

Palgrave Avenue

Preliminary Ecological Appraisal Report

Guinness Partnerships

December 2021



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Contents

Chapter	Page
Summary	4
Terms of Reference	4
The Site	5
The Scheme	5
Scope of the Assessment	5
2. Methods	
Desk Study	5
Field Surveys	6
Limitations	7
3. Results	
Statutory and non-Statutory Designated Sites	8
Habitats	9
Protected and Priority Species	10
4. Constraints and Recommendations	12
Key Constraints	12
Further Survey Requirements	13
Biodiversity Net Gain	13
Mitigation	13
Biodiversity Opportunities for Ecological Enhancements	14
5. Conclusion	15
Report Validity	15
Appendices	16
Appendix A. Site Location and Scheme Drawings	17
Appendix B. Extended Phase 1 Habitat Survey Plan and Target Notes	20
Extended Phase 1 Habitat Survey Plan	20
Target Notes	22
Appendix C. Plant Species List	23
English name	23
Scientific name	23
DAFOR	23
Appendix D. Legislation table	24
Tables	
Table 2-1 - Data search areas	6
Table 3-1 - Statutory and non-statutory designated sites within 2 km of the Site	8
Table 3-2 – Priority habitats within 1 km of the Site	9
Table B-1 – Summary of Target Notes	22

Summary

Report purpose	The primary aims of this report are to: Identify key ecological constraints to the development; Identify if additional ecological surveys are required to inform an ecological impact assessment; and Identify avoidance, mitigation, compensation and enhancement measures.
Proposed Scheme	The Proposed Scheme entails the construction of a total of seven new dwellings which are proposed across three terraces at a Site off Palgrave Avenue, Manchester.
Desk studies and field surveys	• An extended Phase 1 habitat survey of the Site was undertaken on 4th November 2021; and • A desk study undertaken on 5th November 2021.
Ecological features	The walkover survey identified suitable habitat for nesting birds and bats. No evidence of protected or priority species was recorded during the survey. All habitats contained within the Site boundary are commonly occurring, widespread in Britain and are generally considered to be of low ecological importance.
Avoidance, mitigation and compensation measures	Key mitigation measures to ensure no significant negative impacts to the identified Important Ecological Features occurs as a result of the development include: • the development of a sensitive lighting scheme for bats; and • pre-works checks for nesting birds, where relevant • The Proposed Scheme should achieve 10% Biodiversity Net Gain, as per local planning policy, and planting of native trees should be incorporated into landscape design.
Recommendations for further survey	A Preliminary Bat Roost Assessment is recommended to be undertaken on any structures or trees which will be impacted by the works. The individual trees and structures to be surveyed would be determined once details of the works are available including timings, duration and use of lighting. The Proposed Scheme should achieve 10% Biodiversity Net Gain, as per local planning policy, this assessment should be carried out following a suitable metric.
Opportunities for biodiversity enhancements	Incorporation of features for roosting bats and nesting birds Native species planting including shrubs/trees providing food year-round to provide foraging habitat and refuge for birds and bats.

Report Validity

In the event of scope or programme changes or if works do not commence within 12 months of the date of this report then updates to the surveys may be required to ensure the validity of the data, as per CIEEM guidance¹.

Introduction

Terms of Reference

- 1.1. Atkins, member of the SNC-Lavalin group, was commissioned by Guinness Partnership to undertake a Preliminary Ecological Appraisal (PEA) in connection with the proposed construction of seven dwellings across three terraces on a portion of land off Palgrave Avenue, Manchester (hereafter referred to as the Proposed Scheme). This report presents the findings of a PEA on the land parcel as shown in the Site Location Plan in Appendix A (hereafter referred to as the Site).

¹ CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

- 1.2. This report has been undertaken with reference to current good practice² and provides an initial appraisal of any likely ecological constraints upon designated site, protected species and other Important Ecological Features (IEFs).
- 1.3. Following the principles of the mitigation hierarchy and British Standard (BS) 42020:2013³, this report also identifies the need for measures to avoid, mitigate or compensate for negative impacts to habitats and species likely to be a result of the Proposed Scheme. Opportunities to provide biodiversity enhancements in accordance with local, regional and national biodiversity planning policies are also identified where relevant. Furthermore, this report identifies recommendations for further ecological surveys that may be required to establish the presence or likely absence of IEFs within and adjoining the Proposed Scheme, including specially protected species, priority species and priority habitats.
- 1.4. This report is intended to inform design development, site layout and/or site investigations. In addition, it provides the indicative scope for further ecological surveys and/or ecological impact assessment required in connection with a planning application or to contribute to an Environmental Impact Assessment.

The Site

- 1.5. The Site is located at Ordnance Survey national grid reference SD 85857 00308 in central Manchester.
- 1.6. The Site is approximately 0.2 ha in extent and primarily consists of an area of poor semi-improved grassland managed for amenity use through regular mowing. Scattered mature trees are present within the Site. There is also pavement dissecting the Site. The immediate surroundings are primarily composed of housing estates. Within the wider habitat, there are patches of poor semi-improved grassland and areas of woodland to the south, west, and north-west. The River Irk is located approximately 800 m to the west of the Site.

The Scheme

- 1.7. Specific details of the Proposed Scheme are yet to be confirmed, including site compounds, access routes and the timing of the works. When details of the Proposed Scheme are available, this PEA report may need to be updated.
- 1.8. The Proposed Scheme involves the construction of seven houses. The details of the Proposed Scheme, as they are currently understood, are shown on the Scheme Drawings and Site Location Plan in Appendix A.

