

RUTLAND COUNTY – BIODIVERSITY ASSESSMENT

Non-Technical Biodiversity Report

Final

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EXECUTIVE SUMMARY

Johns Associates Ltd were commissioned by Rutland County Council in May 2022 to undertake a biodiversity assessment of the county (including Phase 1 habitat survey of selected areas within the two main towns of Uppingham and Oakham and 24 of the larger villages/ Parishes) to inform the Local Plan process. **Individual Biodiversity Summary Reports have been produced for Oakham & Barleythorpe, Uppingham and 24 additional Parishes within Rutland County. These Summary Reports are available on request from Rutland County Council.**

A rigorous desk-based assessment of the county was carried out utilizing GIS systems. A number of different data sources were used to create an overarching baseline map of Rutland County, including relevant GIS datasets from Natural England, the Centre for Ecology and Hydrology, Leicestershire and Rutland Environment Records Centre, Forestry Commission and OS Mapping.

Additional Information was used as part of the desk-based assessment, including biodiversity evidence prepared in support of the adopted Core Strategy, Site Allocations DPD and Minerals Core Strategy as well as for the withdrawn Local Plan.

After compiling layered datasets for the county, a desked based assessment was undertaken by comparing the mapped habitat polygons data to the aerial photography obtained from Google maps, Google earth and Bing maps.

A team of surveyors undertook Phase 1 Habitat surveys of areas highlighted through the desk-based assessment and as directed by Rutland County Council during the course of the contract. Surveys were conducted between June 2022 and January 2023. All phase 1 surveys were carried out from public rights of way only, using binoculars where necessary to identify Phase 1 habitat types.

The study identified a total of 43 Phase 1 habitat types within Rutland County. The four largest (by area) were found to be: Arable (20,841.293 ha); Improved Grassland (5,066.679 ha); Poor semi-improved Grassland (3,813.732 ha) and Built-up areas (1,961.202 ha). All these habitats are of limited biodiversity value and cover a total of 31,682.906 ha, which is equivalent to 80.65% of the county. The remaining 20% is made up of a total of 39 Phase 1 habitat types, all covering very small areas of between 0.02 Ha and 1,673.82 Ha.

Just over half (53.05%) of Rutland County comprises arable habitat, which is of low biodiversity value. Many of the arable fields surveyed as part of this study were farmed to their boundaries, with no arable fields margins available for wildlife. Many of the hedgerows were species-poor, which in turn means that green corridors within the County are of lower ecological value than they could be.

Improved and poor semi-improved grassland were the second and third most abundant habitat types, both likely used for grazing. These areas are likely to be high in nutrients with low species diversity, which limits the value of the habitat to species such as invertebrates, which in turn act as prey species for birds, bats, hedgehogs and other wildlife. Grazed land is largely unsuitable for legally protected/ notable faunal species as it is kept very short, meaning vegetation cover is not available to species such as reptiles and amphibians.

Semi-natural broadleaved woodland accounts for only 2.09% of the land within the County, (822.23 ha), although plantation woodland covers a larger area (4.26% or 1,673.82 ha). Targets for woodland planting would have multiple benefits including soil protection, resilience to the effects of climate change and building a more biodiverse county, as well as providing habitats for a range of wildlife. Increased woodland cover would also strengthen green infrastructure across the county, particularly where improved hedgerow networks connect woodlands and other areas of habitat. It should be noted that the majority of woodland cover within the county is ash, and targets for increasing woodland coverage should include planting a broader range of native species, (such as oak), particularly when considering the effects that ash die-back is currently having across the country.

Aquatic habitats (rivers, streams, ponds and lakes) are also a small percentage of the total habitat within the county. It is therefore important to protect and enhance these features as much as possible to provide protection from

flooding and to provide valuable aquatic and marginal habitats for a range of wildlife, including legally protected otters, water voles and great crested newts (amongst others).

The county has relatively few statutory designated sites and these cover a total of only 2,373.07 Ha (of which Rutland Water accounts for 1,540.1 Ha, or 65%). St George's Barracks was identified during the field surveys as being of sufficient quality to meet the criteria for designation as a SSSI, and it is recommended that this is pursued with Natural England. Notwithstanding its potential for designation, St George's Barracks represents the best quality site in ecological terms that was surveyed within the county as part of this study, and it should be protected from the pressures of development (including potentially significant impacts from recreational pressure arising from developing a smaller part of this site).

There is a real opportunity for improvements to green corridors at the county scale through upcoming mandatory Biodiversity Net Gain requirements, with relatively simple enhancements through additional planting to ensure gaps are closed and species diversity is increased able to achieve significant improvements in linear habitat units using the Defra Metric 4.0.

The focus for Rutland County Council moving forwards in terms of biodiversity strategies should be Biodiversity Net Gain (particularly in terms of how it can be used to increase the cover of ecologically valuable habitats across the county and to ensure green and blue corridors are retained, enhanced or created for the benefit of local communities and wildlife) and developing a mechanism for establishing a strong local nature recovery strategy. To achieve this, objectives for the establishment and appropriate management of identified target Phase 1 Habitat types (to be agreed) should be set, with the main mechanism for delivery being the upcoming mandatory BNG requirements and Local Nature Recovery Strategy. Work with landowners across the county to establish a 'bank' of off-site BNG areas to support sustainable development within the county should be pursued.

The study concluded with a review of relevant biodiversity planning policies currently being used by neighbouring local authority areas and by other LPAs across England. Section 5.2 of this non-technical report includes suggested wording for five key policies to be included within the new Rutland Local Plan for consideration as part of the Local Plan process. These are based on the results of this study, (including the field-based element), the desk study and policy review. The suggested policies include:

- Protection of Sites, Habitats and Species
- Local Nature Recovery Strategy
- Biodiversity Net Gain
- Green Infrastructure
- Rutland Water

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1 INTRODUCTION

1.1 BACKGROUND

Johns Associates Ltd were commissioned by Rutland County Council in May 2022 to undertake a biodiversity assessment of the county (including Phase 1 habitat survey) to inform the Local Plan process.

Following the withdrawal of the existing Local Plan in September 2021, the Council has begun work on a new Local Plan for Rutland. This will replace the adopted Local Plan, which comprises the Minerals Core Strategy & Development Control Policies (adopted 2010), Core Strategy (adopted 2011) and the Site Allocations & Policies Development Plan Document (DPD) (adopted 2014).

The Council commissioned Johns Associates Ltd to undertake Phase 1 Habitat surveys as part of the preparation for the Local Plan to update the evidence on biodiversity and the natural environment in order to inform decisions about where new development should be located and the policy approach to biodiversity and the natural environment.

Paragraphs 174 and 179 of the NPPF provide details of how planned development is expected to conserve and enhance the natural environment. Development should protect and minimise impacts and provide measurable net gains in biodiversity.

Paragraph 179 sets out to protect and enhance biodiversity and geodiversity, and plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping-stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

In October 2019 Rutland County Council put forward a Climate Change Action Motion. Among the measures put forward as part of this Motion are commitments to:

- Make sure the Council's activities achieve a net-zero carbon footprint before 2050
- Achieve 100% clean energy across all council functions by 2050 or earlier
- Provide a climate change impact assessment on all relevant council decisions
- Request that scrutiny panels consider the impact of climate change and the environment when reviewing council policies and strategies
- Review council activities to take account of production and consumption emissions
- Set up a Climate Change Partnership Group involving Councillors, residents, young people, climate experts, businesses, and other relevant groups
- Encourage the UK government to provide the powers, resources and funding needed to help tackle climate change

1.2 STUDY AREA

Rutland is a small rural authority in the East Midlands with a population of approximately 38,000. There are two market towns, Oakham and Uppingham, and 52 villages. It has a historic built environment and a high quality and

distinctive landscape. It is an affluent area, with low levels of deprivation, unemployment and crime and above average levels of educational attainment and car ownership. Employment is predominantly in the service sector. House prices are high resulting in concealed pockets of deprivation and housing affordability problems.

Rutland is bordered by South Kesteven in Lincolnshire to the east, North Northamptonshire Council to the south and Melton Borough Council and Harborough Borough Council in Leicestershire to the north and west.

Rutland Water reservoir is an internationally important wetland site, designated as a Special Protection Area (SPA), Ramsar site and a Site of Special Scientific Interest. It forms an important visitor and recreation attraction and is also a designated Reservoir.

Figure 1 shows the extent of the study area, with Figure 2 showing the Parish boundaries.

1.3 PURPOSE AND STRUCTURE OF THIS REPORT

The Biodiversity Study has provided a robust evidence base for the preparation of biodiversity and natural environment policies and proposals in the new Local Plan as well as informing a diverse range of other policy requirements such as Biodiversity Net Gain (BNG) Local Nature Recovery Strategies (LNRS), Green Infrastructure and climate change.

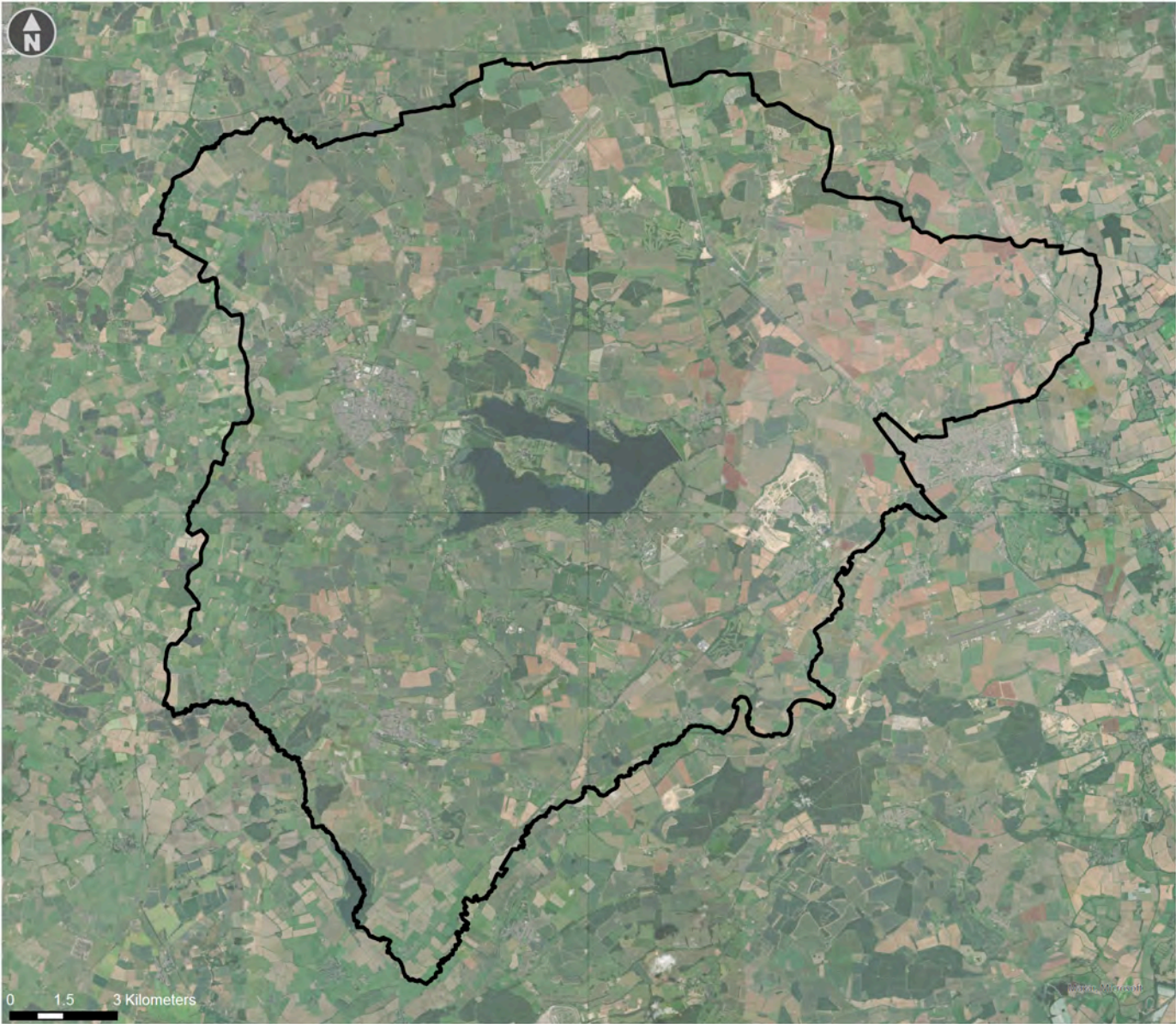
This non-technical report summarises the conclusions of the study and can be used by Rutland County Council to inform the preparation of the Local Plan and a future Local Nature Recovery Strategy covering Rutland. It also proposes wording for new Local Plan policies in relation to biodiversity/ nature conservation to satisfy the requirements of Paragraphs 174 and 179 of the NPPF.

The remainder of the report is structured as follows:

- Section 2: Methodologies used for the desk-based, field-based and mapping elements of the study.
- Section 3: Ecological baseline for Rutland County
- Section 4: Review of Planning Policies of adjacent Council areas and Local Authorities in other parts of England.
- Section 5: Policy and Strategy recommendations

The Appendices to this report comprise standalone results for the two towns (Oakham and Uppingham) and the larger villages, as well as the results of the Planning Policy review.

Figure 1: Extent of Study Area

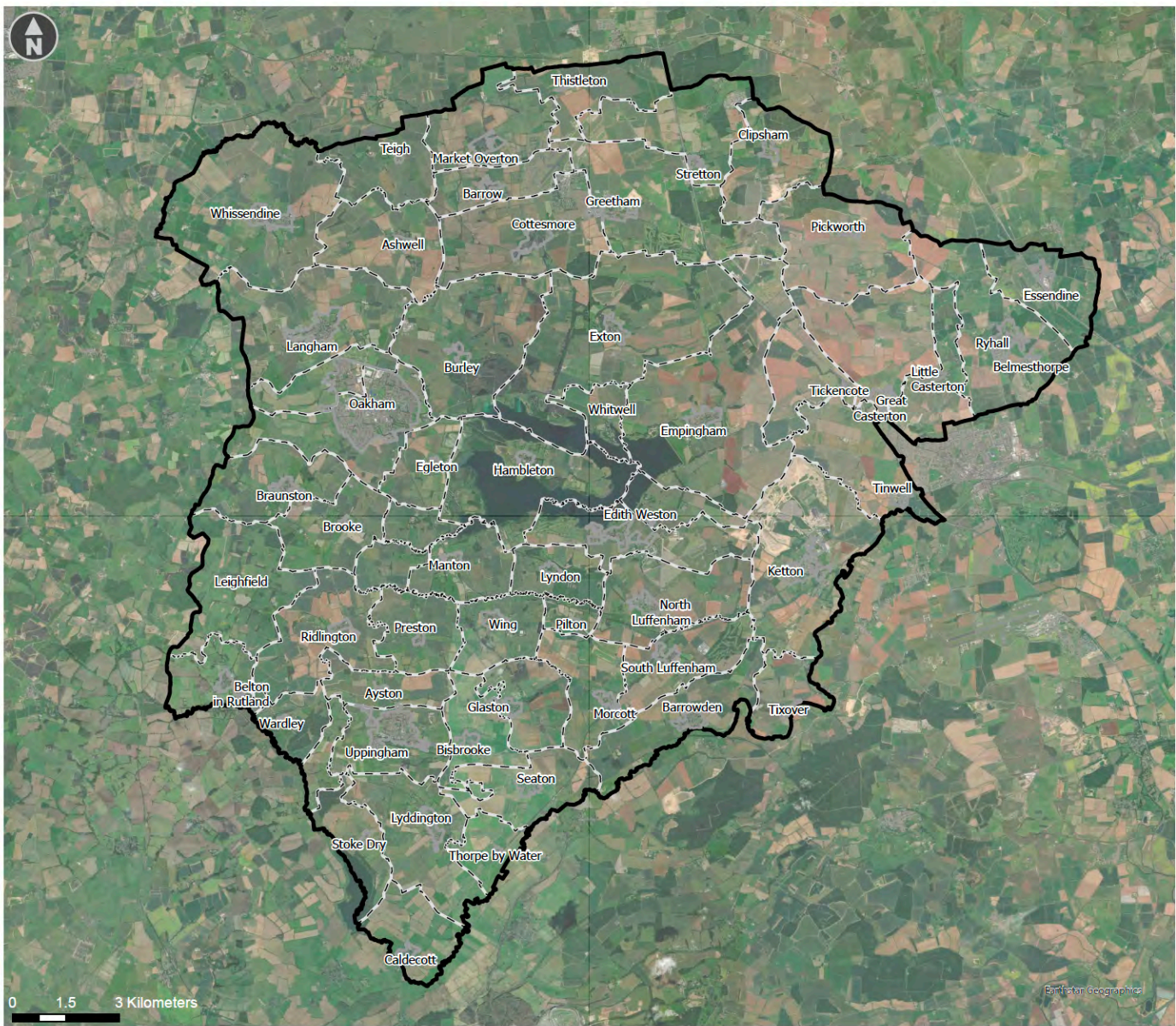


 Rutland County Boundary

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Site Location - Rutland County		
SCALE @ A3	CREATED BY	CHECKED BY	
1:100,000	CA	LJ	
REFERENCE	ISSUE/REVISION	DATE	
J00964-001		20/2/2023	

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Figure 2: Study area showing Parish boundaries



Rutland County Boundary
 Rutland Parish Regions

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Rutland County Parish Regions		
SCALE @ A3	CREATED BY	CHECKED BY	
1:100,000	CA	LJ	
REFERENCE	ISSUE/REVISION	DATE	
J00964-002		28/2/2023	

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2 METHODOLOGY

2.1 DESK STUDY

A rigorous desk-based assessment of the county was carried out utilizing GIS systems.

A number of different data sources have been used to create an overarching baseline map of Rutland County, including the following GIS datasets:

- Natural England – Living England – national scale habitat mapping
- Natural England – Priority habitat mapping
- Natural England – Environmental stewardship scheme agreements
- Natural England – Countryside stewardship scheme agreements
- Natural England – Designated sites maps for SSSI's, SAC's, SPA's, NNR's, LNR's and Ancient Woodlands
- Centre for Ecology and Hydrology – Land cover maps
- Leicestershire and Rutland Environment Records Centre – County wildlife sites – provided by Rutland County Council
- Forestry commission – National Forest Inventory
- OS Master-mapping base data

Additional Information has been used as part of the desk-based assessment, including biodiversity evidence prepared in support of the adopted Core Strategy, Site Allocations DPD and Minerals Core Strategy as well as for the withdrawn Local Plan available on the council's website which comprises:

- Phase 1 Habitat Survey –Oakham (2009)
- Phase 1 Habitat Survey –Stamford (2009)
- Phase 1 Habitat Survey –Uppingham (2009)
- Other site-specific ecological evidence which was provided as supporting evidence for sites in the withdrawn Local Plan
- Leicester, Leicestershire and Rutland Biodiversity Action Plan (2016 –2026)

After compiling layered datasets for the county, a desked based assessment was undertaken by comparing the mapped habitat polygons data to the aerial photography obtained from Google maps, Google earth and Bing maps. Habitat polygons were checked and assessed and broad habitat types were assigned to the polygons.

Large areas of arable land/horticultural land, plantation woodland/coniferous woodland and broadleaved woodland were assessed and mapped digitally with no further surveys required.

Areas highlighted by the desk-based assessment as being potentially significant in terms of habitat value and specific sites/ areas highlighted by Rutland County Council as requiring field survey were subsequently surveyed using the JNCC Phase 1 methodology (see below).

In addition, a high-level desk study was undertaken using freely available on-line data sources to obtain details of the statutory and non-statutory sites present within Rutland County. Results of this are presented in Section 3.1 of this report.

2.2 FIELD SURVEY

A team of surveyors undertook Phase 1 Habitat surveys of areas highlighted through the desk-based assessment and as directed by Rutland County Council during the course of the contract. Surveys were conducted between June 2022 and January 2023. All phase 1 surveys were carried out from public rights of way only, using binoculars where necessary to identify Phase 1 habitat types. Areas without access from PRoW were not subject to field survey and this additional information was fed into the attribute table for each habitat polygon in the main GIS dataset.

Habitat assessments followed the standardised system for classifying and mapping British Habitats using the Joint Nature Conservancy Council (Joint Nature Conservancy Council, 2010), Handbook for Phase 1 Habitat survey – a technique for environmental audit. Annotated habitat maps together with descriptions of the recorded habitat types were produced, which were subsequently digitized using a geographical information system (ArcGIS).

Using the main GIS dataset, each surveyed habitat polygon was assigned a habitat condition score using the DEFRA metric 3.1 habitat condition assessment criteria. This will allow habitats surveyed to be monitored in the future and any overall changes in condition, noted.

Species lists for each habitat were produced, with flora taxonomy following the nomenclature detailed in New Flora of the British Isles (4th Edition) (Stace C., 2019). The survey also included identification of non-native invasive plant species.

Flora, where appropriate, were given a descriptive score of abundance using the DAFOR scale, as follows:

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional
- R – Rare
- L – Locally (to be used as a prefix for any of the above)
- V – Very (to be used as a prefix for any of the above)

The survey was also completed in accordance with Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013) and BS 42020:2013 Biodiversity - Code of practice for planning and development.

Finally, an overarching habitat map of the county has been produced that includes attribute tables detailing each habitat area/land parcel in the county. Each habitat polygon has details regarding level of survey (desk based/phase 1 survey), habitat types, habitat condition (if surveyed), details on dates of survey, weather conditions during the survey, and details on species assemblage present.

2.3 MAPPING

Technical details of the methodology used to digitise and map habitats and other information using ArcGIS Pro can be provided on request.

2.4 LIMITATIONS, CONSTRAINTS AND ASSUMPTIONS

The main JNCC survey season for Phase 1 Habitat Surveys is April to October. Because of the size and complexity of the survey element of this contract and unforeseen circumstances, some surveys were completed outside of this period. However, the surveyors were all botanical specialists capable of identifying species from vegetative characteristics and therefore this is not considered to be a significant limitation. Where surveys were completed 'out

of season' this is highlighted within the GIS mapping. Further surveys of these areas (if required) should be completed within the period April – October to ensure full species lists are available.

Field surveys were mainly carried out from Public Rights of Way (PRoW) meaning that some areas had to be surveyed using high-powered binoculars to confirm the Phase 1 habitat type present. Whilst this is not ideal, confidence in the correct identification of broad Phase 1 habitat types is high given the skills and experience of the surveyors.

No further limitations or constraints are considered relevant to this study, and the results presented in this non-technical report and the accompanying GIS mapping is considered to be robust and fit for the purposes of Rutland County Council.

3 ECOLOGICAL BASELINE

3.1 DESK STUDY

3.1.1 Designated Sites

Statutory Designated Sites

There are 19 statutory designated sites within Rutland County. These are described in Table 1 below:

Table 1: Statutory Designated Sites in Rutland County

Name	Designation	Location	Area	Reasons for Designation
Bloody Oaks Quarry	SSSI Local Wildlife Site	SK 972 108	1.46 hectares	The site comprises one of the best remaining examples of limestone grassland in Leicestershire and is representative of grassland developed on soft limestones in Central and Eastern England.
Burley and Rushpit Woods	SSSI	SK 890 097	161.9 hectares	One of the largest continuous areas of ancient semi-natural woodland in Leicestershire. The woodland structure is unusual for Leicestershire, being high forest containing mature and over-mature trees and large quantities of dead wood.
Clipsham Old Quarry and Pickworth Great Wood	SSSI	SK 979 152	112.5 hectares	Contains important exposures of Lincolnshire Limestone and some of the best areas of species-rich limestone grassland in the County. Pickworth Great Wood is one of the largest remaining blocks of deciduous woodland in Leicestershire and contains stands representative of ancient, semi-natural woodland on clay soils in Central England.
East Wood, Great Casterton	SSSI	TF 005 117	6.96 hectares	The site comprises one of the best remaining semi-natural woodlands in Leicestershire and is representative of semi-natural woodland on clay soils in Central England.
Empingham Marshy Meadows	SSSI	SK 956 093 SK 957 087	14.53 hectares	The site contains some of the best remaining examples of base-rich marsh and fen in Leicestershire and is representative of marsh communities in Central and Southern England.
Eye Brook Reservoir	SSSI	SP 854 955	209.93 hectares	One of the more important wintering wildfowl sites in the East Midlands.
Greetham Meadows	SSSI	SK 938 157	12.6 hectares	This is one of the best remaining 'ridge and furrow' hay meadow sites in the region. Unimproved fields of this type were once widespread in the Midlands, but they are becoming increasingly rare due to changes in agricultural practice. Greetham is the only known locality for the frog orchid in Leicestershire, which is at the extreme northern limits of its British range here.
Ketton Quarries	SSSI	SK 973	142.8 hectares	Ketton Quarries contain nationally important

Name	Designation	Location	Area	Reasons for Designation
		056		exposures of Jurassic Limestone. The older workings contain some of the largest remaining examples of semi-natural limestone grassland and scrub in Leicestershire.
Luffenham Heath Golf Course	SSSI	SK 958 025	74.85 hectares	The site includes some of the best remaining areas of calcareous grassland in Leicestershire and is representative of grassland developed on soft limestones in Central and Eastern England.
Newell Wood	SSSI	TF 004 144	34.16 hectares	The site comprises one of the best remaining examples of acid lowland woodland in Leicestershire and is representative of semi-natural woodland developed on light soils in Central and Eastern England.
North Luffenham Quarry	SSSI	SK 961 037	4.56 hectares	A disused limestone quarry which contains a rich flora characteristic of calcareous grassland. The site is one of the best remaining examples of this plant community in Leicestershire and is representative of grassland developed on the soft limestones of Central and Eastern England.
Prior's Coppice	SSSI	SK 831 052	27.89 hectares	The site comprises one of the best remaining ash-maple woods in Leicestershire and is representative of semi-natural woodland developed on clay soils in Central and Eastern England.
Rutland Water	SSSI SPA Ramsar Site Local Wildlife Site	SK 928 070	1,540.1 hectares	The site supports exceptional numbers and diversity of passage and wintering waterfowl.
Ryhall Pasture and Little Warren Verges	SSSI	TF 027 135 TF 010 143 TF 029 136	7.6 hectares	The site combines one of the best remaining examples of semi-natural limestone grassland in Leicestershire with adjacent species-rich roadside verges in Lincolnshire. The grassland type is representative of swards developed on soft limestones in eastern and southern England.
Seaton Meadows	SSSI	SP 915 979	11.43 hectares	Lying on alluvial soils close to the River Welland, Seaton Meadows comprise one of the few remaining examples of unimproved alluvial flood meadows in Leicestershire. This habitat has become very scarce as a result of agricultural improvement and river improvement schemes.
Shacklewell Hollow	SSSI	SK 977 078	4.0 hectares	The site comprises a complex of semi-natural habitats and contains some of the best examples of species-rich neutral marsh remaining in Leicestershire.
Tickencote Marsh	SSSI	SK 982 091	3.1 hectares	Tickencote Marsh is one of the very few outstanding examples of base-rich grazing marsh remaining in Leicestershire. This type of habitat is becoming increasingly scarce as a result of drainage and cessation of grazing.

Name	Designation	Location	Area	Reasons for Designation
Tolethorpe Road Verges	SSSI	TF 017 107	1.1 hectare	Tolethorpe Road Verges are a representative example of eastern Jurassic limestone grassland. This type of habitat is now very scarce in the East Midlands as a result of the widespread conversion of permanent pasture to cereal. The verges support several regionally uncommon plant species.
Wing Water Treatment Works	SSSI	SK 899 027	1.6 hectares	Site of geological importance.

Non-Statutory Designated Sites

There are currently 359 Local Wildlife Sites (LWS) within Rutland, including sites that are notified or have candidate/potential status. The location of these is shown on the accompanying GIS mapping.

3.1.2 Priority Habitats

The following Priority Habitats are present in Rutland (data courtesy of www.magic.defra.gov.uk). Note that some habitats cover a small area only.

- Coastal and floodplain grazing marsh
- Lowland calcareous grassland
- Lowland Meadows
- Purple moor grass and rush pasture
- Lowland heathland
- Lowland fens
- Deciduous woodland
- Traditional orchards
- Wood pasture and parkland

3.2 FIELD SURVEY

3.2.1 Habitats

Table 2 summarises the extent of Phase 1 habitat types identified across the county of Rutland, from both field surveys and a review of aerial mapping. The table has been arranged to display the habitats from largest to smallest in hectares (Ha). The top four habitats (in terms of area) include:

1. Arable - 20,841.293 ha
2. Improved Grassland – 5,066.679 ha
3. Poor semi-improved Grassland – 3,813.732 ha
4. Built up areas - 1,961.202 ha

All these habitats are of limited biodiversity value and cover a total of 31,682.906 ha, which is equivalent to 80.65% of the county.

The remaining 20% is made up of a total of 39 Phase 1 habitat types, all covering very small areas within Rutland County (between 0.02 ha and 1,673.82 ha, see Table 2).

Table 2: Total Sum of Phase 1 Habitat Types Across Rutland

Habitat Types	Sum of Areas (ha)	Percentage
J1.1 - Cultivated/disturbed land - arable	20,841.29	53.05%
B4 - Improved grassland	5,066.68	12.90%
B6 - Poor semi-improved grassland	3,813.73	9.71%
J5.2 - Built up areas (extent of urban development)	1,961.20	4.99%
A1.1.2 - Broadleaved woodland - plantation	1,673.82	4.26%
G1.1 - Standing water - eutrophic	1,320.46	3.36%
A1.1.1 - Broadleaved woodland - semi-natural	822.23	2.09%
J5.1 - Hardstanding	574.00	1.46%
A1.3.2 - Mixed woodland - plantation	465.22	1.18%
J1.2 - Cultivated/disturbed land - amenity grassland	457.54	1.16%
B3.2 - Calcareous grassland - semi-improved	404.32	1.03%
B2.2 - Neutral grassland - semi-improved	309.80	0.79%
I2.1 - Quarry	305.89	0.78%
A2.2 - Scrub - scattered	265.38	0.68%
A2.1 - Scrub - dense/continuous	252.42	0.64%
J4 - Bare ground	142.04	0.36%
J5 - Other habitat (solar farms, wastewater treatment works, garden centres and allotments)	104.27	0.27%
A3.1 - Broadleaved Parkland/scattered trees	95.47	0.24%
A1.2.2 - Coniferous woodland - plantation	95.41	0.24%
J3.6 - Buildings	64.90	0.17%
B5 - Marsh/marshy grassland	53.18	0.14%
A1.3.1 - Mixed woodland - semi-natural	42.89	0.11%
F2.1 - Marginal and inundation - marginal vegetation	36.95	0.09%
J3.4 - Caravan site	32.58	0.08%
A1.2.1 - Coniferous woodland - semi-natural	32.54	0.08%
B3.1 - Calcareous grassland - unimproved	13.30	0.03%
C3.1 - Other tall herb and fern - ruderal	8.07	0.02%
G1 - Standing water	6.45	0.02%
D2 - Wet dwarf shrub heath	6.41	0.02%
J1.3 - Cultivated/disturbed land - ephemeral/short perennial	4.69	0.01%
A4.1 - Broadleaved woodland - recently felled	2.56	0.01%
B1.2 - Acid grassland - semi-improved	2.51	0.01%

Habitat Types	Sum of Areas (ha)	Percentage
F1 - Swamp	1.07	0.00%
I2.2 - Spoil	0.91	0.00%
G2.1 - Running water - eutrophic	0.72	0.00%
C1.1 - Bracken - continuous	0.71	0.00%
A3.3 - Mixed Parkland/scattered trees	0.36	0.00%
I1.4.2 - Other exposure - basic	0.28	0.00%
J2.1.2 - Intact hedge - species-poor	0.21	0.00%
J2.8 - Earth bank	0.13	0.00%
B2.1 - Neutral grassland - unimproved	0.08	0.00%
J1.4 - Introduced shrub	0.04	0.00%
G1.2 - Standing water - mesotrophic	0.02	0.00%
Grand Total	39,282.72	100%

3.2.2 St George's Barracks

Following the field survey of the St George's Barracks Site on 25th October 2022, a standalone-Technical Note was produced for submission to Rutland County Council (St. George's Barracks: Technical Note, Johns Associates, February 2023). This included recommendations for the site to be considered either as a non-statutory Local Wildlife Site or assessment against the SSSI site selection criteria for potential designation as a statutory SSSI. The Technical Note is appended to this report as Appendix C.

Summary Results and Conclusions of Survey

The Site has extensive areas of both semi-improved and unimproved calcareous grassland habitat which is broadly classified as Lowland Calcareous grassland, a UK BAP Priority Habitat and listed as a Habitat of Principal Importance under S41 of the Natural Environment and Rural Communities (NERC) Act (UK Government, 2006). The grassland is considered to be of relatively high ecological value, and high ecological value when considered within its geographic context.

Lowland calcareous (calicolous) grasslands throughout the UK mostly occur on shallow, infertile lime-rich soils over chalk and limestone bedrock with pH in the range 6.5 to 8.5. They are occasionally found on other base-rich substrates such as basic igneous rocks and calcareous glacial drift deposits. These grasslands may be either unenclosed or enclosed, with many now being confined to steep valley slopes, escarpments, and coastal cliffs and headlands. More rarely they may occur on relatively level ground such as in the East Anglian Breckland and Salisbury Plain. These agriculturally unproductive grasslands were traditionally grazed by sheep or cattle. They are floristically rich and form an especially important habitat for butterflies and other invertebrates.

Due to the historic use of the site as an MOD airfield the grassland has been managed in a low intensity way. The current management regime is by annual hay crop in which the arisings are removed. This ongoing management is maintaining the rich sward diversity.

Overall, the landscape of Rutland is dominated by intensively managed agricultural land, both arable and pastoral. The underlying geology of Rutland in the east of the county includes a band of Calcareous bedrock of Lincolnshire limestone, which St. George's Barracks is located on. Due to the general land management practices across the county, (dominated by intensive agricultural practices), areas of calcareous grassland within the county have been

lost over time and have now become increasingly rare and generally appear limited to roadside verges and a few larger areas created on former quarry sites which are now designated as Sites of Special Scientific Interest (SSSI's), such as Ketton Quarries located to the east of St. George's Barracks.

This Site is unusual in that the grassland has developed on low level, undisturbed ground, whereas the majority of calcareous grassland within the county has developed on former limestone quarry exposures/workings.

Recommendations

It is considered that any development of the St George's Barracks site will have a detrimental effect of the habitats and protected and notable species present within the Site. Even if sections of the habitats are retained, (previous proposals have suggested that this area should be managed and maintained as a public park), recreational impacts are very likely to degrade the habitats present. A loss of rarer species from the sward would cause the habitat to tend towards a more mesotrophic grassland sward. Also, the increased recreational impacts are likely to have a severe effect on ground nesting birds such as skylark.

Considering the scarcity of this type of grassland in the county landscape and that it is an undisturbed, low-lying calcareous grassland assemblage it is considered that this site is of high ecological value, and it is recommended that an update NVC survey should be carried out to ascertain the extent of the calcareous grassland communities present.

Currently the airfield has been highlighted as a potential Local Wildlife Site (LWS) due to the large area of moderately species-rich calcareous/mesotrophic grassland it supports. However, the results of an updated NVC survey may support the Site having a higher-level designation (dependent on the NVC subcommunities found within the Site and the vascular plant species present) - it may even qualify for designation as a Site of Special Scientific Interest (SSSI).

To enable sites to be properly evaluated against the guidelines, there is a requirement for detailed survey information to determine accurately the vegetation types present, their species composition and spatial configuration, including their area. Sites should be surveyed using the NVC survey methodology detailed in Rodwell (2006). It is essential that the surveyors are experienced botanists with a good knowledge of the grassland sections of the NVC (Rodwell 1991, 1992, 2000) and variations described subsequently. This survey should be completed within the optimum JNCC survey period for grasslands: June - July.

A minimum of five quadrats per sub-community type would be good practice and the accepted standard for complex or atypical sites. This will allow for the construction of constancy tables which can then be compared against the community keys and the published NVC tables (Rodwell 1991, 1992, 2000) and enable accurate NVC sub-communities to be assigned.

From the species assemblages observed within the Site it is assumed that the majority of the grassland will be a mixture of the following:

- CG3 – *Bromus erectus* grassland;
- CG4 - *Brachypodium pinnatum* grassland;
- CG5 – *Bromus erectus* – *Brachypodium pinnatum* grassland

All of these are considered to be grassland communities of high botanical nature conservation value, with both CG4 and CG5 having an estimated cover of less than 10,000ha in Great Britain.

Due to the size and extent of the Site, (approx. 160ha) it would qualify for designation as a SSSI subject to NVC community classification. It is likely that the Site may be classified as a SSSI if large areas are found to be both CG4 and CG5 having an estimated cover less than 10,000ha in Great Britain. However, even if the majority of the Site was

assessed as being CG3, given the limited cover of this habitat community within Leicestershire and Rutland it could still be considered eligible for designation.

Overall, in the context of calcareous grassland habitats within Rutland, St. George's barracks represents 38% of all calcareous grassland habitat within the county.

3.3 HABITAT SURVEY CONCLUSIONS

Just over half (53.05%) of Rutland County comprises arable habitat, which is of low biodiversity value. Many of the arable fields surveyed as part of this study were farmed to their boundaries, with no arable fields margins available for wildlife. Many of the hedgerows were species-poor, which in turn means that green corridors within the County are of lower ecological value than they could be. There is a real opportunity for improvements to these green corridors through upcoming mandatory Biodiversity Net Gain requirements, with relatively simple enhancements through additional planting to ensure gaps are closed and species diversity is increased able to achieve significant improvements in linear habitat units using the Defra Metric.

Improved and poor semi-improved grassland were the second and third most abundant habitat types, both likely used for grazing. These areas are likely to be high in nutrients with low species diversity, which limits the value of the habitat to species such as invertebrates. Grazed land is largely unsuitable for legally protected/ notable faunal species as it is kept very short, meaning vegetation cover is not available to species such as reptiles and amphibians.

Semi-natural broadleaved woodland accounts for only 2.09% of the land within the County, (822.23 Ha), although plantation woodland covers a larger area (4.26% or 1,673.82 Ha). Targets for woodland planting would have multiple benefits including soil protection, resilience to the effects of climate change and building a more biodiverse county, as well as providing habitats for a range of wildlife. Increased woodland cover would also strengthen green infrastructure across the county, particularly where improved hedgerow networks connect woodlands and other areas of habitat. It should be noted that the majority of woodland cover within the county is ash, and targets for increasing woodland area should include planting a broader range of native species, (such as oak), particularly when considering the effects that ash die-back is having across the country.

Aquatic habitats (rivers, streams, ponds and lakes) are also a small percentage of the total habitat within the county. It is therefore important to protect and enhance these features as much as possible to provide protection from flooding and to provide valuable aquatic and marginal habitats for a range of wildlife, including legally protected otters, water voles and great crested newts (amongst others).

The county has relatively few statutory designated sites and these cover a total of only 2,373.07 Ha (of which Rutland Water accounts for 1,540.1 Ha, or 65%). St George's Barracks was identified during the field surveys as being of sufficient quality to meet the criteria for designation as a SSSI, (see Appendix C), and it is recommended that this is pursued with Natural England. Notwithstanding its designation, St George's Barracks represents the best quality site in ecological terms that was surveyed within the county, and it should be protected from the pressures of development (including the potentially significant impacts from recreational pressure arising from developing a smaller part of this site).

4 REVIEW OF PLANNING POLICY

4.1 METHODOLOGY

4.1.1 Desk-Based Study

A review of relevant planning policies in adjacent Local Authority areas and of some further afield was undertaken to inform the development of draft planning policies for inclusion in the Rutland Local Plan. The following documents were consulted:

Leicestershire County Council

- Mineral & Waste Local Plan, adopted 25th September 2019

South Kesteven District Council

- South Kesteven Local Plan, adopted January 2020

North Northamptonshire Council

- Joint Core Strategy, adopted July 2016

Melton Borough Council

- Melton Local Plan, adopted October 2018

Harborough District Council

- Harborough Local Plan 2011-2031, adopted 30th April 2019

Lincolnshire County Council

- Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies, adopted June 2016

Cambridgeshire County Council

- Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, adopted July 2021

Eastleigh Borough Council

- Eastleigh Borough Local Plan 2016-2036, adopted 25th April 2022

Wiltshire County Council

- Wiltshire Core Strategy, adopted January 2015

In addition, existing Rutland County Council planning policies contained in the following Development Plan documents were also reviewed:

- Minerals Core Strategy & Development Control Policies, adopted October 2010
- Core Strategy, adopted July 2011
- Site Allocations & Policies Development Plan Document, adopted October 2014

4.2 RESULTS

The following relevant planning policies were identified through the desk study as being relevant to this study. Full policy wordings are contained in Appendix D of this non-technical report.

Rutland County Council

Minerals Core Strategy & Development Control Policies

- MDC Policy 6 – Biodiversity and Geological Conservation Interests
- MDC Policy 12 – Restoration and Aftercare

Core Strategy

- Policy CS21 – The natural environment
- Policy CS23 – Green infrastructure, open space, sport and recreation
- Policy CS24 – Rutland Water

Sites Allocation & Policies Development Plan Document

- Policy SP19 – Biodiversity and geodiversity conservation
- Policy SP21 – Important open spaces and frontages
- Policy SP26 – Rutland Water Recreation Areas

Leicestershire County Council

Minerals & Waste Local Plan

- Policy DM7 – Sites of Biodiversity/ Geodiversity Interest

South Kesteven District Council

South Kesteven Local Plan

- Policy EN2 – Protecting Biodiversity and Geodiversity
- Policy EN3 – Green Infrastructure

North Northamptonshire Council

Joint Core Strategy

- Policy 4 – Biodiversity and Geodiversity

Melton Borough Council

Melton Local Plan

- Policy EN2 – Biodiversity and Geodiversity
- Policy EN3 – The Melton Green Infrastructure Network
- Policy EN8 – Climate Change

Harborough District Council

Harborough Local Plan 2011-2031

- Policy GI1 – Green infrastructure networks
- Policy GI5 – Biodiversity and Geodiversity
- Policy CC1 – Mitigating climate change

Lincolnshire County Council

Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies

- Policy DM2 – Climate change
- Policy DM7 – Internationally Designated Sites of Biodiversity Conservation Value
- Policy DM8 – Nationally Designated Sites of Biodiversity and Geological Conservation Value
- Policy DM9 – Local Sites of Biodiversity Conservation Value

Cambridgeshire County Council

Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036

- Policy 20 – Biodiversity and Geodiversity

Eastleigh Borough Council

Eastleigh Borough Local Plan 2016-2036

- Policy DM11 – Nature conservation

Wiltshire Council

Wiltshire Core Strategy

- Core Policy 50 – Biodiversity and Geodiversity

Bath & North East Somerset Council

Local Plan Partial Update

- Policy NE3 – Sites, Habitats & Species
- New Policy NE3a – Biodiversity Net Gain
- Policy NE5 – Ecological Networks and Nature Recovery

5 POLICY AND STRATEGY RECOMMENDATIONS

5.1 STRATEGY

The following sections contain recommendations for an overarching biodiversity strategy for Rutland based on the results of this study and our professional judgement. In summary, objectives for the establishment and appropriate management of identified target Phase 1 Habitat types (to be agreed) should be set, with the main mechanism for delivery being the upcoming mandatory BNG requirements and Local Nature Recovery Strategy. Work with landowners across the county to establish a 'bank' of off-site BNG areas to support sustainable development within the county should be pursued (see relevant text in Section 5.1.2, below – in bold).

5.1.1 Local Nature Recovery Strategy and Green/Blue Infrastructure

It is important to ensure that wildlife corridors are protected, enhanced and restored throughout the county and areas of biodiversity value are linked within the landscape. This will allow mobile species to move between habitat areas, potentially colonizing new parts of the county over time. It is understood that Rutland is working with Leicestershire County Council to develop a Nature Recovery Strategy that covers both counties. Wording is suggested in Section 5.2 below for a Local Nature Recovery Strategy policy to ensure delivery of agreed measures.

5.1.2 Biodiversity Net Gain

10% Biodiversity Net Gain becomes mandatory for most developments from November 2023.

This includes:

- Brownfield sites;
- Change of use applications;
- Temporary permissions;
- 'small sites' (from 2024), which are defined as:
 - Residential sites of <10 dwellings on < 1Ha site OR an unknown number of dwellings on <0.5 Ha site
 - Non-residential developments with a floorspace of <1,000m² of <1 Ha site.

It does not include:

- Sites with a baseline biodiversity score of 0 (using the Defra Metric) e.g., car parks/ other areas of hard standing or bare ground with no vegetation.
- Developments where temporary impacts will be restored within 2 years (using the Defra Metric)
- Marine developments (except NSIPs)

Irreplaceable habitats (such as ancient woodland) will have their own set of regulations (secondary legislation not yet available).

There will be two main ways that developers can secure the mandatory 10% net gain:

1. Through on-site provision (e.g. retaining, enhancing or creating habitats within the red line boundary)
2. **Using registered off-site areas (i.e. buying habitat/ linear/ river units) with delivery and subsequent management secured by legal agreements**
3. Buying Government Biodiversity Credits (a short-term scheme and expensive to act as a disincentive)

Much of the necessary secondary legislation is still outstanding, although it would be advisable for Rutland County Council to look into establishing a register of off-site BNG provisions.

Delivery of mandatory BNG for the Leicestershire/ Rutland area is understood to be the subject of a separate commercial contract currently being undertaken by RSK Biocensus. The output of this contract should include suggested mechanisms for the delivery of BNG across both counties.

5.2 PLANNING POLICIES

Based on the planning policy review undertaken as part of this study and the results of the Phase 1 Habitat surveys/ mapping, the following draft policies are recommended to ensure biodiversity is protected and enhanced within the county. A number of other local planning authorities have their own "Biodiversity Checklist" which has to be completed and submitted with all planning application. Rutland could look at developing this to ensure all biodiversity matters have been properly considered by the applicant and their agent/ ecologist.

5.2.1 Protection of Sites, Habitats and Species

A policy should be developed that protects statutory and non-statutory sites, important habitat areas and legally protected and/or notable species, particularly those with a restricted distribution within Rutland or for which Rutland County is a stronghold. Potential wording is given below:

"Development resulting in significant harm to biodiversity will not be permitted. Harm to biodiversity must always first be avoided and minimised. Where avoidance of harm is not possible, mitigation, and as a last resort, compensation must be provided, to at least equivalent ecological value.

For designated sites and other important habitat, this means:

1. Development that would adversely affect, directly or indirectly, internationally designated sites (such as RAMSAR) and sites within the National Sites Network (including new and existing SPAs) will not be permitted other than in exceptional circumstances where:
 - There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
 - The proposal needs to be carried out for imperative reasons of overriding public interest.
 - The necessary compensatory measures can be secured.
2. Development that would adversely affect, directly or indirectly nationally designated sites including SSSIs, Internationally Important Sites will not be permitted except in exceptional circumstances where:
 - a) the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest.
 - b) mitigation measures can be secured to prevent any significant adverse effect on the site, including retention of existing habitat and vegetation in situ; and
 - c) provision of replacement habitat creation and bespoke measures.
3. Development that would adversely affect, directly or indirectly other habitats or features of biodiversity/geodiversity importance or value will only be permitted in the following cases:
 - a) for Local Wildlife Sites; Local Nature Reserves, Regionally Important Geological/ Geomorphological Sites and other sites of equivalent nature conservation value, where material considerations are sufficient to outweigh the local biological geological/ geomorphological and community/ amenity value of the site;

where impacts have been minimised; and where there are opportunities to replace and/or offset the loss to at least equivalent or greater ecological value.

- b) for UK Priority Habitats where the importance of the development and its need for that particular location is sufficient to override the value of the species or habitat; and where impacts have been minimised; and where it can be demonstrated that it is possible to replace and/or offset the loss to at least equivalent or greater ecological value.
 - c) for locally important habitats, where the importance of the development and its need for that particular location is sufficient to override the value of the habitat.
 - d) for features of the landscape such as trees, copses, woodlands, grasslands, ponds, roadside verges, veteran trees, hedgerows, and watercourses and their corridors if they are of amenity, wildlife, or landscape value, or if they contribute to a wider network of habitats, where such features are retained and enhanced unless the loss of such features is unavoidable and material considerations outweigh the need to retain the features.
4. Development is expected to protect and enhance irreplaceable habitats (within Rutland including (but not confined to) ancient woodlands; ancient and veteran trees; and priority grasslands). Development negatively impacting irreplaceable habitat will not be permitted unless there are wholly exceptional circumstances and a suitable mitigation and compensation strategy is provided.
5. In all cases:
- a) Firstly, any harm to the nature conservation value of the site should be avoided where possible before mitigation and as a last resort compensation are considered, and
 - b) Secondly, compensatory provision of at least equal nature conservation value is made for any outstanding harm, and
 - c) Thirdly, Biodiversity Net Gain will be delivered and managed in perpetuity (minimum of 30 years) through the appropriate means e.g. a legal agreement.
 - d) Then, as appropriate:
 - i. Measures for the protection and recovery of priority species are made.
 - ii. Provision is made for the management of retained and created habitat features.
 - iii. Site lighting details are designed to avoid harm to nature conservation interests; including habitat connectivity and function as part of an ecological corridor."

5.2.2 Local Nature Recovery Strategy

Local Nature Recovery Strategies (LNRS) are a new mandatory system of spatial strategies for nature established by the Environment Act 2021. BNG is likely to play a large part in ensuring Strategies are delivered within local authority areas, but a separate planning policy within Rutland regarding Nature Recovery is recommended, as not all development will be subject to mandatory BNG requirements. The wording below is adapted slightly from a policy recently proposed by Bath & North East Somerset Council:

"Development proposals will be expected to demonstrate that a positive contribution will be made to regional Nature Recovery Networks and the Local Nature Recovery Strategy and for maintaining or creating local ecological networks through habitat creation, protection, enhancement, restoration and/or management."

5.2.3 Biodiversity Net Gain

With mandatory BNG requirements from November 2023 for most developments, (small sites and NSIPS have later start dates, and there are some exclusions), it is important to have a strong BNG policy included in the new Local Plan to ensure maximum gains for the county can be secured through the planning process.

BNG provisions will be dropped into existing legislation, likely to be the Town & Country Planning Act 1990 rather than the Environment Act 2021, with a new general planning condition for all relevant planning applications: "No commencement of development until a Biodiversity Gain Plan has been agreed with the Local Planning Authority."

Suggested wording for a new BNG policy is given below:

"Development will only be permitted for major developments where a Biodiversity Net Gain of at least 10% is demonstrated and secured in perpetuity (for at least 30 years) subject to the following requirements:

- a) The latest DEFRA metric or agreed equivalent is used to quantify the biodiversity value of the site pre-development, post-development after application of the mitigation hierarchy and for any off-site areas proposed for habitat creation or enhancement both pre- and post-development.
- b) That the assessment be undertaken by a suitably qualified and/or experience ecologist and is submitted together with baseline and proposed habitat mapping in a digital format with the application.
- c) A Biodiversity Gain Plan will be required, detailing how the post-development biodiversity values of the site and any supporting off-site provision will be secured, managed and monitored in perpetuity.
- d) Any off-site habitats created or enhanced are well located to maximise opportunities for local nature recovery.

For minor developments, development will only be permitted where no net loss and appropriate net gain of biodiversity is secured using the latest DEFRA Small Sites metric or agreed equivalent.

Developments that will deliver greater than 10% Biodiversity Net Gain will be supported.

Opportunities to secure Biodiversity Net Gain on householder developments and exempted brownfield sites will be supported."

5.2.4 Green Infrastructure

The value of green and blue corridors within Rutland cannot be overstated, and a policy aimed at protecting, enhancing and creating corridors for wildlife and local communities is considered important. Suggested wording is given below, using current policies adopted by Melton Borough Council, South Kesteven District Council and Wiltshire Council as a guide:

"Development proposals should ensure that existing and new green infrastructure is considered and integrated into the scheme design, taking opportunities to enrich biodiversity habitats, enable greater connectivity and provide sustainable access for all. Proposals which may result in recreational and visitor pressure on designated biodiversity sites will be particularly expected to provide such green infrastructure.

Proposals that cause loss or harm to this network will not be permitted unless the need for and benefits of the development demonstrably outweigh any adverse impacts. Where adverse impacts on green infrastructure are unavoidable, development will only be permitted if suitable mitigation measures for the network are provided.

Where development is permitted, developers will be required to:

- Retain and enhance existing on-site green infrastructure (including watercourses/ ditches);
- Put measures in place to ensure appropriate long-term management of any green infrastructure directly related to the development; and
- Identify and provide opportunities to enhance and improve linkages between the natural and historic landscapes of Rutland.

If damage or loss of existing green infrastructure is unavoidable, the creation of new or replacement green infrastructure equal to or above its current value and quality, that maintains the integrity and functionality of the green infrastructure network, will be required.

Proposals for major development should be accompanied by an audit of the existing green infrastructure within and around the site and a statement demonstrating how this will be retained and enhanced through the development process.

Development will not adversely affect the integrity and value of the green infrastructure network or provide inadequate green infrastructure mitigation.

Green infrastructure projects and initiatives that contribute to the delivery of a high quality and highly valued multi-functional green infrastructure will be supported. Contributions (financial or other) to support such projects and initiatives will be required where appropriate from developers."

5.2.5 Rutland Water

Existing Policy CS24 (Rutland Water) should be retained, with suggested additions to the policy wording in **bold**.

"Development in the defined Rutland Water Area will be carefully designed and located to ensure that it respects the nature conservation features of this internationally important site and does not have an adverse impact on the landscape and wildlife interests and the general tranquil and undisturbed environment of Rutland Water.

New development will be limited to small scale recreation, sport and tourist uses within the five defined Recreation Areas around the shores of Rutland Water where this is directly related to the use and enjoyment of Rutland Water and appropriate in scale, form and design to its location.

*Outside the five defined recreation areas, new development will be restricted to small scale development for recreation, sport and tourism facilities only where essential for nature conservation or fishing or essential for operational requirements of existing facilities and subject to it being appropriate in terms of location, scale, design and impact on the landscape, **SSSI/SPA/ Ramsar designations and biodiversity**.*

Caravan and camping sites will not be acceptable outside the defined recreation areas and only within the defined recreation areas where appropriate to the area in terms of its scale, location and impact on the surrounding area."

Other Suggestions

The Policy Review highlighted a number of other policies currently adopted around the country which may be useful for Rutland to consider, given the results of the Phase 1 Habitat study. These include:

Woodland

Development proposals affecting semi-natural broadleaved woodland, (directly or indirectly), will not be permitted. Veteran trees could be included in such as policy.

Climate Change

A number of planning policies highlighted in the review address climate change in a number of ways - through biodiversity, water resources, flood risk, climate resilience and/or sustainability. Policy EN8 in the Melton Local Plan covers a number of these areas in one policy, and links it to other relevant policies in the Local Plan, which is considered to be a good approach. Policy EN8 is reproduced below:

“All new development proposals will be required to demonstrate how the need to mitigate and adapt to climate change has been considered, subject to considerations of viability, in terms of:

- Sustainable design and construction in accordance with Policy EN9 – ensuring energy efficient and low carbon development.
- Provision of green infrastructure in accordance with Policy EN3 – the Melton Green Infrastructure Network.
- Provision of renewable and/or low carbon energy production, including de-centralised energy and/or heat networks in accordance with Policy EN10 – energy generation from renewable sources.
- Flood risk in accordance with Policy EN11 – minimizing the risk of flooding and policy EN12 – sustainable urban drainage systems.
- Providing opportunities for sustainable modes of transport in accordance with Policy IN1 – delivering infrastructure to support new development.”

APPENDIX A - TOWNS

A1 OAKHAM & BARLEYTHORPE

A2 UPPINGHAM

J00964

Oakham and Barleythorpe Parishes - Biodiversity Summary

1 INTRODUCTION

Oakham is the largest town within Rutland, and is located in the west of the county, close to Rutland Water. Barleythorpe is a Parish located to the northwest of Oakham. Recent development to the northwest of Oakham has connected Barleythorpe to Oakham which has resulted in safe access for residents of Barleythorpe to a full range of key services in Oakham including shops and schools. However, it is important to maintain an area of separation for the landscape setting of Barleythorpe. Given their proximity, Oakham and Barleythorpe are presented together in this Biodiversity Summary, as providing stronger habitat links between the two would afford an opportunity for an increase in overall biodiversity.

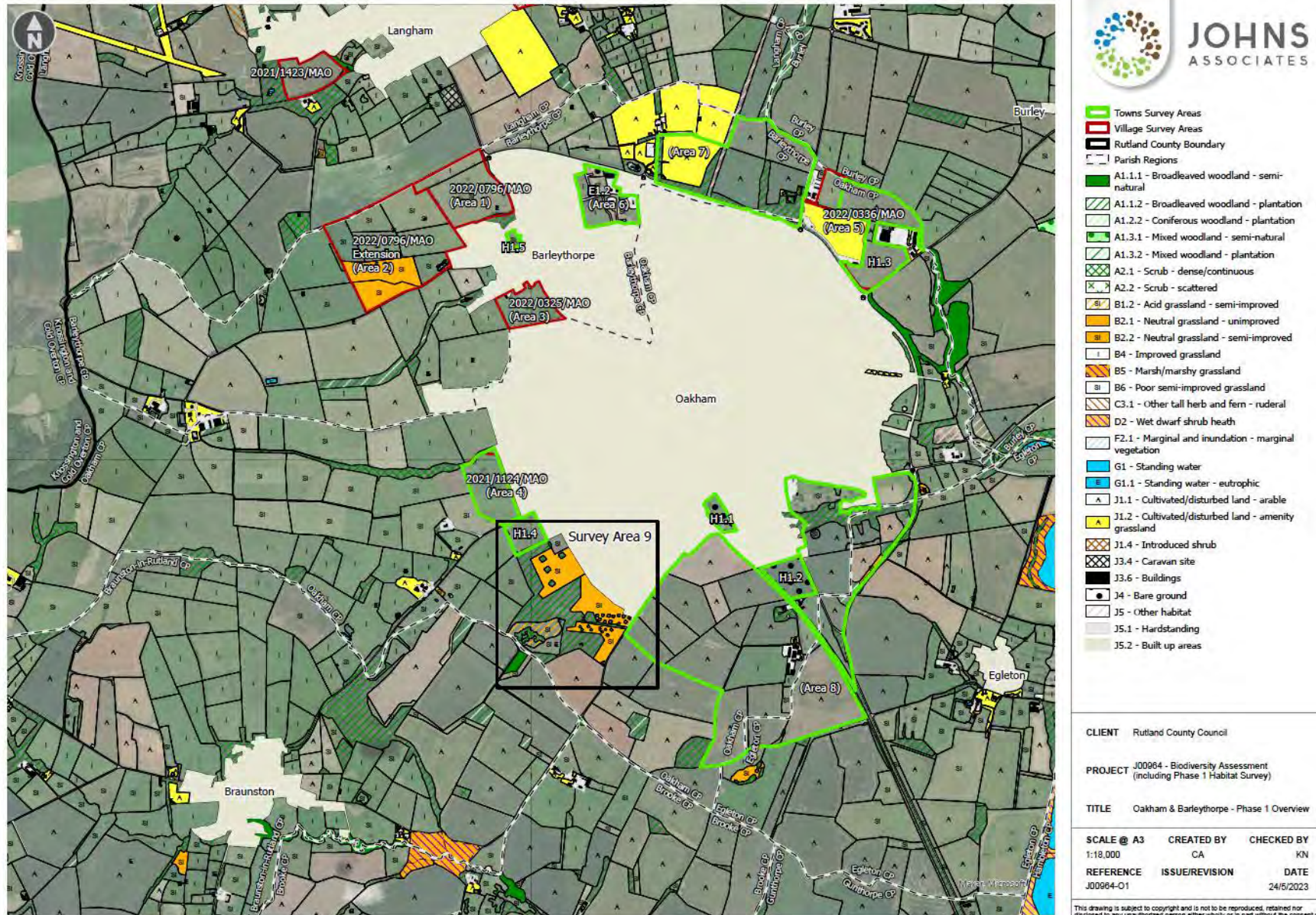
Figure 1 shows the habitat types identified within the boundary of Oakham and Barleythorpe. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within these two parish boundaries.

The four most frequent habitats within Oakham and Barleythorpe are improved grassland, built up areas (extent of the developed areas of both Parishes), arable, and poor semi-improved grassland. These four habitat types account for approximately 83% of the habitats within the Oakham and Barleythorpe boundary (see Table 1).

Table 1: Oakham & Barleythorpe Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Oakham & Barleythorpe
B4	Improved grassland	132.95	33.71
J5.2	Built up areas	73.38	18.60
J1.1	Cultivated/ disturbed land - arable	70.01	17.75
B6	Poor semi-improved grassland	51.90	13.16
J1.2	Cultivated/ disturbed land – amenity grassland	26.13	6.63
A1.1.2	Broadleaved woodland - plantation	13.35	3.38
B2.2	Neutral grassland - semi-improved	8.67	2.20
J5.1	Hardstanding	7.42	1.88
A1.3.2	Mixed woodland - plantation	4.78	1.21
J5	Other habitat	1.21	0.31
J4	Bare ground	1.14	0.29
A2.2	Scrub - scattered	1.02	0.26
J3.6	Buildings	0.95	0.24
A2.1	Scrub – dense/ continuous	0.95	0.24
G1.1	Standing water - eutrophic	0.32	0.08
F2.1	Marginal and inundation – marginal vegetation	0.25	0.06
Total		394.41	100.00

Figure 1: Overview of Habitats within Oakham and Barleythorpe Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around both Oakham and Barleythorpe to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (red boundaries for Barleythorpe, green for Oakham). Figure 11 shows the GCN Risk Zones within the Oakham/ Barleythorpe settlement area, whilst Figure 12 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 is located to the northwest of Barleythorpe (see Figure 2). It comprises areas of improved grassland and poor semi-improved grassland, and is bordered by hedgerows, some of which are species rich. An area of broadleaved plantation woodland is present along the southern boundary, with scattered trees throughout the Area, some of which were assessed as having bat roost potential. A small pond is present in the south-eastern part of Survey Area 1. A line of trees separates the area of improved grassland from the adjacent and larger area of poor semi-improved grassland.

The Survey Area is subject to a current planning application, (reference 2022/0796/MAO) for a residential development, with landscaping and public open space, associated drainage infrastructure and access works, and safeguarded land for community uses. There is an extension to this planning application area adjacent to the west.

Overall, the habitats present within the boundary of Survey Area 1 are of low biodiversity value, with the exception of the boundary hedgerows (particularly those that are species rich). The grassland appears to have been used for grazing, with a very short sward height unsuitable for supporting wildlife. However, the boundary hedgerows, individual trees and woodland adjacent to the southern boundary are likely to support nesting birds, commuting and foraging bats, common reptiles (in areas of longer vegetation), invertebrates, small mammals and possibly roosting bats in trees with suitable features.

2.1.1 Site Constraints

Figure 10 shows that the majority of Survey Area 1 falls within an Amber Risk Zone for great crested newts (GCN). Boundary habitats where these offer good vegetation cover may provide suitable terrestrial habitat for this species and further survey of the on-site pond is recommended in Section 2.1.2. Ponds within and adjacent to the extension area have confirmed records of GCN and therefore individual newts could be present within suitable terrestrial habitats in Survey Area 1.

A number of trees within the boundary of Survey Area 1 were assessed as having suitable features for roosting bats. Further surveys will be needed to confirm whether this is the case. Three bat licences have been issued by Natural England in recent years for sites close to the southern boundary of the Area. Linear habitats and the adjacent woodland are likely to be used by foraging and commuting bats.

Areas of longer vegetation within the Survey Area may support common reptile species.

Boundary habitats should be retained, protected and enhanced as part of any development proposals to ensure valuable wildlife corridors are established and/or maintained. Ideally, individual trees should also be retained and incorporated into the scheme design, with root zones protected during construction using appropriate tree protection fencing.

2.1.2 Survey Recommendations

The grassland habitats are considered to be a good location ecologically for allocation in the local plan as long as the area of woodland to the south and the boundary hedgerows can be retained, protected and enhanced for wildlife.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys of any suitable habitat, particularly close to the woodland edge. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).
- Hedgerows, woodland and individual trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented, and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 2: Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located immediately adjacent to the west of Survey Area 1 and comprises the extension area to planning application 2022/0796/MAO (see Figure 3). It covers eight fields, and habitats include semi-improved neutral grassland, poor semi-improved grassland, a small number of buildings in the south of the Survey Area, two ponds, (one with confirmed records of GCN), and boundary hedgerows with trees, some of which are native and species rich. An area of dense scrub is present adjacent to the western Survey Area boundary, which is likely to provide terrestrial habitat for GCN and other amphibians that use the nearby on-site pond for breeding.

Overall, the habitats within the boundary of Survey Area 2 are of low-moderate biodiversity value. The grasslands (particularly the poor semi-improved areas) are of lower value, whilst the species-rich hedgerows and ponds are of moderate value to wildlife. It would be worth considering retention of these areas and incorporating them into any future scheme design. The species-poor hedgerows with trees that are present along the southern Survey Area boundary should be retained and enhanced to improve their structure and diversity; this would contribute to BNG being achieved for the site.

2.2.1 Site Constraints

Figure 3 shows that one of the on-site ponds is part of a complex that supports a meta-population of GCN. Adequate survey information will be required to inform both the planning decision and also an application for a European Protected Species Licence (EPSL) to Natural England, which will be necessary to enable any development to proceed lawfully.

The hedgerows and off-site scrub habitat are likely to support a range of species, including nesting birds, common reptiles, amphibians, hedgehogs and invertebrates. Bats are likely to use hedgerows and the lines of trees present for foraging and also for commuting to other suitable habitats in the wider local area.

Individual trees within the boundary of Survey Area 2 may have suitable features for roosting bats. Further surveys will be needed to confirm whether this is the case. Three bat licences have been issued by Natural England in recent years for sites close to the southern boundary of the Area.

Boundary habitats should be retained, protected and enhanced as part of any development proposals to ensure valuable wildlife corridors are established and/or maintained. Ideally, the ponds and individual trees should also be retained and incorporated into the scheme design, with root zones protected during construction using appropriate tree protection fencing. The ponds should be protected by a suitable buffer to ensure their continuing value to wildlife.

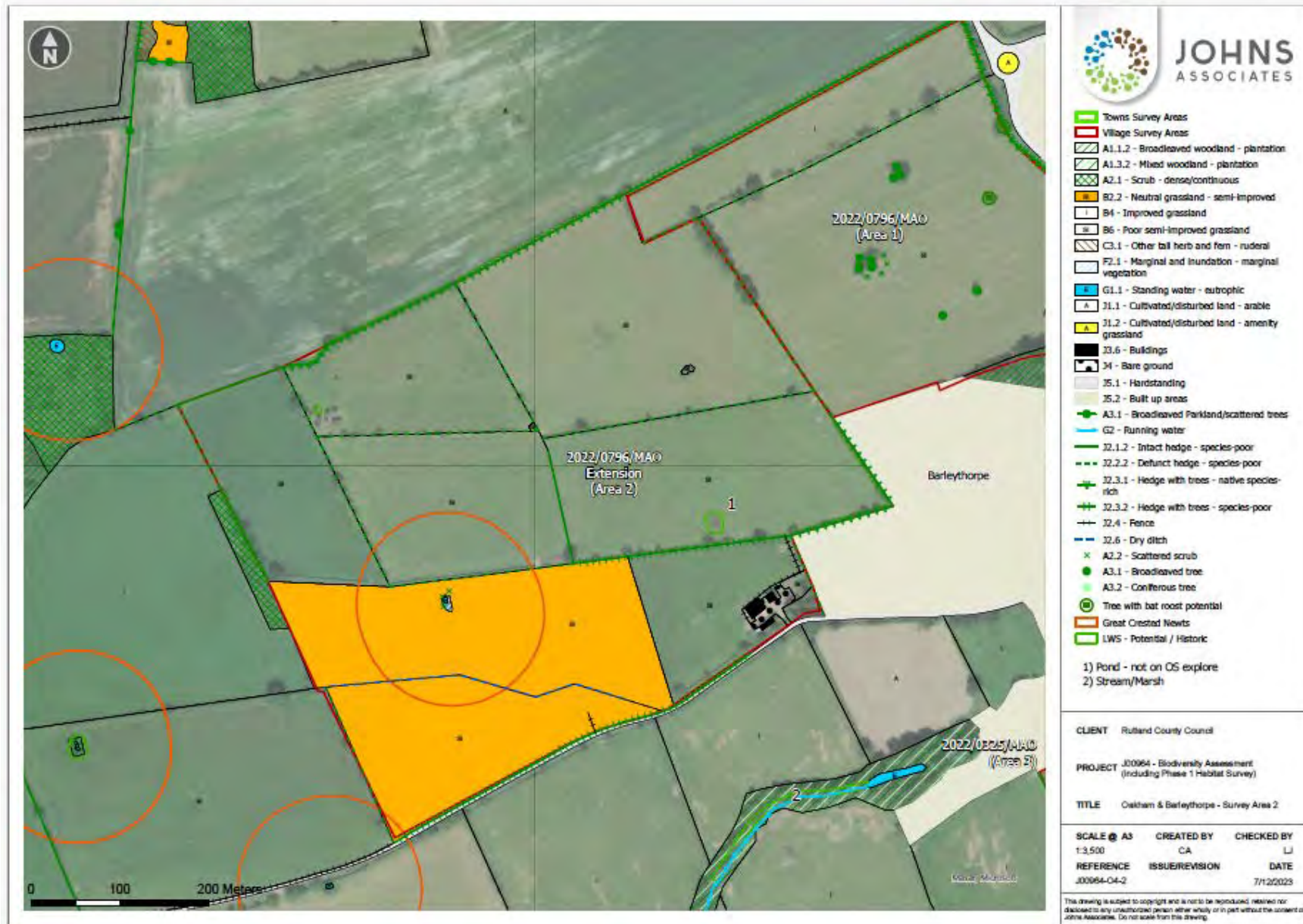
2.2.2 Survey Recommendations

The grassland habitats are considered to be a good location ecologically for allocation in the local plan as long as the ponds and the boundary hedgerows can be retained, protected and enhanced for wildlife.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.

- Reptile surveys of any suitable habitat, particularly close to the scrub area and hedgerows. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).
- Hedgerows, ponds and individual trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented, and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 3: Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 comprises four poor semi-improved grassland fields located between the settlements of Oakham and Barleythorpe (see Figure 4). An area of parkland/ scattered trees is present along the southern boundary, and the individual field parcels are separated by fences. A species poor but intact hedge forms the western boundary and there is an existing building in the north of the Survey Area. Catmose College and Catmose Sports Centre are situated immediately adjacent to the south, whilst the B640 forms the eastern boundary. The Area is subject to a current outline planning application, (reference 2022/0325/MAO) for up to 150 residential dwellings (Class C3), with all matters reserved except for access for the development of land off Main Road, Barleythorpe.

Overall, the habitats associated with Survey Area 3 are of low biodiversity value. The boundary habitats should be retained and enhanced, as they offer the best opportunities for wildlife.

2.3.1 Site Constraints

The majority of the Survey Area falls within an Amber Risk Zone for GCN, although limited habitat exists on site for this species.

The scattered trees along the southern boundary may offer suitable habitat for roosting bats, and these should be surveyed (see Section 2.3.2). Likewise, the existing buildings may support a bat roost(s) and will require further assessment.

2.3.2 Survey Recommendations

Survey Area 3 is considered to be a good location ecologically for allocation in the local plan providing boundary habitats can be retained, protected and enhanced for wildlife.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- All existing building within Survey Area 3 should be subject to Potential Roost Assessments (PRAs) to confirm whether any are used by bats. Magic map (www.magic.defra.gov.uk) provided five records of bat licences issued for works within a radius of 500m of the Survey Area, two to the south-east and three to the north.

Figure 4: Survey Area 3



2.4 SURVEY AREA 4

Survey Area 4 comprises two distinct parcels of land, bisected by Braunston Road and located to the west of the main settlement of Oakham.

The northern parcel comprises an improved grassland field, with a small area of unimproved neutral grassland in the north, close to a small watercourse, which flows west to east along the northern site boundary. Dense scrub is present along the banks of the watercourse. The eastern boundary, adjacent to existing residential areas, is fenced, whilst the southern and west boundaries comprise species-poor intact hedgerows and separate the Survey Area from extensive areas of poor semi-improved grassland to the west, likely used for grazing. This part of Survey Area 4 was subject to a planning application (reference 2021/1124/MAO) in 2021/22 for up to 100 dwellings, including up to 30% affordable housing, open space, green infrastructure, children's play area and SuDS. This application was granted permission on appeal.

