

Northern Gateway

Area GMA 1.1 - Ecological Constraints and Opportunities A104444-7

June 2021
Prepared by WYG Environment Planning Transport Limited
On behalf of Northern Gateway Development Vehicle LLP



Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH Tel: +44 (0)161 872 3223 Fax: +44 (0)161 872 3193 Email: Website: www.wyg.com

WYG Environment Planning Transport Limited. Registered in England & Wales Number: 03050297 Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, LS1 4ER



Document control



Document:	Area G1.1 – Ecological	
	Constraints and Opportunities	
Project:	Northern Gateway	
Client:	Northern Gateway	
	Development Vehicle LLP	
Job Number:	A104444-7	
File Origin:	A104444-	
	5/Reports/Draft/Volume 2	
Revision:	0	
Date:	December 2019	
Prepared by:	Checked by:	Approved By:
Laura Holmes MCIEEM	Philip Preston MCIEEM	Rachel Kerr CEnv
Principal Ecologist	Principal Ecologist	MCIEEM
		Associate Ecologist
Description of revision:	First Issue	
Revision:	1	
Date:	August 2020	
Prepared by:	Checked by:	Approved By:
Jessica Yorke ACIEEM	Laura Holmes MCIEEM	Rachel Kerr CEnv
Consultant Ecologist	Principal Ecologist	MCIEEM
		Associate Ecologist
Description of revision:	Update following an extended	
	Phase 1 habitat survey of	
	part of the site and	
	addressing client's comments	
Revision:	2	
Date:	September 2020	
Prepared by:	Checked by:	Approved By:
Jessica Yorke ACIEEM	Laura Holmes MCIEEM	Rachel Kerr CEnv
Consultant Ecologist	Principal Ecologist	MCIEEM
		Associate Ecologist





Description of revision:	Update to reflect client	
	comments	
Revision:	3	
Date:	June 2021	
Prepared by:	Checked by:	Approved By:
Samantha Wood	Caroline Martin	Caroline Martin
Description of revision:	Accessibility Check	



Contents

1.0	Intro	ductio	n	8
	1.1	Instru	uction	8
	1.2	Obje	ctives	8
	1.3	Prop	osed Development	9
2.0	Site	Settin	g	. 11
	2.1	Loca	tion and Size	. 11
	2.2	Site I	Description	. 11
	2.3	Desk	Study	. 12
	2.3.	1	Previous Surveys	. 12
	2.3.2	2	Desk Based Study	. 13
	2.4	2020	Site Surveys	. 14
	2.5	Limit	ations	. 14
3.0	Bas	eline E	Ecological Conditions	. 16
	3.1	Desk	Study	. 16
	3.1.	1	Designated Sites and Habitats of Principal Importance	. 16
	3.1.2	2	Previous Survey	. 18
	3.2	2020	Update: Habitats	. 19
	3.3	2020	Update: Protected and Notable Species	. 26
	3.3.	1	Invertebrates	. 26
	3.3.2	2	Amphibians including Great Crested Newt	. 27
	3.3.	3	Reptiles	. 28
	3.3.4	4	Bats	. 29
	3.3.	5	Birds	. 30





	3.3.6	Badger	31
	3.3.7	Otter	32
	3.3.8	Water Vole	32
	3.3.9	Brown Hare	32
	3.3.10	European Hedgehog	33
	3.3.11	Invasive non-native plant species	33
4.0	Constraint	s and Opportunities	34
	4.1 Cons	traints	37
	4.1.1	Biodiversity Net Gain	37
	4.1.2	Internationally Designated Sites	39
	4.1.3	Nationally and Locally Designated Sites	40
	4.1.4	Habitats	41
	4.1.5	Protected and Notable Species	41
	4.2 Oppo	ortunities	43
	4.2.1	Biodiversity Net Gain	43
	4.2.2	Habitats / Protected and Notable Species	44
	4.3 Next	Steps to Assess Constraints and Opportunities	46
	4.3.1	Next Steps – Requirements for Future Planning Application	46
	4.3.2	Next Steps - Opportunities	47
	4.4 Conc	lusions	47
Арр	endices		49
	National P	lanning Policy Framework	73
	Biodiversit	y 2020: A strategy for England's wildlife & ecosystem services	73
	Local Biod	iversity Action Plan	74
	Local Plan	S	75



	Bury Metropolitan Borough Council	.75
	Rochdale Metropolitan Borough Council	. 79
Dra	wings	
A10)4444-5-MAN-N-01 Site Location Plan	
A10	04444-5-MAN-N-301 GMA 1.1 Desk Study Search Area	
A10	04444-5-MAN-N-305 GMA 1.1. High Level Constraints Plan	

Appendices:

Appendix A: Report Conditions

Appendix B: Wildlife Legislation

Appendix B: Relevant Planning Policy and Legislation

Appendix C: Survey Calendar



1.0 Introduction

WYG has been commissioned by Northern Gateway Development Vehicle LLP ('NGDV') to undertake a high-level desktop and site reconnaissance constraints and opportunities review of a site referred to as Area GMA 1.1 within the proposed Greater Manchester Northern Gateway development area.

The site is identified as Allocation GM 1.1 in the draft Greater Manchester Strategic Framework (GMSF). It forms part of the strategic cross-boundary 'Northern Gateway' allocation positioned around the intersection of the M60, M62 and M66 Motorways.

1.1 Instruction

This desk top assessment and constraints review provides information to support the promotion of GMA 1.1 for allocation in the Greater Manchester Spatial Framework (GMSF). The findings from the assessment will be used to inform the site masterplan as it is updated and refined

This report has assessed the land shown on Figure A104444-5-MAN-N-01. It forms the majority part of proposed allocation GMA 1.1 'Heywood/Pilsworth (Northern Gateway)' in the draft GMSF. The north-eastern part of the proposed allocation already benefits from an outline planning permission for mixed use employment and residential development (the 'South Heywood' scheme, granted in March 2020); as such it is not included within this assessment work commissioned by the NGDV.

1.2 Objectives

Following a desk top, site reconnaissance, constraints and opportunities review in December 2019 by WYG¹, the main body of the site was assessed in greater detail in June 2020; WYG undertook an extended Phase 1 habitat

A104444-5 www.wyg.com

¹ Northern Gateway – Ecological Constraints and Opportunities Report; A104444-5. WYG December 2019



survey (Ecological Appraisal report) of the area shaded orange on A104444-7-MAN-N-301. The remaining area within the site boundary was subject to a high-level walkover only.

The overall objectives of the report are to collect information on key habitat quality for the following:

- Habitats of Principal Importance (as identified during the high-level constraints and opportunities exercise).
- Water features.
- Riparian habitats.
- Woodland; and
- Hedgerows.

This will provide insight of the quality of the blue and green infrastructure currently present and will provide an early indication of any ecologically valuable areas. Note that only part of the area was subject to an extended Phase 1 habitat survey (A104444-7-MAN-N-301), and the high-level walkover undertaken within the rest of the red line boundary does not replace an extended Phase 1 habitat survey which would need to be undertaken to inform any future planning application.

1.3 Proposed Development

It is understood at this stage that Area GMA 1.1 will be developed primarily for commercial and industrial purposes (B1, B2 and B8 of the Town and Country Planning Use Classes Order 1987) with associated spine roads, and soft and hard landscaping, and around 200 residential dwellings in the west of the site, off Castle Road.

The 'South Heywood' scheme in the north-eastern part of the GMSF allocation already benefits from planning permission for a new link road, industrial development, 1000 new dwellings and a new local centre and



primary school. This report does not consider this part of the allocation since it has already been subject to detailed assessment through the planning application.



2.0 Site Setting

2.1 Location and Size

Key details for Area GMA 1.1 are summarised in the Table 2.1 below.

Table 2.1: key details for Area GMA 1.1

Site Specifics	
Address	Land to the north of the M62 & M66 junction
	(Simister Island), Rochdale.
Grid Reference	SD 83550 07966
Site Area	500 Hectares

2.2 Site Description

The site currently predominantly comprises agricultural land with local roads crossing through the proposed development area. There are a number of farms within the site boundary. Pike Fold Golf Club is located in the south



west of the site. Whittle Brook and associated riparian habitat runs through the middle of the site with a number of other watercourses joining it.

Table 2.2: Site descriptions for site boundaries

Boundary	Description
North	Pilsworth Landfill Site, agricultural land and the South
	Heywood Development.
East	Agricultural land and residential properties.
South	M62 constrains the southern boundary beyond which
	Area GMA 1.2 is located.
West	M66 constrains the western boundary beyond which
	agricultural land and residential properties are
	located.

2.3 Desk Study

2.3.1 Previous Surveys

A high-level ecological walkover of land within the red line boundary (A104444-5-MAN-N-01) of the site was completed on 18th November 2019 by Laura Holmes MCIEEM, WYG Principal Ecologist (WYG, 2019)². During the walkover the following observations were made:

- indicative broad habitat types represented on the visible parts of the site (based on the Phase 1 Vegetation and Habitat Survey³ categories).
- potential for habitats to support protected (and notable) species; and
- scope for retention of ecological features and opportunities within the Masterplan.

The walkover survey could only be completed from public rights of way

² Northern Gateway – Ecological Constraints and Opportunities Report V1; A104444-5. WYG December 2019

³ JNCC, (2010), Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit, JNCC: Peterborough.



therefore some areas of the site could not be accessed. This assessment has been completed using on site observations supplemented by desktop information including aerial and OS mapping. The high-level walkover did not include observations from within a set buffer area around the site unless it was to note a broad habitat feature of possible relevance. No detailed habitat mapping was carried out, however the plans produced provided broad overviews of potential ecological constraints and requirements for potential further surveys.

2.3.2 Desk Based Study

A desk study was undertaken for the Ecological Constraints and Opportunities Report V1 in December 2019. The aim was to obtain information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and a 2 km search buffer. Information was requested from the Greater Manchester Ecological Unit (GMEU) for information on any nature conservation designations and protected or notable species records within 2 km of the site. A search for relevant information was also carried out on MAGIC⁴; DEFRA's interactive, web-based database for statutory designations and information on any European Protected Species Licences (EPSL) applications that have been granted in the local are. A detailed review of aerial and OS mapping was also undertaken.

⁴ MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any EPSL applications that have been granted in the local area



2.4 **2020 Site Surveys**

An extended Phase 1 habitat survey was undertaken by WYG of the area of the site shown on Figure A104444-7-MAN-N-301 GMA 1.1 in June 2020.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (JNCC, 2010)⁵. Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2019)⁶. The site was also appraised for its suitability to support notable flora, with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017)⁷.

A high-level ecological walkover was undertaken for the remaining land within the redline boundary, where accessible, as shown on Figure A104444-5-MAN-N-01, using similar methodologies as described in *Section 2.3.1*.

2.5 Limitations

An extended Phase 1 habitat survey was not undertaken of the entire area within the red line boundary, only the area shown on Figure A104444-5-MAN-N-01. The surrounding area was subject to a high-level walkover only. There is therefore only detailed habitat mapping for the extended Phase 1 habitat survey area. No access was gained to the Pine Fold Golf Club, this was only viewed from the adjacent land.

No species-specific surveys have been carried out at this stage, but the information derived from the assessments undertaken are considered adequate to inform the next stage of this project. Detailed site-specific surveys, including a full extended Phase 1 habitat survey for the areas not yet surveyed and Phase 2 protected species surveys will be required as plans progress and to support any planning application.

⁵ See Footnote 4.

⁶ Stace, C., (2019), New Flora of the British Isles, 4th Edition, C&M Floristics Middlewood Green, Suffolk.

⁷ CIEEM, (2017), Guidelines for Preliminary Ecological Appraisal, 2nd Edition, CIEEM: Winchester.



The details of this report will remain valid for a period of 18 months from the date of the surveys (i.e. December 2021), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be are any changes to the red line boundary or development proposals which this report was based on.



3.0 Baseline Ecological Conditions

The following section provides a summary of the information derived from previous reports (desk study and site visit) to provide an overview of the likely site ecology. This assessment also highlights the potential for ecological constraints to be present on site and the scope for retention and enhancements of features with ecological value.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading. Relevant wildlife legislation has been provided in Appendix A.

3.1 Desk Study

3.1.1 Designated Sites and Habitats of Principal Importance

All designated sites are defined in local plans under the Town and Country Planning System and the National Planning Policy Framework and are a material consideration when planning applications are being determined. There are no designated Natura 2000 sites within 2 km of the site boundary. The closest European site is the Rochdale Canal Special Area of Conservation (SAC) which lies 3 km east. The site lies within the Impact Risk Zone (IRZ) for the Rochdale Canal SSSI, however this does not present a constraint to development at the site as only planning proposals relating to infrastructure (airports, helipads and other aviation proposals); air pollution; and/or combustion (combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion) are considered likely to impact on the SSSI.

In addition, the following Natura 2000 sites are within 20 km of the site:

 South Pennine Moors SAC is located 11 km north east /17 km east of the site: and



 Peak District Moors (South Pennine Moors Phase 2) Special Protection Area (SPA) is located 11 km north east/ 17 km east of the site.

There are two Local Nature reserves (LNRs) within a 2 km radius of the site boundary. Hopwood woodlands LNR, 1.7 km east and Hollins Vale LNR, 0.1 km west on the other side of the M66.

Hopwood Woodlands LNR is a series of small woodlands around the grounds of Hopwood Hall which support bird and common toad *Bufo bufo* populations.

Hollins Vale LNR is a farmland reserve containing areas of woodland, grassland and wetland.

There are ten Sites of Biological Interest (SBI) within a 2 km radius of the site boundary. There is one SBI, Pilsworth, that is adjacent to the northern boundary of the site. The SBIs and their distance from the site are listed in Table 3.1 below.

Table 3.1: A table to show the 10 SBIs within 2 km of the site. Distance and direction from the site given.

Site of Biological Importance (SBI)	Approximate Distance and Direction from the site boundary (km)
Pilsworth	Adjacent to north boundary
Hollins Plantation	0.06 west
Hollins Vale	0.2 west
Railway cutting at Heywood	0.7 north
Parr Brook	0.7 west





Heaton Park Reservoir West	0.8 south
Hazlitt wood	0.8 south
Heaton Park Reservoir East	0.9 south
Glade and Oaken Bank woods	1.9 east
Streams and flushes near Bradley Hall Farm	1.9 south east

The desk study identified Habitats of Principal Importance (HPI) within site:

- Deciduous woodland HPI is recorded in pockets within the edges of the site, as well as branching off the riparian corridor of the Whittle Brook.
- Non-priority habitat 'Good quality semi-improved grassland' is recorded in the west of the site.
- Watercourses and ponds are present within the site.

3.1.2 Previous Survey

Habitats recorded within the red line boundary of the site during the 2019 high-level walkover included the following:

- Improved and semi-improved agricultural fields used for grazing.
- Arable fields.
- Hedgerows and hedge and tree lines.
- Tall ruderal herbs.
- Waterbodies (over 30) and watercourses.
- · Scattered trees.



- Plantation and semi-natural broadleaved woodland; and
- Buildings and structures.

