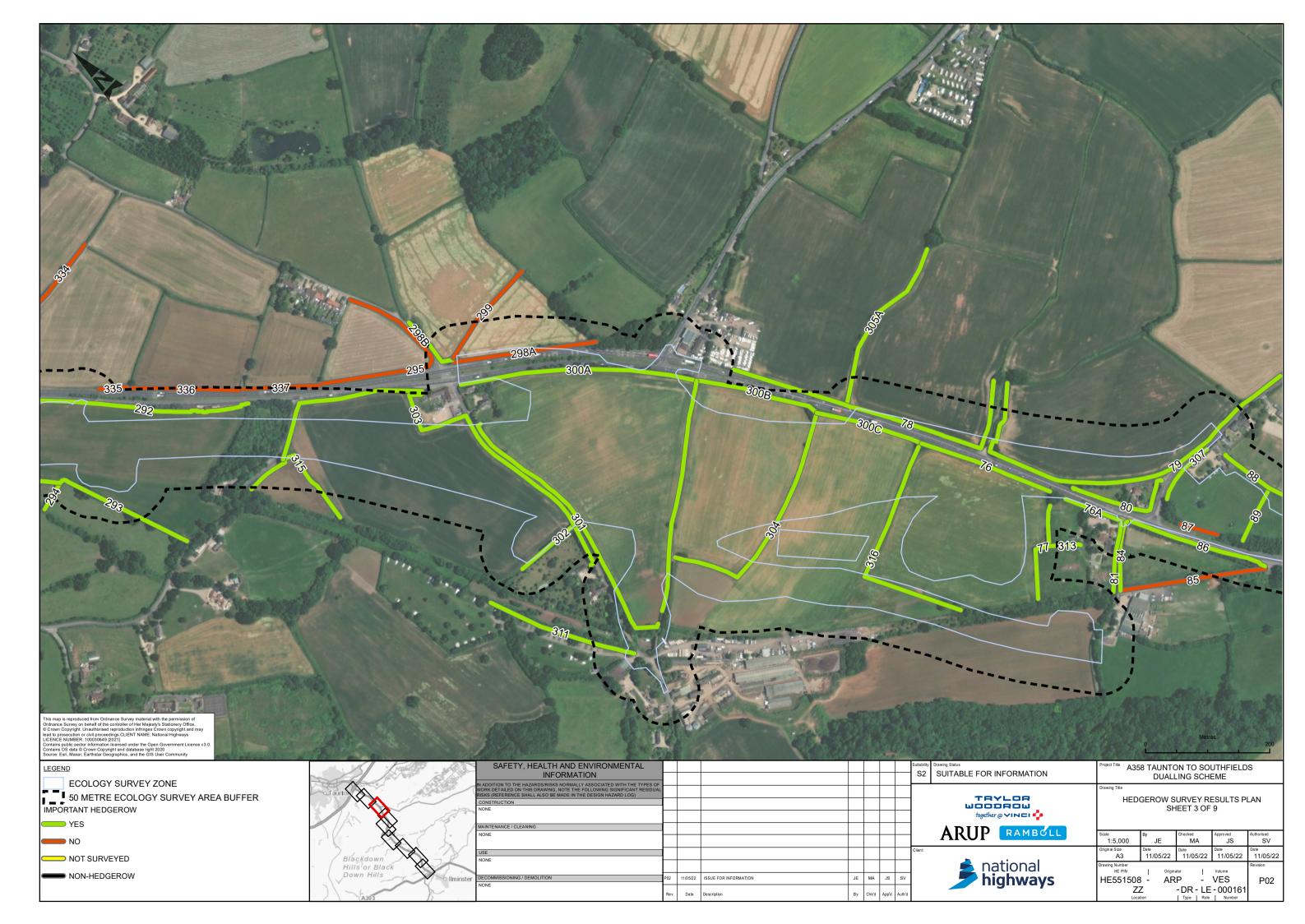
Hedgerow label	Species rich	Important	Bank or wall which supports the hedgerow along at least half of its length	Gaps which aggregate do not exceed 10% of length of hedgerow	Where the length of the hedgerow does not exceed 50m, at least one standard tree	Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least 2 