The southern parcel comprises an area of poor semi-improved grassland, with small patches of ruderal vegetation scattered along the western and southern boundaries, which may offer suitable habitat for common reptile species. The northern, western and southern boundaries are made up of species-poor intact hedgerows, with an area of broadleaved plantation woodland immediately adjacent to the south. The eastern boundary is fenced.

Overall, the habitats present in the northern parcel of Survey Area 4 are considered to be of low-moderate biodiversity value. However, the area of unimproved neutral grassland is of considerably higher value as this habitat covers only 0.08ha (less than 0.01%) of Rutland County as a whole. Ideally, this area should be retained, protected and enhanced, with access from the new housing development restricted to avoid significant anthropogenic effects leading to the eventual loss of this habitat area. The watercourse should also be protected through establishment of a suitable buffer zone to protect this valuable wildlife corridor.

Overall, the habitats present in the southern parcel of Survey Area 4 are of low biodiversity value. The ruderal areas may offer suitable habitat for common reptiles, particularly where this is located close to the woodland. The woodland edge habitat is likely to be used by foraging and commuting bats. Hedgerows are likely to be used by a range of wildlife, including nesting birds, commuting bats and reptiles.

2.4.1 Site Constraints

Both areas are located within an Amber Risk Zone for GCN, with a meta-population present to the south. Suitable on-site habitats for this species are limited, although hedgerows, ruderal vegetation and areas of dense scrub (particularly along the watercourse corridor in the north) may be used by this species as it moves to/from breeding ponds.

Individual trees and trees within areas of woodland may be used by roosting bats and nesting birds. Hedgerows will be used by nesting birds and potentially also by commuting/ foraging bats, reptiles, amphibians, small mammals (including hedgehogs) and invertebrates.

Boundary habitats are valuable as they provide important green links into the wider local landscape and between other areas of habitat, including woodlands, ponds and watercourses. These habitats should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented, and Heras fencing used to as necessary to ensure no development related impacts occur.

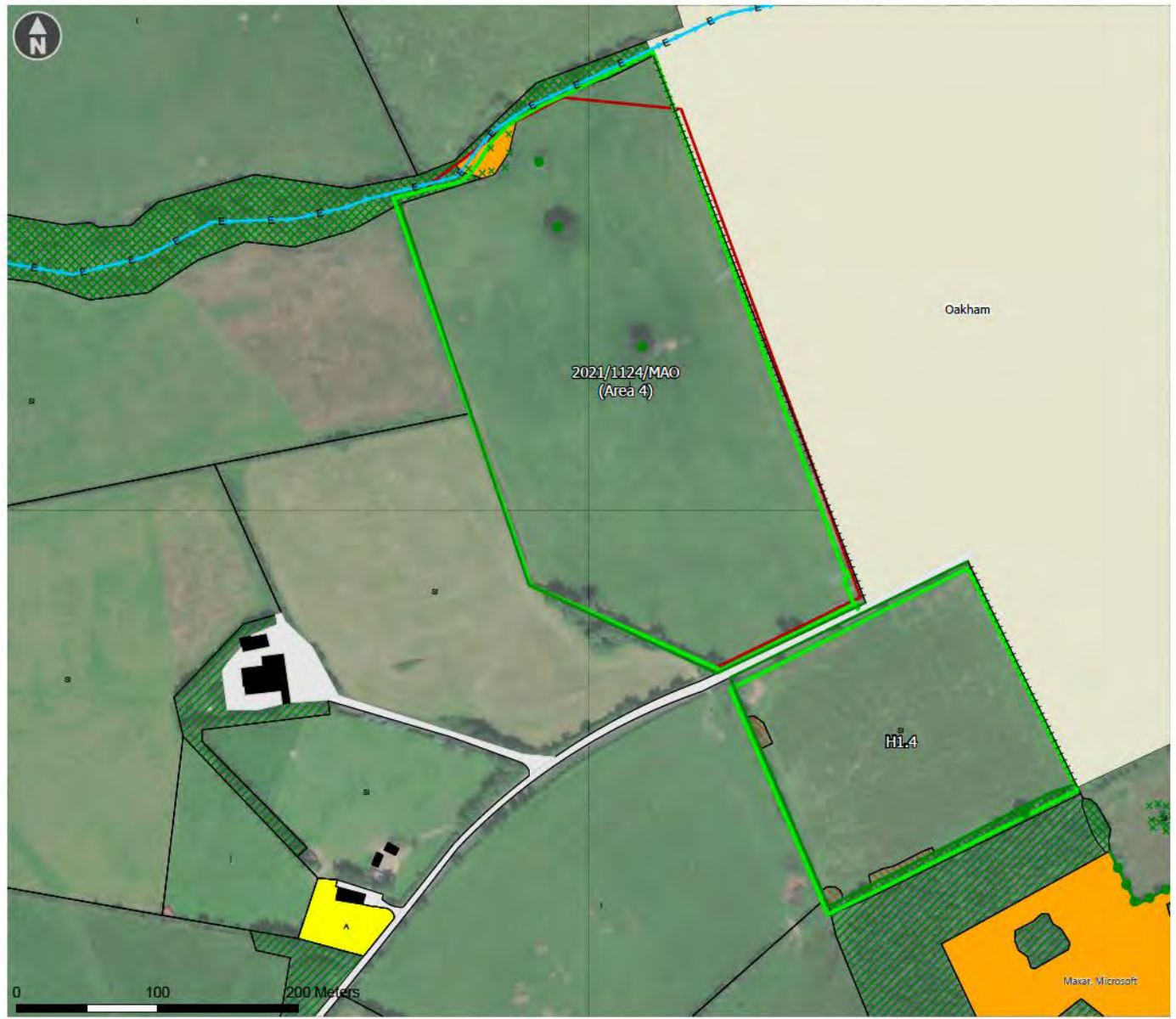
2.4.2 Survey Recommendations

Both parcels of land within Survey Area 4 are considered suitable for allocation, providing sufficient ecological survey information is made available at the planning application stage and proposals are carefully designed to take account of the valuable habitats in the north. All field boundaries and individual trees/ woodland edges should be retained, protected from accidental damage during construction works and enhanced to provide BNG and to maintain wildlife corridors to allow continued movement of species into/ out of the site.

The following surveys are recommended:

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys of suitable habitat, particularly close to the scrub area, ruderal habitat and hedgerows. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).
- An National Vegetation Classification (NVC) survey of the neutral grassland habitat should be undertaken by a competent botanist (at least FISC level 4) and a Management and Monitoring Plan produced for agreement with Rutland Council.

Figure 5: Survey Area 4



- Towns Survey Areas
- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- B2.1 - Neutral grassland - unimproved
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J5.1 - Hardstanding
- J5.2 - Built up areas
- A3.1 - Broadleaved Parkland/scattered trees
- E G2.1 - Running water - eutrophic
- J2.1.2 - Intact hedge - species-poor
- + J2.4 - Fence
- x A2.2 - Scattered scrub
- A3.1 - Broadleaved tree

CLIENT	Rutland County Council
PROJECT	J00064 - Biodiversity Assessment (including Phase 1 Habitat Survey)
TITLE	Oakham & Barleythorpe - Survey Area 4
SCALE @ A3	1:2,500
CREATED BY	CA
CHECKED BY	KN
REFERENCE	J00064-O4-4
ISSUE/REVISION	
DATE	24/5/2023

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2.5 SURVEY AREA 5

Survey Area 5 is located to the northeast of Oakham and comprises three areas of arable land. The Wilson Fields amenity grassland is immediately adjacent to the western boundary, with residential properties situated to the north-west and east. A watercourse flows along the northern and eastern Survey Area boundary, with individual broadleaved trees present along the banks. Boundary intact species-poor hedgerows are present around the Survey Area, with an area of broadleaved plantation woodland along the south-western boundary, alongside the A606. Burley Road runs alongside the south-eastern boundary.

The Survey Area is subject to a current outline planning application (reference 2022/0336/MAO) for the erection of up to 213 dwellings, amenity space, allotments including parking and areas for outdoor play, landscaping and all associated infrastructure, which was approved on 16th March 2023.

Overall, the Survey Area is considered to be of low biodiversity value, as the arable habitat is farmed to the field boundaries, with little evidence of arable margins that provide suitable habitat for wildlife. The exception to this is the watercourse which flows west to east along the northern site boundary, which has records of water vole and several individual trees with suitability for roosting bats. These habitats should be protected from the potential effects of development by establishing a dark buffer strip, which will contribute to BNG.

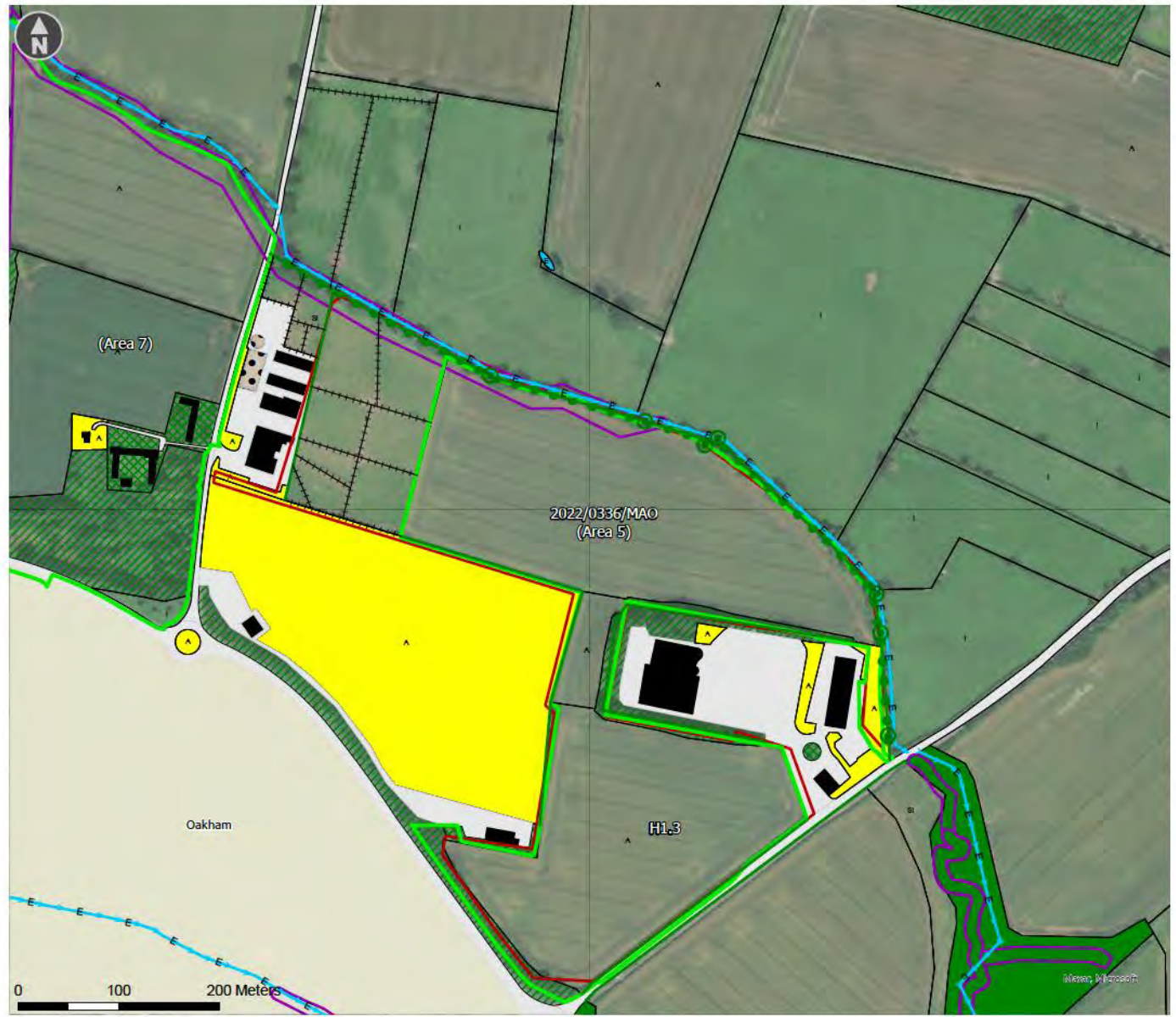
2.5.1 Site Constraints

The watercourse is the main ecological constraint in this Survey Area, as it has records of water vole along the upper section (see Figure 6) and several trees were assessed as having suitability for roosting bats. The watercourse should be protected from the potential impacts of development, (including accidental pollution, degradation of the habitats present and disturbance to legally protected water voles), through the establishment of an appropriate buffer strip of at least 8m in width. This should be appropriately enhanced and managed to provide biodiversity net gain as a result of the development.

2.5.2 Survey Recommendations

This Survey Area has recently been granted planning permission, and so further ecological surveys have not been recommended.

Figure 6: Survey Area 5



- Towns Survey Areas
- Village Survey Areas
- A1.1.1 - Broadleaved woodland - semi-natural
- ▨ A1.1.2 - Broadleaved woodland - plantation
- ▨ A1.3.2 - Mixed woodland - plantation
- ▨ A2.1 - Scrub - dense/continuous
- ▨ B4 - Improved grassland
- ▨ B6 - Poor semi-improved grassland
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5.1 - Hardstanding
- J5.2 - Built up areas
- A3.1 - Broadleaved Parkland/scattered trees
- G2.1 - Running water - eutrophic
- J2.1.2 - Intact hedge - species-poor
- J2.4 - Fence
- Tree with bat roost potential
- LWS - Potential / Historic
- Water Vole

CLIENT	Rutland County Council		
PROJECT	J00064 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Oakham & Barleythorpe - Survey Area 5		
SCALE @ A3	CREATED BY	CHECKED BY	
1:3,500	CA	KN	
REFERENCE	ISSUE/REVISION	DATE	
J00064-04-5		24/5/2023	

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2.6 SURVEY AREA 6

Survey Area 6 is located in the north of Oakham, just south of the A606. It comprises existing brownfield areas (including buildings and hard standing), as well as improved grassland, poor semi-improved grassland and small stands of dense scrub. There is a network of small roads/ paths across the Area.

Overall, the habitats within Survey Area 6 are considered to be of low biodiversity value.

2.6.1 Site Constraints

Figure 10 shows this Survey Area to be located wholly within an Amber Risk Zone for GCN and Figure 7 shows the ponds present in the local area which have records of this species. The closest is 'Pond, Burley Way, Oaksham' LWS. However, two of these ponds are situated across the main A606 road, which is considered to be a barrier to the movement of GCN to the Survey Area. There is very little habitat present within the boundary of Survey Area 6 for this species, as the grassland is maintained with a short sward height offering no vegetation cover. The areas of dense scrub may be suitable, although these are isolated and not part of any wildlife corridors to/from the ponds.

Figure 11 shows part of the Survey Area to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 6 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

The buildings present may be suitable for roosting bats.

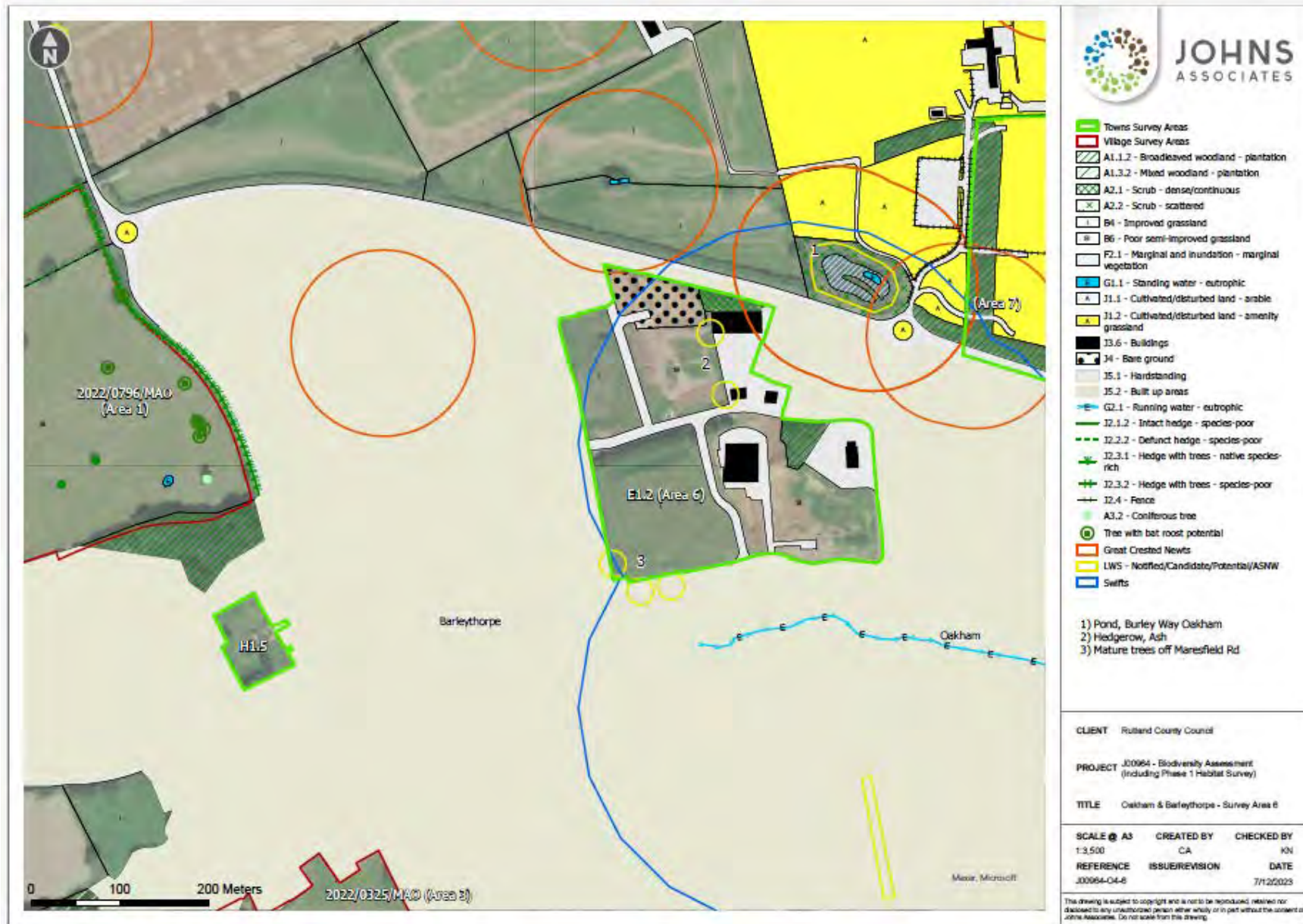
Two LWSs are present within the Survey Area boundary or immediately adjacent to it: 'Hedgerow, Ash LWS' is situated in the centre of the Survey Area and comprises two mature ash trees, whilst the 'Mature Trees of Maresfield Road LWS' designation covers three trees adjacent to the south-west. These should be retained and protected during construction using appropriate fencing.

2.6.2 Survey Recommendations

Survey Area 6 is considered suitable for allocation, providing the mature trees that form part of non-statutory LWS designations are retained and protected during construction and adequate surveys for GCN (with a subsequent Method Statement to ensure individuals are protected during site preparation works) are carried out.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).

Figure 7: Survey Area 6



2.7 SURVEY AREA 7

Survey Area 7 is a large area of land located to the north of the main settlement of Oakham (see Figure 8). The main habitats present are amenity grassland (in the west) and arable land (in the east). These areas are bisected by a railway line. Additional Phase 1 habitat types include broadleaved plantation woodland, standing water, dense scrub and buildings.

There are two potential/ historic/ notified non-statutory LWS within the boundary of Survey Area 7: Oakham Canal LWS, which is situated within an area of woodland in the south-east of the Area and has records of water vole; and Hedgerow Ash, located in an arable field near the railway line (see Figure 8).

A watercourse runs along the north-eastern site boundary, which has records of water vole.

The grassland habitats present within the boundary of Survey Area 7 are considered to be of low biodiversity value. However, the woodland, scrub and standing water are of greater value and should ideally be retained, protected, enhanced and managed in order to achieve sufficient BNG for any development at this location once this becomes mandatory in November 2023, particularly as legally protected water voles are present on site. This will also have the effect of strengthening valuable wildlife corridors in this part of Oakham.

2.7.1 Site Constraints

A pond supporting a population of GCN is present to the north-west of the Survey Area, approximately 80m from the Area boundary. Habitats present on-site may provide suitable terrestrial habitat for this species, particularly the area of woodland in the west, close to this off-site pond.

Oakham Canal, the watercourse adjacent to the north-eastern boundary, LWS trees and the areas of woodland should be retained and incorporated into the masterplan for this Survey Area. These areas should be protected during construction from accidental pollution and damage from plant/ machinery movements through the use of Heras/ tree protection fencing and appropriate signage. Habitat enhancement would deliver BNG for any development at this site, and the establishment of appropriate buffers around these more ecologically valuable habitats should be considered.

2.7.2 Survey Recommendations

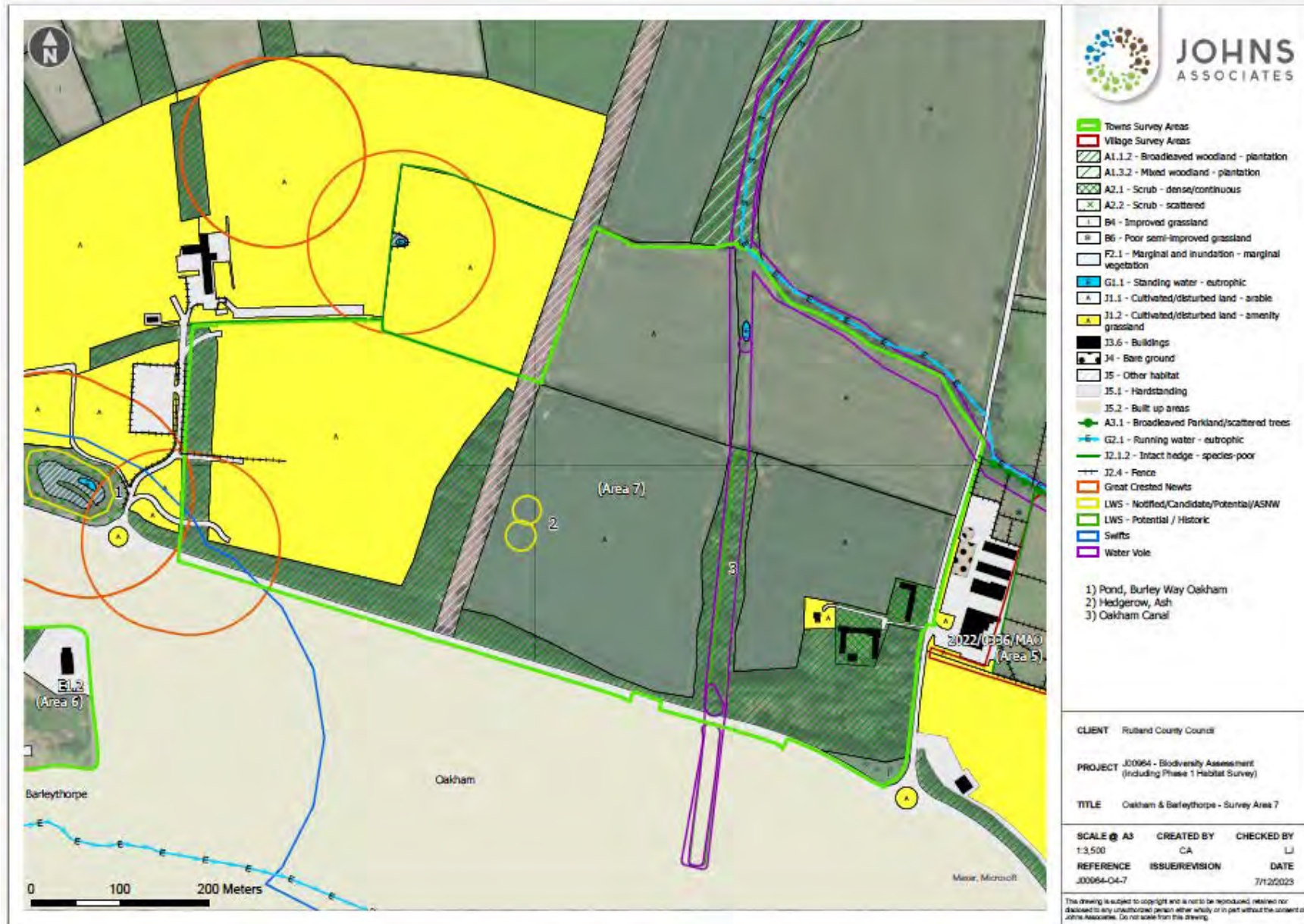
The grassland areas of Survey Area 7 are considered suitable for allocation in the new local plan. However, areas of more valuable semi-natural habitat should be retained, protected and enhanced to ensure important wildlife corridors are preserved given the location of this Survey Area in the north of Oakham.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys of suitable habitat, particularly close to the woodland and scrub areas. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians (including GCN) during site clearance/ preparation works. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-

commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).

- All existing building within Survey Area 7 should be subject to Potential Roost Assessments (PRAs) to confirm suitability for use by bats.
- Water vole survey.

Figure 8: Survey Area 7



2.8 SURVEY AREA 8

Survey Area 8 is a large area located to the south of Oakham. It comprises 11 arable fields, three areas of improved grassland and a small, central area of poor semi-improved grassland. Additional habitats present include amenity grassland, dense scrub, existing buildings, tall ruderal vegetation, native species rich hedgerows with trees and individual broadleaved trees. Brooke Cover East LWS is located adjacent to part of the western site boundary, and there is a small watercourse adjacent to the southern boundary towards the eastern extent of the Survey Area. Brooke Road forms the northern boundary to this Area.

Overall, the habitats within Survey Area 8 are considered to be of low biodiversity value, as they are predominantly arable and improved grassland. The area of scrub, native species rich boundary hedgerows with trees and adjacent habitats (Brook Cover East and the watercourse) offer more suitable areas for wildlife including nesting birds, reptiles, small mammals, bats and invertebrates.

2.8.1 Site Constraints

Part of the eastern area of Survey Area 8 falls within an Amber Risk Zone for GCN and the area of dense scrub habitat may support this species.

Buildings and mature trees on site may support roosting bats – Figure 9 shows individual trees with suitable features.

Boundary habitats should be retained, protected and enhanced as part of any proposals for this Area, which would help to secure the necessary 10% BNG. The off-site woodland and watercourse should be protected from the effects of development, whether this is from lighting impacts, accidental pollution or damage to trees from soil compaction. Heras or tree protection fencing should be used as appropriate, with signage where necessary.

2.8.2 Survey Recommendations

Survey Area 8 is considered suitable for allocation, providing the boundary habitats are retained and enhanced to contribute to the wider network of green corridors, especially as this Area is located to the south of Oakham, close to other areas of open land and semi-natural habitats.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge and hedgerow boundaries).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys of suitable habitat, particularly close to the off-site woodland, hedgerows, tall ruderal vegetation and scrub. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians (including GCN) during site clearance/ preparation works. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Vegetation clearance should take place outside of the bird breeding season (mid-February – August inclusive).
- All existing building within Survey Area 8 should be subject to Potential Roost Assessments (PRAs) to confirm suitability for use by bats.

Figure 9: Survey Area 8

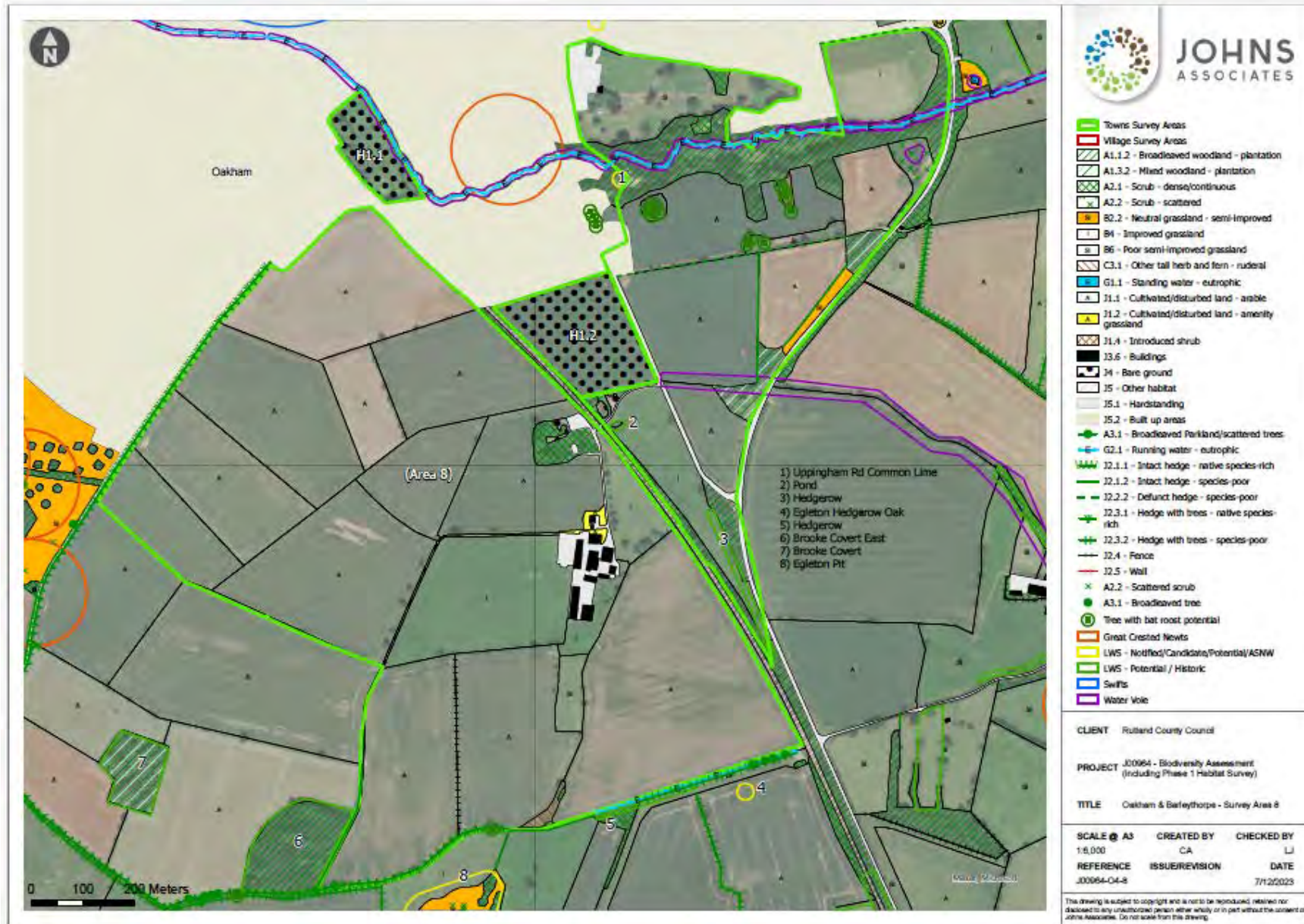


Figure 10: Oakham and Barleythorpe Great Crested Newt Risk Zones

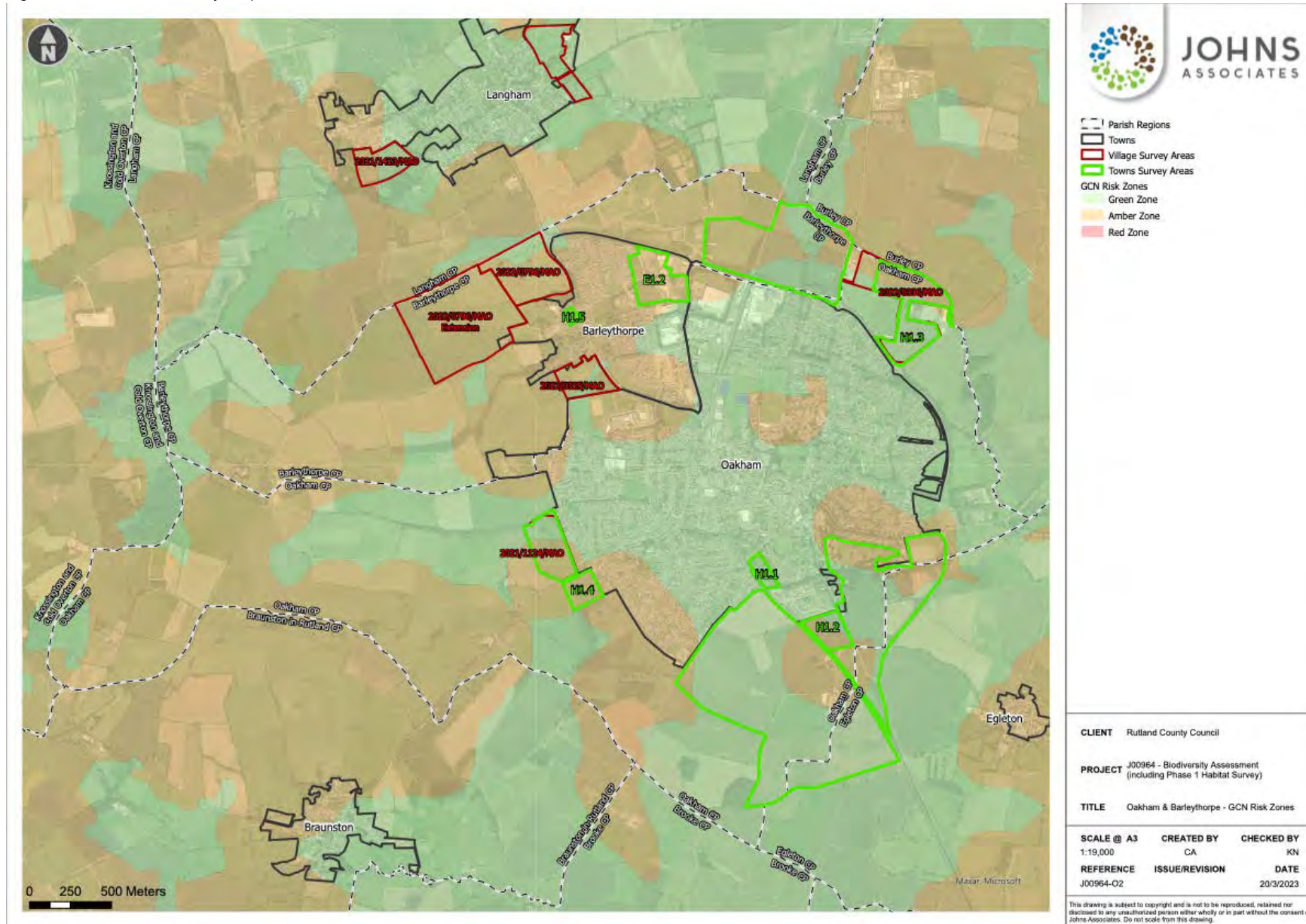
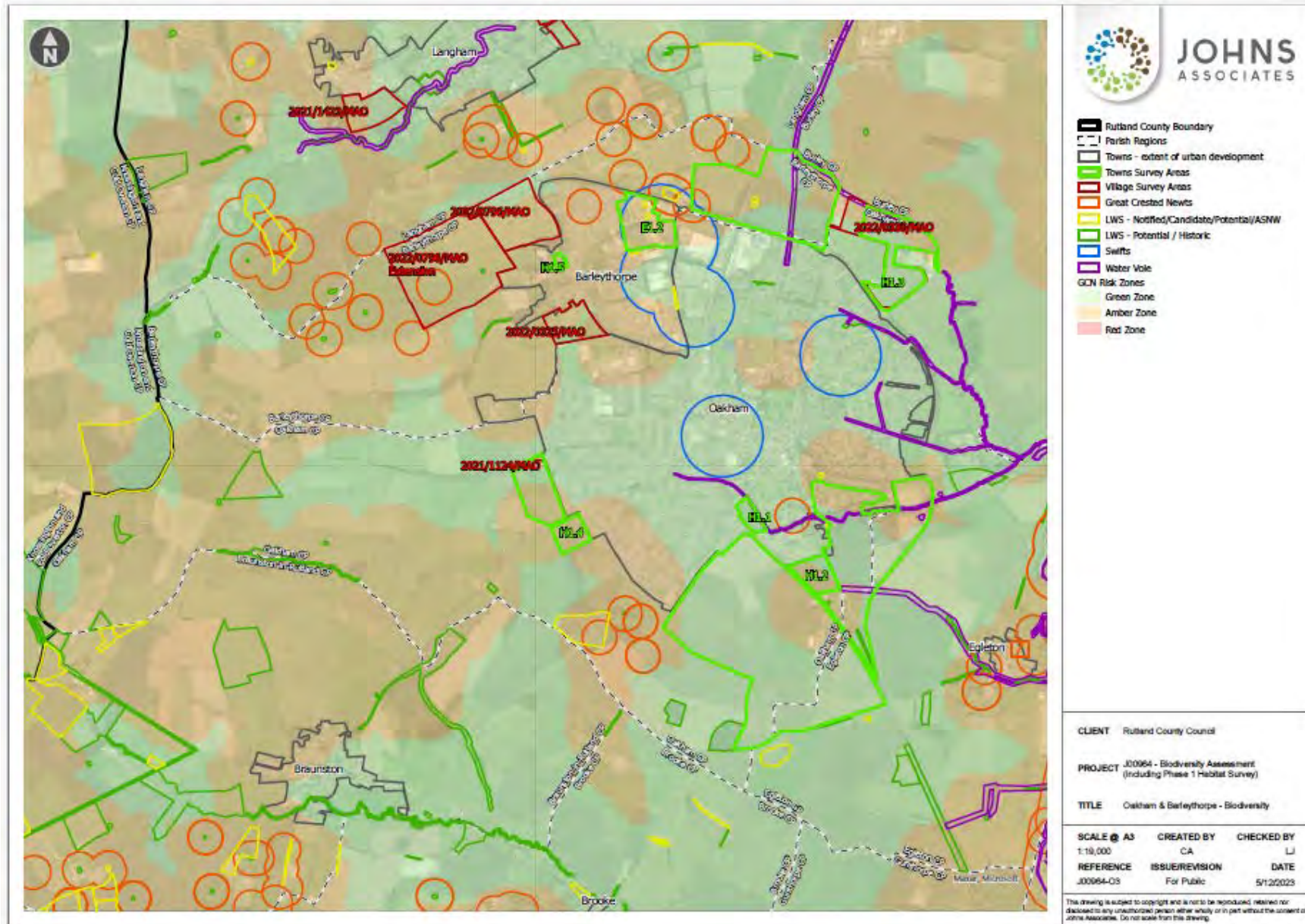


Figure 101: Oakham and Barleythorpe Biodiversity Map



RUTLAND COUNTY COUNCIL

Uppingham Parish – Biodiversity Summary Report

1 INTRODUCTION

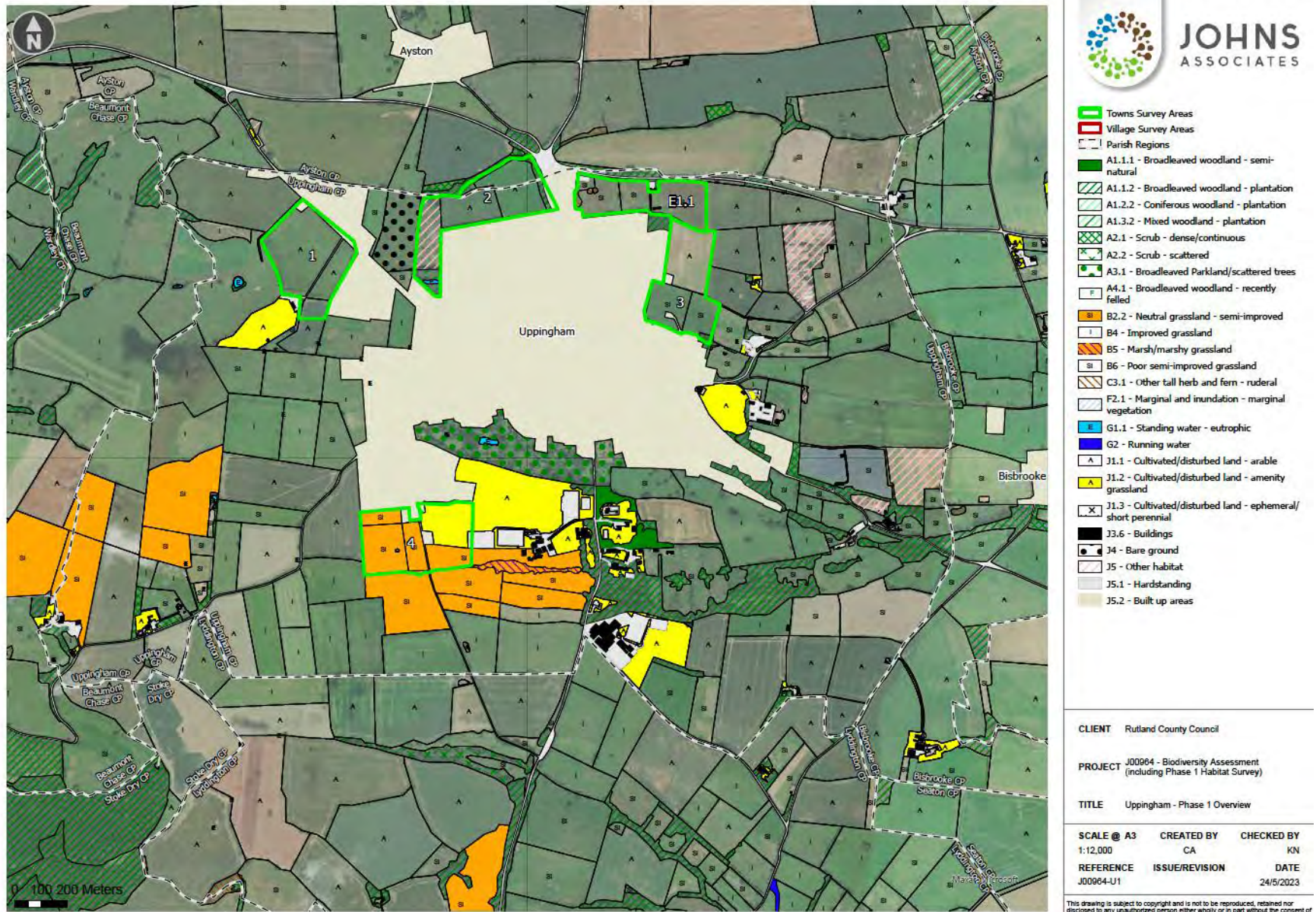
Uppingham is one of the two largest towns in Rutland, located in the south of the County between Rutland Water and Eye Brook Reservoir. Figure 1 shows the habitat types identified within the boundary of Uppingham. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within Uppingham parish boundary.

The five most frequent habitats within Uppingham were: arable, improved grassland, built up areas (extent of the developed area of Uppingham), poor semi-improved grassland and neutral semi-improved grassland. These five habitat types account for approximately 85% of the habitats within the Uppingham parish boundary (see Table 1).

Table 1: Uppingham Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Uppingham
J1.1	Cultivated/ disturbed land – arable	136.41	23.06
J5.2	Built up areas	121.71	20.58
B4	Improved grassland	106.53	18.01
B6	Poor semi-improved grassland	87.92	14.86
B2.2	Neutral grassland – semi-improved	39.90	6.75
J1.2	Cultivated/ disturbed land – amenity grassland	25.66	4.34
A1.1.2	Broadleaved woodland - plantation	21.78	3.68
J5.1	Hardstanding	13.99	2.37
J5	Other habitat	11.01	1.86
A3.1	Broadleaved parkland/ scattered trees	10.03	1.70
J4	Bare ground	5.11	0.86
A2.1	Scrub - dense/ continuous	3.88	0.66
J3.6	Buildings	3.11	0.53
A1.1.1	Broadleaved woodland – semi-natural	2.26	0.38
B5	Marsh/ marshy grassland	1.00	0.17
A4.1	Broadleaved woodland – recently felled	0.64	0.11
G1.1	Standing water - eutrophic	0.27	0.05
C3.1	Other tall herb and fern - ruderal	0.22	0.04
F2.1	Marginal and inundation – marginal vegetation	0.02	0.00
Total		591.46	100.00

Figure 1: Overview of Habitats within Uppingham Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Uppingham to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (shown as green boundaries). Figure 7 shows the GCN Risk Zones within the Uppingham settlement area, whilst Figure 8 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 was located to the north-west of Uppingham, off Leicester Road. Located on private land, there was no public rights of way access, therefore habitat assessments were undertaken from the roadside and using binoculars where possible. Survey Area 1 (shown in Figure 2) is made up of predominantly arable habitat with a track running through the centre.

Overall, the habitats within this area are very poor in biodiversity terms: the arable land is intensively managed up to the hedgerow edges leaving no buffer strips of grassland or arable seed mixes for farmland birds. The linear habitats (hedgerows) within this Survey Area offer the greatest importance for biodiversity. These are likely to support nesting birds, commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.1.1 Site Constraints

A candidate Local Wildlife Site (LWS) is located to the east of Survey Area 1, comprising four mature ash trees south of Leicester Road with girths of between 3.14m and 3.77m. Only two of these trees are located on the eastern Survey Area boundary. These trees, given their designation, should be retained and protected if the Survey Area was to be developed. The trees should be assessed for potential bat roost features and their root zones protected during construction.

Survey Area 1 is also partially located within an Amber Zone for great crested newt (GCN), as shown in Figure 2. There are a total of 10 ponds within 500m of the Survey Area boundary - six have had positive GCN license return data and a further two have been granted GCN EPS licenses. These ponds are located east of the Survey Area and the information relates to a historic planning application along Leicester Road - 2016/0336/MAJ. A GCN survey report was prepared for this planning application by Hankinson Duckett Associates in May 2015. Four ponds within the area were found to contain GCN, and a GCN license was applied for to trap and translocate newts from this area. As a result of this development no specific GCN ponds or foraging habitat was created. The only ponds were SUDS ponds located in the middle of the development, which are heavily managed and provide no shelter or foraging opportunities for GCN. The SUDS ponds are and isolated by roads and residential properties making these pond unlikely to support a GCN breeding population.

A further pond is situated to the west of Survey Area 1 which has previously had records of GCN. However, this pond is not shown on the GCN Risk Zone map. If included, the majority of Survey Area 1 would fall within the Amber Risk Zone for this European Protected Species.

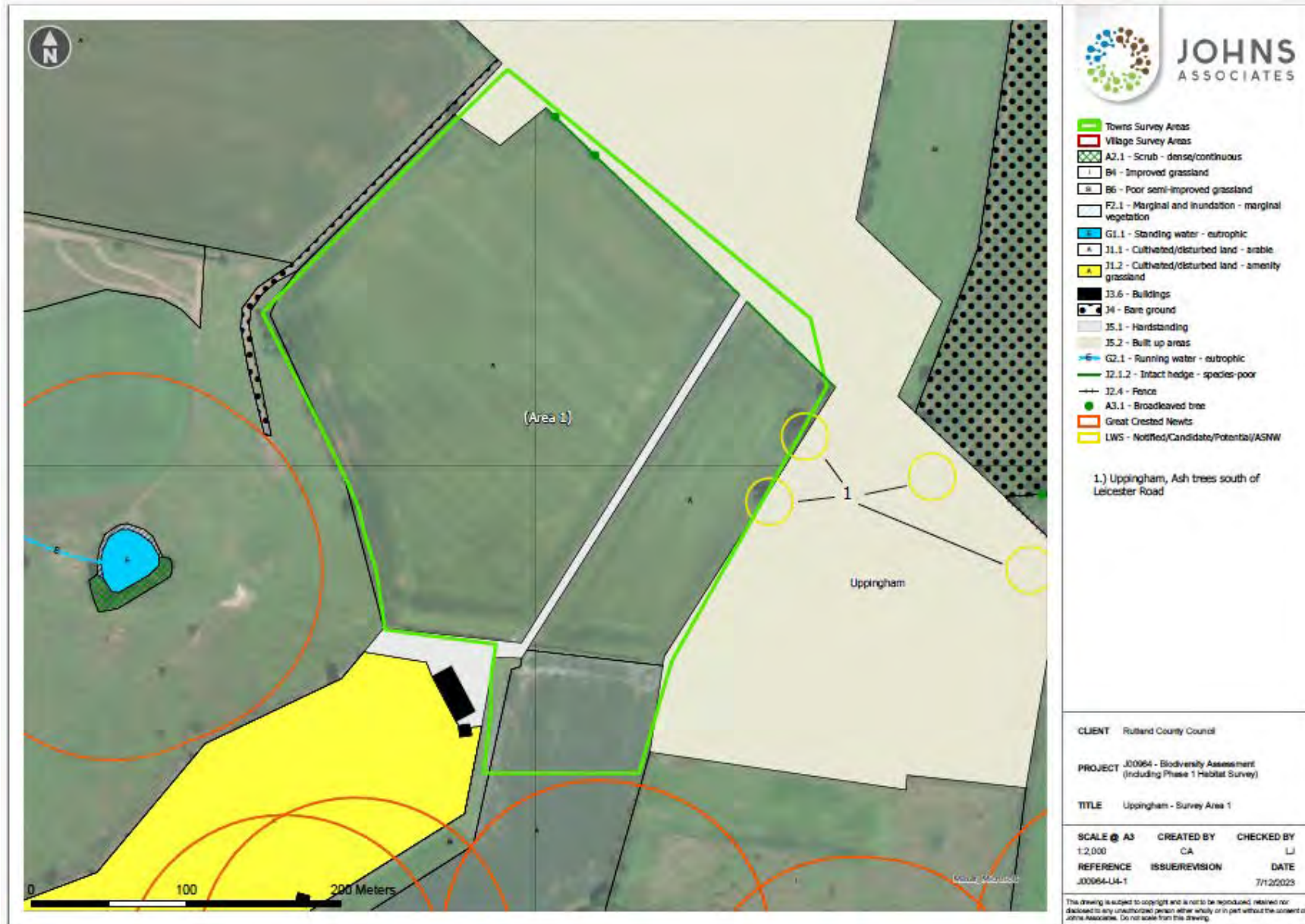
It is recommended that the habitats around these ponds are enhanced as part of any planning permission, to create a mosaic of tussocky, species-rich grassland interspersed with patches of scrub and trees. Additional pond creation should also be carried out as part of any planning proposal, with a suitable mix of aquatic flora included to provide suitable egg laying substrate. At least some wildlife corridors should be created around this Survey Area to provide safe movement of amphibians between ponds and to provide additional foraging and hibernation resources.

2.1.2 Survey Recommendations

- Bat activity surveys.

- Ground level tree assessments (GLTA) of all standard trees within hedgerows. Further surveys maybe required if Potential Roost Features (PRF's) are found within the trees. This could include emergence surveys and/or tree climbing surveys.
- GCN population surveys of all ponds within 500m of Survey Area 1.

Figure 2: Uppingham Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located to the north of Uppingham off the A47 to the west of Ayston Road. This Survey Area is comprised several distinct land parcels. The northern area is dominated by arable land that is intensively managed with no arable field margins. There is a broadleaved woodland shelter belt present along the northern and eastern boundaries. To the west of the Survey Area there is a large area of land that is currently being used as allotments and directly adjacent to this is a triangular area that is a historic LWS. At the time of survey this area of land was Heras fenced off and had recently been cleared. Many trees had been felled and large areas of what was assumed to be scrub and tall ruderal habitats had been completely removed leaving large areas of bare ground. A pond was still visible in the centre of this area.

Overall, the arable land within Survey Area 2 was of limited ecological value as it was intensively managed up to the hedgerow boundaries leaving no buffer strips of grassland or arable seed mixes for farmland birds. The woodland boundaries, allotment area and LWS are of higher ecological value and are likely to support nesting birds, commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates. Figure 3 shows the location of Survey Area 2 and the habitats recorded during the field survey.

2.2.1 Site Constraints

The southern section of this Survey Area is currently classified as a historic LWS (last thought to have been surveyed between 1980-1990). It includes a pond and was previously recorded as a grassland paddock. As this part of Survey Area 2 was inaccessible at the time of survey, it is unknown whether it still has any ecological value.

A recent planning application nearby on Leicester Road (planning application reference - 2019/0524/OUT) included a GCN survey of the area, although access to the pond located in the LWS was not granted. However, the survey concluded that there was a medium-sized population of GCN located to the south-west of the application site with a peak count of 11 individual newts from the three ponds that had confirmed GCN.

Records Centre data shows that GCN have previously been recorded within the LWS pond situated within Survey Area 2. The majority of the western portion of Survey Area 2 is located within an Amber Risk Zone for GCN. If this Area is to be developed, then GCN surveys will be required to confirm the current population size and the distribution of suitable terrestrial habitat.

It is considered that any further development in this area of Uppingham could sever a fundamental link between the potential GCN population within Survey Area 2 and the metapopulation located to the south-west of this site. Consideration should be given to habitat enhancement within the site to support the local GCN population. Additional pond creation should also be carried out where possible in strategic locations and be suitably planted. Wildlife corridors should be created around Survey Area 2 to provide safe movement of GCN between sites and to provide additional foraging and hibernation resources.

The habitat mosaics present throughout Survey Area 2 provide good foraging habitat for a range of bat species, and there are a number of mature trees within the hedgerows and in the broadleaved woodland to the north of the Survey Area which could support roosting bats. There is good connectivity to other areas of suitable habitat within the wider local area from the woodland and hedgerow habitats within Survey Area 2, particularly to the west, connecting the Survey Area to Wardley Wood, which is located close to the River Eye Brook. Planning applications for Survey Area 2 should include adequate bat survey information and mitigation/ avoidance measures to safeguard the local bat population.

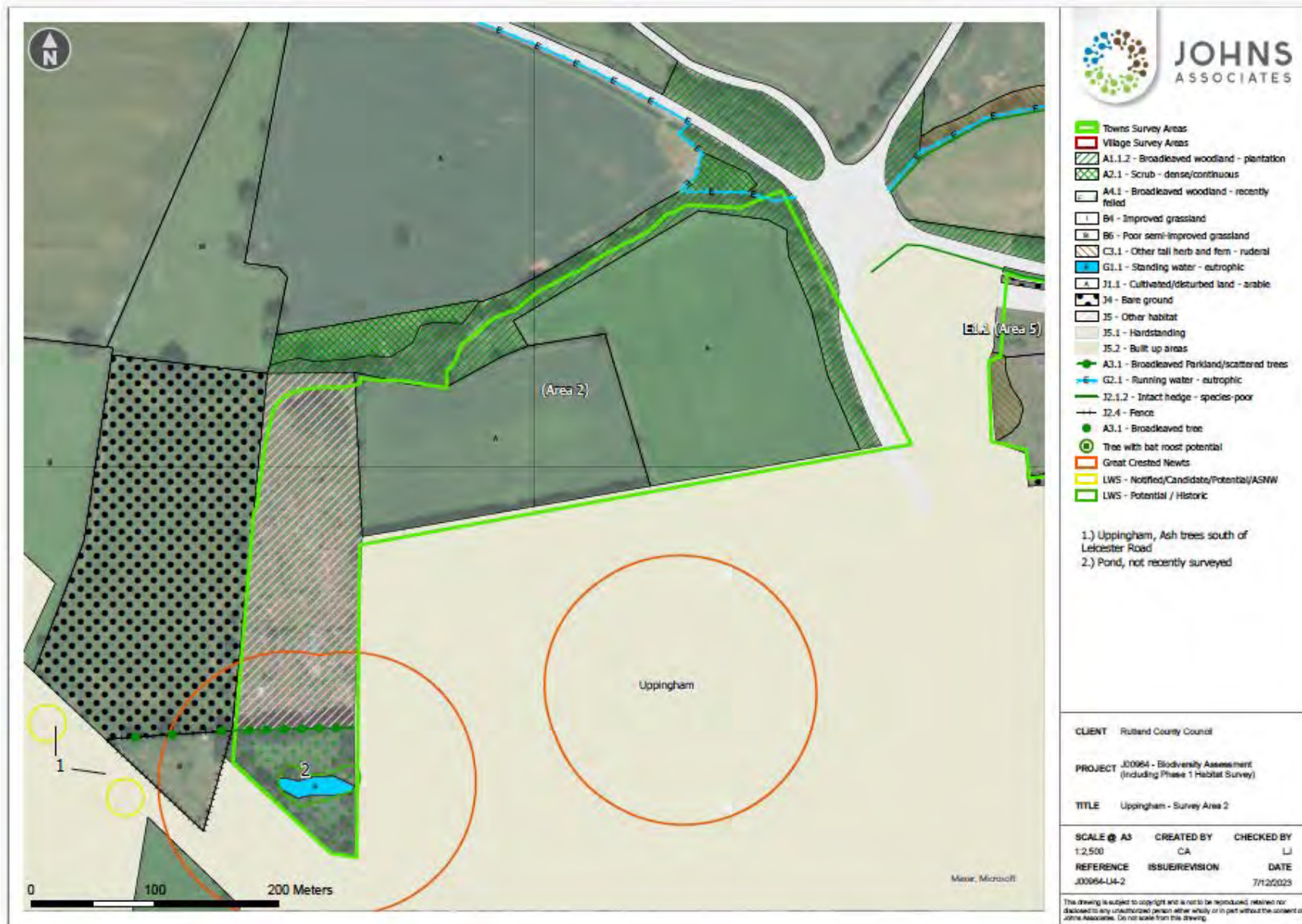
Although reptile surveys for nearby planning applications did not record any reptile species it is considered that the habitats to the west of the Survey Area, the allotments and the LWS, offer suitable foraging habitat for common reptile species such as grass snake, common lizard and slow worm. Reptile surveys should be carried out as part of any planning application for the development of Survey Area 2.

2.2.2 Survey Recommendations

If Survey Area 2 is to be allocated/ developed it would be worth considering retaining the area of the historic LWS and allotments to help provide habitat for wildlife and maintain a wildlife corridor through this area of Uppingham. The arable fields to the north of the Site are considered to be a good location ecologically for new housing development.

- Update survey of the LWS located towards the south of Survey Area 2 to confirm its current biodiversity value.
- GCN population survey of the pond within the LWS and an update GCN population survey of all ponds within 500m of the Survey Area.
- Bat activity surveys.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area. Further surveys may be required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- Reptile surveys, with particular focus on the good reptile habitat present to the west of the Survey Area in the allotments and the LWS.

Figure 3: Uppingham Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 is located to the east of Uppingham and comprises three fields which were not accessible at the time of survey as they were located on private land with no public rights of way access. Habitat assessments were carried out from aerial surveys and from neighbouring fields using binoculars where possible. Survey Area 3 is shown in Figure 4.

The topmost field is arable land that is intensively managed with no field margins present. The lower two fields are poor semi-improved grassland fields that at the time of survey were horse grazed. There is a small stream that flows west to east through the centre of these fields. In the south-east of the Survey Area is a small block of broad-leaved plantation woodland. All field boundaries are demarcated by hedgerows and scrub. The lower fields are partially covered by an historic LWS designation. The habitats present within the Survey Area are generally considered to be of low - moderate biodiversity value.

2.3.1 Site Constraints

The lower eastern field and top half of the lower western field is partially covered by a historic LWS designation. The LWS is detailed as 'Grasslands off Glaston Road' and was last surveyed between 1980-1990. No recent survey data is available, and it is therefore unknown whether the LWS still has any ecological value. However, the Site still holds the LWS designation. An update survey of the whole LWS to see if the Site still meets the selection criteria is recommended prior to any development being consented.

The ecological constraints are typically in the lower two fields, and it would be worth considering retaining these fields and enhancing them for the benefit of wildlife, (particularly the stream and associated riparian corridor), through mandatory BNG requirements. The arable field to the north is less ecologically constrained and is considered a good location for allocation for development in the Local Plan.

Although this Survey Area didn't appear suitable for reptiles, this may have been due to overgrazing of the fields. The habitats present would provide suitable foraging habitat for a range of common reptile species such as grass snake, common lizard and slow worm if grazing pressure were reduced. Reptile survey data would be required if Survey Area 3 is to be developed.

2.3.2 Survey Recommendations

If the site is to be developed/ allocated it would be worth considering retaining as much of the historic LWS as possible to provide an on-going habitat resource for wildlife. The arable field to the north of the Site is considered to be a good location ecologically for development.

- Update survey of the LWS part of which is located within the Survey Area to see if the LWS selection criteria are still met.
- Bat activity surveys.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be impacted by development. Further surveys maybe required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- Reptile surveys, with particular focus in the margins of the stream and in areas of longer grassland.

Figure 4: Uppingham Survey Area 3



- ▭ Towns Survey Areas
- ▭ Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5.1 - Hardstanding
- J5.2 - Built up areas
- G2.1 - Running water - eutrophic
- J2.1.2 - Intact hedge - species-poor
- ++ J2.4 - Fence
- - J2.5 - Wall
- x A2.2 - Scattered scrub
- LWS - Potential / Historic
- Swifts

1.) Grasslands off Glaston Rd

CLIENT	Rutland County Council	
PROJECT	J00064 - Biodiversity Assessment (including Phase 1 Habitat Survey)	
TITLE	Uppingham - Survey Area 3	
SCALE @ A3	CREATED BY	CHECKED BY
1:2,000	CA	KN
REFERENCE	ISSUE/REVISION	DATE
J00064-U4-3		24/5/2023

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2.4 SURVEY AREA 4

Survey Area 4 is located to the south of Uppingham off Leicester Road on private land, which was only partially accessible from public rights of way. Where direct access was not possible, habitat assessments were conducted from field observations, aerial interpretations and surveys from the roadside and using binoculars. Survey Area 4 is shown in Figure 5.

The Survey Area is predominantly semi-improved neutral grassland and amenity grassland which forms part of the Uppingham School playing fields. A stream flows through the south-eastern corner of the Survey Area and into a LWS.

2.4.1 Site Constraints

The fields in this area have been mapped as semi-improved neutral grassland; however, survey of these fields was completed after in drought conditions and additionally the fields had been over grazed. The species composition was considered to be fairly diverse, although these areas were precautionarily mapped as semi-improved neutral grassland because of the drought conditions and overgrazing. Without these pressures, the grassland may be more ecologically valuable.

The hedgerows along Gypsy Hollow Lane were species rich and should be retained.

Although Survey Area 4 is not covered by any ecological designation there is a historic LWS, 'grassland and marsh west of Redhill', located almost adjacent to the Area to the south-east. Originally designated for the mosaic of grassland and marsh habitats present, it is thought to have last been surveyed between 1980-1990. There is no current survey data for this LWS.

As part of the Phase 1 habitat survey, this LWS was surveyed as much as reasonably practicable from public rights of way. There still is a large area of marshy grassland within this area, which at the time of survey was a damp, wide, marshy hollow with willow stands throughout, veteran ash trees as well as common osier willow scrub developing. The marshy grassland was considered to be in overall poor condition, but this may be due to the impacts of the drought earlier in the year coupled with increased grazing pressure.

The stream running along the south-eastern boundary should be protected by a suitable ecological buffer zone to maintain its ecological value and as a corridor into the wider local area.

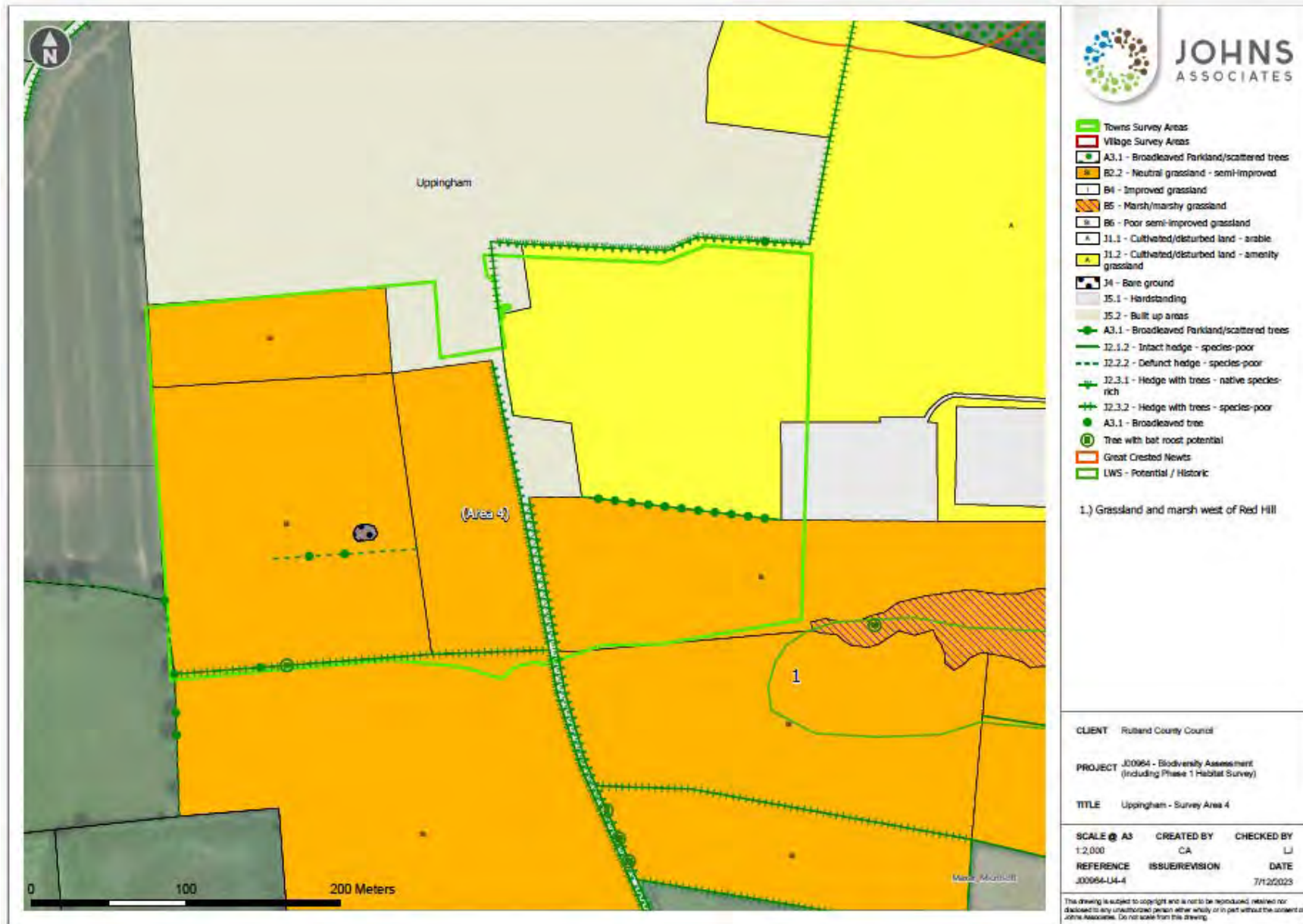
2.4.2 Survey Recommendations

If the Survey Area is to be allocated for development in the local plan it is recommended that the south-eastern area is retained and enhanced through mandatory BNG requirements to avoid potential impacts to the historic LWS. Consideration should also be given to enhancing the LWS for the benefit of wildlife. Overall, the Site is considered to be a good location ecologically for development, providing the recommendations relating to the south-eastern area are imposed.

- Update vegetation survey of the fields to confirm whether the grassland is semi-improved neutral grassland or poor semi-improved grassland, and to confirm its condition.
- Update survey of the LWS to see if the LWS selection criteria are still met and as a result what impact nearby development may have on this site.
- If the stream along the south-eastern boundary is to be affected by development, a MoRPH5 river assessment survey may be required and suitable mitigation (in the form of a buffer strip) proposed.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be impacted by development. Further surveys maybe required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.

- Bat activity surveys, to include the LWS to the south-east.
- Reptile surveys, with particular focus on the field margins and areas in close proximity to the LWS.

Figure 5: Uppingham Survey Area 4



2.5 SURVEY AREA E1.1

Survey Area E1.1 is located in the north of Uppingham and comprises three fields located to the south of the A4. Parts of the Survey Area were accessible via public rights of way, although the easterly field was inaccessible at the time of survey as it was located on private land with no public rights of way access. Habitat assessments of this area were carried out from neighbouring fields using binoculars where possible and from aerial surveys. Survey Area E1.1 is shown in Figure 6.

All three fields are comprised of poor semi-improved grassland that at the time of survey had no evidence of current management. To the south of the Survey Area is a small block of broad-leaved plantation woodland. The habitats present within the Survey Area are generally considered to be of low biodiversity value.

2.5.1 Site Constraints

Overall, the habitats present within this Survey Area are of low biodiversity value. However, the grassland appears to have limited management and as a result the sward grows to a longer height with forbs allowed to flower and set seed. The sward height was varied, but overall, fairly long and would offer good foraging habitat for reptiles.

From previous construction activities to the west there are large soil/rubble bunds present in the western field which have been colonised by tall ruderal vegetation. These bunds are considered suitable hibernation features for several reptile species and may also be used by basking reptiles.

The grassland could also offer potential nesting habitat for ground nesting birds such as skylark.

2.5.2 Survey Recommendations

If the Survey Area is to be allocated for development in the local plan a number of ecological surveys are recommended. Overall, the Survey Area is considered to be a good location ecologically for development, however, consideration should be given to retaining, protecting and enhancing existing hedgerows and trees.

- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be impacted by development. Further surveys maybe required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- Bat activity surveys.
- Reptile surveys, with particular focus around the bunds in the western most field.
- Skylark survey.