As a result of the 2019 high-level walkover, the site was considered suitable for the following protected/notable species:

- Invertebrates (including white-clawed crayfish Austropotamobius pallipes).
- Great crested newt (GCN) Triturus cristatus.
- Reptiles.
- Bats (both roosting and foraging/commuting suitability).
- Farmland and wintering birds.
- Badger Meles meles.
- Otter Lutra lutra and water vole Arvicola amphibius.
- Brown hare Lepus europaeus; and
- Hedgehog Erinaceus europaeus.

Invasive plant species, such as Himalayan balsam *Impatiens glandulifera*, were considered likely to be present on site.

3.2 2020 Update: Habitats

Habitats recorded within the red line boundary of the site during the 2020 extended Phase 1 habitat survey are listed in Table 3.2 with a description. Habitats identified of a higher quality, and which are considered to be



potential constraints to development, are shown on High Level Constraints Figure A104444-7-GMA 1.2.

Table 3.2: A table showing the habitats identified within the site during the 2020 survey and descriptions.

<u>Habitat</u>	<u>Description</u>
Improved	The site was dominated by agricultural fields, and of these
grassland	fields, the majority were identified as improved grassland.
	Largely dominated by perennial rye grass Lolium perenne,
	Yorkshire fog Holcus lanatus and meadow foxtail
	Alopecurus pratensis, with a very limited spread of ground
	flora. The majority of fields were being grown for hay at the
	time of the survey, with a sward height of 30 – 50 cm. A few
	fields were being used for grazing, both sheep and horse,
	and had very short sward heights.
	Improved grassland is generally of low ecological value but
	provides some foraging habitat for small mammals including
	brown hare and badger, as well as farmland and wintering
	birds.
Poor semi-	Occasional fields / areas of poor semi-improved grassland
improved	were identified within the site. This grassland was largely
grassland	associated with rougher, smaller fields, often adjacent to a
	watercourse. These fields were likely more difficult to
	intensively manage for hay, and therefore, a slightly greater
	diversity of plant species were present. Areas of this habitat
	were found along the Whittle Brook corridor and the
	Brightley Brook corridor, as well as within the south of the
	site.





	This grassland is generally of low ecological value but
	provides some foraging habitat for small mammals including
	brown hare and badger, as well as farmland and wintering
	birds.
Semi-	Occasional fields / areas of semi-improved neutral grassland
improved	were identified within the site. Four large fields were located
grassland	within the centre of the site, as well as several areas along
	the Whittle Brook corridor and some fields to the south of the
	Whittle Brook. These areas included a greater diversity of
	ground flora including tufted vetch Vicia cracca, red clover L.
	Trifolium pratensis, meadow buttercup Ranunculus acris L.
	and smooth cat's-ear <i>Hypochaeris glabra</i> .
	Semi-improved acid grassland was identified within the site,
	associated with the Whittle Brook and Castle Brook riparian
	corridor. An area was also identified within the north east of
	the site. Species present were synonymous with species
	poor acid grasslands and included red fescue Festuca rubra,
	heath bedstraw Gallium saxitile, sheep's sorrel Rumex
	acetosella and tormentil Potentilla erecta.
	Areas of good guality semi-improved grassland were

Areas of **good quality semi-improved grassland** were mapped on MAGIC's⁸ Priority Habitat Inventory and are highlighted as grassland areas of greater quality habitats.

Species-rich habitats such as semi-improved grassland, are considered of good ecological value, providing foraging habitat for a wide range of species.

⁸ See Footnote 5. A104444-5 www.wyg.com





Marshy	Areas of marshy grassland were identified within parts of the
grassland	site which had poor drainage, i.e. hollows, depressions and
	low-lying areas often adjacent to watercourses. Dominant
	species present were largely soft rush Juncus effusus and
	Yorkshire fog, along with other wet loving plant species.
	Marshy grassland was found along the Brightley Brook and
	along the Castle Brook. Common spotted-orchids
	Dactylorhiza fuchsii were found within an area of marshy
	grassland along the Castle Brook.
	Marshy grassland is considered of good ecological value,
	providing foraging habitat for a wide range of species.
Arable	A few arable fields were noted in the north and east of the
	site. The arable fields lacked a field margin.
	Arable fields of this kind are considered of low ecological
	value but provide some foraging habitat for small mammals
	including brown hare and farmland birds.
Hedgerows	There was a network of intact and defunct hedgerows
	throughout the site mainly bordering the improved
	grassland, semi-improved grassland and arable land. The
	invasive species Himalayan balsam was recorded within
	the base vegetation of many hedgerows. The majority of the
	hedgerows were species-poor, dominated by hawthorn, but
	some were identified as being species-rich. A detailed
	assessment of all hedgerows will be required to inform
	proposals. A large proportion of the hedgerows were well
	established, containing mature trees and woody species in
	some sections such as elder and ash. Therefore, some may
	qualify as Important under the Hedgerow Regulations 1997.
	Hedgerows are considered to provide good wildlife corridors





for a range of species, including commuting and foraging habitat for bats. Scattered There are occasional mature and semi-mature broadleaved scattered trees throughout the site, mainly associated with field boundaries, however some solitary trees were within the semi-improved grassland. Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all woodlands surveyed.		
There are occasional mature and semi-mature broadleaved scattered trees throughout the site, mainly associated with field boundaries, however some solitary trees were within the semi-improved grassland. Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		for a range of species, including commuting and foraging
trees scattered trees throughout the site, mainly associated with field boundaries, however some solitary trees were within the semi-improved grassland. Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		habitat for bats.
field boundaries, however some solitary trees were within the semi-improved grassland. Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all	Scattered	There are occasional mature and semi-mature broadleaved
the semi-improved grassland. Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all	trees	scattered trees throughout the site, mainly associated with
Scattered trees are considered to individually provide low ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		field boundaries, however some solitary trees were within
ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		the semi-improved grassland.
ecological value, but when considered alongside surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		
surrounding habitats may form part of wildlife corridors for a range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		Scattered trees are considered to individually provide low
range of species, including roosting, commuting and foraging habitat for bats. Broadleaved Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		ecological value, but when considered alongside
Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		surrounding habitats may form part of wildlife corridors for a
Broadleaved semi-natural woodland was located several distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn Crataegus monogyna woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak Quercus robur. The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		range of species, including roosting, commuting and
distinct areas across the site. The largest of these woodland woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		foraging habitat for bats.
woodlands was located in the south east of the site, comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all	Broadleaved	Broadleaved semi-natural woodland was located several
comprising a diverse age and height structure of trees and forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all	semi-natural	distinct areas across the site. The largest of these
forming a green corridor of mature woodland connecting to the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all	woodland	woodlands was located in the south east of the site,
the Whittle Brook. Another of these woodland areas was a self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		comprising a diverse age and height structure of trees and
self-seeded hawthorn <i>Crataegus monogyna</i> woodland, likely having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		forming a green corridor of mature woodland connecting to
having undergone succession from scrub, located to the south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		the Whittle Brook. Another of these woodland areas was a
south of the Whittle Brook. A narrow strip of mature woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		self-seeded hawthorn Crataegus monogyna woodland, likely
woodland was located in the north east of the site, dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		having undergone succession from scrub, located to the
dominated by English oak <i>Quercus robur</i> . The remaining semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		south of the Whittle Brook. A narrow strip of mature
semi-natural woodlands within the site were relatively small in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		woodland was located in the north east of the site,
in size and were generally dominated by semi-mature trees or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		dominated by English oak Quercus robur. The remaining
or species of a generally thin and spindly nature. The invasive species Himalayan balsam was recorded within all		semi-natural woodlands within the site were relatively small
invasive species Himalayan balsam was recorded within all		in size and were generally dominated by semi-mature trees
-		or species of a generally thin and spindly nature. The
woodlands surveyed.		invasive species Himalayan balsam was recorded within all
		woodlands surveyed.
Four woodlands, identified as Habitats of Principal		Four woodlands, identified as Habitats of Principal
Importance (HPI), were identified along the site boundaries;		Importance (HPI), were identified along the site boundaries;





	two were mature woodlands associated with Pilsworth SBI
	located along the north of the site boundary.
	Broadleaved semi-natural woodland is considered of good
	ecological value, providing foraging habitat for a wide range
	of species.
Broadleaved	Broadleaved plantation woodland was identified along the
plantation	Whittle Brook corridor in the centre of the site, with
woodland	woodland areas extending north up Whittle Brook tributary
	valleys. The plantation woodland along the Whittle Brook
	was dominated by silver birch Betula pendula and poplar
	Populus sp., it was well established with occasional mature
	oaks. A length of plantation woodland was recorded in the
	west of the site surrounded by improved grassland fields,
	dominated by silver birch and cherry Prunus avium.
	The plantation woodland areas are well established and
	contribute to the ecological value of the site, although
	plantation woodland has lower ecological value than the
	native broadleaved stands.
Scrub	There were many areas of dense / continuous scrub
	throughout the site. Several areas of dense scrub were
	associated with watercourses throughout the site. The
	Brightley Brook, along the north western site boundary,
	supported four large areas of scrub. All dense scrub
	throughout the site was dominated by either hawthorn or
	bramble Rubus fruticosus agg, and often with tall ruderals
	species present.
	This habitat is considered species-poor but of some

ecological value through provision of commuting and





	formation and outstale a satisfies the later
	foraging opportunities within the site.
Tall ruderal	There are small areas of tall ruderal herb throughout the
	site, associated with field margins, hedgerows, watercourses
	and waterbodies. Species comprise tall perennial and
	biennial dicotyledons, such as nettle and willowherb
	Epilobium species.
	This habitat is considered species-poor but of some
	ecological value through provision of commuting and
	foraging opportunities within the site.
Open water	Using both aerial imagery and site surveys over 30
	waterbodies have been identified within the site with further
	ponds within 500m of the site. Of these 30, 15 waterbodies
	have been Habitat Suitability Index ⁹ (HSI) assessed for the
	suitability to support GCN. Of these 15, six were surveyed
	for the presence of GCN using the eDNA test; one
	waterbody of six returned a positive result, confirming GCN
	presence. Further assessment of remaining ponds will be
	required to assess suitability for great crested newts to
	inform the detailed planning stage.
	Waterbodies are considered to provide good ecological
<u> </u>	value.
Running	The site supported a number of watercourses and ditches.
water	The Whittle Brook runs along the southern site boundary,
(including	supporting a mixture of woodland and grassland riparian
ditches)	habitat. The width of the riparian corridor is greater in the
	west of the site, than the east of the site where improved
	grassland fields run almost to its edge. The western riparian
	corridor supports low-lying mosaic of different grasslands,

⁹ Oldham R.S., Keeble J., Swan M.J.S. and Jeffcote M., (2000), Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*), Herpetological Journal, 10 (4), 143-155.



	,
	with scrub and woodland. A number of tributaries runs into
	the Whittle Brook, including Castle Brook, which runs along
	the west of the site. Brightley Brook runs along the north
	west site boundary, comprising both sections of natural
	watercourse channel and a manmade channel. Brightley
	Brook has been diverted into a large fishing lake, part of the
	Pilsworth SBI, an outflow in the west of the lake leads back
	in Brightley Brook. Several other additional small brooks and
	ditches were located within the site.
	Watercourses are considered to provide good ecological
	value.
Amenity	Amenity grassland was found associated with residential
grassland	dwellings. Amenity grassland areas were heavily managed,
	with very low sward heights (5 cm).
	This habitat is considered species-poor with limited
	ecological value.
Buildings	The site supported a number of residential buildings, farm
	buildings and industrial buildings, of which 37 have been
	accessed and surveyed in detail (external only).
	Buildings themselves provide limited to negligible ecological
	value but may have importance for their use by bats and
	breeding birds
	-

3.3 2020 Update: Protected and Notable Species

3.3.1 Invertebrates

The desk study identified three species of invertebrates: wall butterfly Lasiommata megera, white-letter hairstreak Satyrium w-album and cinnabar Tyria jacobaeae, the latter being a Species of Principal Importance (SPI) and



the only species recorded within the redline boundary of the site.

Predominantly heavily grazed or cut agricultural fields which are likely to have pesticides applied to them are generally sub-optimal for invertebrates. The network of hedgerows, watercourses with associated riparian habitats and ponds have the potential to support a range of invertebrates. Other suitable habitat such as tall ruderals, including the cinnabar larval foodplant ragwort *Senecio jacobaea*, were present in the site. Whittle Brook was assessed as having some suitability to support white-clawed crayfish *Austropotamobius pallipes*.

3.3.2 Amphibians including Great Crested Newt

The desk study provided 72 records of confirmed GCN presence within the redline boundary of the site. The majority of the records were associated with four areas within the site, Pike Fold Golf Course golf ponds on the western edge adjacent to the M66, Whittle Sand quarry on the northern boundary, Broom Hill Farm in the south east adjacent to the M62 and Egypt Farm in the south west adjacent to the M62.

There are 21 records of confirmed GCN presence outside the site boundary. The majority of the records were either associated with Unsworth Academy in the west separated from the site by the M66. Additional records are located at Hopwood College ponds and Yew Tree Farm both east of the site.

A total of ten records for common toad were also recorded within the redline boundary of the site of the site.

Three EPS mitigation licences were issued within a 2 km radius of the red line boundary of the site, these are:

- 2015-8369-EPS-MIT, allowing the damage of a resting place, associated with the main M62/M66 roundabout.
- 2017-31812-EPS-MIT, allowing the damage of a resting place, associated with the Castlebrook High School in Unsworth.



 (2017-31535-EPS-MIT), allowing the damage to a resting and breeding site in 2017, associated with the main M62/A6046 roundabout.

The site provides suitable aquatic habitat for breeding GCN. The site provides suitable aquatic habitat for breeding GCN. During the 2020 surveys, 21 of the onsite ponds had a Habitat Suitability Index (HSI) assessment for their potential to support GCN. Ten of these 21 ponds scored 'Average' or above. The remaining ponds on site could not be accessed or viewed from public rights of way. Of these 21 ponds which were HSI assessed, six were eDNA surveyed for the presence of GCN DNA; one out of the six ponds came back positive. This positive pond is located in the centre of the site, to the north of Whittle Brook. The majority of the site supports improved grassland which is considered poor quality terrestrial habitat for GCN. The hedgerow network within the site does provide suitable terrestrial habitat for GCN, as well as good connectivity across the site. The areas of woodland, tall ruderal, dense scrub and low-lying grassland habitat around the Whittle Brook and Castle Brook, provide suitable habitat to support GCN in their terrestrial phase.

3.3.3 Reptiles

The desk study identified no previous records of reptiles within 2 km of the site boundary.

The majority of the site supports improved grassland fields, this habitat is considered to offer poor reptile habitat. The large connected network of hedgerows associated with these fields provides suitable habitat to support foraging, basking and hibernating reptile species. The mosaic of grassland habitats with scrub identified within the Whittle Brook riparian corridor,



particularly present within the west of the site, is considered to provide suitable habitat to support foraging, basking and hibernating reptile species.

