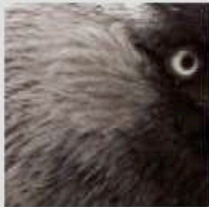


Santa's Grottos, Alton Towers Resort

Preliminary Ecological Appraisal
September 2024





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Where field investigations have been carried out, these have been restricted to the agreed scope of works and carried out to a level of detail required to achieve the stated objectives of the services. Natural habitats and species distributions may change over time and further data should be sought following any significant delay from the publication of this document.

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1 Summary

1.1 The Proposed Development

- 1.1.1 This document provides an ecological appraisal of the site at Alton Towers Resort, related to proposals to construct two additional Santa's Grottos structures in an existing Santa's Grottos woodland.
- 1.1.2 This report describes and assesses features of ecological value found to be present at the site. It also provides advice to help minimise any adverse ecological impacts, thereby enabling the development to comply with current nature conservation policy and legislation.

1.2 Ecological Receptors

- 1.2.1 The ecological assessment, set out in detail below, has found a low level of nature conservation interest on the site. The site is dominated by pine plantation, with low ecological value, and small areas of moderate condition neutral grassland.
- 1.2.2 The small size of the site reduces the likelihood for the site to support any significant populations of notable fauna, but species such as bats, amphibians, reptiles or badger may occasionally be present, due to more suitable habitat being present in proximity to the site.

1.3 Recommended Actions

- 1.3.1 No further survey is required to enable an assessment of impacts to habitats or protected species. Ecological impacts on features of interest can be avoided through implementing precautionary methods of working, and providing compensation for lost habitats.
- 1.3.2 A full Biodiversity Net Gain assessment will be required for the proposed development.

1.4 Conclusions

- 1.4.1 Overall, the conclusion of this report is that there will be a small net loss in biodiversity resulting from the development, which will be mitigated for under mandatory Biodiversity Net Gain requirements.

2 Introduction

2.1 Site Description

- 2.1.1 Alton Towers Resort (ATR) is located immediately southeast of the village of Farley in Staffordshire, and approximately 28km east of Stoke-on-Trent. The central Ordnance Survey Grid Reference for the site is approximately SK 07239 43754.
- 2.1.2 The site is a small area of approximately 0.1 ha within Alton Towers Resort, shown in Figure 1 below. The site consists of coniferous woodland and three Santa's Grottos, which are timber built structures. The wider landscape is dominated by pasture to the north and the west, with Alton Towers Resort to the south and east, consisting of a mosaic of woodland, grassland and urban habitat types.

Figure 1. Site Location



2.2 Study Scope

- 2.2.1 Baker Consultants was commissioned by the client to undertake the following works in relation to the Site:
- Desk-based study with local records centres and online databases to identify designated sites of nature conservation importance, areas of priority habitats and records of protected and/or notable species

- UK Habitat survey to record the nature and extent of vegetation and habitats within and adjacent to the Site
- Appraisals for protected and/or notable flora and fauna
- Biodiversity Net Gain baseline assessment

2.2.2 This report takes into account standard guidance from a variety of sources including the Chartered Institute of Ecology and Environmental Management ^{1 2 3}, British Standards Institution ⁴, and www.gov.uk ⁵.

2.2.3 The report considers, in particular, potential effects on the following biodiversity features:

- Designated Sites (international, national and local)
- European Protected Species
- National Protected Species
- Habitats and Species of Principal Importance for Conservation
- Habitats and species of local interest

¹ CIEEM (2022, v1.2). Guidelines for Ecological Impact Assessment In The UK And Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

² CIEEM (2015). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

³ CIEEM (2017). Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management, Winchester.

⁴ BSI (2013). BS42020:2013 Biodiversity – Code of Practice for Planning and Development

⁵ <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

3 Methods

3.1 Surveyor Qualifications and Experience

- 3.1.1 The survey was undertaken by Ecologist Rae Smith. Rae is a FISC Level 4 botanical surveyor, and a qualifying member of CIEEM, with over two years professional experience in ecological consultancy. In that time, she has undertaken several habitat assessment and appraisals for protected species.
- 3.1.2 Wherever appropriate during surveys, Natural England’s Standing Advice on Protected Species ⁶ was taken into account, along with a wide range of other best practice guidance on survey methods. These are referenced in the text below. However, the professional judgement of the surveyors was also applied in relation to the site conditions and target species/habitats being considered. This may have required changes to the published guidance.

3.2 Desk-study

- 3.2.1 A data search was undertaken for designated sites of nature conservation interest, priority habitats and records of protected and priority species. Data for these was gained through the sources listed in Table 1 below:

Table 1. Desk-study Data Sources

Organisation/source	Data sought	Search area
Multi-Agency Geographic Information for the Countryside (MAGIC)	Statutory designated sites, Habitats of Principal Importance and Ancient Woodland	1 km
Local Biological Records Centre (Staffordshire Ecological Records Centre)	Non-statutory designated sites of nature conservation and records of protected / notable species.	1 km

- 3.2.2 Natural England’s online Impact Risk Zone tool was utilised ⁷. This identifies whether developments are likely to have an impact on Sites of Special Scientific Interest (SSSIs), based upon their type and location, and whether Natural England should be consulted as part of proposals.

3.3 UK Habitat Survey

- 3.3.1 The Habitat Survey ⁸ was carried out by Rae Smith on 15th July 2024. Weather conditions during the survey were mild (15-16°C), with approximately 60% cloud cover, a slight breeze (BF2), and dry.
- 3.3.2 The vegetation types and habitats present were described and mapped during a walkover of the site, using the standard published guidelines for UK Habitat Classification System. Features of particular interest were recorded as Target Notes (TNs).

⁶ <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications>

⁷ Available at: <http://www.magic.gov.uk>

⁸ UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://ukhab.org/>)

- 3.3.3 In addition, the habitats within the site were appraised for their suitability to support protected or notable species, or assemblages that could be sensitive to the development proposals, in accordance with 'Guidelines for Preliminary Ecological Appraisal' ⁹.
- 3.3.4 During the survey, consideration was given to features such as potential breeding bird habitat, bat roosting locations, badger sett locations, reptile habitat and the suitability of water features for amphibians and riparian mammals.
- 3.3.5 Invasive species, such as Japanese Knotweed and Giant Hogweed, were noted by the surveyor if present. These species can have implications for development activity and human health respectively.
- 3.3.6 The survey approach taken is designed to identify broad habitat types at a site and the potential of these habitats to support notable/protected species, and to assist in providing an overview of the ecological interest at a site. It is the most widely used and professionally recognised method for initial ecological site appraisal.