Figure 6: Town Survey Area E1.1

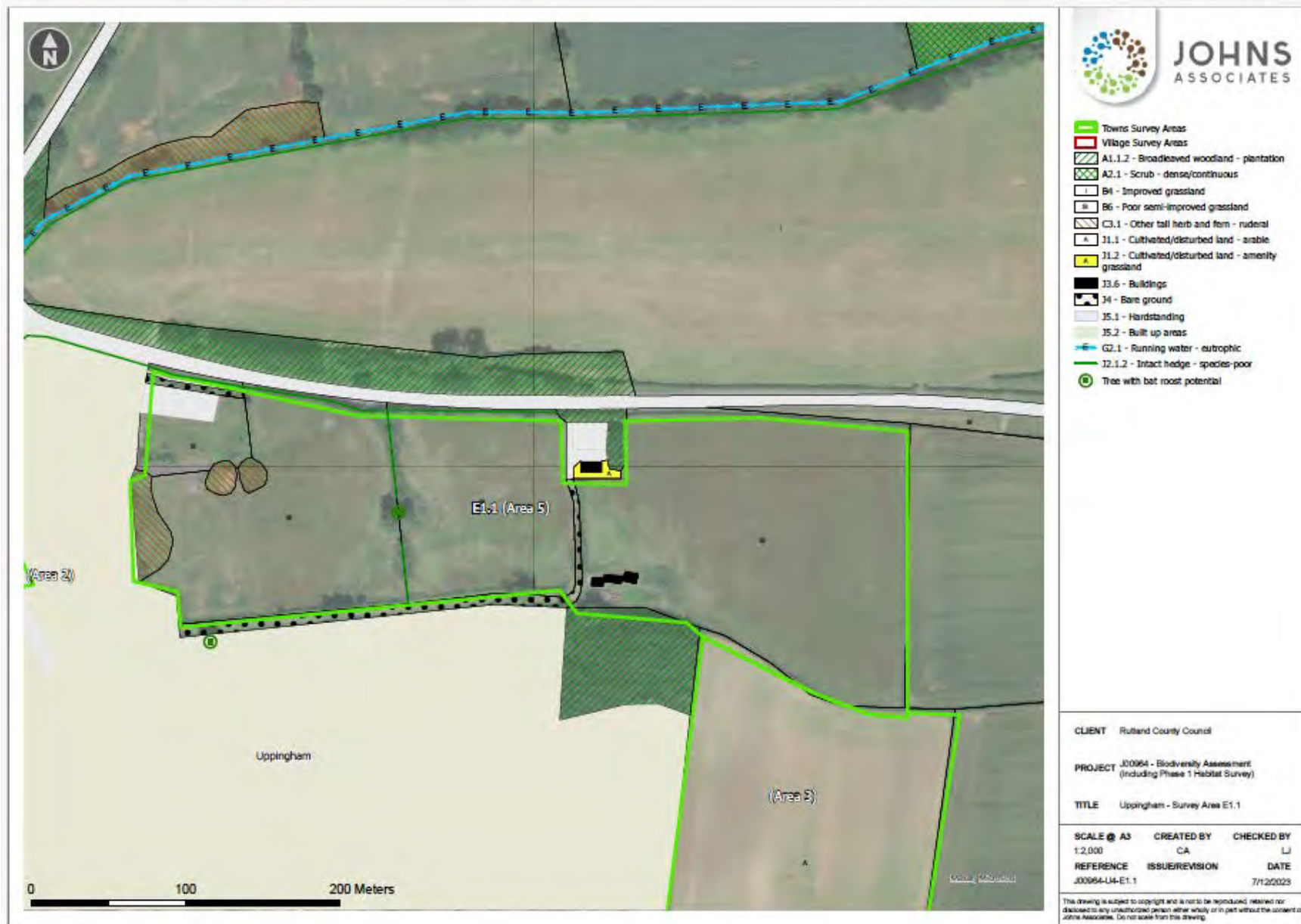


Figure 7: Uppingham Great Crested Newt Risk Zones

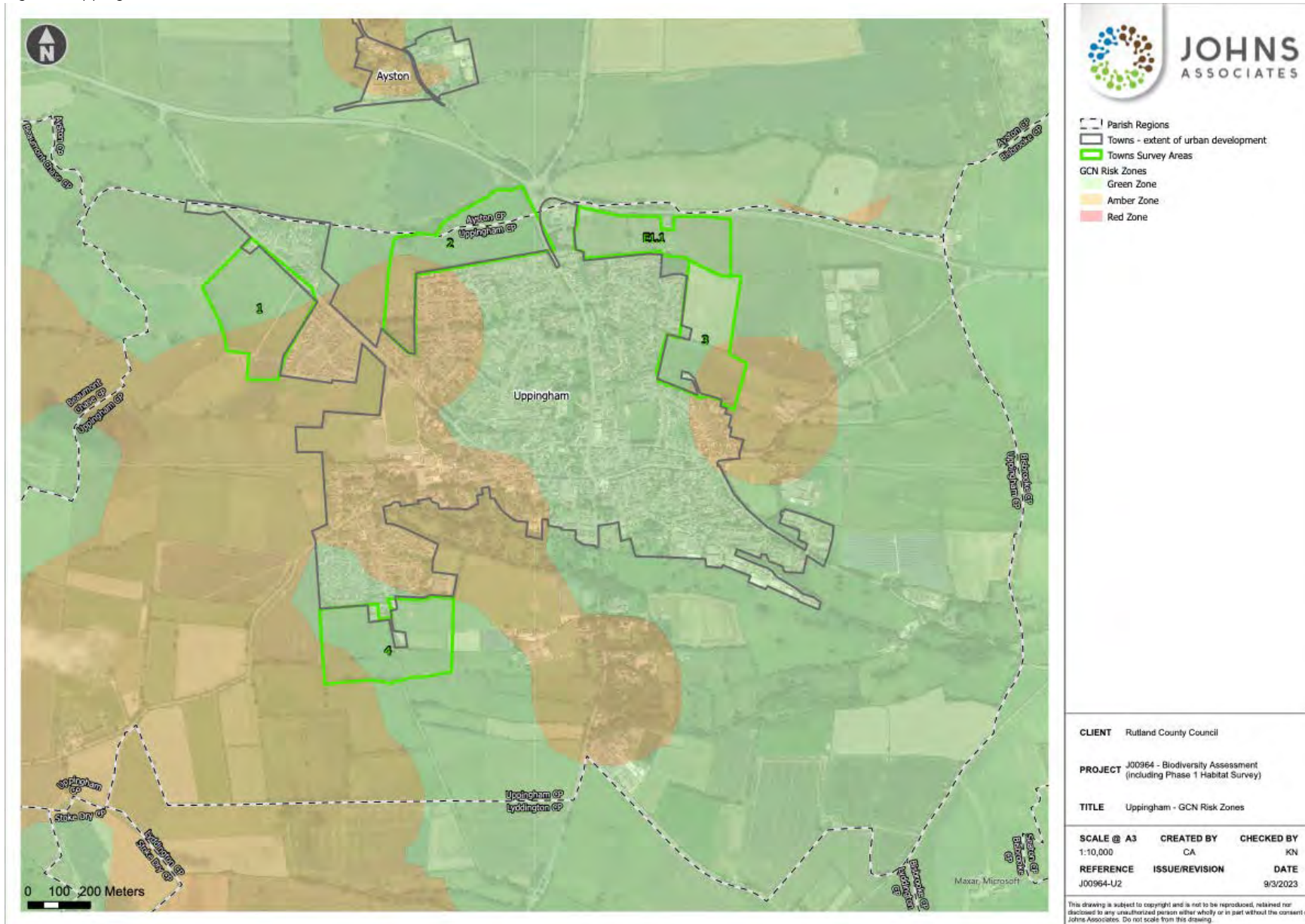
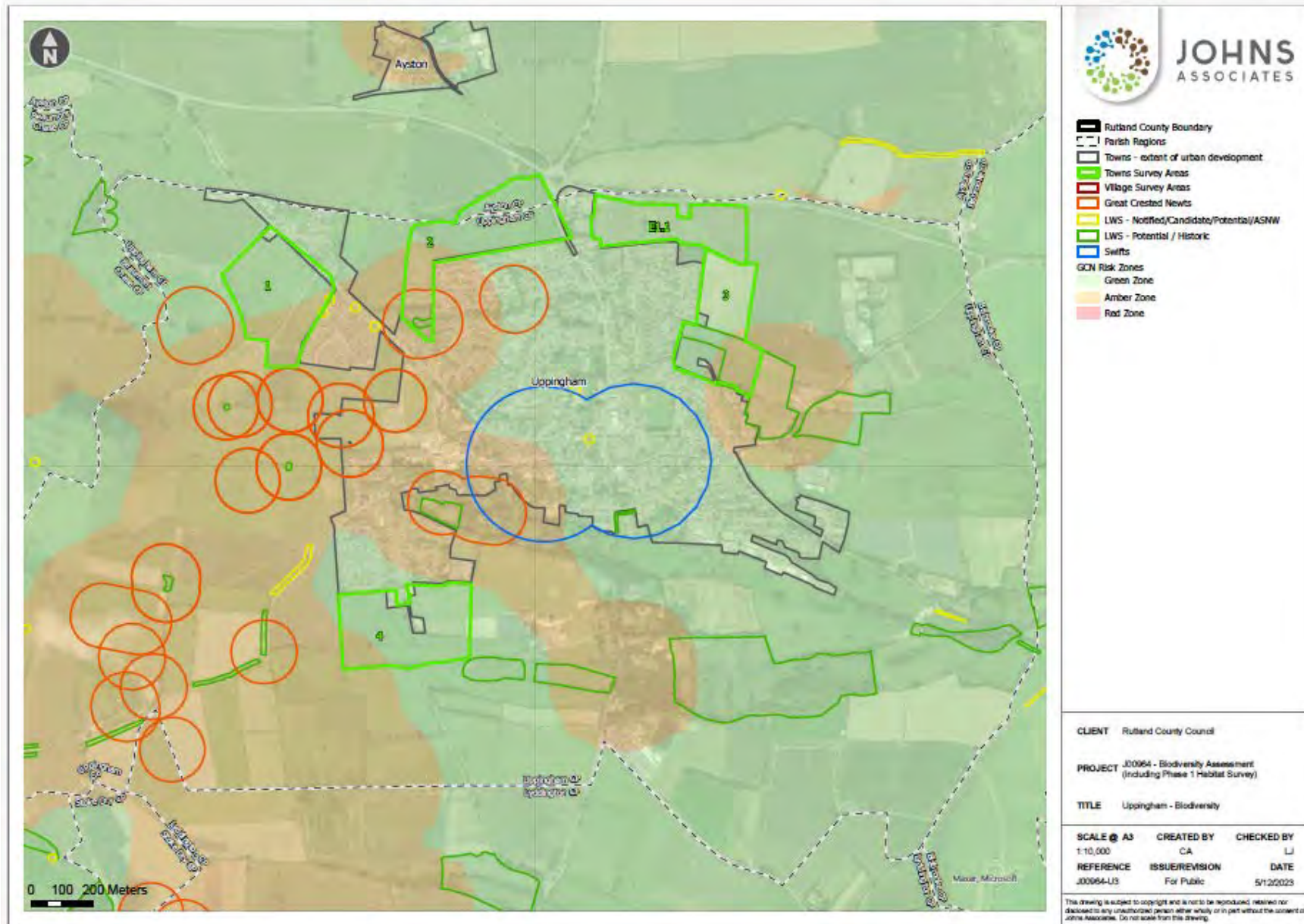


Figure 8: Uppingham Biodiversity Map



APPENDIX B – LARGER VILLAGES

B1	COTTESMORE
B2	EDITH WESTON
B3	EMPINGHAM
B4	GREAT CASTERTON
B5	GREETHAM
B6	KETTON
B7	LANGHAM
B8	MARKET OVERTON
B9	WHISSENDINE
B10	LITTLE CASTERTON/ STAMFORD NORTH
B11	NORTH LUFFENHAM
B12	EXTON
B13	SOUTH LUFFENHAM
B14	TINWELL
B15	BARROWDEN
B16	RYHALL
B17	MORCOTT
B18	GLASTON
B19	ESSENDINE
B20	WING
B21	CALDECOTT
B22	MANTON
B23	LYDDINGTON
B24	BELTON-IN-RUTLAND

RUTLAND COUNTY COUNCIL

J00964

Cottesmore Parish - Biodiversity Summary Report

1 INTRODUCTION

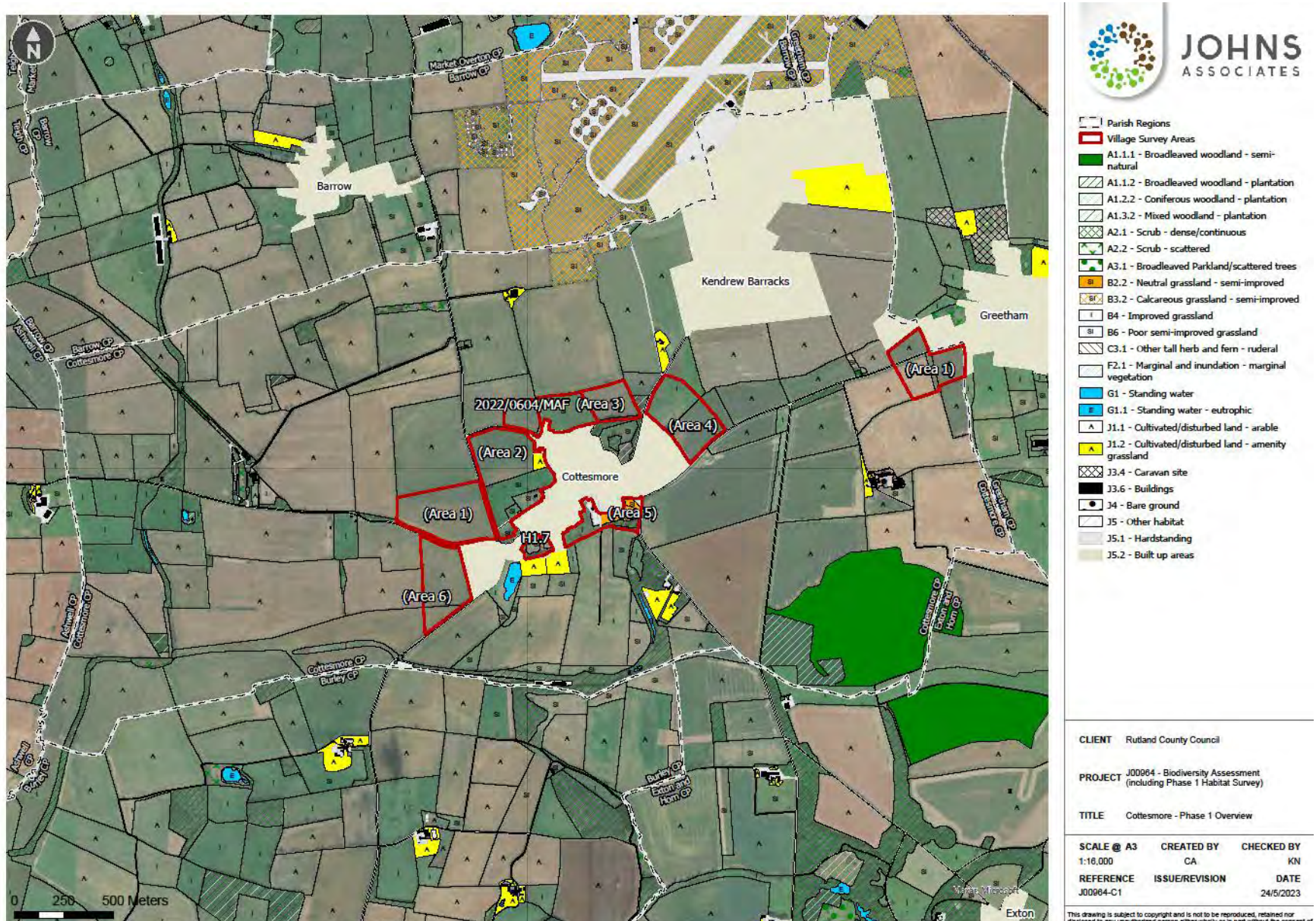
Cottesmore is a village and civil parish in Rutland, located in the north of the County to the north-east of Langham. Figure 1 shows the habitat types identified within the boundary of Cottesmore. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within the Cottesmore parish boundary.

The three most frequent habitats within Cottesmore were arable, improved grassland and built-up areas (extent of the developed area of Cottesmore). These habitat types account for approximately 85% of the habitats within the Cottesmore parish boundary (see Table 1). Broadleaved woodland, the fourth most frequent habitat type within the Parish, accounts for only 3.75% of the overall Parish area.

Table 1: Cottesmore Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Cottesmore
J1.1	Cultivated/disturbed land - arable	678.66	67.09
J5.2	Built up areas (extent of Cottesmore)	105.49	10.43
B4	Improved grassland	71.79	7.10
A1.1.1	Broadleaved woodland - semi-natural	37.95	3.75
B6	Poor semi-improved grassland	29.55	2.92
A1.1.2	Broadleaved woodland - plantation	27.23	2.69
J1.2	Cultivated/disturbed land - amenity grassland	15.82	1.56
J5.1	Hardstanding	13.48	1.33
A1.2.2	Coniferous woodland - plantation	8.89	0.88
B3.2	Calcareous grassland - semi-improved	6.11	0.60
A2.2	Scrub - scattered	3.84	0.38
J4	Bare ground	2.65	0.26
J5	Other habitat	2.12	0.21
A2.1	Scrub - dense/continuous	1.98	0.20
G1.1	Standing water - eutrophic	1.58	0.16
B2.2	Neutral grassland - semi-improved	1.39	0.14
J3.6	Buildings	1.20	0.12
A1.3.2	Mixed woodland - plantation	0.79	0.08
C3.1	Other tall herb and fern - ruderal	0.62	0.06
F2.1	Marginal and inundation - marginal vegetation	0.29	0.03
G1	Standing water	0.14	0.01
Total		1011.56	100.00

Figure 1: Overview of Habitats within Cottesmore Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Cottesmore to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (red boundaries). Figure 8 shows the GCN Risk Zones within the Cottesmore settlement area, whilst Figure 9 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 is located in the west of the Parish of Cottesmore and consists of two arable fields, bisected by Ashwell Road. No public right of way access was possible, and therefore phase 1 habitat types were assigned using aerial images and by surveying from the public highways using binoculars where possible.

The northern field is farmed right up to the boundaries, with no buffer strip of longer/ more ecologically valuable habitat present. Ashwell Road forms the southern boundary of this field, with Main Street to the east. Further arable fields are present adjacent to the western and northern boundaries.

The southern field is also arable in nature and is farmed to the field boundaries, with no buffer strips evident. Ashwell Road forms the northern boundary, with Burley Road to the south and more arable fields to the west. Residential properties form the eastern boundary of this field.

Overall, the habitats within this Survey Area are considered to be of low value in biodiversity terms, with poor boundary features (e.g. hedgerows).

2.1.1 Site Constraints

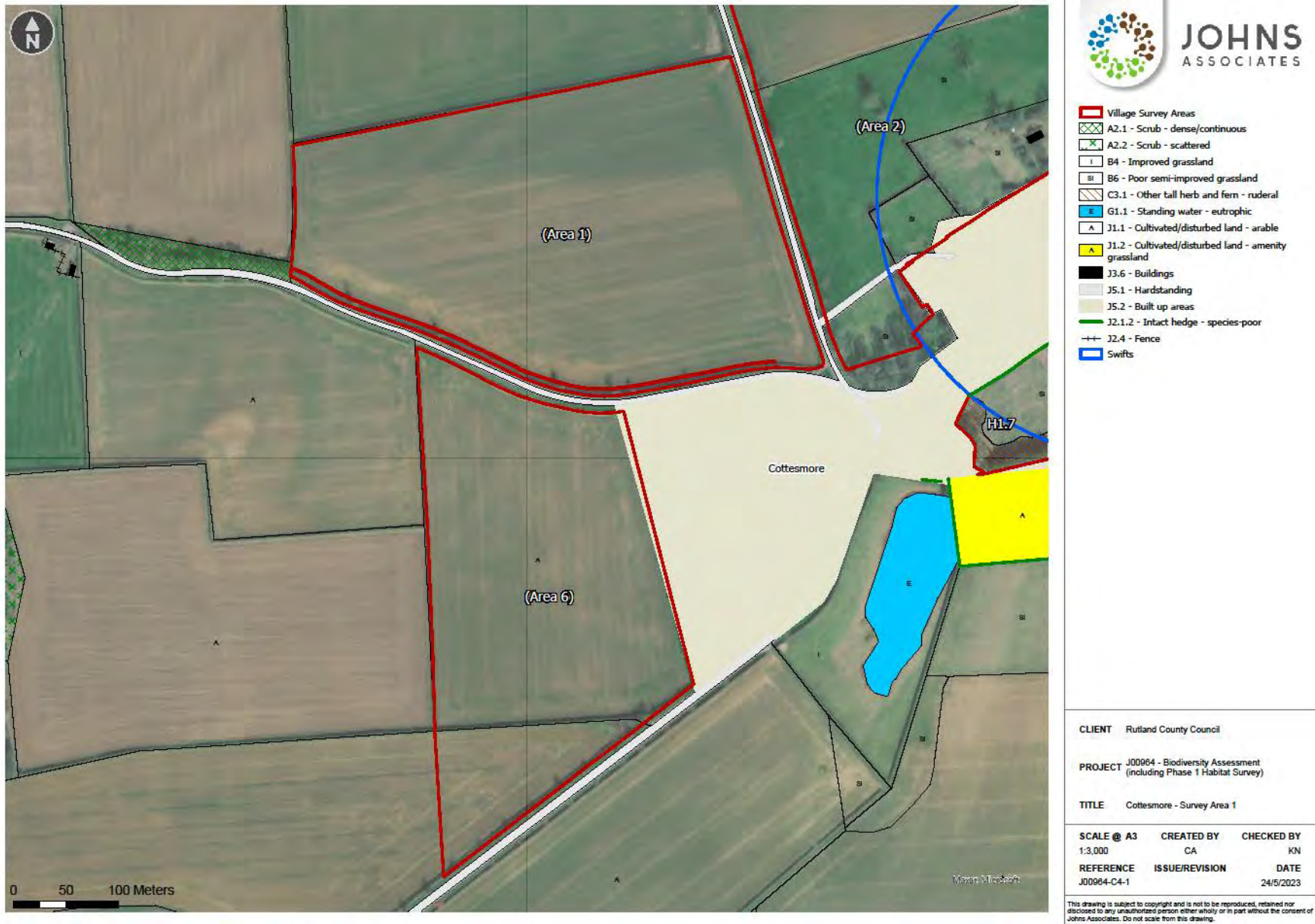
An area of the southern field adjacent to the B668 (Burley Road) and the residential properties (extreme south-eastern portion of this field) is situated within an Amber GCN Risk Zone (see Figure 8), However, the B668 is considered to represent a significant barrier to the movement of newts from the large pond to the southeast of the Survey Area, should they be breeding at this location. Therefore, GCN surveys are not considered necessary as part of any planning application for Survey Area 1.

No further ecological constraints are present at this location and Survey Area 1 is considered to be a good option for allocation for development in the local plan.

2.1.2 Survey Recommendations

No ecological surveys of Survey Area 1 are considered necessary, however, BNG can be achieved through the enhancement of field boundaries, for example, by providing dense, native hedgerows that have a good species diversity. Development proposals should also include areas of semi-natural habitat within the design, again to maximise BNG when this becomes mandatory in November 2023. These features will provide habitat for a range of wildlife, including birds, invertebrates, small mammals, reptiles, amphibians and bats.

Figure 2: Cottesmore Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located in the northwest of the Parish of Cottesmore, and comprises an arable field, an area of amenity grassland associated with St. Nicholas CE VA Primary School, and three areas of poor semi-improved grassland in the south of the Survey Area, likely used for grazing. This Survey Area had no public access via rights of way and was therefore assigned habitat types through the use of aerial images and field survey using binoculars from Main Street, Mill Lane and The Spinney.

The three areas of poor semi-improved grassland in the south of the Survey Area are of low ecological value, although the Magic Map website shows a small watercourse along the boundary between this area and the arable field to the north. This may be no more than a ditch but should be included in an ecological assessment of the site as part of any future planning application. The Spinney forms part of the southern boundary of this area, with residential areas to the south and east and the arable field to the north.

The arable field in the north of the Survey Area is farmed to the boundaries, with no evidence of ecologically valuable field margin habitat. Mill Lane forms the northern boundary, with Main Street to the west, the areas of poor semi-improved grassland to the south and residential areas and primary school to the east. An intact species-poor hedgerow is present along the northern boundary.

The area of amenity grassland within the school site is likely to be used as sports pitches and/or outdoor play space for the children and is probably intensively managed by mowing to maintain a short sward height. Amenity grassland is typically of low ecological value, as the short sward does not provide adequate cover for species such as reptiles or amphibians, and the low species diversity does not provide a rich source of food for birds or invertebrates.

Overall, Survey Area 2 is of low ecological value, with a lack of linear habitat features to provide green corridors into the wider local area.

2.2.1 Site Constraints

Aerial images of Survey Area 2 appear to show some areas of longer vegetation, particularly in the southern poor semi-improved grassland compartments. These areas should be assessed for their value to legally protected/notable species including reptiles, amphibians and invertebrates. The ditch noted above should also be assessed for its suitability to support legally protected species. Any individual trees present within the Survey Area should ideally be retained as part of any future development, with fencing used to protect the root zones from potential effects during construction (e.g. through compaction of soil and/or accidental damage by machinery).

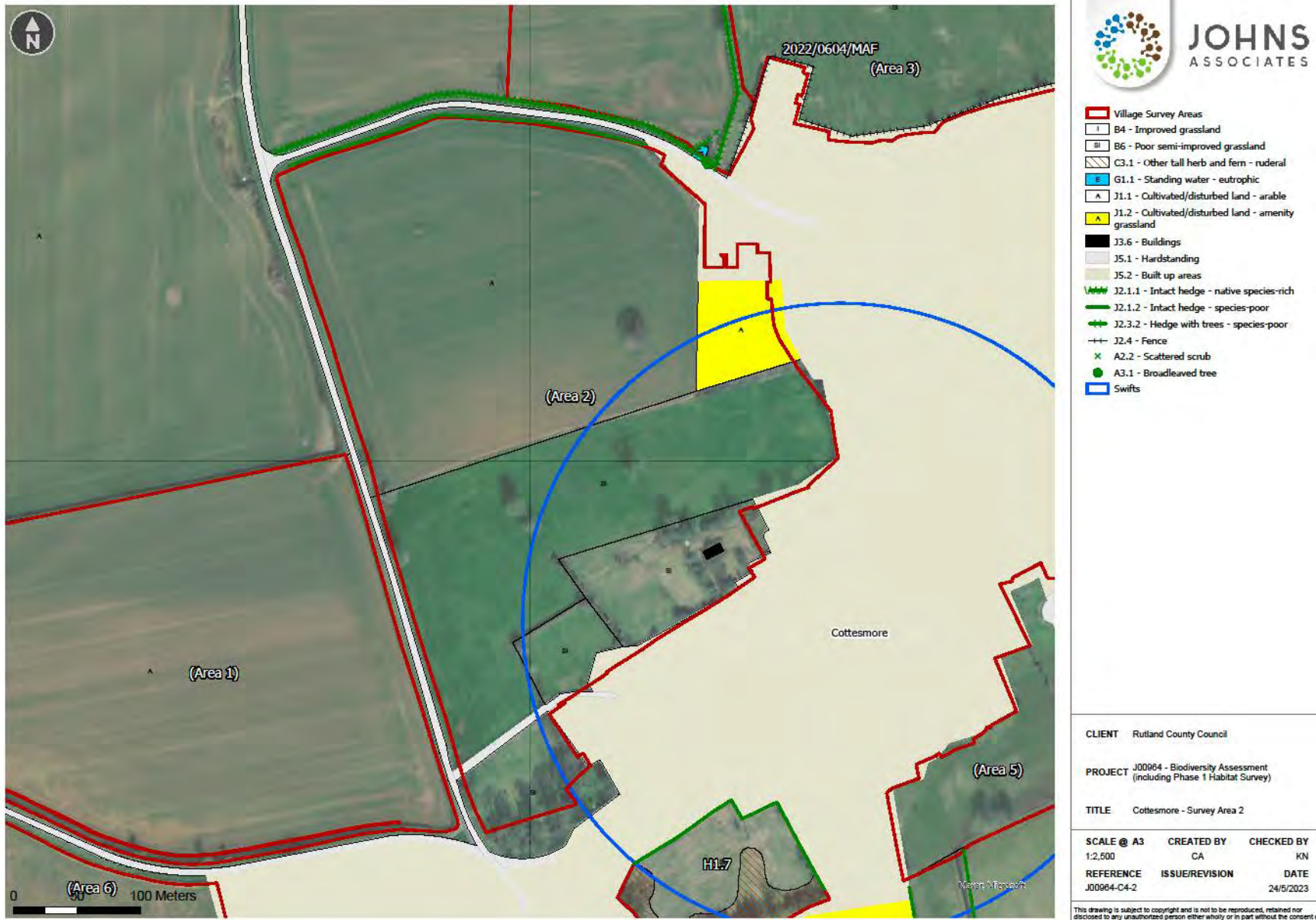
2.2.2 Survey Recommendations

Survey Area 2 is considered to be a good location ecologically for the allocation of a new housing development as long as the boundary habitats are enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.

Figure 9 shows part of the south-eastern section of this Survey Area to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 2 should incorporate swift bricks or suitable nestboxes to provide additional nesting habitat for this declining species.

Figure 3: Cottesmore Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 is located in the north of Cottesmore Parish. It comprises a central poor semi-improved grassland field, with an arable field to the east and part of a larger arable field to the west (see Figure 4), which also contains a pond. Once again, no public rights of way were present close to Survey Area 3, and so aerial images have been used to assign Phase 1 habitat types as no roadside access was possible.

The central poor-semi-improved grassland field is of low ecological value, although it is bounded on three sides by a species-poor hedge with trees which could be improved in order to provide biodiversity net gain at the site should it be allocated for development.

The eastern arable field is also of low ecological value, as it is farmed to the boundaries with no field margins for wildlife. However, this field has an area of broadleaved plantation woodland immediately adjacent to the southern boundary, which is likely to provide valuable habitat for a range of species including foraging and commuting bats, nesting birds, and invertebrates. Allotments are present adjacent to this area of woodland, which are likely to support populations of common reptiles.

The small portion of the arable field to the west is also of low ecological value, although the boundary scrub habitat and species poor hedgerows with trees are of higher ecological significance as they provide linear wildlife corridors to the wider local area as well as providing habitat for a range of species. Figure 4 shows a small pond in the corner of the field.

Overall, Survey Area 3 is of low ecological value and therefore a suitable choice for allocation. There is an opportunity for the boundary habitats to be retained, protected and enhanced as part of future proposals, which will assist with BNG and provide valuable green corridors into the wider local area and to the area of woodland immediately to the south.

2.3.1 Site Constraints

Boundary hedgerows are currently species-poor but provide valuable habitat within a largely arable landscape and should therefore be retained and enhanced through additional planting. Trees within the hedgerows should also be retained and protected as part of any development proposals.

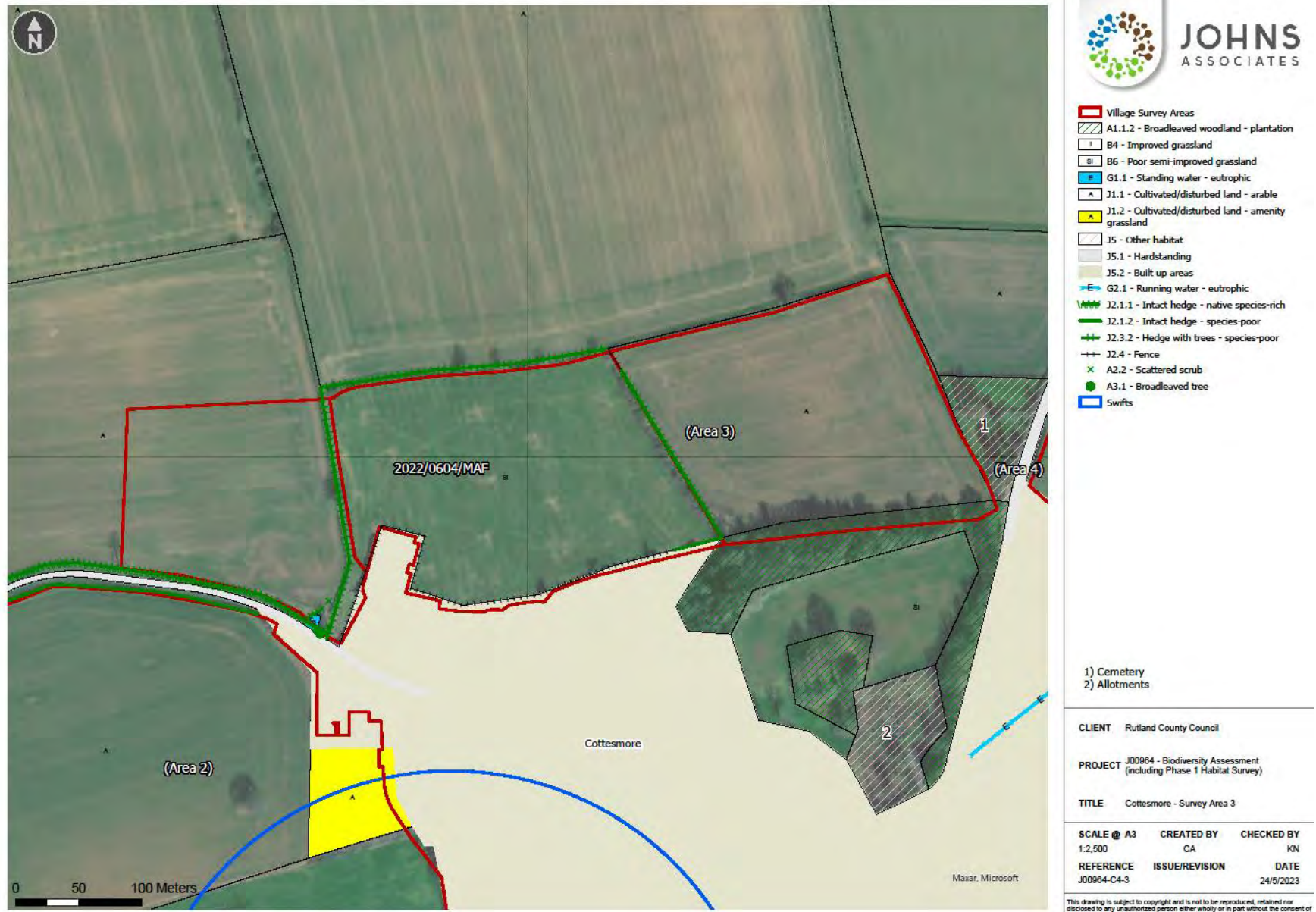
The woodland edge habitat should be protected by an ecological buffer, with tree protection fencing also recommended during any construction works.

2.3.2 Survey Recommendations

Survey Area 2 is considered to be a good location ecologically for the allocation of a new housing development as long as the boundary habitats are enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

- Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- The small pond in the southwest of Survey Area 3 should be assessed for its suitability to support amphibians, particularly GCN. Surveys may be required if the pond is assessed as being suitable for this species.
- The Survey Area should be assessed for reptile suitability, given its proximity to the allotments and area of scrub habitat. A precautionary Method Statement is recommended for vegetation clearance work to safeguard any amphibian, reptiles and/or hedgehogs that may be using the site.

Figure 4: Cottesmore Survey Area 3



2.4 SURVEY AREA 4

Survey Area 4 is located to the northeast of the main settlement of Cottesmore and comprises two fields: one arable and the other improved grassland (possibly used for grazing). A watercourse flows through the centre of the Survey Area, along the existing field boundary. No access was possible and so habitat types have been assigned using aerial images and observation from Rogue's Lane and Greetham Road using binoculars.

Overall Survey Area 4 is of low ecological value, although boundary trees and the watercourse should be retained and protected during any development works and incorporated into the masterplan for the site.

2.4.1 Site Constraints

The ecological constraints for this Survey Area are centred around the watercourse. The watercourse should have an 8m buffer to protect its ecological value in habitat terms, as a wildlife corridor and to mitigate any pollution impacts from construction. The watercourse should also be enhanced for the benefit of wildlife through mandatory BNG requirements. The poor semi-improved grassland and arable habitat is less ecologically constrained and is considered a good location for development through its allocation in the Local Plan.

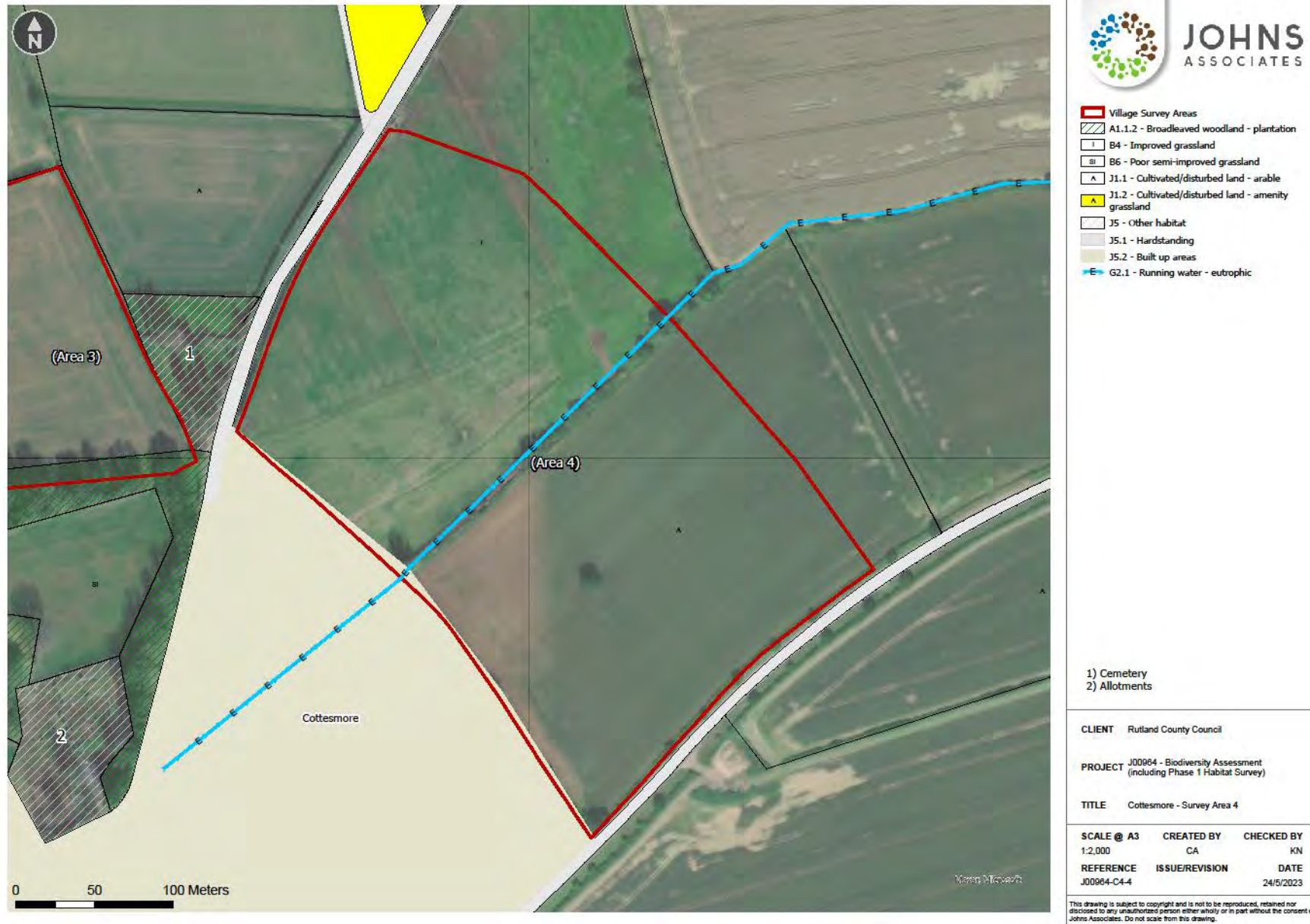
The watercourse is considered to be an important ecological corridor and is likely to be used as a commuting route and foraging habitat for a number of bat species.

2.4.2 Survey Recommendations

If Survey Area 4 is to be allocated for development the watercourse should be retained, protected and enhanced to help provide habitat for wildlife and maintain a valuable corridor through this area of Cottesmore. The improved grassland and arable fields are considered a good location ecologically for new development as long as a number of surveys and protection measures are implemented:

- Bat activity surveys and static monitoring should be conducted to assess whether there are any important commuting routes for bats that need to be retained as dark corridors within any new development design, particularly along the watercourse and associated line of trees as this provides the only potential commuting route in this area.
- A lux lighting plan should be provided prior to determination, to avoid lighting impacts on bats and other nocturnal wildlife.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be affected by proposals. Further surveys may be required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.

Figure 5: Cottesmore Survey Area 4



2.5 SURVEY AREA 5

Survey Area 5 is located in the southeast of Cottesmore Parish (see Figure 6) and comprises a mosaic of habitat types including semi-improved neutral grassland, tall ruderal vegetation, improved grassland and broadleaved plantation woodland. Boundary habitats include species-poor hedgerows with trees. Exton Road forms the eastern boundary to this Survey Area, with residential areas to the north, sports pitches to the west and additional areas of improved and semi-improved grassland and woodland to the south/ southeast. Habitat types have been assigned using aerial images and observation from Exton Road using binoculars.

Overall, the habitats within this Survey Area are considered to be of moderate value in biodiversity terms: semi-improved neutral grassland habitat makes up only 0.14% of the habitats present in Cottesmore Parish and broadleaved plantation woodland only 2.69%. Ideally these habitats should be retained and enhanced for wildlife, particularly as they are linked to a larger area of woodland immediately to the southeast and in the wider local area (including Cottesmore Wood, Westland Wood and Tunneley Wood to the southeast). The improved grassland in the west of this area is deemed to be the most suitable area for development as it is of low biodiversity value.

2.5.1 Site Constraints

The ecological constraints for this Survey Area are centred around the semi-improved neutral grassland and woodland.

The woodland habitat present in the south of the Survey Area should be retained and protected through the implementation of a woodland buffer zone. This area is likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill on these habitats is no greater than 0.5 lux. Depending on the species present and overall condition of this habitat, (to be assessed as part of mandatory BNG requirements for the site), some habitat enhancements may be possible, for example, through improved management practices and additional planting.

Ideally, the semi-improved neutral grassland habitat should be retained and enhanced to provide high quality habitat for wildlife. This could also provide significant BNG for any development within the western part of Survey Area 5.

Areas of taller vegetation (for example, the ruderal vegetation in the west of the Survey Area) may support common species of reptile and further surveys are recommended in Section 2.5.2.

Figure 6 shows that a significant part of the western section of this Survey Area is within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 5 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

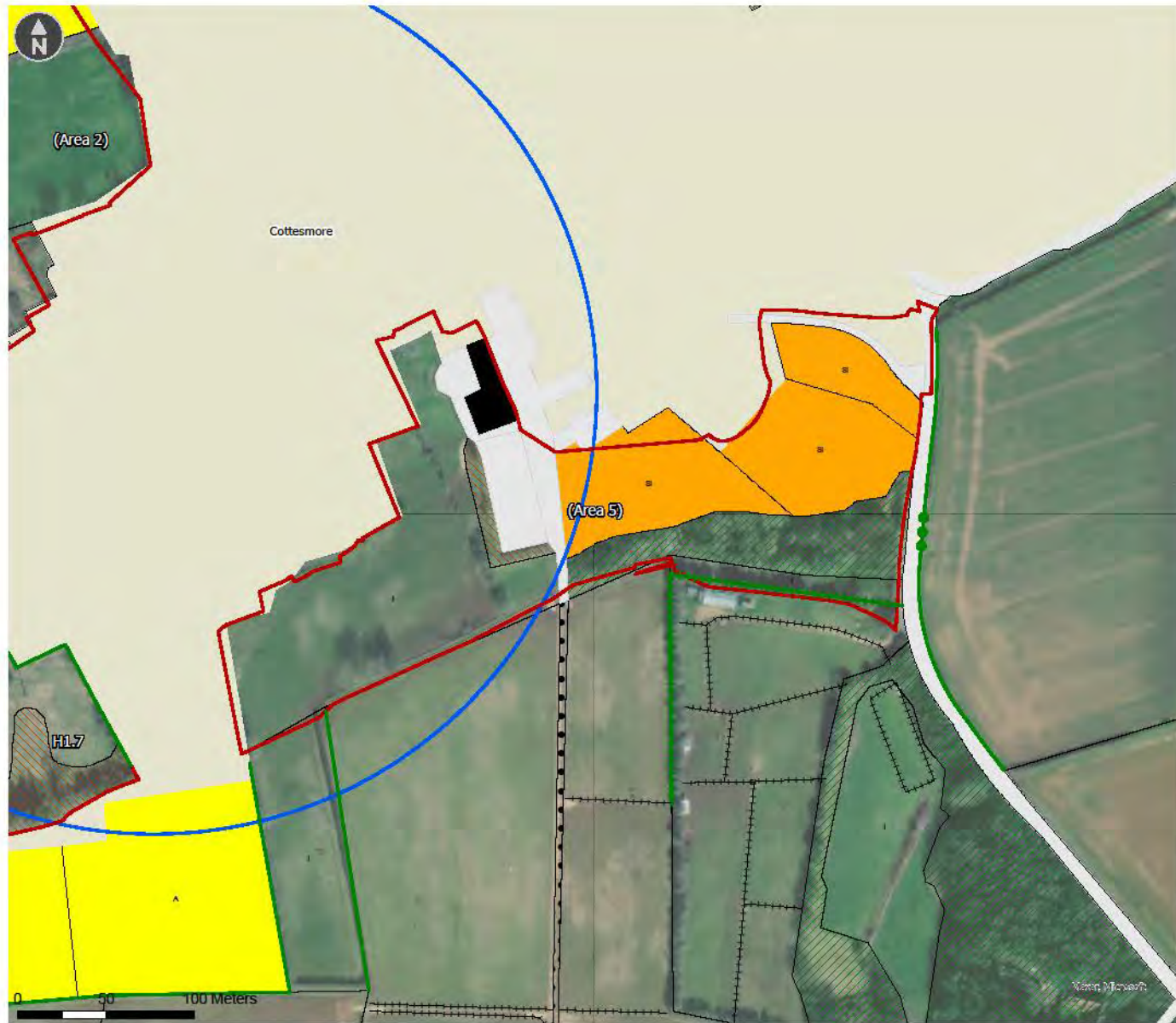
2.5.2 Survey Recommendations

If Survey Area 5 is to be allocated for development (as a whole or in part), it would be worth considering maintaining the southern boundaries as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The improved grassland field is considered to be a good location ecologically for the allocation of a new housing development as long as the adjacent boundary habitats and those within the eastern half of the Area can be retained, protected and enhanced for wildlife.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.

- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge).
- Potential Roost Assessment (PRA) of the building(s) located within the Survey Area to confirm whether any are used by bats. Magic map (www.magic.defra.gov.uk) provided one record of a bat licence issued for brown-long eared bats in 2011 for works to a property approximately 175m northwest of the Survey Area, in Main Street.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys in areas of suitable habitat e.g. ruderal vegetation in the west. A precautionary method statement should be produced to further reduce any risk of harm to these species. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works.
- Woodland, semi-improved neutral grassland, hedgerows and trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 6: Cottesmore Survey Area 5



- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas
- J2.1.2 - Intact hedge - species-poor
- J2.3.2 - Hedge with trees - species-poor
- J2.4 - Fence
- A3.1 - Broadleaved tree
- Swifts

CLIENT Rutland County Council

PROJECT J0064 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Cottesmore - Survey Area 5

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2.6 SURVEY AREA 6

Survey Area 6 is located in the southwestern area of Cottesmore Parish, close to Survey Area 5. It comprises poor semi-improved grassland and tall ruderal vegetation, with intact species-poor hedgerows along the northern and eastern boundaries. Residential dwellings are present to the north of this Survey Area, with playing fields (comprising amenity grassland) immediately to the south. A large pond is situated approximately 60m southwest of the Survey Area.

Figure 7 show that a significant part of the eastern section of this Survey Area is within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 6 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 9 shows that this Survey Area is located within an Amber Risk Zone for GCN, and as such any suitable terrestrial habitat for this species (likely to be the tall ruderal vegetation) should be assessed thoroughly for likely presence of this species. GCN surveys of the nearby pond are recommended in Section 2.6.2.

Overall, the habitats in Survey Area 6 are considered to have low-moderate biodiversity value. Although not inherently valuable habitat types, the location of this Survey Area within a GCN Risk Zone, proximity of the pond and present of tall ruderal vegetation suggests that reptiles and/or amphibian species may be present. All species receive some degree of legal protection under the Wildlife and Countryside Act 1981 (as amended).

2.6.1 Site Constraints

Much of this Survey Area is located within an Amber Risk Zone for Great Crested Newts (GCN) and there is a large pond present to the southwest located within private land which could possibly support breeding populations of GCN. However, there were no records of GCN present in this area and no GCN records or EPS licenses were returned from a search on Magic Maps.

Tall ruderal habitat within the Survey Area is likely to provide suitable terrestrial areas for foraging and hibernating GCN as well as reptiles. If access is available, a GCN survey of the large pond should be undertaken to inform any planning application for Survey Area 6. If this is not possible, a precautionary approach should be taken, and a method statement produced and implemented for vegetation clearance works. If any reptiles/GCN are encountered works should be halted and the appointed suitability qualified ecologist consulted as a Natural England European Protected Species License may be required.

Survey Area 6 is considered to be a suitable site for allocation in the local plan as it is surrounded by existing residential/ amenity facilities providing the ecological constraints highlighted above are taken into consideration.

2.6.2 Survey Recommendations

This Survey Area is considered to be a good location ecologically for the allocation of a new development as long as the potential for legally protected species is dealt with appropriately through the planning process, informed by adequate ecological site surveys.

- Reptile surveys.
- GCN surveys of the large pond located to the southwest of the Survey Area (if access is available).
- Precautionary method statement should be produced to further reduce any risk of harm to reptiles/ amphibian species. This should include sequential cutting of tall ruderal vegetation to make these habitats unsuitable for foraging reptiles or GCN prior to pre-commencement/ site preparation works.

Figure 7: Cottesmore Survey Area 6



Figure 8: Cottesmore Great Crested Newt Risk Zones

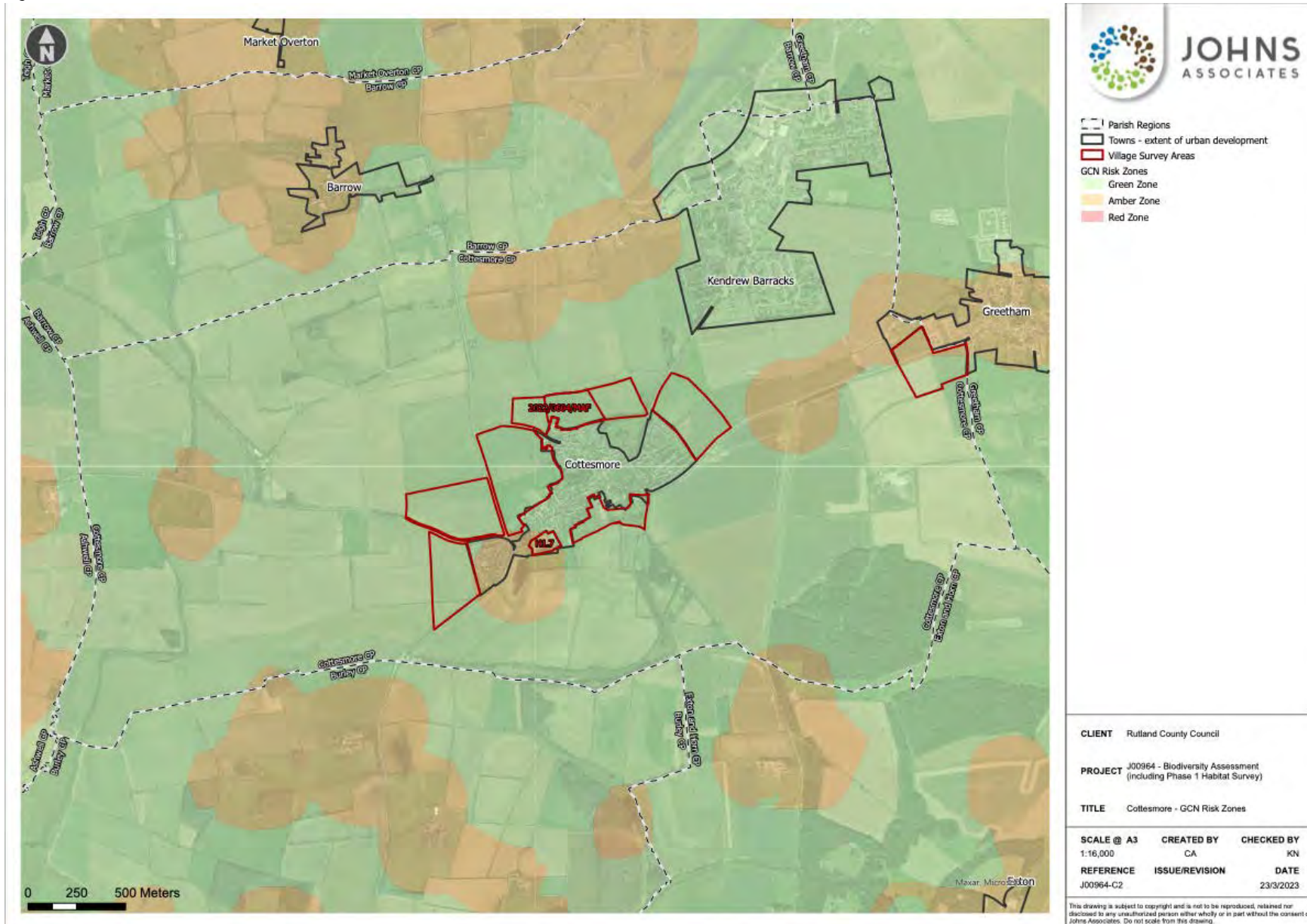
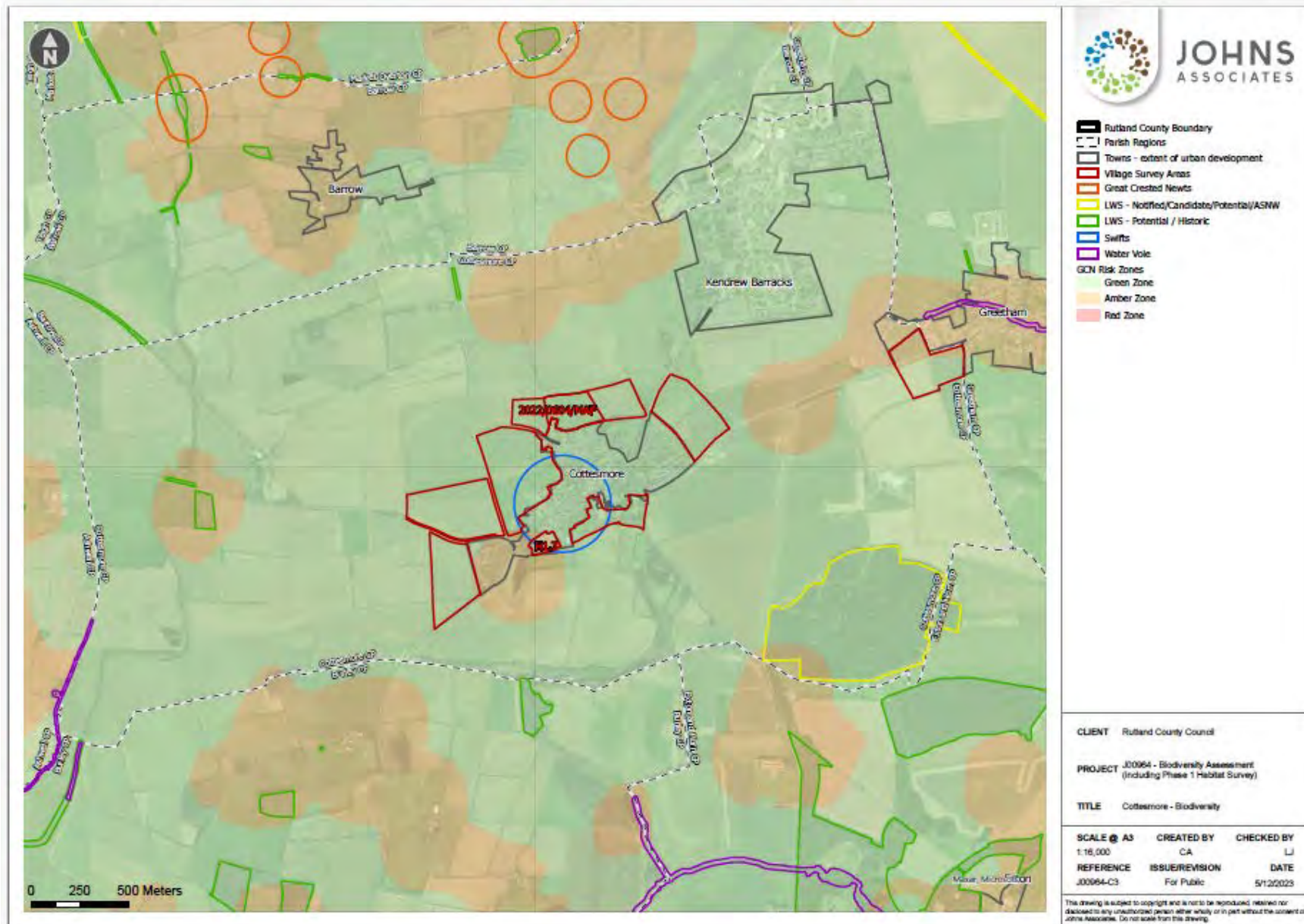


Figure 9: Cottesmore Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Edith Weston - Biodiversity Summary Report

1 INTRODUCTION

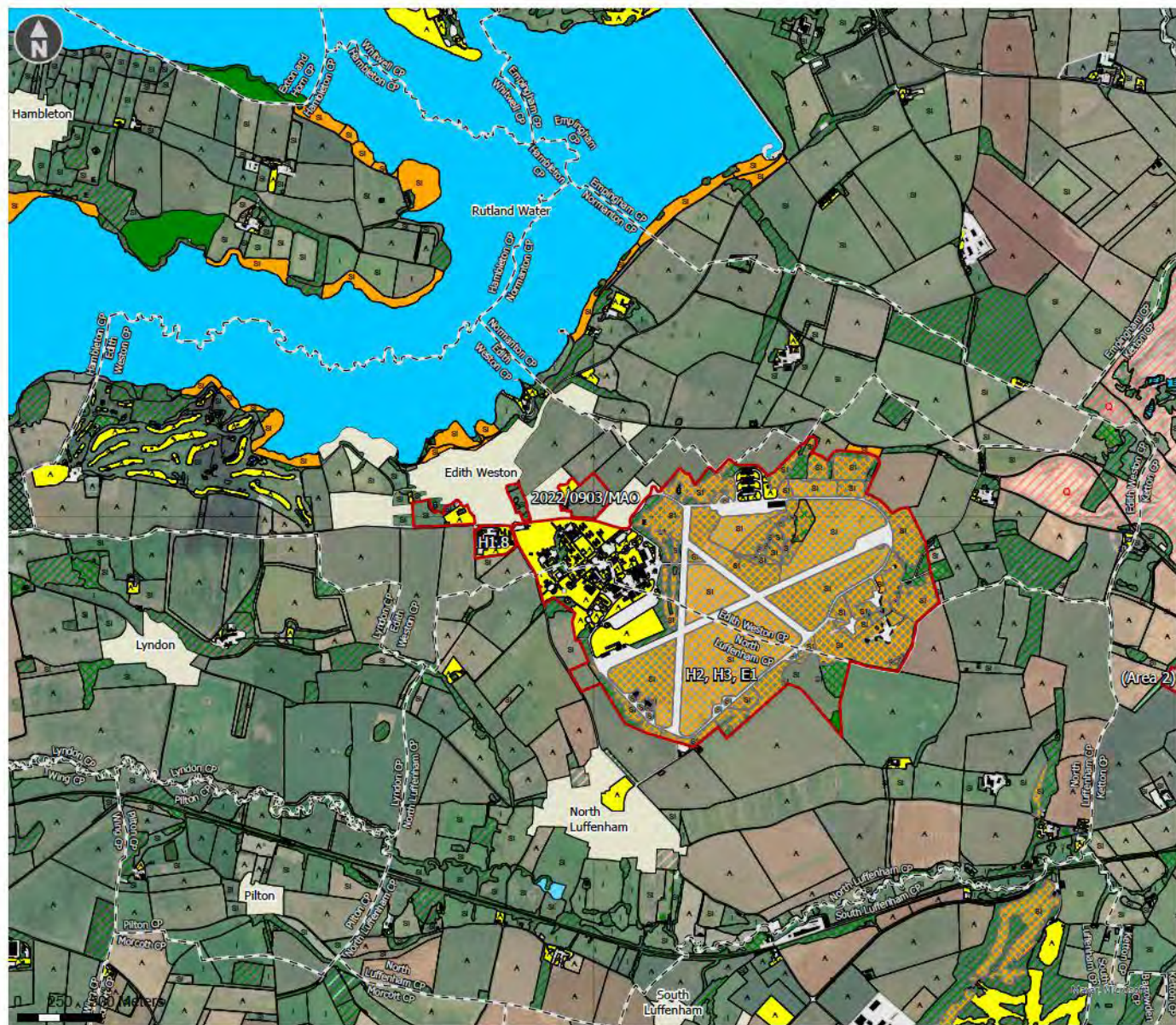
Edith Weston is a village and civil parish in Rutland, located to the south of Rutland Water. Figure 1 shows the habitat types identified within the boundary of Edith Weston Parish. A breakdown of the habitat areas can be seen in Table 1 which also gives the percentage cover of each habitat type.

The six most frequent habitats within Edith Weston were arable, semi-improved calcareous grassland, eutrophic standing water, poor semi-improved grassland, built up areas and broadleaved plantation woodland. These six habitat types account for approximately 81% of the habitats within the Edith Weston parish boundary (see Table 1).

Table 1: Edith Weston Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Edith Weston
J1.1	Cultivated/disturbed land - arable	209.87	27.93
B3.2	Calcareous grassland - semi-improved	119.50	15.90
G1.1	Standing water - eutrophic	112.97	15.03
B6	Poor semi-improved grassland	71.31	9.49
J5.2	Built up areas	49.47	6.58
A1.1.2	Broadleaved woodland - plantation	42.67	5.68
J5.1	Hardstanding	40.81	5.43
J1.2	Cultivated/disturbed land - amenity grassland	40.59	5.40
I2.1	Quarry	20.56	2.74
A2.1	Scrub - dense/continuous	14.91	1.98
B2.2	Neutral grassland - semi-improved	12.58	1.67
A2.2	Scrub - scattered	5.92	0.79
J3.6	Buildings	5.58	0.74
B4	Improved grassland	2.75	0.37
B3.1	Calcareous grassland - unimproved	0.97	0.13
J4	Bare ground	0.76	0.10
F2.1	Marginal and inundation - marginal vegetation	0.17	0.02
J5	Other habitat	0.14	0.02
J3.4	Caravan site	0.02	0.00
Total		751.54	100.00

Figure 1: Overview of Habitats within Edith Weston Parish Boundary



- Parish Regions
- Towns Survey Areas
- Village Survey Areas
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A1.2.2 - Coniferous woodland - plantation
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B2.2 - Neutral grassland - semi-improved
- B3.1 - Calcareous grassland - unimproved
- B3.2 - Calcareous grassland - semi-improved
- B4 - Improved grassland
- B5 - Marshy/marshy grassland
- B6 - Poor semi-improved grassland
- F1 - Swamp
- F2.1 - Marginal and inundation - marginal vegetation
- G1 - Standing water
- G1.1 - Standing water - eutrophic
- I2.1 - Quarry
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.4 - Caravan site
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Edith Weston - Phase 1 Overview

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2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Edith Weston to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1.

2.1 SURVEY AREA 1

Survey Area 1 is located in the centre of Edith Weston between two built up areas and has a public right of way running through the site. Survey Area 1 (shown in Figure 2) is made up of two fields of poor semi-improved grassland and an amenity grassland playing field to the east. The Survey Area is bordered by broadleaved plantation woodland, lines of trees and hedgerows.

The grassland habitats within this Survey Area are generally species-poor with the amenity grassland managed to a short-sward height with the areas of poor semi-improved grassland cut less frequently, therefore offering limited biodiversity value. However, the broadleaved woodland plantation and linear habitat features (lines of trees and hedgerows) within this Survey Area provide greater biodiversity value, offering opportunities for nesting birds, commuting/ foraging bats, as well as potentially amphibians, small mammals and invertebrates.

The pond within the woodland towards the north-west of Survey Area 1 offers potential to support a breeding population of great crested newt (GCN).

Overall, the Survey Area is frequently used by members of the community for dog walking, recreational use of the children's play area and families walking to the school located at the western Survey Area boundary.

2.1.1 Site Constraints

Rutland Water RAMSAR, SPA and SSSI is located approximately 0.2km to the north of Survey Area 1. The Survey Area lies within an impact risk zone for this designated site. The site is designated due to the abundance and diversity of passage and wintering waterfowl that it supports. Development within the impact zone of this protected site will need careful consideration, however the Survey Area is not considered important for supporting wintering wildfowl due to the lack of suitable habitat, however development in this area would be likely to increase recreational impacts on Rutland Water.

The Survey Area is located wholly within an Amber Risk Zone for Great Crested Newts (GCN) and there are two ponds present offsite to the north located within private land which could possibly support breeding populations of this species. There are records of GCN in close proximity to this pond, although no further GCN records or EPS licenses were returned from a search on Magic Maps.

The habitats within the Survey Area are considered to offer moderate suitability for foraging or hibernating GCN. The Area is connected to the pond via the broadleaved plantation woodland located around the perimeter of the Survey Area. GCN surveys will be required of the nearby off-site ponds as a Natural England European Protected Species License may be necessary.

The woodland habitats that lie adjacent to the boundaries of the Survey Area should be retained and protected through the implementation of a woodland buffer zone. These areas are likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill on these boundary habitats is no greater than 0.5 lux.

This Survey Area also lies within close proximity to a possible or historic LWS, St Marys Church and King Edward's Way limestone wall. It is not considered likely that this historic LWS would be negatively impacted by the potential development of Survey Area 1.

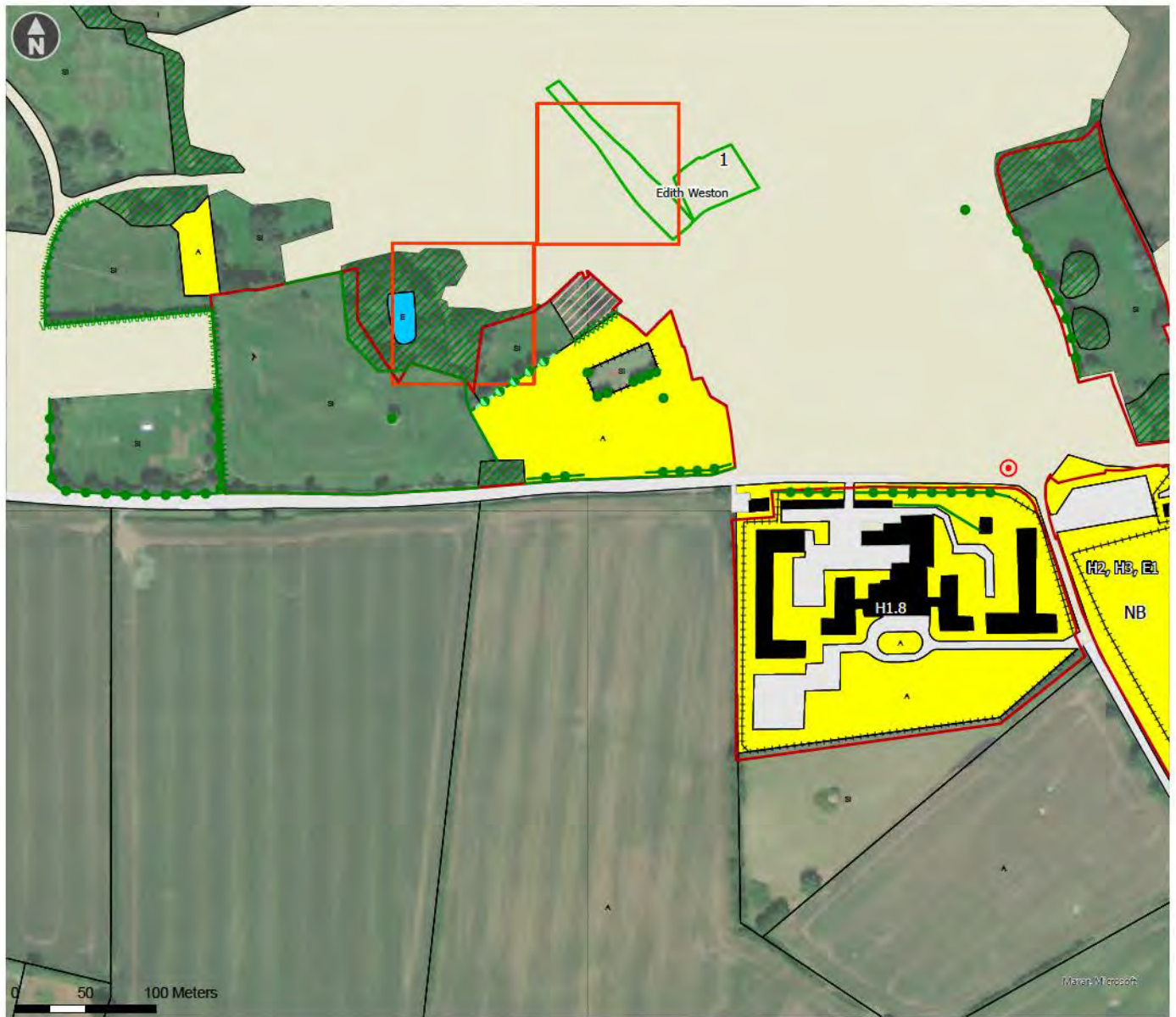
Due to the high level of recreational pressure across the Area it is assumed that it is highly unlikely to support a reptile population.

2.1.2 Survey Recommendations

If Survey Area 1 is to be allocated for development, it would be worth considering retaining and protecting the hedgerows, mature trees and woodland around the Site as dark corridors to preserve their value as functional wildlife corridors for nocturnal species. The Survey Area is considered to be a good location ecologically for allocation as long as a number of surveys and protection measures are implemented:

- Any trees around the perimeter of the site that have potential to support roosting bats that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Survey Area that should be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- HSI and GCN population surveys (if required) of the two ponds located north of the site within 500m of Survey Area 1.
- No additional surveys are required for reptiles; however, a precautionary method statement should be produced to further reduce any risk of harm to these species. This should include sequential cutting of vegetation around the perimeters of the Survey Area to make these habitats unsuitable for foraging reptiles prior to pre-commencement/ site preparation works.

Figure 2: Edith Weston Survey Area 1



- Towns Survey Areas
 - Village Survey Areas
 - A1.1.2 - Broadleaved woodland - plantation
 - B4 - Improved grassland
 - B6 - Poor semi-improved grassland
 - G1.1 - Standing water - eutrophic
 - J1.1 - Cultivated/disturbed land - arable
 - J1.2 - Cultivated/disturbed land - amenity grassland
 - J3.6 - Buildings
 - J5 - Other habitat
 - J5.1 - Hardstanding
 - J5.2 - Built up areas
 - XXXX A2.2 - Scrub - scattered
 - A3.1 - Broadleaved Parkland/scattered trees
 - A3.3 - Mixed Parkland/scattered trees
 - |||| J2.1.1 - Intact hedge - native species-rich
 - |||| J2.1.2 - Intact hedge - species-poor
 - |||| J2.3.1 - Hedge with trees - native species-rich
 - ++ J2.4 - Fence
 - Target Note
 - A3.1 - Broadleaved tree
 - Great Crested Newts
 - LWS - Potential / Historic
- 1) St Mary's Church and King Edward's Way, limestone wall

NB - St George's Barracks

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Edith Weston - Survey Area 1

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2.2 SURVEY AREA 2

Survey Area 2 is located at the eastern extent Edith Weston between two built up areas of the town. The Survey Area is currently used for sheep grazing and solely located on private land, with no public rights of way access, therefore habitat assessments were undertaken using aerial maps or from nearby rights of way/roadways using binoculars where possible. Survey Area 2 (shown as the red line boundary in the west of Figure 3) is made up of one poor semi-improved grassland field currently used for sheep grazing with parcels of broadleaved plantation woodland on the northern and southern boundaries and two plantation copses in the centre of the field. The Survey Area is bordered by a line of broadleaved trees and hedgerow along the western boundary.

The grassland habitat within this Survey Area is generally species-poor and managed to a short-sward height through overgrazing, offering limited biodiversity value. However, the broadleaved woodland planation and linear habitat features (lines of trees and hedgerows) within this Survey Area provide greater biodiversity value, offering opportunities for nesting birds, commuting/foraging bats, as well as potentially amphibians, small mammals and invertebrates.

2.2.1 Site Constraints

Rutland Water RAMSAR, SPA and SSSI is located approximately 0.4km to the north of Survey Area 2. The Survey Area lies within an impact risk zone of this designated site. The site is designated due to the abundance and diversity of passage and wintering waterfowl that it supports. Development within the impact zone of this protected site will need careful consideration, however Survey Area 2 is not considered important for supporting wintering wildfowl, although development in this area is likely to increase recreational impacts on Rutland Water.

The northern section of this Survey Area is located within an Amber Risk Zone for GCN and there is one pond present 190m offsite to the north located within private land which could possibly support a breeding population of GCN. There are records of GCN present in close proximity to this pond, although no further GCN records or EPS licenses were returned from a search on Magic Maps.

The habitats within the Survey Area are considered to offer moderate suitability for foraging and/or hibernating GCN. However, major ecological barriers are present between the Survey Area and the pond, including large areas of residential development and a road. Therefore, it is not considered likely that GCN would be present within Survey Area 2 and no further GCN surveys will be required.

The woodland habitats within the Area should be retained and protected through the implementation of woodland buffer zones. These areas are likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill on these boundary habitats is no greater than 0.5 lux.

Due to the high level of grazing pressure across the site it and the fact the site is ecologically isolated from other habitat that could support reptile populations it is assumed that the site is highly unlikely to support these species.