3.3.4 Bats

Two EPS licences were granted for bat species within the redline boundary of the site, these were:

- (EPSM2010-2617), common pipistrelle, for the destruction of a resting place in 2011, associated with residential dwellings in Darn Hill.
- (EPSM2010-2397), common pipistrelle, for the damage to a resting and breeding site in 2011, associated with Hopwood College.

The desk study provided 4 roost locations for common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus* and unidentified bat species within the redline boundary of the site. These records were located at Meadow Croft Fold barn centrally located on the southern edge of the site and a farm located on Griffe Lane in the west of the site.

The desk study provided 10 records of bat activity within the 2 km study area identifying the presence of Daubenton's bat *Myotis daubentonii*, noctule *Nyctalus noctula* and soprano pipistrelle, the majority of records were associated with Unsworth town to the west and the large waterbody on the northern boundary.

The majority of the site supports improved grassland fields, it is considered this is unlikely to provide high quality foraging habitat. The network of hedgerows, tree lines, woodland edges and watercourses throughout the site provide good connectivity across the site, and with the wider landscape. In particular Whittle Brook river corridor, running east to west through the middle of the site, is considered to provide good quality commuting and foraging habitat. Several wooded tributaries lead off the Whittle Brook, providing foraging and commuting habitats northwards into the site. Castle Brook connects to the Whittle Brook in the west of the site and flows south and east.



Pilsworth SBI lies along the north west site boundary, comprising large fishing lakes with mature woodland surrounding it, and Brightley Brook running alongside. All of these provide valuable foraging resource and potential commuting routes. The south east site boundary lies adjacent to the M62 motorway, this area of the site is considered unlikely to provide value for foraging and commuting bats. Overall the site is considered to provide high quality foraging and commuting habitat.

There are various potential roosting opportunities within the site, including many buildings and structures associated with residential properties and farms, as well as numerous mature trees.

3.3.5 **Birds**

The desk study identified the site as supporting *Arable Farmland and Grassland Bird Assemblages* (MAGIC map)¹⁰ - species listed are grey partridge *Perdix perdix*, lapwing *Vanellus vanellus*, snipe *Gallinago gallinago*, yellow wagtail *Motacilla flava* and tree sparrow *Passer montanus*.

Grasshopper warbler *Locustella naevia*, kingfisher *Alcedo atthis* and lesser redpoll have also been recorded within the redline boundary of the site, these are listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Additionally, there are several records of the Schedule 1 species barn owl *Tyto alba* within the redline boundary of the site, associated with Higher Barn Farm in the north east of the site and Meadow Croft Farm just south of Higher Barn Farm. There are also three records for Schedule 1 species peregrine *Falco peregrinus* within the redline boundary of the site, with one associated with Pilsworth SBI adjacent to the northern boundary.

The desk study provided a list of SPI recorded within the redline boundary of the site: bullfinch *Pyrrula pyrrula*, curlew *Numenius arquata*, grey partridge, herring gull *Larus argentatus*, house sparrow *Passer domesticus*, lapwing, lesser redpoll *Acanthis cabaret*, linnet *Carduelis cannabina*, reed bunting

www.wyg.com



Emberiza schoeniclus, skylark Alauda arvensis, song thrush Turdus philomelos, starling Sturnus vulgaris and tree sparrow

During the extended Phase 1 habitat survey several observations of bird activity were noted. Swallow *Hirundo rustica*, swift *Apus apus* and house martin *Delichon urbicum* were recorded foraging over fields throughout the site. House sparrow were recorded along several hedgerows and around farm buildings in the north of the site. Lapwing and skylark were recorded within an improved grassland field in the north of the site, and a linnet was recorded flying over an improved grassland field within the east of the site.

Habitats on site were largely grazed/arable fields and hedgerows, which may support breeding birds, including farmland bird assemblages. Additional opportunities for ground nesting species may exist within the less intensively managed field/areas within fields on site. The woodland areas, scattered tree lines, waterbodies and watercourses are likely to support a range of breeding bird species. The large expanse of agricultural fields also provides suitable habitat for wintering birds. Kingfisher was observed along a stream in the northeast corner of the site during the 2019 walkover survey, and a potential kingfisher nest hole was recorded along the bank of the Whittle Brook. There are also several farmhouses, barns and other structures which provide scope for nesting birds under eaves, in brickwork crevices and in roof spaces or derelict structures. Evidence of roosting and breeding barn owl within several barn owl boxes was recorded within the site.

3.3.6 **Badger**

The desk study returned two records of badger *Meles meles* within the redline boundary of the site and an additional eight records that were found outside the site boundary. The records included sighting, setts and field signs.

Badger setts and evidence of badger were identified during the extended Phase 1 habitat survey, details of these features are confidential due to the



sensitivity of the species. The areas of broadleaved woodland, scattered tree lines and network of hedgerows provide suitable areas for badgers to create their setts. The surrounding fields provide foraging opportunities.

3.3.7 Otter

The desk study returned no otter Lutra lutra records.

The lakes of Pilsworth SBI provide suitable foraging habitat, with Brightley Brook connecting them to the wider area. Anecdotal evidence of otter using the lakes was provided by a member of the fishing club at Pilsworth SBI. Although not directly connected to Brightley Brook, Whittle Brook runs nearby and was considered to offer holt and couch potential, as well as commuting and foraging opportunities. The other watercourses within the site were considered likely too narrow and shallow to support otter holts or a major food source, however, they may provide connectivity and commuting routes. The nearest river outside the site is the River Roch, however, this is separated from the site by the M66 motorway.

3.3.8 Water Vole

The desk study returned one record of water vole *Arvicola amphibius*, associated with Hollins Brook, approximately 0.3 km west of the site boundary.

The watercourses on site, including Whittle Brook, Castle Brook and Brightley Brook, were considered to have potential to support for water vole.

3.3.9 **Brown Hare**

The desk study identified four records of European hare within the redline boundary of the site, associated with Unsworth Moss centrally located on the southern edge of the site, Broom Hill Farm in the south east adjacent to the M62 and Stock Nock Farm in the north east.

There was suitable habitat for hare in the large open agricultural fields



including those under cereal crops which provide good foraging opportunities. A brown hare was recorded within the red line boundary in an improved grassland field in the north of the site during the 2020 extended Phase 1 habitat survey.

3.3.10 European Hedgehog

The desk study provided no records of hedgehog *Erinaceus europaeus* within the site boundary. There are however ten records outside the red line boundary of the site boundary, within 2 km of the site, associated with Heywood town north of the site and Heaton Park south of the site boundary.

There is suitable habitat for hedgehog in the form of hedgerows, tall ruderal vegetation, woodland, scattered trees and gardens.

3.3.11 Invasive non-native plant species

No invasive non-native plant records were returned from during the desk study.

During the 2020 extended Phase 1 habitat survey Himalayan balsam was recorded along many of the hedgerows, watercourses and within many woodland, scrub and tall ruderal areas. Japanese knotweed *Reynoutria japonica* was identified in patches along Whittle Brook. There is potential for these and other invasive non-native plant species to occur more extensively throughout the site.



4.0 Constraints and Opportunities

The following constraints and opportunities are based on relevant planning policy and legislation including the National Planning Policy Framework, Greater Manchester Local Biodiversity Action Plan and the relevant Local Plan documents.

The site is covered by two local authorities, Bury Metropolitan Borough Council and Rochdale Metropolitan Borough Council. The division between these two areas begins along Moss Hall Road (in the north of the site), which dissects the site from north to south. The majority of the site is covered by Bury council, with a smaller area covered by Rochdale Council.

At present, the Bury UDP (adopted 1997) (Bury Council, 1997) is currently the main policy document where relevant policies have been saved whilst a new local plan is being drafted. The Bury local plan is still being drafted after consultations were held in November 2018, a draft is available (Bury Council, 2018). At present the Local Adopted Core Strategy for Rochdale is the current local plan for the area, adopted in 2016 (Rochdale Council, 2016). In addition to the Core Strategy, the UDP (1196-2016) is also a consideration (Policies saved in 2009) until the Allocations Development Plan has been adopted (Rochdale Council, 2006). Relevant Local Plan policies can be found in Appendix B.

The **Greater Manchester Spatial Framework** (GMSF), although not yet adopted, sets out the plan for development within the Greater Manchester



Area over the next two decades, and relevant sections of the Draft published in January 2019 will be referenced.

The GMSF supports the important role of Greater Manchester's natural assets by:

- "Valuing the special qualities and key sensitivities of Greater
 Manchester's landscapes (recognising importance of an area's
 appearance to the sense of place held by those who live in or visit it).
- Seeking to protect and enhance green infrastructure (the wider network of green (and blue) features which make a huge contribution to quality of life, promote good mental and physical health, create liveable places and support economic growth).
- Seeking an overall enhancement of biodiversity and geodiversity (the living organisms and ground beneath our feet which underpin the value of the natural environment and its ability to provide a wide range of important benefits, including supporting human health and quality of life).
- Seeking to maintain a Green Belt (which plays an important role in restricting unplanned development in a conurbation with a complex urban form, ensuring that its cities, towns and smaller settlements retain their identity)."

Chapter 8 of the GMSF sets out policies to create a greener Manchester. The relevant policies are summarised below:

- "Policy GM-G 1: Valuing Important Landscapes Development should reflect and respond to the special qualities and sensitivities of the key landscape characteristics of its location.
- Policy GM-G 2: Green Infrastructure Network The network of green infrastructure that stretches throughout Greater Manchester will be





designed, managed, protected and enhanced so as to help deliver a number of critical benefits.

- Policy GM-G 3: River Valleys and Waterways River valleys and waterways will be protected and improved as central components of Greater Manchester's green infrastructure network, making a major contribution to local identity, quality of life and the natural environment.
- Policy GM-G 7: Trees and Woodland In making planning decisions and carrying out other associated activities, Greater Manchester's authorities will work to deliver the aims and objectives of the Greater Manchester Tree and Woodland Strategy¹¹, aiming to significantly increase tree cover, protect and enhance woodland, and connect people to the trees and woodland around them.
- Policy GM-G 9: Standards for a Greener Greater Manchester Greater Manchester will develop standards in relation to: A Greater Manchester "Green Factor", which sets out the level of on-site green infrastructure that new developments are expected to provide so as to meet their occupants' needs and contribute to the extent and interconnectedness of the wider network. The Green Factor will provide a baseline expectation based on the proportion of the site that is covered by different types of green infrastructure features.
- Policy GM-G 10: A Net Enhancement of Biodiversity and Geodiversity

 Across the plan as a whole, a net enhancement of biodiversity
 resources will be sought. Section 8.51 of the GMSF refers to
 Biodiversity Net Gain using the existing DEFRA metric (DEFRA, 2012)
 supported by best practice guidance (CIEEM 2016), however these
 will be superseded by a more locally-specific Greater Manchester

June 2021 **creative minds** safe hands

 $^{^{11}}$ City of Trees, (2019). All Our Trees - Greater Manchester's Tree and Woodland Strategy. [online] Available at https://www.cityoftrees.org.uk/sites/default/files/8082_All_our_trees_report_Dr8_MW.pdf



biodiversity metric which will be adopted as supplementary guidance to the GMSF.

 Policy GM-G 11: The Greater Manchester Green Belt - The Greater Manchester Green Belt will be afforded strong protection in accordance with the National Planning Policy Framework."

The site lies within the cross-boundary Policy GM Allocation 1.1: Heywood / Pilsworth (Northern Gateway), which states development will need to:

- "Seek to offset the loss of private open land through the provision of an accessible and high-quality green and blue infrastructure network to provide health benefits to workers and residents as well as creating a visually attractive environment. This should include the enhancement of existing features such as Whittle and Brightley Brooks.
- Minimise impacts on and provide net gains for biodiversity assets within the site.
- Develop a satisfactory management plan for areas of green infrastructure, biodiversity features and other areas of open space."

4.1 Constraints

4.1.1 Biodiversity Net Gain

Although not mandatory at present, the government are likely to use the forthcoming Environment Bill to mandate Biodiversity Net Gain in England. When in force it is likely that at least a 10% net gain will be required from developments.



A revised NPPF was issued on 19th February 2019 (Ministry of Housing Communities and Local Government, 2019¹²) and currently supplements government Circular 06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System (Office of the Deputy Prime Minister, 2005¹³).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 170 of the NPPF also states that:

'Planning policies and decisions should contribute to and enhance the natural environment by:

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

Paragraph 174 then goes on to confirm that:

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

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable **net gains for biodiversity**.

The GMSF states:

"minimise impacts on and provide net gains for biodiversity within the site."

 $\underline{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment \ data/file/7692/147570.pdf}$

¹² Ministry of Housing Communities and Local Government, (2019), National Planning Policy Framework, [online] Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

¹³ ODPM, (2005), Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System, [online] Available at



Due to the location of the site within an area of green space, development of the area will likely result in a net loss of biodiversity, which would require addressing through detailed mitigation and enhancements and/or commuted sums which could be used to provide biodiversity gains in local nature conservation sites.

A Biodiversity Net Gain assessment (BNG) /Biodiversity Offsetting calculation will likely be required for the site at planning stage as it is considered that an application for development will be submitted at a time when biodiversity net gain will be required. A dummy BNG calculation could be undertaken to inform allocation to examine biodiversity units and inform potential constraints.

It is considered likely that a site wide Biodiversity Mitigation and Enhancement Plan will be required to promote and manage Biodiversity Net Gain at the detailed design stage. Section 8.51 of the GMSF (revised 2019) refers to Biodiversity Net Gain using the existing DEFRA metric¹⁴ supported by best practice guidance ¹⁵, however these will likely be superseded by a more locally-specific Greater Manchester biodiversity metric which will be adopted as supplementary guidance to the GMSF.

4.1.2 Internationally Designated Sites

It is anticipated that development of the site will not result in the direct loss or degradation of the qualifying features of the internationally designated sites;

¹⁴ Defra and Natural England (March 2012) Biodiversity Offsetting Pilots – Technical Paper: the metric for the biodiversity offsetting pilot in England

¹⁵ Chartered Institute of Ecology and Environmental Management et al (2016) Biodiversity Net Gain: Good practice principles for development



Rochdale Canal SAC, Peak District Moors (South Pennine Moors Phase 2) SPA and South Pennine Moors SAC

Due to the development's primarily industrial nature it is not considered likely that there will be an increase in visitor pressure at any of the designated sites.

As a result of the direction of flow of the watercourses within the site, the site is not considered to be hydrologically linked to the designations.

Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance (IAQM, 2011) states that detailed assessment of the effects of construction related air pollution only require detailed assessment when sensitive receptors (such as the designated sites included within this assessment) are located within a maximum of 500m from construction works and 200m from the roads used by construction traffic. The site is located more than 500m from all Natura 2000 sites. Although the M62, which runs over the Rochdale Canal SAC, also runs adjacent to the site, it is not anticipated that the development will lead to a significant increase of traffic on the M62. On this basis no further assessment at this stage is considered necessary.