⁹ CIEEM (2017). Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management, Winchester.

4 Results

4.1 Study Limitations

- 4.1.1 It is important to note that, even where data is returned for a desk-study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest since the area may simply be under-recorded. Equally, due to the level of recording, some species should be considered more frequent than indicated by the records provided within a desk-study.
- 4.1.2 Whilst every effort was made in the field survey to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment. Also, natural and semi-natural habitats are subject to change, species may colonise the site after surveys have taken place and results included in this report may become less reliable over time.
- 4.1.3 Survey data is generally only considered valid if it is from the current or previous active season. In some cases, surveys up to 3 years old may be considered acceptable by consultees if the habitats have not significantly changed in the intervening period.

4.2 Designated Sites

- 4.2.1 The desk-study provided information on the designated sites listed below in Table 2.

Table 2. Designated Sites

Name	Status	Location/distance	Interest
<i>Statutory Sites – no sites within 1km</i>			
Dimmings Dale and the Ranger	SSSI	1.3km southwest	Wooded valley with remnant ancient woodland supporting a range of invertebrates, liverworts and mosses
Peak District Dales	SAC	8km northeast	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) 9180 Tilio-Acerion forests of slopes, screes and ravines *Priority feature 1092 White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i>
<i>Non-statutory Sites</i>			
Abbey Wood	LWS	250m south	A large expanse of woodland surrounding Alton Towers. There are sycamore plantations, but the main core of woodland being semi-natural showing a good age structure of trees with frequent mature beech, yew and maturing oak.
Hazelhurst Brook	Retained BAS	600m northeast	A narrow stream valley which becomes progressively more steeply-incised towards the eastern end where there are a series of linked pools fed by the stream. A tributary joins towards the centre of the site, where there is a waterfall.
Barbary Gutter	LWS	650m southwest	A broadleaved woodland with a stream running through it. Much of the understory is Rhododendron and open areas are Bracken. Ancient woodland indicators can be found near the banks of the stream.

Name	Status	Location/ distance	Interest
Orrils Wood & Basin Wood	LWS	650m north	Two linked areas of woodland, Basin Wood and Orrils Wood, together with the grassland on a relatively steep south-facing slope, adjoining these woodlands. Streams flow through both the woodlands, and in places these have been canalised.
Alton Park	LWS	800m east	A lowland wood pasture with a number of veteran trees in the southern field. In the north-east is an abundance of scattered oak and sweet chestnut over poor semi-improved grassland on a north facing slope.
Churnet Valley Railway	LWS	1km southwest	Broadleaved woodland alongside a railway with associated dry and wet woodland flora. A stream runs through part of the site and a pool with a mix of species in its marginal vegetation is also a feature.
Lord's Bridge (north of)	LWS	1km west	A disused section of canal running through an area of ancient semi-natural woodland.

4.2.2 Natural England's online MAGIC tool identified that no SSSIs were within 1km of the site. The closest statutory site is Dimmings Dale and the Ranger SSSI, 1.3km to the southwest of the site, which is designated for supporting ancient woodland, and important assemblages of invertebrates, liverworts and mosses.

4.2.3 The closest designated site is Abbey Wood Local Wildlife Site, which is located 250m to the south of the site. The site is designated for supporting a large area of semi-natural, mature woodland.

4.3 Habitats

4.3.1 Scientific names are provided in Appendix 1, with common names only used in the text below. Standard nomenclature ¹⁰ is used for vascular plant species.

Habitats Overview

4.3.2 The habitat types recorded on site during the UK Habitat survey are described in turn below (and illustrated in Appendix 2). Particular features of interest, recorded during the survey, are listed as Target Notes in Appendix 1, with their locations shown in the Appendix 2 UK Habitat plan.

Woodland

4.3.3 The site predominantly consists of young pine trees, which are classified as 'Other Coniferous Woodland' (TN1). The understorey of the woodland is predominantly bare ground due to the dense shading from the coniferous canopy, however there were several small patches of Hogweed, Willowherb and Birds-foot Trefoil in more open areas along footpaths (Figure 1).

4.3.4 The woodland is enclosed by a timber fence, with some boundary areas used for storage of materials related to the theme park (Figure 2). Trees within the woodland are uniform in age, between 10-15 years old, with the woodland not present in 2010 aerial imagery.

¹⁰ Stace, C. (2019). New Flora of the British Isles. Fourth Edition. Cambridge University Press, Cambridge.

Figure 2. Young pine trees in woodland TN1



Figure 3. Storage of materials in woodland TN1



Urban

- 4.3.5 Crossing throughout woodland TN1 is a network of paved footpaths which connect with three Santa's Grottos. The Grottos are single-storey timber structures with felted gable roofs.
- 4.3.6 Additional paved areas are also present to the south of the site, in a designated smoking area. These areas have all been assessed as being Developed Land, Sealed Surface.

Grassland

- 4.3.7 To the southeast of the site is a small portion of Other Neutral Grassland TN2, with grass species dominated by Yorkshire Fog, with occasional Rough Meadow Grass, Sweet Vernal Grass, Cocks-foot and Red Fescue. Herbs included a mixture of abundant Common Knapweed, Hogweed, Ribwort Plantain, Hogweed, and Red Clover. Other occasional and rare species included Spear Thistle, Greater Willowherb, Yarrow, Selfheal, Meadow Buttercup, Creeping Cinquefoil and Curled Dock.
- 4.3.8 Whilst the grassland supports a range of species, the overall species diversity was considered to be moderate, with between 6-8 species per m². The grassland appears to be infrequently managed (Figure 4), generally with a height over 1m – however, an absence of bramble suggests the grassland is cut occasionally.
- 4.3.9 To the west of the site is a section of more intensively managed Other Neutral Grassland (TN3), which had a height of around 10-20cm, with some areas of bare sandy soil present (Figure 5). Similar to TN2, the grassland was dominated by Yorkshire Fog, with Sweet

Vernal Grass, Red Fescue and Rough Meadow Grass occasional in the sward. Herbs were similar to TN2, with additional herbs including occasional Rosebay Willowherb, Herb-Robert, White Clover, Creeping Buttercup, Black Medick, Daisy, Common Vetch and rare Tormentil.