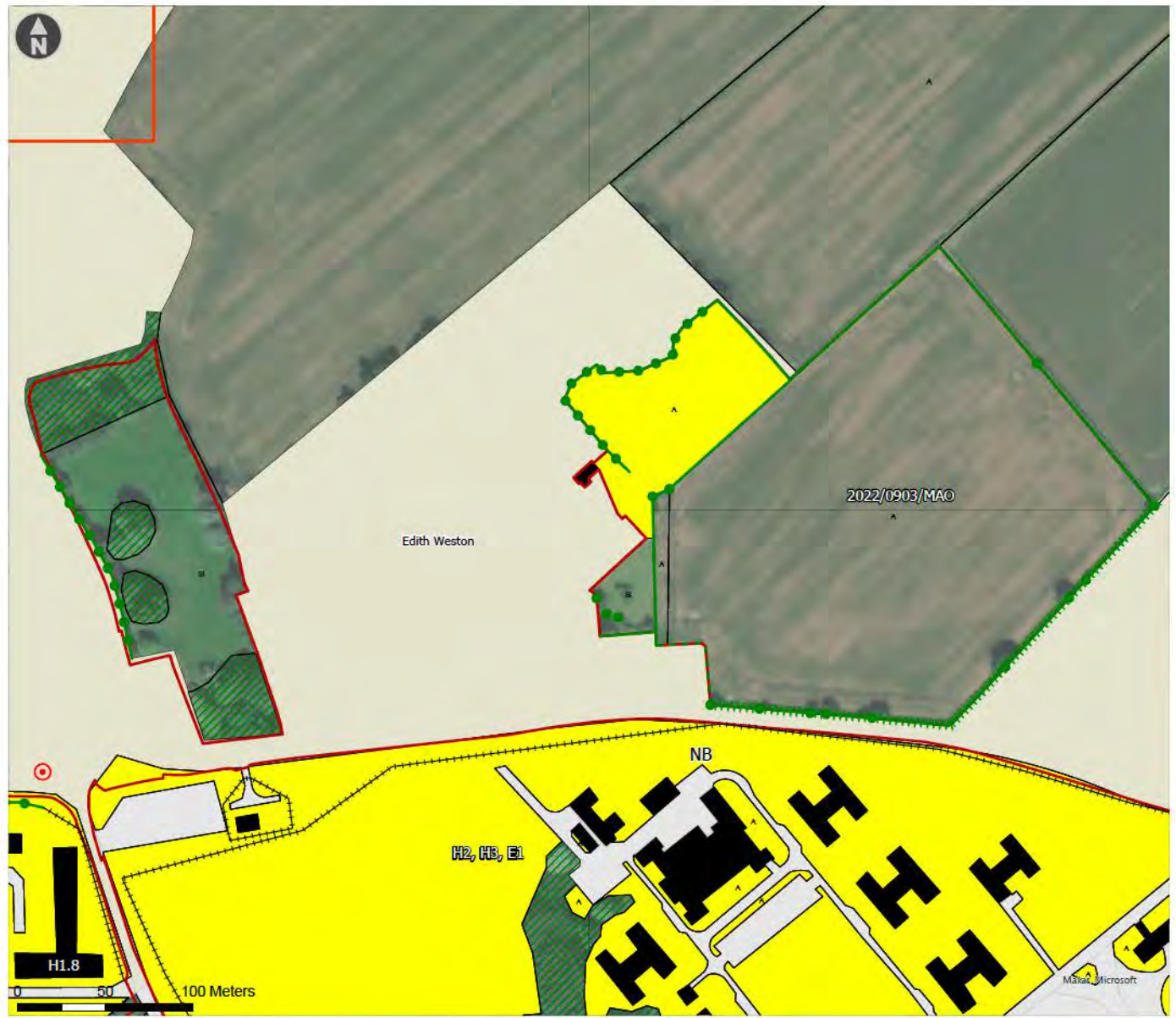
2.2.2 Survey Recommendations

If Survey Area 2 is to be allocated for development, it would be worth considering retaining and protecting the woodland and mature trees around the Site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The Area is considered to be a good location ecologically for allocation as long as a number of surveys and protection measures are implemented:

- Any trees around the perimeter of the Area that have potential to support roosting bats that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.

- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the site that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- No additional surveys are required for reptiles or GCN, however, a precautionary method statement should be produced via Planning Condition to further reduce any risk of harm to these species. This should include details of sequential cutting of vegetation around the perimeters of the Survey Area to make these habitats unsuitable for foraging reptiles/GCN prior to pre-commencement/ site preparation works.

Figure 3: Edith Weston Survey Area 2



- Towns Survey Areas
- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- B6 - Poor semi-improved grassland
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J5.1 - Hardstanding
- J5.2 - Built up areas
- A3.1 - Broadleaved Parkland/scattered trees
- J2.1.1 - Intact hedge - native species-rich
- J2.1.2 - Intact hedge - species-poor
- - - J2.2.2 - Defunct hedge - species-poor
- + + J2.4 - Fence
- A3.1 - Broadleaved tree
- Great Crested Newts

NB - St George's Barracks

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment
(including Phase 1 Habitat Survey)

TITLE Edith Weston - Survey Area 2

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2.3 PLANNING APPLICATION BOUNDARY 2022/0903/MAO

This Planning Application Area is located at the eastern extent of Edith Weston. The site is predominately arable and located on private land with no public rights of way access, however access arrangements were made to access the site for the field survey.

Overall, the habitats within this planning application area were generally poor in biodiversity terms. The amenity grassland provides limited value for protected species due to the species-poor and short nature of the sward. The semi-improved grassland may provide some value to foraging and/or commuting reptiles and small mammals. The hedgerows and standard trees offer the greatest value for biodiversity and are likely to provide opportunities for nesting birds, foraging bats and potentially roosting bats.

2.3.1 Site Constraints

Rutland Water RAMSAR, SPA and SSSI is located approximately 0.65km north of this planning application site. The site lies within the impact risk zone of Rutland Water, which is designated due to the abundance and diversity of passage and wintering waterfowl that it supports. Development within the impact zone of this protected site will need careful consideration, particularly as the planning application site may be important for supporting wintering wildfowl over the arable stubble in the winter. Additionally, development in this area is likely to increase recreational impacts Rutland Water.

The Survey Area is located in a Green Risk Zone for GCN, and no ponds are located within close proximity of the site. There are no records of GCN in close proximity of the site and no further GCN records or EPS licenses were returned from a search on Magic Maps; therefore, no surveys are required for this species.

The hedgerows and mature trees should be retained and protected through the implementation of buffer zones. These areas are likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill onto these boundary habitats is no greater than 0.5 lux both during construction and operation of any development.

Due to the high-level management across the site it and the fact it is ecologically isolated from other habitat areas that could support reptile populations it is assumed that reptiles are absent from the site.

2.3.2 Survey Recommendations

If this planning application area is to be allocated for development, it would be worth considering retaining and protecting the mature trees and hedgerows around the site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The site is considered to be a good location ecologically for allocation as long as a number of surveys and protection measures are implemented:

- Any trees around the perimeter of the site that have potential to support roosting bats that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the site that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- No additional surveys are required for reptiles or GCN; however, a precautionary method statement should be produced to further reduce any risk of harm to these species. This should include details of a sequential cutting regime for existing vegetation around the perimeters of the site to make these habitats unsuitable for foraging reptiles/GCN prior to pre-commencement/ site preparation works.

- Wintering bird surveys to assess whether any other the species associated with Rutland water use the site is also recommended.

Figure 4: Edith Weston Great Crested Newt Risk Zones

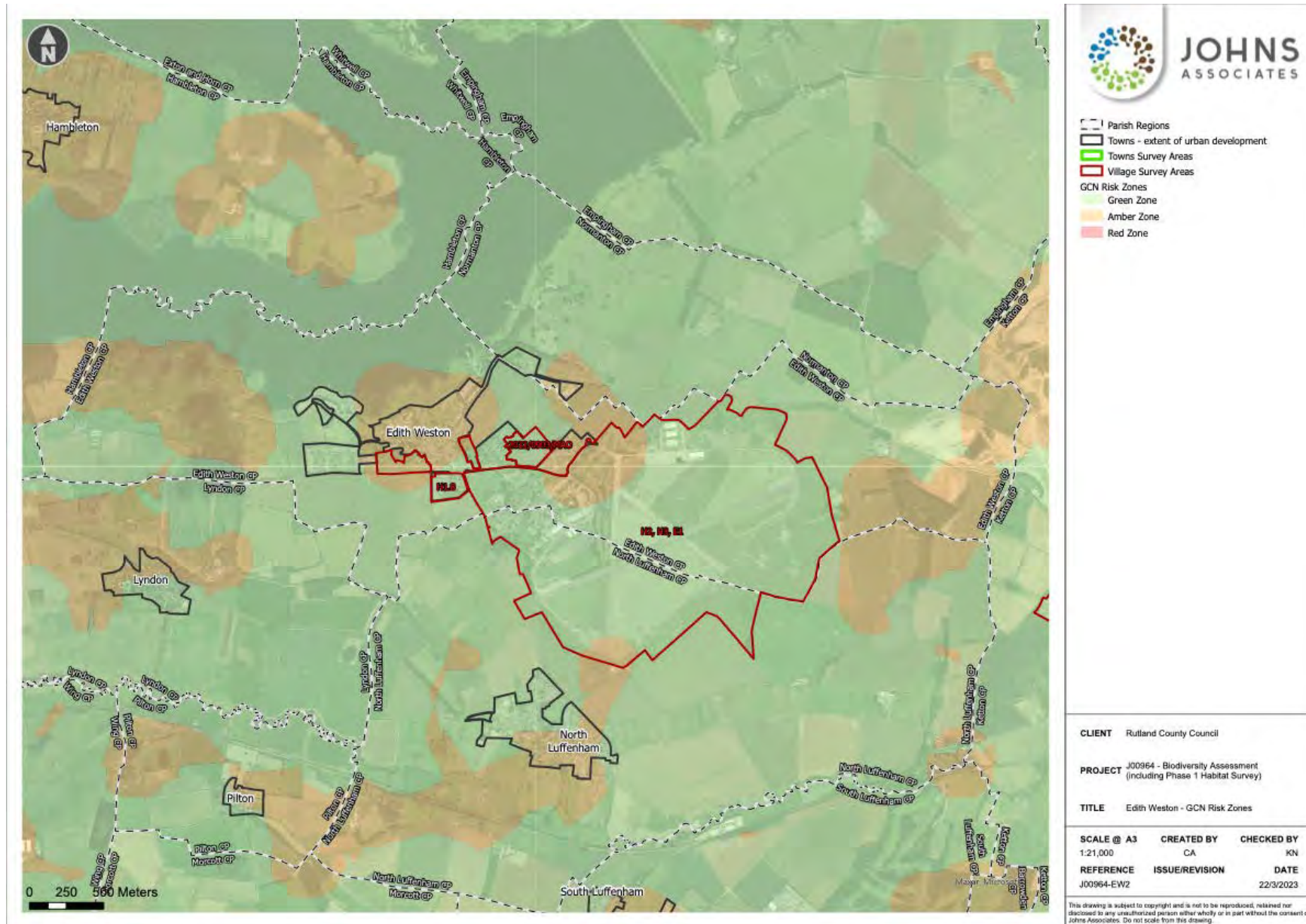
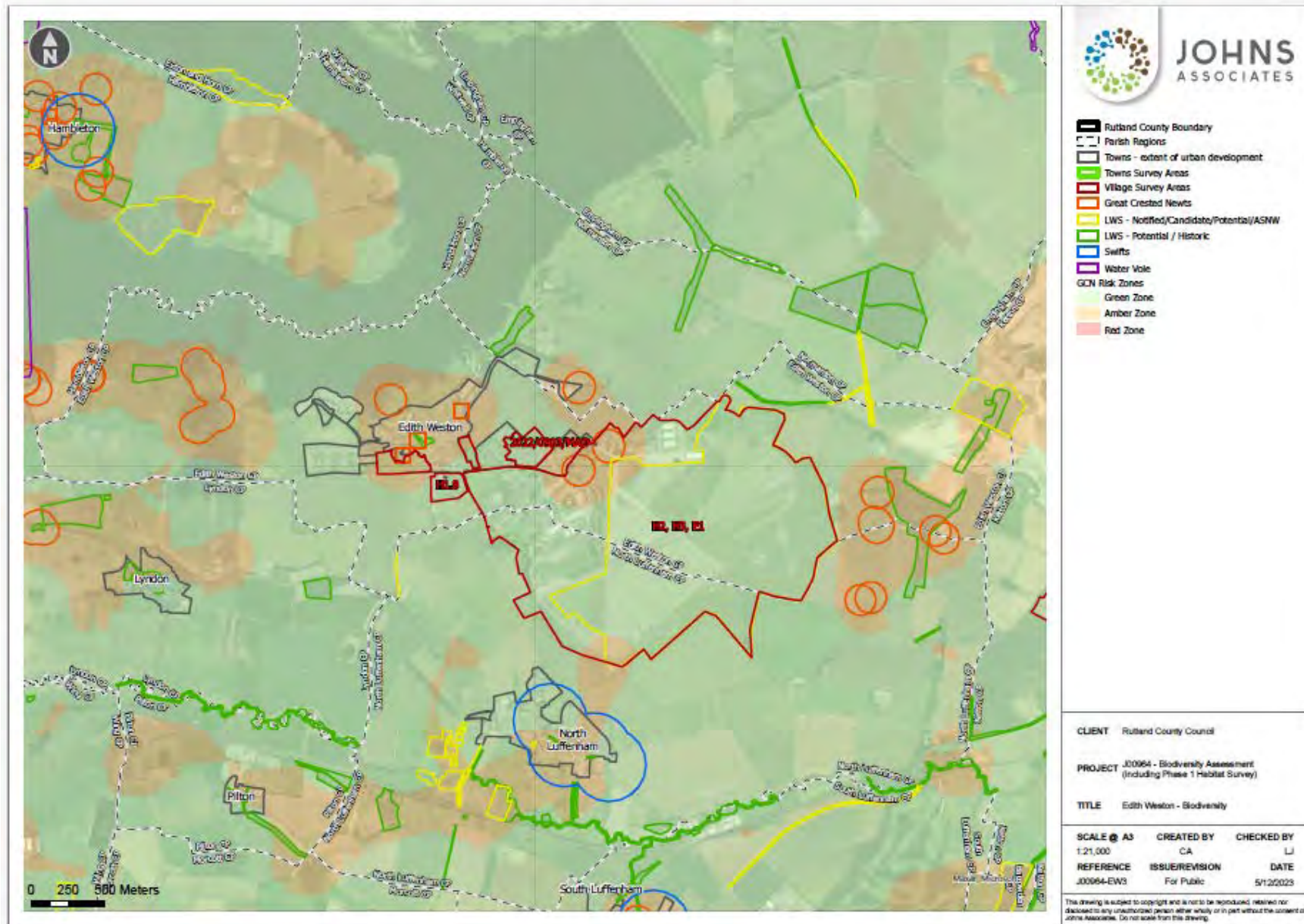


Figure 5: Edith Weston Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Empingham Parish - Biodiversity Summary Report

1 INTRODUCTION

Empingham is a village and civil parish in Rutland, located in the northeast of the County approximately 1km east of Rutland Water and 7.5km northwest of Stamford. Figure 1 shows the habitat types identified within the boundary of Empingham Parish. A breakdown of the habitat areas can be seen in Table 1, which gives the percentage cover of each habitat type within the Empingham Parish boundary.

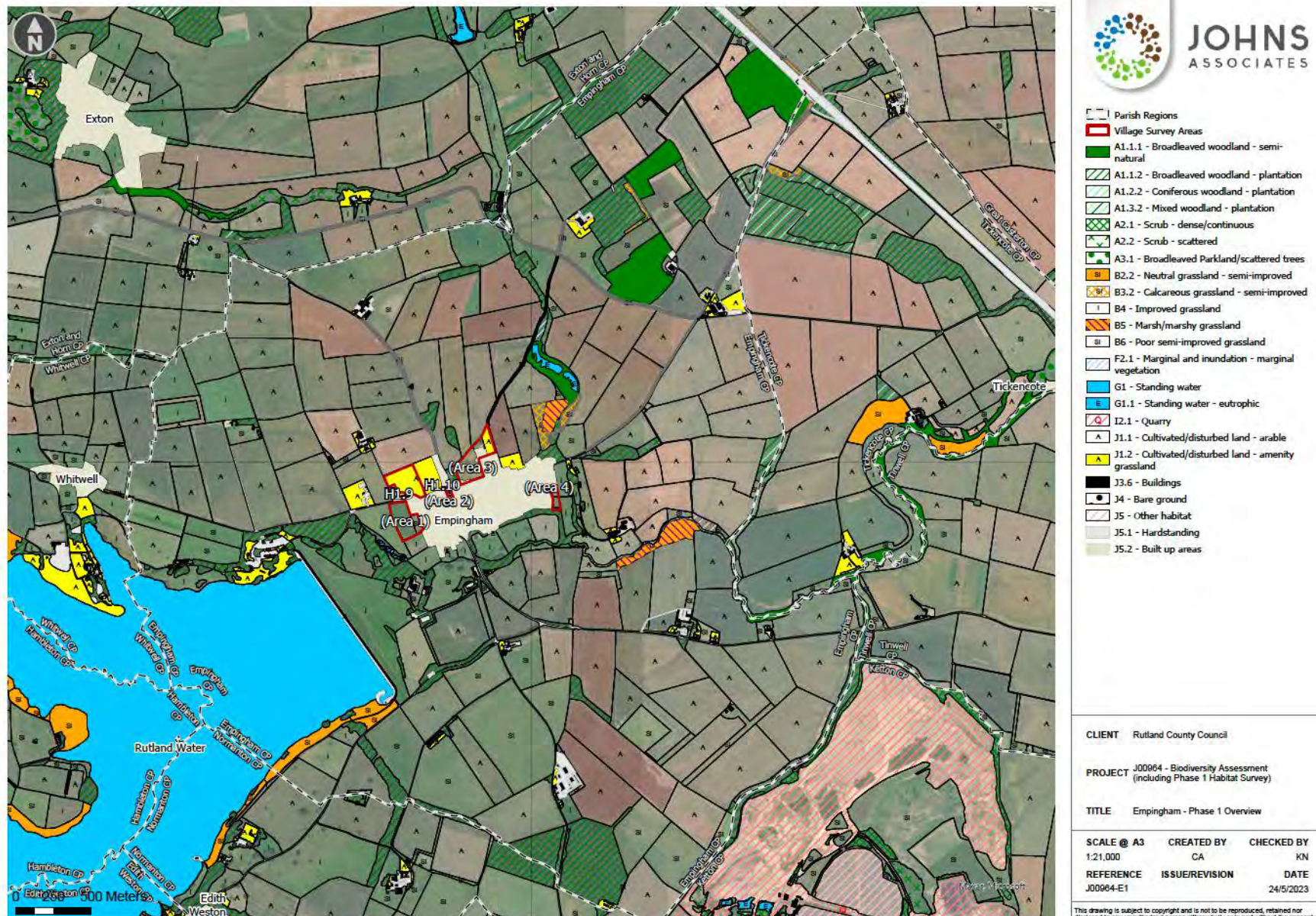
The five most frequent habitats within Empingham were arable, poor semi-improved grassland, improved grassland, eutrophic standing water (part of Rutland Water) and broadleaved plantation woodland. These habitat types account for approximately 88% of the habitats within the parish boundary (see Table 1).

Table 1: Empingham Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Empingham
J1.1	Cultivated/disturbed land - arable	1097.93	55.72
B6	Poor semi-improved grassland	240.63	12.21
B4	Improved grassland	145.94	7.41
G.1.1	Standing water - eutrophic	133.80	6.79
A1.1.2	Broadleaved woodland - plantation	118.41	6.01
J5.1	Hardstanding	49.18	2.50
A1.1.1	Broadleaved woodland – semi-natural	44.97	2.28
J1.2	Cultivated/ disturbed land – amenity grassland	37.92	1.92
J5.2	Built up areas	35.445	1.80
B3.2	Calcareous grassland – semi-improved	11.85	0.60
B2.2	Neutral grassland – semi-improved	10.16	0.52
B5	Marsh/ marshy grassland	6.42	0.33
A2.2	Scrub - scattered	6.39	0.32
J3.6	Buildings	6.03	0.31
A1.3.2	Mixed woodland – plantation	4.49	0.23
J1.3	Cultivated/ disturbed land – ephemeral/ short perennial	4.13	0.21
J4	Bare ground	4.10	0.21
A2.1	Scrub – dense/ continuous	3.88	0.20
F2.1	Marginal and inundation – marginal vegetation	3.82	0.19
A1.2.2	Coniferous woodland - plantation	2.31	0.12

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Empingham
J5	Other habitat	1.79	0.09
B3.1	Calcareous grassland - unimproved	0.47	0.02
C3.1	Other tall herb and fern - ruderal	0.28	0.01
G1	Standing water	0.01	0.00
Total		1970.35	100.00

Figure 1: Overview of Habitats within Empingham Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Empingham to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (red boundaries). Figure 6 shows the GCN Risk Zones within the Empingham settlement area, whilst Figure 7 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 is located adjacent to the west of the main settlement of Empingham and comprises three fields, bisected by Whitwell Road.

The area north of Whitwell Road comprises an amenity grassland area, with a cemetery adjacent to part of the western boundary, residential dwellings adjacent to the southern boundary, Empingham Cricket & Social Club to the east and an arable field to the north. This area is of low biodiversity value as the habitat is intensively managed by mowing to maintain a short sward height. There are no boundary hedgerows or similar to provide habitat for wildlife.

The extent of Survey Area 1 south of Whitwell Road comprises two distinct areas, the first is an improved grassland with no boundary features and the second (adjacent to the east) is a smaller area of poor semi-improved grassland. Both areas are likely to be used for grazing.

Overall, the habitats within Survey Area 1 are of negligible biodiversity value as the grasslands are intensively managed and provide no cover for wildlife. There are no boundary features to any of the field parcels to provide green corridors into the wider local area.

2.1.1 Site Constraints

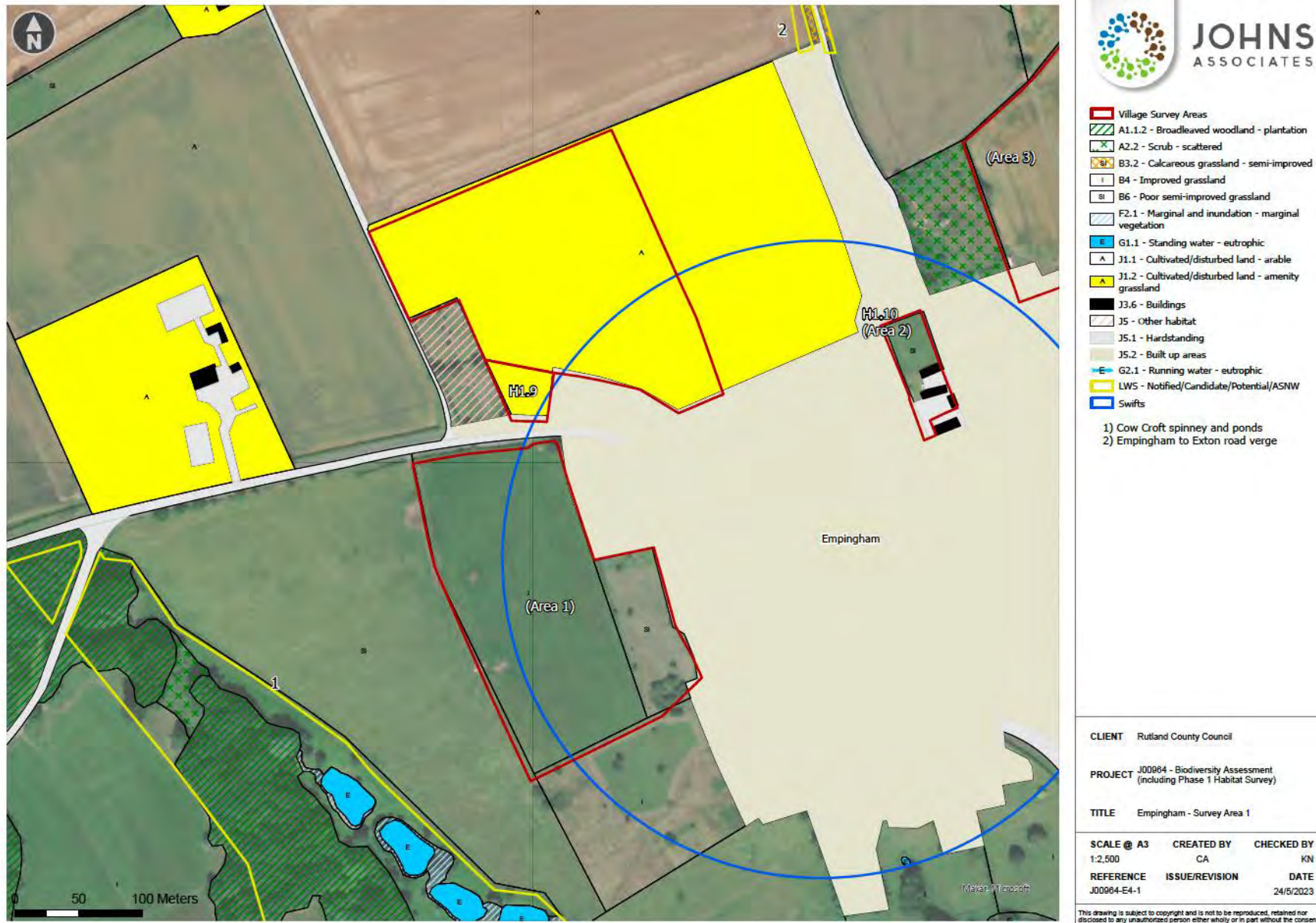
There are no constraints associated with this Survey Area and it is considered suitable for allocation.

2.1.2 Survey Recommendations

No ecological surveys of Survey Area 1 are considered necessary, however, BNG could be achieved through the creation of dense, native hedgerows that have a good species diversity along the boundaries of any new development. Development proposals should also include areas of semi-natural habitat within the design, again to maximise BNG when this becomes mandatory in November 2023. These features will provide habitat for a range of wildlife, including birds, invertebrates, small mammals, reptiles, amphibians and bats.

Figure 7 shows part of the Survey Area to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 1 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 2: Empingham Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located within the built-up area of the village. Empingham Cricket & Social Club and a bowling green are situated to the north, with Exton Road adjacent to the eastern boundary. The southern and western boundaries of Survey Area 2 are immediately adjacent to residential areas.

The Survey Area itself is relatively small and comprises three buildings, and area of hardstanding and an area of poor semi-improved grassland. No semi-natural habitats are present along the boundaries.

Overall, the habitats present in Survey Area 2 are considered to be of negligible biodiversity value. The buildings may be suitable for roosting bats, which should be confirmed by surveys to inform any future planning application for the site.

2.2.1 Site Constraints

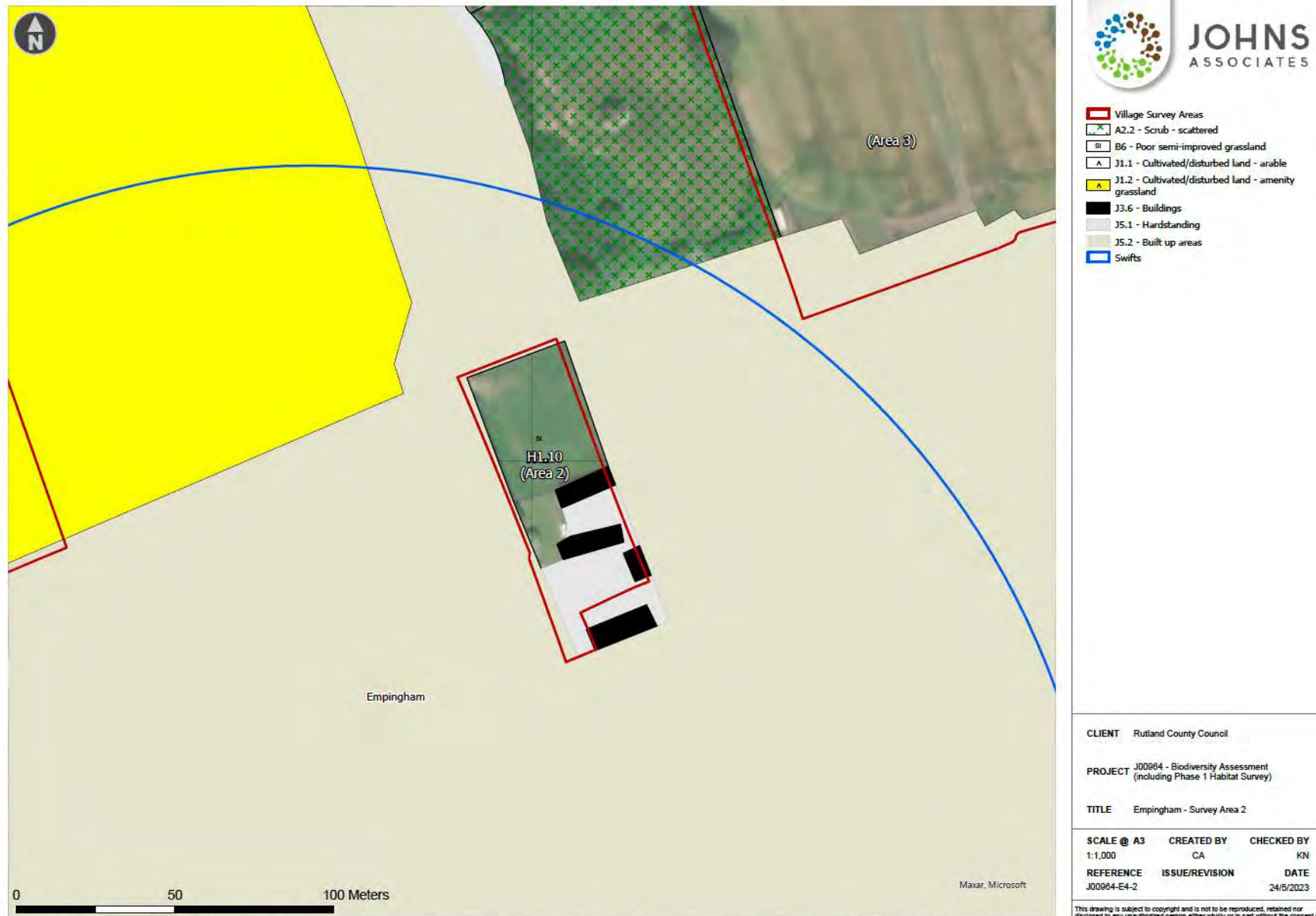
The buildings may support roosting bats and further surveys will be required (see Section 2.2.2). If the grassland habitat includes areas of longer vegetation, it may be suitable for common reptiles if present in the wider local area. The Survey Area is considered suitable for allocation.

2.2.2 Survey Recommendations

The following ecological surveys are recommended to inform any planning application for this site. BNG could be achieved through the creation and appropriate management of areas of semi-natural habitat within any scheme design (including site boundaries). Such areas could provide habitat for a range of wildlife, including birds, invertebrates, small mammals, reptiles, amphibians and bats.

A Potential Roost Assessment (PRA) of the buildings located within the Survey Area should be conducted to confirm whether any are used by bats. Magic map (www.magic.defra.gov.uk) provided one record of a bat licence issued for brown-long eared bats in 2015 for works to a property approximately 290m east of the Survey Area, close to Main Street.

Figure 3: Empingham Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 is situated in the north of the main settlement of Empingham. It comprises areas of arable and amenity grassland habitat, (a playing field), with a small woodland (Beckworth Spinney) and existing buildings also present within the Area boundary. A LWS, 'Lovers Lane Verge' is situated at the north-eastern boundary of the Survey Area, adjacent to the amenity grassland and an area of scrub borders the western boundary.

Overall, the habitats present in Survey Area 3 are of low biodiversity value. However, Beckworth Spinney will provide habitat for a range of wildlife including nesting birds, invertebrates, foraging bats and potentially reptiles if the margins offer enough vegetation cover. Bats may be roosting within one or more of the existing buildings.

2.3.1 Site Constraints

The ecological constraints for this Survey Area are centred around the woodland, which should have a buffer created as part of any development proposals to protect its ecological value in habitat terms. The woodland and its buffer should be enhanced for the benefit of wildlife through mandatory BNG requirements. The arable and amenity grassland habitat is less ecologically constrained and is considered a good location for development through allocation in the Local Plan.

2.3.2 Survey Recommendations

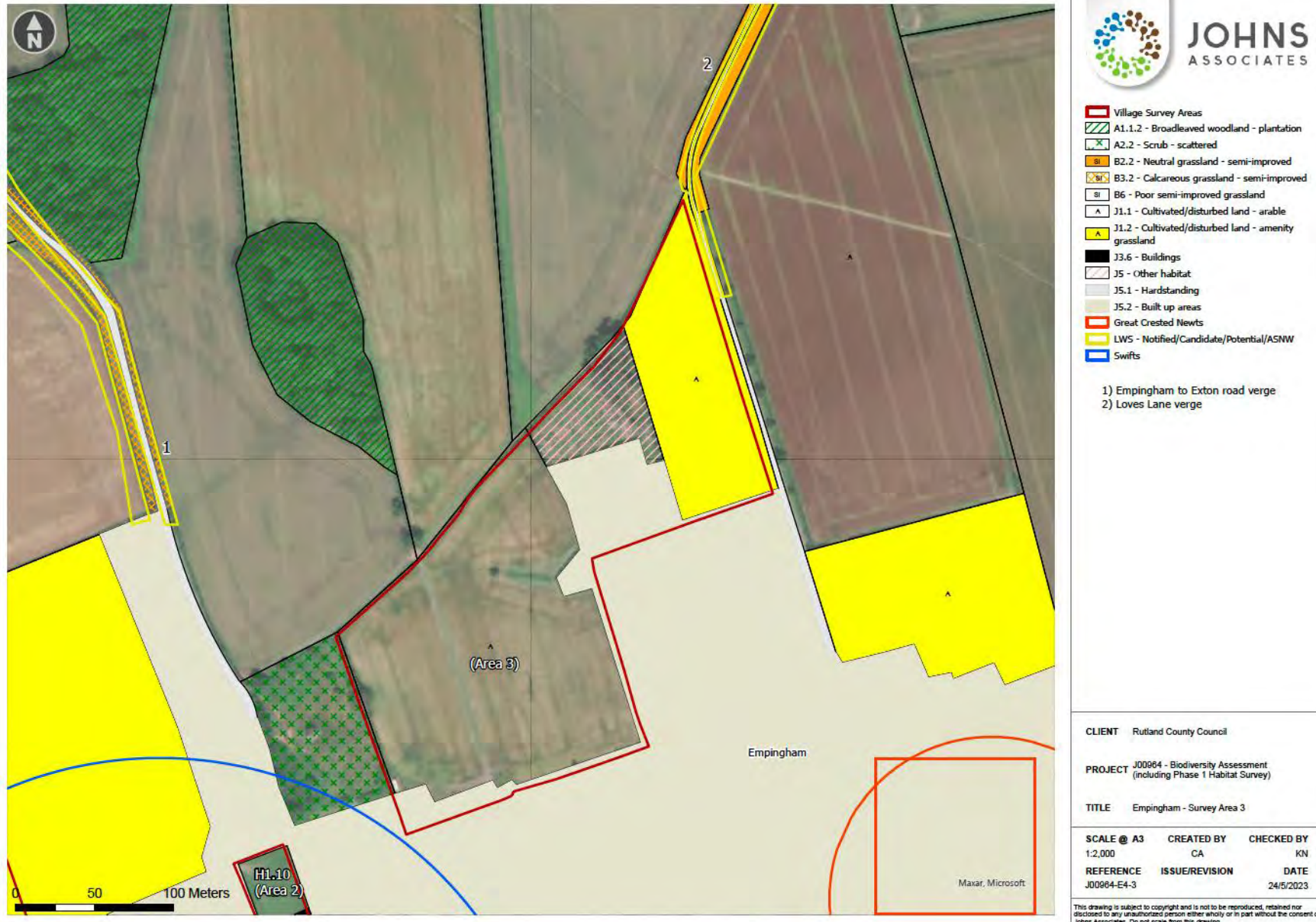
If Survey Area 3 is to be allocated for development the woodland should be retained, protected and enhanced to help provide habitat for wildlife and contribute to a valuable green corridor through this area of Empingham towards Lee Spinney and Warren Spinney. Opportunities to create and/or enhance existing hedgerows to provide this valuable wildlife corridor between the woodlands should be actively encouraged as part of any development proposals.

The arable field and amenity grassland are considered good locations ecologically for new development as long as a number of surveys and protection measures are implemented:

- Bat activity surveys and static monitoring should be conducted to assess whether there are any important commuting routes for bats that need to be retained as dark corridors within any new development design, particularly along the woodland edges as this provides the only potential commuting route in this area.
- A lux lighting plan should be provided prior to determination, to avoid lighting impacts on bats and other nocturnal wildlife.
- Ground level tree assessments (GLTA) of all standard trees within or immediately adjacent to the Survey Area should be carried out. Further surveys may be required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- All existing buildings within Survey Area 3 should be subject to Potential Roost Assessments (PRAs) to confirm whether any are used by bats. Magic map (www.magic.defra.gov.uk) provided one record of a bat licence issued for brown-long eared bats in 2015 for works to a property approximately 220m south of the Survey Area, close to Main Street.
- Reptile surveys of any suitable habitat, particularly close to the woodland edge, scrub habitat to the west and protected road verge to the northeast. A precautionary method statement should be produced to further reduce any risk of harm to these species. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works.

- The woodland habitat should be retained, protected and enhanced through mandatory BNG requirements within any development design. Suitable buffers should be implemented, and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 4: Empingham Survey Area 3



2.4 SURVEY AREA 4

Survey Area 4 is located in the east of Empingham village and comprises improved grassland and a small area of broadleaved plantation woodland in the south. It forms part of a larger area of improved grassland which includes a watercourse in the east (a tributary of the River Gwash) which has a potential/ historic LWS designation and records of water vole. This will provide a valuable wildlife corridor and should be protected. A larger woodland is situated adjacent to the southern Survey Area boundary, with residential properties to the west and north and Empingham CE Primary School also to the west.

Overall, the habitats present within the boundary of Survey Area 4 are considered to be of low biodiversity value, although the woodland in the south is likely to support a range of species including nesting birds, foraging and commuting bats, invertebrates, small mammals and potentially reptiles if the margins offer enough vegetation cover. Habitats on site are not suitable for water vole, which are likely to remain within the watercourse and associated riparian/ marginal habitats.

2.4.1 Site Constraints

The ecological constraints for this Survey Area are centred around the woodland and watercourse to the east.

The woodland habitat present in the south of the Survey Area should be retained and protected through the implementation of a woodland buffer zone. This area is likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill on these habitats is no greater than 0.5 lux. Depending on the species present and overall condition of this habitat, (to be assessed as part of mandatory BNG requirements for the site), some habitat enhancements may be possible, for example, through improved management practices and additional planting.

Any areas of taller vegetation (for example, close to the woodland edges) may support common species of reptile and further surveys are recommended in Section 2.4.2.

Figure 6 shows that Survey Area 4 is located wholly within an Amber Risk Zone for GCN.

2.4.2 Survey Recommendations

If Survey Area 4 is to be allocated for development, it would be worth considering retaining and protecting the southern boundary as a dark corridor to maintain its value as a functional wildlife corridor for nocturnal species and to protect the wider area of woodland to the south. The improved grassland field is considered to be a good location ecologically for allocation in the local plan as long as the area of woodland and habitats to the east (associated with the river corridor) can be retained, protected and enhanced for wildlife.

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by any development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design (particularly along the woodland edge).
- A lux lighting plan should be produced prior to determination of any planning applications to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys of any suitable habitat, particularly close to the woodland edge. A precautionary method statement should be produced to further reduce any risk of harm to reptiles and amphibians. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works.

- Woodland and individual trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented and Heras fencing used to as necessary to ensure no development related impacts occur. Protection and enhancement of the river corridor should also be considered.

Figure 5: Empingham Survey Area 4

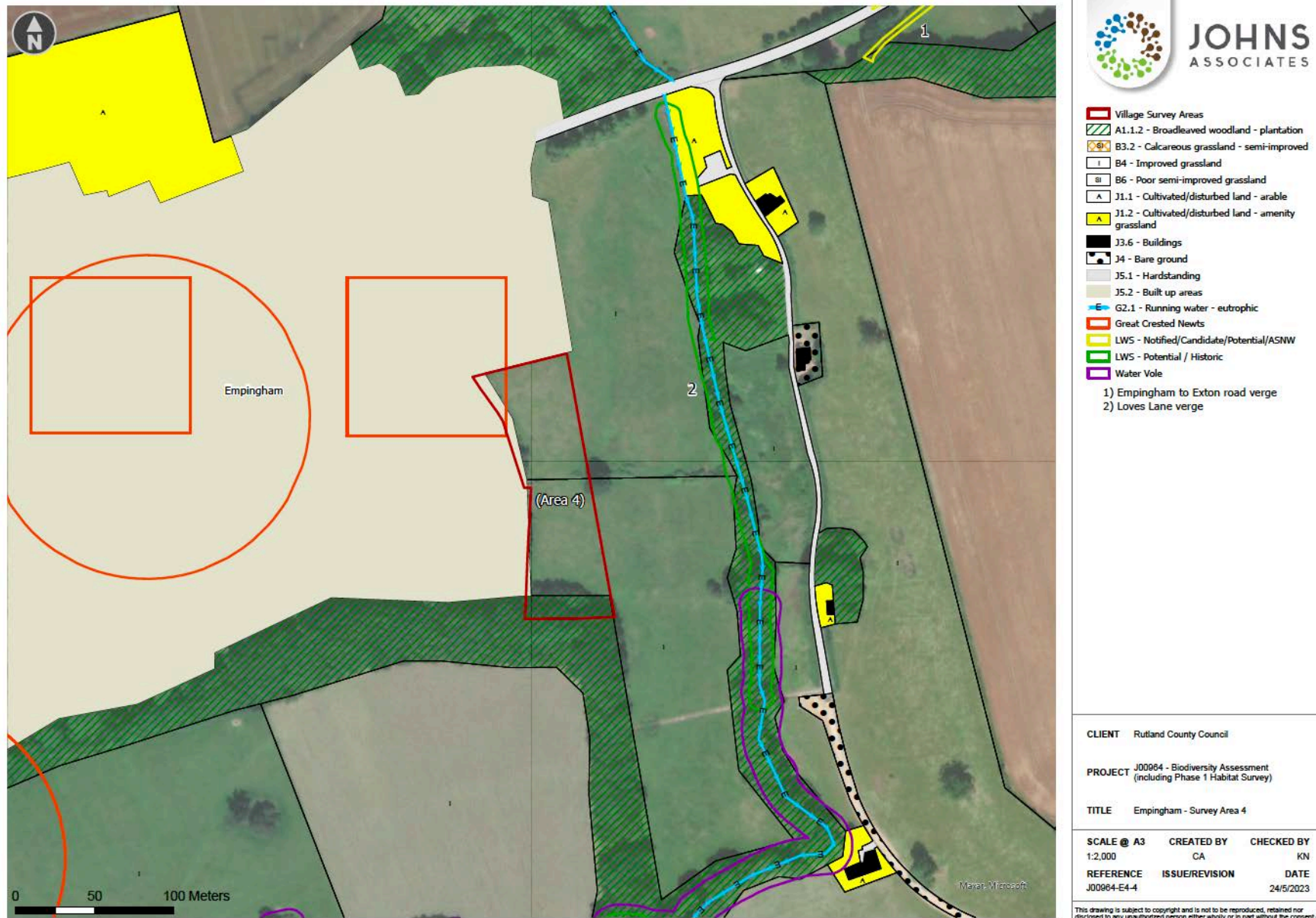


Figure 6: Empingham Great Crested Newt Risk Zones

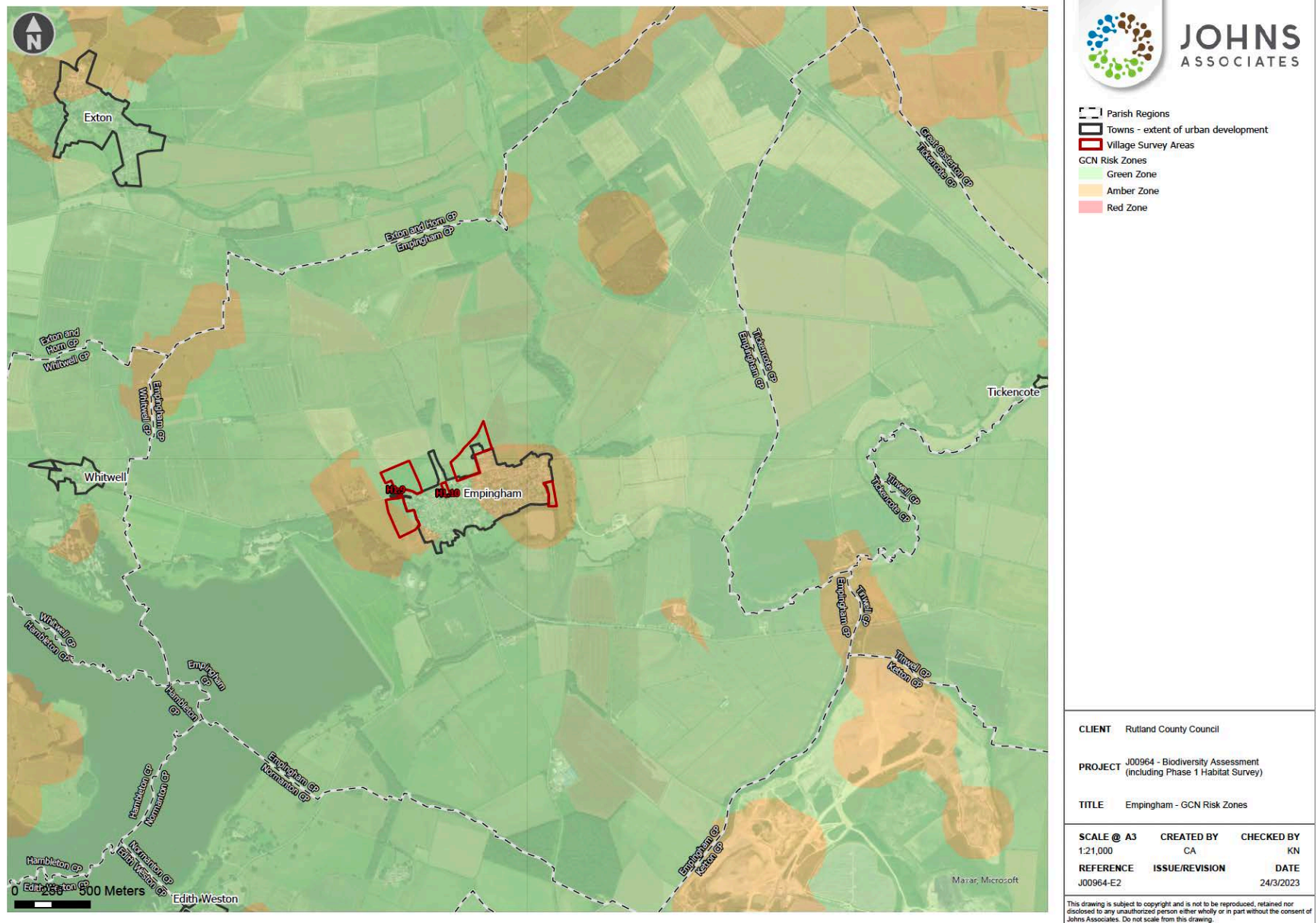
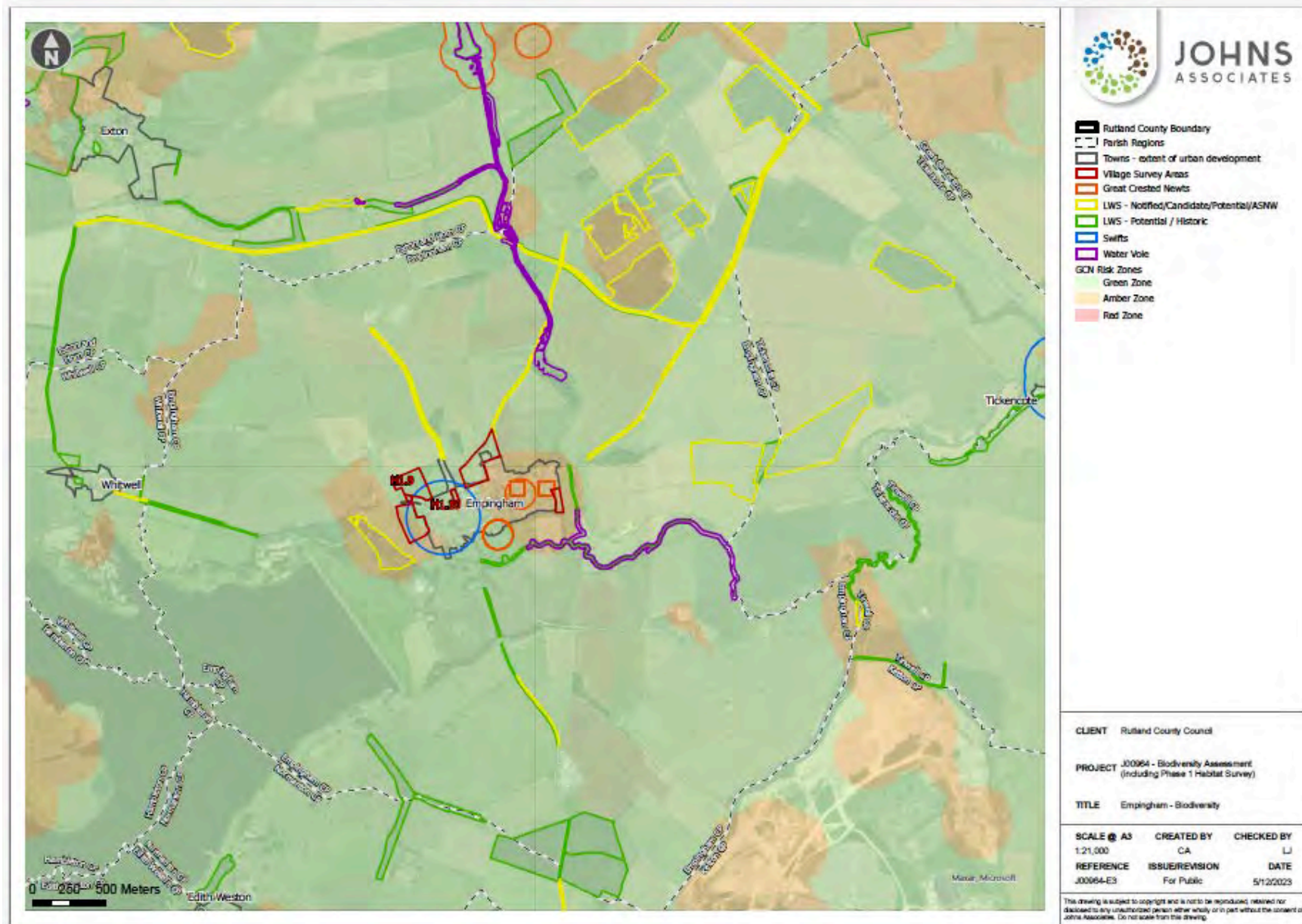


Figure 7: Empingham Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Great Casterton Parish - Biodiversity Summary Report

1 INTRODUCTION

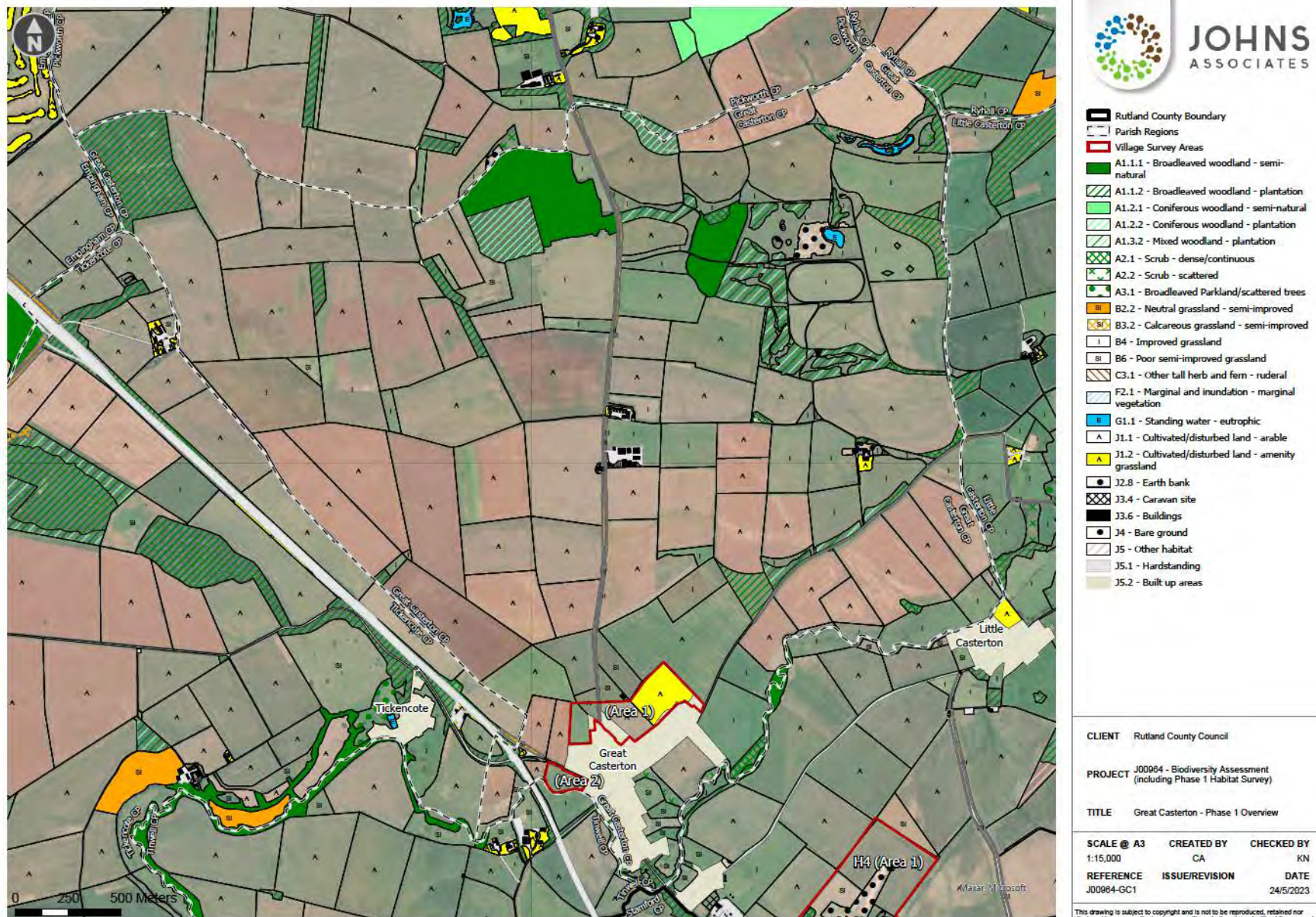
Great Casterton is a village and civil parish in Rutland, located in the east of the County to the north of Stamford. Figure 1 shows the habitat types identified within the boundary of Great Casterton. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within the parish boundary.

The three most frequent habitats within Great Casterton were arable, improved grassland and poor semi-improved grassland. These habitat types account for approximately 81% of the habitats within the Great Casterton parish boundary (see Table 1).

Table 1: Great Casterton Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Great Casterton
J1.1	Cultivated/ disturbed land - arable	289.70	58.56
B4	Improved grassland	70.77	14.30
B6	Poor semi-improved grassland	42.17	8.52
B2.2	Neutral grassland – semi-improved	18.79	3.80
A1.1.2	Broadleaved woodland - plantation	17.29	3.50
J5.2	Built up areas	11.61	2.35
J5.1	Hardstanding	9.29	1.88
A1.1.1	Broadleaved woodland – semi-natural	9.22	1.86
A3.1	Broadleaved parkland/ scattered trees	6.21	1.26
J4	Bare ground	4.68	0.95
J5	Other habitat	3.97	0.80
A2.1	Scrub – dense/ continuous	3.40	0.69
B3.2	Calcareous grassland – semi-improved	1.93	0.39
A2.2	Scrub - scattered	1.86	0.38
J1.2	Cultivated/ disturbed land – amenity grassland	1.82	0.37
J3.6	Buildings	1.12	0.23
J3.4	Caravan site	0.41	0.08
C3.1	Other tall herb and fern - ruderal	0.24	0.05
J2.8	Earth bank	0.13	0.03
F2.1	Marginal and inundation – marginal vegetation	0.08	0.02
G1.1	Standing water - eutrophic	0.06	0.01
Total		494.74	100.00

Figure 1: Overview of Habitats within Great Casterton Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for two sites within Great Casterton parish to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (red boundaries). Figure 4 shows the GCN Risk Zones within the Great Casterton Parish, whilst Figure 5 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 is located in the north of Great Casterton, immediately adjacent to the northern extent of the settlement in a semi-rural location. The Survey Area comprises amenity grassland habitat to the rear of Casterton College, (likely used as playing fields and intensively managed to maintain a short sward height), an arable field which appears to be farmed to the boundaries with no field margins of value to wildlife, and parts of rear domestic gardens associated with a row of existing properties. An existing non-statutory site ('Pickworth Road Roadside Verge Nature Reserve') bisects the Survey Area. A very small areas of broadleaved plantation woodland is situated adjacent to the central section of the northern Survey Area boundary. 'Home Farm LWS' is located immediately adjacent to the north-eastern boundary (see Figure 2).

Overall, the habitats present on Site are considered to be of low biodiversity value. The on-site and adjacent non-statutory sites are the most ecologically valuable areas associated with Survey Area 1, and these should be protected from the potential effects of any development if the site is allocated in the Local Plan. Appropriate buffer strips should be included in the site masterplan to ensure these non-statutory designated sites are protected, and enhancement measures (if appropriate) considered which should be delivered through mandatory BNG requirements. Boundary habitats within the Survey Area should be retained, protected and enhanced to maximise their value as wildlife corridors, and/or created to increase this resource locally.

2.1.1 Site Constraints

Figure 5 shows that a significant part of the western section of this Survey Area is within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 1 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

The presence of non-statutory LWSs within and adjacent to the Survey Area boundary must be properly considered as part of any future planning proposals. These sites are of County nature conservation importance, and should be retained, protected and enhanced.

The existing gardens associated with the houses in the west of the Site are likely to support a range of wildlife, including nesting birds, invertebrates, small mammals (including hedgehogs) and common reptiles. The houses themselves may support bat roosts, and therefore lighting of the western Survey Area boundary would need to be carefully considered and a Lighting Plan produced for the development.

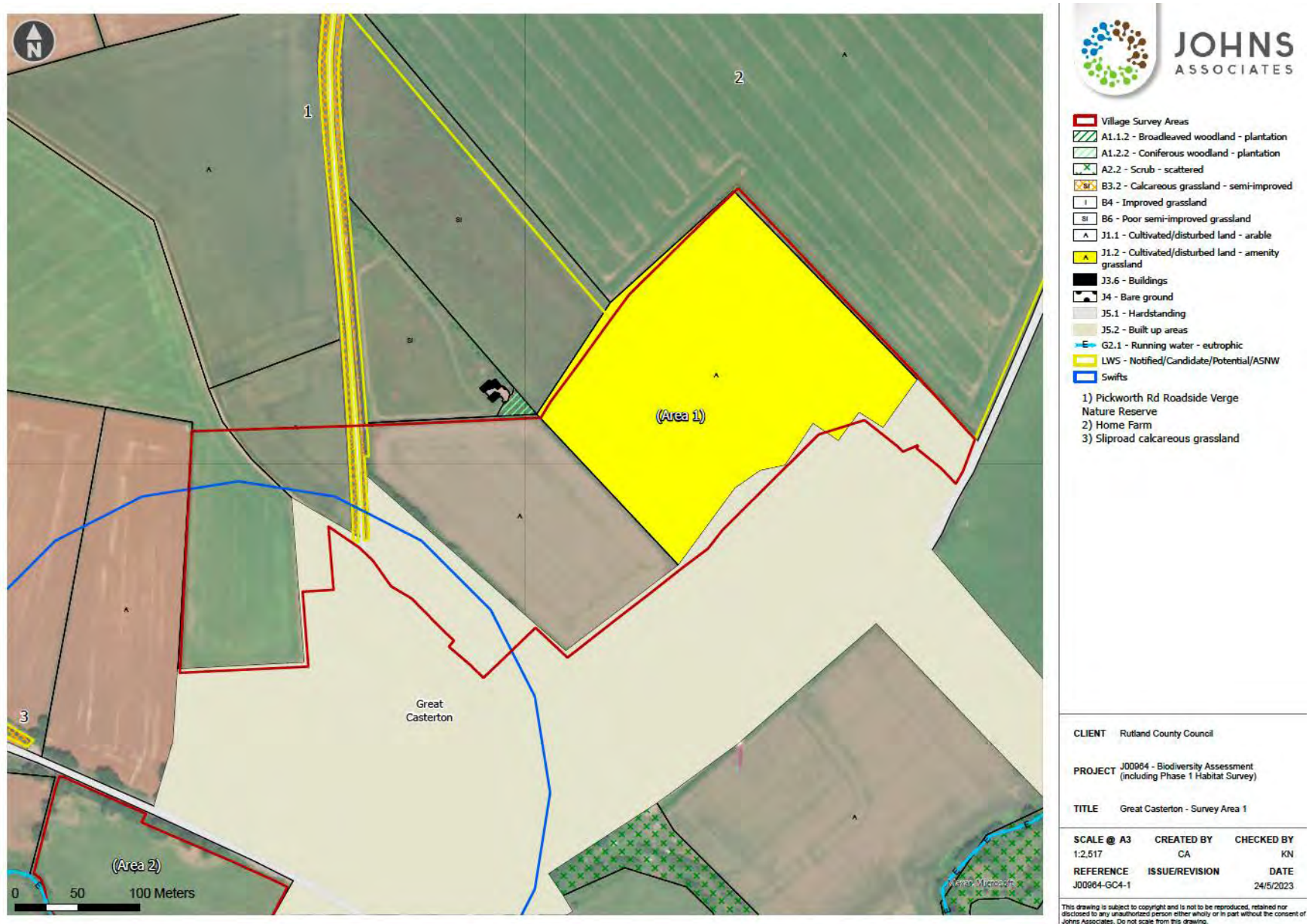
A buffer will be needed to protect the small area of woodland to the north from impacts arising from soil compaction within the root zones. Appropriate fencing should be installed to clearly mark this no-access area for construction traffic.

2.1.2 Survey Recommendations

Survey Area 1 is considered to be a good location ecologically for allocation for development as long as the Local Wildlife Sites and boundary habitats are retained, protected and enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

- Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- The Survey Area should be assessed for reptile suitability, particularly the existing gardens. A precautionary Method Statement is recommended for vegetation clearance work to safeguard any nesting birds, amphibians, reptiles and/or hedgehogs that may be using the site.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design.

Figure 2: Great Casterton Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located immediately to the southwest of Great Casterton village. It comprises a single improved grassland field, likely used for grazing. Aerial photos show hedgerows along the northern and western boundaries, with the River Gwash forming the southern Survey Area boundary. Residential properties are located to the south-east and Old Great North Road is adjacent to the northeastern boundary. The A1 is situated approximately 70m west of this site at its closest point. A stretch of the River Gwash (adjacent to the southern-western boundary) is a potential/historic LWS.

Overall, the habitats present within the boundary of Survey Area 2 are of low-moderate biodiversity value, and the watercourse and boundary hedgerows should be retained and protected during any development works and incorporated into the masterplan for the site.

2.2.1 Site Constraints

The ecological constraints for this Survey Area are centred around the River Gwash and boundary hedgerows. The watercourse should have an 8m buffer to protect its ecological value in habitat terms, as a wildlife corridor and to mitigate any pollution impacts from construction. The watercourse should also be enhanced for the benefit of wildlife through mandatory BNG requirements. The improved grassland habitat is less ecologically constrained and is considered a good location for development through its allocation in the Local Plan.

The watercourse is considered to be an important ecological corridor and is likely to be used as a commuting route and foraging habitat for a number of bat species.

Figure 5 shows that this Survey Area is wholly within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development within Survey Area 1 should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

2.2.2 Survey Recommendations

If Survey Area 2 is to be allocated for development the watercourse and boundary hedgerows should be protected and enhanced to help provide habitat for wildlife and maintain a valuable corridor through the wider local area. The improved grassland field is considered a good location ecologically for new development as long as a number of surveys and protection measures are implemented:

- Bat activity surveys and static monitoring should be conducted to assess whether there are any important commuting routes for bats that need to be retained as dark corridors within any new development design, particularly along the watercourse and associated hedgerows as this provides a potential commuting route to areas of broadleaved plantation woodland along the A1 and further to the west.
- A lux lighting plan should be provided prior to determination, to avoid lighting impacts on bats and other nocturnal wildlife.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be affected by proposals. Further surveys may be required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- Otter and water vole surveys along the River Gwash.

Figure 3: Great Casterton Survey Area 2

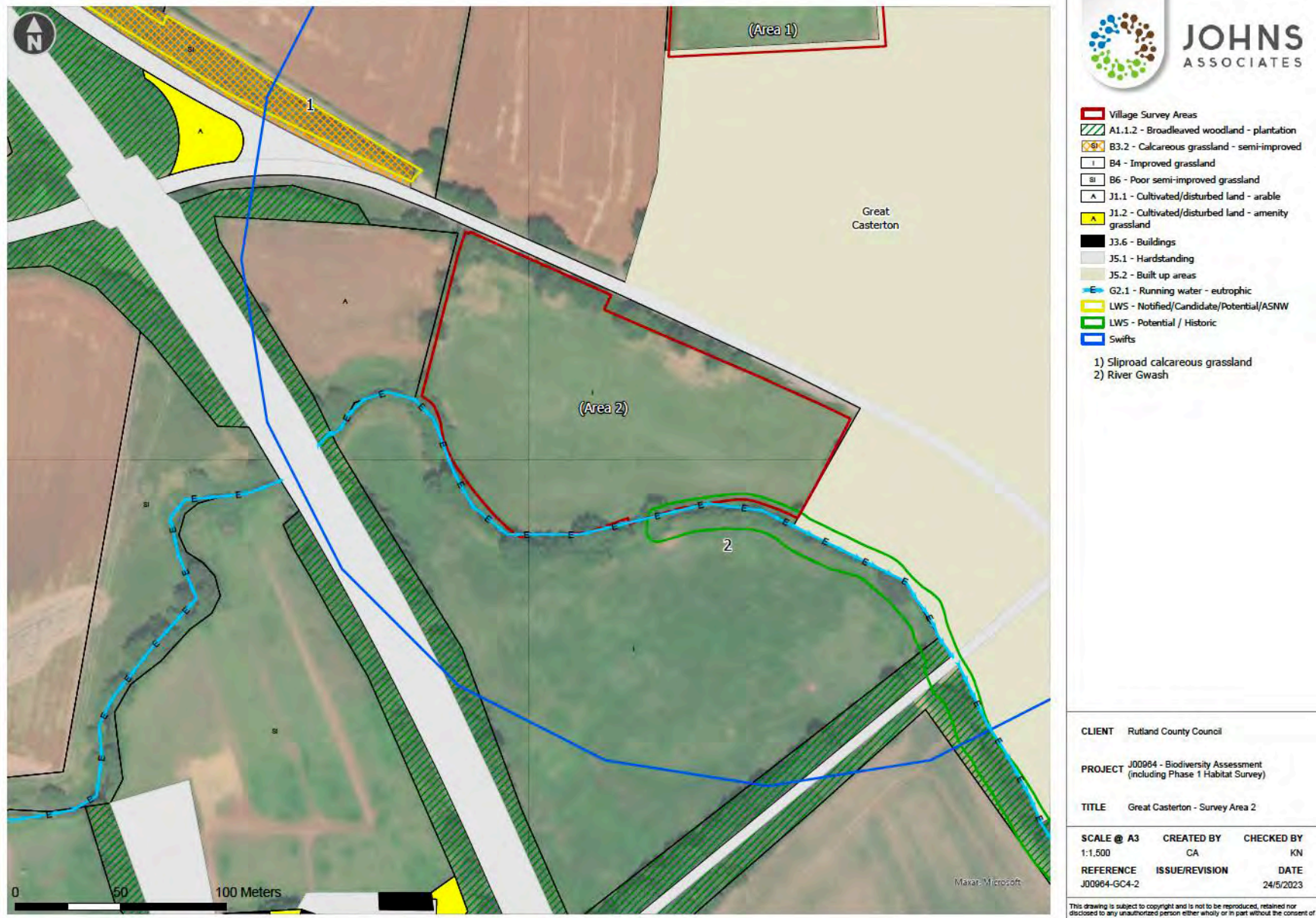
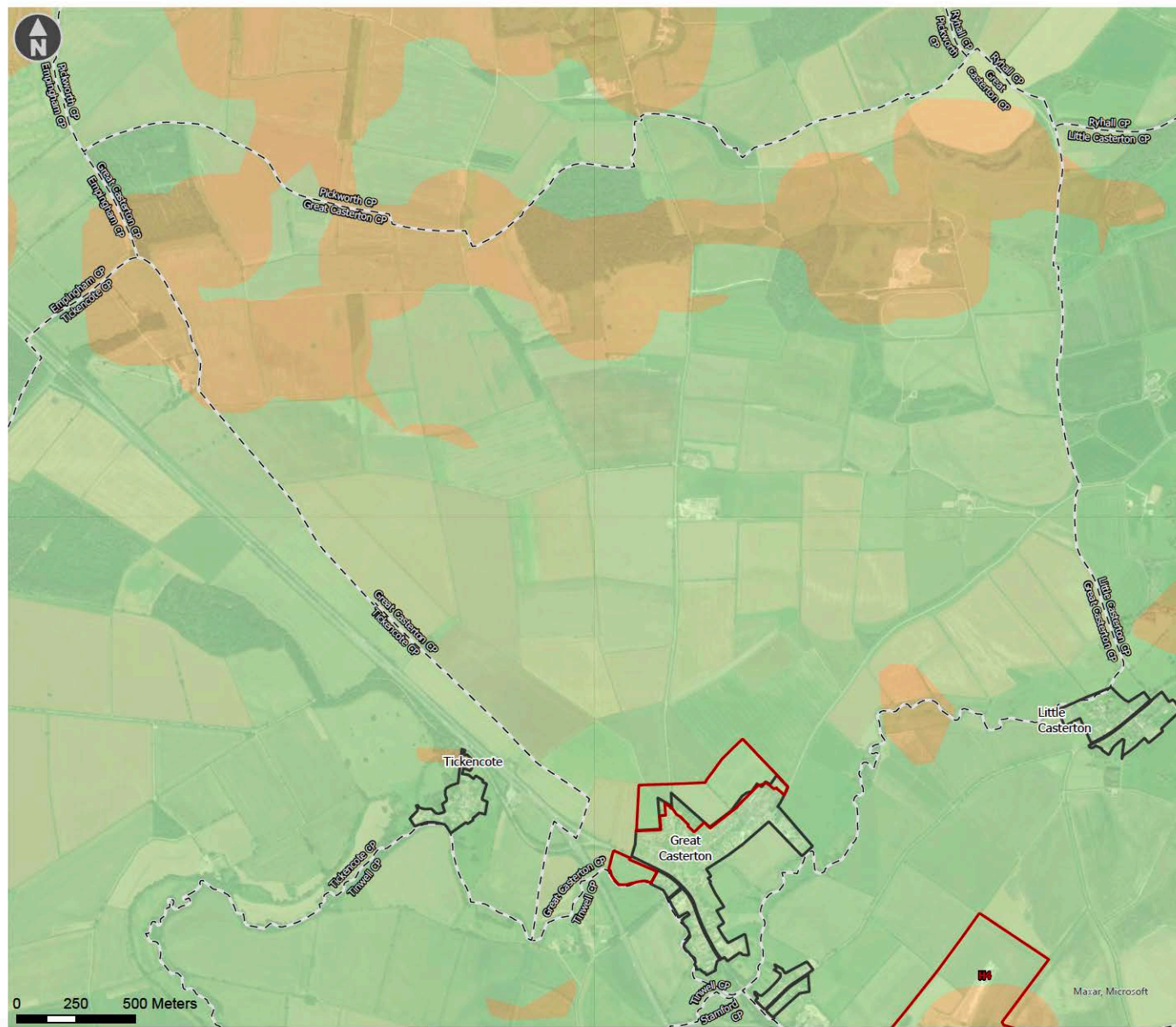


Figure 4: Great Casterton Great Crested Newt Risk Zones

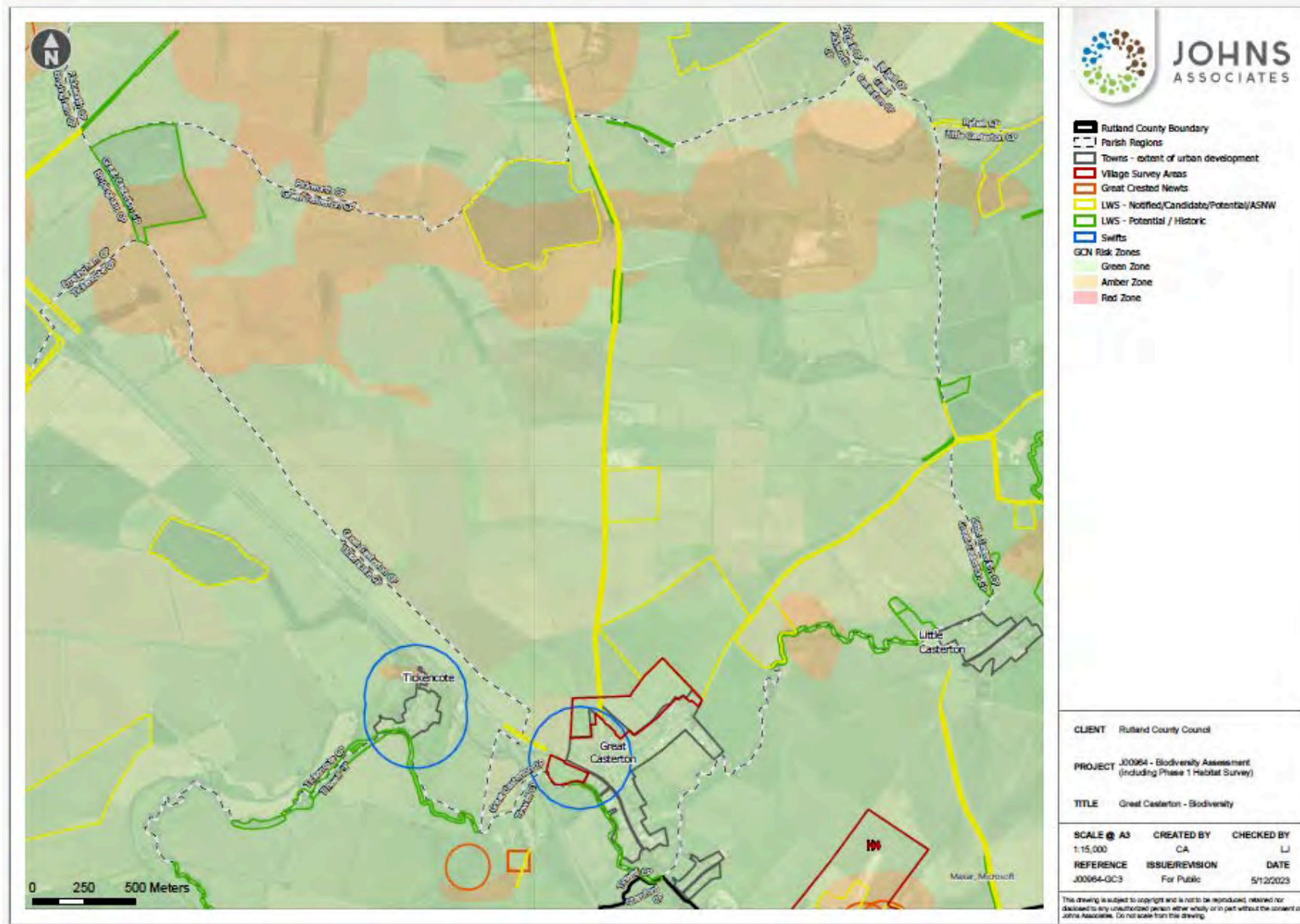


- Parish Regions
- Towns - extent of urban development
- Village Survey Areas
- GCN Risk Zones**
- Green Zone
- Amber Zone
- Red Zone

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Great Casterton - GCN Risk Zones		
SCALE @ A3	CREATED BY	CHECKED BY	
1:15,000	CA	KN	
REFERENCE	ISSUE/REVISION	DATE	
J00964-GC2		24/3/2023	

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Figure 5: Great Casterton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Greetham Parish - Biodiversity Summary Report

1 INTRODUCTION

Greetham is a village and civil parish in Rutland, located between Cottesmore and Stretton, to the north of Rutland Water. Figure 1 shows the habitat types identified within the boundary of Greetham Parish. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within the Greetham Parish boundary.