Scope of the Assessment

- 1.9. This report presents ecological information obtained during the following:
- A field survey of accessible land within and adjacent to the Site on 4th November 2021; and
 - A desk-study undertaken on 5th November 2021.
- 1.10. The field survey and identification of potential ecological constraints was based on the condition of the Site and its immediate surrounds encountered at the time of the walkover survey, and information about the Proposed Scheme available at the time. If information on the Proposed Scheme should change, the Site may need to be re-visited to establish if there are any further ecological constraints arising from changes to the design.

2. Methods

Desk Study

- 2.1. The geographical area for obtaining ecological data through desk studies has been determined using best practice guidance and professional judgement. Baseline data has been gathered from a range of sources through data requests, consultation, and using online resources as outlined below. This included data gathering in relation to statutory and non-statutory designated sites and

² CIEEM (2017) Guidelines for preliminary ecological appraisal. 2nd Edition.

³ British Standard (2013) BS 42020:2013 Biodiversity - code of practice for planning and development

protected and priority species⁴. The study areas used for the data gathering are detailed in Table 2-1. The desk study was undertaken on 5th November 2021. For species records collected, those within 10 years of the data collection date have been considered as 'recent' within the assessment.

2.2. The following online resources were accessed:

- Multi-Agency Geographic Information for the Countryside (MAGIC) website⁵;
- Woodland Trust: Ancient Tree Inventory⁶
- Botanical Society of Britain and Ireland (BSBI) Maps⁷; and
- British Geological Society (BGS) Geology of Britain Viewer⁸.

2.3. Ordnance Survey maps and the Grid Reference Finder website were used to identify the presence of waterbodies within 500 m of the Site boundary, in order to establish if the land within and immediately surrounding the Site could be used as terrestrial habitat for great crested newts. This species typically uses suitable terrestrial habitat up to 500 m from a breeding pond⁹. However, there is a notable decrease in great crested newt abundance beyond a distance of 250 m from a breeding pond¹⁰.

2.4. Greater Manchester Local Records Centre (GMLRC) was contacted to request records of protected and priority (Section 41¹¹) species and details of non-statutory designated sites.

Table 2-1 - Data search areas

Data Type	Search area – distance from Proposed Scheme boundary
Statutory designated sites	2 km
Non-statutory designated sites	2 km
Ancient woodland	1 km
Priority habitats (including veteran trees)	1 km
Protected species	2 km

2.5. A review of national and local planning policy relevant to the Proposed Scheme was undertaken as part of the data gathering. The following policy documents were subject to review:

- Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework¹²;
- GMCA Biodiversity Net Gain: Guidance for Greater Manchester¹³ and
- Core Strategy 2012-2027, Manchester City Council.¹⁴

Field Surveys

2.6. The geographical area for undertaking ecological field surveys has been determined using the current survey guidance, professional judgement and the Zones of Influence, which have been determined based on likely effects arising from the Proposed Scheme.

⁴ These are defined in CIEEM (2017) Guidelines for Preliminary Ecological Appraisal 2nd Edition

⁵ <https://magic.defra.gov.uk/>

⁶ <https://ati.woodlandtrust.org.uk/>

⁷ [BSBI maps](#)

⁸ [Geology of Britain viewer | British Geological Survey \(BGS\)](#)

⁹ English Nature (2004). Great Crested Newt Mitigation Licences

¹⁰ English Nature (2004). An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) <http://publications.naturalengland.org.uk/publication/134002>

¹¹ Section 41 of the natural Environment and Rural Communities (NERC) Act 2006.

¹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

¹³ [gmca-bng-guidance-update_250221-final-edited.pdf \(greatermanchester-ca.gov.uk\)](#)

¹⁴ https://secure.manchester.gov.uk/info/200074/planning/6573/core_strategy_2012-2027

Surveyor Competencies

- 2.7. All the surveys were led by surveyors who have been assessed to be at least of capable experience following the Chartered Institute of Ecology and Environmental Management (CIEEM) competency framework¹⁵.

Extended Phase 1 Habitat Survey

- 2.8. An ecological field survey of areas within and adjacent to the Site, including land up to 50 m from the Site boundary where access was allowed (the Survey Area), was undertaken on 4th November 2021 using the extended Phase 1 habitat survey methodology¹⁶ as guidance. The walkover survey recorded information on the habitats within the Survey Area and also included a search for evidence of the presence of, and the potential of each habitat to support, protected and priority species as recommended by CIEEM¹⁷. Vascular plant names recorded during this survey follows Stace¹⁸, whilst nomenclature for lower plants follows Blockeel *et al*¹⁹.
- 2.9. This survey method comprised mapping habitats present according to the JNCC Phase 1 habitat survey methodology¹⁶, with target notes (TNs) used to record specific details on the plant species composition of the habitats, current management and quality. TNs were also used to record features of ecological importance (e.g. ponds, complex habitat mosaics). In addition, the survey comprised assessing the suitability of the habitats present for, and recording any activity of the following species/species groups (in line with current guidance):
- amphibians (terrestrial and aquatic habitats), including an assessment of aquatic habitat for its suitability to support great crested newts (*Triturus cristatus*) using the Habitat Suitability Index (HSI) assessment²⁰
 - bats²¹;
 - badger (*Meles meles*);
 - breeding and wintering birds;
 - reptiles²²;
 - invertebrates²³
 - plants^{Error! Bookmark not defined.};
 - fungi^{Error! Bookmark not defined.} and;
 - other protected and priority species²⁴
- 2.10. Evidence of the presence of the following Invasive Non-Native Species (INNS) was recorded where seen:
- Evidence of animal species as listed on the Invasive Alien Species (Enforcement and Permitting) Order 2019 muntjac deer and grey squirrel.
 - Evidence of the presence of Invasive Non-Native Plant Species (INNPS). These are listed within Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended) and subject to strict legal control.

Limitations

- 2.11. This section identifies any limitations to the surveys or assessment and provides an explanation as to the effect of these on the appraisal.

¹⁵ <https://www.cieem.net/competency-framework>

¹⁶ Joint Nature Conservation Committee (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit.