standard trees	Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount at least one for each 50m	At least 3 woodland species (Schedule 2) within one metre, in any direction, of the outermost edges of the hedgerow	A ditch along at least one half of the length of the hedgerow	Connections scoring 4 points or more in accordance with subparagraph (5)	A parallel hedge within 15m of the hedgerow	Hedge less than 30 years old?	Does hedge currently support or have desk study records of spp protected in Schedules 1, 5 or 8 of the WaCA, or red data book species for 2007 to date.	Is the hedgerow directly connected to a hedgerow or woodland known to support hazel dormouse?	Does the hedge include at least 7 woody species (from Schedule 3)	Does the hedge include at least 6 woody species (from Schedule 3) + 3 features listed overleaf?	Does the hedge include at least 6 woody species (from Schedule 3), including native black poplar, small or large lvd lime or service tree?	Does the hedge include at least 5 woody species (from Schedule 3) + four features listed	Hedge adjacent to a bridleway, foot path/road used by public, path/byway open to all traffic + at least 4 woody species (from Schedule 3) + at least 2 features listed
367	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Absent	Present	Present				Yes	Yes			
368		Yes	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent		Yes						
369	Yes	Yes	Absent	Present	Present	Present	Present	Absent	Present	Present	Absent			Yes	Yes	Yes		Yes	
370	Yes	Yes	Absent	Present	Absent	Absent	Absent	Present	Present	Present	Absent		Yes					Yes	
371		Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent			Yes					
372	Yes	Yes	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent		Yes						

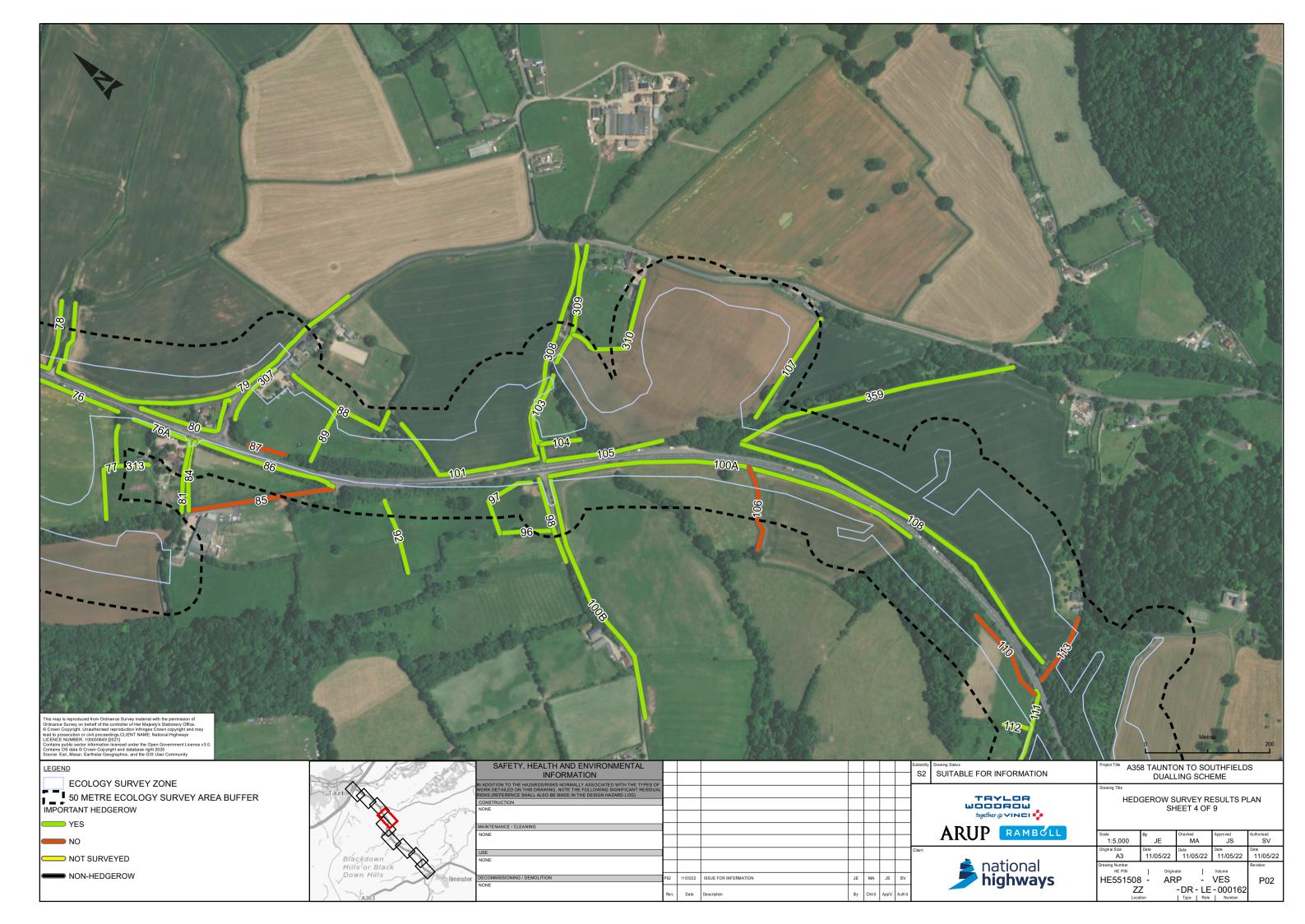