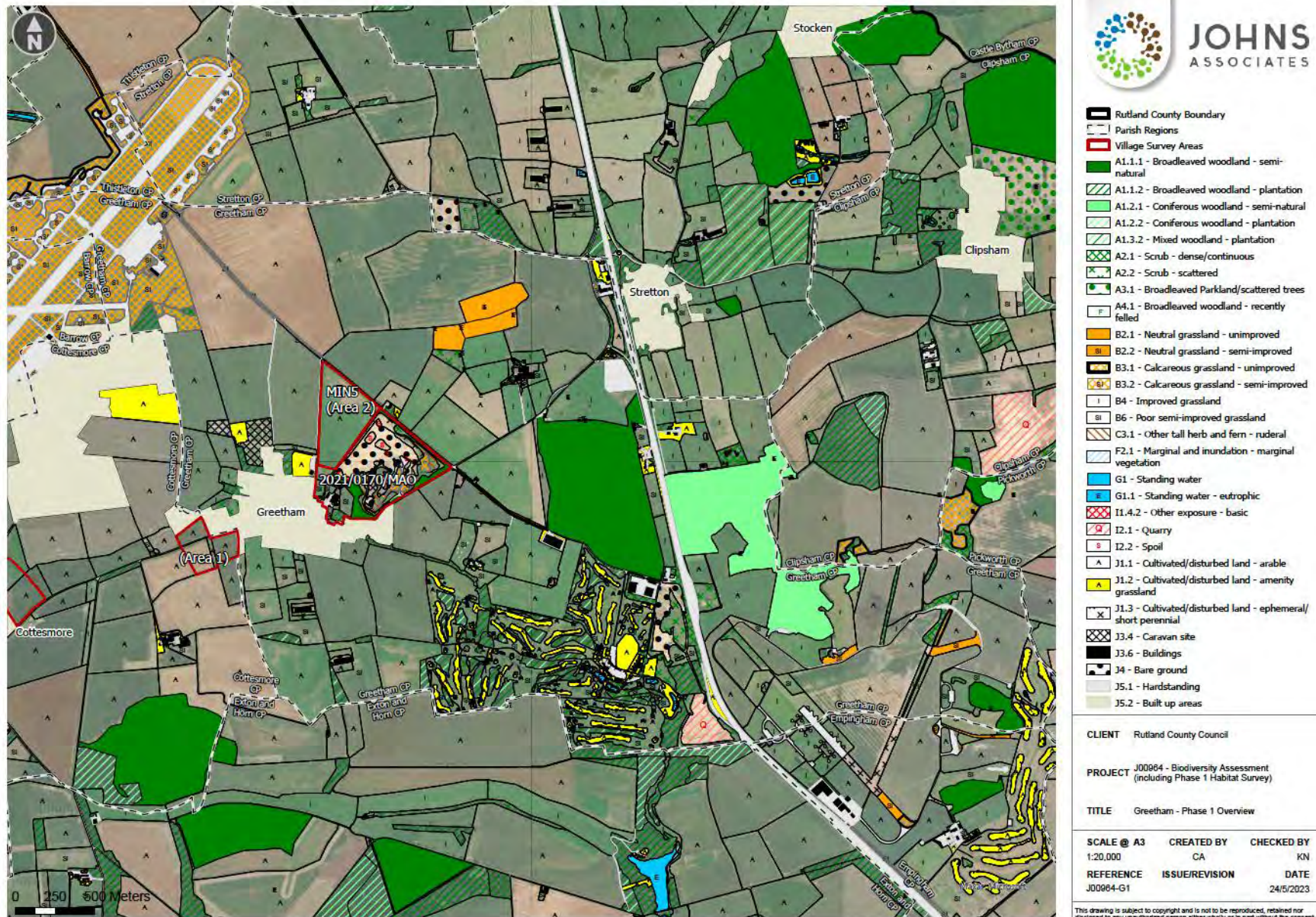
The five most frequent habitats within Greetham were: arable, poor semi-improved grassland, improved grassland, broadleaved woodland and coniferous woodland. These five habitat types account for approximately 74% of the habitats present (see Table 1).

Table 1: Greetham Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Greetham
J1.1	Cultivated/disturbed land - arable	574.92	46.10
B6	Poor semi-improved grassland	119.39	9.57
B4	Improved grassland	110.02	8.82
A1.1.1	Broadleaved woodland - semi-natural	66.96	5.37
A1.2.1	Coniferous woodland - semi-natural	53.38	4.28
J5.1	Hardstanding	51.45	4.13
B3.2	Calcareous grassland - semi-improved	45.88	3.68
J1.2	Cultivated/disturbed land - amenity grassland	40.10	3.22
J5.2	Built up areas	39.74	3.19
A1.1.2	Broadleaved woodland - plantation	25.42	2.04
A1.3.2	Mixed woodland - plantation	19.52	1.56
A2.2	Scrub - scattered	19.02	1.53
J4	Bare ground	19.01	1.52
A2.1	Scrub - dense/continuous	13.90	1.11
B2.1	Neutral grassland - unimproved	12.59	1.01
I2.1	Quarry	5.91	0.47
J3.4	Caravan site	5.48	0.44
J1.3	Cultivated/disturbed land - ephemeral/short perennial	5.19	0.42
J3.6	Buildings	5.11	0.41
A1.2.2	Coniferous woodland - plantation	4.05	0.32
B2.2	Neutral grassland - semi-improved	3.78	0.30
C3.1	Other tall herb and fern - ruderal	2.43	0.19

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Greetham
G1.1	Standing water - eutrophic	1.28	0.10
I2.2	Spoil	0.89	0.07
F2.1	Marginal and inundation - marginal vegetation	0.72	0.06
B3.1	Calcareous grassland - unimproved	0.65	0.05
I1.4.2	Other exposure - basic	0.28	0.02
G1	Standing water	0.02	0.00
Total		1247.064	100.00

Figure 1: Overview of Habitats within Greetham Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Greetham to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1.

2.1 SURVEY AREA 1

Survey Area 1 is located in the southwest of the Parish and comprises arable habitat. The Survey Area is bisected by Greetham Road.

The northern compartment (north of Greetham Road) has residential areas to the east and a wastewater treatment works to the northwest. A pond and a watercourse are present within the treatment works site. Further arable habitat is situated to the west. This part of Survey Area 1 is located within an Amber Risk Zone for GCN, although no suitable habitats are present within the Area boundary.

The southern compartment of Survey Area 1 (south of Greetham Road) comprises sections of two arable fields. No boundary hedgerows are present. A very small section of this compartment is located within an Amber Risk Zone for GCN, (see Figure 4), although again, no on-site habitats are considered suitable for this species.

Overall, the Survey Area is considered to have very low biodiversity value, as it comprises only arable habitat. No field margins containing longer vegetation and/or greater species diversity were noted during the survey.

2.1.1 Site Constraints

There are no ecological constraints present within or adjacent to Survey Area 1 and it is considered suitable for allocation within the new local plan.

2.1.2 Survey Recommendations

Any individual trees close to the boundary of this Survey Area should be surveyed for their suitability to support roosting bats. No other surveys are deemed necessary.

Figure 2: Greetham Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is a large area of land situated in the northeast of the Greetham Parish boundary. The eastern part of this Area has an existing outline planning application, (reference 2021/0170/MAO), for 30 residential dwellings, which has yet to be determined.

The Survey Area comprises a mosaic of habitats. The western compartment comprises arable habitat, with a section of the western boundary hedgerow having 'potential LWS' status (i.e. awaiting confirmation).

The eastern (and larger) compartment (part of which is subject to the current outline planning application) incorporates the 'southern portion of the now redundant (Phase 1) Greetham limestone quarry, which has been worked out for block stone and aggregate'. Habitats present include broadleaved semi-natural woodland, broadleaf plantation woodland, poor semi-improved grassland, bare ground, spoil, inland cliff and other exposure (from the quarry workings), semi-improved calcareous grassland, intact hedgerows, tall ruderal vegetation, a small pond, scattered scrub and ephemeral/ short perennial vegetation.

Typically, the habitats present within the western part of this Survey Area have low biodiversity value. The exception to this may be the section of hedge with 'potential LWS' status, and further surveys to determine its ecological value are needed. Providing this section of boundary habitat (preferably within its wider context of the entire hedgerow) this part of the Survey Area is suitable for allocation. The eastern part of this Survey Area is considered to have low-moderate biodiversity value, with some of the more valuable habitats including semi-natural woodland and semi-improved calcareous grassland. These habitat types comprise just 5.37% and 3.68% respectively of the total area within Greetham Parish, and ideally should be retained, protected and the grassland enhanced as part of any development proposals.

2.2.1 Site Constraints

There are two areas of hedgerow with 'potential LWS' status within Survey Area 2. Further surveys will be needed to confirm their current ecological status, and whether either section meets the criteria for designation. All boundary features associated with this Survey Area should be retained, protected and enhanced as part of any development proposals, as they form valuable wildlife corridors to the wider local area.

A current LWS ("Verge Near Greetham Wood") is located close to the eastern boundary of the Survey Area, near the Stretton Road crossroads. This should be protected from potential accidental damage from construction vehicles should the Area be allocated for development, potentially with fencing and appropriate signage being used.

The semi-natural broadleaved woodland should be retained and protected using appropriate fencing and signage during construction works. Woodland edge habitat is likely to be used by foraging and commuting bats, and suitable trees within the woodland may be used by roosting bats.

Ideally, areas of calcareous grassland should be retained as part of any development proposals. Enhancement of this habitat would provide valuable biodiversity net gain once this becomes mandatory in November 2023.

Water voles have been recorded in the watercourse which flows close to the southern Area boundary, although no suitable habitat is present for this species on-site.

Scrub and tall ruderal vegetation may provide suitable habitat for a range of species including nesting birds, reptiles, small mammals and invertebrates. Depending on the nature of the spoil, this habitat may provide suitable hibernation features for common reptile species.

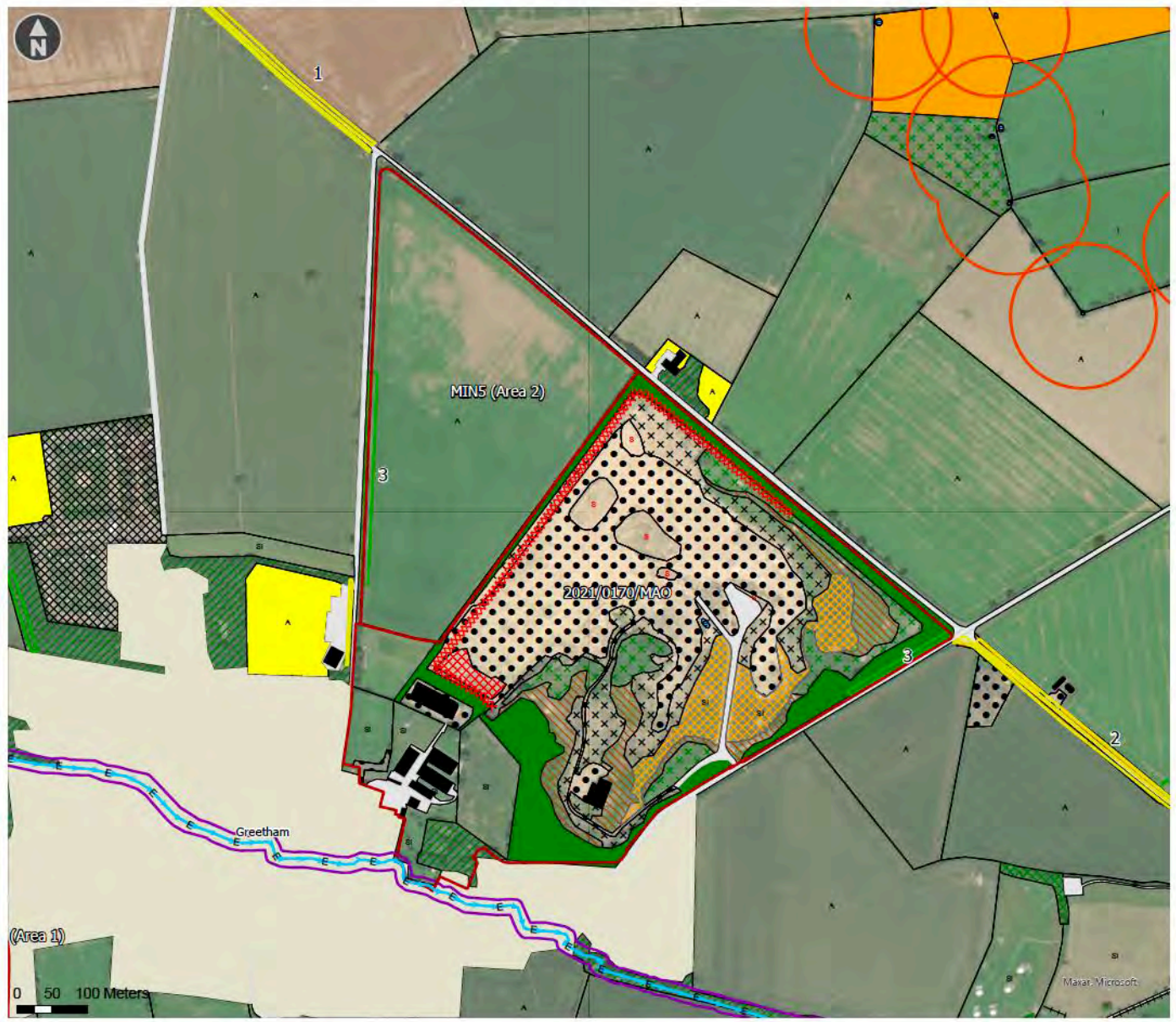
2.2.2 Survey Recommendations

The western part of Survey Area 2 is considered suitable for allocation as it has limited biodiversity value. More constraints are associated with the eastern part of this Survey Area, which will require careful masterplanning to

ensure the valuable habitats are protected and enhanced as part of any development proposals. The following surveys are deemed necessary to support the development of Survey Area 2:

- Update surveys of the two potential LWS, to confirm their current ecological value and LWS designation.
- Reptile surveys of suitable habitat.
- Potential roost assessments (PRA) of all buildings to be demolished to confirm use by bats. Further emergence surveys may be required if their suitability is assessed as being anything but negligible.
- Any trees to be removed should be subject to ground level tree assessment (GLTA) to confirm their suitability to support roosting bats. Further surveys may be required depending on the outcome of the GLTA.
- Activity surveys (including use of static detectors) to confirm use of the site by bats. This should inform a lighting strategy for any development proposals, with woodland edge habitat and other boundary features to be subject to no more than 0.5lux illumination during construction and occupation phases of any development.

Figure 3: Greetham Survey Area 2



- Village Survey Areas
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- B2.1 - Neutral grassland - unimproved
- B2.2 - Neutral grassland - semi-improved
- B3.2 - Calcareous grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- G1.1 - Standing water - eutrophic
- I1.4.2 - Other exposure - basic
- I2.2 - Spoil
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J1.3 - Cultivated/disturbed land - ephemeral/short perennial
- J3.4 - Caravan site
- J3.6 - Buildings
- J4 - Bare ground
- J5.1 - Hardstanding
- J5.2 - Built up areas
- G2.1 - Running water - eutrophic
- I1.1.2 - Inland cliff - basic
- J2.1.2 - Intact hedge - species-poor
- J2.4 - Fence
- Great Crested Newts
- LWS - Notified/Candidate/Potential/ASNW
- LWS - Potential / Historic
- Water Vole

- 1) Greetham Roadside Verge Nature Reserve
- 2) Verge near Greetham Wood
- 3) Hedgerows

CLIENT Rutland County Council

PROJECT J00064 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Greetham - Survey Area 2

SCALE @ A3	CREATED BY	CHECKED BY
1:5,000	CA	KN
REFERENCE	ISSUE/REVISION	DATE
J00064-G4-2		24/5/2023

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Figure 4: Greetham Great Crested Newt Risk Zones

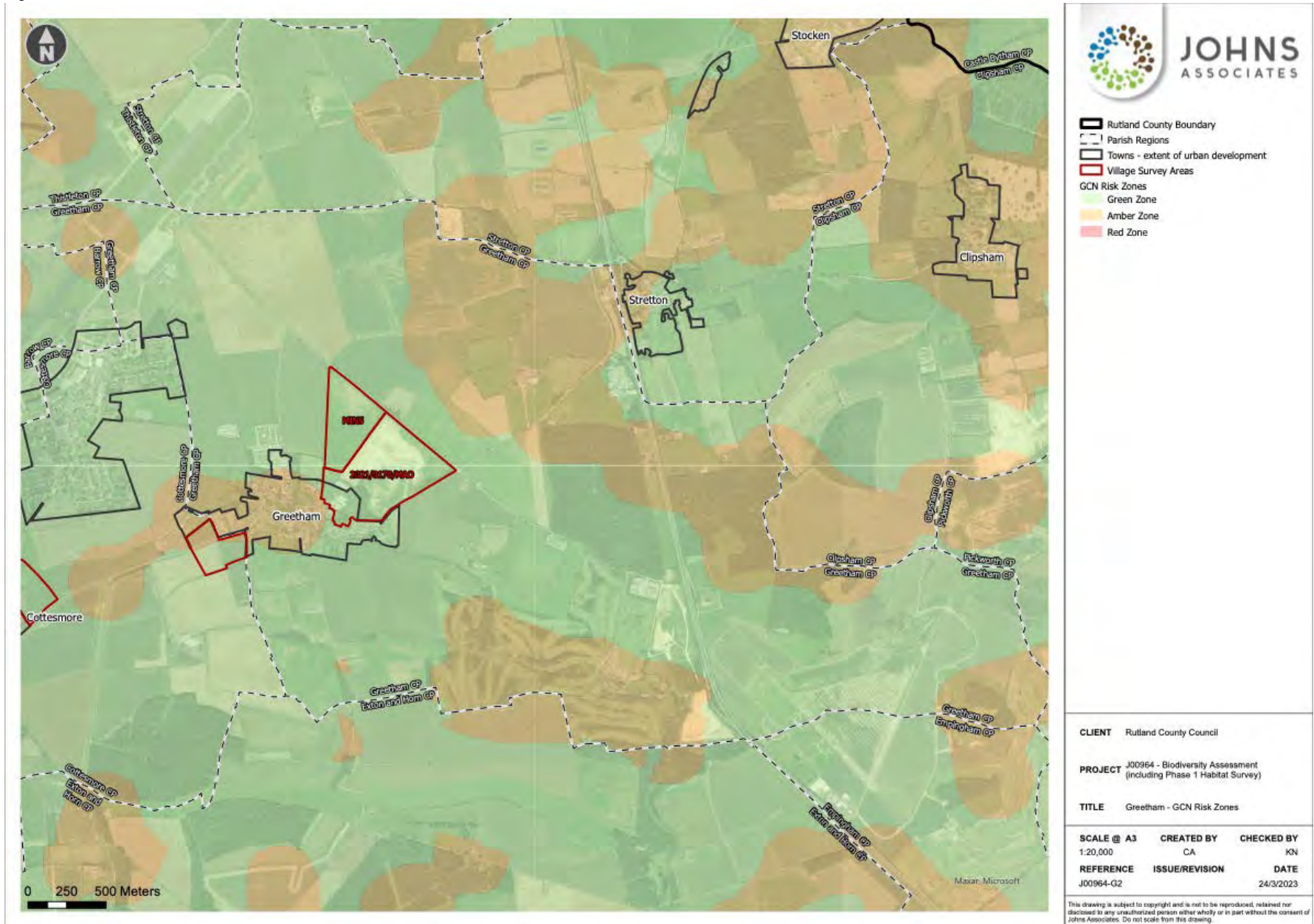
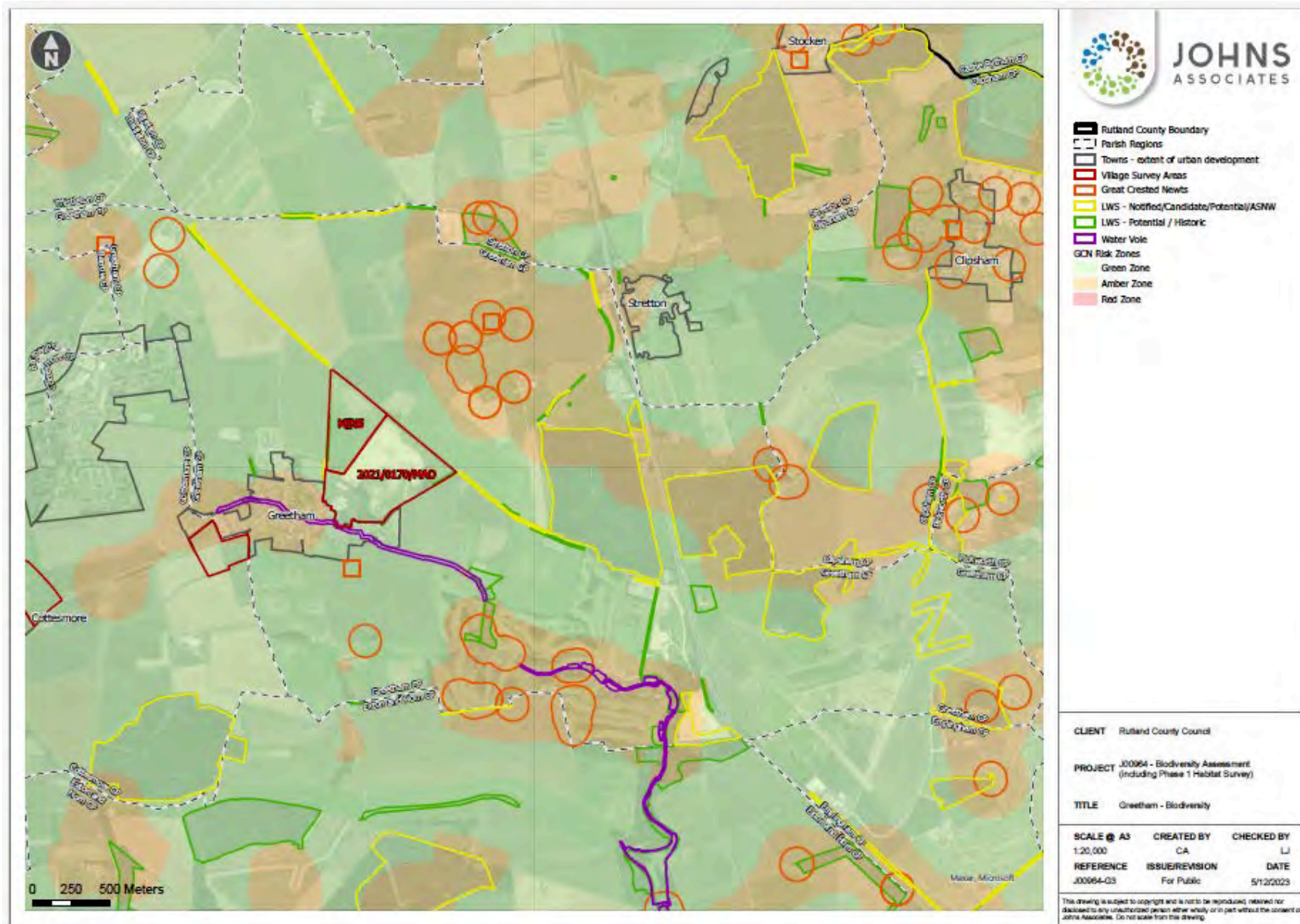


Figure 5: Greetham Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Ketton Parish - Biodiversity Summary Report

1 INTRODUCTION

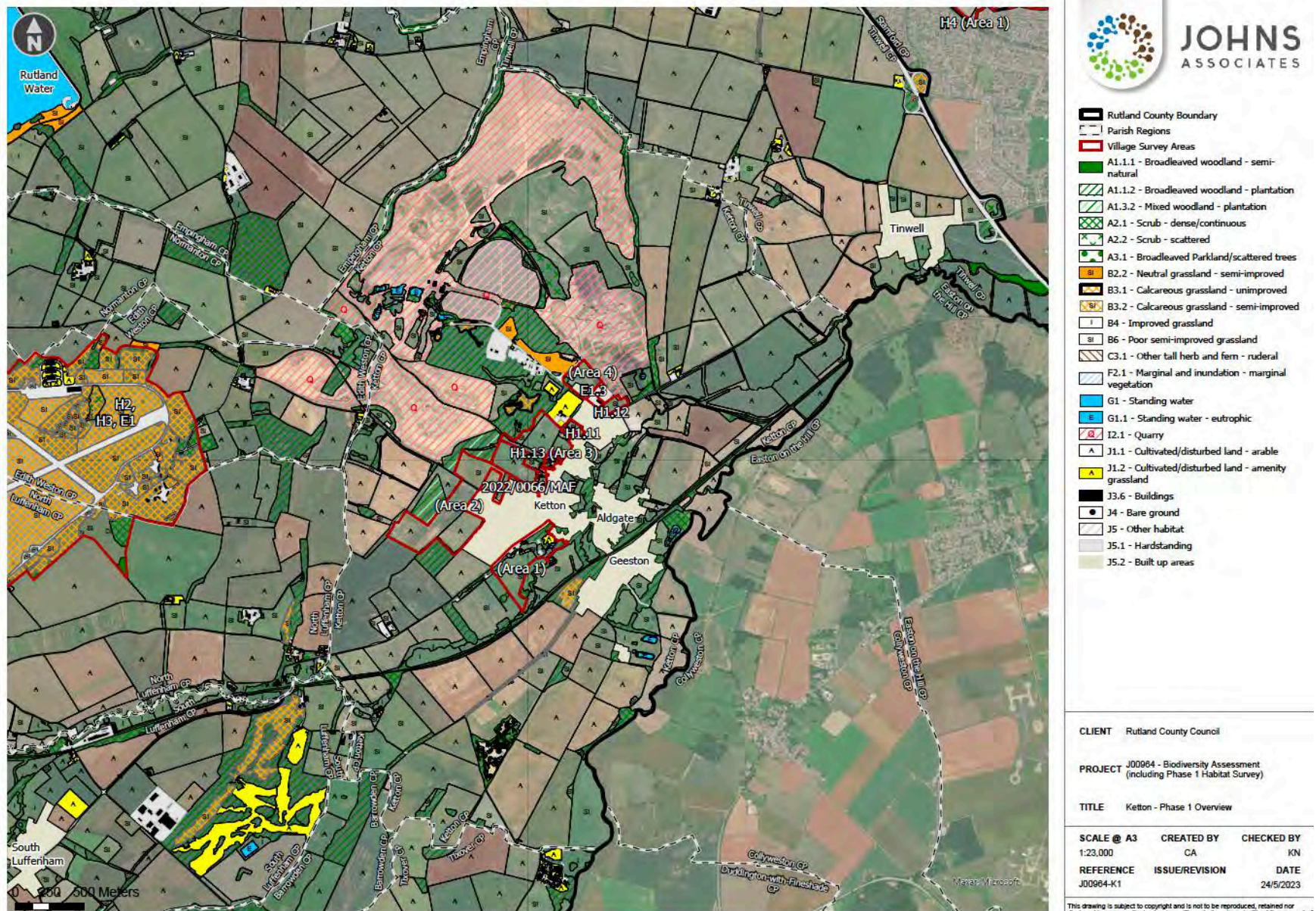
Ketton is a village and civil parish in Rutland, located to the southwest of Stamford and southeast of Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas can be seen in Table 1 which also gives the percentage cover of each habitat type within the Ketton Parish boundary.

The four most frequent habitats were arable, quarry, poor semi-improved grassland and broadleaved plantation woodland. These habitat types account for approximately 81% of the habitats within the Ketton Parish boundary (see Table 1).

Table 1: Ketton Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Ketton
J1.1	Cultivated/ disturbed land - arable	545.54	40.38
12.1	Quarry	248.20	18.37
B6	Poor semi-improved grassland	214.35	15.87
A1.1.2	Broadleaved woodland - plantation	85.30	6.31
J5.2	Built up areas	79.63	5.89
A2.1	Scrub – dense/continuous	44.90	3.32
J5	Other habitat	31.63	2.34
B4	Improved grassland	25.82	1.91
J5.1	Hardstanding	16.17	1.20
A2.2	Scrub - scattered	14.65	1.08
A1.3.2	Mixed woodland - plantation	11.71	0.87
J1.2	Cultivated/ disturbed land – amenity grassland	5.65	0.42
B2.2	Neutral grassland – semi-improved	5.16	0.38
J4	Bare ground	5.02	0.37
B3.2	Calcareous grassland – semi-improved	3.98	0.29
G1.1	Standing water - eutrophic	3.53	0.26
B3.1	Calcareous grassland - unimproved	3.37	0.25
F2.1	Marginal and inundation – marginal vegetation	2.96	0.22
J3.6	Buildings	2.31	0.17
A1.1.1	Broadleaved woodland – semi-natural	1.18	0.09
Total		1351.06	100.00

Figure 1: Overview of Habitats within Ketton Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Ketton to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (red boundaries). Figure 6 shows the GCN Risk Zones within the Ketton settlement area, whilst Figure 7 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 is a large area of land located south of the main settlement of Ketton. The majority of the Survey Area comprises poor semi-improved grassland, with existing buildings, amenity grassland, areas of bare ground, dense scrub, broadleaved plantation woodland and a large pond also present. The River Chater (a tributary of the River Welland) flows west to east along the southern boundary, with the A6121 forming the northern site boundary. A natural burial ground is located adjacent to the west, whilst residential properties are present to the east.

Overall, Survey Area 1 is considered to be of moderate biodiversity value due to the mosaic of habitats present. The eastern area is of greater value than the west, as it includes the pond and woodland, which is connected to other areas of semi-natural habitat to the south via green corridors. The river also provides a valuable wildlife corridor across this part of the county. Ideally, the woodland should be retained and enhanced as part of any future proposals for this site. The river should also be protected from accidental spillages of polluting materials during construction, (including soils), and a buffer strip of at least 8m should be incorporated into the site design to maintain and enhance its value as a wildlife corridor.

2.1.1 Site Constraints

Figure 6 shows that a small part of the woodland in the north-eastern section of this Survey Area falls within the boundary of an Amber Risk Zone for great crested newts (GCN). The woodland is likely to provide suitable terrestrial habitat for this species, although the A6121 is considered to be a significant barrier to GCN movement, should the breeding ponds be located north of the Survey Area. It is unknown whether the on-site pond supports this species, but surveys are recommended in Section 2.1.2.

There are two non-statutory Local Wildlife Sites (LWSs) close to this Survey Area: the first, 'Geeston Quarry LWS' is situated approximately 290m south of the Survey Area, just the other side of the railway line. The second, 'Ketton Roadside Verge Nature Reserve' is located adjacent to the southern boundary of Geeston Quarry LWS.

There are also three potential/ historic LWSs close to Survey Area 1. The closest is the ox-bow on the River Chater, adjacent to the south-eastern site boundary and set within an area of woodland that is contiguous with the on-site woodland. The second is a linear section of habitat adjacent to the railway line. The third is another stretch of the River Chater, immediately adjacent to the west of the southernmost tip of the Survey Area (see Figure 2).

The mosaic of habitats on site (particularly in the east) is considered to be of moderate biodiversity value. Consideration should be given to retaining and enhancing some of this area as part of any development proposals to maintain its value.

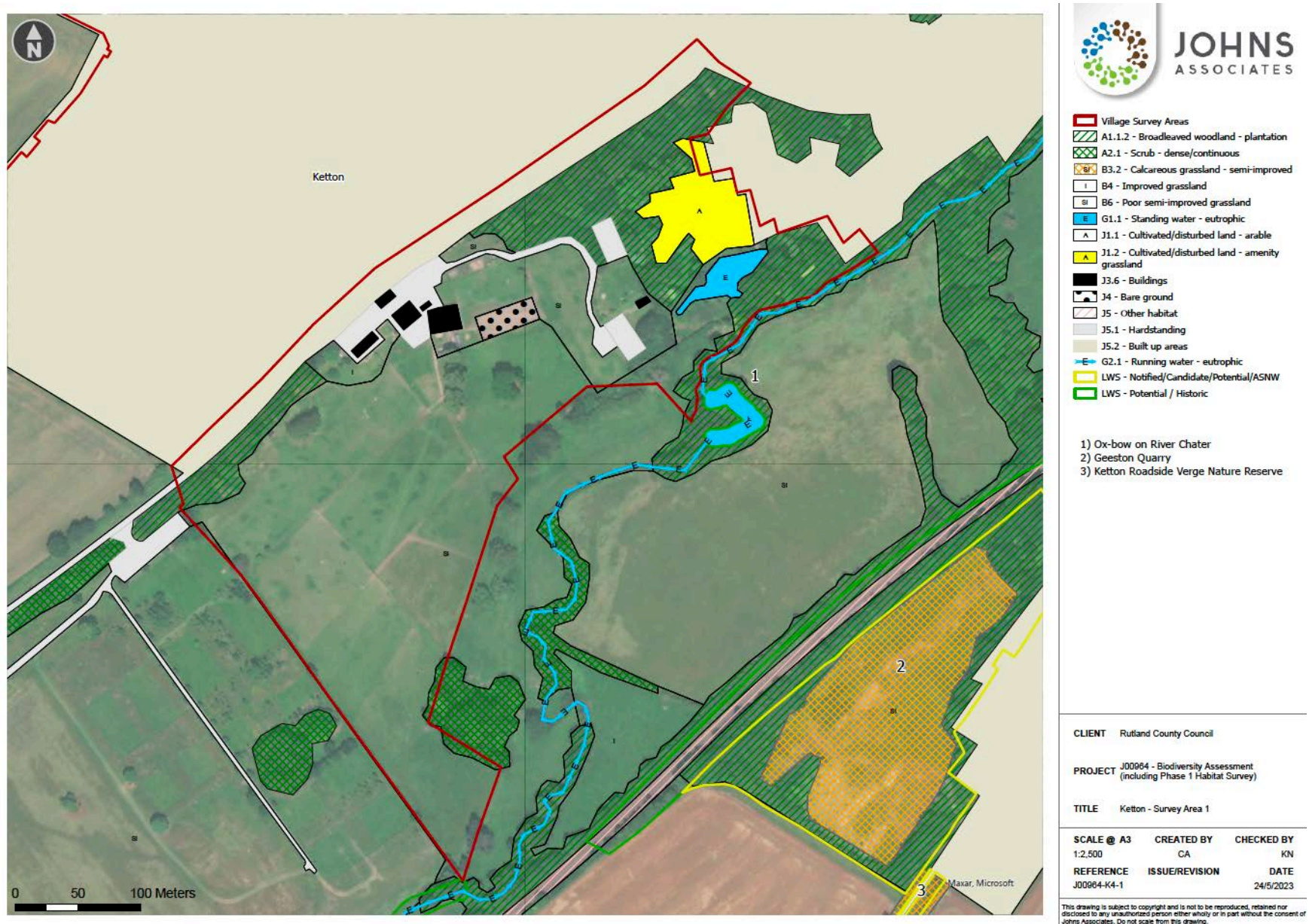
2.1.2 Survey Recommendations

If this Survey Area is allocated within the new Rutland Local Plan, a suite of ecological surveys and subsequent ecological impact assessment report is recommended to inform the planning decision. This should include the following elements:

- UKHab survey of the site and assessment of the current condition of the River Chater ox-bow against the LWS selection criteria, to confirm whether the area meets the standard for designation. Hedgerow surveys should assess the value of all linear features in terms of the Hedgerow Regulations 1997.

- GCN surveys of the on-site pond and any additional ponds within 500m of the Survey Area boundary to confirm whether this species is present.
- Reptile surveys of suitable habitat, including woodland edges, areas of longer grassland and dense scrub. A precautionary method statement should be produced to further reduce any risk of harm to these species during construction. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Timing of vegetation clearance works to avoid the bird besting season (mid-February – August inclusive) is also recommended for inclusion in this Method Statement or a similar document (for example, a Construction Ecological Management Plan, CEMP) to be produced through formal Planning Condition.
- Production of an Ecological Impact Assessment to current CIEEM Guidelines to ensure all potential effects to ecological receptors are properly considered. This should include a full BNG assessment using the current Defra Metric 4.0.
- Bat activity surveys (including use of static detectors) to assess current level of use of the site by commuting and/or foraging bats. Lighting proposals will need to properly consider the results of these surveys.
- Ground Level Tree Assessments of all trees to be felled or impacted as part of future planning proposals for Potential Roost Features for bats. Subsequent emergence/ climbing surveys may also be required.
- Use of tree protection fencing to ensure woodlands and trees to be retained are properly protected from accidental damage during construction. Appropriate buffer strips around habitats of biodiversity value should be included as part of any development proposals, together with enhancement of hedgerows and the river corridor as appropriate to strengthen the wildlife corridors into the wider local area.
- Protection of the River Chater corridor from accidental pollution (e.g. from hydrocarbons and silt/ soils etc) during construction. Enhancement of riparian habitats to increase their biodiversity value as part of mandatory BNG requirements.
- Appropriate post-construction management and monitoring of all retained, enhanced and newly created habitats and habitat features (e.g. bat boxes and reptile hibernacula) through an agreed Landscape and Ecology Management Plan (LEMP) or similar, to be produced through formal Planning Condition for agreement with Rutland Council.

Figure 2: Ketton Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is a large area of arable and poor semi-improved grassland located to the north-west of Ketton, bisected by Empingham Road. Several areas of broadleaved plantation woodland and mixed plantation woodland are present adjacent to the Survey Area boundaries, (see Figure 3). The site includes part of two potential/ historic LWSs – a hedgerow to the north and 'Ketton Cemetery and Hedgerow' in the eastern section of the Survey Area.

Overall, the habitats present are considered to be of low biodiversity value. The arable fields appear to be farmed to the boundaries, with no wildlife-friendly margins offering vegetation cover. The poor semi-improved grassland appears to have been used for grazing, with a short sward height that is unsuitable habitat for wildlife. However, the boundary hedgerows are of greater value, and should be retained and enhanced as part of any proposals for Survey Area 2. In addition, two areas covered by potential/ historic LWS designations are of more ecological value, and should be retained, protected and enhanced where possible through careful development design.

2.2.1 Site Constraints

This Survey Area is considered suitable for allocation within the Local Plan providing the more valuable hedgerow habitats are retained and enhanced to provide wildlife corridors between areas of habitat in the wider local area, particularly woodland blocks and the River Chater to the south.

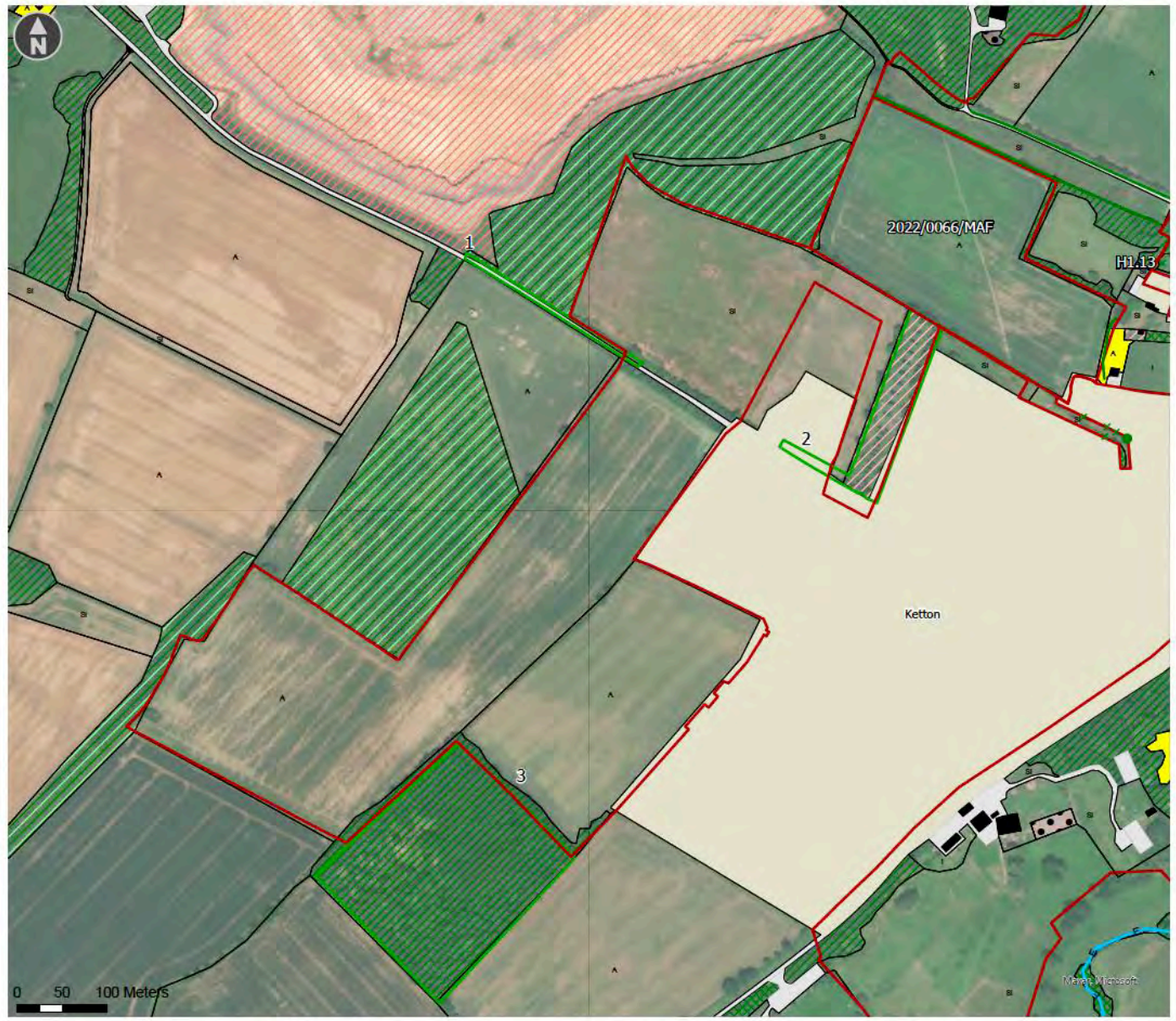
The potential/ historic LWSs described above should be surveyed by a suitably qualified and experienced ecologist to determine their current value/ condition, and to confirm whether these meet the criteria for LWS site selection/ designation. If so, the sites should be retained, protected, enhanced and managed through mandatory BNG requirements to ensure their biodiversity value is not degraded over time.

2.2.2 Survey Recommendations

The arable and poor semi-improved grassland habitats are considered suitable for development. The following surveys should be undertaken to inform any planning application for Survey Area 2:

- UKHab survey of the site and assessment of the current condition of the potential/ historic LWSs against the site selection criteria, to confirm whether the areas meet the standard for designation. Hedgerow surveys should assess the value of all linear features in terms of the Hedgerow Regulations 1997.
- Reptile surveys of suitable habitat, including woodland edges and the base of hedgerows. A precautionary method statement should be produced to further reduce any risk of harm to these species during construction. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Timing of vegetation clearance works to avoid the bird besting season (mid-February – August inclusive) is also recommended for inclusion in this Method Statement or a similar document (for example, a Construction Ecological Management Plan, CEMP).
- Bat activity surveys (including use of static detectors) to assess current level of use of the site by commuting and/or foraging bats. Lighting proposals will need to properly consider the results of these surveys.
- Ground Level Tree Assessments of all trees to be felled or impacted as part of future planning proposals for Potential Roost Features for bats. Subsequent emergence/ climbing surveys may also be required.
- Use of tree protection fencing to ensure woodlands and trees to be retained are properly protected from accidental damage during construction. Appropriate buffer strips around habitats of biodiversity value should be included as part of any development proposals, together with enhancement of hedgerows as appropriate to strengthen the wildlife corridors into the wider local area.

Figure 3: Ketton Survey Area 2



- Village Survey Areas**
- A1.1.2 - Broadleaved woodland - plantation
 - A1.3.2 - Mixed woodland - plantation
 - A2.1 - Scrub - dense/continuous
 - A2.2 - Scrub - scattered
 - B4 - Improved grassland
 - B6 - Poor semi-improved grassland
 - G1.1 - Standing water - eutrophic
 - I2.1 - Quarry
 - J1.1 - Cultivated/disturbed land - arable
 - J1.2 - Cultivated/disturbed land - amenity grassland
 - J3.6 - Buildings
 - J4 - Bare ground
 - J5 - Other habitat
 - J5.1 - Hardstanding
 - J5.2 - Built up areas
 - G2.1 - Running water - eutrophic
 - J2.1.2 - Intact hedge - species-poor
 - A2.2 - Scattered scrub
 - A3.1 - Broadleaved tree
 - LWS - Potential / Historic

- 1) Hedgerow
- 2) Ketton Cemetery and hedgerow
- 3) Cats Hill Spinney

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Ketton - Survey Area 2		
SCALE @ A3	CREATED BY	CHECKED BY	
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2.3 SURVEY AREA 3

Survey Area 3 is located adjacent to Survey Area 2 to the north of the main settlement of Ketton. Part of this Survey Area is subject to a current planning application (reference 2022/0066/MAF) for a residential development of up to 41 dwellings including open space, allotments, improved site access including off-site highway works and ecological enhancements. The remainder of the Survey Area currently comprises arable, improved grassland and poor semi-improved grassland, with small areas of broadleaved plantation woodland and hedgerows.

Overall, the habitats present are considered to be of low biodiversity value. The arable fields appear to be farmed to the boundaries, with no wildlife-friendly margins offering vegetation cover. The poor semi-improved grassland appears to have been used for grazing, with a short sward height that is unsuitable habitat for wildlife. However, the boundary hedgerows and broadleaved plantation woodland habitats are of greater value and should be retained and enhanced as part of any proposals for this Survey Area.

2.3.1 Site Constraints

This Survey Area is considered suitable for allocation within the Local Plan providing the more valuable hedgerow and woodland habitats are retained and enhanced to provide wildlife corridors between areas of habitat in the wider local area, particularly woodland blocks to the north.

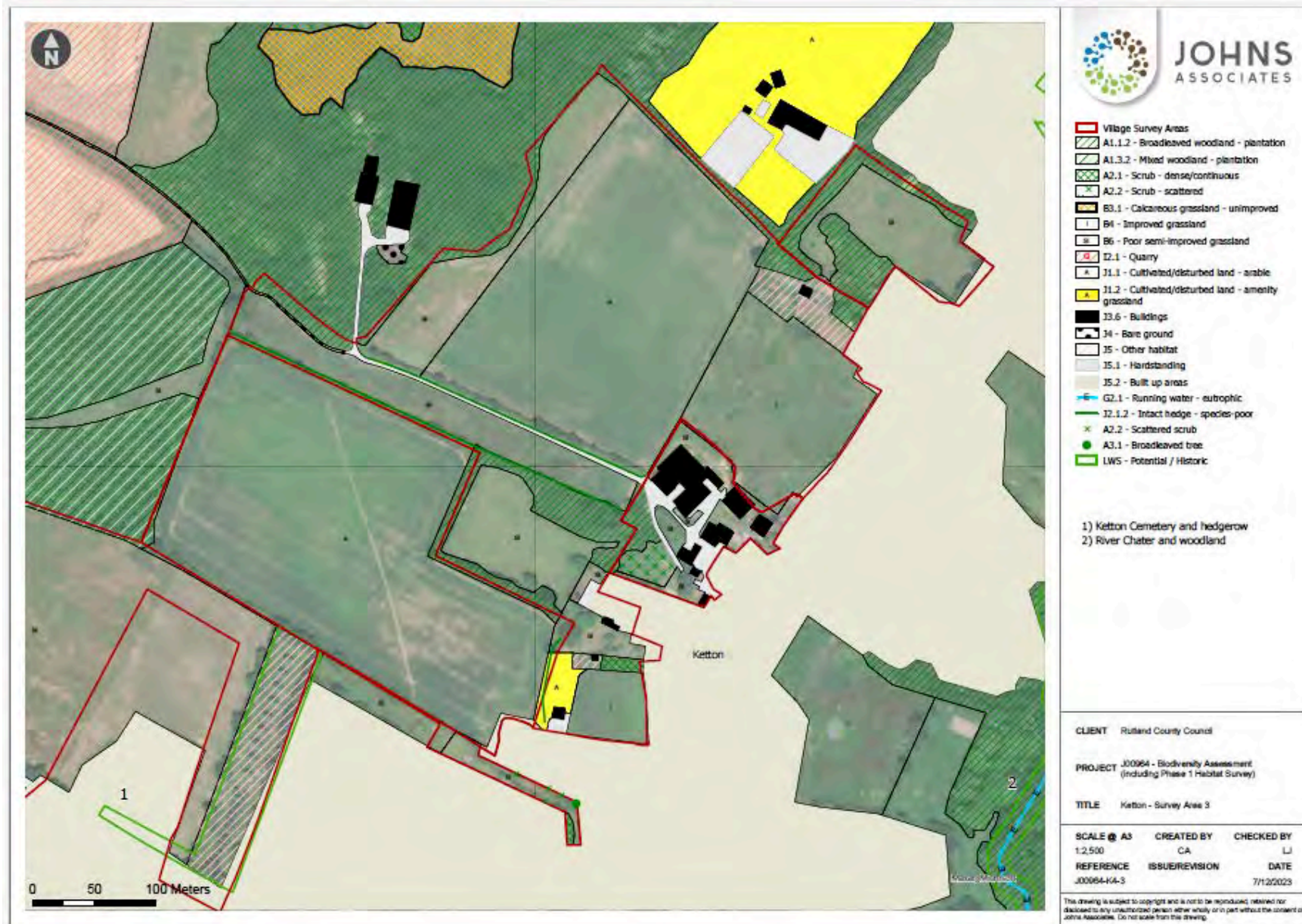
Woodland edges and hedgerows are also likely to provide suitable habitat for commuting and foraging bats, reptiles, nesting birds, small mammals (including hedgehogs) and invertebrates. Suitable trees within the site may also offer potential for roosting bats.

2.3.2 Survey Recommendations

The arable and grassland habitats are considered suitable for development. The following surveys should be undertaken to inform any planning application for Survey Area 3:

- Reptile surveys of suitable habitat, including woodland edges and the base of hedgerows. A precautionary method statement should be produced to further reduce any risk of harm to these species during construction. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Timing of vegetation clearance works to avoid the bird nesting season (mid-February – August inclusive) is also recommended for inclusion in this Method Statement or a similar document (for example, a Construction Ecological Management Plan, CEMP).
- Bat activity surveys (including use of static detectors) to assess current level of use of the site by commuting and/or foraging bats. Lighting proposals will need to properly consider the results of these surveys.
- Ground Level Tree Assessments of all trees to be felled or impacted as part of future planning proposals for Potential Roost Features for bats. Subsequent emergence/ climbing surveys may also be required.
- Use of tree protection fencing to ensure woodlands, hedgerows and trees to be retained are properly protected from accidental damage during construction. Appropriate buffer strips around habitats of biodiversity value should be included as part of any development proposals, together with enhancement of hedgerows as appropriate to strengthen the wildlife corridors into the wider local area.

Figure 4: Ketton Survey Area 3



2.4 SURVEY AREA 4

Survey Area 4 is located off Pit Lane to the north-east of the main settlement of Ketton and comprises three distinct parcels of land, (see red line boundaries in Figure 5).

The first is an area of arable land behind a row of existing houses. The gardens of the houses are separated from the site by fencing. There is a small area of broadleaved plantation woodland in the west of this parcel. Scattered scrub is present along the south-eastern boundary. Pit Lane Verge potential/ historic LWS is situated adjacent to part of the south-western boundary of this parcel of land.

The second parcel is smaller and comprises buildings and an area of hardstanding.

The third parcel comprises an area of poor semi-improved grassland with a hedgerow/ line of trees along the south-eastern boundary adjacent to the A6121 Stamford Road.

The River Chater and Woodland potential/ historic LWS is situated to the south of Survey Area 3, although no direct habitat corridors appear to link the Survey Area to this LWS.

Overall, the habitats within the three parcels are considered to be of low biodiversity value. Small areas of woodland and hedgerow habitat may support wildlife species including common reptiles, bats, and nesting birds and these habitats should be retained, protected and enhanced as part of any development proposals.

2.4.1 Site Constraints

The buildings may support roosting bats and further surveys will be required (see Section 2.4.2). If the grassland habitat includes areas of longer vegetation, it may be suitable for common reptiles if present in the wider local area. Woodland edges and hedgerows may also provide suitable habitat for reptiles and for nesting birds.

The ecological constraints for this Survey Area are centred around the woodland and the adjacent Pit Lane Verge LWS, which should have a buffer created as part of any development proposals to protect their ecological value in habitat terms. The woodland and its buffer should be enhanced for the benefit of wildlife through mandatory BNG requirements. The buildings, hardstanding, arable and poor semi-improved grassland habitat is less ecologically constrained and is considered a good location for development through allocation in the Local Plan.

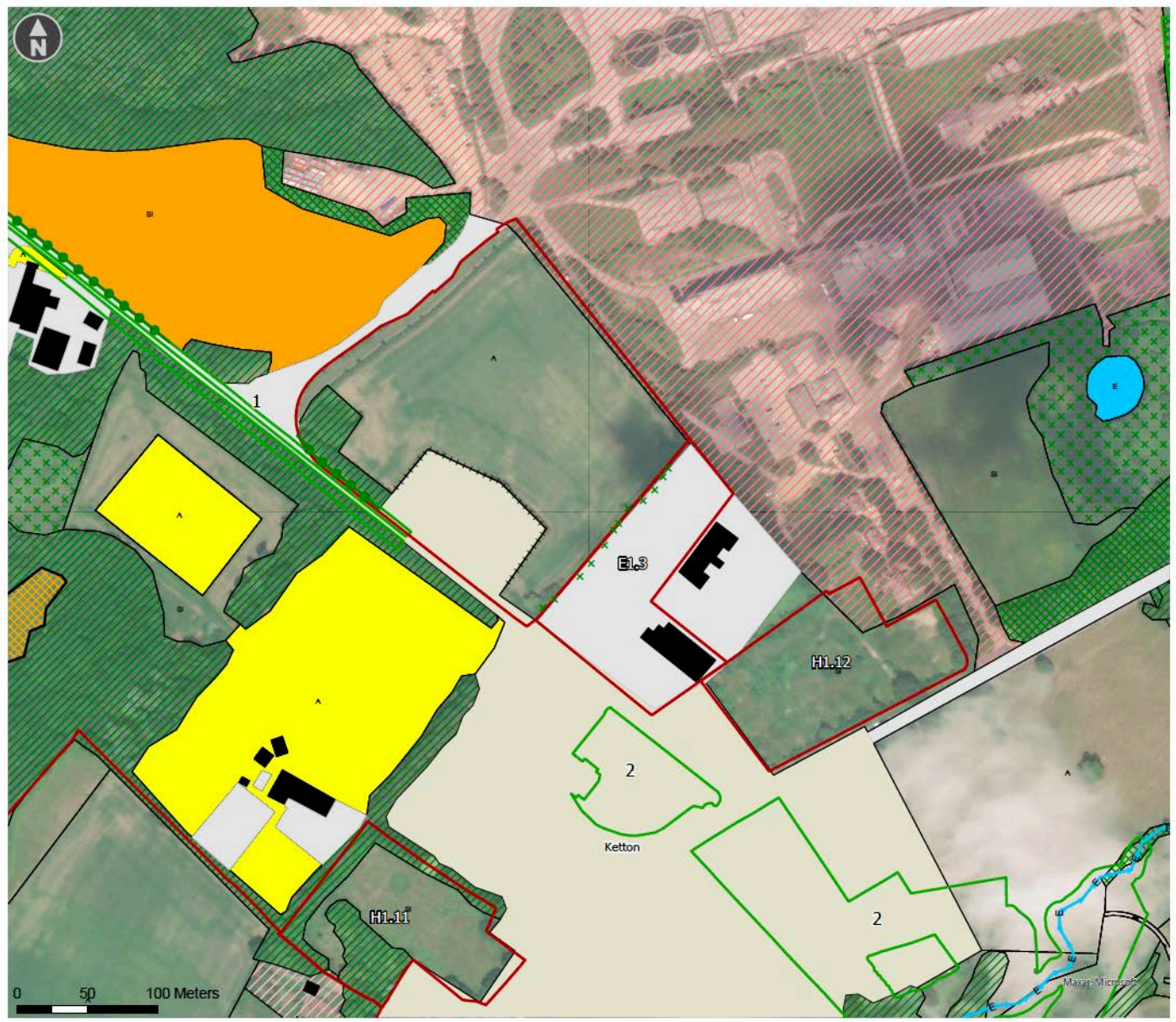
2.4.2 Survey Recommendations

The following ecological surveys are recommended to inform any planning application for this site. BNG could be achieved through the creation and appropriate management of areas of semi-natural habitat within any scheme design (including site boundaries). The broadleaved plantation woodland should be incorporated into the scheme design, and boundary hedgerows should be retained and enhanced. Such areas could provide habitat for a range of wildlife, including birds, invertebrates, small mammals, reptiles, amphibians and bats.

- A Potential Roost Assessment (PRA) of the buildings located within the Survey Area should be conducted to confirm whether any are used by bats. Magic map (www.magic.defra.gov.uk) provided one record of a bat licence issued for common pipistrelle bats in 2017 for works to a property approximately 690m further along Pit Lane to the north.
- Reptile surveys of suitable habitat, including woodland edges and the base of hedgerows. A precautionary method statement should be produced to further reduce any risk of harm to these species during construction. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works. Timing of vegetation clearance works to avoid the bird nesting season (mid-February – August inclusive) is also recommended for inclusion in this Method Statement or a similar document (for example, a Construction Ecological Management Plan, CEMP).

- Bat activity surveys (including use of static detectors) to assess current level of use of the site by commuting and/or foraging bats. Lighting proposals will need to properly consider the results of these surveys.
- Ground Level Tree Assessments of all trees to be felled or impacted as part of future planning proposals for Potential Roost Features for bats. Subsequent emergence/ climbing surveys may also be required.
- Use of tree protection fencing to ensure woodlands, hedgerows and trees to be retained are properly protected from accidental damage during construction. Appropriate buffer strips around habitats of biodiversity value should be included as part of any development proposals, together with enhancement of hedgerows as appropriate to strengthen the wildlife corridors into the wider local area.

Figure 5: Ketton Survey Area 4



- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- B2.2 - Neutral grassland - semi-improved
- B3.1 - Calcareous grassland - unimproved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- G1.1 - Standing water - eutrophic
- I2.1 - Quarry
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas
- A3.1 - Broadleaved Parkland/scattered trees
- G2.1 - Running water - eutrophic
- J2.4 - Fence
- A2.2 - Scattered scrub
- LWS - Potential / Historic

- 1) Pit Lane verge
- 2) River Chater and woodland

CLIENT	Rutland County Council		
PROJECT	J00064 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Ketton - Survey Area 4		
SCALE @ A3	CREATED BY	CHECKED BY	
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REFERENCE	ISSUE/REVISION	DATE	
J00064-K4-4		24/5/2023	

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Figure 6: Ketton Great Crested Newt Risk Zones

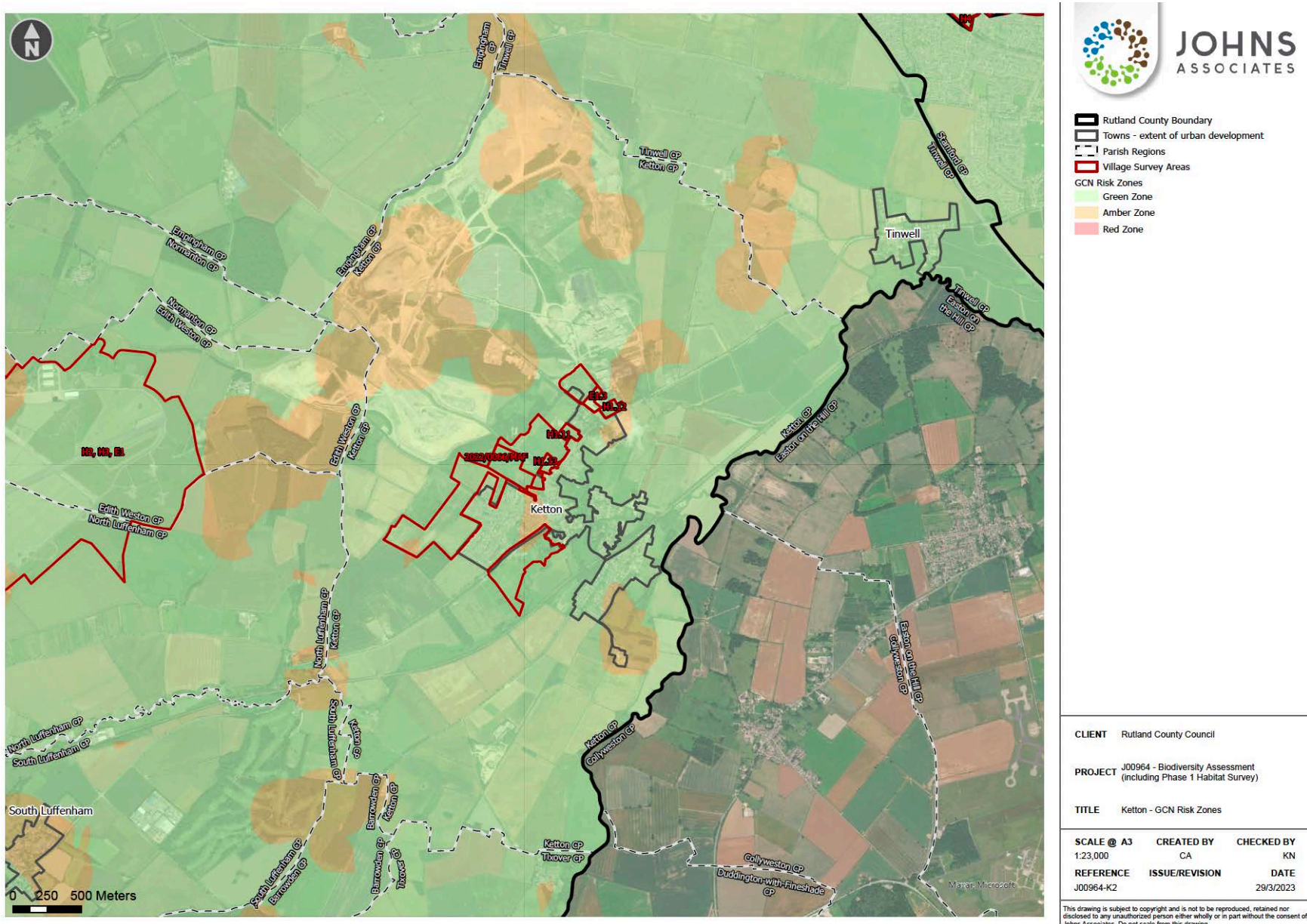
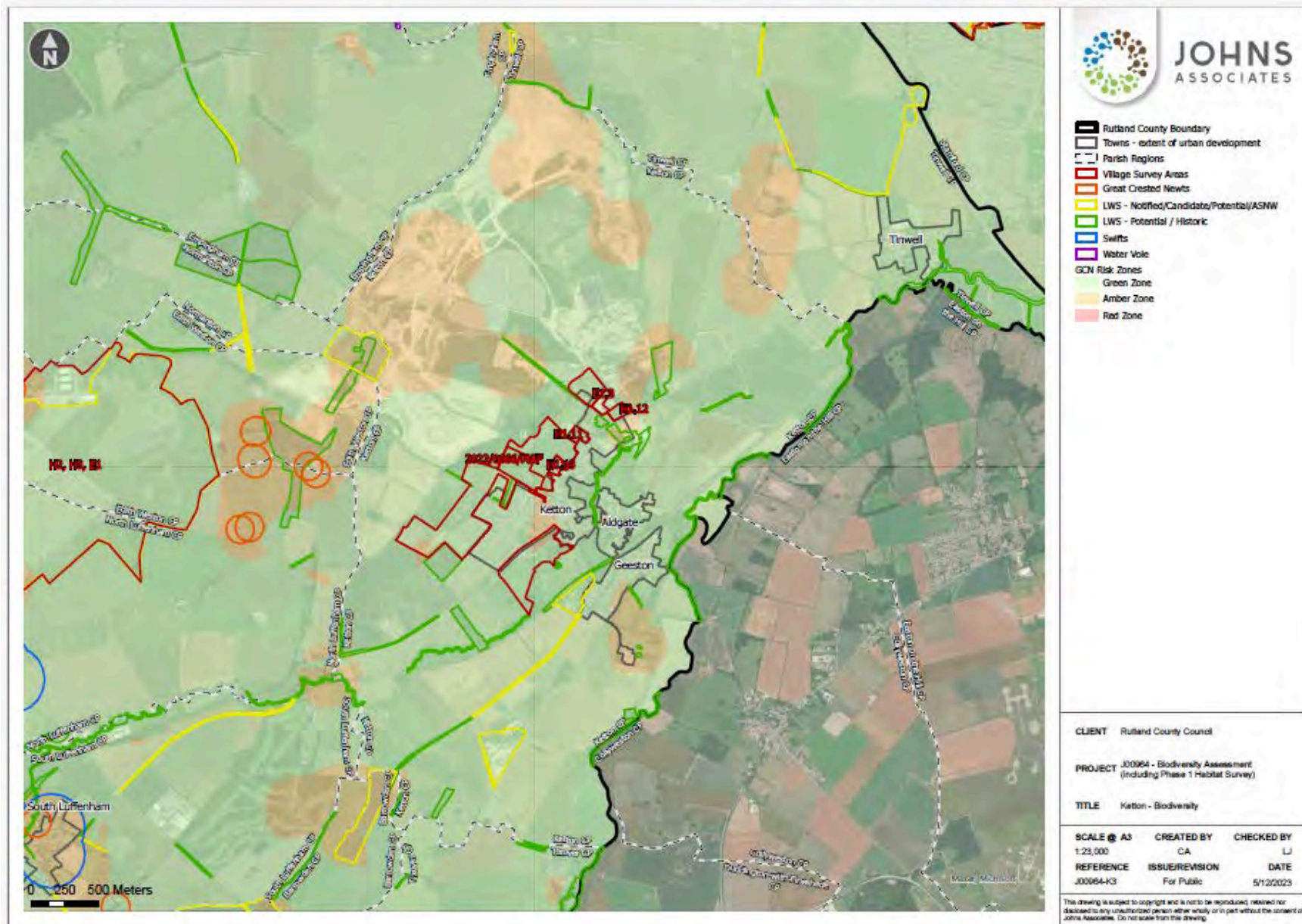


Figure 7: Ketton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Langham Parish - Biodiversity Summary Report

1 INTRODUCTION

Langham is a larger Parish in the north-west of Rutland, located between the parishes of Barleythorpe and Whissendine. Figure 1 shows the habitat types identified within the boundary of Langham. A breakdown of the habitat areas are given in Table 1, which shows the percentage cover of each habitat type within Langham parish boundary.

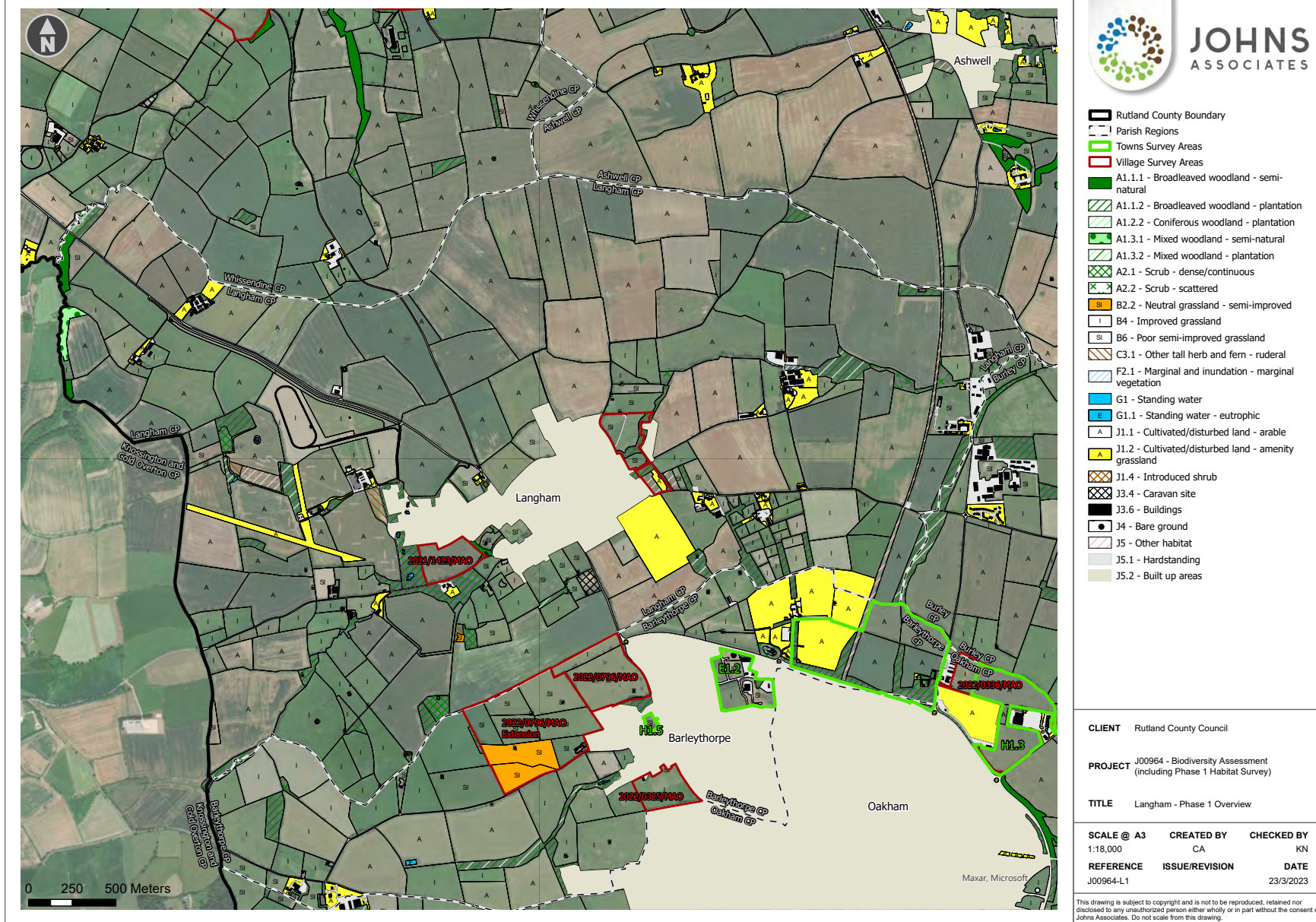
The five most frequent habitats within Langham were: arable, improved grassland, built up areas (extent of the developed area of Langham), poor semi-improved grassland and amenity grassland. These five habitat types account for approximately 92% of the habitat within the Langham parish boundary. Of these habitat types, arable land makes up nearly 63%.