¹⁷ CIEEM (2017) Guidelines for preliminary ecological appraisal. 2nd Edition.

¹⁸ Stace (2019) New Flora of the British Isles 4th edition

¹⁹ Blockeel, T.L., Bell, N.E., Hill, M.O., Hodgetts, N.G., Long, D.G., Pilkington, S.L. & Rothero, G.P. 2020. A new checklist of the bryophytes of Britain and Ireland. Journal of Bryology online, March 2021

²⁰ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*) Herpetological Journal 10 (4), 143-155 (2000).

²¹ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London

²² Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife advice sheet 10

²³ As relevant to the location, identified through the desk study

²⁴ As relevant to the location, identified through the desk study

- 2.12. Up to 50 m beyond the Site boundary was surveyed where feasible. Where residential properties existed within the 50 m boundary, access was restricted. However, this is not considered to be a significant limitation as more detailed preliminary ecological assessments will be undertaken of the surrounding buildings for their suitability to support roosting bats and they will not be directly impacted and mitigation measures will be put in place to minimise any direct impacts. This limitation is only applicable to bats and no other species are anticipated to be impacted.
- 2.13. The survey was carried out in November, at a time of year when certain plant species (including some INNPS) are not easily identifiable. Therefore, the presence of INNPS has not been ruled out. This limitation was further reduced through having a Field Identification Skills Certificate (FISC) Level 6 botanist accompany lead surveyors at the time of the field survey.
- 2.14. Many cryptic taxa that may constitute IEFs, particularly including apomictic species of plant, invertebrates and fungi, could not be adequately surveyed at the time of the survey. These groups require specialist survey and survey windows are generally highly restrictive, particularly for plants across the genera *Taraxacum*, *Rubus* and *Hieracium*. However, attributable to the nature of the habitats present at the Site and surrounding landscape, this is not considered to be a significant limitation.
- 2.15. The search for waterbodies within 500 m of the Site was undertaken by using Ordnance Survey plans and aerial photographs only. These sources may not show all waterbodies within 500 m of the Site boundary and therefore some waterbodies may not have been identified.
- 2.16. The desk study reviewed the Woodland Trust Veteran Trees inventory, MAGIC and BGS data for information on irreplaceable habitats. These provide a record of irreplaceable habitats but are not exhaustive lists and other irreplaceable habitats may be present in the area. The walkover survey aimed to identify such features and as such this is not considered a constraint.
- 2.17. GMLRC biological records are not exhaustive and include only records of specially protected species and Species of Principal Importance for England. The absence of records does not conclusively demonstrate the absence of any given species.
- 2.18. Ecological surveys are limited by factors which affect the presence of plants, fungi and animals such as the time of year, weather, migration patterns and behaviour. The ecological surveys undertaken to support this PEA Report have not therefore produced a comprehensive list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. The above limitation has been addressed through taking the precautionary approach within the appraisal.

3. Results

Statutory and non-Statutory Designated Sites

- 3.1. Table 3-1 details the statutory and non-statutory designated sites for nature conservation identified through the desk study.

Table 3-1 - Statutory and non-statutory designated sites within 2 km²⁵ of the Site

Site name	Designation	Location of designated site ²⁶	Features of interest ²⁷
Clayton Vale	Local Nature Reserve (Statutory)	2 km south east of the Site	Reclaimed from land fill in the early 1980's and forms a valley with the river Medlock running along the base
Boggart Hole Clough	Local Nature Reserve (Statutory)	1.9 km north east of the Site	Largest woodland clough in Manchester and partially composed of ancient woodland

²⁵ This is the Zone of Influence for designated sites.

²⁶ Where designated sites are situated outside of the Site boundary, the distance and direction is given to the closest point that the designated site is from the Site.

²⁷ including qualifying features of internationally designated sites and reasons for designation for SSSIs

Rochdale canal: Stotts lane to Ducie street basin	Site of Biological Importance / Local Wildlife Site (Non- statutory)	900 m south east of the Site	An important wildlife corridor. A good site for otter, bats and aquatic plants.
Reservoirs at Harpurhey	Site of Biological Importance / Local Wildlife Site (Non- statutory)	1.25 km north west of the Site	A series of former mill ponds restored in the early 2000's for wildlife
Bank bridge meadow	Site of Biological Importance / Local Wildlife Site (Non- statutory)	1.8 km south east of the Site	An area of floristically rich grassland maintained through a traditional hay cut.

3.2. The Site falls into the Rochdale Canal Site of Special Scientific Impact Risk Zone (SSSI IRZ). This is also designated as a Special Area of Conservation (SAC). The SSSI contains important habitats for submerged aquatic plants and emergent vegetation associated with oligotrophic to mesotrophic waters, including an internationally important population of floating water-plantain. Floating water-plantain is a European Protected Species listed under Annex II of Directive 92/43/EEC and is listed as a primary reason for the selection of the site as an SAC. The site also supports diverse aquatic flora including several pondweeds, such as nationally rare American pondweed and county-rare blunt-leaved pondweed. The Rochdale Canal SSSI is over 2 km from the Site. The Proposed Scheme does not fall into a IRZ category which would pose a risk to the Rochdale Canal SSSI. In addition, there is no hydrological connectivity between the Site and the SSSI. Given the absence of hydrological connectivity and distance from the Site it is considered unlikely that floating-water plantain (Annex II species listed as a reason for designation of the site) or other aquatic species would be impacted by the works. Therefore, the Rochdale Canal SSSI and SAC are not considered further in this report.

3.3. There is no hydrological connectivity from the Site to any non-statutory or statutory site for nature conservation within 2 km of the Site, and given the distance of the designated sites from the Site and the land use (which comprises roads and residential housing) it is considered unlikely that designated sites will be impacted by the Proposed Scheme and they are not considered to pose a constraint. Statutory and non-statutory sites for nature conservation are not considered further in this report.