4.1.3 Nationally and Locally Designated Sites

There were no nationally designated sites within the 2 km search area. The closest is the Rochdale Canal SSSI 3 km east of the site. The site lies in the Impact Risk Zone of the Rochdale Canal SSSI, however only planning proposals relating to infrastructure (airports, helipads and other aviation proposals); air pollution; and/or combustion (combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion) are considered likely to impact on the SSSI. Therefore, discussion with the LPA specifically



regarding Rochdale Canal SSSI proximity is not required for the proposed development as it falls outside the scope for likely impact.

There are two LNRs and ten SBIs within 2 km of the site; four of these sites are located adjacent to the site boundary. Although there will be no direct loss of these sites, there is the potential for indirect impacts due to air pollution, water pollution and light pollution. This will need to be further investigated and it is recommended that consultation with the LPA is undertaken at the detailed planning stage. The use of an appropriate Construction Environment Management Plan (CEMP) during construction, and the design of a post-development Ecological Mitigation and Management Plan (EMMP) is considered necessary.

4.1.4 Habitats

A number of specific habitat constraints which may require further survey at detailed design stage, and which are recommended for retention, protection and enhancement during development, have been identified. Locations of key habitat constraints can be seen on GMA 1.1 High Level Constraints Plan (Figure A10444-7-MAN-N-305).

Habitat constraints which may require further surveys have been identified, which include:

- Hedgerow Assessments under the Hedgerow Regulations 1997 to identify Important Hedgerows; and
- Habitat Suitability Indices of waterbodies to assess suitability for great crested newts.

Please note a detailed extended Phase 1 habitat survey has only been undertaken for part of the site (A104444-7-MAN-N-301) and will be required for the full remaining areas in order to support future planning applications.

4.1.5 **Protected and Notable Species**



A number of potential further species surveys required at the planning applications stage have been identified and listed below:

- Great crested newt eDNA surveys.
- Great crested newt presence/absence surveys.
- Great crested newt population estimates.
- Reptile presence/absence surveys.
- Bat roost presence/absence surveys of trees and buildings/structures.
- Bat activity surveys.
- Badger survey.
- Breeding bird surveys.
- Wintering bird surveys
- Barn owl survey.
- Kingfisher survey.
- Water vole and otter survey.
- Invasive species survey.
- Invertebrate survey (including white-clawed crayfish); and
- Surveys for SPI species (brown hare, common toad, hedgehog).

The above surveys should be undertaken at the times shown in the Survey Calendar in Appendix C.



4.2 Opportunities

Based upon the results of the desk-based study, the high-level walkovers (2019, 2020) and the extended Phase 1 habitat survey of part of the site (2020) the following opportunities have been determined.

4.2.1 Biodiversity Net Gain

It is considered that with appropriate habitat retention, enhancement and inclusion of off-site area (such as Pilsworth South) that 10% biodiversity net gain could be achieved. The biodiversity mitigation and enhancement strategy for the site will be the subject of discussions with GMEU as the masterplan evolves.

Opportunities for Biodiversity Net Gain include using the lowest ecological / poorest quality land for the development, and enhancing the remainder, whilst avoiding/retaining and enhancing the higher ecological value/good quality habitat. The good quality habitats within the site include the river habitat corridors, broadleaved woodlands, some hedgerows, species-rich grasslands and ponds. Habitats should be enhanced to improve value where suitable and should be appropriate to the local area and to support relevant protected species. The creation of good quality habitats that are of high ecological value within the soft landscaping of the site will help to achieve a Biodiversity Net Gain across the site. Developing a network of connected



green corridors throughout the site will also contribute to a Biodiversity Net Gain across the site and improve connectivity with the wider landscape.

4.2.2 Habitats / Protected and Notable Species

The following high-level habitat opportunities have been identified:

- Enhance good quality areas of grassland to create lowland wildflower meadows, species-rich acid grassland, species-rich neutral grassland.
- Strips of rough grassland with appropriate management incorporated to provide habitat for reptiles, amphibians, small mammals and hunting habitat for bird species such as barn owl.
- Hedgerows to be enhanced by gap-filling, invasive species removal, by leaving 5m buffer strips and by sowing with native seed producing plants, creating wildlife corridors across the site, in line with GMSF Policy GM-G 2.
- Tree lines along watercourses and broadleaved woodlands to be enhanced by planting suitable native shrub and tree species, and invasive species removal, in line with GMSF Policy GM-G 7 and the Greater Manchester's Tree and Woodland Strategy¹⁶.
- Watercourses (Whittle Brook, Castle Brook, Brightley Brook) to be protected and enhanced by invasive species removal, in line with GMSF Policy GM-G 3.
- Woodland planting and enhancement along the motorway edges to create greater screening and within the site to promote wildlife corridors, in line with GMSF Policy GM-G 7.
- Ponds on site to be enhanced and new ponds created. Green corridors created to link ponds, creating a network of habitats across the site, in line with GMSF Policy GM-G 2.
- Bird boxes of varying specification for different species to be

¹⁶ See Footnote 15.

June 2021 **creative minds** safe hands



incorporated into buildings and landscaping.

- Bat boxes of varying specification for different species to be incorporated into buildings and landscaping.
- Adding hibernacula within terrestrial habitat for GCN and reptiles.

Three key site-specific opportunities have been identified which could promote and enhance biodiversity, maintain wildlife corridors within the site and ensure connectivity with the wider landscape. They involve:

- Enhancing and extending the woodland habitats along the north west of the site by planting native trees and shrubs of local provenance and carrying out invasive species control. Creating a buffer along the edge with rough grassland, species-rich grassland or marshy grassland. This north western edge of the site backs onto the restored habitats of Pilsworth Landfill, which are further connected to the wider landscape to the north by a series of linked woodland, grassland and scrub habitats.
- Enhancing Whittle Brook and associated riparian habitats, including tributaries (Castle Brook) as this provides high ecological value across the site. Native woodland and shrub planting along the corridor, as well as within woodland areas which lead off the corridor. To retain and enhance the areas of good quality semi-improved grassland, acid grassland and semi-improved neutral grassland with the aim of increasing its coverage and species richness. The creation of rough grassland along and leading off the riparian corridor. A buffer zone should be created along either side of the riparian corridor and species-rich grassland, marshy grassland or rough grassland established.
- Developing a management plan for the site to promote wildlife. This
 could include enhancing areas of grassland to create native wild flower
 meadows, enhancing woodland areas, ponds to be retained and
 enhanced where possible and new ponds created, strips of rough
 grassland with appropriate management incorporated to provide



hunting habitat for bird species such as barn owl, a hedgerow network created across the site, bird and bat boxes of varying specification for different species to be incorporated into buildings and landscaping, green corridors created to link green and blue habitats on site.

4.3 Next Steps to Assess Constraints and Opportunities

4.3.1 Next Steps – Requirements for Future Planning Application

Requirements for the future planning application will involve:

- Undertaking an extended Phase 1 habitat survey (of the remaining areas not included in the 2020 survey) to determine which other further surveys are necessary, as listed below.
- A Biodiversity Net Gain calculation once a final Masterplan design is available, informed by agreement with LPA of biodiversity metric to use at an early stage to allow initial cost analysis.
- Consultation with the LPA regarding potential indirect impacts on LNRs and SBIs.

It is considered likely that the following further surveys will also be required:

- Hedgerow survey.
- Habitat Suitability Indices of ponds for great crested newts.
- Great crested newt eDNA surveys.
- Great crested newt presence/absence surveys.
- Great crested newt populations estimate.
- Reptiles.
- Bat roost surveys of trees and buildings.
- Bat activity surveys.
- Badger survey.
- Breeding bird surveys.
- Wintering bird surveys.



- Barn owl survey.
- Kingfisher survey.
- Water vole survey
- Invasive species survey.
- Invertebrate survey (including white-clawed crayfish); and
- Surveys for SPI species (brown hare, common toad, hedgehog).

The above surveys should be undertaken at the times shown in the Survey Calendar in Appendix C.

4.3.2 Next Steps - Opportunities

The results of the further surveys will be used to identify and develop opportunities within the site, which can be used to inform the Masterplan design.

4.4 Conclusions

Based upon the assessment work to date there are no major ecological constraints which preclude the proposed development. This report identifies high-level constraints and appropriate measures required in order to avoid or mitigate for such constraints. Such measures along with recommendations for appropriate enhancements would be incorporated into the design of the scheme at the detailed planning stage.

Further habitat and species surveys as noted in Section 4.3.1 will be required to inform a detailed planning application.