Figure 4. Grassland TN2



Figure 5. Grassland TN3



4.4 Biodiversity Net Gain

Baseline Value

- 4.4.1 No habitats present on site are identified as important habitats in the local plan, and therefore all habitats have been assessed as having 'low' strategic significance. Whilst policy NE2 focuses on existing woodland, the Staffordshire Biodiversity Action Plan refers only to Lowland Wood Pasture and Parkland, Native Woodland and Wet Woodland. As woodland TN1 is Pine plantation, it is unlikely to be covered under the local policy, and it has been assessed as 'low' strategic significance.
- 4.4.2 No irreplaceable habitats are present on site. A baseline habitat plan is given in Appendix 1, with condition sheets provided in Appendix 3.
- 4.4.3 The baseline biodiversity value of the site is 0.21 habitat units (Table 3).

Table 3. Baseline Habitat Units

Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Baseline units
Other coniferous woodland (TN1)	0.0547	Low	Poor	Low	0.11
Developed land; sealed surface	0.0298	V.Low	N/A	Low	0.00
Other neutral grassland (TN2)	0.0021	Medium	Moderate	Low	0.02
Other neutral grassland (TN3)	0.01	Medium	Moderate	Low	0.08
Total Baseline Habitat Units					0.21

4.5 Species Overview

- 4.5.1 The notable species recorded on or near the site by desk-study or field survey are summarised in the following sections. Further details of the desk-study results are also provided in Appendix 4.

4.6 Bats

- 4.6.1 The desk study returned four records for bats from 2014-2024, including one record for unknown Pipistrelle species, two records for Common Pipistrelle, and one record for Brown Long-eared bat. All records are for bat activity, with no known roost identified within 1 km of the site. A search of MAGIC did not identify any granted EPS licences within 1 km of the site.

4.7 Daytime Bat Walkover

- 4.7.1 The site is assessed to offer potential roosting opportunities in the existing Santa's Grottos. The structures have several gaps between timber beams, which may lead to suitable roosting crevices or cavities within the structure, such as into soffit box cavities, if present (Figure 6). Other areas also have lifted roof felt (Figure 7), which may be used by crevice dwelling species. As the structures were not assessed internally, a full assessment of the structure suitability cannot be made. However, the type of structures are not considered likely to support roosts of high conservation status (i.e. notable species, or maternity / hibernation roosts), and they are assessed as having low suitability for roosting bats.
- 4.7.2 No potential roost features were identified in the trees of woodland TN1, or in the single urban tree in grassland TN3. Young pine trees are generally considered unlikely to support roosting bats, and as no features of interest were identified, the woodland is assessed as having negligible suitability for roosting bats.
- 4.7.3 Woodland TN1 and the neighboring grasslands are likely to support foraging bats which are present in the wider area. However, as the woodland parcel is small, with the canopy dominated by a single species, the habitat is considered to be of low foraging suitability, with more suitable mixed and deciduous woodland nearby in the Alton Towers Resort.

4.8 Badger

- 4.8.1 The desk study returned five records for Badger from 2004-2022, with no detail of record type provided.
- 4.8.2 The field survey did not identify any conclusive signs of Badger, with no mammal holes,

latrines or prints identified. A single push-through was noted under a fence to the east of the site, however this may have been created by other mammals such as Rabbit or Fox.

- 4.8.3 The small area of the site and limited understorey of the woodland TN1 limit the suitability of the site for supporting foraging Badger. However, more favourable habitat is abundant in the wider Alton Towers Resort site, and therefore it is considered likely for Badger to occasionally be present on site.

Figure 6. Potential access into soffit box/ internal cavity



Figure 7. Lifted roof felt



4.9 Otter and Water Vole

- 4.9.1 The desk study returned no records for Otter or Water Vole within 1km of the site. No suitable habitat is present on site for Otter or Water Vole, and the species are not considered further.

4.10 Hazel Dormouse

- 4.10.1 The desk study returned no records of hazel dormice within the search area. The State of Britain's Dormice 2023¹¹ report states Dormice are believed to be locally extinct in Staffordshire.
- 4.10.2 The woodland available on site has no understorey scrub, and as such is not suitable for

¹¹ Wembridge, D. et al. (2023). *The State of Britain's Dormice 2023*. Peoples Trust for Endangered Species. (available from: <https://peoplestrust.wpenginepowered.com/wp-content/uploads/2023/11/State-of-Britains-Dormice-2023.pdf>)

Dormice.

- 4.10.3 The absence of recent records in the wider landscape combined with the suboptimal habitats on site make it unlikely for Dormice to be using the site, and the species is not considered further.

4.11 Other Mammals

- 4.11.1 The desk study returned two records for West European Hedgehog from 2005 and 2023. The closest record is from 400m to the west in Farley.
- 4.11.2 The grassland and woodland available on site provide suitable foraging habitat for mammals including Hedgehog. The site is likely to be functionally linked with nearby parcels of woodland, ornamental shrubs and grassland within the Alton Towers Resort. The stored materials within woodland TN1 may also provide shelter and hibernacula for small mammals. It is therefore likely that mammals, including Hedgehog, are occasionally present on the site.

4.12 Amphibians

- 4.12.1 The desk study returned no records for amphibians within 1km of the site. MAGIC identified a Class Licence Return reporting a positive result for Great Crested Newt 60m to the north east of the site in 2016, within the Alton Towers Resort boundary.