Appendix C Hedgerow survey results plans

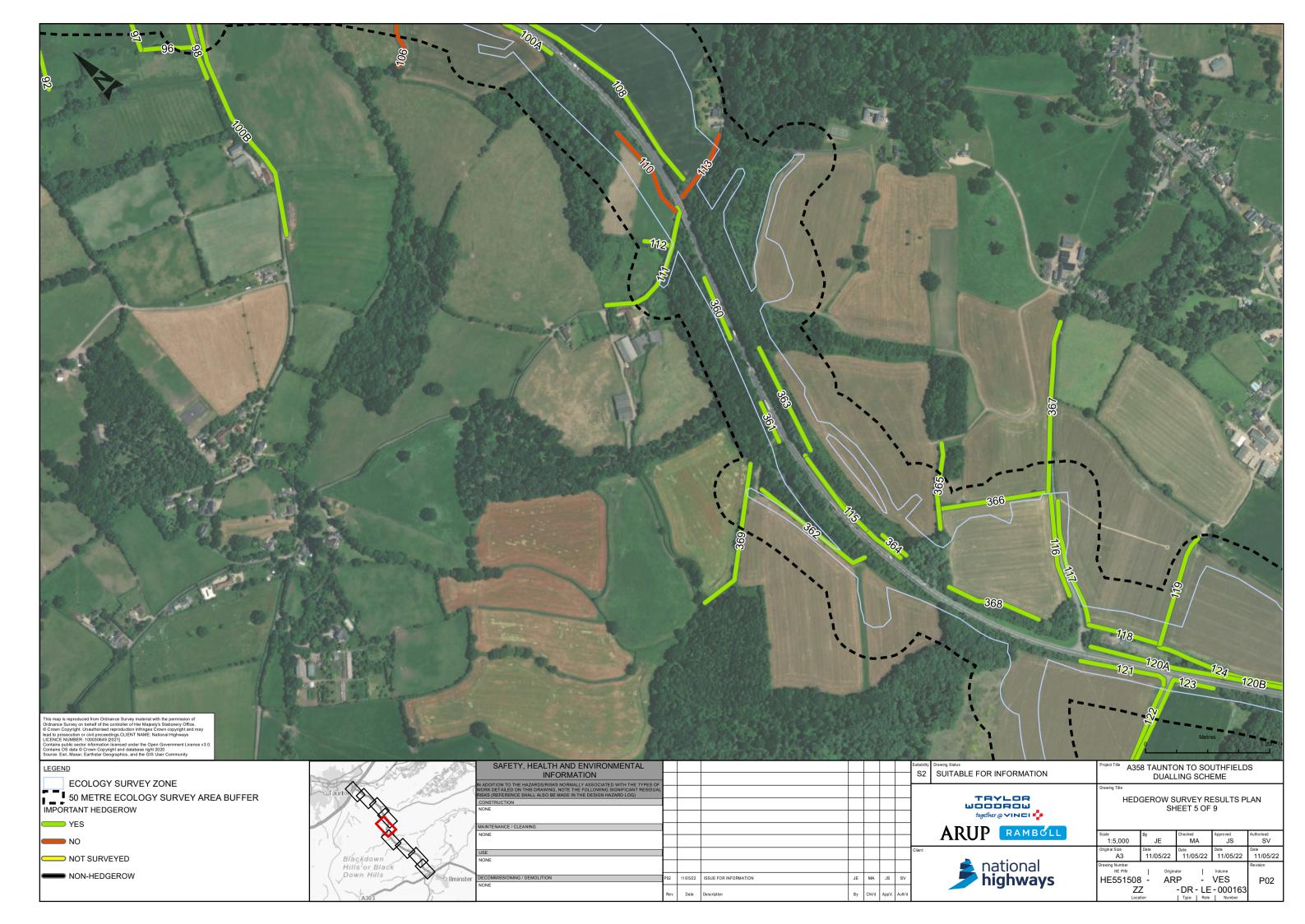
Figure C-1 Hedgerow survey results plan

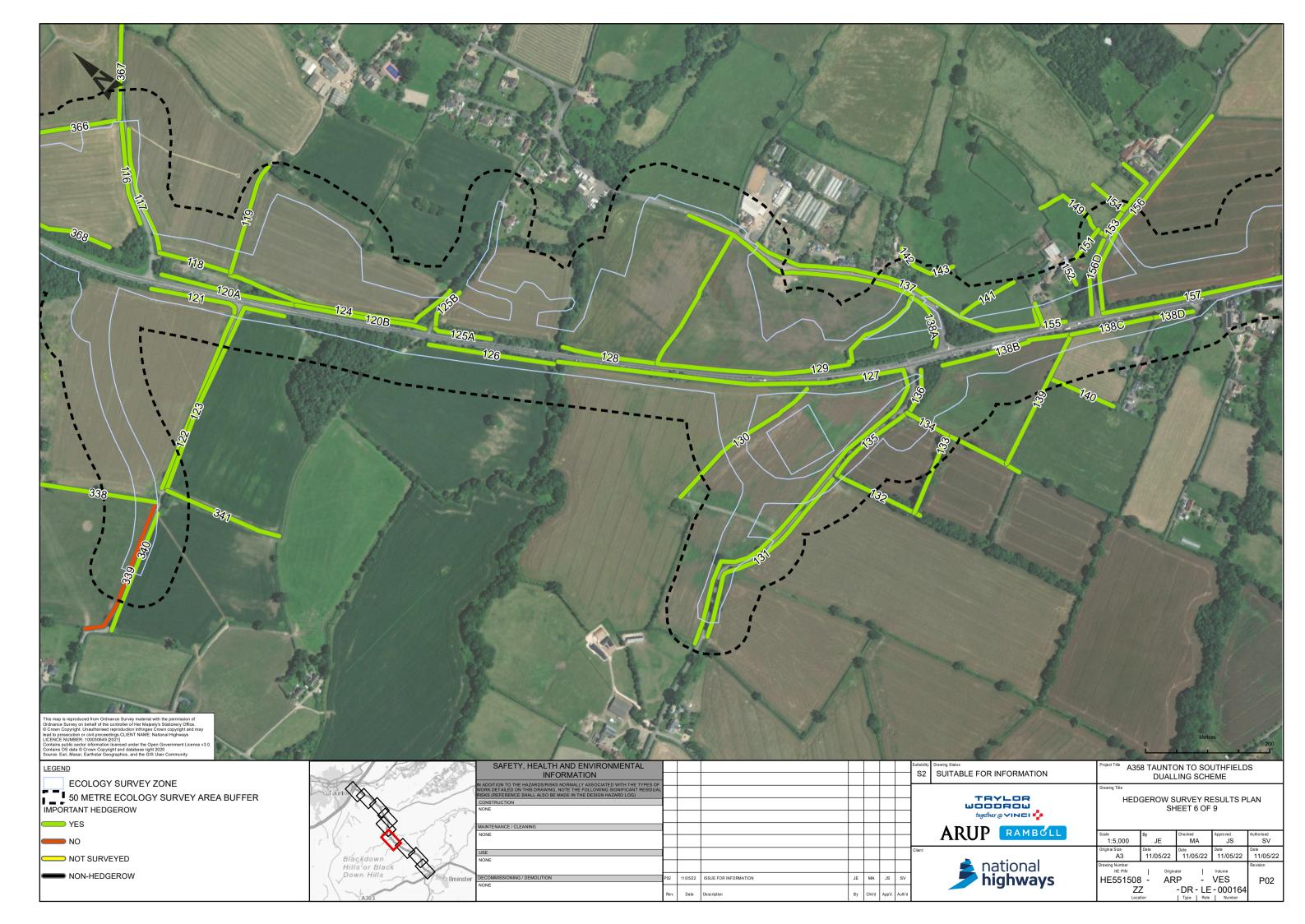


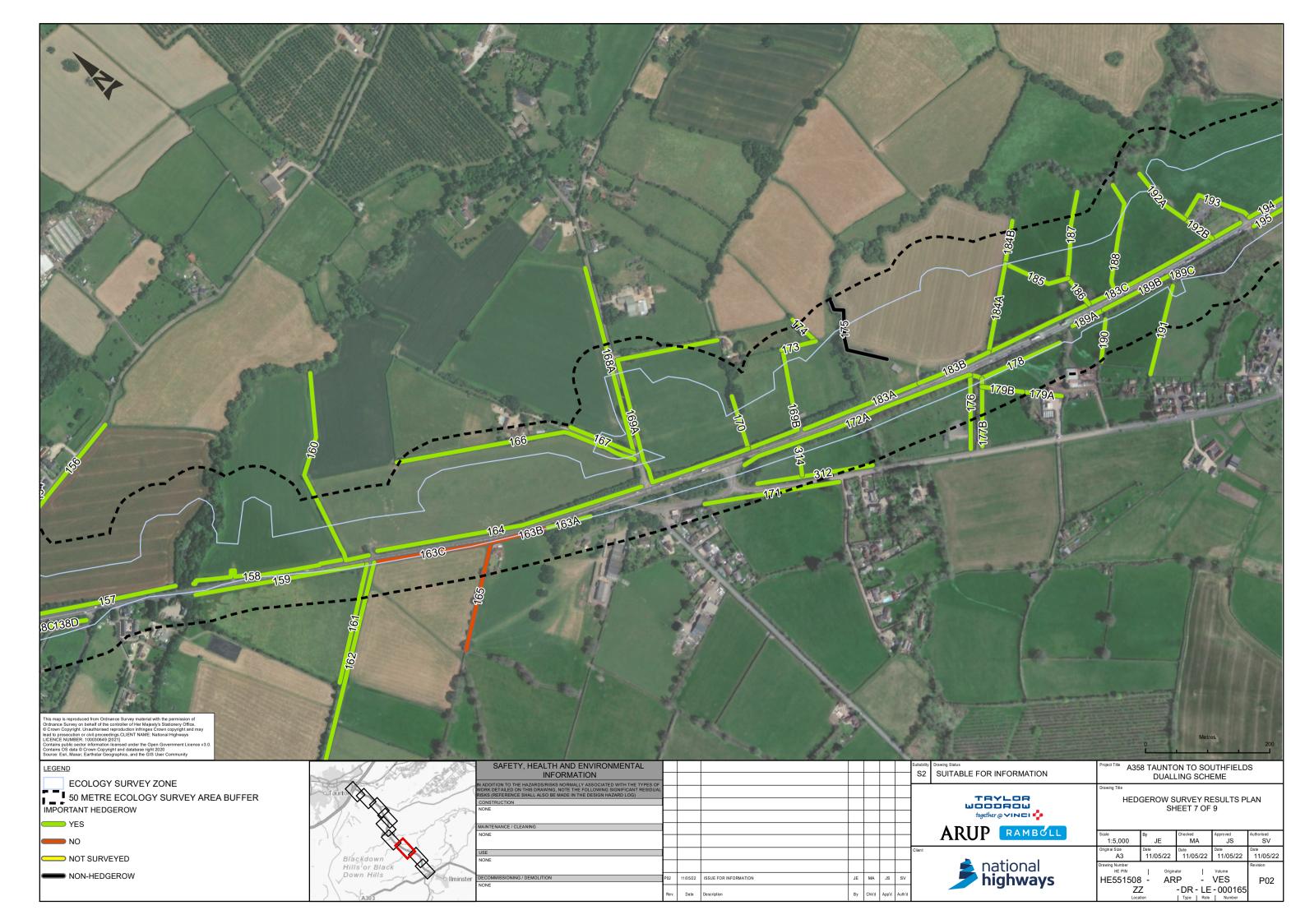


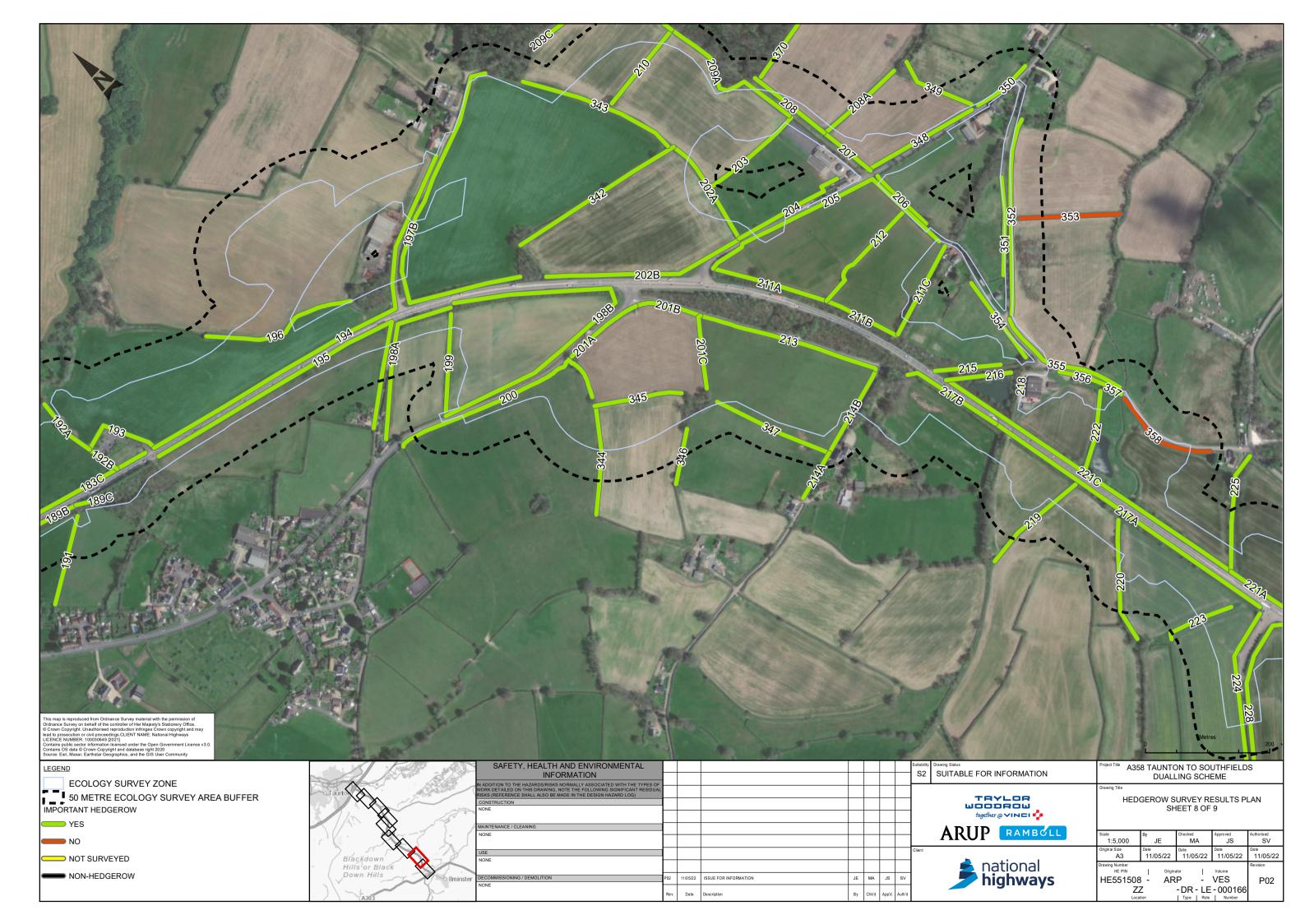


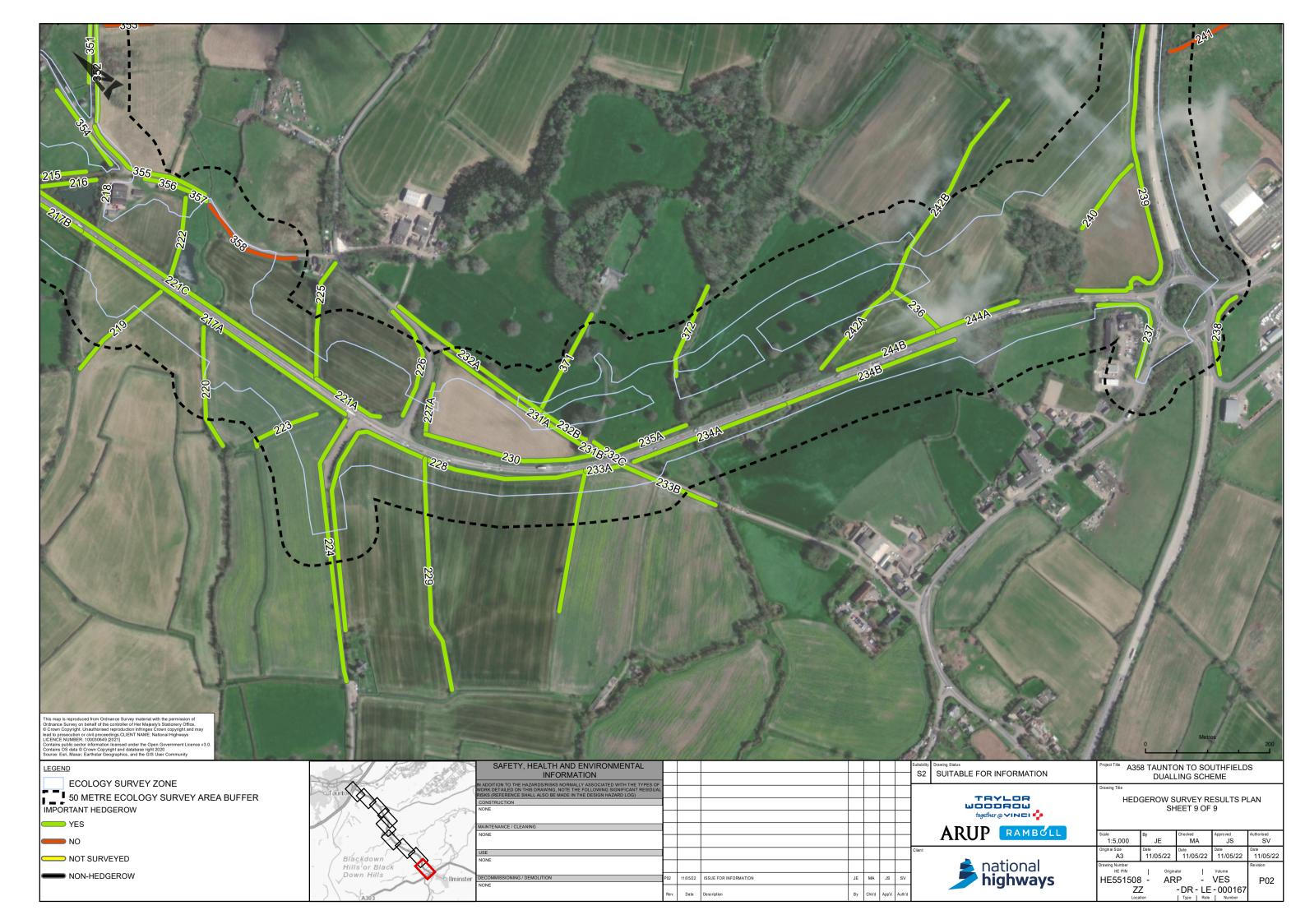












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