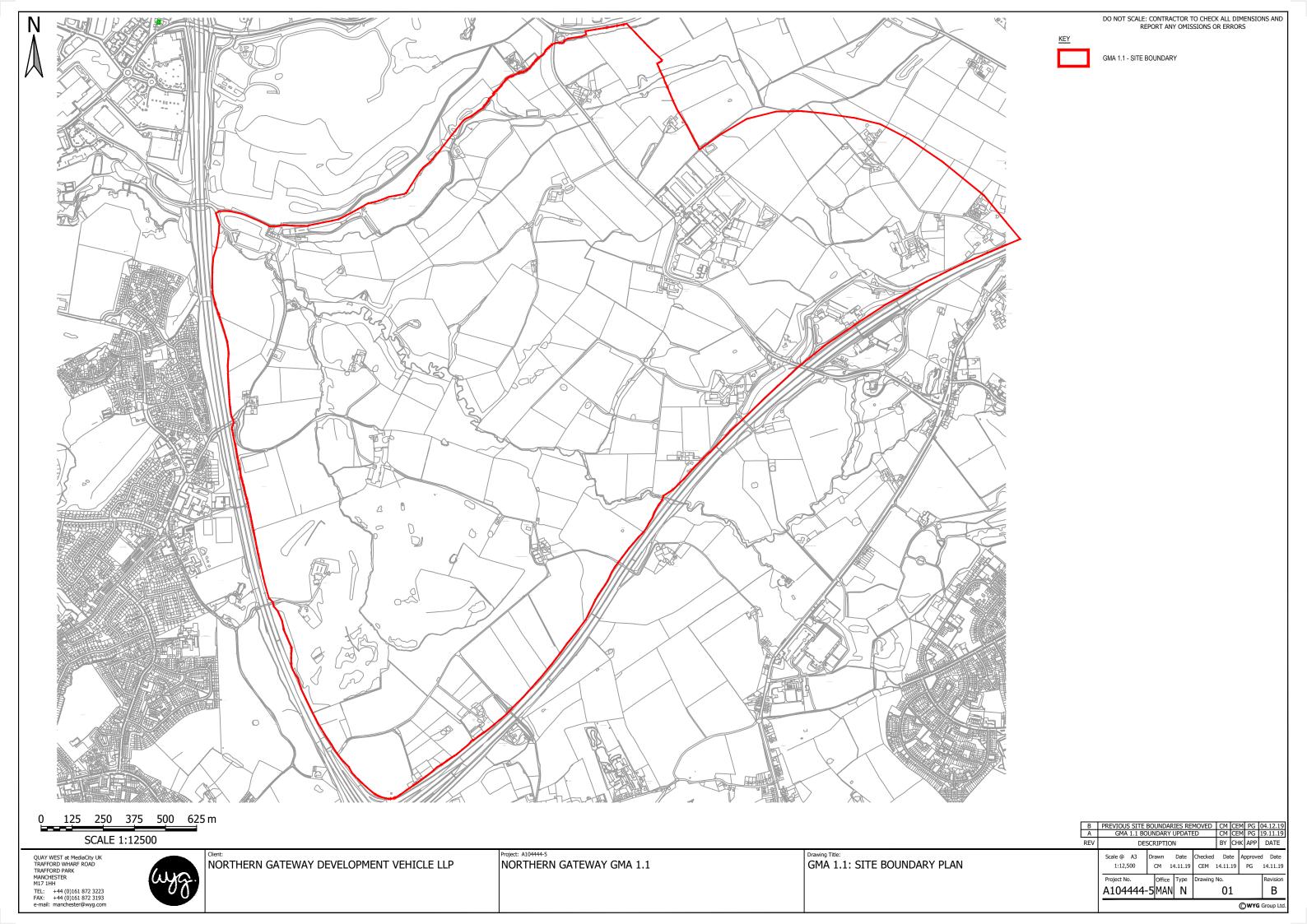


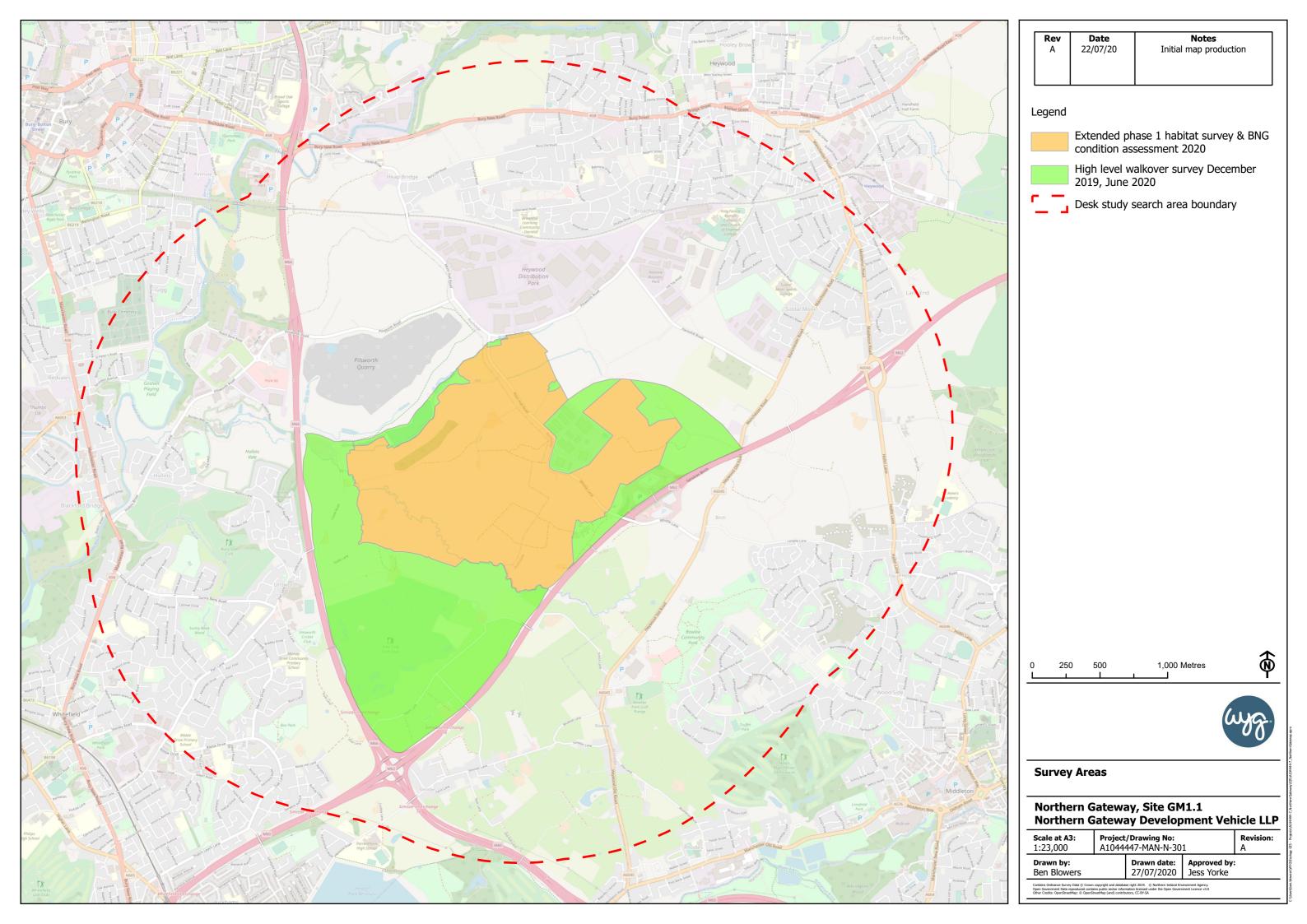
Drawings

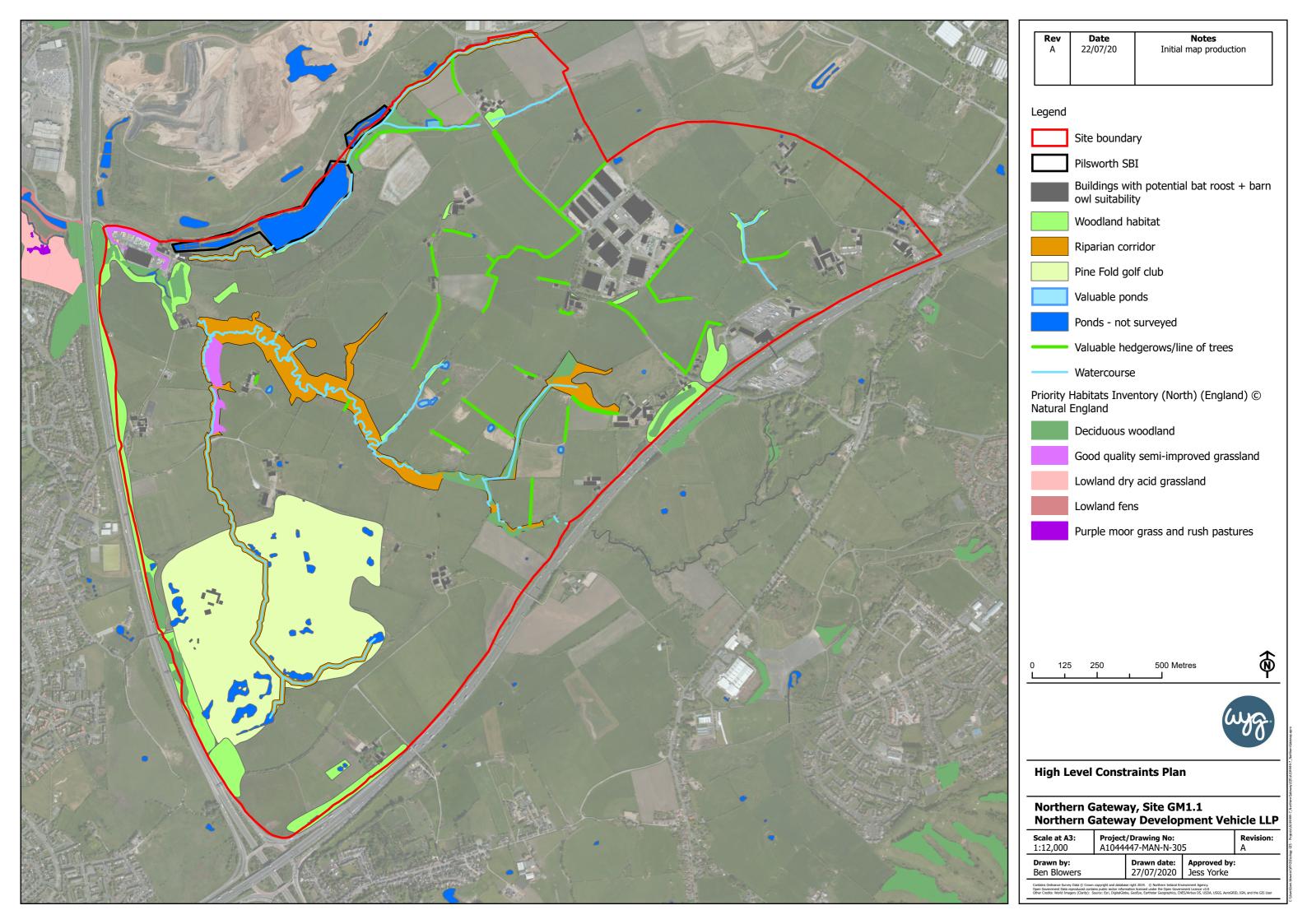
A104444-5-MAN-N-01 Site Location Plan

A104444-7-MAN-N-301 GMA 1.1 Survey Areas

A104444-7-MAN-N-305 GMA 1.1 High Level Constraints Plan









Appendices



Appendix A. Report Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of [Northern Gateway Development Vehicle LLP] ("the Client") for the proposed uses stated in the report by WYG Environment Planning Transport Limited] ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

No liability is accepted, or warranty given for; unconfirmed data, third party documents and information supplied to WYG or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. WYG does not purport to provide specialist legal, tax or accounting advice.

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary, and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of



the Report will be determined by a number of factors including its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.



Appendix B. Wildlife Legislation

Bern Convention

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

Habitats Directive



The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Fora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes. In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

https://www.legislation.gov.uk/uksi/2018/1307/note/made

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:





Schedule 5 – European Protected
Species of Plants
Shore dock Rumex rupestris
Shore dock Numex rupesurs
Killarney fern <i>Trichomanes speciosum</i>
Timamey fem <i>menemance speciesam</i>
Early gentian Gentianella anglica
Lady's-slipper Cypripedium calceolus
Creeping marsh-wort Apium repens
Crooping mater were plant repens
Slender naiad Najas flexilis
Fen orchid <i>Liparis loeselii</i>
Floating-leaved water plantain Luronium
natans
Yellow marsh saxifrage Saxifraga
hirculus

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK.

This legislation is the chief means by which the 'Bern Convention' and the Birds



Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

kill, injure, or take any wild bird.

take, damage or destroy the nest of any wild bird while that nest is in use; or take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or

disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5. interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and

The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant.

unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or

sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

55



It is recommended that plant material of these species is disposed of as biohazardous waste, and these plants should not be used in planting schemes.

Schedule 1 - Birds which are protected by special penalties

Avocet	Recurvirostra avosetta	Osprey	Pandion haliaetus
Bee-eater	Merops apiaster	Owl, Barn	Tyto alba
Bittern	Botaurus stellaris	Owl, Snowy	Nyctea scandiaca
Bittern, Little	Ixobrychus minutus	Peregrine	Falco peregrinus
Bluethroat	Luscinia svecica	Petrel, Leach's	Oceanodroma
			leucorhoa
Brambling	Fringilla montifringilla	Phalarope, Red-	Phalaropus lobatus
		necked	
Bunting, Cirl	Emberiza cirlus	Plover, Kentish	Charadrius
			alexandrinus
Bunting, Lapland	Calcarius lapponicus	Plover, Little	Charadrius dubius
		Ringed	
Bunting, Snow	Plectrophenax nivalis	Quail, Common	Coturnix coturnix
Buzzard, Honey	Pernis apivorus	Redstart, Black	Phoenicurus ochruros
Capercaillie	Tetrao urogallus	Redwing	Turdus iliacus
Chough	Pyrrhocorax pyrrhocorax	Rosefinch, Scarlet	Carpodacus erythrinus
Corncrake	Crex crex	Ruff	Philomachus pugnax
Crake, Spotted	Porzana porzana	Sandpiper, Green	Tringa ochropus
Crossbills (all	Loxia	Sandpiper, Purple	Calidris maritima
species)			
Curlew, Stone	Burhinus oedicnemus	Sandpiper, Wood	Tringa glareola
Divers (all	Gavia	Scaup	Aythya marila
species)			
Dotterel	Charadrius morinellus	Scoter, Common	Melanitta nigra
Duck, Long tailed	Clangula hyemalis	Scoter, Velvet	Melanitta fusca
Eagle, Golden	Aquila chrysaetos	Serin	Serinus serinus



Eagle, White-	Haliaetus albicilla	Shorelark	Eremophila alpestris
tailed			
Falcon, Gyr	Falco rusticolus	Shrike, Red-	Lanius collurio
		backed	
Fieldfare	Turdus pilaris	Spoonbill	Platalea leucorodia
Firecrest	Regulus ignicapillus	Stilt, Black-winged	Himantopus
			himantopus
Garganey	Anas querquedula	Stint, Temminck's	Calidris temminckii
Godwit, Black-	Limosa limosa	Swan, Bewick's	Cygnus bewickii
tailed			
Goshawk	Accipiter gentilis	Swan, Whooper	Cygnus cygnus
Grebe, Black-	Podiceps nigricollis	Tern, Black	Chlidonias niger
necked			
Grebe, Slavonian	Podiceps auritus	Tern, Little	Sterna albifrons
Greenshank	Tringa nebularia	Tern, Roseate	Sterna dougallii
Gull, Little	Larus minutus	Tit, Bearded	Panurus biarmicus
Gull,	Larus melanocephalus	Tit, Crested	Parus cristatus
Mediterranean			
Harriers (all	Circus	Tree-creeper,	Certhia brachydactyla
species)		Short-toed	
Heron, Purple	Ardea purpurea	Warbler, Cetti's	Cettia cetti
Hobby	Falco subbuteo	Warbler, Dartford	Sylvia undata
Hoopoe	Upupa epops	Warbler, Marsh	Acrocephalus palustris
Kingfisher	Alcedo atthis	Warbler, Savi's	Locustella luscinioides
Kite, Red	Milvus milvus	Whimbrel	Numenius phaeopus
Merlin	Falco columbarius	Woodlark	Lullula arborea
Oriole, Golden	Oriolus oriolus	Wryneck	Jynx torquilla

Animal (Vertebrate) Species Listed in Schedule 5 (full legal protection at all times)



Horseshoe Bats	Rhinolophidae	Newt – Great	Triturus cristatus
(all species)		Crested	
Typical Bats (all	Vespertilionidae	Snake – Smooth	Coronella austriaca
species)			
Dolphin – Bottle-	Tursiops truncatus	Toad, Natterjack	Epidalea calamita
nosed	(tursio)		
Dolphin –	Delphinus delphis	Turtles – All	Cheloniidae &
Common		Species	Dermochelyidae
Dormouse -	Muscardinus avellanarius	Basking Shark	Cetorhinus maximus
Hazel			
Pine Marten	Martes martes	Burbot	Lota lota
Porpoise –	Phocaena phocaena	Goby – Giant	Gobius cobitis
Harbour			
Otter – Eurasian	Lutra lutra	Goby – Couch's	Gobius couchii
Squirrel – Red	Sciurus vulgaris	Seahorse – Short-	Hippocampus
		snouted ¹⁷	hippocampus
Walrus	Odobenus rosmarus	Seahorse – Spiny	Hippocampus
			guttulatus
Water Vole	Arvicola amphibia	Sturgeon	Acipenser sturio
Whales – All	Cetacea	Vendace	Coregonus albula
Species			
Wildcat	Felis sylvestris	Whitefish	Coregonus lavaretus
Lizard – Sand	Lacerta agilis		

Animal (Vertebrate) Species Protected under Section 9 (1) part: Killing and Injuring & Section 9 (5) Sale

Adder	Vipera berus	Slow worm	Anguis fragilis
Lizard –	Zootoca vivipara	Snake – Grass	Natrix helvetica (natrix)
Viviparous			

 $^{^{\}rm 17}$ Both sea horse species are protected in England only.



Animals (Vertebrate) Species Protected under Section 9 (5) Sale only

Frog – common	Rana temporaria	Newt – Smooth	Lissotriton vulgaris
Newt – Palmate	Lissotriton helvetica	Toad – Common	Bufo bufo

Animals (Vertebrate) Species Protected under Section 9 (1) (4)(a): Killing, Injuring &Taking and Damage / Destruction of place of shelter / protection only

Allis Shad	Alosa alosa	Shark – Angel	Squatina squatina
Twaite Shad	Alosa fallax		

Butterflies & Moths - Full Protection under Schedule 5¹⁸ at all times

High brown	Argynnis adippe	Fisher's Estuarine	Gortyna borelii
fritillary		Moth	
Large Blue	Maculinea arion	Barberry Carpet	Pareulype berberata
Heath Fritillary	Mellicta athalea	Black-veined Moth	Siona lineata
Marsh Fritillary	Eurodryas aurinia	Sussex Emerald	Thalera fimbrialis
Swallowtail	Papilio machaon	Essex Emerald	Thetidia smaragdaris
	britannicus		
Large Copper	Lycaena dispar	Fiery Clearwing	Bembecia
			chrysidiformis
Reddish-buff	Acosmetia caliginosa	New-Forest Burnet	Zygaena viciae
Moth			

Butterflies – Protected under Section 9 (5) Sale Only

Purple Emperor	Apatura iris	Adonis Blue	Lysandra bellargus
Northern Brown	Aricia artaxerxes	Chalkhill Blue	Lysandra coridon
Argus			
Pearl-bordered	Boloria euphrosyne	Glanville Fritillary	Melitaea cinxia
Fritillary			
Chequered	Carterocephalus	Large Tortoiseshell	Nymphalis polychloros
Skipper	palaemon		

 $^{^{18}}$ Viper's Bugloss Moth *Hadena irregularis* was removed from Schedule 5 in 1996 as it is believed to be extinct.