Habitat Appraisal

- 4.12.2 The site provides no suitable breeding habitat for amphibians. There are several waterbodies within 500m of the site, within the Alton Towers Resort to the south and the east of the site. Many of these water bodies are ornamental ponds with fish, or chlorinated play areas, and their value to amphibians are therefore limited. However, some smaller, less disturbed ponds may provide suitable breeding habitat for amphibians.
- 4.12.3 The habitats present on site provide suboptimal terrestrial habitat for amphibians. Woodland TN1 has a limited understorey, and therefore is unlikely to provide sufficient shelter or foraging potential for amphibians. However, the stored materials may provide suitable hibernacula for species such as Common Toad or Great Crested Newt, if present. Therefore, whilst presence of amphibians within the site is considered to be unlikely, their presence on the site cannot be ruled out entirely.

4.13 Reptiles

- 4.13.1 The desk study returned a single record for Grass Snake from 2016 over 700m from the site in Alton Parish to the south.
- 4.13.2 The site provides limited opportunities for reptiles, with grassland TN2 being most suitable to support Grass Snake or other reptiles. However, the habitat parcel is too small and isolated from other suitable habitat to regularly support reptiles that may be present in the wider area, and their presence on site is likely to be limited to occasional use.

4.14 Birds

- 4.14.1 The desk study returned 441 records for 61 species of birds, including Barn Owl, Red Kite and Redwing.
- 4.14.2 The habitats present on site provide limited habitat for birds, with species that favour coniferous woodland most likely to be present, such as Goldcrest. Several old nests were identified across the site, including in the branches of the pine trees of TN1, and associated with the Santa's Grottos structures. The site is therefore confirmed as supporting breeding birds, however the nests had fledged at the time of the survey so species could not be determined.

4.15 Invertebrates

- 4.15.1 The desk study returned 116 records for 26 species of invertebrates, including the Grey-Patched Mining Bee, Ghost Moth and Small Phoenix.
- 4.15.2 The site provides limited valuable habitat for invertebrates, with the diversity of grasses and herbs across grassland TN2 and TN3 providing potential food plants for a range of species, including some which may be rare or notable. However, the habitat parcels are small and are therefore unlikely to provide a significant resource for species, with similar habitats widely available across the Alton Towers Resort site.

4.16 Plants

- 4.16.1 The desk study returned two records of notable plants, including Bluebell at North Bridge (north of) LWS, around 1km to the southwest of the site, and Jacob's Ladder in Farley, 350m to the west of the site.
- 4.16.2 No rare or notable plants were noted during the field survey.

4.17 Invasive Species

- 4.17.1 The desk study returned no records for non-native invasive species, and no species were noted on site during the field survey.

5 Assessment

5.1 National Policy

- 5.1.1 The National Planning Policy Framework (NPPF 2023) sets out the Government's planning policies for England and how these should be applied. It states that the purpose of the planning system is to contribute to the achievement of sustainable development, combining economic, social and environmental objectives, and 'protecting and enhancing our natural --- environment; including ---helping to improve biodiversity'. Within this framework, the requirements in relation to biodiversity are included within several policies. The two most relevant to individual planning decisions are Paragraphs 180 and 186, shown below:

180. Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; etc...*

186. When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate

- 5.1.2 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on every public authority to have regard to conserving biodiversity. Section 41 of the same Act requires that the Secretary of State must publish a list of the living organisms and types of habitats that are of 'Principal Importance' for the purpose of conserving biodiversity. The Secretary of State must take steps, as appear reasonably practicable, to further the conservation of those living organisms and habitats in any list published under this section. The list of species and habitats of principal importance currently includes 943 species and 56 habitats.

5.2 Local Policy

- 5.2.1 The Local Plan is made up of several planning documents built around a Core Strategy. The Local Plan along with the NPPF sets out how to manage sustainable development in the area. The key sections relevant to this report are shown below:

Policy NE1 – Biodiversity and Geological Resources

The biodiversity and geological resources of the District and neighbouring areas will be conserved and enhanced by positive management and strict control of development (and having regard to relevant ecological evidence) by:

...

5. Expecting all development where possible seeks to deliver a net gain in biodiversity proportionate to the size and scale of the development. In circumstances where adverse impacts are demonstrated to be unavoidable, developers will be required to ensure that impacts are appropriately mitigated, with suitable compensation measures towards loss of habitat used only as a last resort where there is no alternative. Where any mitigation and compensation measures are required, they should be appropriately scheduled and managed according to the nature, size and scale of the development so as to minimise impacts that may disturb protected or important habitats and species.

...

7. Ensuring development promotes the appropriate maintenance, enhancement, restoration and/or re-creation of biodiversity through its proposed nature, scale, location and design. The Staffordshire Moorlands Biodiversity Opportunity Map, in conjunction with the Staffordshire Biodiversity Action Plan, will be used to guide biodiversity enhancement measures to be included in development proposals as appropriate to the nature and scale of development proposed and other environmental interest, in particular supporting opportunities to increase grassland and heathland habitats including supporting targets in the UK and Staffordshire Biodiversity Action Plan.

...

Policy NE2 – Trees, Woodland and Hedgerows

The Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration.

This will be achieved by:

- *Requiring that existing woodlands, healthy trees and hedgerows are retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss;*

...

- *Resisting development that would directly or indirectly damage existing ancient woodland, veteran trees and ancient or species-rich hedgerows.*

...

5.3 Legislation

- 5.3.1 The Wildlife and Countryside Act 1981 (as amended) provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs). These sites are identified for their flora, fauna, geological or physiographical features by Natural England. The Act also contains measures for the management of SSSIs and protection against damaging operations. Impact Risk Zones (IRZs) define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts ¹².
- 5.3.2 The Wildlife and Countryside Act 1981 (as amended) is the primary legislation which protects native animals, plants and habitats in the UK. The Act makes it an offence to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also makes it an offence to intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant.
- 5.3.3 European Protected Species (EPS), such as bats and great crested newts, are protected under both the Wildlife and Countryside Act 1981 (as amended) and under the Conservation of Habitats and Species Regulations 2017 (as amended). Taken together, these make it an offence to:
- a) Deliberately capture, injure or kill a EPS;
 - b) Deliberately disturb any EPS, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.