Table 1: Habitats within Langham Parish

Habitat type	Habitat area (Ha)	Percent of Langham Habitat
J1.1 - Cultivated/disturbed land - arable	742.36	62.81%
B4 - Improved grassland	208.11	17.61%
J5.2 - Built up areas	64.56	5.46%
B6 - Poor semi-improved grassland	46.34	3.92%
J1.2 - Cultivated/disturbed land - amenity grassland	30.68	2.60%
A1.1.2 - Broadleaved woodland - plantation	29.63	2.51%
J5.1 - Hardstanding	16.49	1.40%
A1.3.2 - Mixed woodland - plantation	11.08	0.94%
J5 - Other habitat	6.46	0.55%
A2.2 - Scrub - scattered	4.48	0.38%
J3.6 - Buildings	4.39	0.37%
A2.1 - Scrub - dense/continuous	3.53	0.30%
J4 - Bare ground	3.47	0.29%
A1.1.1 - Broadleaved woodland - semi-natural	2.71	0.23%
C3.1 - Other tall herb and fern - ruderal	2.62	0.22%
A1.3.1 - Mixed woodland - semi-natural	1.86	0.16%
J3.4 - Caravan site	1.32	0.11%
A1.2.2 - Coniferous woodland - plantation	0.61	0.05%
F2.1 - Marginal and inundation - marginal vegetation	0.52	0.04%
G1.1 - Standing water - eutrophic	0.38	0.03%
B2.2 - Neutral grassland - semi-improved	0.18	0.01%

G1 - Standing water	0.04	0.00%
Grand Total	1181.830	100.00%

Figure 1: Overview of Habitats within Langham Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Langham to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1 (shown as green boundaries). Figure 4 shows the GCN Risk Zones within the Langham settlement area, whilst Figure 5 gives the overall biodiversity map of the area.

2.1 SURVEY AREA 1

This Survey Area has a current planning application being determined (reference 2021/1423/MAO) for the provision of 50 new residential properties. The Survey Area is located to the south-west of the developed extent of Langham and comprises a large arable field adjacent to existing housing to the north, broad-leaved plantation woodland to the east and west and Cold Overton Road to the south, with woodland beyond. Fine species-rich hedges border the southern and eastern edges, and they include a number of veteran trees (ash, but with pedunculate oak) which support potential roosting features (PRF) for bats. The hedgerow along the western Survey Area boundary lacks mature trees and is less species rich. The northern boundary has occasional overhanging trees from the adjacent land which may support roosting bats.

The western, eastern, and southern boundaries provide biodiversity corridors and are complemented by adjacent woodland adjacent to the Survey Area on both the western and eastern boundaries. The southern boundary hedge is a species rich intact hedgerow with trees that provides a great general biodiversity corridor complemented by natural movement being possible along a dry drain at the base of the hedgerow.

The intact species rich hedgerow with trees on the eastern boundary is a good general biodiversity corridor. The western hedgerow is defunct and species poor, and blends into the adjacent broadleaved plantation woodland providing a useful foraging resource for birds, small mammals and invertebrates. This hedgerow would benefit from infill planting/ enhancement.

The northern boundary of the Survey Area is adjacent to the edge of an existing housing development and there are a number of gardens escapes present along the field edge.

2.1.1 Site Constraints

The western section of the Survey Area is located within an Amber Risk Zone for Great Crested Newts (GCN) and there is a series of ponds present to the west located within private land which could possibly support breeding populations of GCN. However, there were no records of GCN present in this area and no GCN records or EPS licenses were returned from a search on Magic Maps.

Therefore, given the poor suitability of onsite habitats for foraging and hibernating GCN it is considered proportionate to conclude that as long as the habitats remain in the same condition as the 2022 baseline survey, no GCN surveys will be required. However, if the site is to be developed, a precautionary method statement should be produced and implemented and if any reptiles/GCN are encountered then works should be halted and the appointed suitability qualified ecologist consulted as a Natural England European Protected Species License may be required.

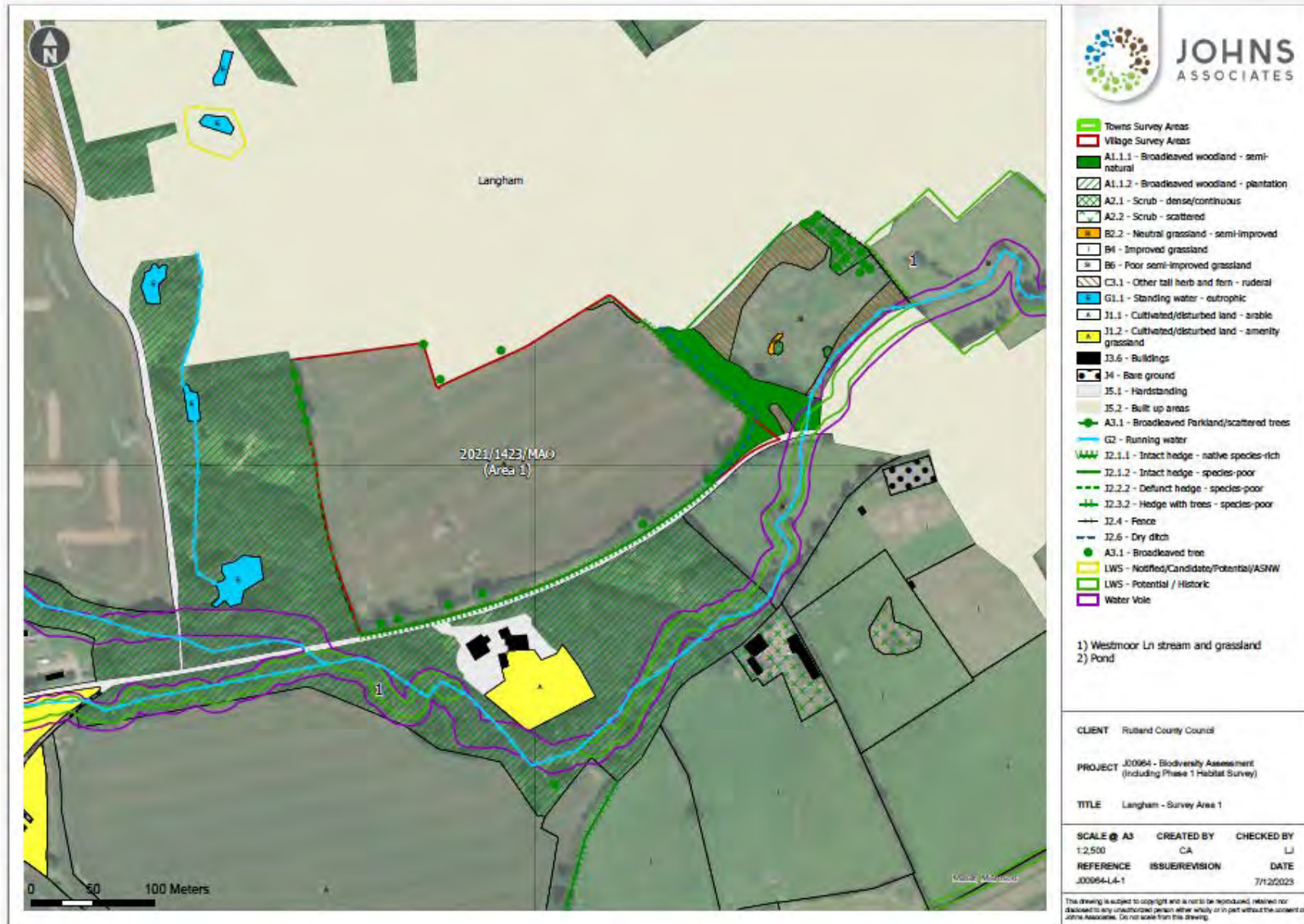
The woodland that lies adjacent to the eastern and western boundaries should be retained and protected through the implementation of a woodland buffer zone. These areas are likely to be important for nocturnal wildlife such as bats, and hedgehogs, therefore a Lux Lighting plan should be produced to ensure light spill on these boundary habitats is no greater than 0.5 lux.

2.1.2 Survey Recommendations

If Survey Area 1 is to be allocated for development, it would be worth considering maintaining the boundaries around the Site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The arable field is considered to be a good location ecologically for the allocation of a new housing development as long as the adjacent boundary habitats can be retained, protected and enhanced for wildlife.

- Any trees around the perimeter of the site that have potential to support roosting bats that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the site that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- No additional surveys are required for reptiles or GCN, however, a precautionary method statement should be produced to further reduce any risk of harm to these species. This should include sequential cutting of vegetation around the perimeters of the site to make these habitats unsuitable for foraging reptiles or GCN prior to pre-commencement/ site preparation works.
- Woodlands, hedgerows and trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented around these habitats and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 2: Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located along the eastern extent of the developed area of Langham. Located on private land, there was no public rights of way access, therefore habitat assessments were undertaken using aerial maps, from the roadside or nearby rights of way using binoculars where possible. Survey Area 2 (shown in Figure 3) is made up two areas: the northern area is comprised predominantly of poor semi-improved grassland with a track running through the centre. This area is also intersected by a watercourse that has woodland along both banks which has a mix of native and ornamental species such as purple leaved beech *Fagus sylvatica 'purpurea'*.

The second area to the south is currently being used as local allotments with an area of managed amenity grassland to the east with broadleaved woodland plantation making up the northern and eastern Survey Area boundaries.

Overall, the habitats within this area are considered to be of moderate value in biodiversity terms: the grasslands are intensively managed via overgrazing and amenity grassland habitat is mown to maintain a short sward height.

The linear habitats (hedgerows) within this Survey Area offer the greatest value in biodiversity terms. These are likely to support nesting birds, commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.2.1 Site Constraints

The ecological constraints for this Survey Area are centred around the watercourse and woodland. The watercourse should have an 8m buffer to protect its ecological value in habitat terms, as a wildlife corridor and to mitigate any pollution impacts from construction. The woodland and watercourse should also be enhanced for the benefit of wildlife through mandatory BNG requirements. The poor semi-improved grassland and amenity grassland is less ecologically constrained and is considered a good location for development through its allocation in the Local Plan.

The watercourse with the woodland is considered to be an important ecological corridor and is likely to be used as a commuting route and foraging habitat for a number of bat species.

The site is located in the Green Risk Zone for GCN; therefore no surveys are required for this species. However, a suitable ecological buffer should be provided for the pond located outside of the Survey Area on the northern boundary.

Although this Survey Area didn't appear suitable for reptiles, this may have been due to overgrazing of the fields. The habitats present could provide suitable foraging habitat for a range of common reptile species such as grass snake, common lizard and slow worm if the grazing regime were to change prior to development. Reptile surveys would be required if Survey Area 2 is to be allocated.

Off-site to the north is a hedgerow covered by a historic LWS designation. This LWS was last surveyed between 1980-1990. No recent survey data is available, and it is therefore unknown whether the LWS still has any ecological value. However, it still holds the LWS designation. Because of this, any development of Survey Area 2 should aim to avoid any impacts to this hedgerow.

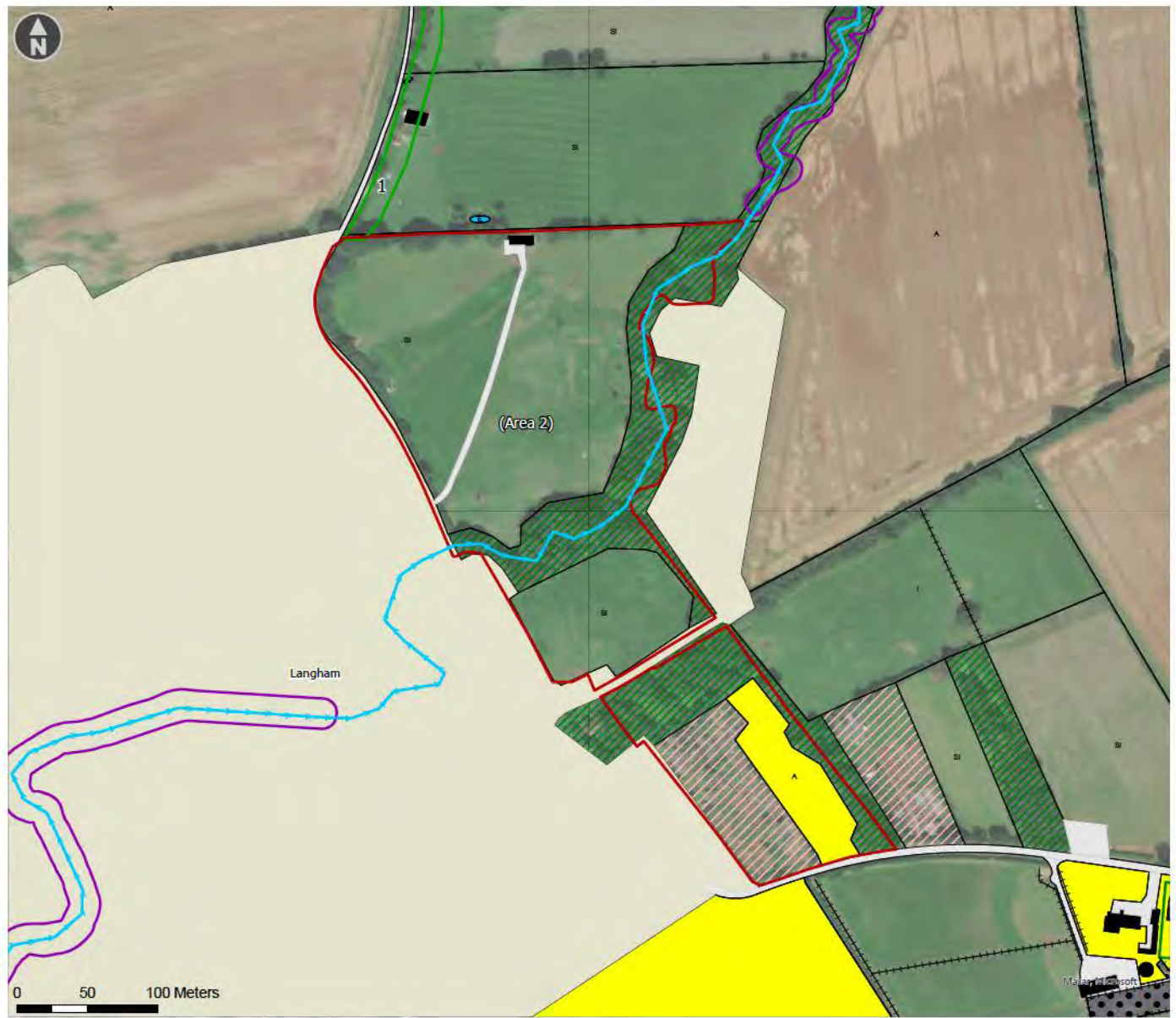
2.2.2 Survey Recommendations

If Survey Area 2 is to be allocated for development the woodlands should be retained, protected and enhanced along with the watercourse to help provide habitat for wildlife and maintain a valuable corridor through this area of Langham. The poor semi-improved grassland fields in the north of the Survey Area are considered a good location ecologically for new development as long as a number of surveys and protection measures are implemented:

- Update survey of the historic LWS located to the north of Survey Area 2 to confirm its current biodiversity value. This LWS should be protected from any development related impacts.
- Bat activity surveys and static monitoring should be conducted to assess whether there are any important commuting routes for bats that need to be retained as dark corridors within any new development design.

- A lux lighting plan should be provided prior to determination, to avoid lighting impacts on bats and other nocturnal wildlife.
- Ground level tree assessments (GLTA) of all standard trees within the Survey Area that are likely to be affected by proposals. Further surveys may be required if Potential Roost Features (PRF's) are found. This could include emergence surveys and/or tree climbing surveys.
- Reptile surveys, with particular focus on the good reptile habitat present along the watercourse/woodland boundary and allotments.
- Otter and water vole surveys may be required as the watercourse has records for these species just off-site to the north, and these species may use this watercourse to move through the catchment, even if it is not suitable for holts/ burrows.

Figure 3: Survey Area 2



- Towns Survey Areas
- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- A2.2 - Scrub - scattered
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas
- G2 - Running water
- J2.1.2 - Intact hedge - species-poor
- J2.4 - Fence
- LWS - Potential / Historic
- Water Vole
- 1) Hedgerow

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Langham - Survey Area 2

SCALE @ A3	CREATED BY	CHECKED BY
1:2,500	CA	KN
REFERENCE	ISSUE/REVISION	DATE
J00964-L4-2		24/5/2023

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Figure 4: Langham Great Crested Newt Risk Zones

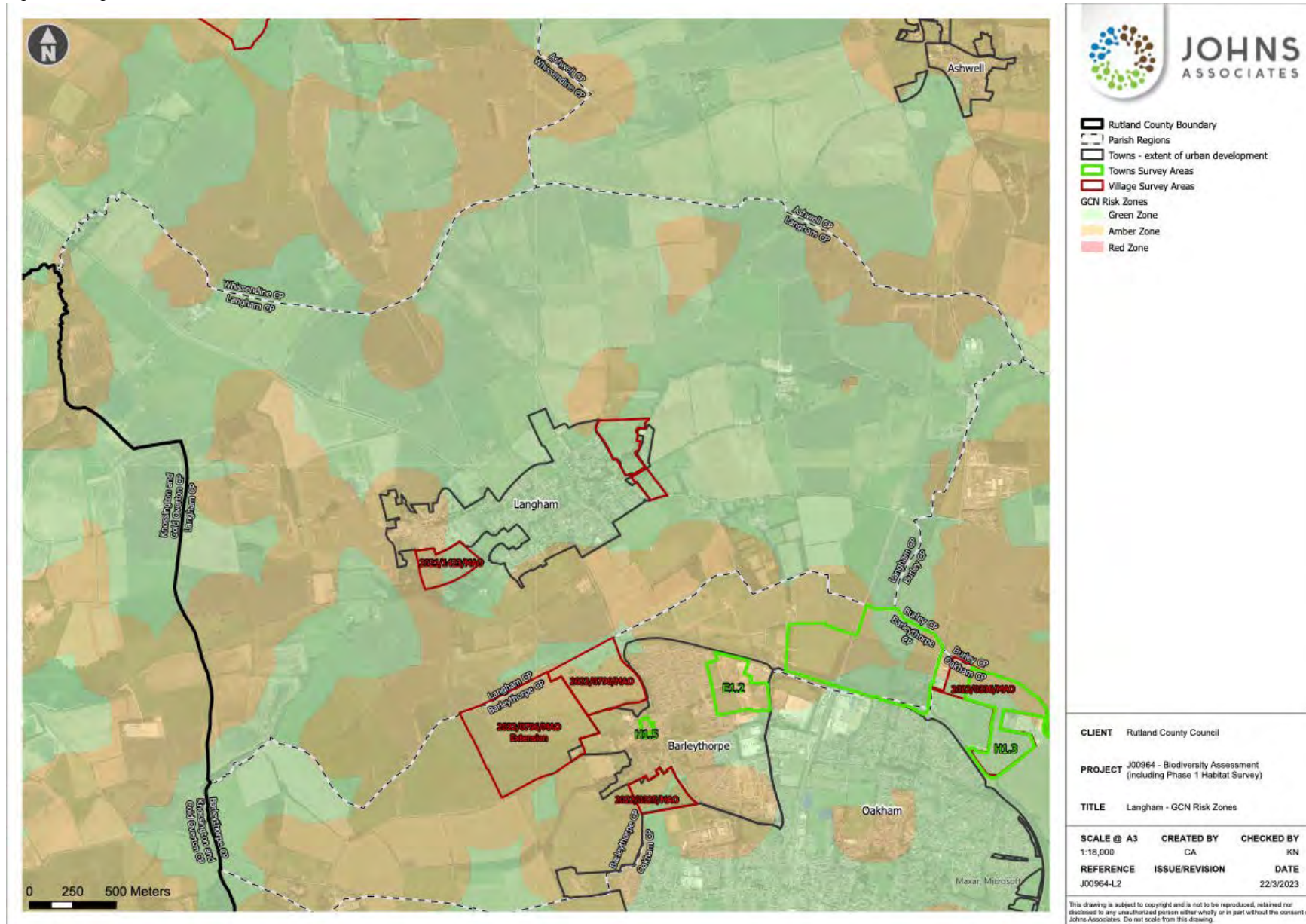
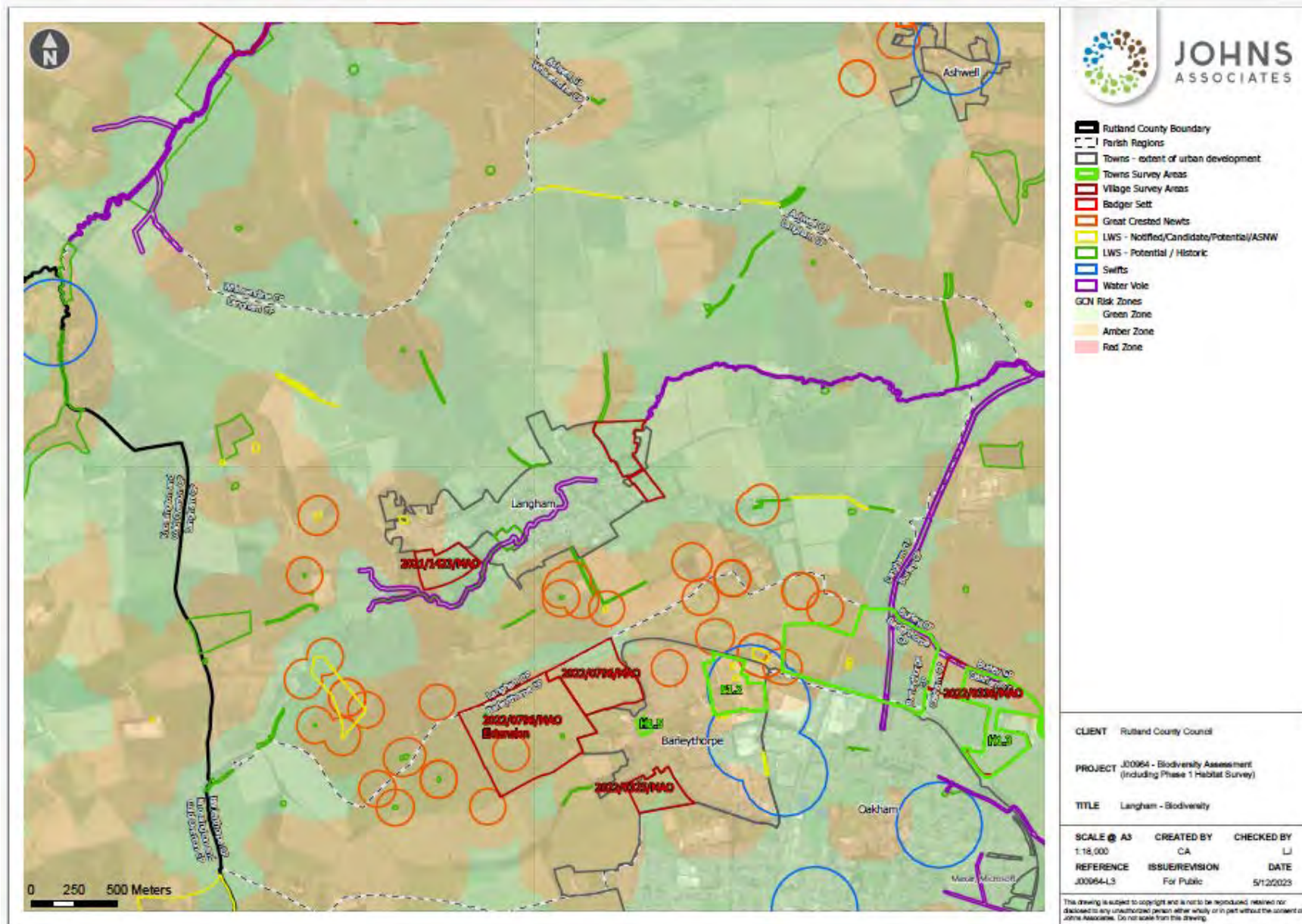


Figure 5: Langham Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Market Overton Parish - Biodiversity Summary Report

1 INTRODUCTION

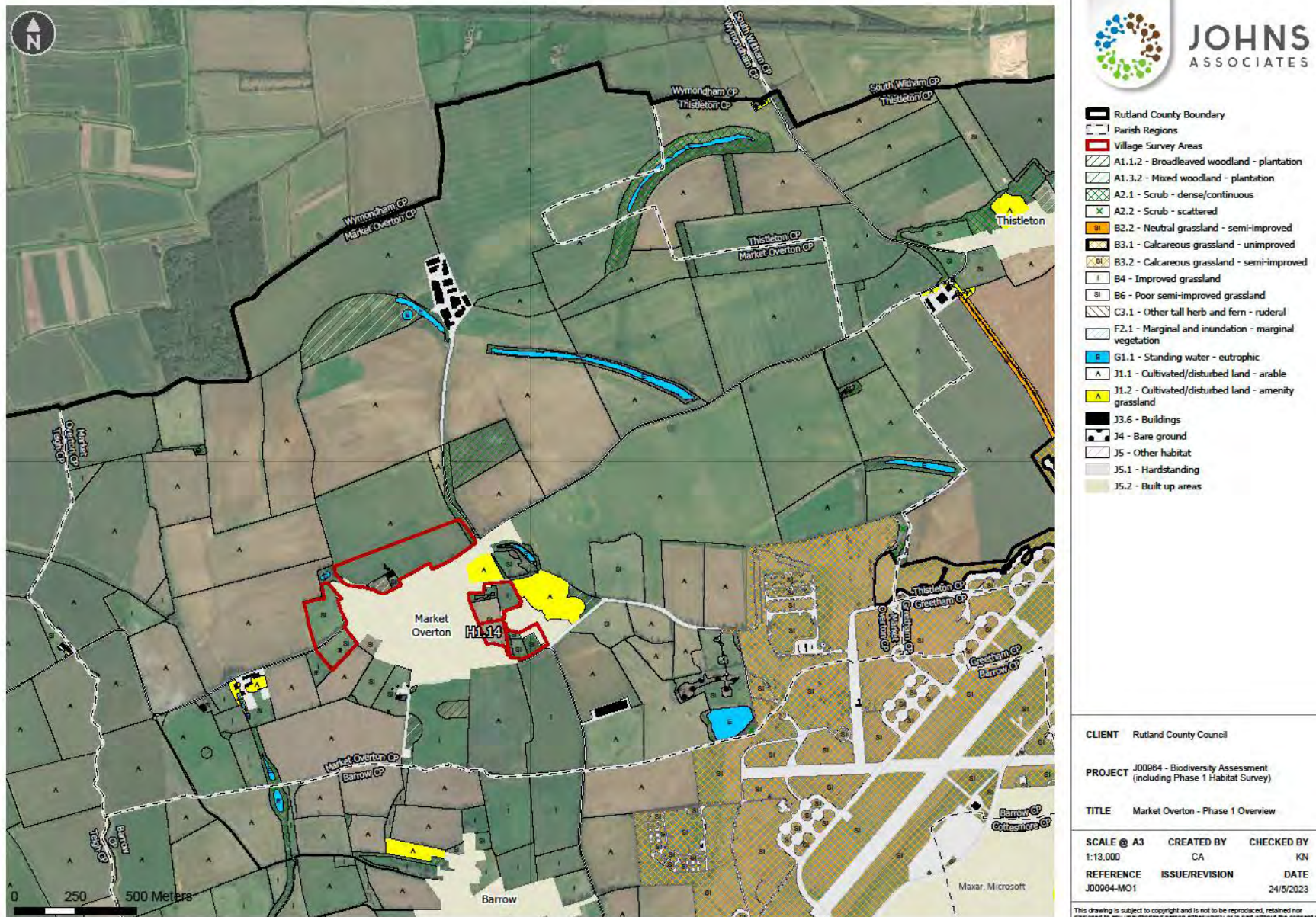
Market Overton is village located on the northern edge of the county of Rutland, to the east of Whissendine and north of Cottesmore. Figure 1 shows the habitat types identified within the boundary of Market Overton. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each habitat type within Market Overton Parish boundary.

The five most frequent habitats within Market Overton were: arable, improved grassland, built up areas (extent of the developed area of Market Overton), semi-improved calcareous grassland and poor semi-improved grassland. Cultivated arable land accounts for approximately 76% of the habitats within the Market Overton Parish boundary (see Table 1).

Table 1: Market Overton Parish Habitats

Phase 1 Habitat Code	Phase 1 Habitat Type	Habitat Area (ha)	% of Overall Habitat within Market Overton
J1.1	Cultivated/disturbed land - arable	555.74	76.16%
B4	Improved grassland	32.40	4.44%
B3.2	Calcareous grassland - semi-improved	30.52	4.18%
B6	Poor semi-improved grassland	27.42	3.76%
J5.2	Built up areas	25.71	3.52%
A1.1.2	Broadleaved woodland - plantation	10.60	1.45%
J5.1	Hardstanding	12.66	1.73%
A1.3.2	Mixed woodland - plantation	9.57	1.31%
A2.1	Scrub - dense/continuous	5.77	0.79%
J1.2	Cultivated/disturbed land - amenity grassland	5.77	0.79%
G1.1	Standing water - eutrophic	5.62	0.77%
A2.2	Scrub - scattered	2.30	0.32%
J3.6	Buildings	1.93	0.26%
B3.1	Calcareous grassland - unimproved	1.64	0.22%
J4	Bare ground	1.30	0.18%
J5	Other habitat	0.43	0.06%
C3.1	Other tall herb and fern - ruderal	0.19	0.03%
F2.1	Marginal and inundation - marginal vegetation	0.18	0.02%
Total		729.73	100.00

Figure 1: Overview of Habitats within Market Overton Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Market Overton to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1.

2.1 SURVEY AREA 1

Survey Area 1 is located immediately to the west of the main settlement of Market Overton and comprises two poor semi-improved grassland fields, bisected by Teigh Road. Both are likely to be used for grazing.

The northern compartment has hedgerow boundaries to the south, west and north, with St Peter and St Paul's Church to the east. The linear hedgerows provide the most ecologically valuable habitats within this Survey Area. A large pond set within an area of woodland is situated to the north of this area, and a potential LWS (comprising a hedgerow) is immediately to the west and runs alongside Teigh Road.

The southern compartment is also adjacent to residential properties to the east, with a species poor hedgerow with trees forming the southern, western and northern boundaries to Survey Area 1. A small pond is located in the centre of this compartment.

Overall, the habitats present in Survey Area 1 are of low biodiversity value. The most valuable habitats are the boundary hedgerows, which should be retained, protected and enhanced as part of any development proposals to strengthen green corridors into the wider local area.

2.1.1 Site Constraints

Figure 5 shows the whole of Survey Area 1 is within an Amber Risk Zone for GCN. Suitable habitats on site may include the pond south of Teigh Road, and also the boundary hedgerows, which may provide suitable terrestrial habitat for GCN moving to/ from breeding ponds in the local area. A search using Magic Maps (www.magic.defra.gov.uk) did not return any ponds with confirmed GCN within 500m of the Survey Area, but that may be due to a lack of surveys.

The boundary hedgerows should be retained, protected and enhanced as a way of securing the required level of BNG as they are the most ecologically valuable habitats at this site and contribute to green corridors in the wider local area. Any individual trees present within the Survey Area should also be retained as part of any future development, with fencing used to protect the root zones from potential effects during construction (e.g. through compaction of soil and/or accidental damage by machinery).

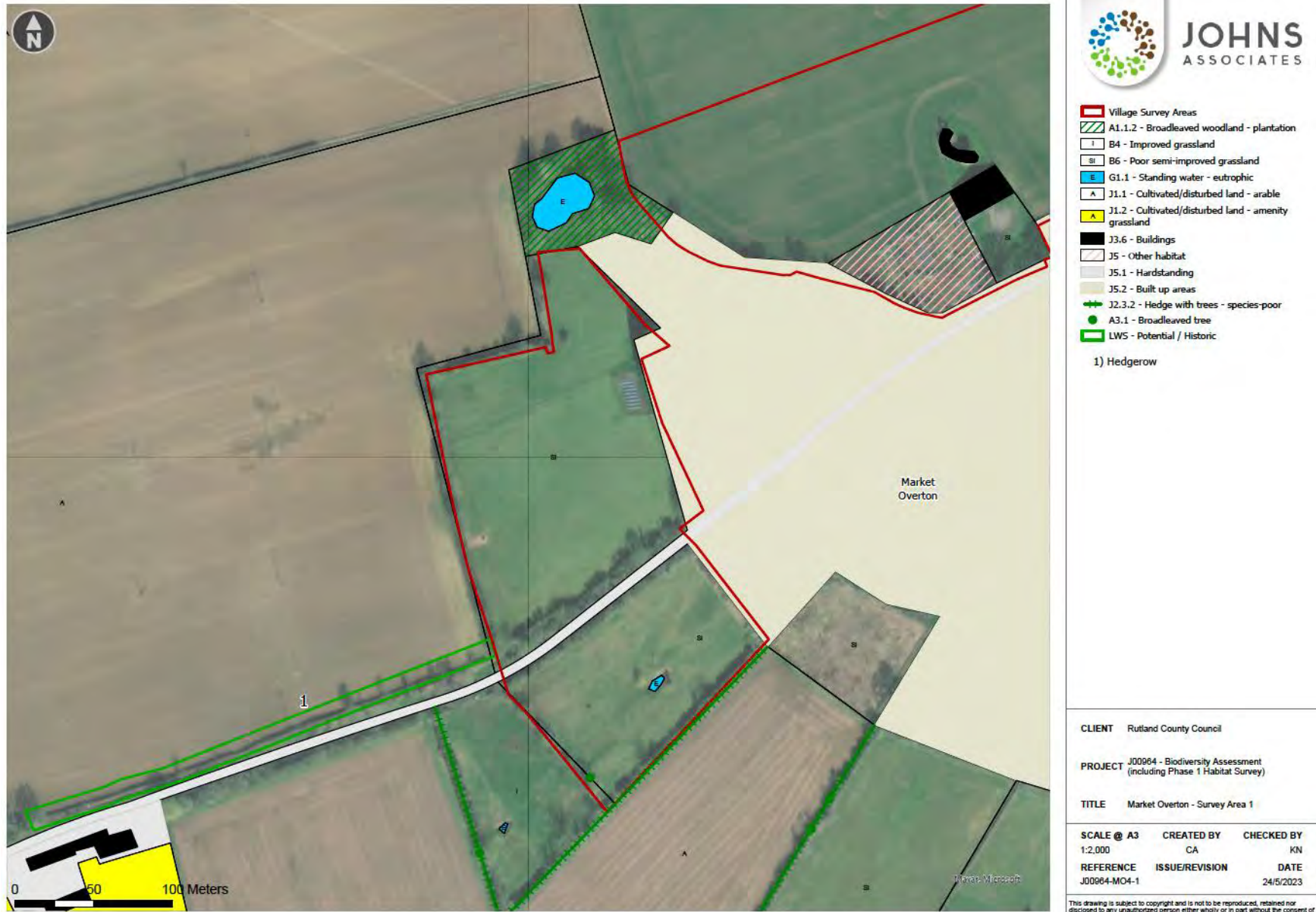
2.1.2 Survey Recommendations

Survey Area 1 is considered to be a good location ecologically for allocation for development as long as the boundary habitats are enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.

A Habitat Suitability Index assessment of the pond within the Survey Area boundary and the larger off-site pond should be undertaken to confirm its suitability for breeding GCN and to inform any planning application for this site.

Figure 2: Market Overton Survey Area 1



2.2 SURVEY AREA 2

Survey Area 2 is located in the north of Market Overton Parish and comprises part of an arable field, a small allotment area and a series of buildings/ built structures. An area of scrub is present along the eastern boundary, with a small area of poor semi-improved grassland habitat in the south, adjacent to residential properties and the allotments. A large pond within an area of woodland is located to the west.

Overall, the habitats within this Survey Area are considered to be of low biodiversity value. However, the allotments and scrub could support populations of common reptiles, such as slow worm, grass snake and common lizard. The scrub and woodland habitat are also likely to support nesting birds.

2.2.1 Site Constraints

Figure 5 shows the whole of Survey Area 2 is within an Amber Risk Zone for GCN. Suitable habitats on site may include the allotments, and also the scrub, which may provide suitable terrestrial habitat for GCN moving to/ from breeding ponds in the local area. A search using Magic Maps (www.magic.defra.gov.uk) did not return any ponds with confirmed GCN within 500m of the Survey Area, but that may be due to a lack of surveys.

The woodland, allotments and scrub may support a range of legally protected and/or notable species including nesting birds, reptiles, common amphibians, small mammals and invertebrates. The woodland and any mature individual trees within the Survey Area boundary should be retained and protected during construction works.

Buildings and mature trees present within the Survey Area boundary may support roosting bats.

2.2.2 Survey Recommendations

Survey Area 2 is considered to be a good location ecologically for the allocation of a new housing development as long as the boundary habitats are enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

- Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Buildings/ built structures should be assessed for their suitability to support roosting bats. Where suitability is considered to be more than negligible, emergence surveys will need to be undertaken to inform a probable EPS licence application to Natural England.
- A Habitat Suitability Index assessment of the large off-site pond should be undertaken to confirm its suitability for breeding GCN and to inform any planning application for this site.
- Reptile surveys within the allotments and scrub habitat. A Method Statement is recommended to ensure no individuals are harmed during clearance of the allotment area.

Figure 3: Market Overton Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 is located in the southeast of Market Overton Parish. It encompasses several small fields comprising improved and poor semi-improved grassland habitat, with areas of tall ruderal vegetation, broadleaved plantation woodland, and individual trees. A species-poor hedgerow with trees is present along the southern boundary. Amenity play space is present to the east and north, with a large pond situated to the northeast. Residential dwellings are located to the west and east.

Overall, the habitats present in Survey Area 3 are of low biodiversity value. However, the broadleaved plantation woodland, tall ruderal vegetation and hedgerow may offer suitable habitat to a range of legally protected and/or notable species including bats, common reptiles, amphibians (including GCN), nesting birds, invertebrates and small mammals. The hedgerow and woodland habitat should be retained, protected and enhanced as part of any proposed development in order to maximise BNG.

2.3.1 Site Constraints

Figure 5 shows the northern half of Survey Area 2 is within an Amber Risk Zone for GCN, with the large off-site pond to the north-east a confirmed breeding pond for this species. Valuable habitats on site for this species may include the tall ruderal vegetation, woodland edges and hedgerows, which may provide suitable terrestrial habitat for GCN moving to/ from the breeding pond.

Reptiles may be using the tall ruderal vegetation on site and also the bases of hedgerows, where these provide enough cover. The same habitats may also be used by small mammals such as hedgehogs. The hedgerows, woodland and individual trees will offer suitable nesting habitat for a range of bird species and should be retained, protected and enhanced. Foraging and commuting bats may also be using woodland edge and hedgerow habitats present within the boundary of Survey Area 3.

2.3.2 Survey Recommendations

Survey Area 3 is considered to be a good location ecologically for the allocation of a new housing development as long as the woodland and hedgerows are enhanced for wildlife. Individual trees, where these are assessed as being of ecological value, should also be retained and incorporated into the landscape design.

- Individual trees that have potential to support roosting bats that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- A Habitat Suitability Index assessment of the large off-site pond should be undertaken to confirm its suitability for breeding GCN and to inform any planning application for this site.
- Reptile surveys within areas of suitable habitat. A Method Statement is recommended to ensure no individuals are harmed during clearance of these areas.

Figure 4: Market Overton Survey Area 3

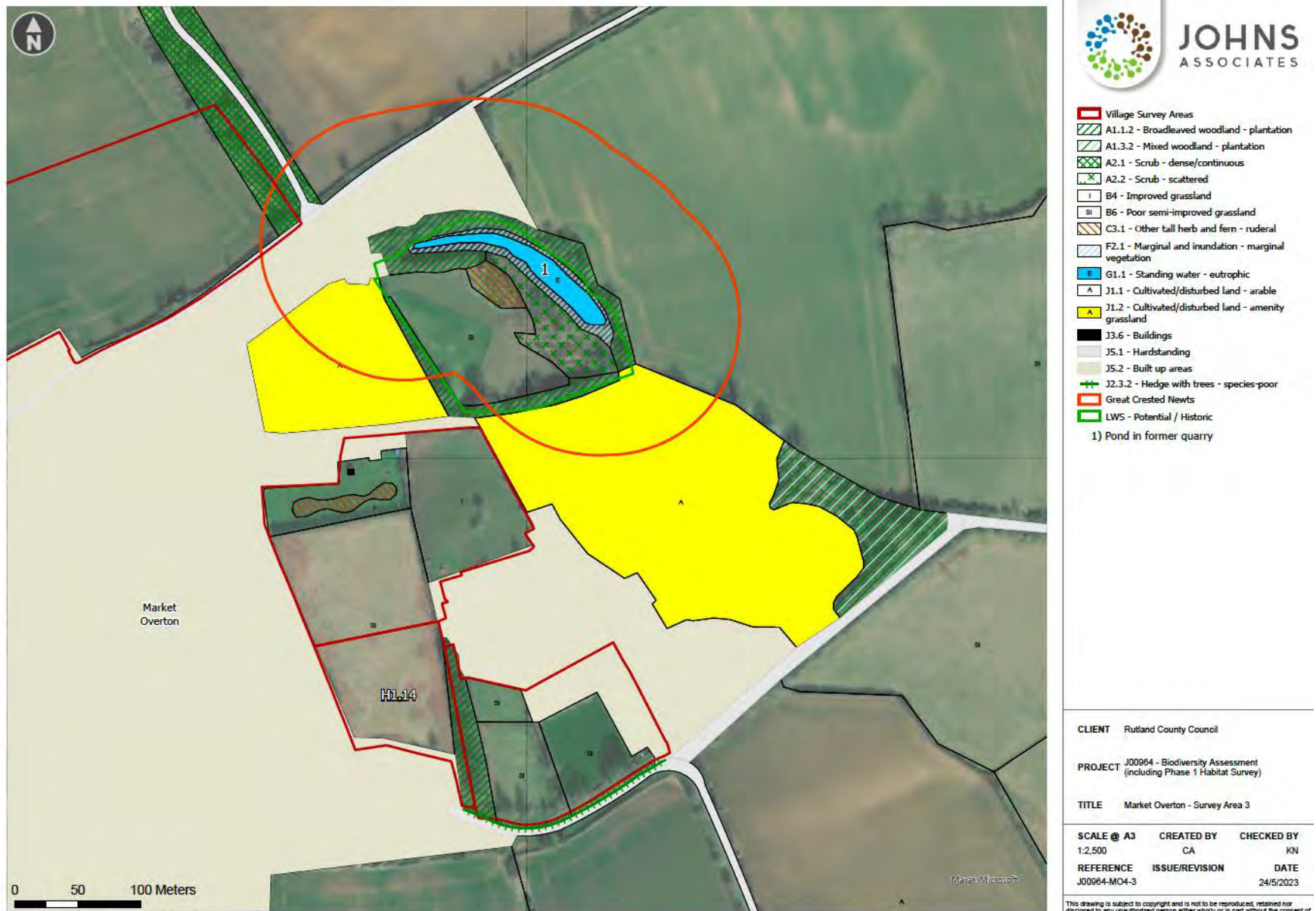


Figure 5: Market Overton Great Crested Newt Risk Zones

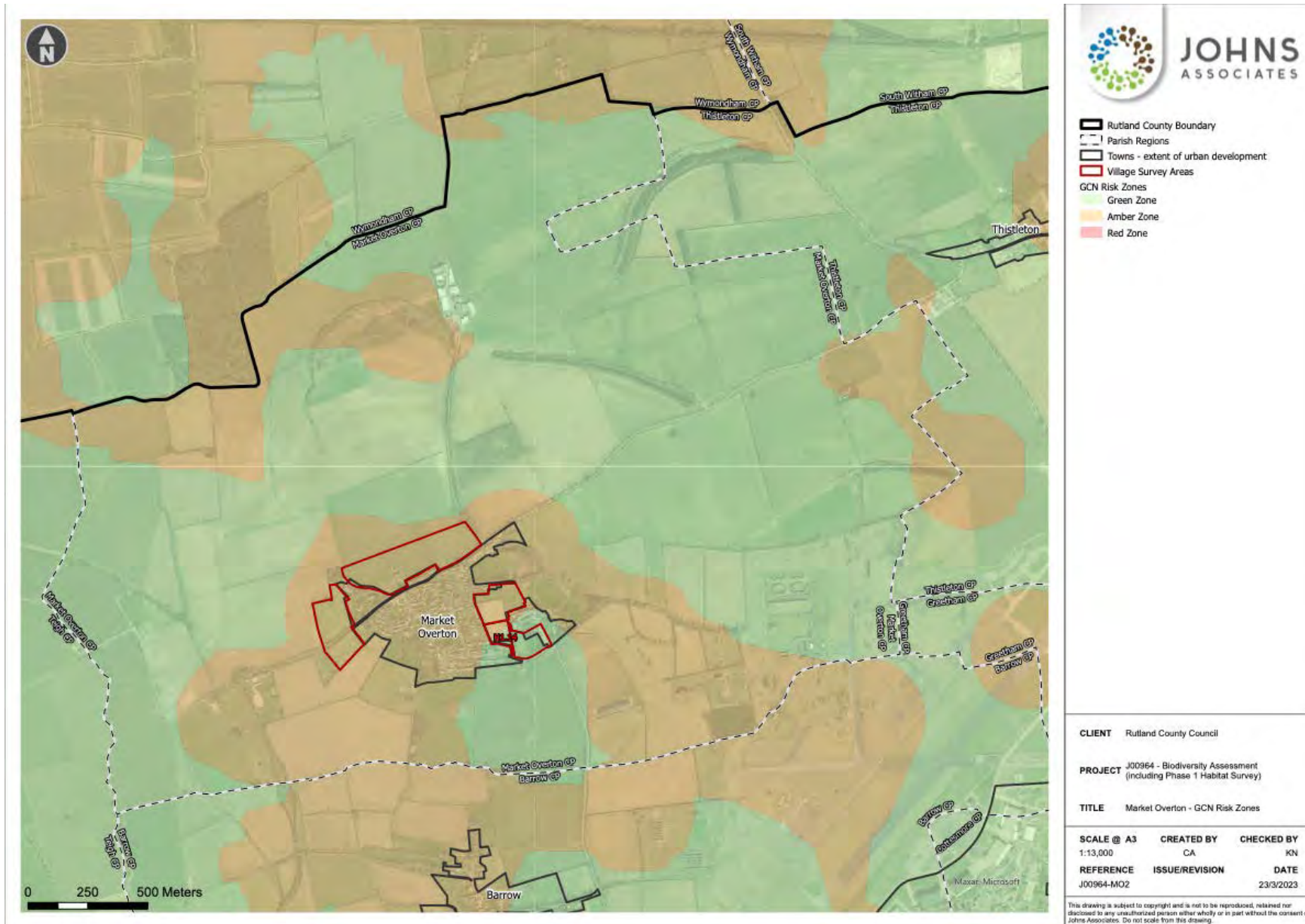
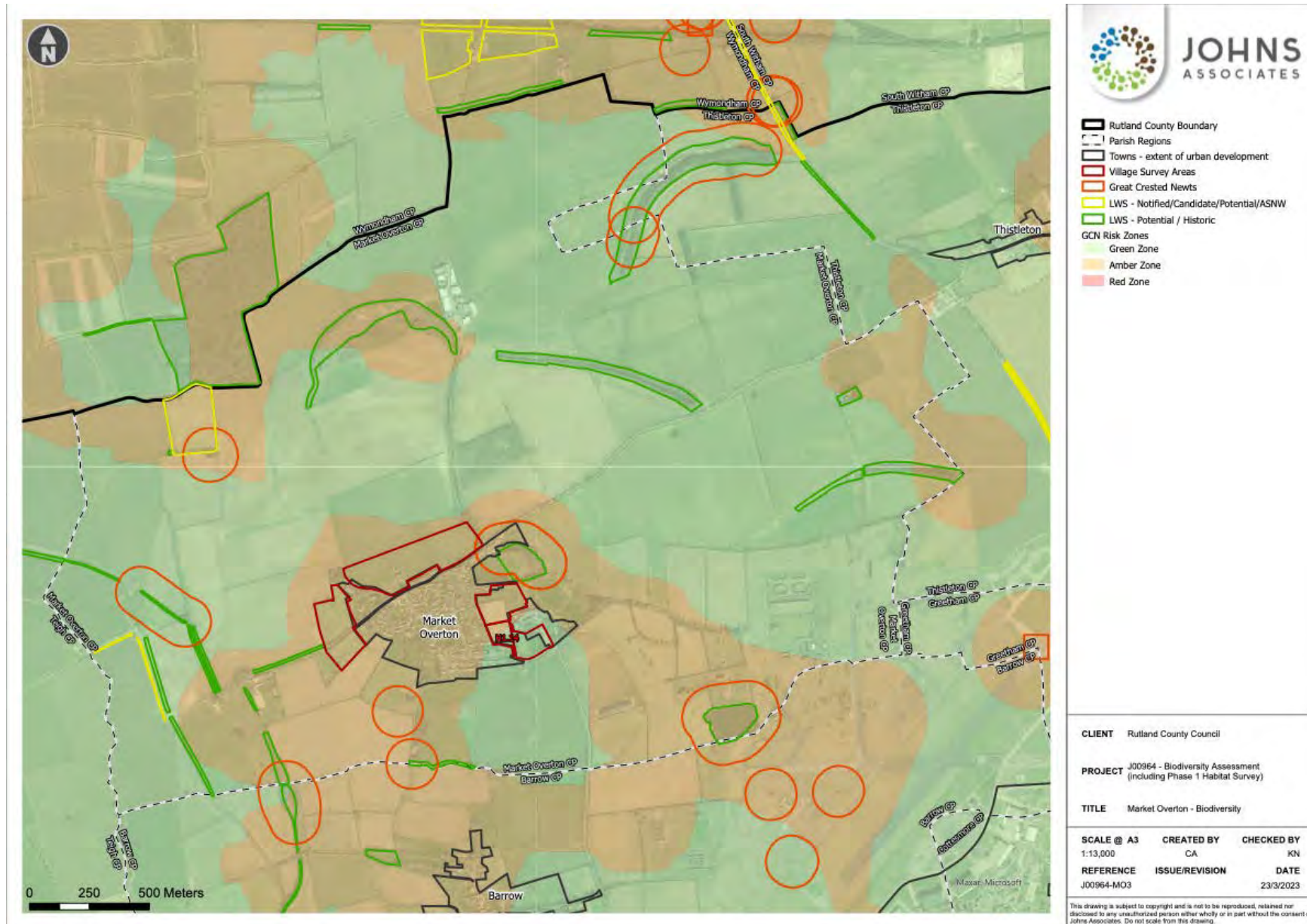


Figure 6: Market Overton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Whissendine Parish - Biodiversity Summary Report

1 INTRODUCTION

Whissendine is a smaller Parish in Rutland, located in the north-west corner of the County between Oakham to the southeast and Melton Mowbray in Leicestershire to the northwest. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas can be seen in Table which gives the percentage cover of each habitat type within the Parish.

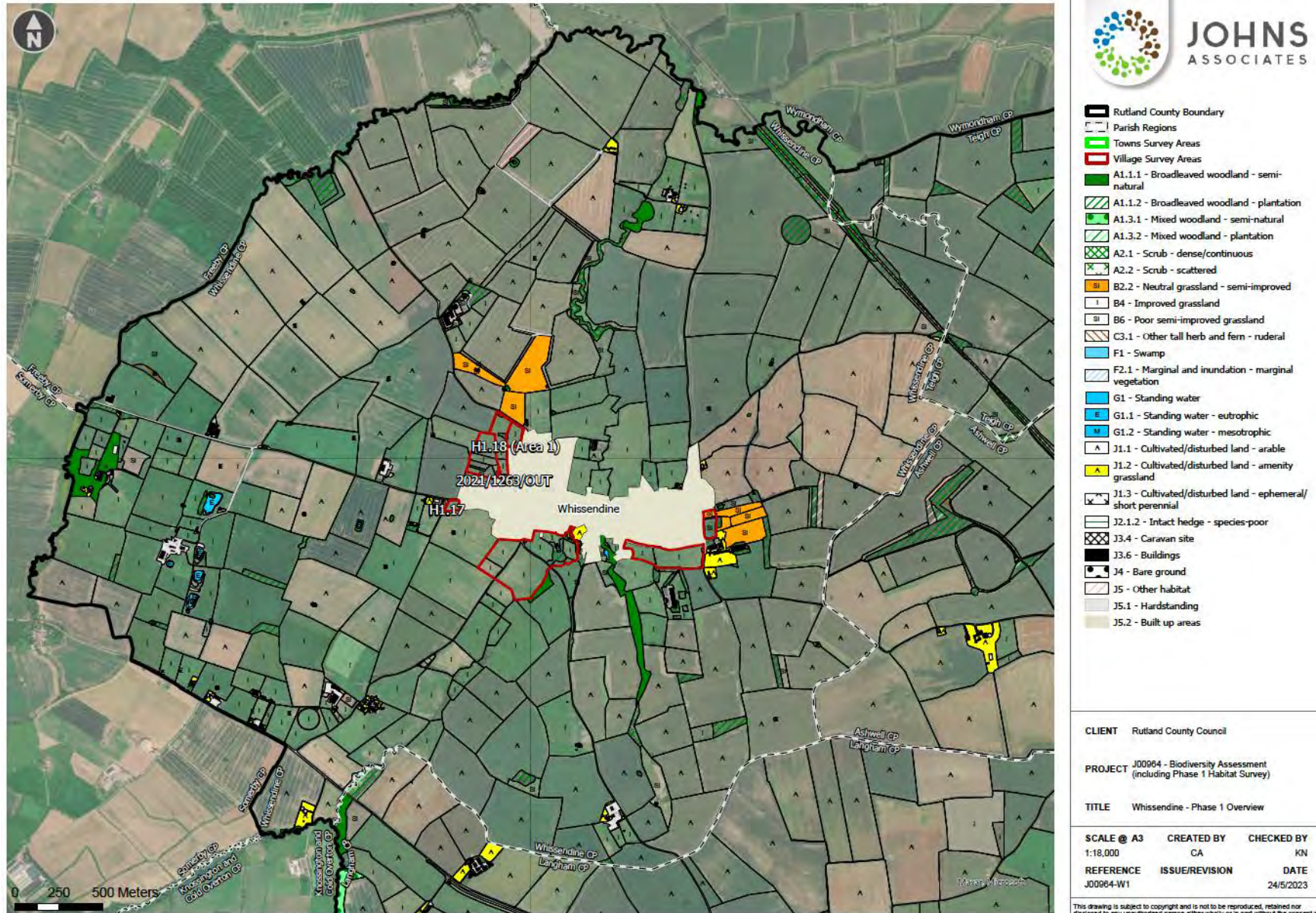
The four most frequent habitats within Whissendine were arable, improved grassland, built up areas (extent of the developed area of Whissendine) and poor semi-improved grassland. These four habitat types account for approximately 94% of the habitats within the Parish boundary (see Table 1).

Table 1: Whissendine Parish Habitats

Habitat Type	Total Habitat Area (ha)	% of Overall Habitat within Whissendine
J1.1 - Cultivated/disturbed land - arable	1001.65	61.44%
B4 - Improved grassland	441.43	27.08%
J5.2 - Built up areas – Extent of Whissendine	53.35	3.27%
B6 - Poor semi-improved grassland	34.21	2.10%
A1.1.2 - Broadleaved woodland - plantation	15.73	0.96%
J5.1 - Hardstanding	14.77	0.91%
B2.2 - Neutral grassland - semi-improved	14.46	0.89%
A1.1.1 - Broadleaved woodland - semi-natural	13.46	0.83%
A2.2 - Scrub - scattered	8.54	0.52%
A2.1 - Scrub - dense/continuous	8.15	0.50%
J1.2 - Cultivated/disturbed land - amenity grassland	7.03	0.43%
J5 - Other habitat	4.79	0.29%
J4 - Bare ground	3.72	0.23%
J3.6 - Buildings	3.64	0.22%
G1.1 - Standing water - eutrophic	1.99	0.12%
A1.3.2 - Mixed woodland - plantation	1.18	0.07%
C3.1 - Other tall herb and fern - ruderal	0.87	0.05%
F2.1 - Marginal and inundation - marginal vegetation	0.81	0.05%

J3.4 - Caravan site	0.339	0.02%
G1 - Standing water	0.10	0.01%
J2.1.2 - Intact hedge - species-poor	0.06	0.00%
J1.3 - Cultivated/disturbed land - ephemeral/short perennial	0.03	0.00%
F1 - Swamp	0.02	0.00%
G1.2 - Standing water - mesotrophic	0.02	0.00%
Grand Total	1630.324	100%

Figure 1: Overview of Habitats within Whissendine Parish Boundary



2 SURVEYED AREAS

Rutland County Council asked for a number of sites around Whissendine to be surveyed as part of the wider phase 1 habitat survey of the county. These sites have been highlighted as potential areas for allocation within the new local plan. Their locations are shown in Figure 1.

2.1 SURVEY AREA 1

Survey Area 1 was located to the north-west of Whissendine, south of Stapleford Road and an outline planning application has already been submitted for this area (reference 2021/1263/OUT). Survey Area 1 (shown in Figure 2) is predominantly made up of improved grassland habitat, with one field comprising poor semi-improved grassland to the south, and pockets of plantation woodland across the Area. The fields have boundary hedgerows.

Overall, the habitats within this area are very poor in biodiversity terms: the improved grassland is dominated by perennial rye grass and is intensively managed by overgrazing sheep meaning overall the sward is maintained at a very low height. The poor semi-improved grassland was slightly more species diverse and managed by cutting probably once a year. The woodland parcels and linear habitats (hedgerows) within this Survey Area offer the greatest importance for biodiversity. These are likely to support nesting birds, commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.1.1 Site Constraints

The north-west corner of the Survey Area is located in an Amber Risk Zone for Great Crested Newts (GCN) as shown in Figure 7. There is a pond present to the west located on private land which has previously had records of GCN present. However, Magic maps provided data showing GCN as being absent from this pond following a survey carried out in May 2019. To the north of Stapleford Road was a second pond; survey data showed that this pond did have GCN present in May 2019. This pond is located 150m north of the Survey Area boundary.

Given the poor suitability of onsite habitats for foraging and hibernating GCN it is considered proportionate to conclude that as long as the habitats remain in the same condition as the 2022 baseline survey, no GCN surveys will be required. However, if the site is to be developed, a precautionary method statement should be produced and implemented and if any reptiles/GCN are encountered works should be halted and the appointed suitability qualified ecologist consulted as a Natural England European Protected Species License may be required. Consideration should be given to enhancing the habitats surrounding the GCN ponds to the north if Survey Area 1 is allocated for development, and to creating additional ponds to help maintain the GCN metapopulation in this area.

The woodland parcels within the Survey Area boundary should be retained and protected through the implementation of woodland buffer zones. These areas are likely to be important for nocturnal wildlife such as bats and hedgehogs, therefore a Lux Lighting Plan should be produced to ensure light spill onto these habitats does not exceed 0.5 lux.

The poor semi-improved grassland field to the south of the Survey Area has potential to support a small-moderate reptile population as the grassland sward is varied in height and there is cover from adjacent scrub and woodland habitat that could also offer potential hibernacula.

2.1.2 Survey Recommendations

If Survey Area 1 is to be allocated for development, it would be worth considering maintaining the woodland parcels and retained hedgerows around the Site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The Survey Area is considered to be a good location ecologically for allocation as long as the woodland habitats and hedgerows can be retained, protected and enhanced for wildlife.

- Any trees around the perimeter of the Area that have potential to support roosting bats and that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level tree assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Area that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination of any planning application to avoid lighting impacts on bats and other nocturnal wildlife.
- Reptile surveys should be undertaken, with particular focus on poor semi-improved grassland habitat present along the southern boundary that borders existing residential properties.
- No additional surveys are required for GCN, however, a precautionary method statement should be produced to further reduce any risk of harm to reptile and amphibian species (including GCN). This should include sequential cutting of suitable areas of vegetation to ensure these habitats are unsuitable for foraging reptiles and GCN prior to pre-commencement/ site preparation works.

Woodlands, hedgerows and trees should be retained, protected and enhanced through mandatory BNG requirements within the development design. Suitable buffers should be implemented around these habitats and Heras fencing used to as necessary to ensure no development related impacts occur.

Figure 2: Whissendine Survey Area 1



- Towns Survey Areas
- Village Survey Areas
- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J1.3 - Cultivated/disturbed land - ephemeral/short perennial
- J3.6 - Buildings
- J4 - Bare ground
- J5.1 - Hardstanding
- J5.2 - Built up areas
- x A2.2 - Scattered scrub
- A3.1 - Broadleaved tree
- xxxx A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- A3.3 - Mixed Parkland/scattered trees
- J2.1.2 - Intact hedge - species-poor
- J2.3.1 - Hedge with trees - native species-rich
- J2.3.2 - Hedge with trees - species-poor
- J2.4 - Fence
- Great Crested Newts

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Whissendine - Survey Area 1

SCALE @ A3	CREATED BY	CHECKED BY
1:2,000	CA	KN
REFERENCE	ISSUE/REVISION	DATE
J00964-W4-1		24/5/2023

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2.2 SURVEY AREA 2

Survey Area 2 was located to the eastern extent of the built-up area of Whissendine, east of Ashwell Road. Survey Area 2 (shown in Figure 3) is comprised of poor semi-improved grassland, with one smaller field of semi-improved neutral grassland to the north, a parcel of plantation woodland located between the two fields and a species rich intact native hedgerow on the western Survey Area boundary.

Overall, the habitats within this area are considered to be of moderate value in biodiversity terms: the semi-improved neutral grassland was fairly diverse with a good abundance of forbs and was not overgrazed by sheep. The woodland parcels and linear habitats (hedgerows) within this Survey Area also offer importance for biodiversity: there were a number of mature trees present in the offsite woodland to the south, and these areas are likely to support nesting birds, roosting/commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.2.1 Site Constraints

The Survey Area is located wholly within an Amber Risk Zone for Great Crested Newts (GCN) which can be seen in Figure 7. There is a pond located 250m to the north-east of the site within private land which hasn't previously had records of GCN present. No further data for GCN was found on Magic maps either from positive or negative survey results or granted EPS licenses for either of these ponds.

The habitats are considered to offer good suitability for foraging and hibernating GCN. The Area is connected to the pond via the linear habitats and plantation woodland located around the perimeter. Therefore, GCN surveys will be required of the nearby off-site ponds as a Natural England European Protected Species License may be required.

The woodland parcels within and adjacent to the Survey Area boundary should be retained and protected through the establishment of woodland buffer zones. These areas are likely to be important for nocturnal wildlife such as bats and hedgehogs therefore a Lux Lighting plan should be produced to ensure light spill on these boundary habitats is no greater than 0.5 lux.

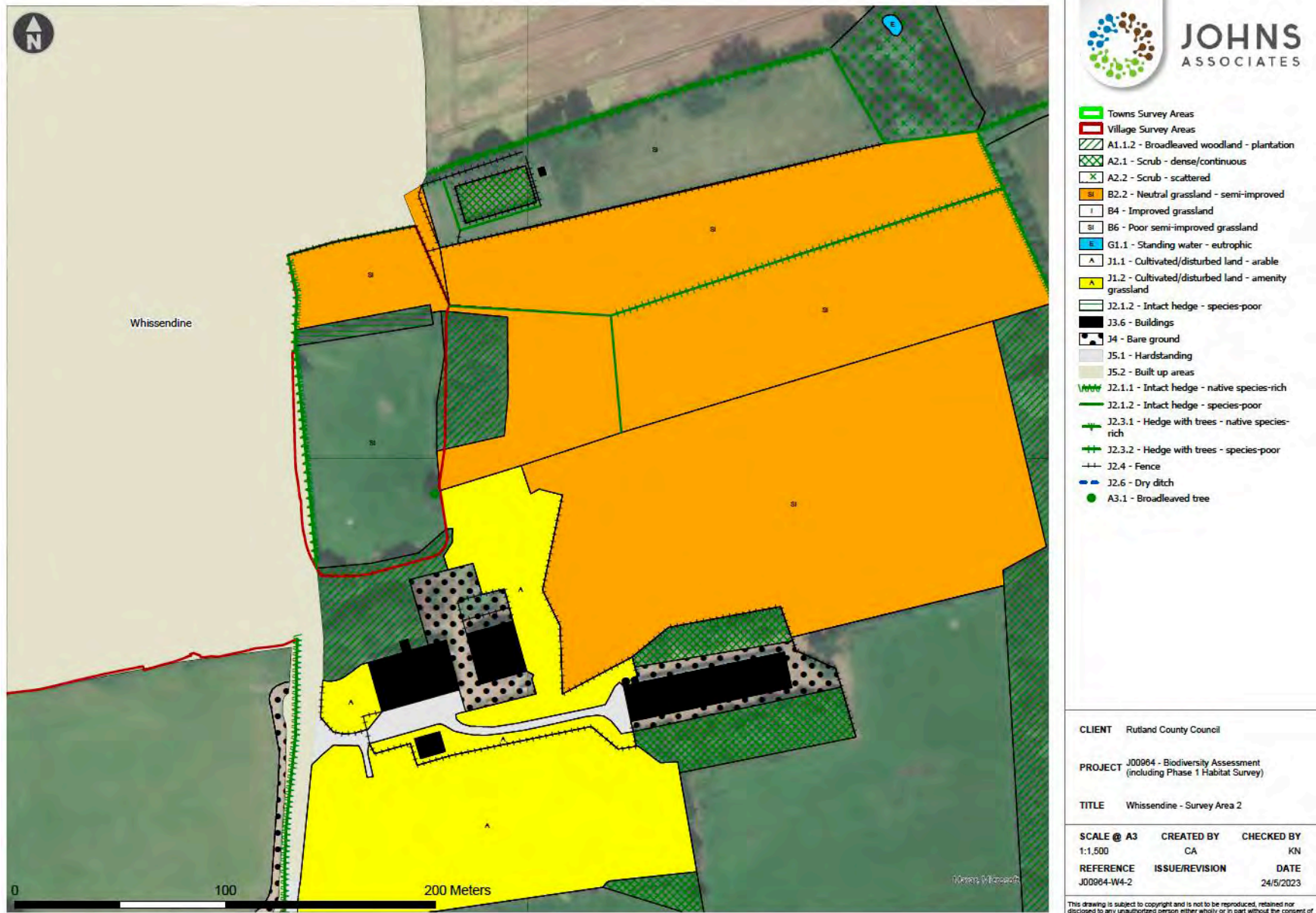
The grassland habitats within the site have potential to support a small-moderate reptile population as the grassland sward is varied in height and there is cover from adjacent scrub and woodland habitat that could also offer potential hibernacula.

2.2.2 Survey Recommendations

If Survey Area 2 is to be allocated for development, it would be worth considering retaining and protecting the hedgerows and woodland around the Site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The site is considered to be a good location ecologically for allocation as long as a number of surveys and protection measures are implemented:

- Any trees associated with the Survey Area that have potential to support roosting bats and that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the site that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- GCN population surveys of all ponds within 500m of Survey Area 2.
- Reptile surveys, with particular focus on woodland edge and semi-improved neutral grassland habitats.

Figure 3: Whissendine Survey Area 2



2.3 SURVEY AREA 3

Survey Area 3 was located to the south of Whissendine. The eastern field had a public right of way running adjacent to it, however the eastern field was solely located on private land with no public right of way access, therefore habitat assessments were undertaken using aerial maps or from nearby rights of way using binoculars where possible. Survey Area 3 (shown in Figure 4) is made up of improved grassland habitat and the fields were bounded by hedgerows with trees.

Overall, the habitats within this area are very poor in biodiversity terms: the improved grassland is dominated by perennial rye grass and crested dogs' tail with very limited forb species. The grassland is intensively managed by overgrazing with sheep meaning overall the sward is maintained at a very low height, offering no cover for faunal species.

The linear habitats (hedgerows) with trees within this Survey Area offer the greatest importance and opportunities for biodiversity. They are likely to support nesting birds, roosting/commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.3.1 Site Constraints

The Survey Area is located wholly within an Amber Risk Zone for Great Crested Newts (GCN) which can be seen in Figure 7. There is a pond located 100m to the west of the site on private land which hasn't previously had records of GCN. There is a further pond 370m to the west. No further data for GCN was found on Magic maps either from positive or negative survey results or granted EPS licenses for either of these ponds.

The habitats within the Survey Area are considered to offer poor suitability for foraging or hibernating GCN, however, the linear habitats and plantation woodland located on the perimeter of the western field offer potential commuting/ foraging and hibernation resources. Therefore, GCN surveys will be required of the nearby off-site ponds as a Natural England European Protected Species License may be required.

The off-site pond 100m to the west is covered by a historic LWS designation. This LWS was last surveyed between 1980-1990. No recent survey data is available, and it is therefore unknown whether the LWS still has any ecological value. However, it still holds the LWS designation. Because of this, any development of Survey Area 3 should aim to avoid any impacts to this pond and associated habitat. This pond has also been highlighted as potentially used by water vole, which should be confirmed through field survey.

It is recommended that the habitats around the nearby ponds are enhanced as part of any planning permission to create a mosaic of tussocky, species-rich grassland interspersed with patches of scrub and trees. This can be created onsite within the western-most area. Additional pond creation should also be carried out as part of any planning proposal, with a suitable mix of aquatic flora included to provide suitable egg laying substrate.