Large Heath	Coenonympha tullia	Silver-studded Blue	Plebejus argus
Small Blue	Cupido minimus	Black Hairstreak	Strymonidia pruni
Mountain Ringlet	Erebia epiphron	White-letter	Strymonidia w-album
		Hairstreak	
Duke of	Hamearis lucina	Brown Hairstreak	Thecla betulae
Burgundy			
Silver-spotted	Hesperia comma	Lulworth Skipper	Thymelicus acteon
Skipper			
Wood White	Leptidea sinapis		

Other Invertebrates - Full Protection under Schedule 5 at all times

beetle Spangled Diving- beetle Lesser Silver	Rainbow Leaf-	Chrysolina cerealis	Tadpole Shrimp	Triops cancriformis
Lesser Silver Hydrochara caraboides De Folin's Lagoon Caecum armoricum Water-beetle Snail Moccas Beetle Hypebaeus flavipes Sandbowl Snail Catinella arenaria Violet Click- Limoniscus violaceus Freshwater Pearl Margaritifera beetle Mussel margaritifera Bembridge Parcymus aeneus Glutinous Snail Myxas glutinosa Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- shell Field-Cricket Gryllus campestris Tentacled Lagoon- worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	beetle			
Lesser Silver Hydrochara caraboides De Folin's Lagoon Caecum armoricum Water-beetle Snail Moccas Beetle Hypebaeus flavipes Sandbowl Snail Catinella arenaria Violet Click- Limoniscus violaceus Freshwater Pearl Margaritifera beetle Mussel margaritifera Bembridge Parcymus aeneus Glutinous Snail Myxas glutinosa Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Spangled Diving-	Graphopterus zonatus	Trembling Sea-mat	Victorella pavida
Mater-beetle Moccas Beetle Hypebaeus flavipes Sandbowl Snail Catinella arenaria Violet Click- Limoniscus violaceus Freshwater Pearl Mussel Mussel Mussel Myxas glutinosa Beetle New Forest Cicadetta montana Cicada Wart-Biter Decticus verrucivorus Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- shell Field-Cricket Gryllus campestris Tentacled Lagoon- worm Norfolk Hawker Aeshna isosceles Snail Catinella arenaria Catinella arenaria Catinella arenaria Catinella arenaria Catinella arenaria Margaritifera Mussel Margaritifera Mussel Margaritifera Myxas glutinosa Freshwater Pearl Margaritifera Mussel Myxas glutinosa Myxas glutinosa Freshwater Pearl Margaritifera Mussel Myxas glutinosa Myxas glutinosa Tenellia adspersa Thyasira gouldi shell Field-Cricket Gryllotalpa gryllotalpa Northern Hatchet- shell Thyasira gouldi shell Field-Cricket Alkmaria romijni	beetle			
Moccas Beetle Hypebaeus flavipes Sandbowl Snail Catinella arenaria Violet Click- Limoniscus violaceus Freshwater Pearl Margaritifera beetle Mussel margaritifera Bembridge Parcymus aeneus Glutinous Snail Myxas glutinosa Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet-Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon-Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Lesser Silver	Hydrochara caraboides	De Folin's Lagoon	Caecum armoricum
Violet Click- beetle Bembridge Parcymus aeneus Beetle New Forest Cicadetta montana Cicada Wart-Biter Decticus verrucivorus Mole-Cricket Gryllotalpa gryllotalpa Freshwater Pearl Mussel Mussel Myxas glutinosa Beutle Lagoon Snail Paludinella littorina Lagoon Sea Slug Tenellia adspersa Northern Hatchet- shell Field-Cricket Gryllus campestris Tentacled Lagoon- worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Water-beetle		Snail	
beetle Mussel margaritifera Bembridge Parcymus aeneus Glutinous Snail Myxas glutinosa Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet-Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon-Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Moccas Beetle	Hypebaeus flavipes	Sandbowl Snail	Catinella arenaria
Bembridge Parcymus aeneus Glutinous Snail Myxas glutinosa Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet-Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon-Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Violet Click-	Limoniscus violaceus	Freshwater Pearl	Margaritifera
Beetle New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- shell Field-Cricket Gryllus campestris Tentacled Lagoon- worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	beetle		Mussel	margaritifera
New Forest Cicadetta montana Lagoon Snail Paludinella littorina Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet-Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon-Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Bembridge	Parcymus aeneus	Glutinous Snail	Myxas glutinosa
Cicada Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Beetle			
Wart-Biter Decticus verrucivorus Lagoon Sea Slug Tenellia adspersa Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	New Forest	Cicadetta montana	Lagoon Snail	Paludinella littorina
Mole-Cricket Gryllotalpa gryllotalpa Northern Hatchet- Thyasira gouldi shell Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Cicada			
Shell Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Wart-Biter	Decticus verrucivorus	Lagoon Sea Slug	Tenellia adspersa
Field-Cricket Gryllus campestris Tentacled Lagoon- Alkmaria romijni worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Mole-Cricket	Gryllotalpa gryllotalpa	Northern Hatchet-	Thyasira gouldi
worm Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa			shell	
Norfolk Hawker Aeshna isosceles Lagoon Sandworm Armandia cirrhosa	Field-Cricket	Gryllus campestris	Tentacled Lagoon-	Alkmaria romijni
3			worm	
Dragonfly	Norfolk Hawker	Aeshna isosceles	Lagoon Sandworm	Armandia cirrhosa
	Dragonfly			



Southern	Coenagrion mercuriale	Medicinal Leech	Hirudo medicinalis
Damselfly			
Fen Raft Spider	Dolomedes fimbriatus	Marine Hydroid	Clavopsella navis
Ladybird Spider	Eresus niger	Ivell's Sea	Edwardsia ivelli
	(cinaberinus)	Anemone	
Fairy Shrimp	Chirocephalus diaphanus	Starlet Sea	Nematosella vectensis
		Anemone	
Lagoon Sand	Gammarus insensibilis	Atlantic Stream	Austropotamobius
Shrimp		(White-clawed)	pallipes
		Crayfish	

Other Invertebrates Protected under Section 9 (1) Possession & 9 (2) (5) Sale only

Stag Beetle	Lucanus cervus	Roman Snail ¹⁹	Helix pomatia
Fan Mussel	Atrina fragilis	Pink Sea-fan	Eunicella verrucosa

Other Invertebrates Protected under Section 9 (4) (a) Damage / Destruction of Place of Shelter / Protection only

Mire Pill Beetle	Curimopsis nigrita		
------------------	--------------------	--	--

Vascular Plant Species - Full Protection under Schedule 8 at all times (previous Scientific name in brackets)

Adder's-tongue	Ophioglossum	Lily – Snowdon	Gagea serotina
Least	lusitanicum		(Lloydia serotina)
Alison- Small	Alyssum alyssoides	Marsh-mallow -	Malva setigera
		Rough	(Althaea hirsuta)
Broomrape –	Orobanche	Milk-parsley –	Selinum carvifolia
Bedstraw	caryophyllacea	Cambridge	
Broomrape –	Orobanche picridis	Mudwort – Welsh	Limosella aquatica
Oxtongue			

¹⁹ England only A104444-5 www.wyg.com





Broomrape –	Orobanche reticulata ²⁰	Naiad – Holly-	Najas marina
Thistle		leaved	
Cabbage – Lundy	Coincya wrightii	Orache – Stalked	Atriplex pedunculata
	(Rhynchosinapis wrightii)		(Halimione
			pedunculata)
Calamint – Wood	Clinopodium	Orchid – Early	Ophrys sphegodes
	menthifolium (Calamintha	Spider	
	sylvatica)		
Catchfly – Alpine	Silene suecica (Lychnis	Orchid – Ghost	Epipogium aphyllum
	alpina)		
Centaury –	Centaurium tenuiflorum	Orchid – Lapland	Dactylorhiza lapponica
Slender		Marsh	
Cinquefoil – Rock	Potentilla rupestris	Orchid – Late	Ophrys fuciflora
		Spider	
Clary – Meadow	Salvia pratensis	Orchid – Lizard	Himantoglossum
			hircinum
Club-rush –	Schoenoplectus triqueter	Orchid – Military	Orchis militaris
Triangular	(Scirpus triqueter)		
Colt's-foot -	Homogyne alpina	Orchid – Monkey	Orchis simia
Purple			
Cotoneaster –	Cotoneaster cambricus	Pear – Plymouth	Pyrus cordata
Wild	(C. integerrimus)		
Cotton-grass –	Eriophorum gracile	Pennycress –	Microthlaspi
Slender		Perfoliate	perfoliatum (Thlaspi
			perfoliatum)
Cow-wheat -	Melampyrum arvense	Pennyroyal	Mentha pulegium
Field			
Crocus – Sand	Romulus columnae	Pigmyweed	Crassula aquatica
Cudweed –	Filago pyramidata	Pine - Ground	Ajuga chamaepitys
Broad-leaved			

 $^{^{20}}$ The Weeds Act 1959 does not apply to thistles $\it Cirsium \, \& \, \it Carduus \, species \, supporting \, this broomrape.$





Cudweed –	Gnaphalium luteoalbum	Pink – Cheddar	Dianthus
Jersey			gratianopolitanus
Cudweed – Red-	Filago lutescens	Pink – Childing	Petrorhagia nanteuilii
tipped			
Cut grass	Leersia oryzoides	Ragwort – Fen	Jacobaea paludosa
			(Senecio paludosa)
Deptford Pink	Dianthus armeria	Ramping-fumitory –	Fumaria reuteri (F.
		Martin's	martinii)
Diapensia	Diapensia lapponica	Rampion – Spiked	Phyteuma spicata
Eryngo – Field	Eryngium campestre	Restharrow – Small	Ononis reclinata
Fern – Dickie's-	Cystopteris dickieana	Rock-cress –	Arabis alpina
bladder		Alpine	
Fleabane –	Erigeron borealis	Rock-cress –	Arabis scabra
Alpine		Bristol	
Fleabane – Small	Pulicaria vulgaris	Sandwort –	Arenaria norvegica ²¹
		Norwegian	
Galingale –	Cyperus fuscus	Sandwort –	Minuartia stricta
Brown		Teesdale	
Gentian – Alpine	Gentiana nivalis	Saxifrage –	Saxifraga cernua
		Drooping	
Gentian - Dune	Gentianella amarella	Saxifrage – Tufted	Saxifraga cespitosa
	subsp. occidentalis		
	(Gentianella uliginosa)		
Gentian –	Gentianopsis ciliata	Solomon's-seal -	Polygonatum
Fringed	(Gentianella ciliata)	Whorled	verticillatum
Gentian - Spring	Gentiana verna	Sow-thistle –	Cicerbita alpina
		Alpine	
Germander –	Teucrium botrys	Spearwort –	Ranunculus
Cut-leaved		Adder's-tongue	ophioglossifolius

www.wyg.com

 $^{^{21}}$ All subspecies occurring in the UK $_{\rm A104444-5}$





Germander –	Teucrium scordium	Speedwell -	Veronica triphyllos
Water		Fingered	
Gladiolus – Wild	Gladiolus illyricus	Speedwell -	Veronica spicata ²²
		Spiked	
Goosefoot –	Chenopodium vulvaria	Spike-rush – Dwarf	Eleocharis parvula
Stinking			
Grass-poly	Lythrum hyssopifolia	South-stack	Tephroseris integrifolia
		Fleawort	ssp. maritima
Hare's-ear –	Bupleurum falcatum	Star-of-Bethlehem	Gagea bohemica
Sickle-leaved		– Early	
Hare's-ear –	Bupleurum baldense	Starfruit	Damasonium alisma
Small			
Hawk's-beard –	Crepis foetida	Strapwort	Corrigiola littoralis
Stinking			
Hawkweed -	Hieracium northroense	Violet – Fen	Viola persicifolia
Northroe			
Hawkweed –	Hieracium zetlandicum	Viper's-grass	Scorzonera humilis
Shetland			
Hawkweed -	Hieracium attenuatifolium	Water-plantain –	Alisma gramineum
Weak-leaved		Ribbon-leaved	
Heath – Blue	Phyllodoce caerulea	Wood-sedge –	Carex depauperata
		Starved	
Helleborine –	Cephalanthera rubra	Woodsia – Alpine	Woodsia alpina
Red			
Horsetail –	Equisetum	Woodsia – Oblong	Woodsia ilvensis
Branched	ramosissimum		
Hound's-tongue –	Cynoglossum	Wormwood – Field	Artemisia campestris
Green	germanicum		
Knawel –	Scleranthus perennis ²³	Woundwort -	Stachys germanica
Perennial		Downy	

²² Both subspecies: *spicata* & *hybrida*

²³ Includes both subspecies: *perennis* & *prostratus*



Knot-grass – Sea	Polygonum maritimum	Woundwort –	Stachys alpina
		Limestone	
Leek – Round-	Allium sphaerocephalon	Yellow-rattle –	Rhinanthus
headed		Greater	angustifolius
Lettuce – Least	Lactuca saligna		

Vascular Plant Species – Partial Protection under Section 13 (2) Protection from commercial exploitation and sale

Bluebell	Hyacinthoides non-	
	scripta	

Bryophytes - Full Protection under Schedule 8 at all times

Anamodon –	Anomodon langifolius	Flamingo Moss	Desmatodon cernuus
Long-leaved			
Blackwort	Southbya nigrella	Frostwort	Gymnomitrion
			apiculatum
Crystalwort –	Riccia bifurca	Glaucous Beard	Barbula glauca
Lizard		Moss	
Earwort – Marsh	Jamesoniella undulifolia	Green Shield Moss	Buxbaumia viridis
Feathermoss –	Hygrohypnum polare	Hair Silk Moss	Plagiothecium piliferum
Polar			
Flapwort –	Leiocolea rutheana	Knothole Moss	Zygodon forsteri
Norfolk			
Grimmia – Blunt-	Grimmia unicolor	Large Yellow	Scorpidium turgescens
leaved		Feather Moss	
Petalwort	Petalophyllum ralfsii	Millimetre Moss	Micromitrium tenerum
Lindenberg's	Adelanthus	Multi-fruited River	Cryphaea lamyana
Leafy-Liverwort	lindenbergianus	Moss	
Feather-moss	Drepanocladus	Nowell's Limestone	Zygodon gracilis
Slender Green	vernicosus	Moss	



Alpine Copper-	Mielichoferia meilicoferia	Rigid Apple Moss	Bartramia stricta
Moss			
Baltic Bog-Moss	Sphagnum balticum	Round-leaved	Rhynchostegium
		feather Moss	rotundifolium
Blue Dew-Moss	Saelania glaucescens	Schleicher's	Bryum schleicheri
		Thread Moss	
Blunt-leaved	Orthotrichum	Triangular Pygmy	Acaulon triquetrum
bristle-Moss	obtusifolium	Moss	
Bright-Green	Cyclodictyon laetevirens	Turpswort	Geocalyx graveolens
Cave-Moss			
Cordate Beard	Barbula cordata	Vaucher's Feather	Hypnum vaucheri
Moss		Moss	
Cornish Path	Ditrichum cornubicum	Western Rustwort	Marsupella profunda
Moss			
Derbyshire	Thamnobryum		
Feather Moss	angustifolium		_

Stoneworts - Full Protection under Schedule 8 at all times

Bearded	Chara canescens	Foxtail Stonewort	Lamprothamnium	
Stonewort			papullosum	

Lichens - Full Protection under Schedule 8 at all times

New Forest	Enterographa elaborata	Forked Hair Lichen	Bryoria furcellata
Beech Lichen			
Snow Caloplaca	Caloplaca nivalis	Golden Hair Lichen	Teloschistes flavicans
Tree	Catapyrenium	Orange-fruited Elm	Caloplaca luteoalba
Catapyrenium	psoromoides	Lichen	
- Canapy Community	p		
Laurer's Catillaria	Catillaria laurei	River Jelly Lichen	Collema dichotomum
. ,	<u> </u>	River Jelly Lichen Starry Breck Lichen	



Upright Mountain	Cladonia stricta	Caledonia	Pannaria ignobilis
Cladonia		Pannaria	
Goblin Lights	Catolechia wahlenbergii	New Forest	Parmelia minarum
		Parmelia	
Elm Gyalecta	Gyalecta ulmi	Oil Stain	Parmentaria chilensis
		Parmentaria	
Tarn Lecanora	Lecanora archariana	Southern Grey	Physcia tribacioides
		Physcia	
Copper Lecidea	Lecidea inops	Ragged Pseudo-	Pseudocyphellaria
		cyphellaria	lacerata
Arctic Kidney	Nephroma arcticum	Rusty Alpine Psora	Psora rubiformis
Lichen			
Ciliate Strap	Heterodermia	Rock Nail	Calicium corynellum
Lichen	leucomelos		
Coralloid Rosette	Heterodermia	Serpentine	Selanopsora liparina
Lichen	propagulifera	Selanopsora	
Ear-lobed Dog	Peltigera lepidophora	Sulphur Tresses	Alectoria ochroleuca
Lichen			