3.4. Irreplaceable Habitats

3.5. No irreplaceable habitats were identified within 1 km of the Site through the desk study and the findings from the field surveys.

Habitats

3.6. The Site is primarily composed of poor semi-improved neutral grassland dominated by common bent, creeping buttercup, red fescue and dandelion species, bisected by a diagonal pavement. Scattered trees were present across the Site, predominantly including alder with ash and silver birch. The immediate surroundings are primarily composed of housing estates. Within the wider area, there are patches of poor semi-improved grassland maintained through regular cutting, alongside areas of broadleaved woodland to the south, west and north-west. The River Irk is located approximately 800 m to the west of the Site.

3.7. Table 3-2 lists all of the priority habitats within 1 km of the Site.

Table 3-2 – Priority habitats within 1 km²⁸ of the Site

Habitat Type	Location of habitat
Open mosaic habitat	Nine parcels within 1 km. The closest parcel is located approximately 160 m southwest of the Site.
Deciduous woodland	Thirteen parcels within 1 km. The closest parcel is located approximately 180 m south west of the Site.

²⁸ This is the Zone of Influence for Priority habitats.

Woodpasture and Parkland	Two parcels within 1 km of the Site. The closest was located approximately 520 m north of the Site.
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- 3.8. No priority habitat within 1 km has hydrological connectivity with the Site. Given the absence of hydrological connectivity, the roads and residential buildings separating these priority habitats from the Site and the distance of these priority habitats from the Site it is considered unlikely that priority habitats will be impacted by the Proposed Scheme, therefore priority habitats will not be considered further in this report.
- 3.9. **Error! Reference source not found.** Table 3-3 lists all of the habitats present within the Zone of Influence. The table also provides details of the area²⁹ of each habitat within the Survey Area and the proportion of the Site this makes up. Habitats are mapped on the extended Phase 1 habitat survey plan in Appendix B with TNs on the figure. A site-specific species list obtained at the time of survey and containing both English and scientific names is available within Appendix C.

Table 3-3 - Habitat types within the Site

Habitat Type	Location of habitat	Area of habitat/ distance of linear feature		Annex 1 habitat y/n	Priority habitat y/n
		Ha/M	% of Site		
Poor semi-improved grassland	Across the majority of the Site	0.17	98%	N	N
Scattered trees	Scattered across the Site	N/A	1%	N	N
Bare ground	Two paved areas to the north and south of Site	0.012	1%	N	N

Protected and Priority Species

- 3.10. Evidence of protected and priority species, or habitats with the potential to support protected and priority species are indicated on the Extended Phase 1 Habitat Survey Plan in Appendix B, with specific features highlighted by TNs on the map. TN descriptions are provided in Appendix B. Details of legislation relating to protected species is provided in Appendix D.

Amphibians

- 3.11. GMLRC provided no records of great crested newts (GCN) or any other amphibian species within 2 km of the Site. No European Protected Species Mitigations Licences (EPSML) for great crested newts were identified within 1 km of the Site.
- 3.12. A single waterbody was identified within 500 m, situated at 290 m north of the Site. This waterbody however, is separated from the Site by residential properties, roads and a railway.
- 3.13. No suitable habitat for GCN was recorded within the Site and given the surrounding habitat, barriers to dispersal, and distance to the nearest known waterbody it is considered highly unlikely that GCN will be present on the Site. Therefore, this species is not discussed further within this report as it is not considered to pose a constraint to the Proposed Scheme.

²⁹ Measurements were taken in QGIS

Bats

- 3.14. GMLRC provided 36 records of bats within 2 km of the Site comprising three species, common pipistrelle, soprano pipistrelle and Daubenton's bat. The closest record was a foraging and commuting common pipistrelle bat approximately 415 m north. Seven European protected Species licence applications were identified for bats within 2 km of the Site. These comprised six EPSMLs which relate to common pipistrelle and one for both common and soprano pipistrelle. The closest licence application is EPSM2010-1888 for destruction of a resting place for common and soprano pipistrelle 650 m north west of the Site.
- 3.15. Whilst no bat roosts have been identified within the Site or survey area, buildings surrounding the Site within the Zone of Influence were identified to provide variable degrees of bat roost suitability.
- 3.16. The scattered trees on Site may provide some limited value to small numbers of foraging bats. However, the Site does not provide habitat links to the wider area. The Site was assessed as having limited foraging suitability for bats. Given the habitat is of limited suitability for foraging bats, it is considered that survey will not be necessary. However, recommendations are provided in Section 4 with regard to foraging and commuting bats.
- 3.17. As suitable roosting habitat for bats has been recorded within the survey area and roosts are known to be present within 2 km, this species may pose a minor constraint to the Proposed Scheme and recommendations are provided in Section 4.

Badgers

- 3.18. GMLRC provided 24 records of badgers within 2 km of the Site. The closest record was a badger sett 1.5 km south east of the Site.
- 3.19. The extended Phase 1 habitat survey did not identify any signs of badger activity, and the habitats on Site are considered to have negligible potential for sett building and poor potential for foraging. Potential for badgers to be present on the Site is limited due to the lack of connectivity with additional foraging habitat, areas suitable for sett creation and the high likelihood of disturbance from local residents.
- 3.20. As no badger evidence has been recorded within the Survey Area, and there is no suitable habitat on Site or in the immediate vicinity for sett creation, this species is not discussed further within this report as it is not considered to pose a constraint to the Proposed Scheme.