¹² Available at: <http://www.magic.gov.uk>

- c) To be in possession or control of any live or dead EPS or any part of, or anything derived from a EPS;
- d) Damage or destroy a breeding site or resting place of a EPS;
- e) Intentionally or recklessly obstruct access to any place that a EPS uses for shelter or protection;
- f) Intentionally or recklessly disturb a EPS while it is occupying a structure or place that it uses for shelter or protection.

5.3.4 The Environment Act 2021 requires that all major developments submitted after 12th February 2024 are required to deliver a 10% net gain for biodiversity using the Statutory Metric.

5.4 Impacts on Designated Sites

5.4.1 The section below provides an evaluation, description of potential impacts and assessment of ecological effects for designated sites relevant to the study area. This information is summarised in Table 3.

Table 4. Designated Sites Potential Impacts Summary

Is the development within 10km of a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar Site?	Yes
Is the development within the Impact Risk Zone of a Site of Special Scientific Interest (SSSI)?	Yes
Is the development within 250m of a Local Wildlife Site and/or Ancient Woodland?	Yes

5.4.2 The closest designated site to the study area is Abbey Wood LWS 250m to the south. The site is important due to the presence of mature, semi-natural woodland. The site is also identified as Ancient Replanted Woodland on MAGIC.

5.4.3 The closest statutory designated site is Dimmings Dale and the Ranger SSSI, designated for ancient woodland, supporting notable invertebrates, liverworts and mosses. The site lies within the IRZ for nearby SSSIs, however the proposed development type does not trigger the IRZ and consultation with Natural England is not required.

5.4.4 The only SAC, SPA or Ramsar site within 10km of the site is the Peak District Dales SAC, which is also located 8km to the north of the site.

5.4.5 Due to the nature of the proposed development, and its context within the existing Alton Towers Resort, it is highly unlikely for the scheme to have impacts on the statutory or non-statutory designated sites.

5.5 Impacts on Habitats

Habitats Overview

5.5.1 The sections below provide an evaluation, description of potential impacts and assessment of ecological effects for each habitat type relevant to the study area.

- 5.5.2 56 Habitats of Principal Importance (HPI) are included on the Section 41 list under the NERC Act. These are all the habitats in England that are regarded as conservation priorities in the UK Post-2010 Biodiversity Framework ¹³. No habitats present on site are listed as HPI, and therefore the proposed development is not likely to impact any important or notable habitats.
- 5.5.3 Impacts from the proposed development are generally limited to the loss of some woodland TN1, for the creation of new footpaths and two grotto structures, covering roughly 30m² each. Where possible, new footpaths will meander around existing trees, however the removal of some trees may be required.
- 5.5.4 As coniferous woodland is not native to Staffordshire, and has a low diversity of trees, it is of low ecological value. The woodland TN1 is also immature, further reducing its value for biodiversity. The loss of a small number of trees from a young coniferous woodland is therefore unlikely to have any ecological impact, with more valuable native deciduous woodland widely available in the wider area.
- 5.5.5 Grassland TN2 will also be lost. As this grassland supports a diversity of grass and herb species, the habitat is considered to be of higher value than woodland TN1, and therefore compensation for the habitat loss should be considered, with grassland enhancement or creation nearby.

5.6 Biodiversity Net Gain

- 5.6.1 Local Policy NE1 requires developments to provide a net gain for biodiversity where possible. The proposed development is also subject to the mandatory 10% BNG requirement under the Environment Act 2021. Wherever possible, this should be delivered on site, however they may be delivered off-site where this is not possible.
- 5.6.2 The current pre-development baseline for the site is 0.21 Biodiversity Units. Due to the loss of habitats within the redline during construction, this value will be reduced by 0.13, to 0.08 Units.
- 5.6.3 To compensate for the reduction in Biodiversity Units, an additional area outside of the development redline will be required for habitat creation and / or enhancement to achieve the mandatory 10% net gain target. This is most likely to be provided within the wider ATR land ownership, but could potentially be provided through commercial providers if needed. To achieve a 10% net gain, 0.02 additional Units would be required to provide a post-development total of 0.23 Units.
- 5.6.4 A range of approaches could be taken to enable a 10% net gain for the proposed development, but the most appropriate is likely to be providing compensation for the small area of 'other neutral grassland' by enhancing an area of the same habitat type somewhere else with the ATR land ownership. In this case, enhancement of 300 m² of 'poor' condition other neutral grassland would provide 0.13 Units. This would be combined and enable a 13.83% net gain.

¹³ Maddock, A. (2010) UK Biodiversity Action Plan Habitat Descriptions. BRIG.

5.7 Species Overview

- 5.7.1 The sections below provide an evaluation, description of potential impacts and assessment of ecological effects for European and nationally protected species/group, or priority species/group, relevant to the study area.
- 5.7.2 There are 943 Species of Principal Importance included on the Section 41 list under the NERC Act. These are the species found in England which are regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

5.8 Bats

- 5.8.1 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended). Seven bat species are also listed as Species of Principal Importance under the provisions of the NERC Act 2006.
- 5.8.2 A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.
- 5.8.3 The proposed development requires the removal of several young pine trees, which have been assessed as having negligible potential to support roosting bats. Therefore, there are no anticipated direct impacts on bat roosts as a result of the proposed development.
- 5.8.4 Potential impacts on roosting bats will be limited to potential disturbance of any bats which may be roosting in the existing grotto structures (if present) during the construction phase, with increased noise during site clearance. However, as the structures are assessed as having low potential for roosting bats, the risk of short-term disturbance will be negligible, and no specific mitigation is considered to be necessary.
- 5.8.5 The loss of a small number of pine trees is not anticipated to have a negative impact on foraging or commuting bats, as habitat connectivity will be maintained, with increased woodland edge/ glade habitat potentially benefiting foraging bats.
- 5.8.6 The scheme does not include any new lighting, and therefore no negative impacts of light spillage onto on-site and off-site foraging habitats are expected as a result of the proposed development.

5.9 Badger

- 5.9.1 Badgers are protected under the Badgers Act 1992. This makes it an offence to willfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. Removal of significant areas of badger foraging habitat may also contravene the Act, as it could be regarded as cruelty.
- 5.9.2 A sett is any structure or place which shows signs indicating it's currently being used by a badger. This means that the tunnels and chambers and the areas immediately outside the

entrances are all part of the sett. Other structures used by badgers for shelter and refuge could also be classed as a sett include: spaces among rocks and boulders, under garden sheds and raised buildings, among hay bales or under hedges or bushes.