Lichens – Partial Protection under Section 13 (2) Commercial Exploitation and Sale Only

Fungi – Full Protection under Schedule 8 at all times

Royal Bolete	Boletus regius	Oak Polypore	Buglossosporus
			pulvinus
Hedgehog	Hericium erinaceum	Sandy Stilt Ball	Battaria phalloides
Fungus			

Invasive plant species listed in Schedule 9



Australian swamp	Crassula helmsii	Japanese rose	Rosa rugosa
stonecrop or New			-
Zealand			
pygmyweed			
Californian red	Pikea californica	Japanese seaweed	Sargassum muticum
seaweed			J
Curly waterweed	Lagarosiphon major	Laver seaweeds	Porphyra spp
		(except native	
		species)	
Duck potato	Sagittaria latifolia	Parrot's-feather	Myriophyllum
			aquaticum
Entire-leaved	Cotoneaster integrifolius	Perfoliate	Smyrnium perfoliatum
cotoneaster		alexanders	
False Virginia	Parthenocissus inserta	Pontic	Rhododendron
creeper		rhododendron	ponticum
Fanwort or	Cabomba caroliniana	Purple dewplant	Disphyma crassifolium
Carolina water-			
shield			
Few-flowered	Allium paradoxum	Red algae	Grateloupia luxurians
garlic			
Floating	Hydrocotyle	Rhododendron	Rhododendron
pennywort	ranunculoides		ponticum ×
			Rhododendron
			maximum
Floating water	Ludwigia peploides	Small-leaved	Cotoneaster
primrose		cotoneaster	microphyllus
Giant hogweed	Heracleum	Three-cornered	Allium triquetrum
	mantegazzianum	garlic	
Giant kelp	Macrocystis spp.	Variegated yellow	Lamiastrum
		archangel	galeobdolon subsp.
			argentatum



Giant knotweed	Fallopia sachalinensis	Virginia creeper	Parthenocissus
			quinquefolia
Giant rhubarb	Gunnera tinctoria	Wakame	Undaria pinnatifida
Giant salvinia	Salvinia molesta	Wall cotoneaster	Cotoneaster
			horizontalis
Green seafingers	Codium fragile	Water fern	Azolla filiculoides
Himalayan	Cotoneaster simonsii	Water hyacinth	Eichhornia crassipes
cotoneaster			
Hollyberry	Cotoneaster bullatus	Water lettuce	Pistia stratiotes
cotoneaster			
Hooked	Asparagopsis armata	Water primrose	Ludwigia grandiflora
asparagus			
seaweed			
Hottentot fig	Carpobrotus edulis	Water primrose	Ludwigia uruguayensis
Hybrid knotweed	Fallopia japonica ×	Waterweeds	Elodea spp.
	Fallopia sachalinensis		
Indian	Impatiens glandulifera	Yellow azalea	Rhododendron luteum
(Himalayan)			
balsam			
Japanese	Reynoutria japonica		
knotweed			

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"



Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern



This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years.

Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.



Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.



Appendix B. Relevant Planning Policy and Legislation

National Planning Policy Framework

The NPPF was adopted in March 2012. Section 11 of the NPPF, Conserving and Enhancing the Natural Environment replaces Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation. However, government Circular 06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that 'planning policies should promote the protection of priority species populations linked to national and local targets.

Furthermore, central and local government policy now points towards ecological enhancement on development sites. The NPPF considers enhancement in the statement 'The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes....and minimising impacts on biodiversity and providing net gains in biodiversity'.

Biodiversity 2020: A strategy for England's wildlife & ecosystem services

Biodiversity 2020 replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is



much broader than the protection and enhancement of less common species and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix A for further details).

Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Greater Manchester LBAP is the relevant document for this site, and it contains the following Habitat & Species Action Plans:

Species Action Plans	
Bittern	Black redstart
Bats	Water vole
European hare	Farmland Birds
Great crested newt	Native black poplar
Twite	Willow tit

Habitats Action Plans	
Grasslands – acid; unimproved neutral;	Hedgerows
marshy.	
Lowland mossland	Reedbeds
Ponds and Lodges	Canals



Habitats Action Plans	
Native woodland	Uplands

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats/species, rather than to protect a county-scarce feature (for example).

Local Plans

Bury Metropolitan Borough Council

At present, the UDP (adopted 1997) (Bury Council, 1997) is currently the main policy document where relevant policies have been saved whilst a new local plan is being drafted. The Bury local plan is still being drafted after consultations were held in November 2018, a draft is available (Bury Council, 2018).

Relevant polices are listed below for both plans:

Unitary Development Plan

EN6 – Conservation of the natural environment

"The Council will retain, protect and enhance the natural environment of the Borough, particularly in relation to areas of ecological, wildlife and geological importance."

EN6/1 - Sites of Nature Conservation Interest (Sites of Special Scientific Interest, National Nature Reserves and Grade A Sites of Biological Importance)



"Planning permission will not be granted for development in or in the vicinity of a designated or proposed site of national or county / regional importance (Site of Special Scientific Interest or National Nature Reserve or Site of Biological Importance which has been identified as of national or county / regional importance i.e. Grade A) which would destroy or adversely affect, either directly or indirectly, the nature conservation interest of the site, unless it can be demonstrated that other material considerations outweigh the special interest of the site."

EN6/2 – Sites of Nature Conservation Interest (Local Nature Reserves and Grade B and C Sites of Biological Importance)

"Planning permission will not be granted for development which would damage either directly or indirectly, the nature conversation interests of sites of particular ecological significance (Local Nature Reserves or Grade B and C Sites of Biological Importance) unless conditions can be imposed that would acceptably mitigate those impacts."

EN6/3 – Features of Ecological Value

"The effect of land use changes on existing features of ecological or wildlife value will be taken into account when assessing development proposals. Any proposal should seek to retain such features and incorporate them into the development."

EN6/4 - Wildlife Links and Corridors

"The Council will seek to consolidate and, where appropriate, strengthen wildlife links and corridors, and will not permit development which would adversely affect identified areas. In particular, the Council will seek to ensure that new development within or adjacent to identified links or corridors



contributes to their effectiveness through the design, landscaping and siting of development proposals and mitigation works, where appropriate."

OL5/2 – Development in River Valleys

"Within the River Valleys, new buildings or the change of use of existing buildings or the change of use of land will not be permitted. The only exceptions considered acceptable will be those where the development would not lead to the division of the open parts of the valleys into sections and it falls within the terms below:

- where the area is designated as Green Belt the established Green Belt policies will apply; or
- where the area does not form part of the Green Belt, at least one of the following circumstances is met:
- that the development represents limited infilling to an established valley settlement or industrial area.
- that it is an extension to, or renewal of an existing industry, where the economic and employment factors are of overriding importance.
- that the development is required in association with an outdoor recreation or appropriate tourist facility.
- that the development is limited and will form part of, and be essential to, the maintenance of the provision and improvement of public services and utilities.
- any other development that would be appropriate in a Green Belt."

OL1 - Green Belt

"The Council will maintain a Green Belt, ensuring that it fulfils the following strategic purposes:

to check the unrestricted sprawl of large built-up areas.



- to prevent neighbouring towns from merging into one another.
- to assist in safeguarding the countryside from further encroachment.
- to preserve the setting and special character of historic towns.
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land."

Draft Local Plan

NE1 – Green Infrastructure

It is proposed that the Local Plan should include a policy that seeks to "protect and enhance multi-functional green infrastructure and support proposals to improve the connectivity and quality of the network where these accord with other Local Plan policies and proposals."

It is considered that the policy should seek to "maintain the positive role and function of the green infrastructure network and ensure that proposals for new built-development and the change of use of land and existing buildings that could result in negative impacts are resisted unless it satisfies stated criteria."

NE2 – Biodiversity

It is proposed that the Local Plan should include a policy that seeks to "ensure that proposals for new development minimise impacts on the Borough's biodiversity assets and provide net gains where possible."

It is considered that the policy should "specify that where there is potential for new development to have an impact on any of the Borough's biodiversity assets, applicants should be expected to apply the sequential approach as outlined in national planning policy on biodiversity and geological



conservation and provide evidence that any potential impact has been fully assessed and that, where potential impacts have been identified, measures have been taken to avoid, mitigate or compensate". The policy should also "set out the factors that will be considered when assessing proposals that would have a potential impact on biodiversity assets".

GB1 – Development in the Green Belt

It is proposed that the Local Plan should include a policy that seeks to "ensure that the development of new buildings within the Green Belt will be regarded as inappropriate unless very special circumstances can be clearly demonstrated."

It is considered that the policy should also "set out the types of development that would be treated as an exception or which would not be regarded as inappropriate provided that they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt".

Rochdale Metropolitan Borough Council

At present the Local Adopted Core Strategy is the current local plan for the area of Rochdale, adopted in 2016 (Rochdale Council, 2016). In addition to the Core Strategy, the UDP (1196-2016) is also a consideration (Policies saved in 2009) until the Allocations Development Plan has been adopted (Rochdale Council, 2006). Relevant polices are listed below for each plan:

Local Adopted Core Strategy

SO4 – To promote a greener environment

"To do this we will focus on:



- Minimising Rochdale's contribution to climate change and mitigating and adapting to its adverse effects.
- 2. Ensuring in particular that development is energy efficient and contributes to carbon reduction.
- Reducing the likelihood of flooding through appropriate flood risk
 management, especially in Rochdale town centre and parts of Littleborough
 and Heywood
- 4. Improving our urban open spaces and making them more accessible.
- Maximising the value of our green open areas and countryside to provide opportunities for recreation, amenity, biodiversity and flood management.
- Minimising and managing waste and managing minerals resources sustainably; and
- Ensuring no detriment to the conservation interests of European and other protected natural sites."

G6 - Enhancing green infrastructure

"We will sustain and enhance a green network to support growth and regeneration in the borough and provide a high-quality environment that meets the needs of our community and visitors to the borough. We will protect and improve green spaces and water bodies and ensure that their value to sustainable development and regeneration is maximised. Our priorities are to improve opportunities for recreation in urban areas and the countryside, improve opportunities for healthy lifestyles, and to help manage and respond to environmental risks such as flooding and the impacts of climate change. We will also ensure that the network supports the sustainable growth of the Greater Manchester city region and links with a wider Greater Manchester strategic green infrastructure network.

We will protect, improve and create green infrastructure to help deliver strategic sustainable development priorities and meet local needs in the following locations:



- Other river valleys and green corridors where the focus will be on enhancing recreational links between urban areas and open countryside to allow passage of wildlife, provide local opportunities for recreation, improving visual amenity, and contribution to local and wider environmental management e.g. reducing air pollution and managing flood risk.
- 2. Other water bodies (lakes, streams, reservoirs, ponds etc) where the focus will be on celebrating water and promoting water features as a key characteristic of the local landscape, to improve their recreational and biodiversity value, maximise their potential for flood risk management and to incorporate water features (existing and new) as part of new developments, public realm initiatives, town centre design and neighbourhood regeneration initiatives where practicable.
- 3. Countryside around towns where the focus will be on reclaiming derelict land, woodland planting and improvement, creating and improving paths and cycle networks to link town and country, promoting access to nature, improving flood risk management and maintaining a strong green belt.
- 4. Urban areas and new development where the focus will be on incorporating green infrastructure into new development, sustainable urban drainage, increasing the number of street trees, greening housing areas and main roads, developing new green spaces, and incorporating green roofs and walls in new development.

We shall take into account local and national planning policy requirements when considering the appropriateness of development proposals that may affect sports, recreation and open space provision.

A Green Infrastructure Strategy for the borough and Green Infrastructure Action Plans for each Township will inform and support area-based Masterplans and initiatives, development proposals and associated developer contributions, regeneration programmes and environmental management schemes.



We will expect development proposals and other proposals affecting green infrastructure to:

- a) be consistent with the above focus for green infrastructure and the wider than local value that green infrastructure can have.
- b) have regard to local landscape character and contribute to its conservation or enhancement.
- c) avoid the loss of existing urban greenspace or features e.g. trees unless suitable alternative provision is made, it has limited value, and its development or change of use will help to meet other sustainability or local regeneration objectives.
- d) in the case of residential development, provide or contribute financially towards recreational open space, including maintenance, in accordance with the standards set out in the Provision of Recreational Open Space in New Housing Supplementary Planning Document (SPD).
- e) take opportunities to improve access to, and the provision of, natural greenspace in accordance with local strategies and standards
- f) take opportunities to secure innovative solutions to the design of urban open space to widen its potential functions e.g. flood risk management, promoting urban wildlife or climate change adaptation.
- g) not sever or impede the key functions of designated greenspace corridors or river valleys, or detract from their natural, visual or recreational quality, but enhance their value and accessibility.
- h) protect ancient woodlands and hedgerows, support new woodland and tree planting in new developments, and replace removed trees from a site at a ratio of 2:1; and
- i) take opportunities, where feasible, to improve the water quality and biodiversity of water bodies and their environs in compliance with the Water Framework Directive or equivalent."

G7 - Increasing the value of biodiversity and geodiversity



"We will ensure that sites and features of biodiversity and geodiversity importance are given full and appropriate recognition and protection. Opportunities for enhancing biodiversity and geodiversity, creating new sites and features of interest and improving opportunities for public enjoyment will be supported. No development should result in a net loss of biodiversity or geodiversity interest in the borough and overall development in the borough should result in a net gain.

Particular priorities for biodiversity and geodiversity are (relevant ones to the site only provided):

- 1. Countryside around towns our focus is to protect and enhance the biodiversity interest of river valleys, woodland, water and farmland including the reclamation of derelict and neglected land and flood risk management measures. We will also support actions which enhance public access and enjoyment of countryside close to urban areas including Local Nature Reserves and the wider countryside.
- 2. Designated sites of ecological importance will be given appropriate protection according to their European, national or local status and in accordance with policies in other development plan documents, supporting Supplementary Planning Documents and Biodiversity Action Plans.
- 3. Protected Species: Development proposals which would affect a species protected by law or its habitat will not be permitted unless it can be demonstrated that:
- a. there is no adverse impact on the species concerned.
- damage to habitats is minimal and alternative habitat provision is effective in maintaining those species.
- 4. Opportunities to protect, enhance and create features of biodiversity or geodiversity interest should be informed by the detail of any formal designation of a site or area and supporting plans and guidance such as Local Biodiversity Action Plans, Green Infrastructure Strategies and Action Plans and the Council's Biodiversity and Development SPD.