Birds

- 3.21. GMLRC provided 172 records of birds (for 13 different species) within 2 km of the Site. The closest record was a bullfinch approximately 550 m north west of the Site. Schedule 1 species include kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*) and peregrine (*Falco peregrinus*). Other species records include lapwing, starling, song thrush, house sparrow and lesser redpoll.
- 3.22. The scattered trees within the Site provide suitable nesting habitat for a range of common and widespread tree/shrub-nesting species of bird.
- 3.23. Although Schedule 1 species have been recorded within 2 km of the Site (kingfisher, peregrine and little ringed plover), the habitats contained within and immediately surrounding the Site are not suitable for nesting by these species given the absence of watercourses with bare, steep banks for kingfisher, the absence of tall, built structures or cliffs which may be used by peregrine, and bare gravel pits, sandy riverbanks and reservoirs for little ringed plover.
- 3.24. As suitable nesting habitat for a variety of common and widespread tree/shrub-nesting bird species has been recorded within the Site and study area this species group may pose a constraint to the Proposed Scheme and recommendations are provided below.

Reptiles

- 3.25. GMLRC provided one record of slow worms (*Anguis fragilis*) within 2 km of the Site. The record was for a total of 11 slow worms approximately 1.6 km east of Site.
- 3.26. The habitats on Site are not considered to provide suitable foraging or refugia habitat for reptiles due to the poor quality, homogeneous character of habitats on Site which are not conducive to any native reptile species. Additionally, the Site is surrounded by residential properties and roads isolating the area from any other suitable reptile habitat in the wider area.

- 3.27. As no suitable habitat for reptiles has been recorded within the study area, coupled with a lack of connectivity, reptiles are not discussed further within this report as it is not considered to pose a constraint to the Proposed Scheme.

Invertebrates

- 3.28. GMLRC provided nine records of invertebrate Species of Principal Importance within 2 km of the Site, including ghost moth (*Hepialus humuli*), latticed heath (*Chiasmia clathrata*) and white-letter hairstreak (*Satyrus w-album*). The closest record was for white-letter hairstreak approximately 880 m west of Site.
- 3.29. The habitats within the Site or the Survey Area are unlikely to support significant invertebrate assemblages given the location, character and overall quality of habitats present across the Site.
- 3.30. As no suitable habitat for significant invertebrates assemblages has been recorded within the study area, they are not discussed further within this report as it is not considered to pose a constraint to the Proposed Scheme.

Fungi

- 3.31. GMRC provided no recent records of Species of Principal Importance or specially protected fungi within a 2 km radius of the Site.
- 3.32. The habitats within the Site or the Survey Area are unlikely to support significant fungal assemblages given the location, character and overall quality of habitats present across the Site.
- 3.33. As no suitable habitat for significant fungal assemblages has been recorded within the study area, they are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.

Plants

- 3.34. GMLRC provided one record of a plant of conservation priority within 2 km of the Site. The record was for a yellow bird's-nest (*Hypopitys monotropa*) approximately 1.2 km south west of the Site.
- 3.35. As no plants of conservation priority were recorded during the extended Phase 1 habitat survey, they are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.
- 3.36. GMLRC provided no records of INNS within 2 km of the Site.
- 3.37. The extended Phase 1 habitat survey identified no INNS.
- 3.38. As no INNS were recorded within the Site boundary or wider Survey Area, they are not discussed further within this report as INNS are not considered to pose a constraint to the Scheme.

Other Notable Species

- 3.39. GMLRC returned six records of hedgehogs within 2 km of the Site. The closest record is approximately 1.1 km south of the Site. No records of other priority species were returned.
- 3.40. The habitats within the Site are suitable for foraging and commuting hedgehog, given they are surrounded by gardens and woodland in present in the surrounding area. Hedgehogs may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4.
- 3.41. There are no suitable habitats for white clawed crayfish, otter or water vole within 250 m of the Site as no watercourses are present. Therefore, these species are not considered further in this assessment.

4. Constraints and Recommendations

Key Constraints

- 4.1. Based on the survey results outlined in Section 3 above, the following constraints have been identified. Recommendations for mitigation of these constraints are provided in the following sections.

Bats

- 4.2. Habitats within the Site offer limited suitability for foraging bats and habitats immediately adjacent to the Site offer suitability for roosting bats. The current proposal includes construction of approximately seven new houses which is to involve removal of any trees on Site, building works involving heavy machinery and new lighting. All of these could result in disturbance to bat roosts within nearby buildings and loss of a small amount of limited suitability foraging habitat.

Nesting birds

- 4.3. The scattered trees on Site are considered to have potential for nesting birds. Felling of these trees within the core nesting season (the core nesting season is 1st March to 31st August) could result in the damage and/or destruction of active nests.

Hedgehogs

- 4.4. Hedgehogs may be found foraging and commuting through the Site, Site clearance and other activity may result in harm and disturbance to hedgehogs.

Further Survey Requirements

- 4.5. A Preliminary Bat Roost Assessment (PBRA) should be carried out of structures and trees which may be impacted by the works, this PBRA should cover all trees and structures within 30 m of the Site in the first instance. Structures and trees which require further survey will be determined when the details of the works including timings, duration and use of lighting have been finalised and the PBRA have been completed. Depending on the result of these assessments and the works required, further surveys may be required in line with Good Practice Guidance³⁰.

Biodiversity Net Gain

- 4.6. The Environment Act 2021³¹ recently received Royal Assent passing the Act into active legislation, mandating the achievement of quantifiable biodiversity net gain projects and plans in England. Whilst these provisions are currently in a transitional period, where mandating biodiversity net gain is not mandatory for two years after Royal Assent of the Act, this is superseded where a Local Authority's Local Plan already contains provisions for biodiversity net gain.
- 4.7. GMCA Biodiversity Net Gain guidance³² states that 'For developments in Greater Manchester, the minimum level of Biodiversity Net Gain is considered to be achieved when the biodiversity units for the habitats (for example, area based habitats, rivers and/or hedges) impacted by the development is increased by 10% or more after the development. This means delivering 10% gain for area base habitats and 10% net gain for hedges and 10% for rivers if any of these habitats are present on the site.' Relevant staff at the local planning authority and Greater Manchester Ecology Unit should be contacted for guidance if needed. The biodiversity net gain assessment should follow methods set out in a suitable metric, such as Biodiversity Metric 3.0³³.