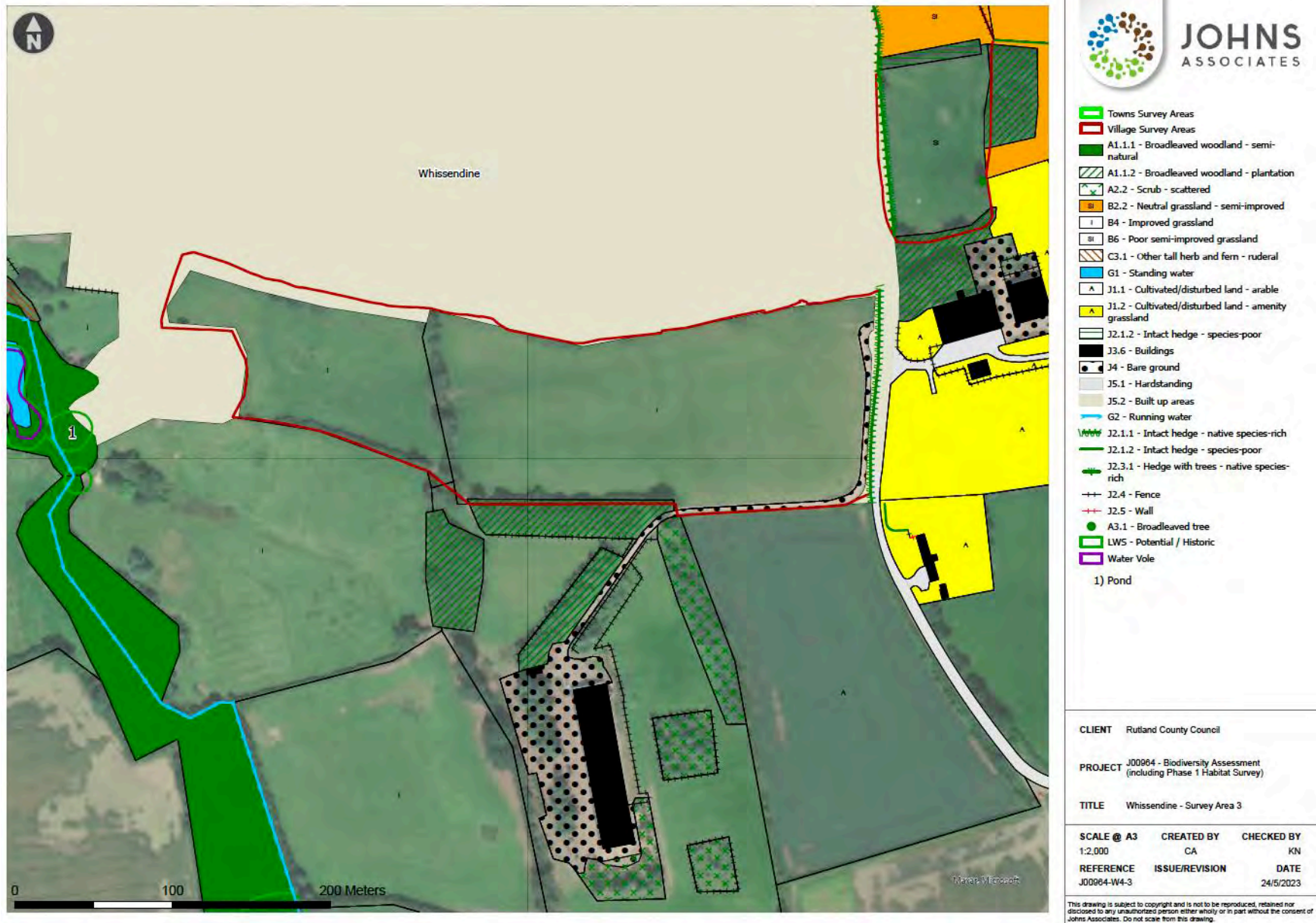
2.3.2 Survey Recommendations

If Survey Area 3 is to be allocated for development, it would be worth considering retaining and protecting the hedgerows around the Site as dark corridors to maintain their value as functional wildlife corridors for nocturnal species. The site is considered to be a good location ecologically for the allocation of a new housing development as long as a number of surveys and protection measures are implemented:

- Update survey of the LWS located west of Survey Area 3 to confirm its current biodiversity value.
- Any trees around the perimeter of the site that have potential to support roosting bats that could be affected as part of the development either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.

- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the site that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- GCN population surveys of all ponds within 500m of Survey Area 3.
- No additional surveys are required for reptiles; however, a precautionary method statement should be produced to further reduce any risk of harm to these species. This should include sequential cutting of vegetation around the perimeters of the site to make these habitats unsuitable for foraging reptiles prior to pre-commencement/ site preparation works.

Figure 4: Whissendine Survey Area 3



2.4 SURVEY AREA 4

Survey Area 4 is located to the south-west of Whissendine (see Figure 5) and is made up of predominantly improved ridge and furrow grassland habitat, with areas of broadleaved plantation woodland and a large pond in the northern section of the Survey Area. The fields were bounded by hedgerows and lines of trees. A watercourse ran along the eastern boundary.

Overall, the habitats within this Survey Area are very poor in biodiversity terms: the improved grassland is dominated by perennial rye grass and crested dogs' tail with very limited forb species, the grassland is also intensively managed by overgrazing sheep meaning overall the sward was maintained at a very low height.

However, north of Oakham Road the habitat types are more diverse and are considered to be of moderate value in biodiversity terms, this includes large areas of broadleaved plantation woodland, tall ruderal, swamp, amenity grassland, improved grassland and a large pond. The woodland, swamp, ruderal habitat and linear habitats (hedgerows and stream) within this survey area offer the greatest importance for biodiversity. These are likely to support nesting birds, roosting/commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.4.1 Site Constraints

Survey Area 4 is partly located within an Amber Risk Zone for GCN which can be seen in Figure 7. There is a pond located within the site boundary to the north which doesn't appear to have previously had records of GCN. No further data for GCN was found on Magic maps either from positive or negative survey results or granted EPS licenses for this pond, but this may be due to that fact that no surveys have previously been carried out.

The habitats within the Survey Area are considered to offer good suitability for foraging or hibernating GCN in the habitats immediately surrounding this pond. South of Oakham Road the habitats offer poorer suitability for both foraging and hibernating GCN. Therefore, GCN surveys will be required of the pond to the north as a Natural England European Protected Species License may be required. However, if only the area of land south of Oakham Road is to be developed a precautionary method statement could be produced and implemented as the habitats in this area are highly unlikely to support this species.

Adjacent to the Survey Area on the eastern boundary is an area of land covered by a historic LWS designation: Whissendine Brook and associated grassland/woodland. This LWS was last surveyed between 1980-1990. No recent survey data is available, and it is therefore unknown whether the LWS still meets the criteria for designation. However, it still holds the LWS status. Because of this, any development of Survey Area 3 should aim to avoid any impacts to this LWS.

The watercourse should have an 8m buffer to protect its ecological value in habitat terms, as a wildlife corridor and to mitigate any pollution impacts from construction. The woodland and watercourse should also be enhanced for the benefit of wildlife through mandatory BNG requirements. The improved grassland is less ecologically constrained and is considered a good location for development through its allocation in the Local Plan.

The watercourse and woodland are considered to form an important ecological corridor which is likely to be used as a commuting route and foraging habitat by a number of bat species. Water vole records also exist for this watercourse, and any development will require adequate supporting survey information, as a displacement licence may be required.

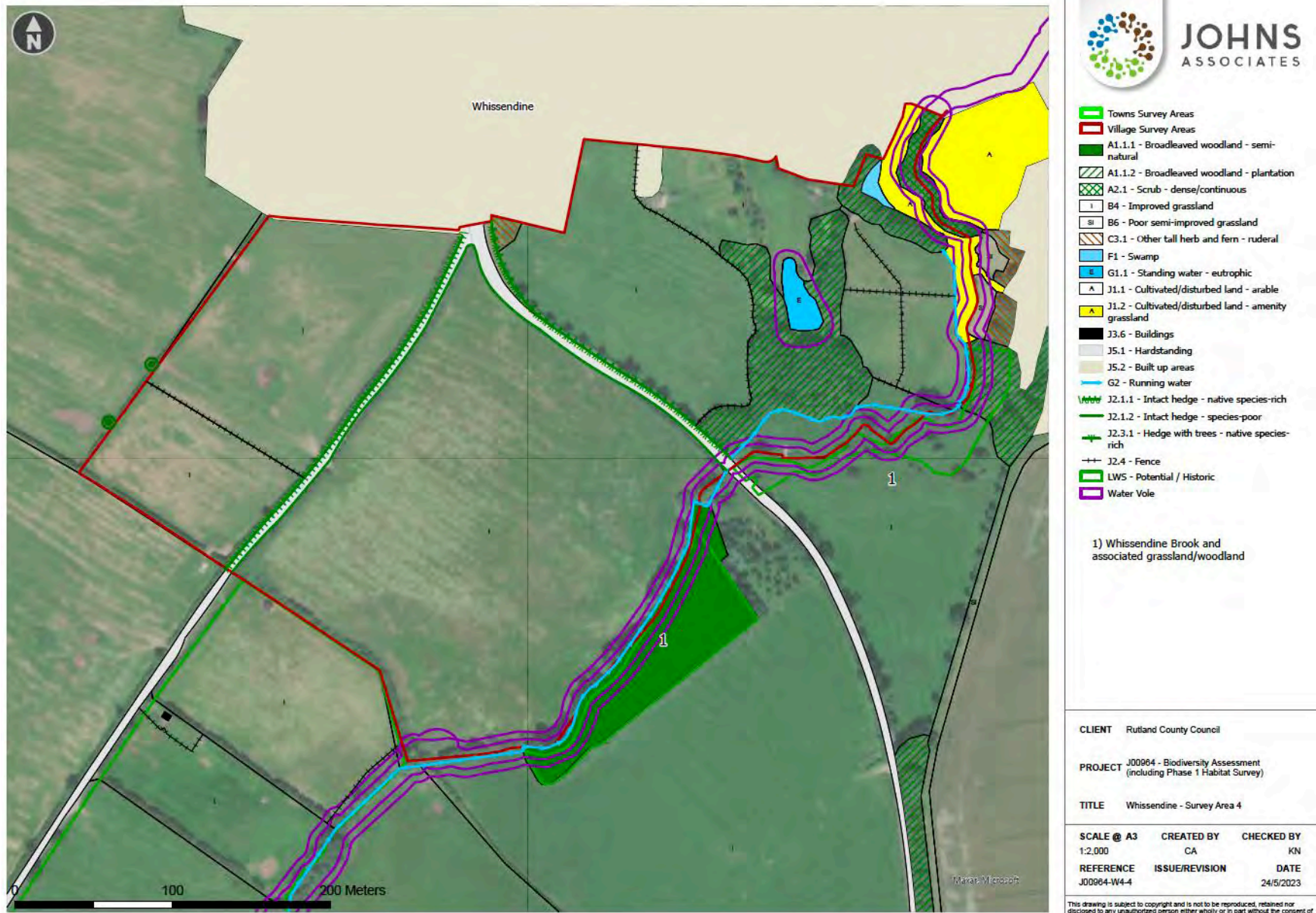
If Survey Area 4 is to be allocated for development, it would be worth considering that the habitats north of Oakham Road, excluding the improved grassland adjacent to the road, are retained, protected and enhanced to achieve sufficient Biodiversity Net Gain. The habitats in this area are of higher value and have the potential to support numerous protected species.

2.4.2 Survey Recommendations

If Survey Area 4 is to be allocated for development, it would be worth considering retaining, protecting and enhancing the areas of woodland, swamp, tall ruderal and linear habitats such as hedgerows and the watercourse to maintain their value as functional wildlife corridors for a range of species. The area south of Oakham Road is considered to be a good location ecologically for allocation as long as a number of ecological surveys and protection measures are implemented:

- Update survey of the LWS located along the watercourse on the eastern site boundary of Survey Area 4 to confirm its current biodiversity value.
- Any trees around the perimeter of the site that have potential to support roosting bats and that could be affected by development proposals either directly or indirectly (e.g. through lighting impacts) should be further surveyed. This includes ground level trees assessments and if considered necessary, emergence surveys and/or tree climbing surveys.
- Bat activity surveys should be conducted to assess whether there are any important commuting routes for bats around the Survey Area that need to be retained as dark corridors within any new development design.
- A lux lighting plan should be produced prior to determination to avoid lighting impacts on bats and other nocturnal wildlife.
- GCN population surveys of all ponds within 500m of Survey Area 4.
- Reptile surveys, with particular focus on the good reptile habitat present north of Oakham Road, around the pond, edges of the woodland, swamp and ruderal habitats. A precautionary method statement may be required further reduce any risk of harm to these species. This should include sequential cutting of suitable vegetation to make these habitats unsuitable for foraging reptiles prior to pre-commencement/ site preparation works.
- Water vole surveys will be required as the watercourse has records of this species being present.

Figure 5: Whissendine Survey Area 4



2.5 SURVEY AREA 5

Survey Area 5 is located at the western extent of the built-up area of Whissendine, south of Melton Road. It has previously been the subject of a planning application (reference 2022/0529/MAF), which was refused. Survey Area 5 (shown in Figure 6) is made up of improved grassland habitat on an old ridge and furrow field. The Area is bounded by hedgerows along the western, northern and eastern boundaries. This Survey Area is located on private land, with no public right of way access, therefore habitat assessments were undertaken using aerial maps, from the roadside or nearby rights of way using binoculars where possible.

Overall, the habitats within this area are very poor in biodiversity terms: the improved grassland is dominated by perennial rye grass and is intensively managed by overgrazing with sheep meaning overall the sward is maintained at a very low height. The linear habitats (hedgerows) within this Survey Area offer the greatest importance for biodiversity. These are likely to support nesting birds, commuting/ foraging bats and may also provide habitat for amphibians, reptiles, small mammals and invertebrates.

2.5.1 Site Constraints

The Survey Area is located in an Amber Risk Zone for Great Crested Newts (GCN), as shown in Figure 7. There is a pond present 90m to the south, (which is also a historic LWS), and another pond located 285m to the west. Both ponds are located on private land. Figure 8 shows that neither pond has previously had records of GCN, although this may be due to a lack of survey information. Previous ecology surveys carried in 2022 by Ecology Solutions as part of planning application 2022/0529/MAF found the pond to the south had no GCN present but the pond to the west did contain GCN.

However, given the poor suitability of onsite habitats for foraging and hibernating GCN it is considered reasonable to conclude that as long as the habitats remain in the same condition as the 2022 baseline survey, no GCN surveys will be required. However, if Survey Area 5 is to be developed, a precautionary method statement should be produced and implemented, and all hedgerows should be retained and protected. If any reptiles/GCN are encountered, then works should be halted and the appointed suitability qualified ecologist consulted as a Natural England European Protected Species License may be required. Consideration should be given to enhancing the habitats surrounding the pond to the south, if possible, as part of any Biodiversity Net Gain provision.

The pond that is a historic LWS has no current survey data (last thought to have been surveyed between 1980-1990). It is recommended this pond is resurveyed to see whether it still has any ecological value.

2.5.2 Survey Recommendations

If Survey Area 5 is to be allocated/ developed it would be worth considering enhancing the area within the boundary of the historic LWS to the south and also retaining and protecting all existing hedgerows to help provide habitat for wildlife and maintain functional wildlife corridors. The Survey Area is considered to be a good location ecologically for allocation.

- Update survey of the LWS located south of Survey Area 5 to confirm its current biodiversity value and status as a GCN breeding pond.
- Bat activity surveys to include static monitoring.

Figure 6: Whissendine Survey Area 5

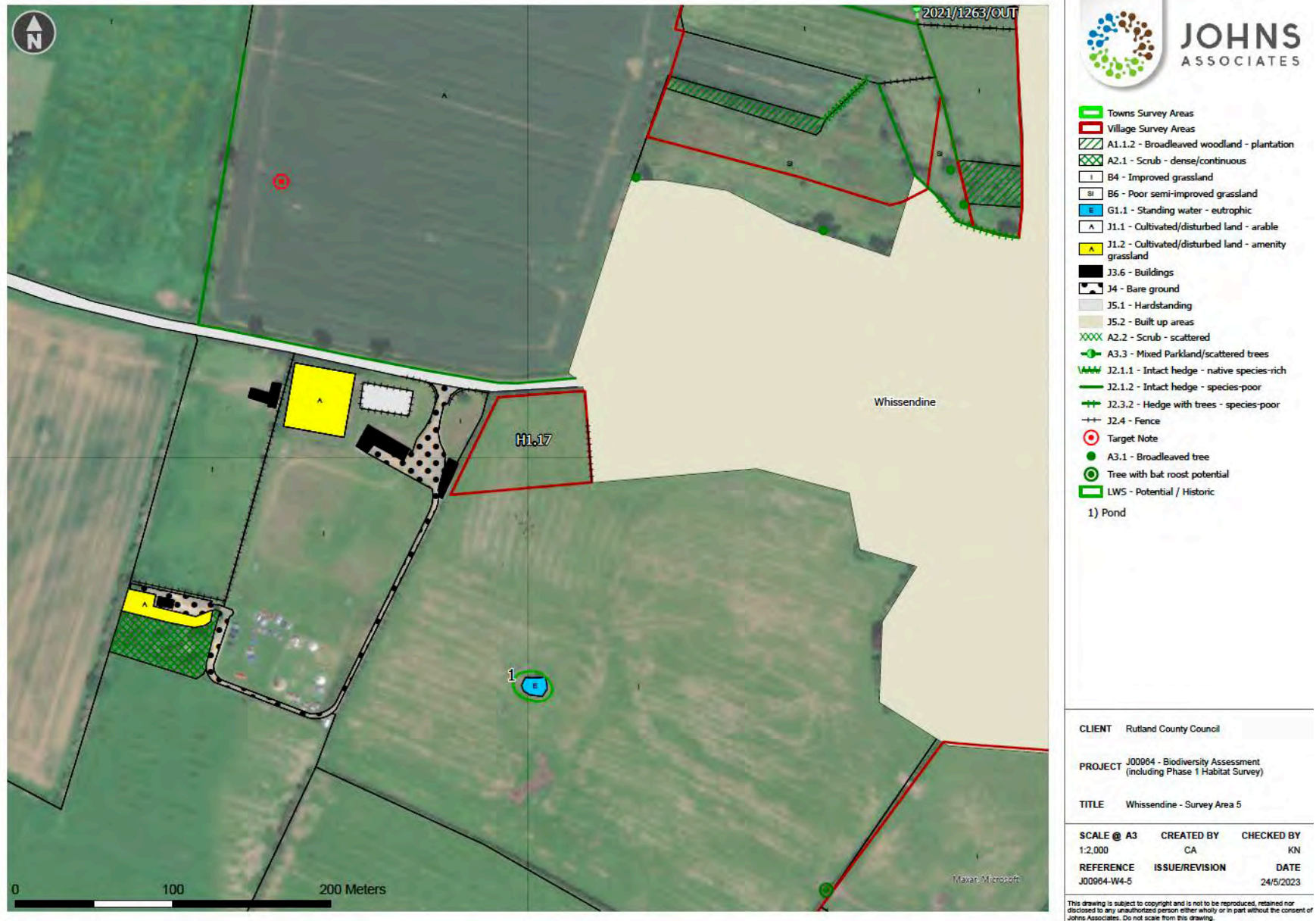


Figure 7: Whissendine Great Crested Newt Risk Zones

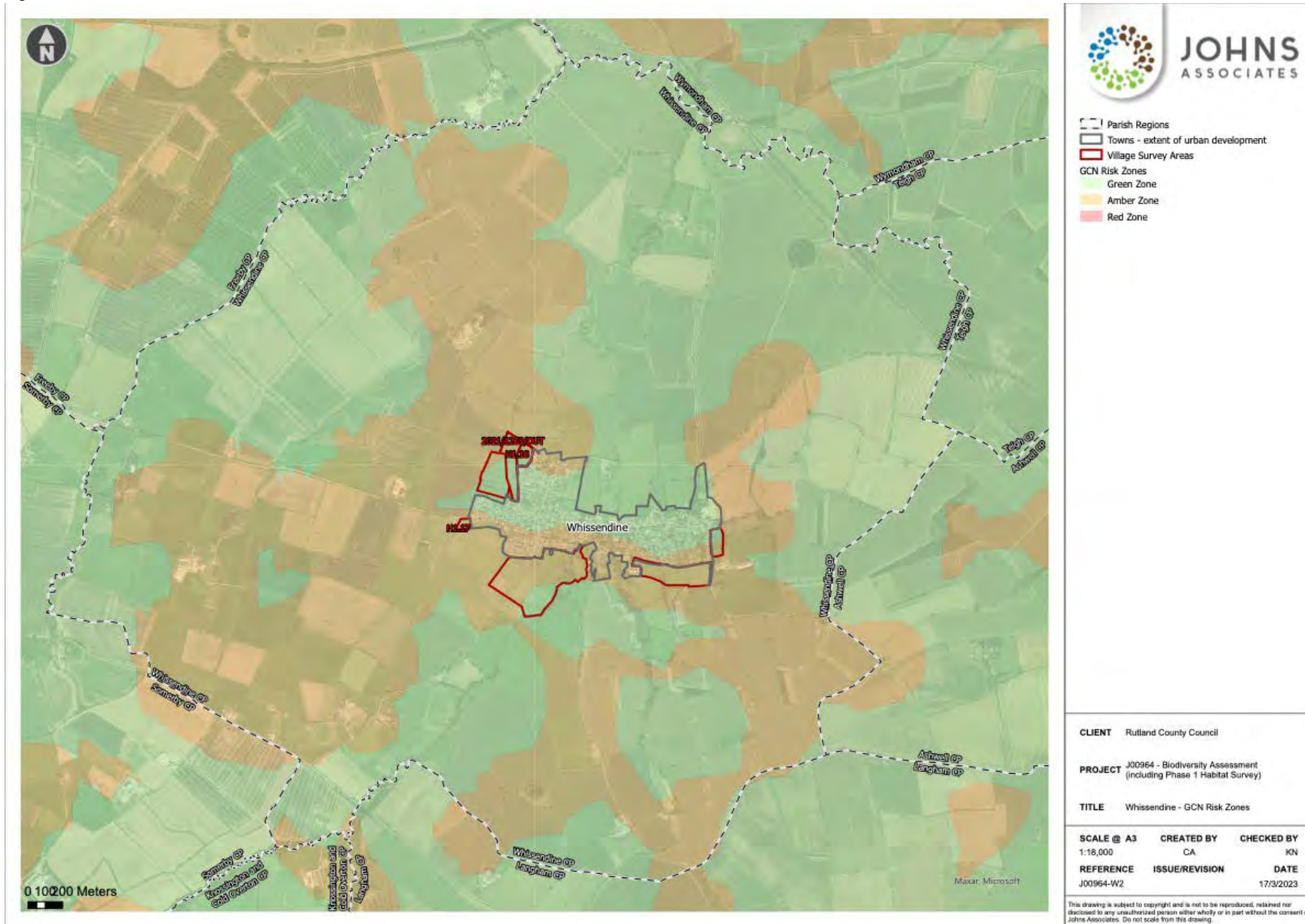
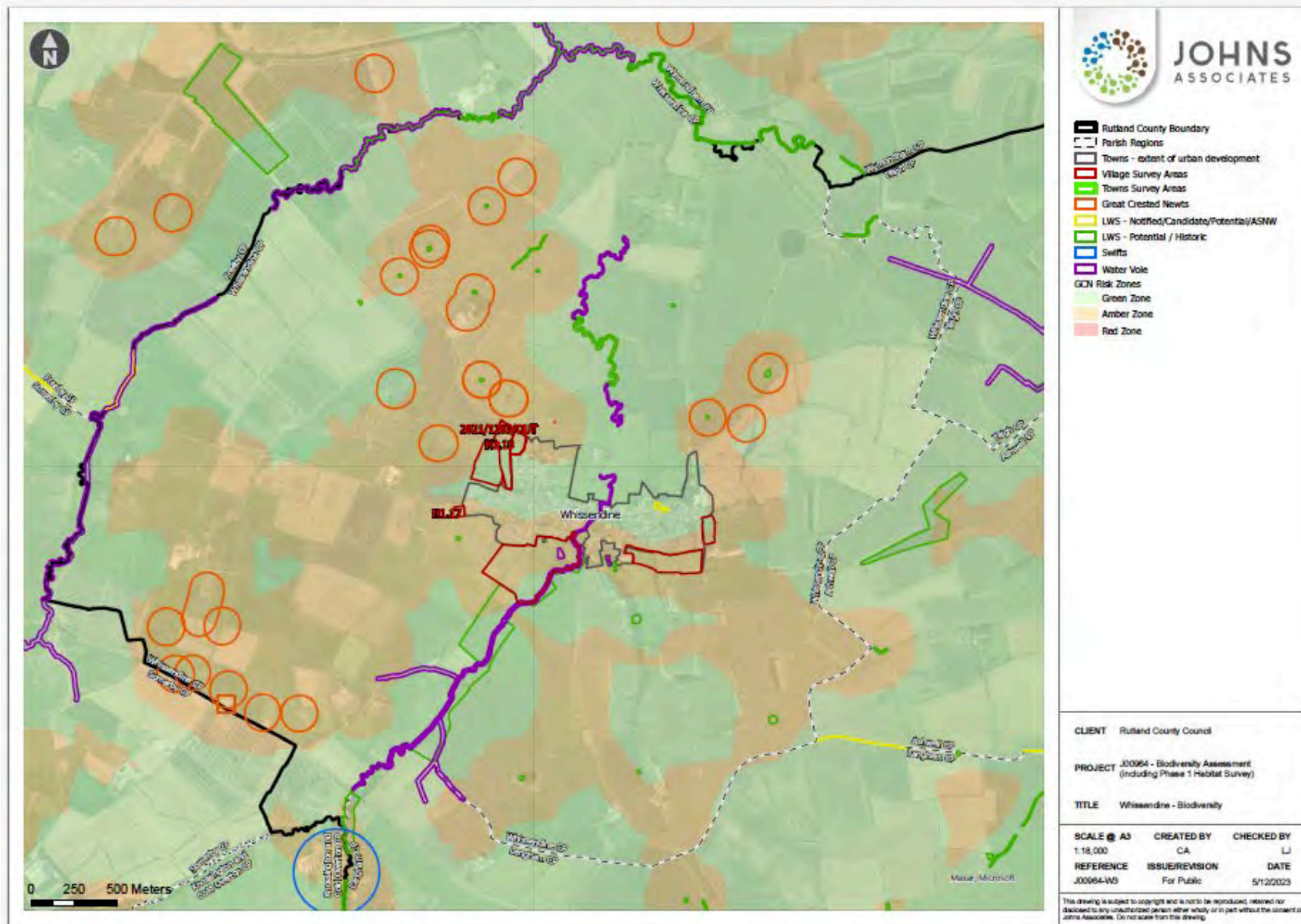


Figure 8: Whissendine Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Little Casterton/ Stamford North Survey Area Summary

1 INTRODUCTION

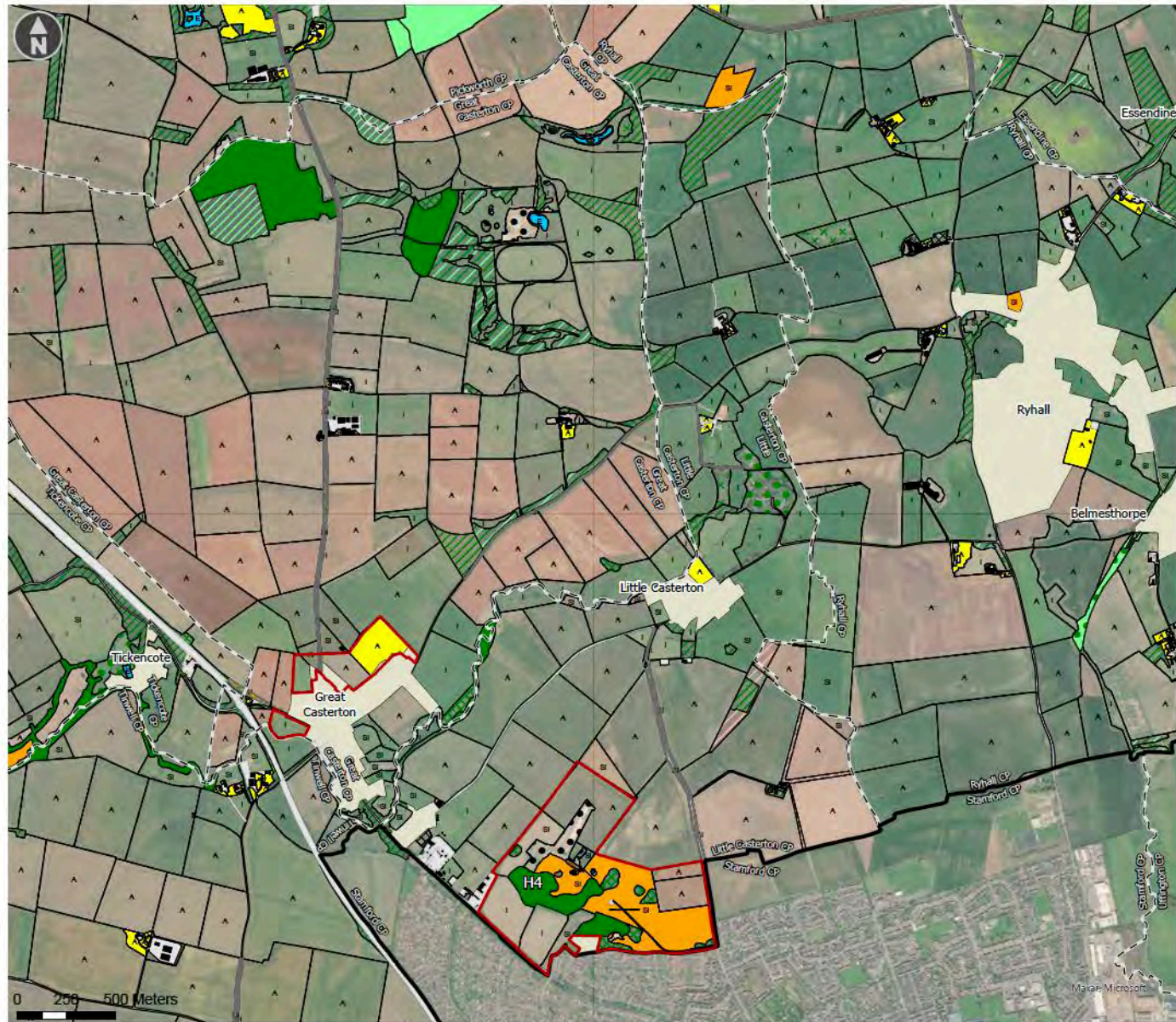
Little Casterton is a small village and civil parish in Rutland located approximately 2.7km north of Stamford. Figure 1 shows the habitat types identified within the boundary of the whole of Little Casterton Parish. A breakdown of the habitat areas can be seen in Table 1 which gives the percentage cover of each within the Parish.

The three most frequent habitats within Little Casterton were: arable, improved grassland, and poor semi-improved grassland. These habitats account for approximately 81% of the habitats within the Parish boundary (see table 1). Arable land accounts for approximately 59% of the whole Little Casterton area.

Table 1: Little Casterton Parish Habitats

Habitat Type	Total Habitat Area (ha)	% of Overall Habitat within Little Casterton
J1.1 - Cultivated/disturbed land - arable	289.70	58.55%
B4 - Improved grassland	70.77	14.30%
B6 - Poor semi-improved grassland	42.17	8.52%
B2.2 - Neutral grassland - semi-improved	18.79	3.80%
A1.1.2 - Broadleaved woodland - plantation	17.29	3.50%
J5.2 – Built up areas	11.61	2.35%
J5.1 - Hardstanding	9.29	1.88%
A1.1.1 – Broadleaved woodland – semi-natural	9.22	1.86%
J4 - Bare ground	4.68	0.95%
J5 – Other habitat	3.97	0.80%
A2.1 – Scrub – dense/ continuous	3.40	0.69%
B3.2 – Calcareous grassland – semi-improved	1.93	0.39%
A2.2 – Scrub - scattered	1.86	0.38%
J1.2 – Cultivated/ disturbed land – amenity grassland	1.82	0.37%
J3.6 - Buildings	1.12	0.23%
J3.4 – Caravan site	0.41	0.08%
C3.1 – Other tall herb and fern - ruderal	0.24	0.05%
J2.8 – Earth bank	0.13	0.03%
F2.1 – Marginal and inundation – marginal vegetation	0.08	0.02%
G1.1 – Standing water - eutrophic	0.06	0.01%
Grand Total	494.75	100%

Figure 1: Overview of Habitats within Little Casterton (Stamford North) Parish Boundary



- Rutland County Boundary
- Parish Regions
- Village Survey Areas
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A1.2.1 - Coniferous woodland - semi-natural
- A1.2.2 - Coniferous woodland - plantation
- A1.3.1 - Mixed woodland - semi-natural
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B2.2 - Neutral grassland - semi-improved
- B3.2 - Calcareous grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- F2.1 - Marginal and inundation - marginal vegetation
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J2.8 - Earth bank
- J3.4 - Caravan site
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Little Casterton - Phase 1 Overview

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1:18,000	CA	KN
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J00964-LC1		24/5/2023

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2 SURVEYED AREAS

Rutland County Council asked for one site within Little Casterton Parish to be surveyed as part of the wider phase 1 habitat survey of the county. This site has been highlighted as a potential area for allocation within the new local plan. Its location is shown in Figure 1 (red boundary). Figure 2 shows the Survey Area in more detail whilst Figure 3 highlights the GCN Risk Zones within the Little Casterton parish boundary. Figure 4 gives an overall biodiversity map of the area.

2.1 SURVEY AREA 1

Survey Area 1 covers a relatively large area and is located approximately 1.8km south of the settlement of Little Casterton, immediately adjacent to the boundary of Stamford Parish. A former limestone quarry, it is set within a rural context on the outskirts of Stamford.

Overall, the Survey Area is considered to be of moderate-high biodiversity value, given the mosaic of habitats present and the fact that a significant proportion of the Area is covered by an existing non-statutory LWS designation (see Section 2.1.1). Careful masterplanning of this Area will be required to ensure valuable habitats are retained, protected, enhanced or created, as appropriate. Gains through mandatory BNG requirements should be properly planned and delivered, ensuring the biodiversity value of the site is maintained and wildlife corridors into the wider local area are established or conserved. The site supports a meta-population of great crested newt (GCN), and development of the site is likely to require an appropriate licence from Natural England.

2.1.1 Site Constraints

There are numerous constraints associated with this Survey Area, including:

- A mosaic of habitats considered to be of moderate-high biodiversity value, including woodland, ponds, hedgerows, semi-improved neutral grassland and dense scrub.
- Legally protected/ notable species records from within the Survey Area boundary, including great crested newts (GCN). The site is also likely to support bats, nesting birds, reptiles and common amphibians (in addition to GCN), small mammals including hedgehog and invertebrates.
- Most of the Survey Area is a designated Local Wildlife Site (LWS) – ‘Former Limestone Quarry’, with a further LWS (‘Little Casterton Verge’) located adjacent to the far north-eastern boundary.

2.1.2 Survey Recommendations

If this Survey Area is allocated within the new Rutland Local Plan, a thorough suite of ecological surveys and subsequent ecological impact assessment report is recommended to inform the planning decision. This should include the following elements:

- Update UKHab survey of the site and assessment of the current condition of on-site habitats against the LWS selection criteria, to confirm whether the non-statutory designated area still meets the standard for selection. This survey should be undertaken by an ecologist with good botanical skills (at least FISC level 4). Hedgerow surveys should assess the value of all linear features in terms of the Hedgerow Regulations 1997.
- GCN surveys of all on-site ponds and any additional ponds within 500m of the Survey Area boundary to confirm whether this species is still present.
- Reptile surveys of suitable habitat, including woodland edges, areas of longer grassland earth banks and dense scrub. A precautionary method statement should be produced to further reduce any risk of harm to these species during construction. This should include sequential cutting of vegetation to make these habitats unsuitable for foraging reptiles or amphibians prior to pre-commencement/ site preparation works.

Timing of vegetation clearance works to avoid the bird besting season (mid-February – August inclusive) is also recommended for inclusion in this Method Statement or a similar document (for example, a Construction Ecological Management Plan, CEMP) to be produced through formal Planning Condition.

- Production of an Ecological Impact Assessment to current CIEEM Guidelines to ensure all potential effects to ecological receptors are properly considered. This should include a full BNG assessment using the current Defra Metric 4.0.
- Bat activity surveys (including use of static detectors) to assess current level of use of the site by commuting and/or foraging bats. Lighting proposals will need to properly consider the results of these surveys.
- Ground Level Tree Assessments of all trees to be felled or impacted as part of future planning proposals for Potential Roost Features for bats. Subsequent emergence/ climbing surveys may also be required.
- Use of tree protection fencing to ensure woodlands and trees to be retained are properly protected from accidental damage during construction. Appropriate buffer strips around habitats of biodiversity value should be included as part of any development proposals, together with enhancement of hedgerows as appropriate to strengthen the wildlife corridors into the wider local area.
- Appropriate post-construction management and monitoring of all retained, enhanced and newly created habitats and habitat features (e.g. bat boxes and reptile hibernacula) through an agreed Landscape and Ecology Management Plan (LEMP) or similar, to be produced through formal Planning Condition for agreement with Rutland Council.

Figure 2: Little Casterton Survey Area 1

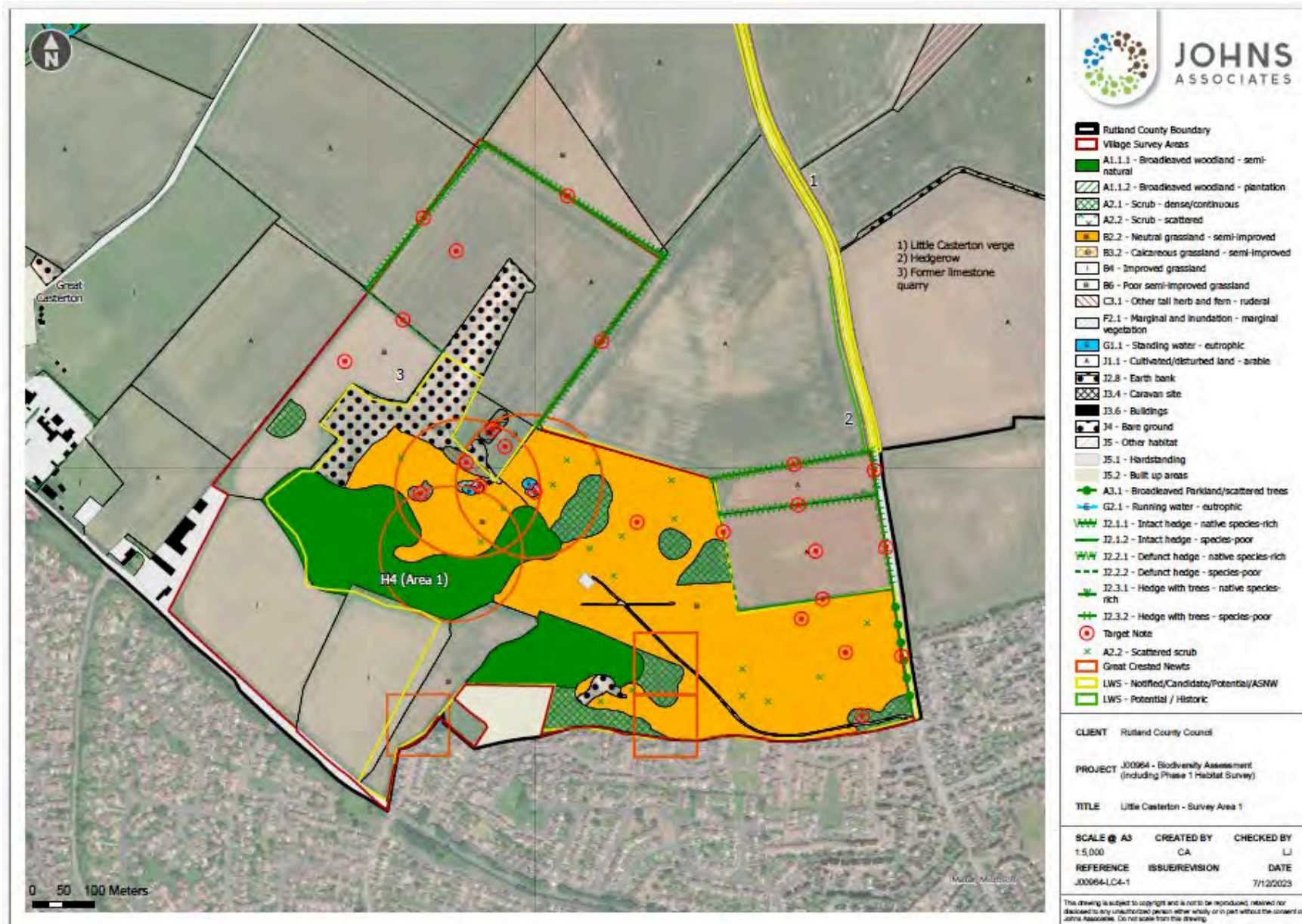
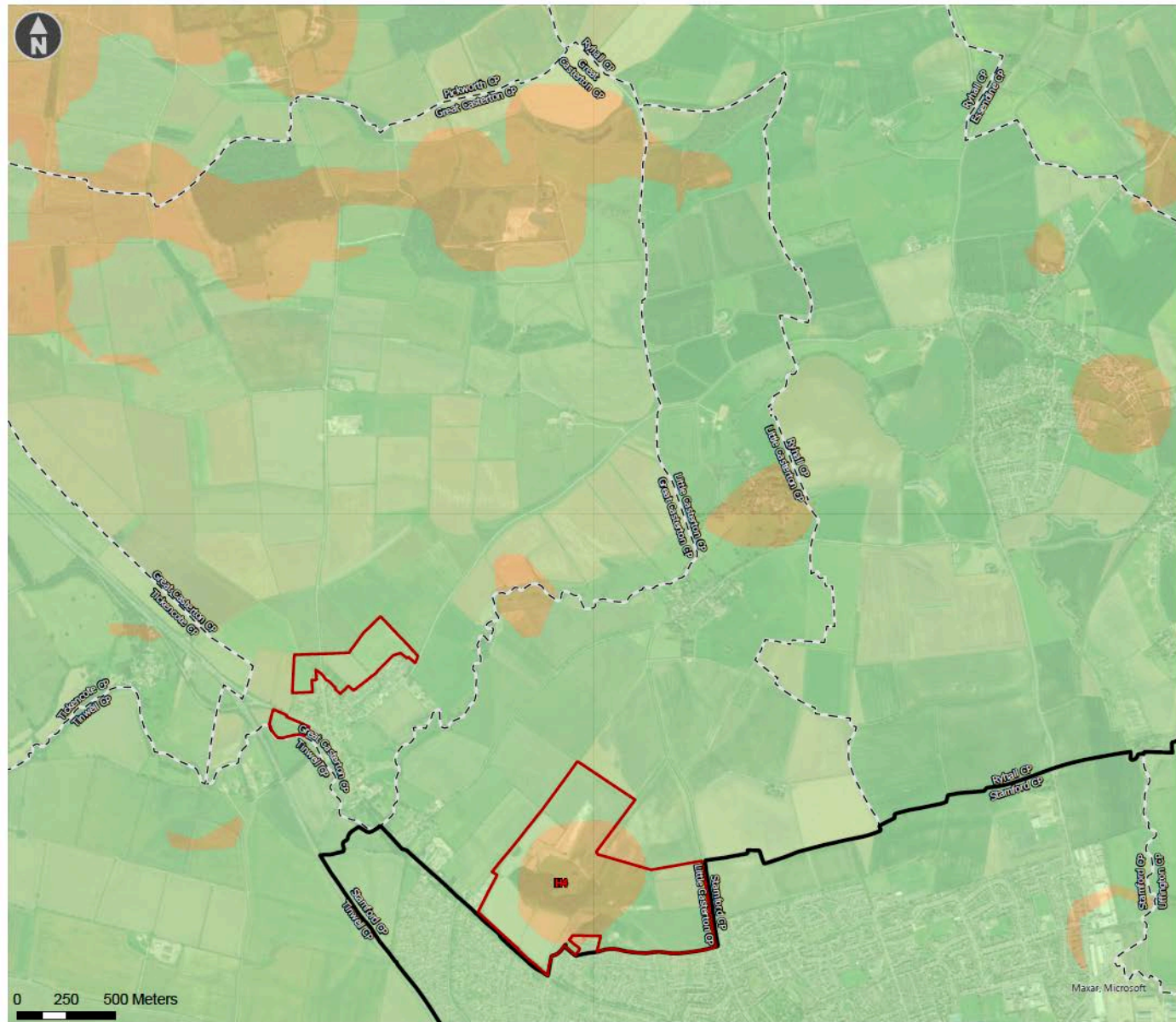








Figure 3: Little Casterton Great Crested Newt Risk Zones

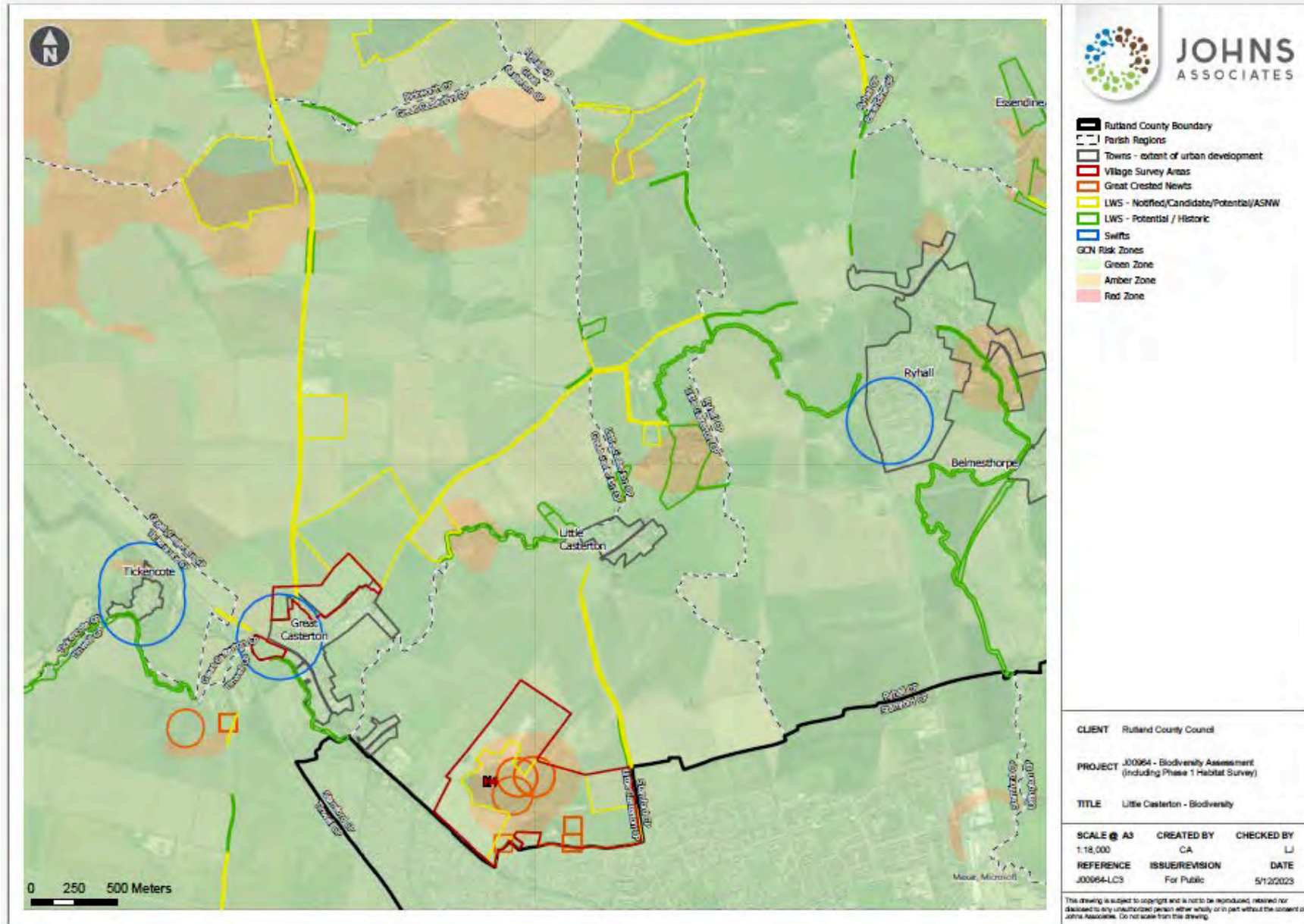


-  Rutland County Boundary
-  Parish Regions
-  Village Survey Areas
- GCN Risk Zones
-  Green Zone
-  Amber Zone
-  Red Zone

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Little Casterton - GCN Risk Zones		
SCALE @ A3	CREATED BY	CHECKED BY	
1:18,000	CA	KN	
REFERENCE	ISSUE/REVISION	DATE	
J00964-LC2		24/3/2023	

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Figure 4: Little Casterton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

North Luffenham Parish - Biodiversity Summary Report

1 INTRODUCTION

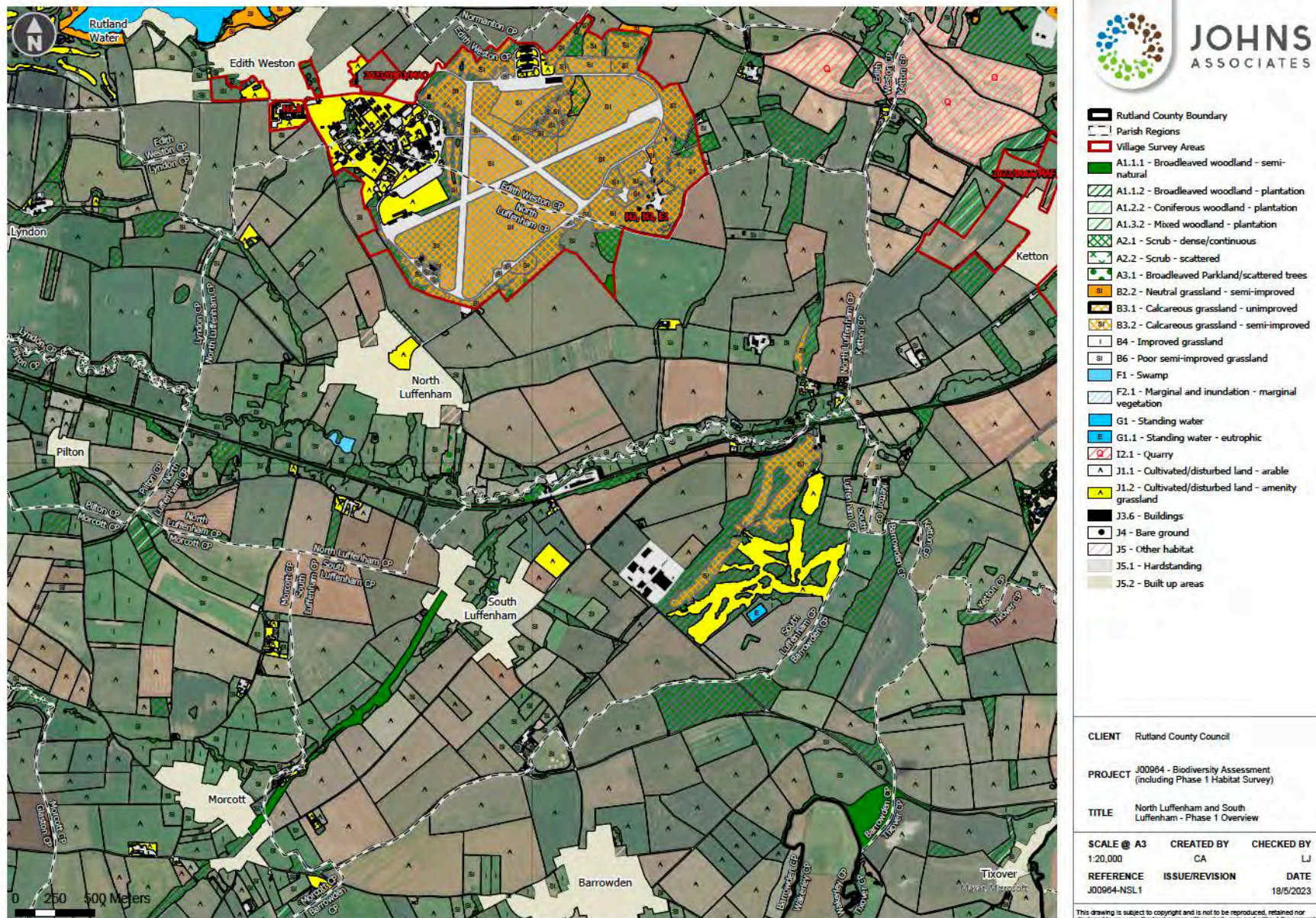
North Luffenham is a Parish in the south of Rutland, located between the parishes of Edith Weston and South Luffenham, south of Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within North Luffenham.

The five most frequent habitats within the Parish were: arable, poor semi-improved grassland, calcareous grassland, broadleaved plantation woodland and improved grassland. These five habitat types account for approximately 87% of the habitat within the Parish boundary. Of these, arable land makes up nearly 60%.

Table 1: Habitats within North Luffenham Parish

Habitat type	Habitat area (Ha)	Percent of North Luffenham Habitat
J1.1 - Cultivated/disturbed land - arable	487.58	59.23%
B6 - Poor semi-improved grassland	98.38	11.95%
B3.2 - Calcareous grassland – semi-improved	48.93	5.94%
A1.1.2 - Broadleaved woodland - plantation	44.92	5.46%
B4 - Improved grassland	33.52	4.07%
J5.2 – Built-up areas	30.82	3.74%
J5.1 - Hardstanding	27.10	3.29%
J1.2 – Cultivated/ disturbed land – amenity grassland	21.66	2.63%
A2.1 - Scrub - dense/continuous	11.32	1.38%
J5 – Other habitat	4.76	0.58%
J3.6 - Buildings	3.64	0.44%
A2.2 – Scrub - scattered	3.11	0.38%
A3.1 – Broadleaved parkland/ scattered trees	2.53	0.31%
J4 – Bare ground	2.33	0.28%
F1 - Swamp	1.01	0.12%
A1.1.1 – Broadleaved woodland – semi-natural	0.62	0.08%
A1.2.2 – Coniferous woodland - plantation	0.60	0.07%
F2.1 – Marginal and inundation – marginal vegetation	0.26	0.03%
G1.1 - Standing water - eutrophic	0.11	0.01%
Grand Total	823.20	100.00%

Figure 1: Overview of Habitats within North Luffenham Parish Boundary



2 SURVEYED AREAS

No additional sites within North Luffenham Parish were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the North Luffenham Parish area, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land and poor semi-improved grassland, (72% of the total land area), both of which are of negligible biodiversity value. It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within North Luffenham Parish should include:

- Maintain/ improve the areas of semi-natural broadleaved woodland to provide a more diverse age and species structure within the woodland areas and a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Provide a buffer to the calcareous grassland habitats associated with St George's Barracks. This will be particularly important in the event of St George's Barracks being designated as a site of nature conservation importance (either statutory or non-statutory, as recommended in the Technical Note provided (Johns Associates, February 2023)).
- Prioritising development within areas of low ecological value e.g. arable, poor semi-improved and improved grassland. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN;
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and/or otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

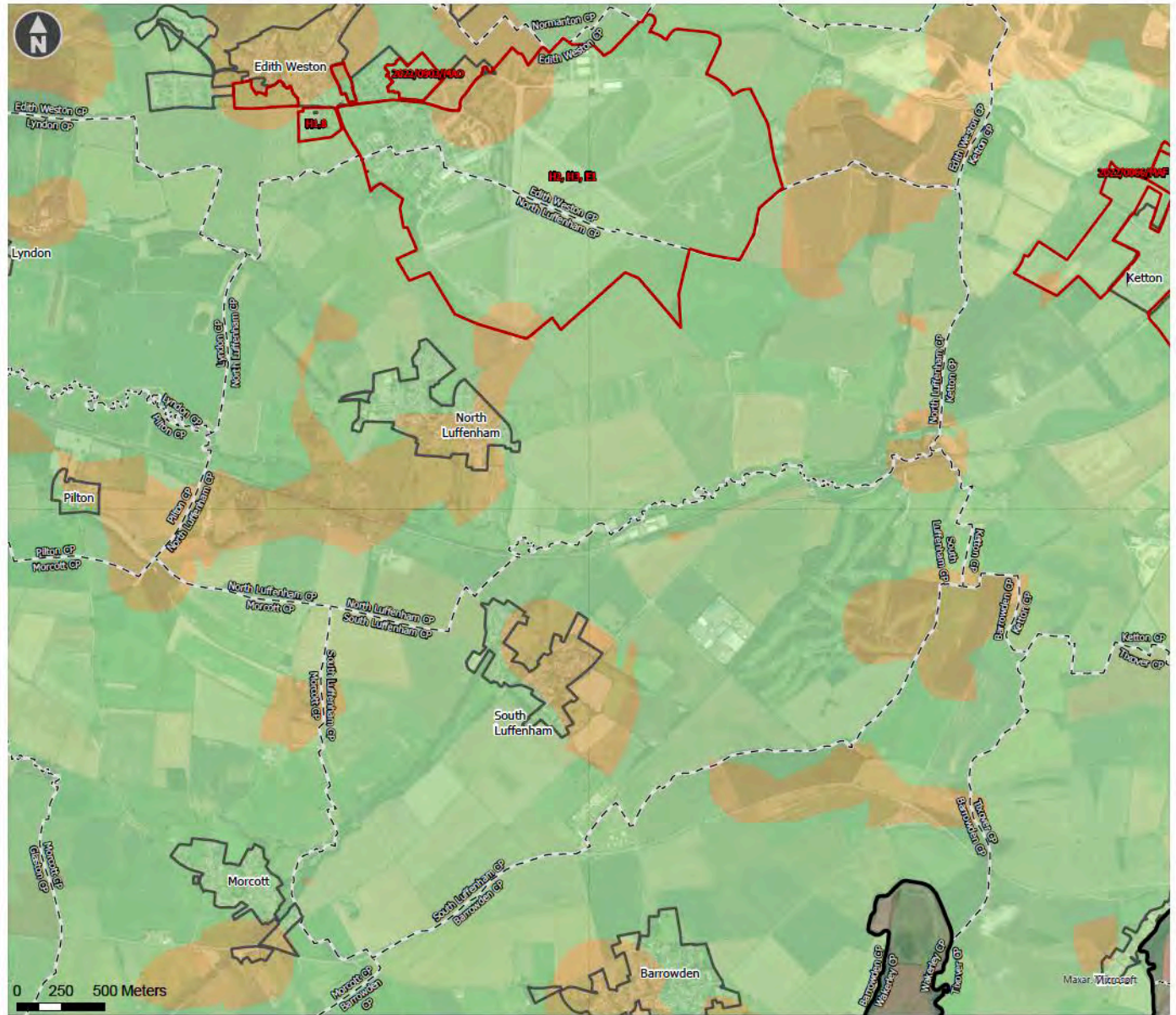
- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Much of the central and southern area within North Luffenham parish falls within an Amber risk zone for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within this area.

Figure 3 shows a significant part of the parish to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: North Luffenham Great Crested Newt Risk Zones

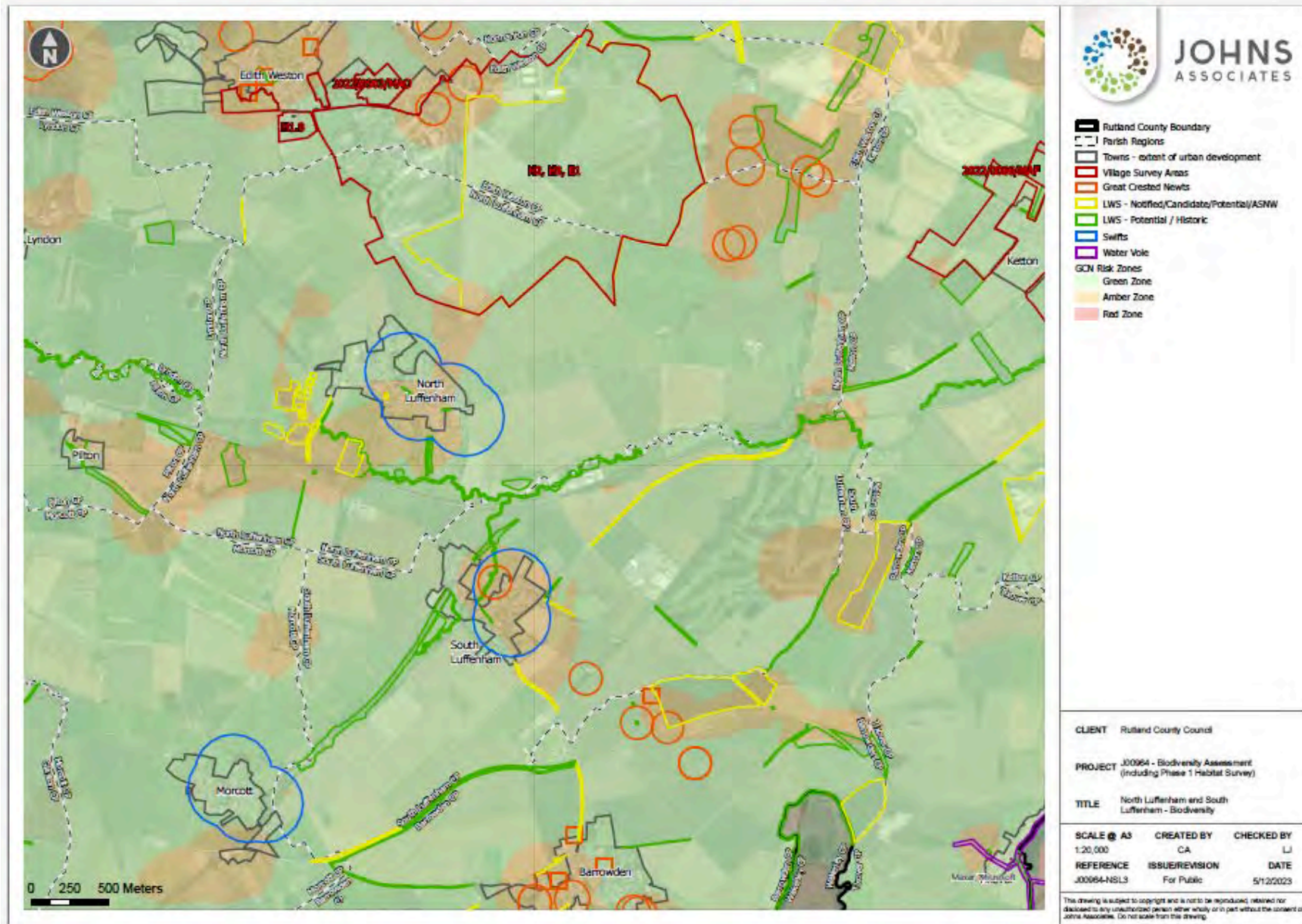


- Rutland County Boundary
- Parish Regions
- Towns - extent of urban development
- Village Survey Areas
- GCN Risk Zones
 - Green Zone
 - Amber Zone
 - Red Zone

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	North Luffenham and South Luffenham - GCN Risk Zones		
SCALE @ A3	CREATED BY	CHECKED BY	
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REFERENCE	ISSUE/REVISION	DATE	
J00964-NSL2		18/5/2023	

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Figure 3: North Luffenham Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Exton Parish - Biodiversity Summary Report

1 INTRODUCTION

Exton is a large Parish in the centre of Rutland, located between the villages of Cottesmore and Empingham, immediately north of (and including part of) Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Exton.

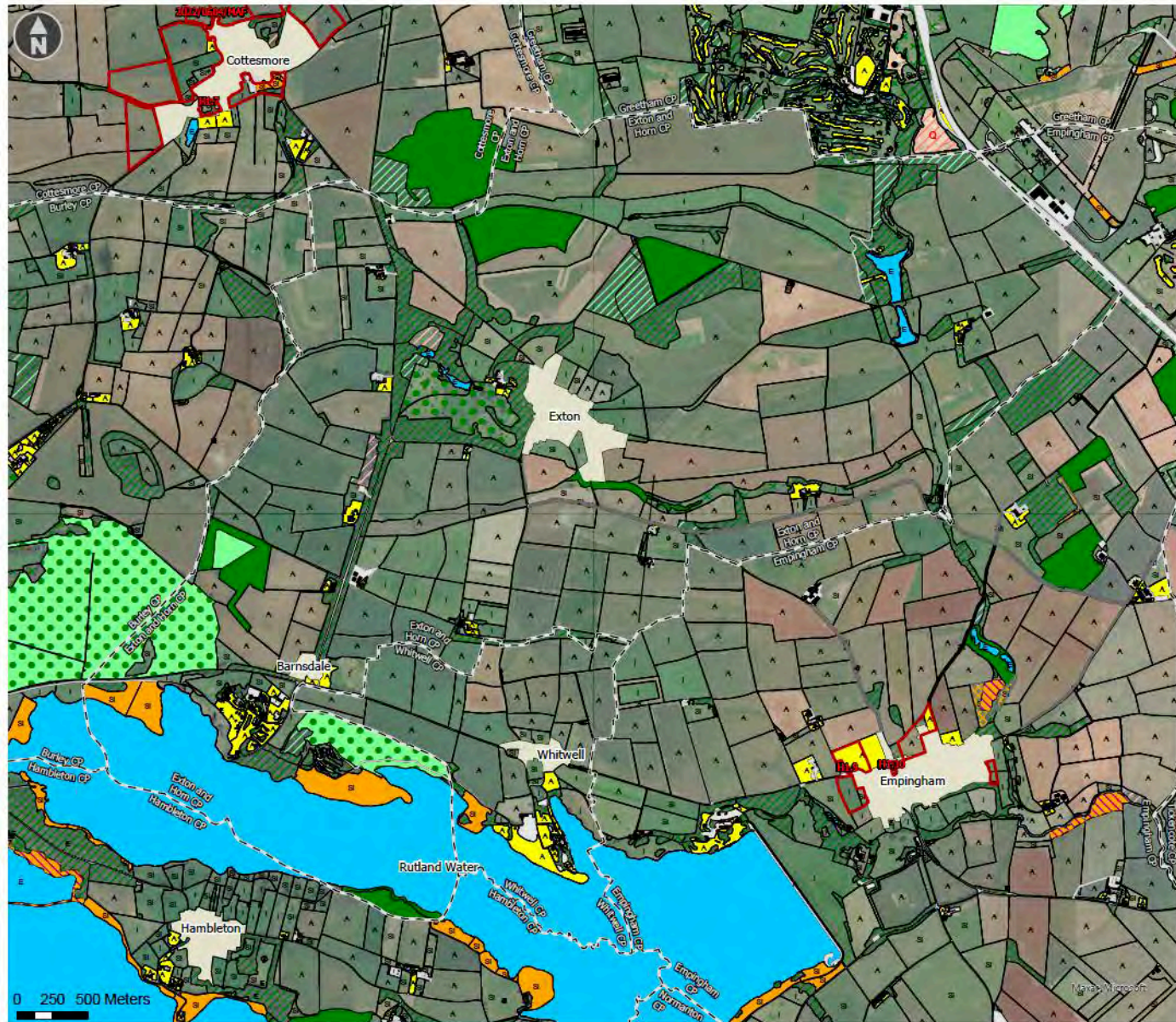
The five most frequent habitats within the Parish were: arable, improved grassland, eutrophic standing water, and broadleaved woodland (semi-natural and plantation). These five habitat types account for approximately 85% of the habitat within the Exton parish boundary. Of these habitat types, arable land makes up nearly 56%.

Table 1: Habitats within Exton Parish

Habitat type	Habitat area (Ha)	Percent of Exton Habitat
J1.1 - Cultivated/disturbed land - arable	1135.35	55.89%
B4 – Improved grassland	185.13	9.11%
G1.1 – Standing water - eutrophic	172.01	8.47%
A1.1.2 – Broadleaved woodland - plantation	160.41	7.90%
A1.1.1 – Broadleaved woodland – semi-natural	64.21	3.16%
B6 – Poor semi-improved grassland	57.50	2.83%
A1.3.1 – Mixed woodland – semi-natural	54.11	2.66%
A1.2.2 – Coniferous woodland - plantation	31.36	1.54%
J5.2 – Built up areas	29.70	1.46%
J5.1 - Hardstanding	27.13	1.34%
A3.1 – Broadleaved parkland/ scattered trees	25.22	1.24%
B2.2 – Neutral grassland – semi-improved	24.38	1.20%
J1.2 – Cultivated/ disturbed land – amenity grassland	21.97	1.08%
A2.2 – Scrub - scattered	13.33	0.66%
J5 – Other habitat	5.92	0.29%
A1.3.2 – Mixed woodland - plantation	4.99	0.25%
A1.2.1 – Coniferous woodland – semi-natural	4.80	0.24%
J4 – Bare ground	4.44	0.22%
B3.2 – Calcareous grassland – semi-improved	3.65	0.18%
J3.6 - Buildings	3.08	0.15%
A2.1 – Scrub – dense/ continuous	1.36	0.07%
F2.1 – Marginal and inundation – marginal vegetation	1.25	0.06%

Grand Total	2031.27	100.00%
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Figure 1: Overview of Habitats within Exton Parish Boundary



- Rutland County Boundary
- Parish Regions
- Village Survey Areas
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A1.2.1 - Coniferous woodland - semi-natural
- A1.2.2 - Coniferous woodland - plantation
- A1.3.1 - Mixed woodland - semi-natural
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B2.2 - Neutral grassland - semi-improved
- B3.1 - Calcareous grassland - unimproved
- B3.2 - Calcareous grassland - semi-improved
- B4 - Improved grassland
- B5 - Marshy/marshy grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- F2.1 - Marginal and inundation - marginal vegetation
- G1 - Standing water
- G1.1 - Standing water - eutrophic
- I2.1 - Quarry
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J1.3 - Cultivated/disturbed land - ephemeral/short perennial
- J3.4 - Caravan site
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Exton - Phase 1 Overview

SCALE @ A3	CREATED BY	CHECKED BY
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J00964-EX1		18/5/2023

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2 SURVEYED AREAS

No additional sites within Exton Parish were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Exton Parish area, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, improved grassland, and standing water (part of Rutland Water) (approximately 72% of the total area). Arable land and improved grassland are both of negligible biodiversity value. The area of Rutland Water that falls within Exton Parish is legally protected as a statutory site of nature conservation importance (SSSI, Special Protection Area and Ramsar Site) and any development that will impact the lake will have to be properly assessed and a Habitats Regulations Assessment may be required.

It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Exton Parish should include:

- Maintain/ improve the areas of broadleaved and mixed woodland to provide a more diverse age and species structure within the woodland areas and a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Provide a buffer to the habitats associated with Rutland Water.