- 5. We will expect development proposals and improvements to:
- a. Protect and include existing biodiversity (including established biodiversity interest on brownfield land) within new developments, public realm and open spaces and meet the requirements of the Biodiversity and Development SPD, Greater Manchester and Local Biodiversity Action Plans.
- b. Protect and enhance existing features such as peatland, ponds, wetlands, reservoirs, mill lodges, trees, hedges, wooded areas, meadows, flora and fauna.
- c. Take opportunities to promote biodiversity and creat new habitats through new development using landscaping and building and construction features wherever possible (e.g. ponds, species of vegetation, green roofs and walls, bat boxes, roof space, appropriate nest boxes and landscaping).
- d. Enhance strategic wildlife corridors and the most natural areas and ensure that habitats and corridors are not fragmented by development.
- e. Improve access where appropriate to new or existing biodiversity interest for public enjoyment; and
- 6. Protect important geology and take opportunities to increase interest and accessibility".

Unitary Development Plan (2001-2016)

G/G/1 (part one policy) Greenspace

"The council will protect and enhance existing public open space and will provide new open space in accordance with identified standards for formal and informal recreational activities and access to natural and amenity greenspace. Emphasis will be placed on:

 a) Protecting sites which have an existing or potential value from inappropriate development.



- b) Improving the quality of open spaces which have potential to meet identified deficiencies for sport and recreation.
- c) Establishing new open spaces when need, land availability and resources justify and allow it.
- d) Improving linear recreational links and routes, and to improve accessibility to key areas of open space, natural greenspace and links between towns and areas of countryside; and
- Seeking planning obligations to secure new or improved provision and contributions towards future maintenance to meet needs arising from new development".

G/8 (A) Greenspace Corridors

"Greenspace Corridors shown on the Proposals Map will be protected.

Development and other measures which will enhance their recreational,
ecological or landscape and amenity value will be permitted. In those parts of
the corridors which are outside the Defined Urban Area, the provisions of
Policy D/10 will also apply. Within all parts of Greenspace Corridors, the
Council will not permit development proposals which would:

- a) Lead to an unacceptable narrowing or a division of the corridor into sections, thereby,
- i. restricting the movement of wildlife along it, or
- ii. restricting the movement of people along established or proposed recreational routes or rights of way.
 - b) Result in the loss or severance of links between areas of recreational open space.
 - c) Result in the loss of existing valued recreational facilities or prejudice proposed new facilities; or
 - d) Prevent public access into the corridor at strategic locations; or which would result in unacceptable harm to: -
 - e) The better landscape qualities and character of the corridor.



- f) The amenity value of the corridor where it provides welcome visual relief from urban development, including attractive views in and out of the corridor.
- g) Features of nature conservation interest, including designated and nondesignated sites; or
- h) Viable agricultural operations, including good quality grazing land and allotments".

G/8 (B)

"Any new development permitted within or adjacent to the corridors will be of a design, and use materials appropriate to, the character and setting of the corridor. Boundary treatments and landscaping should help to retain or reestablish a 'countryside' character in the corridors and contribute to nature conservation interest through design and use of appropriate species".

G/8 (D)

"Development proposals will be permitted that protect and enhance Greenspace Corridors and realise their potential for recreation and nature conservation".

G/NE/1 (part one policy) Nature Conservation

"Sites and features of nature conservation value will be given full and appropriate recognition and protection in the assessment of development proposals. The council will, so far as opportunities and resources permit, create and enhance sites of nature conservation interest and encourage such actions by other parties. Through the protection, enhancement and management of existing sites and greenspace corridors, and the creation of new sites of interest, it is proposed to increase local biodiversity".



NE/2 Designated sites of Ecological and Geological / Geomorphological Importance

"Development proposals adversely affecting sites and areas of ecological and geological / geomorphological importance will not be permitted, the Council seeking to protect and enhance them. In assessing proposals, the Council will apply national planning policy as it relates to international, national and local (including regional) designations as follows:

- a) International Designations Development not directly connected with or necessary for the management of a designated or proposed European Site (Special Protection Area, Special Area of Conservation) will be subject to rigorous examination. Development which will adversely affect the integrity of such sites or where such effects on the integrity of the site cannot be ascertained will not be permitted unless:
- i. There is no alternative solution; and
- ii. There are imperative reasons of over-riding public interest for the development which outweigh the nature conservation value of the site.
 - b) Where the site hosts a priority natural habitat type and / or a priority species, development or land use change will not be permitted unless it is necessary for imperative reasons of human health or public safety or for benefits of primary importance for the environment.
 - c) Development should accord with relevant European policy and guidelines for the protection of such sites. The advice of Natural England will be sought in all cases.
 - d) (n.b.; candidate sites of interest are treated as confirmed designations for planning purposes).
 - e) National Designations Development which is likely to affect a Site of Special Scientific Interest will be subject to special scrutiny. Where such development would have a direct or indirect adverse effect on the special interest of the site, it will not be permitted unless the reasons for development



- clearly outweigh the nature conservation value of the site itself and the national policy to safeguard such sites.
- f) Local and Regionally Important Designations Development affecting a Local Nature Reserve, Regionally Important Geological / Geomorphological Site or Site of Biological Importance will only be permitted where:
- It would not adversely affect the fundamental nature conservation value of the site as defined by appropriate expert assessment.
- ii. Provision has been made by the developer to ensure the safeguarding of the substantive nature conservation value of the site in implementing a proposal.
- iii. It is clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site; or
- iv. Where full or partial losses occur, they are mitigated by providing appropriate compensatory nature conservation benefits either on or off-site.

In all cases where development is permitted, conditions or planning obligations will be used where they are required to ensure the protection and enhancement of the site's nature conservation value".

NE/3 Biodiversity and Development

"In areas not identified as SBIs, LNRs, SSSIs, SPAs or SACs, the effect of land use changes on existing features, species and habitats of ecological value e.g. flora, fauna, wetland, ponds, mill lodges, reservoirs, hedges and trees will be taken into account in assessing proposals. Any development should seek to retain such features and incorporate them into the development. Where this would place an unreasonable constraint on the development, steps to provide compensatory features or habitats of an equivalent nature and value, commensurate with the scale and type of development permitted may be required.



Developments which establish new landscaping and open spaces that contribute to nature conservation and local biodiversity will be supported and encouraged, especially where this will:

- a) Help to address local habitat deficiencies or the needs of species and habitats of conservation concern.
- b) Help to provide accessible, high quality natural greenspace in urban areas; or
- c) Create or extend wildlife corridors both within the urban area and connecting the urban areas with the wider countryside around towns.

The Council will negotiate with developers to secure such measures and will seek to carry out improvements through its own activities and in partnership with others".

NE/4 Protected Species

"Development proposals which would affect a species protected by National or European law or its habitat, will not be permitted unless it can be demonstrated that:

- a) There is no adverse impact on the species concerned.
- b) Loss of, or damage to habitats supporting such species is minimal and, where required, adequate alternative habitats are provided to sustain at least the current levels of the population of the species; and
- c) Where a proposal affects a European Protected Species, it fulfils the appropriate criteria for development as set out in National and European legislation.

Planning conditions and planning obligations will be used to secure the protection of species and their habitats where required".



G/NE/5(part one policy) Landscape and Woodlands

"Proposals that contribute to the protection and enhancement of landscape quality and character and help to enhance or reintroduce local distinctiveness, will be supported. In considering the impact of development proposals, special emphasis will be placed on the effect of development on the visual and cultural character of the landscape and features of acknowledged cultural, natural and historic significance. The council will carry out and encourage actions by other parties to protect and improve landscape character, structure and quality.

Measures to secure the protection and enhancement of existing woodlands and establish new woodland planting in appropriate locations will be carried out and encouraged. The protection and enhancement of woodland should provide clear benefits for landscape character and quality, biodiversity, the viability of rural economic activity or recreation as appropriate".

NE/6 Landscape Protection and Enhancement

"Development will be permitted where it conserves the physical and cultural attributes of the landscape and contributes, as appropriate, to the regeneration, restoration, enhancement or maintenance of the landscape likely to be affected.

Proposals with potential landscape and visual implications will be assessed having regard to the extent to which they would:

- a) Make a positive contribution to the visual amenity of the area (including views into and from the site and surrounding area).
- b) Remove incongruous landscape features.
- c) Assist the conservation of:



- a. Landscape elements that contribute to local distinctiveness.
- b. Historic elements which make a significant contribution (individually or cumulatively) to land scape character and quality (e.g., field, settlement or road patterns, existing buildings, sites and features of archaeological interest).
- c. Semi-natural vegetation which is characteristic to the landscape type.
- d. The visual condition of landscape elements; and
- e. Tranquillity and the amenity and informal recreation value of the landscape.

Development which adversely affects the character or physical structure of the landscape or which would detract from the physical record of the historic and cultural evolution of an area will not be permitted".

NE/8 Development affecting Trees, Woodlands and Hedgerows

"Development proposals will be permitted that do not adversely affect trees, woodland or hedgerows.

Proposals on sites containing trees and woodlands should ensure:

- a) Suitable space and conditions for the successful retention of trees, woodland and hedgerows.
- b) That new tree planting is of an appropriate scale and species and that the impacts on the amenity of the development and surrounding area in the longer term e.g. root spread, stability, loss of daylight, leaf fall and personal safety have been fully considered.
- Suitable care and protection of trees and their environment during construction.
- d) The nature conservation value of existing hedgerows, trees and woodland has been safeguarded where appropriate including the incidence of protected species e.g. bat roosts, and the value of ground flora e.g. bluebells.



- e) Hedgerows which meet the criteria set out in the Hedgerow Regulations 1997 and other hedgerows which are locally distinctive and valuable for their natural or historic value are fully safeguarded.
- f) The requirement of the Forestry Commission for a felling licence to be obtained is met where appropriate.
- g) Suitable arrangements for future maintenance and management of trees and woodland (which may need to be secured by means of a legal agreement); and
- h) Replacement planting of trees in the event of death or failure during a 5-year period".

NE/9 Protection of Woodlands

"The Council will take measures to conserve and enhance existing woodlands, including ancient woodlands, which are important for their contribution to biodiversity, landscape, amenity, and for their recreational and commercial value. The Council will achieve this through planning conditions and obligations, management schemes and Tree Preservation Orders".

NE/10 New Woodland Planting

"The Council will support proposals and initiatives which increase the amount and quality of new woodland planting throughout the Borough. The aim will be to develop a mixed range of woodland across the Borough to enhance landscape and biodiversity, provide greater recreational opportunity, assist the diversification of the rural economy and contribute to the reduction of air pollution. Tree species should be locally native and appropriate to the location. Where appropriate, new or extended woodland through natural regeneration will be encouraged and supported. Care must be taken to ensure that tree planting does not damage or lead to the loss of existing valuable habitats either on site or in adjacent areas.



The Council will particularly encourage woodland planting schemes:

- a) In upland areas (in valleys and cloughs but not on open moorland and skylines).
- b) Marginal farmland and degraded environments in the urban fringes or the countryside around towns.
- c) Within Greenspace Corridors.
- d) Within Recreational Management Areas.
- e) To connect fragmented areas of tree and woodland cover (especially ancient semi-natural woodland).
- f) To provide new or enhanced areas of natural greenspace in the urban area; and
- g) To assist the regeneration and redevelopment of derelict and degraded urban sites and areas (for example through screening and structural planting on development sites)".



Appendix C. Survey Calendar

Ecology Survey Calendar

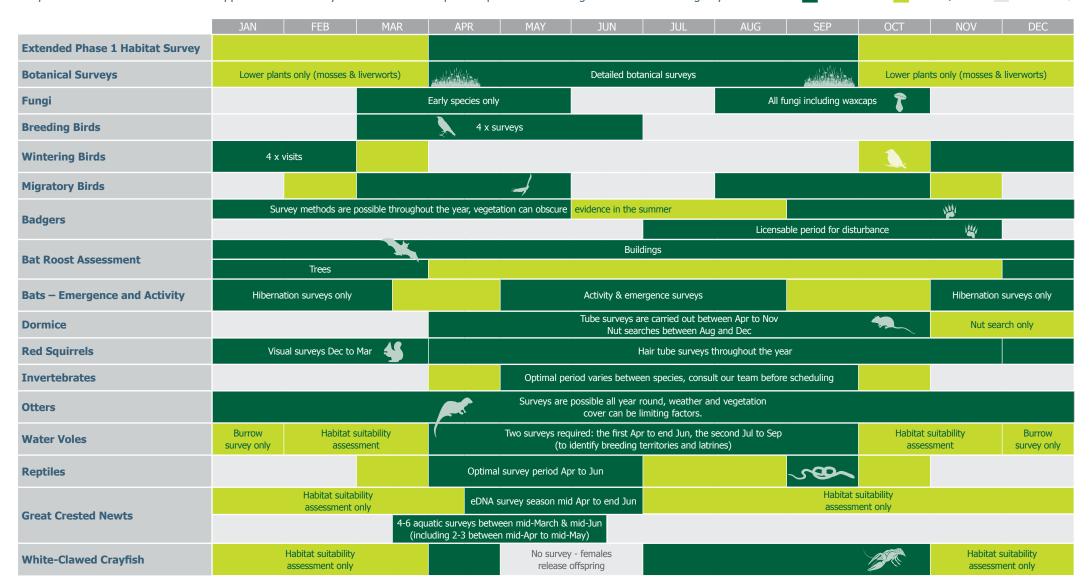


No Survey

Sub-optimal

Optimal

This calendar is a guide to the typical seasonal survey windows within which we usually have to work – it reflects best practice guidance. A number of visits may be required throughout the survey period with factors such as weather and geography potentially impacting dates. We pride ourselves on our innovative approaches and ability to find solutions so please speak to our ecologists before scheduling any work.



E: ecology@wyg.com





- The start of the 'typical' ecological survey season – consult us for forthcoming sites to make sure these windows are met.
- Spring is a great time to complete initial Phase 1 habitat surveys
- Key surveys: great crested newts and breeding birds. A good time to carry out reptile surveys – they like the sun after April showers, and dormouse surveys should be set up by the end of Spring to allow completion within the calendar year
- Hedgerow and scrub clearance will require pre-works checks for nesting birds
- Reptile and amphibian translocation and mitigation works can start as animals come out of hibernation



- Key surveys: bats, plants and invertebrates
- Although bat surveys during Spring and Autumn are possible, the presence of maternity roosts can only be confirmed in Summer
- Early summer marks the end of the great crested newt and breeding bird survey seasons
- Dormouse surveys set up in Spring will take place throughout Summer
- Summer is also the start of the period when works affecting badger setts may take place under licence



- Autumn is the end of most survey periods including bats, reptiles and dormice
- Final survey dates can be hampered by poor weather so allow a buffer in the programme
- Late autumn is also the end of the period in which mitigation for many species may take place as animals become increasingly less active on the approach to hibernation
- Some wintering bird surveys, such as those for SPA qualifying species, commence in Autumn



- Although most survey windows are closed through the winter, many surveys may still take place such as nut searches for dormice and baseline scoping surveys
- Winter is the key season for carrying out hibernation surveys for bats and surveys for wintering birds
- It is the optimum season for completing above-ground vegetation clearance works for hedgerows, woodland and scrub, when birds won't be nesting
- Winter is the perfect time to complete desk studies and constraints assessments so there is plenty of time to discuss options before the start of the survey and mitigation seasons