Mitigation

General

- 4.8. It is recommended that all works adhere to the Guidance on Pollution Prevention (GPP)³⁴ and the Construction Industry Research and Information Association (CIRIA) C715 Environmental good practice on site handbook³⁵.
- 4.9. Any excavations should be filled or covered overnight to prevent animals (such as hedgehogs) falling in. Where pits and trenches cannot be closed or filled on a nightly basis, ensure that a plank is placed into the excavation so an animal can use this as a means to escape if necessary. All excavations should be checked for animals the following morning before proceeding with works. If

³⁰ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

³¹ [Environment Act 2021 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2021/1/section/1)

³² [gmca-bng-guidance-update_250221-final-edited.pdf \(greatermanchester-ca.gov.uk\)](https://www.greatermanchester-ca.gov.uk/media/250221-final-edited.pdf)

³³ <http://publications.naturalengland.org.uk/publication/6049804846366720>

³⁴ <https://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf#:~:text=Guidance for Pollution Prevention%28GPP%29 documents are based,will be committing a criminal offence. Following these>

³⁵ Environmental Good Practice on Site Guide, CIRIA, Jan 2015, Edition 4

an animal is found, the animal should not be touched, and advice should be sought from the Ecologist or the Ecological Representative about the best way to proceed.

- 4.10. Contractors should ensure all rubbish and construction materials are collected and removed from Site on a regular basis to prevent trapping or injury to mammals.
- 4.11. If any protected species or evidence of legally protected species, or any INNS plants, are unexpectedly encountered at any point during the works, all works should cease, and an ecologist should be contacted for further advice on how to proceed.
- 4.12. No night-time working (taken to be 30 minutes prior to sunset until 30 minutes after sunrise) should be undertaken to avoid impacts on nocturnal and crepuscular animals. If night-time working is required, this should be discussed with an ecologist prior to commencement to establish what mitigation measures are required.

Bats

- 4.13. Details of the necessary mitigation required with regard to bats in relation to the Proposed Scheme would be provided following the results of the PBRA and any relevant further bat surveys, if necessary (as informed by the PBRA).
- 4.14. If lighting during construction or operation is required, this should be designed in accordance with the Bat Conservation Trust lighting guidance³⁶. The construction lighting design should take into account the need to avoid illuminating areas where bats may be roosting in locations such as the houses directly adjacent to the Site.

Nesting birds

- 4.15. Tree felling and vegetation clearance should be minimised as far as practicable and undertaken outside the core bird nesting season (the core bird nesting season is 1st of March to 31st of August, though it should be noted that variation in dates is possible for certain species such as wood pigeon) to avoid damage or destruction of occupied nests or harm to breeding birds. If this cannot be achieved, works within the core bird nesting season will require an inspection of vegetation to be cleared for nesting birds by a suitably qualified ecologist no more than 24 hours prior to any works being undertaken. If any nesting birds are identified during the survey, they should be left in situ for their entire nesting period until the young birds have fledged. Alternative approaches to the work will need to be proposed, e.g. leaving an exclusion zone around the nest to avoid disturbance.
- 4.16. All cleared vegetation should be rendered unsuitable for nesting birds, for example, by covering or chipping depending on the end purpose of the vegetation or should be removed from the works area.

Habitats

- 4.17. It is recommended that additional native trees and shrubs are incorporated into retained communal areas of the Site. It is recommended that a range of native species of local provenance are included in the planting and soft landscaping design.

Biodiversity Opportunities for Ecological Enhancements

- 4.18. In line with the NPPF³⁷ and local planning policy measures biodiversity should be protected and enhanced along with providing net gains for biodiversity on site in all Schemes. The recommendations below are based on information in this report along with information from the desk study. These measures will be over and above any similar measures needed to mitigate effects.
- 4.19. There are opportunities to incorporate features with value for foraging bats into the new development from landscaping design. This could entail planting of suitable trees, shrubs and hedgerows. Given the current below low suitability of the habitats within the Site for bats, incorporation of appropriate landscaping can be used to increase the value of the Site for foraging and commuting bats. Areas of retained or planted vegetation on the Site should be left un-lit so they can be utilised for foraging.

³⁶ Bat Conservation Trust (2009) Bats and Lighting in the UK. Bats and the Built Environment Series.

³⁷ [National Planning Policy Framework \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/363623/National_Planning_Policy_Framework.pdf)

- 4.20. There are opportunities to incorporate features with value for nesting birds into the new development. This should result in no net loss, in value for nesting birds through planting of suitable trees/shrubs and incorporation of bird boxes within the new housing.
- 4.21. The following enhancement measures recommended;
- Suitable features for roosting bats and nesting birds incorporated into the new housing/apartments via integrated boxes;
 - Native species planting including shrubs/trees providing food year-round. This will provide foraging habitat and refuge for birds, bats and insects.

5. Conclusion

- 5.1. The Proposed Scheme should take into account the potential presence of foraging and roosting bats, hedgehogs and nesting birds within the local area adjacent to the Site.
- 5.2. Details of the necessary mitigation required with regard to bats in relation to the Proposed Scheme would be provided following the results of the PBRA and any relevant nocturnal surveys, if required (as informed by the PBRA).
- 5.3. Biodiversity Net Gain should be implemented, in line with local planning policy.

Report Validity

- 5.4. In the event of scope or programme changes or if works do not commence within 12 months of the date of this report then updates to the surveys may be required to ensure the validity of the data, as per CIEEM guidance³⁸.