- 5.9.3 No sett or evidence of Badger activity was identified on, or near to the site during the field survey. Therefore, the proposed development is not expected to have any significant impact on Badger. As Badger are likely to be present in the wider area, and possibly occasionally present on site, a precautionary method statement may be required to avoid harm to Badger during the construction process, with details provided in Section 6.

5.10 Other Mammals

- 5.10.1 Mammals, including Fox and Hedgehog, are covered generally under the Wild Mammals (Protection) Act 1996. This makes it an offence to harm any wild mammal with the intent to inflict unnecessary suffering. To avoid a possible offence, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.
- 5.10.2 Due to the small scale of the proposed development, the small area of habitat loss required is unlikely to have any significant impact on local mammal populations, with suitable habitat abundant in the wider area.
- 5.10.3 Impacts are likely to be limited to occurrence during the construction phase, where small mammals may be harmed during site clearance. A precautionary method statement will therefore be required to ensure no sheltering mammals are harmed by the proposed development, with details provided in Section 6.

5.11 Amphibians and Reptiles

- 5.11.1 Great Crested Newts and their habitats in water and on land are protected under the Wildlife and Countryside Act 1981 (as amended) and under the Conservation of Habitats and Species Regulations 2017 (as amended). In addition, great crested newt is listed as a Species of Principal Importance under the provisions of the NERC Act 2006.
- 5.11.2 All British reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Grass Snake, Slow Worm, Common Lizard and Adder are protected against intentional killing or injury and against sale. In addition, all British reptiles are listed as Species of Principal Importance under the provisions of the NERC Act 2006.
- 5.11.3 The proposed development could potentially have an impact on amphibians and reptiles, if present, before, during and after the planned work, due to the following impacts: site clearance, topsoiling, regrading and drainage work, construction works and creation/removal of temporary habitats, like piles of rubble.
- 5.11.4 Loss of suitable habitat is likely to be restricted to clearing stored materials from woodland TN1. Due to the small size of the site, the limited suitability of habitats present, and the small area of habitat clearance required, further survey for amphibians or reptiles is not considered to be necessary. Potential harm to individuals that may be present can

be avoided through implementing a precautionary method statement, which is set out at Section 6.

5.12 Birds

- 5.12.1 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to intentionally or recklessly disturb them while they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.
- 5.12.2 The woodland TN1 is confirmed as supporting nesting birds, and there is therefore potential for the site clearance or construction works, if undertaken during the bird breeding season, to potentially damage active nests and result in an offence under the legislation. Impacts to consider include damaging or removing breeding sites, disturbing birds and their young, removing vegetation or changing habitats. Works will need to follow a precautionary method statement to avoid impact on breeding birds.

5.13 Invertebrates

- 5.13.1 Several bees, wasps, moths, butterflies and other taxa could make use of the bare ground, and grassland habitat within the proposed development site, some of which may be listed as a Species of Principal Importance under the provisions of Section 41 of the NERC Act 2006.
- 5.13.2 However, due to the small area of habitat loss, and presence of similar, or better habitats in the wider area, the proposed development is not anticipated to have an impact on any such species present in the area, and further survey or mitigation is not considered to be necessary.

6 Recommendations

6.1 Introduction

- 6.1.1 The recommendations below for further survey and mitigation are based on the results and assessment set out above, taking into account standard published guidance from a number of sources (as referenced through the report), including the GOV.UK information on Planning and Development ^{14 15}.
- 6.1.2 Individual Local Planning Authorities have their own requirements for ecological information to support the validation and assessment of planning applications. These requirements often vary widely between Authorities and sometimes do not accord with national guidance- including that issued by the statutory nature conservation organisations. As a result we have applied the more consistent national guidance to our survey and mitigation recommendations set out below.

6.2 Further Survey

- 6.2.1 This Preliminary Ecological Appraisal has provided a baseline of ecological information to describe the main characteristics of the proposed development site. Due to the small size of the site and minimal habitat loss, impacts can be avoided through appropriate precautionary method statements, and therefore no further survey is recommended.

6.3 Biodiversity Net Gain

- 6.3.1 The loss of medium distinctiveness Other Neutral Grassland will require the creation/ enhancement of other medium (or high) distinctiveness grassland habitat, to satisfy metric trading rules. The loss of low distinctiveness Other Coniferous Woodland can be compensated for with any other habitat type, and would partly be mitigated on-site through continued management of the site, in line with the Alton Towers
- 6.3.2 As stated above in Section 5.6, off-site enhancement of 300 m² of 'poor' condition other neutral grassland would provide 0.13 additional Units above the baseline and enable a 0.03 increase in Units overall, producing a 13.83% net gain.

Table 5. Combined on-site and off-site change by broad habitat type

Habitat group	Baseline ha/units	Post-development ha/units	Change units
Grassland	0.04 0.23	0.04 0.37	0.14
Urban	0.03 0.00	0.04 0.00	0.00
Woodland and forest	0.05 0.11	0.00 0.00	-0.11
Total	0.12 0.34	0.08 0.37	0.03

¹⁴ <https://www.gov.uk/topic/planning-development/protected-sites-species>

¹⁵ <https://www.gov.uk/guidance/natural-environment#biodiversity-and-ecosystems>

6.4 Mitigation Measures

6.4.1 Mitigation measures should be considered through the masterplan design and planning application process, with actions during the construction and operation phases agreed and established in a Construction Environmental Management Plan (CEMP) and/or Landscape and Ecology Management Plan (LEMP). This whole process from proposal to implementation should consider the 'mitigation hierarchy' – avoid, reduce, compensate and enhance:

- Aim to avoid negative effects, e.g. by redesigning the scheme
- If this isn't possible, use mitigation measures to reduce the impacts
- Use compensation measures if there are still negative impacts, e.g. by replacing habitats
- Seek opportunities to make enhancements for biodiversity

Habitats

6.4.2 The small loss of habitats will be compensated for through delivering a minimum of 10% net gain for biodiversity units, as discussed in Section 6.3. Whilst the metric trading rules for the loss of coniferous woodland do not require replacement tree planting, native tree planting should be considered to compensate for the loss of tree resource.