³⁸ CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

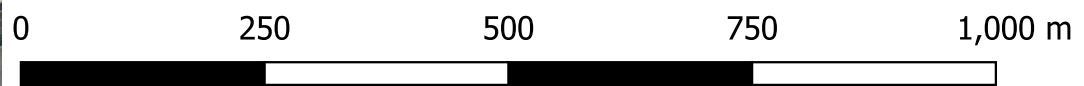
Appendices



Appendix A. Site Location and Scheme Drawings



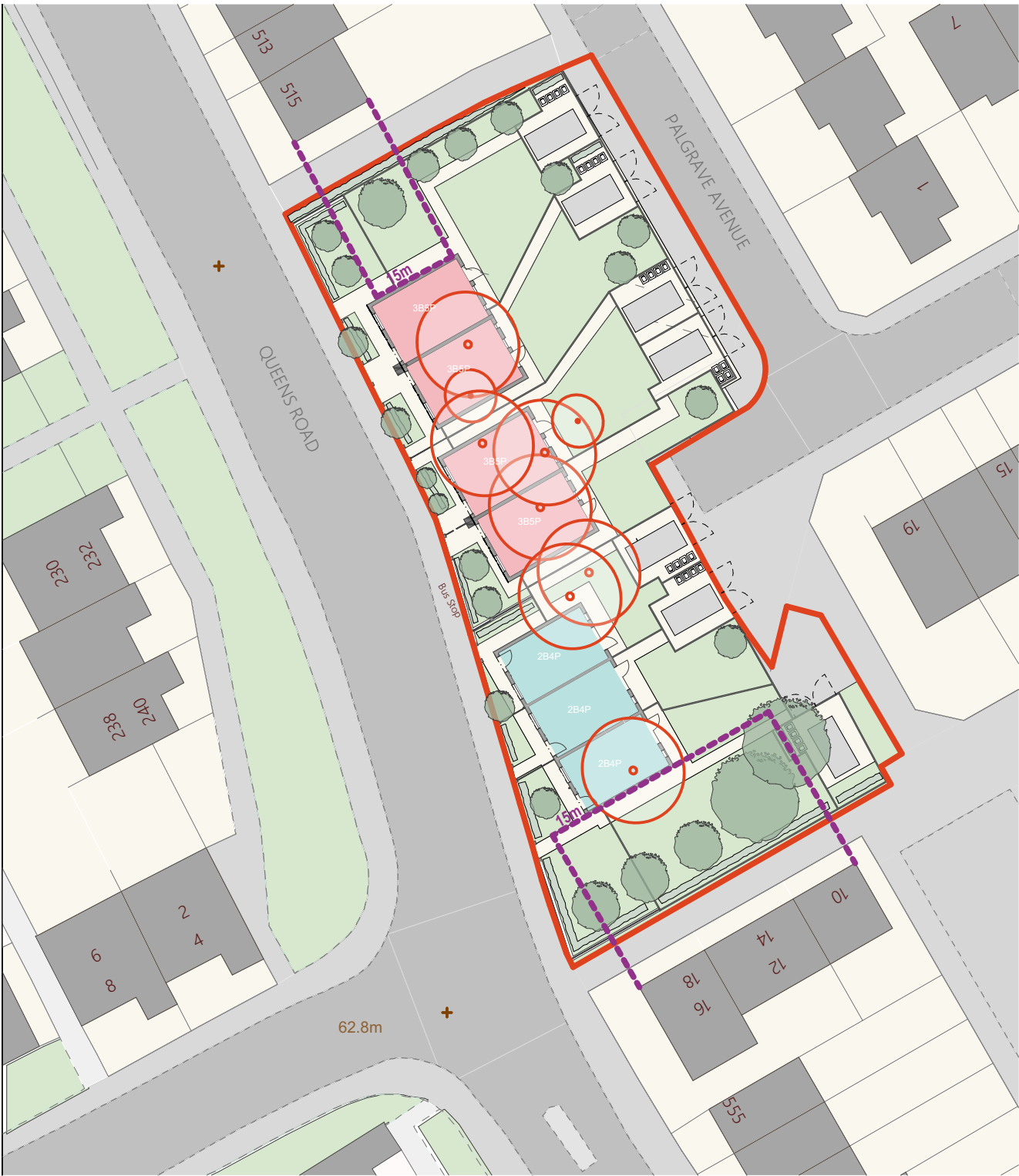
 Site Boundary



Contains Ordnance Survey data © Crown copyright and database right (2018)

Atkins Limited © Chadwick House Birchwood Park Warrington England WA3 6AE			
Project: Palgrave Avenue Guinness Partnerships			
Client: Guinness Partnership			
Title: Site Location Plan			
Drawing number: ECO_5			
Original scale			1:7,750
PAGE 1/1			
Drawn by: GW	Checked by: JS	Reviewed by: LG	Approved by: LG
Date: Dec 21	Date: Dec 21	Date: Dec 21	Date: Dec 21

PROPOSED PLAN



N

— SITE BOUNDARY

SITE AREA : 1,939m²

● EXISTING TREES TO BE REMOVED

● PROPOSED PLANTING

■ PROPOSED SOFT LANDSCAPING
(Subject to a detailed landscaping strategy)

	House Type	Total
■	2B4P House @ 79m ²	3
■	3B5P House @ 93m ²	4
		7



1 Proposed Site Plan 1:500

PROPOSED MASSING



Appendix B. Extended Phase 1 Habitat Survey Plan and Target Notes

Extended Phase 1 Habitat Survey Plan



- Survey Area
- Site Boundary
- Target Notes
- SI Poor semi-improved grassland
- Scattered Trees
- Hardstanding
- No Access



Atkins Limited © Chadwick House Birchwood Park Warrington England WA3 6AE			
Project: Guinness Partnerships Palgrave Avenue			
Client: Guinness Partnerships			
Title: Palgrave Avenue Extended Phase 1 Habitat			
Drawing number: ECO_6			
Original scale		1:711.40473	
PAGE 1/1			
Drawn by: GW	Checked by: JS	Reviewed by: LG	Approved by: LG
Date: Nov 21	Date: Dec 21	Date: Dec 21	Date: Dec 21

Target Notes

Table B-1 – Summary of Target Notes

Target note	Description	Photograph
TN1	A number of buildings surrounding the site had lifting roof tiles, vents and lead flashing which may provide suitable roosting habitat for bats.	
TN2	Site overview photograph.	

Appendix C. Plant Species List

English name	Scientific name	DAFOR
Common feather-moss	<i>Kindbergia praelonga</i>	R
Dilated scalewort	<i>Frullania dilatata</i>	R
Lateral cryphaea	<i>Cryphaea heteromalla</i>	R
Wood bristle-moss	<i>Orthotrichum affine</i>	R
a dandelion	<i>Taraxacum</i> sect. <i>Taraxacum</i>	F
Alder	<i>Alnus glutinosa</i>	R
Ash	<i>Fraxinus excelsior</i>	O
Broad-leaved dock	<i>Rumex obtusifolius</i>	O
Buddleja	<i>Buddleja davidii</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	O
Common bent	<i>Agrostis capillaris</i>	F
Common cat's-ear	<i>Hypochaeris radicata</i>	R
Common chickweed	<i>Stellaria media</i>	O
Common groundsel	<i>Senecio vulgaris</i>	R
Common mouse-ear	<i>Cerastium fontanum</i>	O
Common nettle	<i>Urtica dioica</i>	R
Common ragwort	<i>Jacobaea vulgaris</i>	O
Creeping buttercup	<i>Ranunculus repens</i>	F
Creeping thistle	<i>Cirsium arvense</i>	R
Elder	<i>Sambucus nigra</i>	R
Great willowherb	<i>Epilobium hirsutum</i>	R
Hawthorn	<i>Crataegus monogyna</i>	R
Hemp dead-nettle	<i>Lamium amplexicaule</i>	R
Perennial rye-grass	<i>Lolium perenne</i>	LF
Red clover	<i>Trifolium pratense</i>	R
Red dead-nettle	<i>Lamium purpureum</i>	R
Red fescue agg.	<i>Festuca rubra</i> agg.	F
Ribwort plantain	<i>Plantago lanceolata</i>	O
Silver birch	<i>Betula pendula</i>	O
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>	O
Willowherb sp.	<i>Epilobium</i> sp.	O
Yorkshire-fog	<i>Holcus lanatus</i>	LF

Appendix D. Legislation table

Species	Legislation	Offences	Licensing procedures and guidance
Bats <i>European protected species</i>	Conservation of Habitats and Species Regulations 2017 (as amended) Reg 43	Deliberately ³⁹ capture, injure or kill a bat; deliberate disturbance ⁴⁰ of bats; or damage or destroy a breeding site or resting place used by a bat. [The protection of bat roosts is considered to apply regardless of whether bats are present.]	A Natural England (NE) licence in respect of development is required. Guidance documents: <i>NE Standing Advice for protected species 2013</i> <i>European Protected Species: Mitigation Licensing- How to get a licence</i> (NE 2013) <i>Bat Mitigation Guidelines</i> (English Nature 2004) <i>Bat Workers Manual</i> (JNCC 2004)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb ⁴¹ a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.
Birds	Wildlife and Countryside Act 1981 (as amended) S.1	Intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; intentionally take or destroy the nest or eggs of any wild bird. Intentionally or recklessly disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young; intentionally or recklessly disturb dependent young of such a species [e.g. most birds of prey, kingfisher, barn owl, black redstart, little ringed plover].	No licences are available to disturb any birds in regard to development. Licences are available in certain circumstances to damage or destroy nests, but these only apply to the list of licensable activities in the Act and do not cover development. General licences are available in respect of 'pest species' but only for certain very specific purposes e.g. public health, public safety, air safety. Guidance documents: <i>NE Standing Advice for protected species 2013</i>
Adder Common lizard	Wildlife and Countryside Act 1981 (as amended) S.9(1) and S.9(5)	Intentionally kill or injure any common reptile species.	No licence is required. However an assessment for the potential of a site to support reptiles should be undertaken prior to any development works which have potential to affect these animals.

³⁹ Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing

⁴⁰ Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

⁴¹ Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 (as amended) remain an offence under the Wildlife and Countryside Act 1981 (as amended) although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Grass snake Slow worm			Guidance documents: <i>NE Standing Advice for protected species 2013</i>
Plants <i>Nationally protected species</i>	Wildlife and Countryside Act 1981 (as amended) S.13 (Schedule 8)	Intentionally pick, uproot or destroy any wild plant on Schedule 8	Licences can be issued by Natural England for specific purposes only, such as science and education or conservation purposes. There is no provision for licensing the above actions for development operations under the Wildlife & Countryside Act 1981 (as amended). No licence is required for survey in England. Guidance on survey techniques is available from Natural England. Guidance documents: <i>NE Standing Advice for protected species 2013</i>
Plants <i>Invasive species e.g. Japanese knotweed, hybrid knotweed, giant knotweed, giant hogweed, rhododendron, Himalayan balsam</i>	Wildlife and Countryside Act 1981 (as amended) S.14	It is illegal to plant or otherwise cause these species to grow in the wild.	Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the Environmental Protection Act 1990. Guidance documents: <i>The Knotweed Code of Practice</i> (Environment Agency, 2013 version 3) <i>Managing Invasive Non-native Plants</i> (Environment Agency 2010) <i>Guidance on Section 14 of the Wildlife and Countryside Act, 1981</i> (Defra 2010)

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