Badgers and Other Mammals

6.4.3 Potential impacts on Badgers and other mammals, including Hedgehog, should be avoided, wherever possible, by implementing the following precautionary working methods:

- Contractors will be made aware of the potential presence of Badgers and small mammals, including Hedgehog
- Clearance of habitat piles will be completed by hand tools, enabling any sheltering mammals to escape to safety.
- If Badgers are encountered during the works, all works must cease immediately until the badger/s have left the area
- Any small mammals, including Hedgehog, found within the works area during construction will be carefully relocated to a sheltered location with plenty of vegetation cover, in an area off-site which will remain undisturbed.
- Materials such as netting and cutting tools will not be left in the works area where they might entangle or injure animals which move at night.
- If any excavations or trenches dug during works activities are left open over night, they must be left with a sloping end or ramp to allow any mammals or other animals that may fall in to escape
- Any pipes over 200 mm in diameter will be capped off at night to prevent animals entering

6.4.4 Any new external lighting should be designed to avoid spillage onto adjacent woodland to avoid disturbance to nocturnal mammals such as Badgers.

Amphibians and Reptiles

6.4.5 A precautionary method statement should be followed for site clearance and construction,

to ensure any sheltering amphibians or reptiles are not injured. This includes manually clearing potential refuges in woodland TN1.

- 6.4.6 If amphibians or reptiles are encountered during works, these should be captured and moved away from the affected area to a location with the same or better habitats. For Great Crested Newt, this must be done under licence from Natural England, and compensation will be needed for destroyed habitats

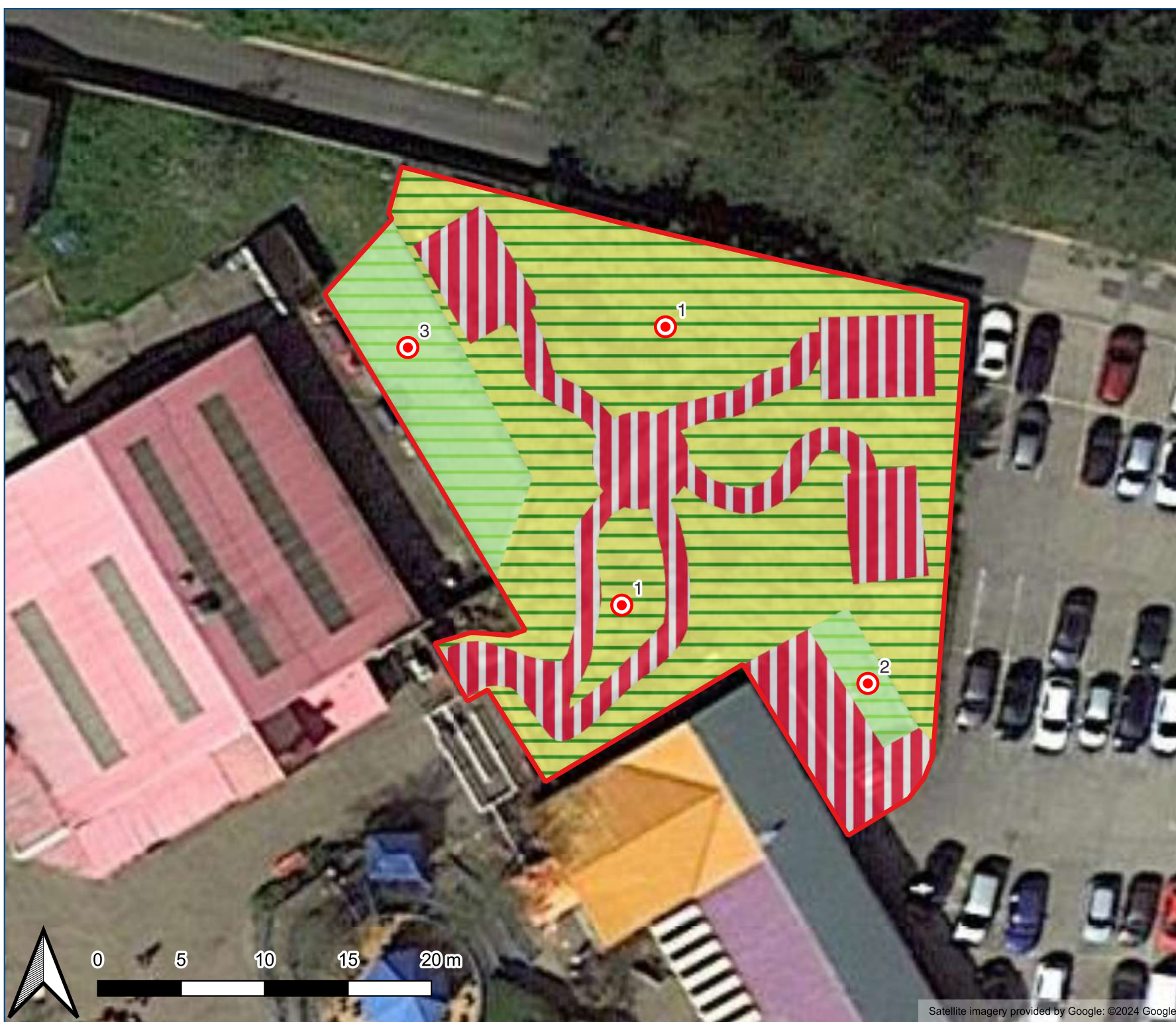
Birds

- 6.4.7 Impacts on nesting birds should be avoided in particular, by carrying out vegetation clearance and similar operations outside of the bird breeding season (April- August). Construction activities that might directly impact upon breeding birds should hence be limited to the September-February period.
- 6.4.8 If the timing or location of work activities cannot be changed to avoid affecting birds, then a nesting bird check should be conducted by a suitably qualified ecologist prior to habitat clearance, to identify any active nests, and establish a suitable works exclusion zone until the nest has fledged.

Appendix 1: Target Notes

No.	Description	Species list
1	<u>Other Coniferous Woodland</u> Fenced young Pine plantation with very limited ground community, with some Hogweed, Willowherb, and Greater Birdsfoot Trefoil. Paved pathways and 3 existing grotto structures within the woodland. Edges of woodland and behind grottos used for storage of materials.	<u>Trees</u> Pine <i>Pinus</i> sp. <u>Herbs</u> Hogweed <i>Heracleum sphondylium</i> Willowherb <i>Epilobium</i> sp. Greater Bird's-foot Trefoil <i>Lotus pedunculatus</i>
2	<u>Other Neutral Grassland</u> Unmanaged patch of grassland behind grottos, within a smoking area. Grass dominated, but many herbs throughout the small patch. Sward over 1m high in places.	<u>Grasses</u> Yorkshire Fog <i>Holcus lanatus</i> Rough Meadow Grass <i>Poa trivialis</i> Sweet Vernal Grass <i>Anthoxanthum odoratum</i> Cock's Foot <i>Dactylis glomerata</i> Red Fescue <i>Festuca rubra</i> <u>Herbs</u> Spear Thistle <i>Cirsium vulgare</i> Greater Willowherb <i>Epilobium hirsutum</i> Knapweed <i>Centaurea nigra</i> Yarrow <i>Achillea millefolium</i> Hogweed <i>Heracleum sphondylium</i> Ribwort Plantain <i>Plantago lanceolata</i> Red Clover <i>Trifolium pratense</i> Heal All <i>Prunella vulgaris</i> Meadow Buttercup <i>Ranunculus acris</i> Creeping Cinquefoil <i>Potentilla reptans</i> Curled Dock <i>Rumex crispus</i>
3	<u>Other Neutral Grassland</u> Larger grassland parcel very similar in composition to TN2, though more species including Tormantil, indicating slight acidic influence in that area of the grassland, but no other indicators present. Much shorter than TN2, and more bare ground.	<u>Grasses</u> Yorkshire Fog <i>Holcus lanatus</i> Sweet Vernal Grass <i>Anthoxanthum odoratum</i> Red Fescue <i>Festuca rubra</i> Rough Meadow Grass <i>Poa trivialis</i> <u>Herbs</u> Rosebay Willowherb <i>Chamerion angustifolium</i> Broadleaved Dock <i>Rumex obtusifolius</i> Herb Robert <i>Geranium robertianum</i> Knapweed <i>Centaurea nigra</i> Red Clover <i>Trifolium pratense</i> Self Heal <i>Prunella vulgaris</i> White Clover <i>Trifolium repens</i> Creeping Buttercup <i>Ranunculus repens</i> Black Medic <i>Medicago lupulina</i> Yarrow <i>Achillea millefolium</i> Tormantil <i>Potentilla erecta</i> Daisy Bellis <i>perennis</i> Common Vetch <i>Vicia sativa</i> Sycamore <i>Acer pseudoplatanus</i> saplings Mosses <i>Bryophyta</i> spp.

Appendix 2: UK Habitat Plan



Legend

- Red Line Boundary
- Target Notes

HABITATS

- Developed land; sealed surface
- Other coniferous woodland
- Other neutral grassland

A	01/08/2024	RS	
Rev	Date	Drawn by	Notes

Project Name: Santa's Grottos
Project Number: 2068
Project Location: Alton Towers Resort, Staffordshire

Plan Title: Baseline UK Habitat Plan

Client: Alton Towers Resort

Map scale: 1 : 300 @A4 Drawn by: RS Date: 12/08/2024

ECOLOGYDEVELOPMENTINNOVATION

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Appendix 3: Habitat Condition Sheets

See '2068 Condition Assessment.xlsx' attached.

Appendix 4: Desk-study

Common Name	Scientific Name	Conservation Status	Latest Record
Badger	<i>Meles meles</i>	PBA	2022
Brown Hare	<i>Lepus europaeus</i>	Sect.41	2000
Brown Long-eared Bat	<i>Plecotus auritus</i>	EPS, Sect.41, WCA5	2021
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	EPS, WCA5	2019
Daubenton's Bat	<i>Myotis daubentonii</i>	EPS, WCA5	NA
Eurasian Otter	<i>Lutra lutra</i>	EPS, Sect.41, WCA5	2002
European Water Vole	<i>Arvicola amphibious</i>	Sect.41	NA
Myotis Bat species	<i>Myotis sp.</i>	EPS, WCA5	NA
Natterer's Bat	<i>Myotis nattereri</i>	EPS, WCA5	NA
Noctule Bat	<i>Nyctalus noctula</i>	EPS, Sect.41, WCA5	NA
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	EPS, Sect.41, WCA5	NA
West European Hedgehog	<i>Erinaceus europaeus</i>	Sect.41	2023
Whiskered/Brandt's	<i>Myotis mystacinus/brandtii</i>	EPS, WCA5	NA
Common Lizard	<i>Zootoca vivipara</i>	Sect.41, WCA5	NA
Grass Snake	<i>Natrix natrix</i>	Sect.41, WCA5	2016
Slow-worm	<i>Anguis fragilis</i>	WCA5	NA
Common Frog	<i>Rana temporaria</i>	WCA5	NA
Common Toad	<i>Bufo bufo</i>	Sect.41, WCA5	1985
Great Crested Newt	<i>Triturus cristatus</i>	EPS, Sect.41, WCA5	NA
Smooth Newt	<i>Lissotriton vulgaris</i>	WCA5	NA
White-clawed Crayfish	<i>Austropotamobius pallipes</i>	Sect.41, WCA5	2002
Bluebell	<i>Hyacinthoides non-scripta</i>	WCA8	2005
Japanese Knotweed	<i>Fallopia japonica</i>	ALIEN	NA

Key

EPS	European Protected Species (listed in Annex 4 of the EC Habitats Regulations and Schedule 2 of the Habitats Regulations)
PBA	Protection of Badgers Act 1992
Sect.41	Section 41 species on Natural Environment and Rural Communities Act (2006)
WCA5	Listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)
WCA8	Listed in Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)
ALIEN	Non-native invasive species



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