- Prioritising development within areas of low ecological value e.g. arable and improved grassland. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (known to be present within the Parish);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole (known to be present within the Parish – see Figure 3) and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Exton Great Crested Newt Risk Zones

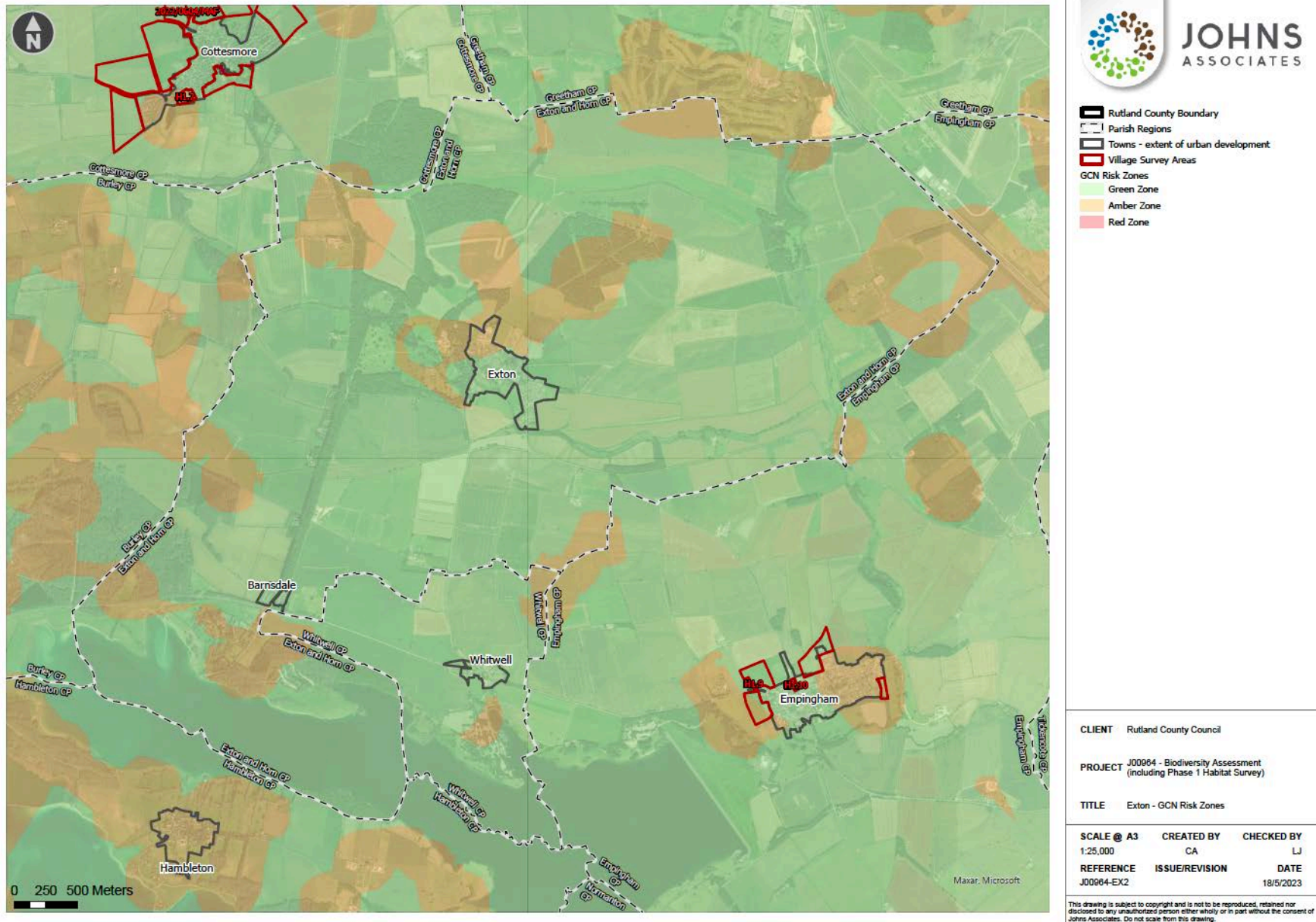
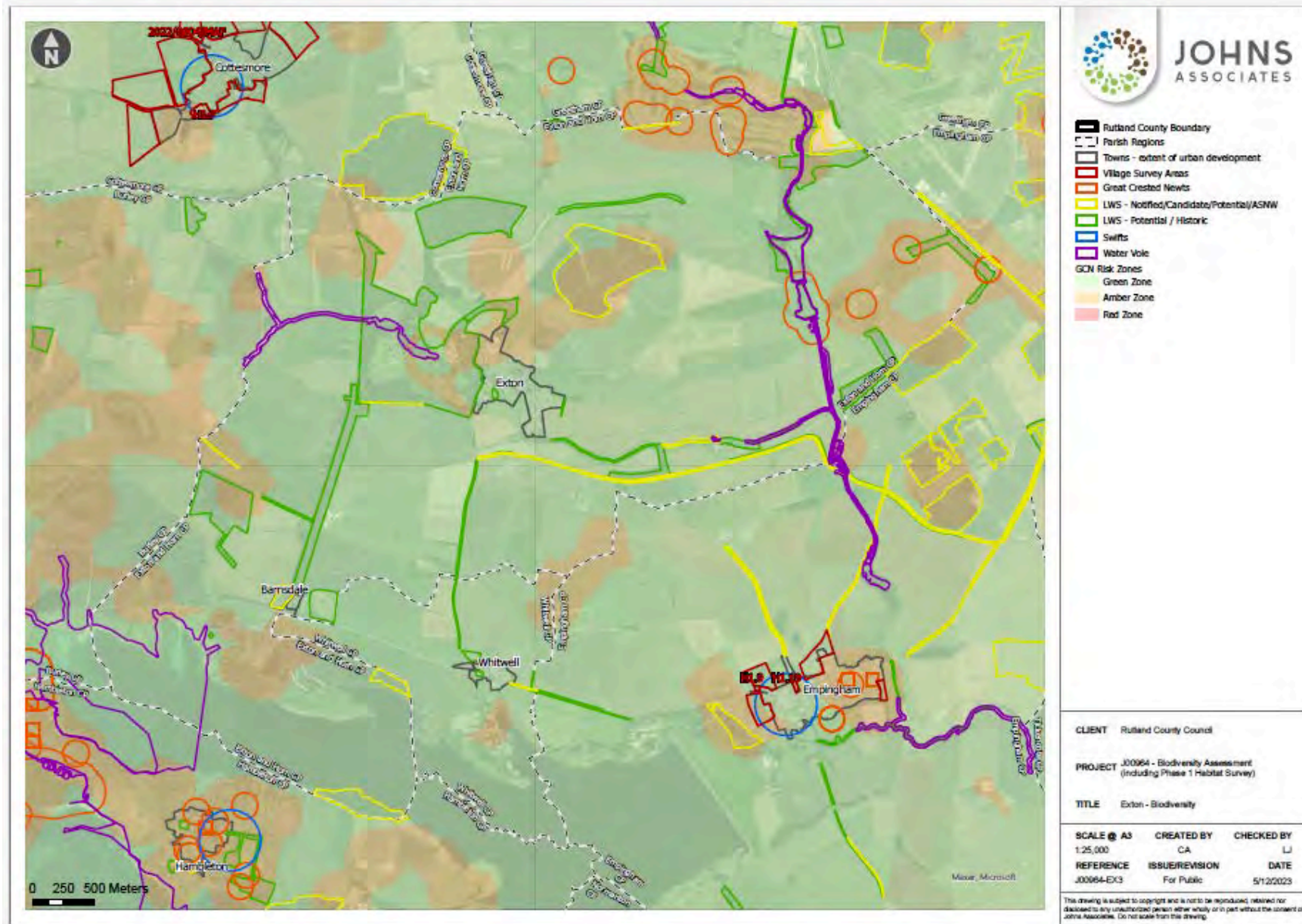


Figure 3: Exton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

South Luffenham Parish - Biodiversity Summary Report

1 INTRODUCTION

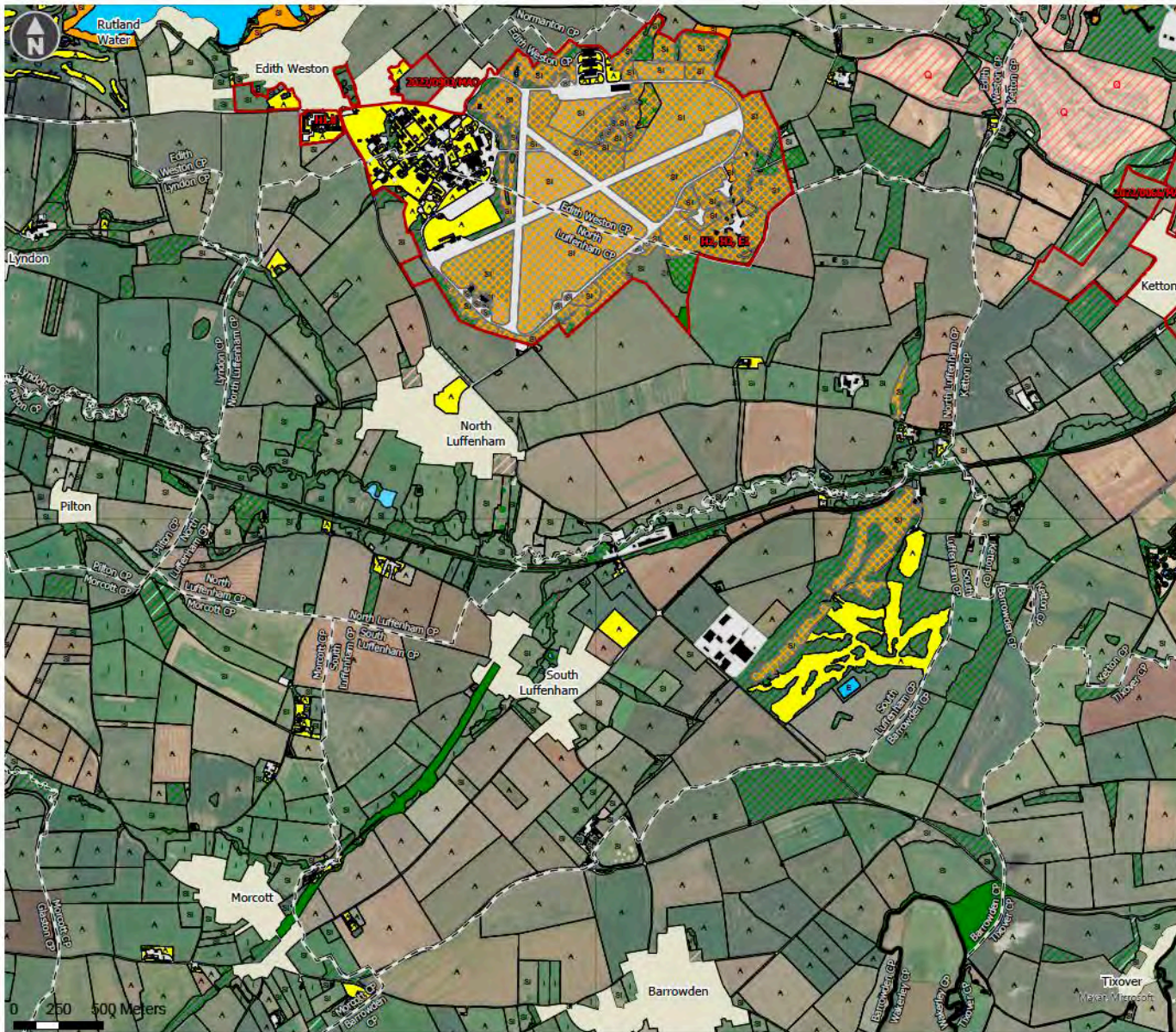
South Luffenham is a Parish in the south of Rutland, located between the parishes of North Luffenham and Barrowden, south of Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within the Parish.

The five most frequent habitats within South Luffenham were: arable, poor-semi-improved grassland, broadleaved plantation woodland, amenity grassland and improved grassland. These five habitat types account for approximately 86% of the habitat within the parish boundary. Of these habitat types, arable land makes up nearly 58%.

Table 1: Habitats within South Luffenham Parish

Habitat type	Habitat area (Ha)	Percent of South Luffenham Habitat
J1.1 - Cultivated/disturbed land - arable	336.96	57.67%
B6 - Poor semi-improved grassland	58.71	10.05%
A1.1.2 - Broadleaved woodland - plantation	48.39	8.28%
J1.2 – Cultivated/ disturbed land – amenity grassland	29.51	5.05%
B4 – Improved grassland	26.96	4.61%
J5.2 – Built up areas	22.90	3.92%
B3.2 – Calcareous grassland – semi-improved	15.14	2.59%
J5.1 - Hardstanding	14.41	2.47%
A2.1 – Scrub – dense/ continuous	9.60	1.64%
A1.1.1 – Broadleaved woodland – semi-natural	8.15	1.40%
J3.6 - Buildings	4.48	0.77%
J5 – Other habitat	2.44	0.42%
J4 – Bare ground	2.40	0.41%
A2.2 – Scrub - scattered	1.43	0.25%
B2.2 – Neutral grassland – semi-improved	1.23	0.21%
G1.1 – Standing water - eutrophic	0.79	0.14%
A1.3.2 – Mixed woodland - plantation	0.71	0.12%
G1 - Standing water	0.07	0.01%
Grand Total	584.29	100.00%

Figure 1: Overview of Habitats within South Luffenham Parish Boundary





JOHNS
ASSOCIATES

	Rutland County Boundary
	Parish Regions
	Village Survey Areas
	A1.1.1 - Broadleaved woodland - semi-natural
	A1.1.2 - Broadleaved woodland - plantation
	A1.2.2 - Coniferous woodland - plantation
	A1.3.2 - Mixed woodland - plantation
	A2.1 - Scrub - dense/continuous
	A2.2 - Scrub - scattered
	A3.1 - Broadleaved Parkland/scattered trees
	B2.2 - Neutral grassland - semi-improved
	B3.1 - Calcareous grassland - unimproved
	B3.2 - Calcareous grassland - semi-improved
	B4 - Improved grassland
	B6 - Poor semi-improved grassland
	F1 - Swamp
	F2.1 - Marginal and inundation - marginal vegetation
	G1 - Standing water
	G1.1 - Standing water - eutrophic
	I2.1 - Quarry
	J1.1 - Cultivated/disturbed land - arable
	J1.2 - Cultivated/disturbed land - amenity grassland
	J3.6 - Buildings
	J4 - Bare ground
	J5 - Other habitat
	J5.1 - Hardstanding
	J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE North Luffenham and South Luffenham - Phase 1 Overview

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REFERENCE J00964-NSL1	ISSUE/REVISION	DATE 18/5/2023

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2 SURVEYED AREAS

No additional sites within South Luffenham were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the South Luffenham parish boundary, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land and grassland habitats of low biodiversity value, (77% of the total land area). It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within South Luffenham Parish should include:

- Improve the areas of broadleaved woodland to provide a more diverse age and species structure within the woodland areas and a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and semi-improved and improved grassland. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse.
- The calcareous grassland associated with the golf course could be managed/ improved to increase floristic diversity, should any planning applications for this area be submitted in the future.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (known to be present in some parts of the Parish – see Figures 2 and 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 shows parts of the parish (particularly within the South Luffenham settlement area) to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: South Luffenham Great Crested Newt Risk Zones

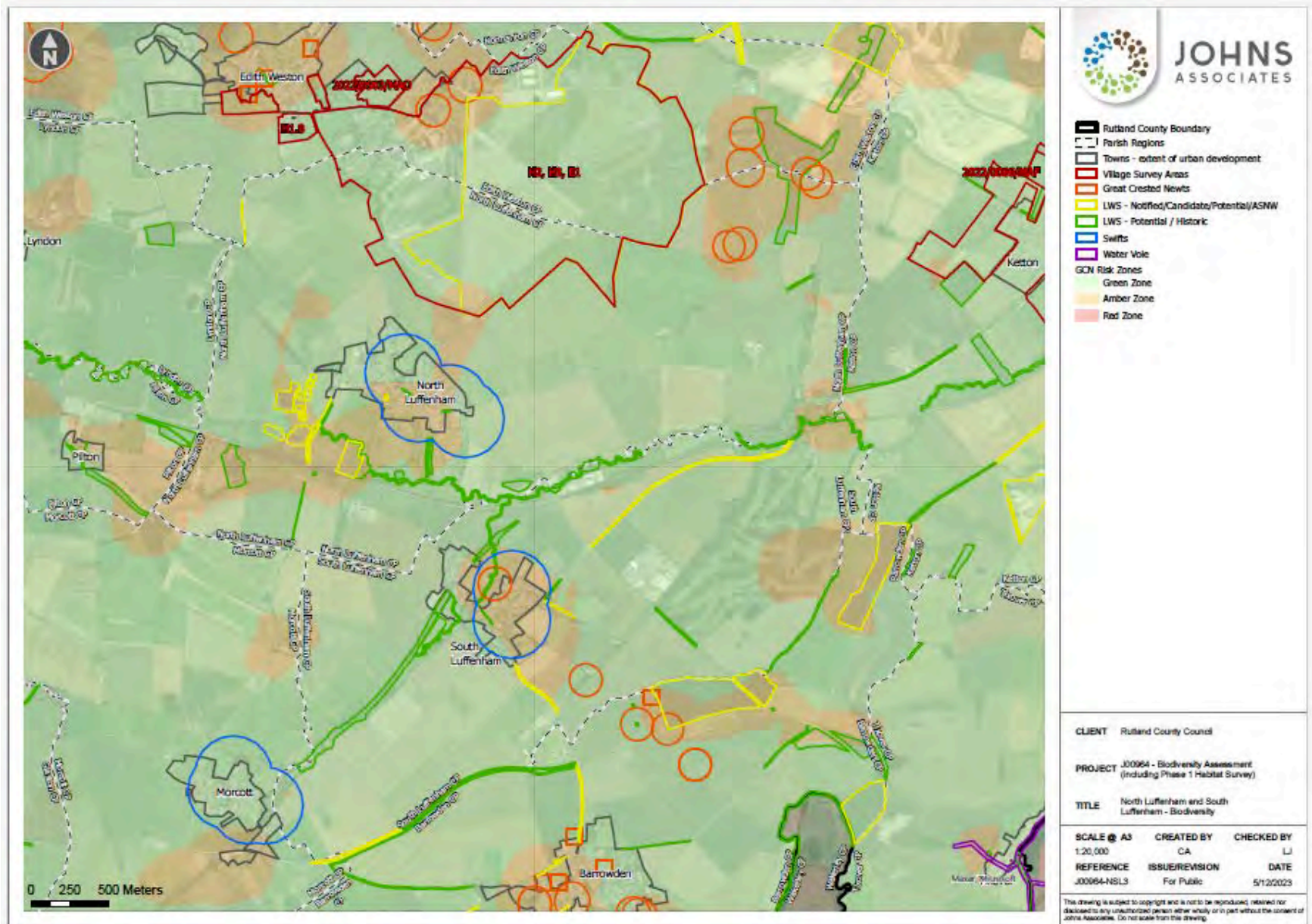


- Rutland County Boundary
- Parish Regions
- Towns - extent of urban development
- Village Survey Areas
- GCN Risk Zones
 - Green Zone
 - Amber Zone
 - Red Zone

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	North Luffenham and South Luffenham - GCN Risk Zones		
SCALE @ A3	CREATED BY	CHECKED BY	
1:20,000	CA	LJ	
REFERENCE	ISSUE/REVISION	DATE	
J00964-NSL2		18/5/2023	

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Figure 3: South Luffenham Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Tinwell Parish - Biodiversity Summary Report

1 INTRODUCTION

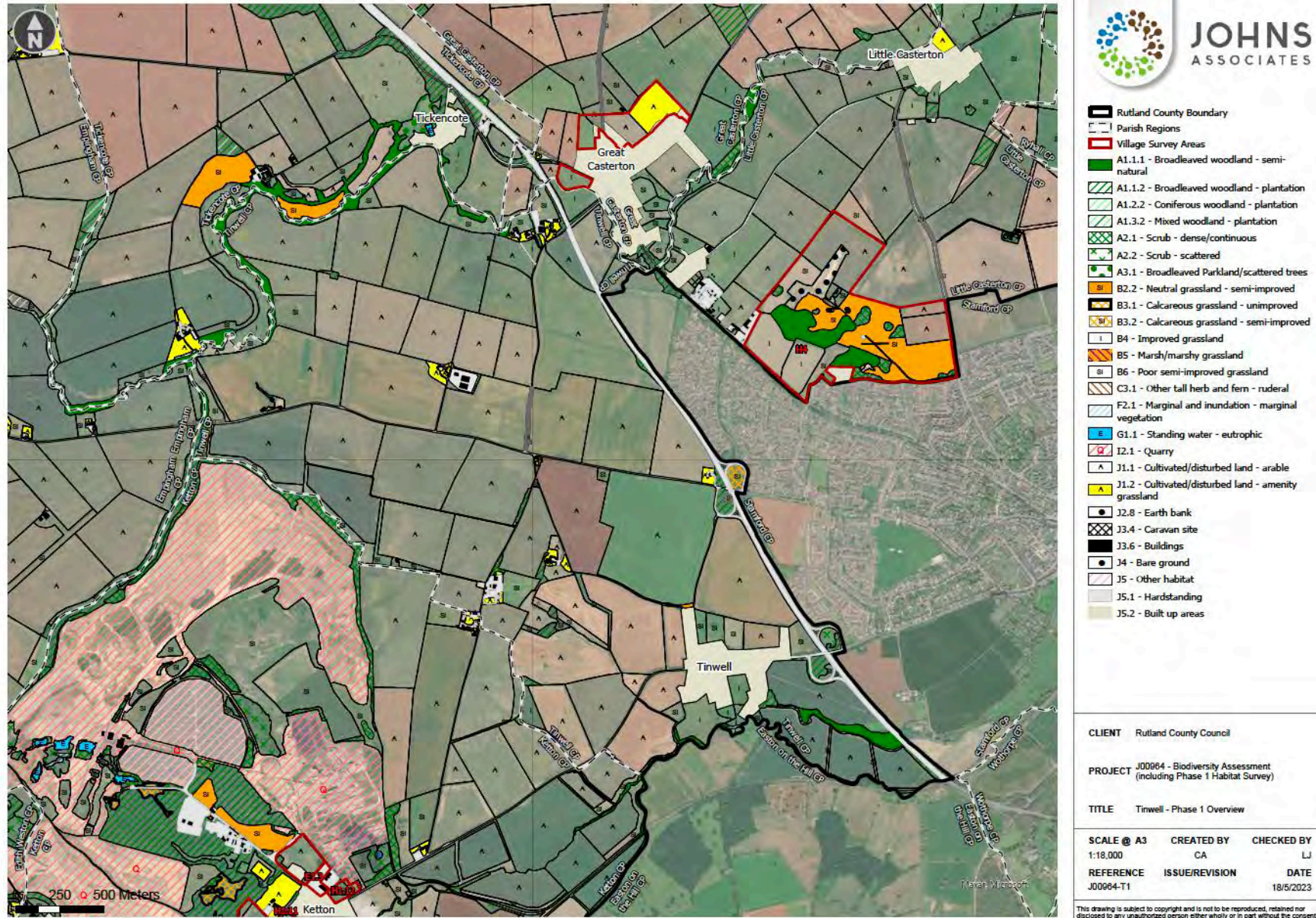
Tinwell is a Parish in the east of Rutland, located between the parishes of Great Casterton to the north and Ketton to the southwest. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Tinwell.

The four most frequent habitats within the Parish were: arable, poor semi-improved grassland, hardstanding and built-up areas (the extent of the Tinwell settlement). These four habitat types account for approximately 92% of the habitat within the parish boundary. Of these habitat types, arable land makes up nearly 82%.

Table 1: Habitats within Tinwell Parish

Habitat type	Habitat area (Ha)	Percent of Tinwell Habitat
J1.1 - Cultivated/disturbed land - arable	590.41	81.68%
B6 – Poor semi-improved grassland	38.16	5.28%
J5.1 - Hardstanding	20.99	2.90%
J5.2 – Built up areas	17.94	2.48%
B4 – Improved grassland	13.41	1.85%
A1.1.1 – Broadleaved woodland – semi-natural	12.98	1.80%
A1.1.2 – Broadleaved woodland - plantation	10.40	1.44%
A2.1 – Scrub – dense/ continuous	4.80	0.66%
J1.2 – Cultivated/ disturbed land – amenity grassland	4.31	0.60%
A2.2 – Scrub - scattered	3.21	0.44%
B3.2 – Calcareous grassland – semi-improved	2.04	0.28%
J4 – Bare ground	1.65	0.23%
J3.6 - Buildings	1.17	0.16%
F2.1 – Marginal and inundation – marginal vegetation	0.98	0.13%
B2.2 – Neutral grassland – semi-improved	0.38	0.05%
C3.1 – Other tall herb and fern - ruderal	0.05	0.01%
G1.1 – Standing water - eutrophic	0.003	0.00%
Grand Total	722.86	100.00%

Figure 1: Overview of Habitats within Tinwell Parish Boundary



2 SURVEYED AREAS

No additional sites within Tinwell were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Tinwell settlement area, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (nearly 82% of the total land area), with very little habitat of biodiversity value present. Semi-natural broadleaved woodland covers only 1.8% of the land within the Parish, and this comprises two small areas: one in the north of the Parish and the other in the south-east.

It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Tinwell Parish should include:

- Improve the areas of broadleaved woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable land. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (known to be present within the Parish – see Figures 2 and 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole (known to be present within the Parish – see Figure 3) and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Tinwell Great Crested Newt Risk Zones

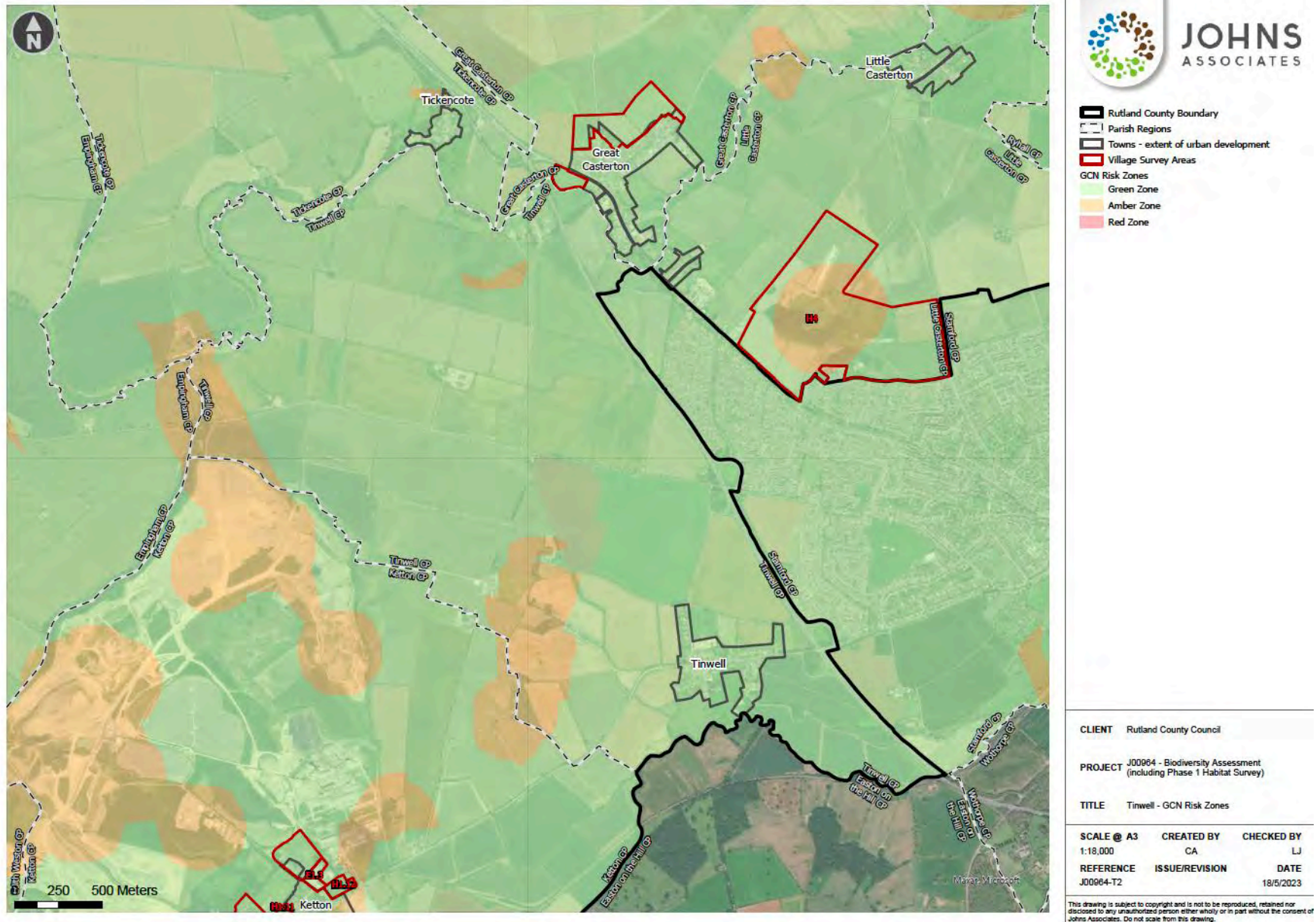
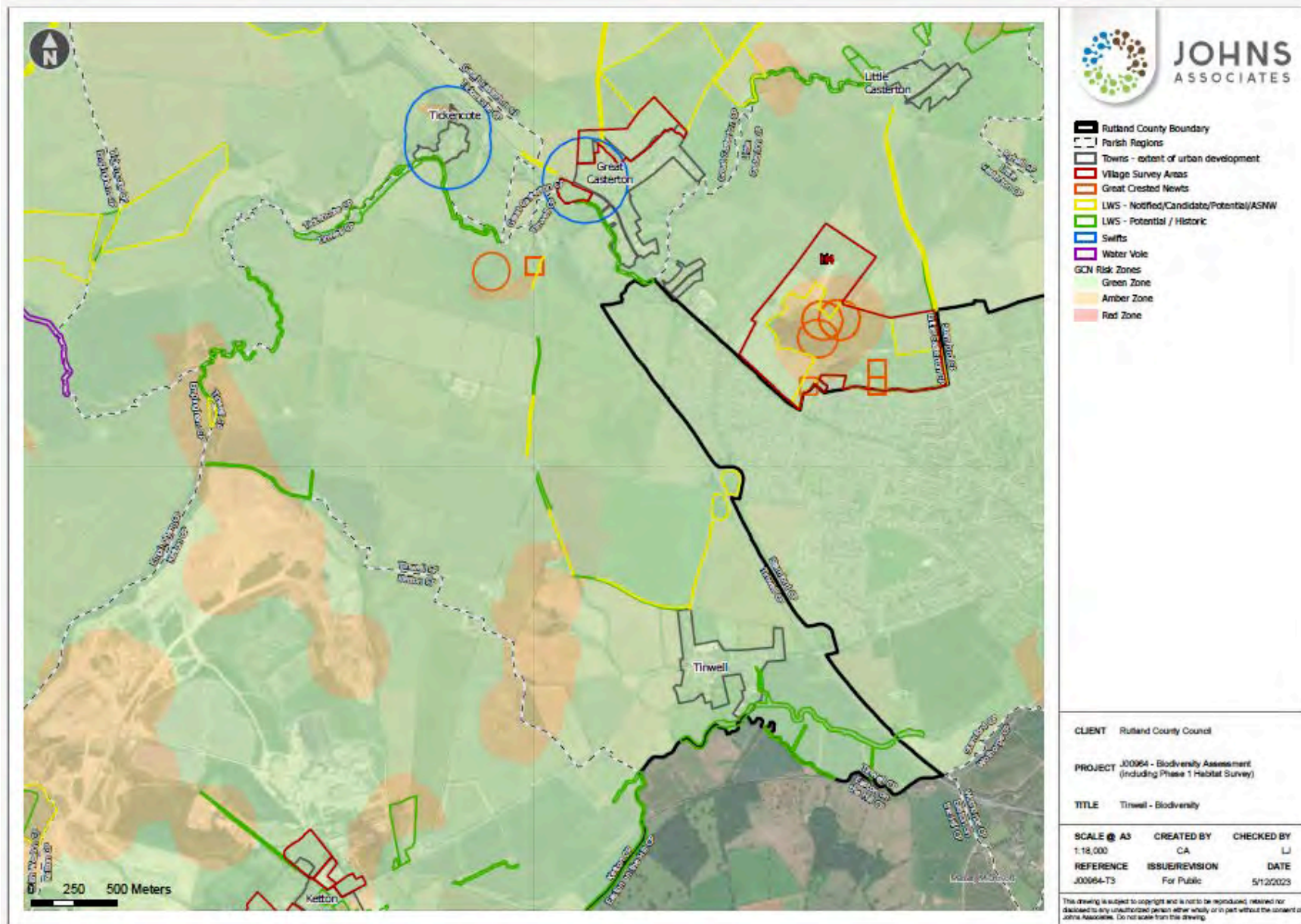


Figure 3: Tinwell Biodiversity Map



J00964

Barrowden Parish - Biodiversity Summary Report

1 INTRODUCTION

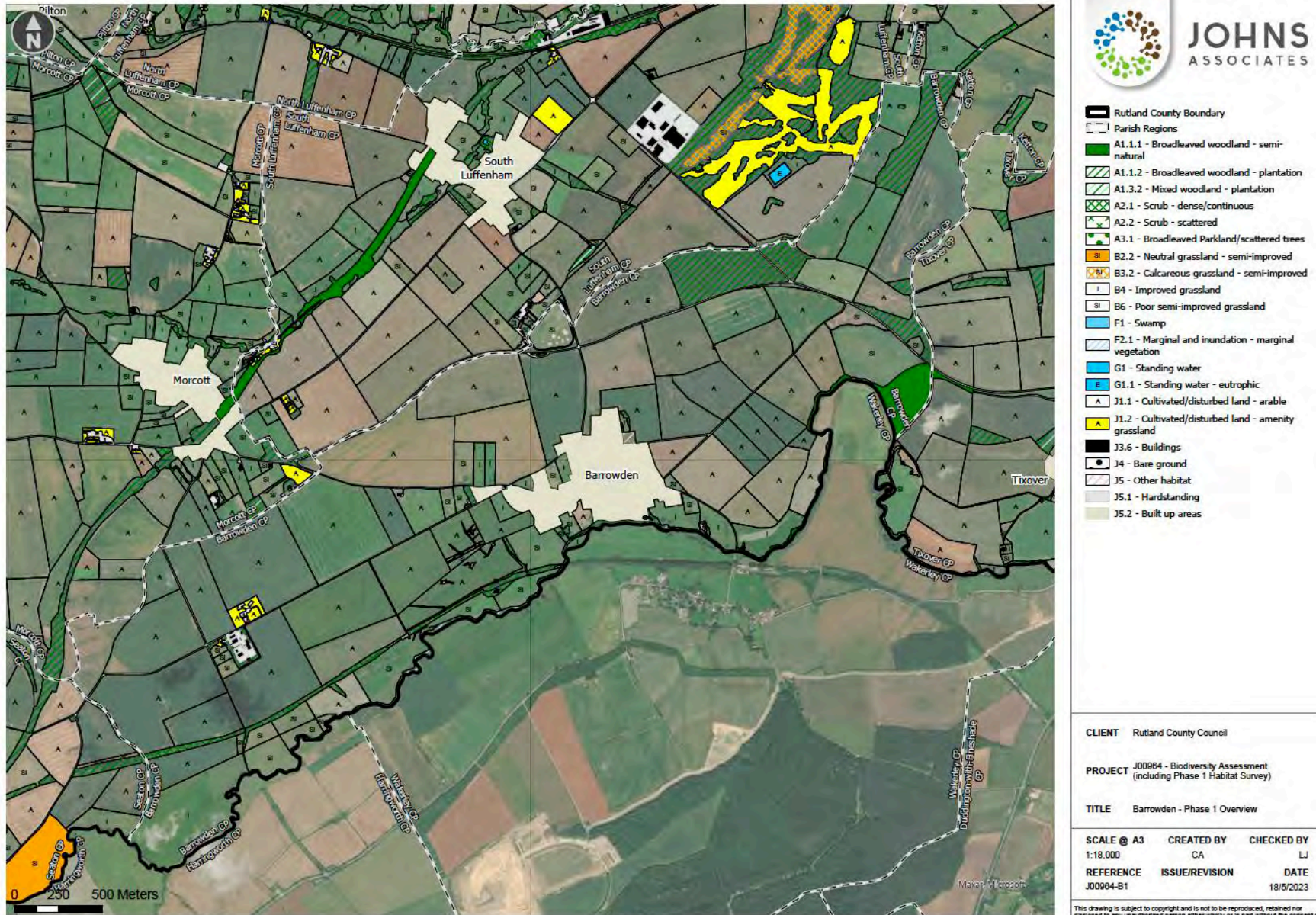
Barrowden is a Parish in the south of Rutland, adjacent to South Luffenham Parish. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Barrowden.

The five most frequent habitats within the Parish were: arable, poor semi-improved grassland, improved grassland, broadleaved plantation woodland and built-up areas (the extent of the Barrowden settlement). These five habitat types account for nearly 95% of the habitat within the Parish boundary. Of these habitat types, arable land makes up 70% of land within the Parish.

Table 1: Habitats within Barrowden Parish

Habitat type	Habitat area (Ha)	Percent of Barrowden Habitat
J1.1 - Cultivated/disturbed land - arable	514.85	70.32%
B6 – Poor semi-improved grassland	62.93	8.59%
B4 – Improved grassland	42.68	5.83%
A1.1.2 – Broadleaved woodland - plantation	39.14	5.34%
J5.2 – Built up areas	34.43	4.70%
J5.1 - Hardstanding	10.74	1.47%
A1.1.1 – Broadleaved woodland – semi-natural	9.11	1.24%
A2.1 – Scrub – dense/ continuous	6.75	0.92%
F2.1 – Marginal and inundation – marginal vegetation	5.54	0.76%
J1.2 – Cultivated/ disturbed land – amenity grassland	2.10	0.29%
J4 – Bare ground	2.09	0.29%
J3.6 - Buildings	0.66	0.09%
A2.2 – Scrub - scattered	0.58	0.08%
J5 – Other habitat	0.48	0.07%
G1.1 – Standing water - eutrophic	0.13	0.02%
Grand Total	732.20	100.00%

Figure 1: Overview of Habitats within Barrowden Parish Boundary



2 SURVEYED AREAS

No additional sites within Barrowden were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Barrowden settlement area, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (70% of the total land area), and grassland types of low biodiversity value. It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Barrowden Parish should include:

- Increasing the area of broadleaved woodland (currently 6.58% of the total Parish area), to provide more habitat of this type. This could be done through the requirement for BNG, or in partnership with other organisations, such as the local Wildlife Trust.
- Enhancing current woodland parcels to ensure a more diverse age and species structure and a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and poor semi-improved/improved grassland. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse, so surveys need to be undertaken by a competent botanist.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (known to be present within the Parish – see Figures 2 and 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Barrowden Great Crested Newt Risk Zones

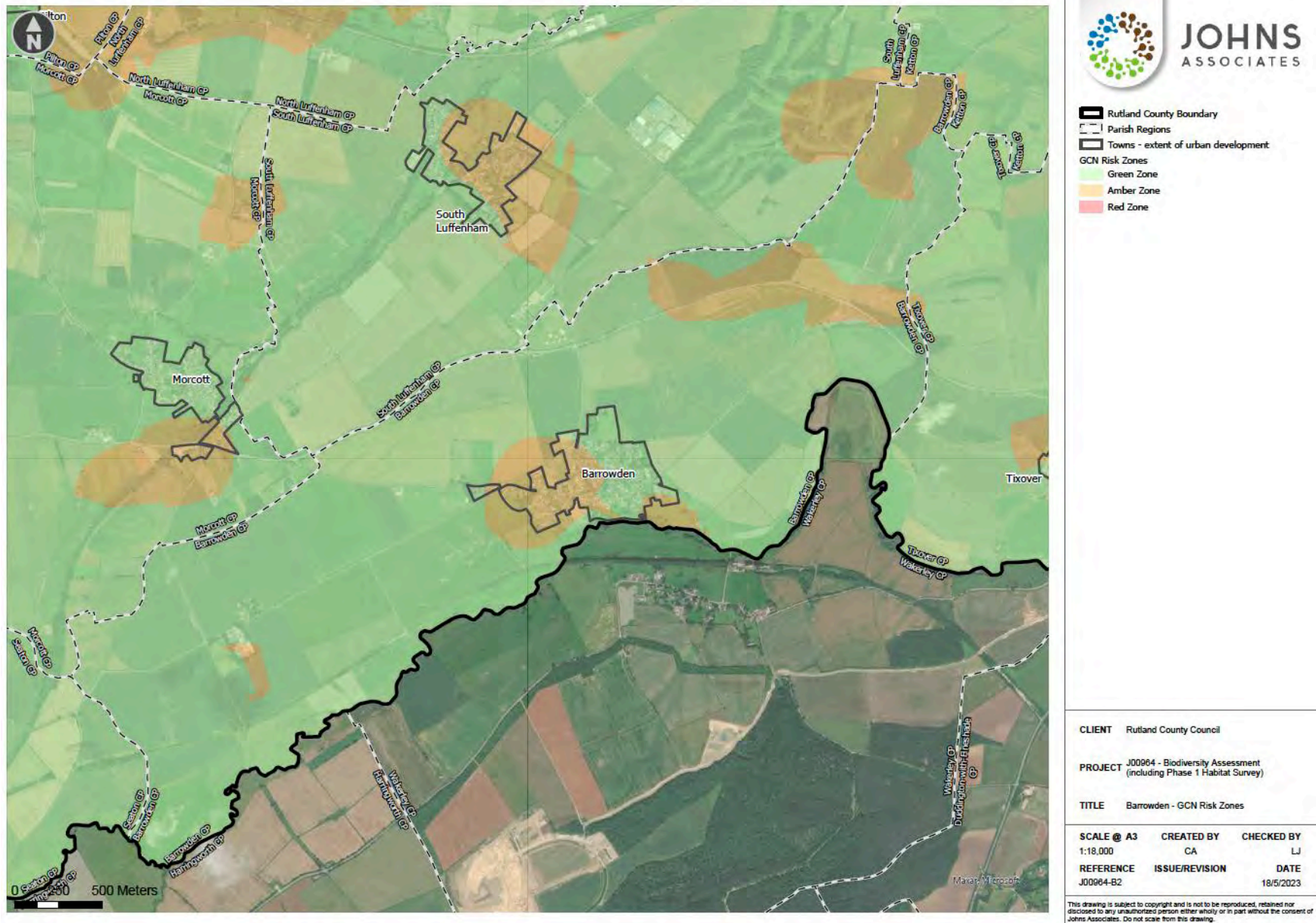
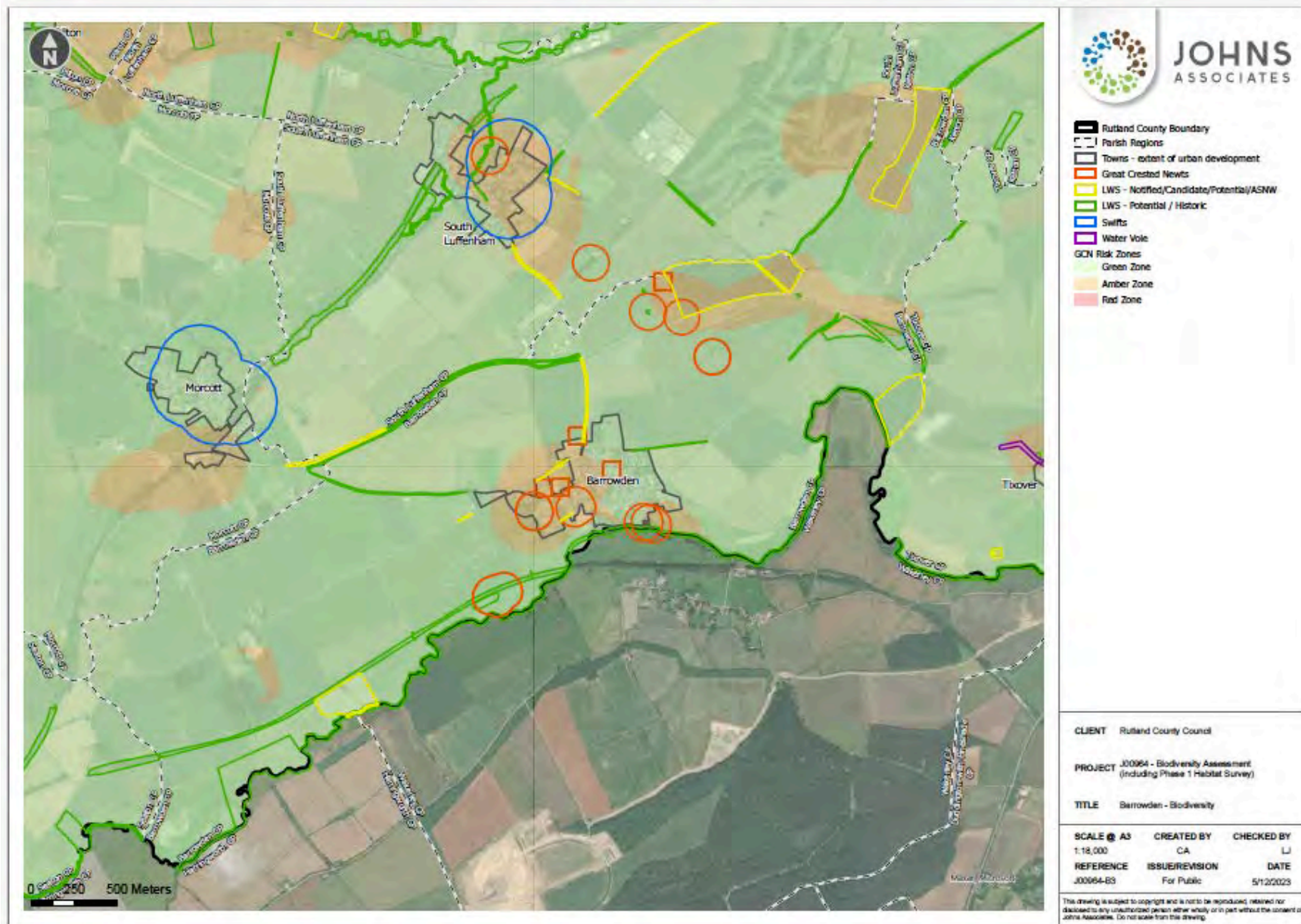


Figure 3: Barrowden Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Ryhall Parish - Biodiversity Summary Report

1 INTRODUCTION

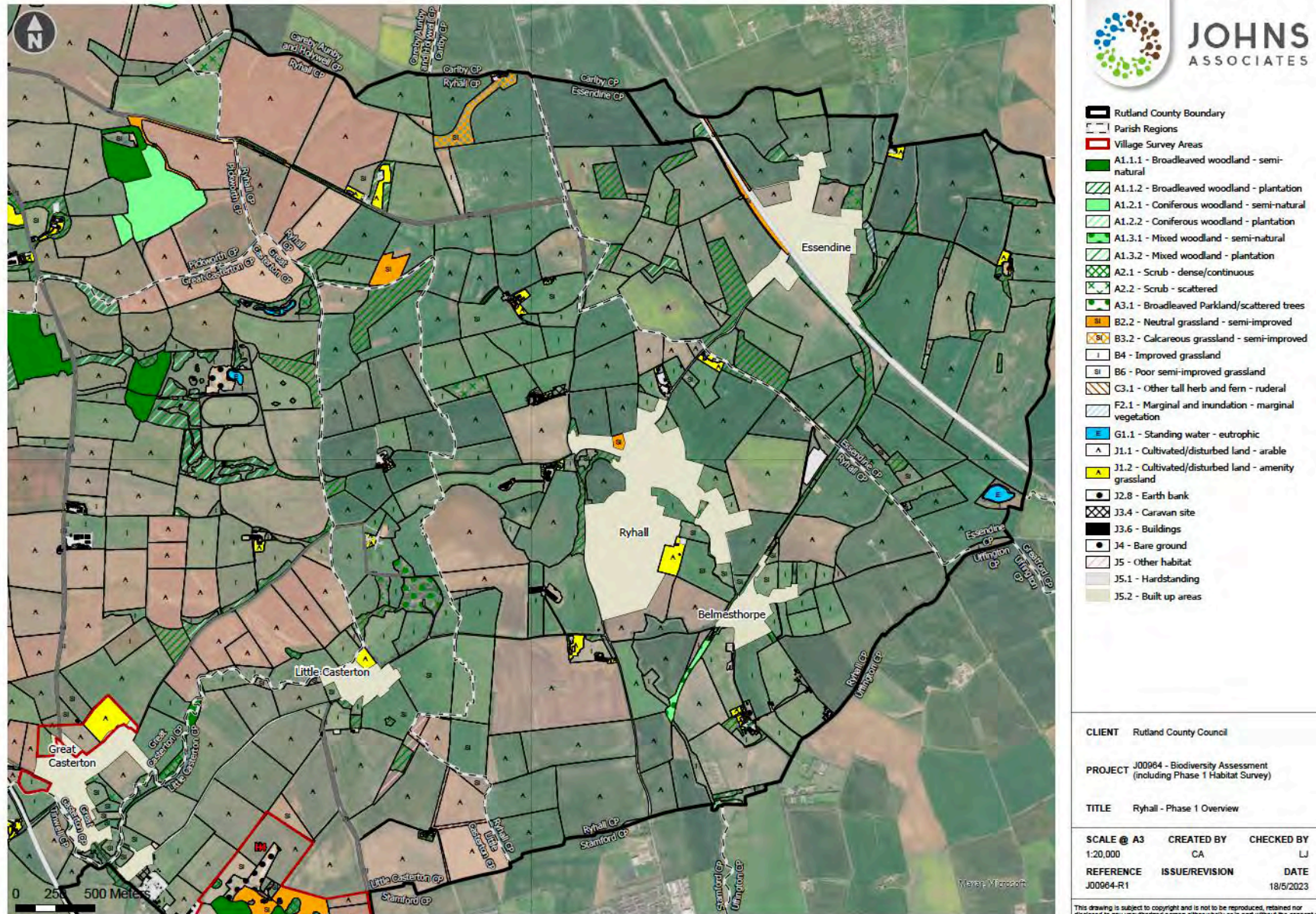
Ryhall is a Parish in the east of Rutland, located between the settlements of Essendine and Little Casterton. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Ryhall Parish.

The four most frequent habitats within the Parish were: arable, improved grassland, built-up areas (the extent of the Ryhall settlement), and poor semi-improved grassland. These four habitat types account for 93% of the habitats within the Ryhall parish boundary. Of these habitat types, arable land makes up approximately 64% of land within the Parish.

Table 1: Habitats within Ryhall Parish

Habitat type	Habitat area (Ha)	Percent of Ryhall Habitat
J1.1 - Cultivated/disturbed land - arable	693.53	64.05%
B4 – Improved grassland	190.65	17.61%
J5.2 – Built up areas	74.79	6.91%
B6 – Poor semi-improved grassland	50.33	4.65%
A1.1.2 – Broadleaved woodland - plantation	14.85	1.37%
J5.1 - Hardstanding	13.02	1.20%
J1.2 – Cultivated/ disturbed land – amenity grassland	9.46	0.87%
B3.2 – Calcareous grassland – semi-improved	8.73	0.81%
A2.2 – Scrub - scattered	7.56	0.70%
B2.2 – Neutral grassland – semi-improved	4.92	0.45%
J4 – Bare ground	4.13	0.38%
A1.3.2 – Mixed woodland - plantation	3.40	0.31%
J3.6 - Buildings	2.40	0.22%
A1.3.1 – Mixed woodland – semi-natural	2.26	0.21%
A2.1 – Scrub – dense/ continuous	1.31	0.12%
J5 – Other habitat	0.96	0.09%
J3.4 – Caravan site	0.38	0.04%
C3.1 – Other tall herb and fern - ruderal	0.15	0.01%
G1.1 – Standing water - eutrophic	0.01	0.00%
Grand Total	1082.81	100.00%

Figure 1: Overview of Habitats within Ryhall Parish Boundary



2 SURVEYED AREAS

No additional sites within Ryhall were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, improved and poor semi-improved grassland and built-up areas comprising the extent of the Ryhall settlement area (93% of the total land area), with very little habitat of biodiversity value therefore present within the Parish as a whole. Broadleaved and mixed woodland together cover only 1.68% of the land within the Parish, and this is all comprised of plantation woodland, which typically has a lower species diversity and range of age classes than semi-natural woodland.

It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Ryhall Parish should include:

- Improve the areas of broadleaved woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.

- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (some areas lie within a GCN Amber Risk zone, see Figure 2);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole (known to be present in the adjacent Essendine Parish) and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 shows the southwestern part of the Ryhall settlement to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Ryhall Great Crested Newt Risk Zones

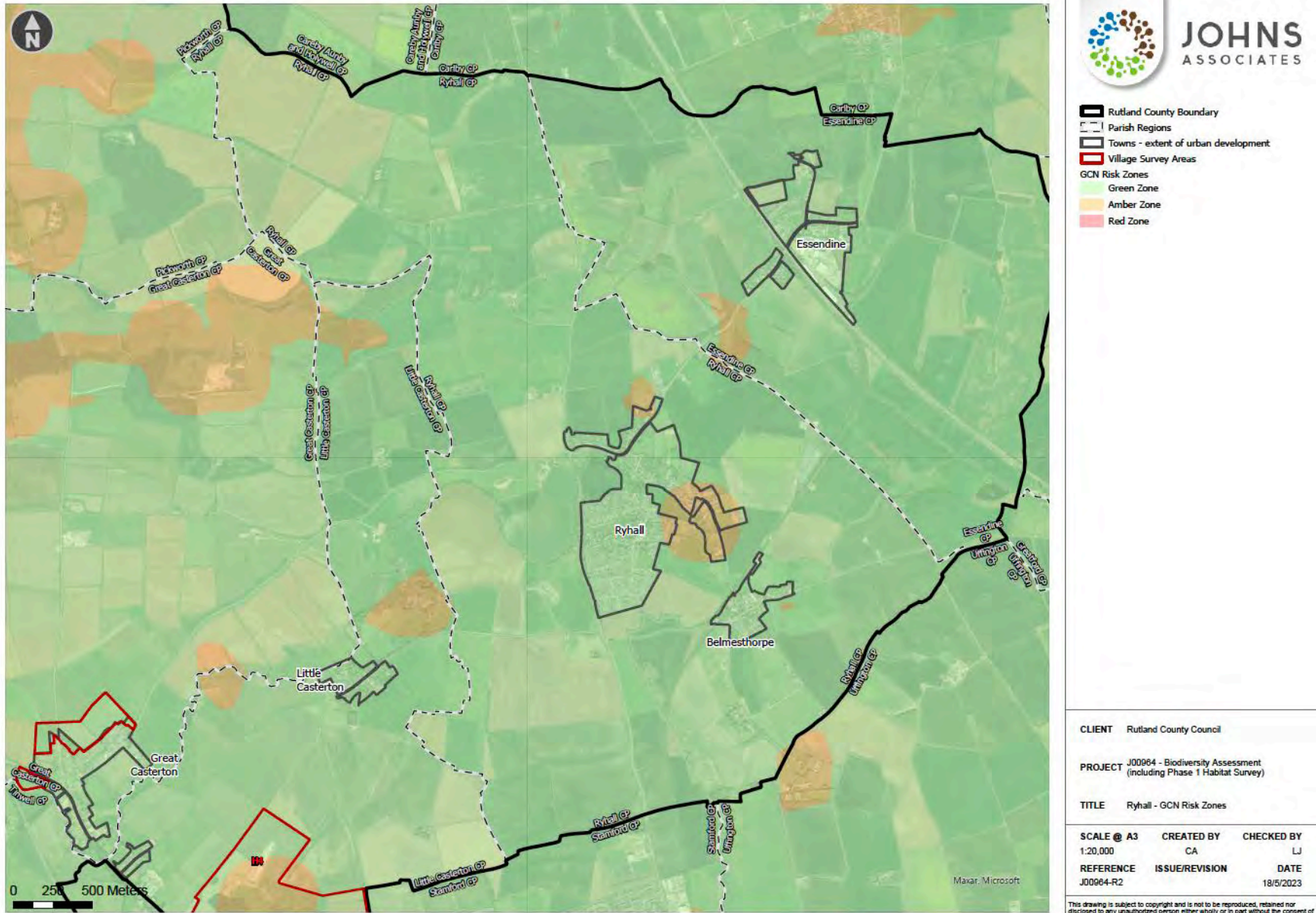
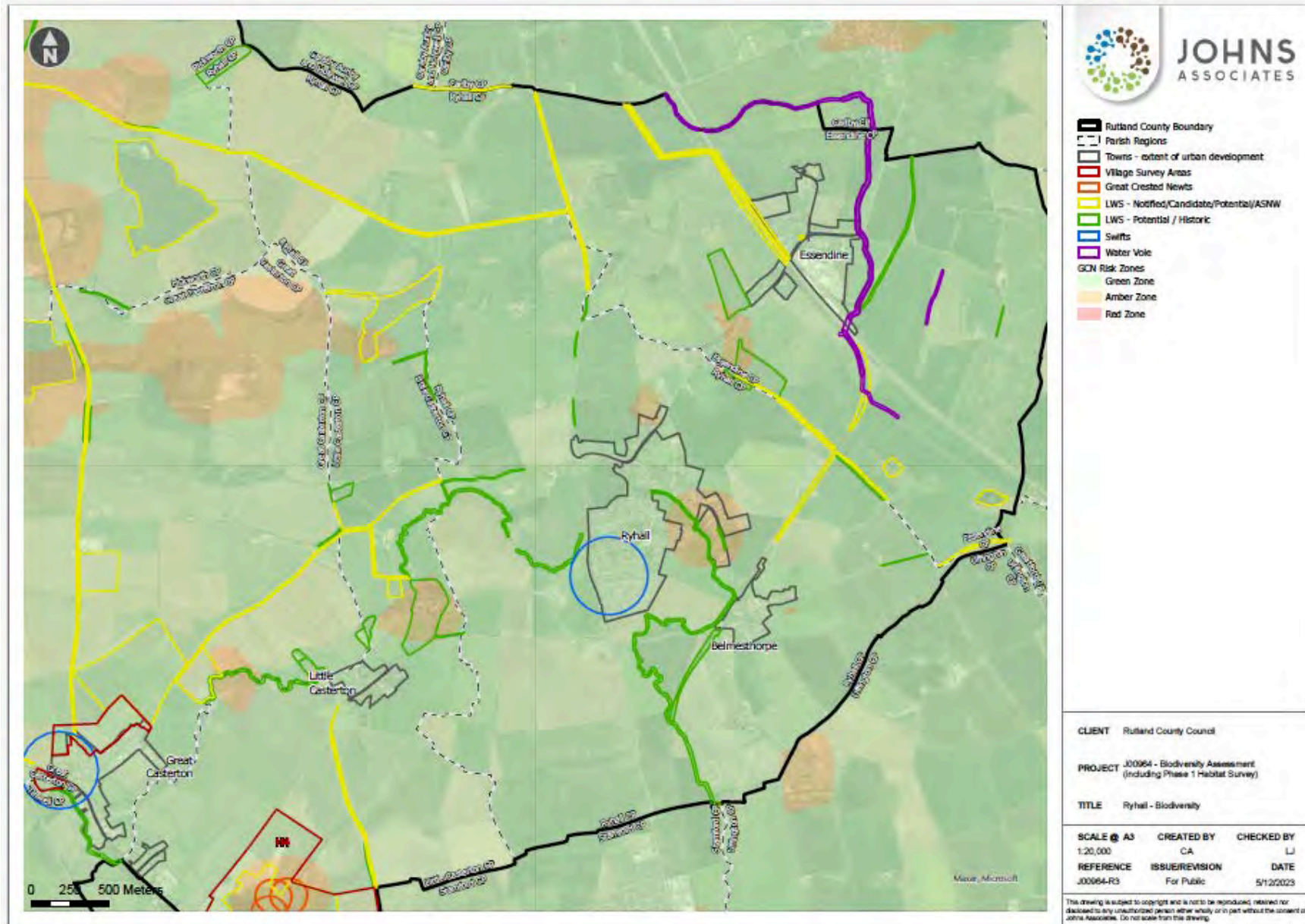


Figure 3: Ryhall Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Morcott Parish - Biodiversity Summary Report

1 INTRODUCTION

Morcott is a small Parish in the south of Rutland, located between the settlements of Barrowden to the east and Glaston to the west. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Morcott Parish.

The three most frequent habitats within the Parish were: arable, improved grassland, and poor semi-improved grassland. These three habitat types account for 88% of the habitats within the parish boundary. Of these, arable land makes up approximately 62% of land within the Parish.

Table 1: Habitats within Morcott Parish

Habitat type	Habitat area (Ha)	Percent of Morcott Habitat
J1.1 - Cultivated/disturbed land - arable	343.67	62.35%
B4 – Improved grassland	75.19	13.64%
B6 – Poor semi-improved grassland	66.37	12.04%
A1.1.2 – Broadleaved woodland - plantation	22.45	4.07%
J5.2 – Built up areas	20.56	3.73%
J5.1 - Hardstanding	7.97	1.45%
J1.2 – Cultivated/ disturbed land – amenity grassland	4.33	0.79%
A1.3.2 – Mixed woodland - plantation	4.00	0.73%
A2.1 – Scrub – dense/ continuous	2.15	0.39%
J4 – Bare ground	1.80	0.33%
J3.6 - Buildings	0.95	0.17%
A1.1.1 – Broad leaved woodland – semi-natural	0.91	0.17%
A2.2 – Scrub - scattered	0.81	0.15%
G1.1 – Standing water - eutrophic	0.02	0.00%
Grand Total	551.18	100.00%

Figure 1: Overview of Habitats within Morcott Parish Boundary



- Rutland County Boundary
- Parish Regions
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A1.2.2 - Coniferous woodland - plantation
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B5 - Marsh/marshy grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- F1 - Swamp
- F2.1 - Marginal and inundation - marginal vegetation
- G1 - Standing water
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Morcott - Phase 1 Overview

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2 SURVEYED AREAS

No additional sites within Morcott were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within Morcott Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, improved and poor semi-improved grassland (88% of the total land area), with very little habitat of biodiversity value therefore present within the Parish as a whole. Semi-natural broadleaved woodland covers only 0.17% of the land within the Parish, whilst broadleaved and mixed plantation woodland together cover only 4.8%.

It is likely that arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Morcott Parish should include:

- Improve the areas of broadleaved woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and/ or grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (some areas lie within a GCN Amber Risk zone, see Figure 2);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

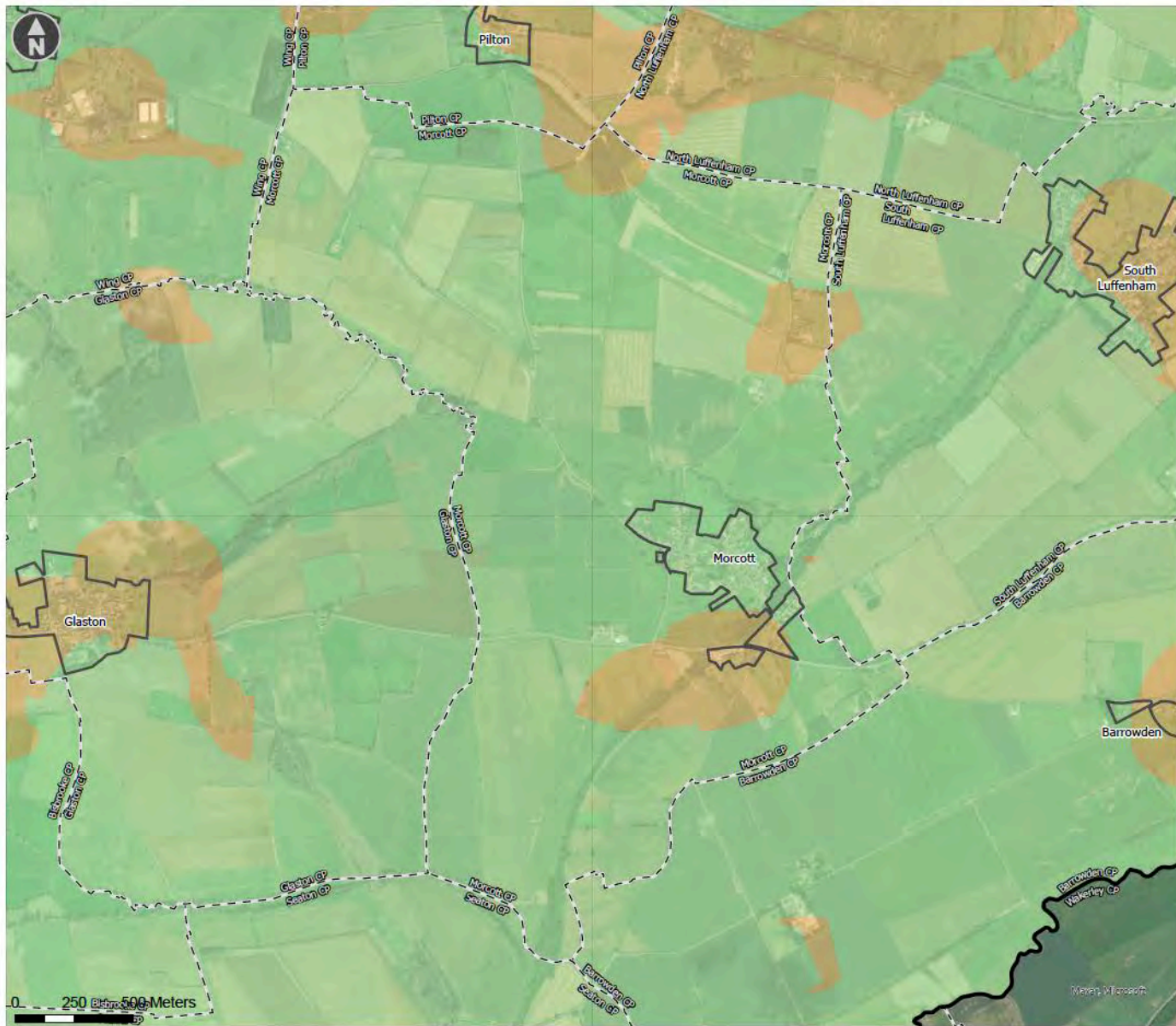
- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 shows the majority of the Morcott settlement area to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a small number of non-statutory historic/ notified/ candidate Local Wildlife Sites close to the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained

Figure 2: Morcott Great Crested Newt Risk Zones



- Rutland County Boundary
- Parish Regions
- Towns - extent of urban development
- GCN Risk Zones**
- Green Zone
- Amber Zone
- Red Zone

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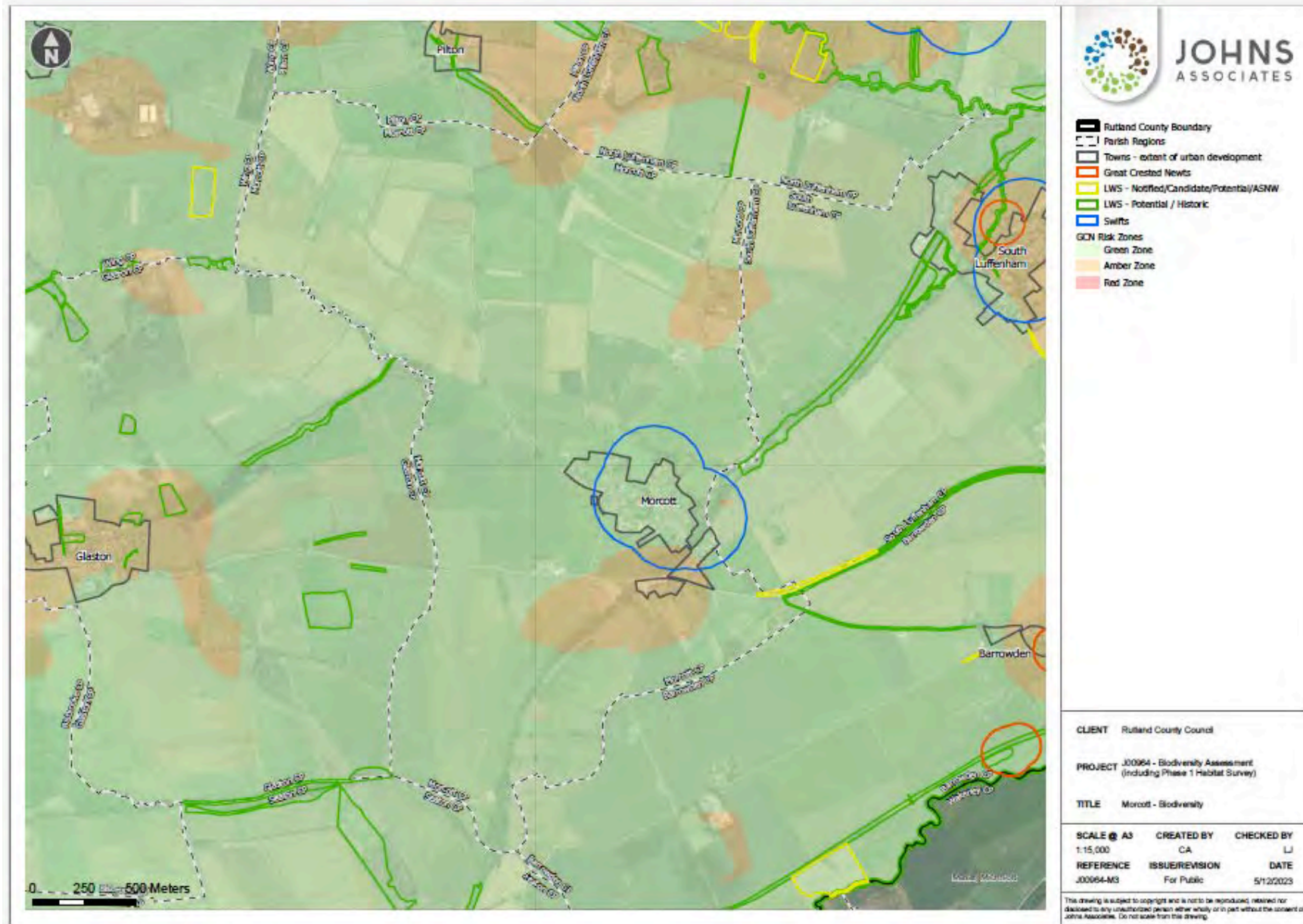
PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Morcott - GCN Risk Zones

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Figure 3: Morcott Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Glaston Parish - Biodiversity Summary Report

1 INTRODUCTION

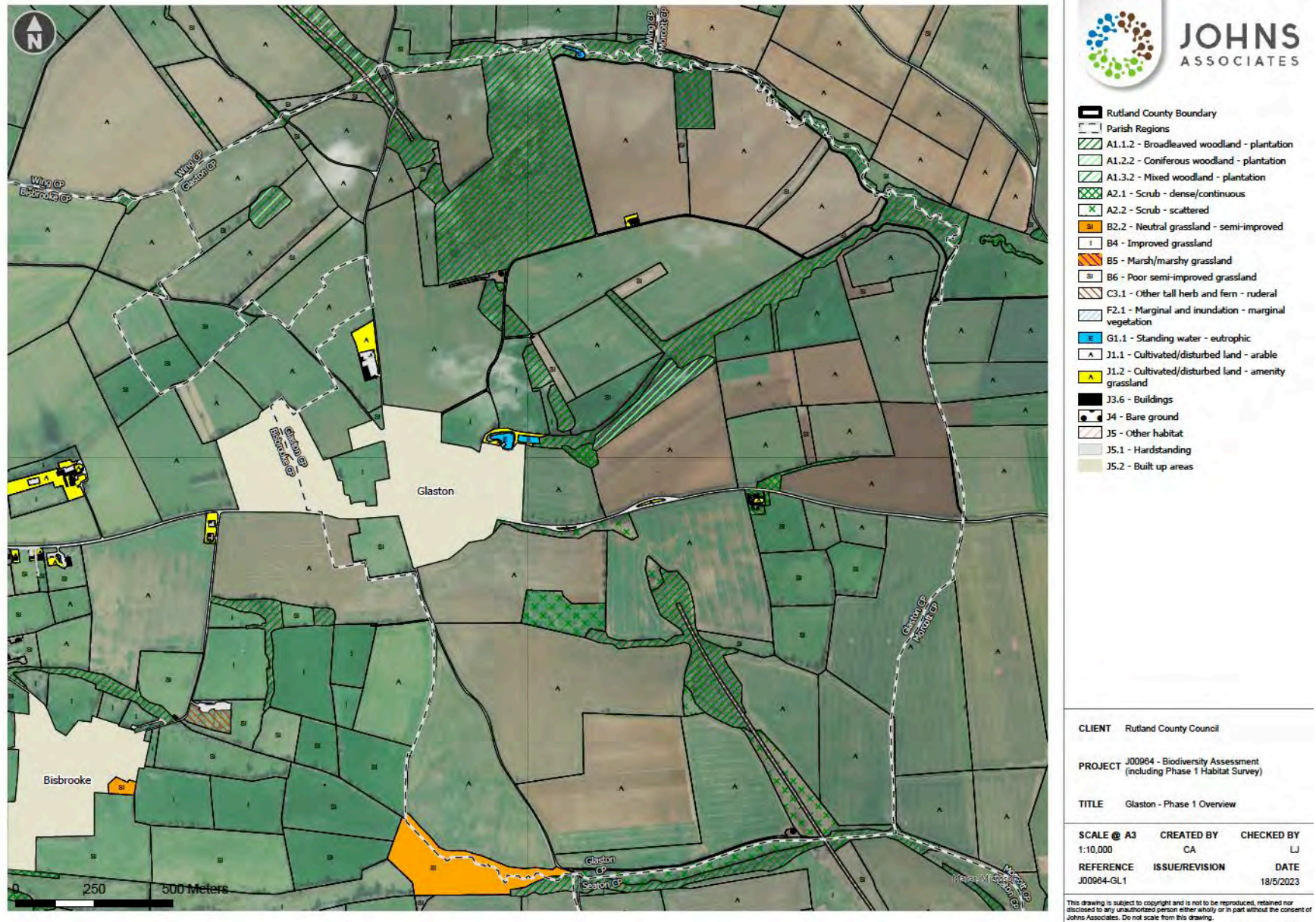
Glaston is a small Parish in the south of Rutland, located between the settlements of Barrowden to the east and Uppingham to the west. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type.

The three most frequent habitats within the Parish were: arable, broadleaved plantation woodland and poor semi-improved grassland. These habitat types account for 88% of the habitats within the Parish boundary. Of these habitat types, arable land makes up approximately 70% of land within the Parish.

Table 1: Habitats within Glaston Parish

Habitat type	Habitat area (Ha)	Percent of Glaston Habitat
J1.1 - Cultivated/disturbed land - arable	333.54	70.36%
A1.1.2 – Broadleaved woodland - plantation	48.51	10.23%
B6 – Poor semi-improved grassland	35.55	7.50%
J5.2 – Built up areas	20.67	4.36%
B4 – Improved grassland	10.81	2.28%
A2.2 – Scrub - scattered	9.21	1.94%
J5.1 - Hardstanding	3.10	0.65%
J4 – Bare ground	2.65	0.56%
A1.2.2 – Coniferous woodland - plantation	2.62	0.55%
B2.2 – Neutral grassland – semi-improved	1.39	0.29%
A1.3.2 – Mixed woodland - plantation	1.38	0.29%
A2.1 – Scrub – dense/ continuous	1.38	0.29%
J5 – Other habitat	1.20	0.25%
J1.2 – Cultivated/ disturbed land – amenity grassland	1.18	0.25%
G1.1 – Standing water - eutrophic	0.46	0.10%
J3.6 - Buildings	0.27	0.06%
F2.1 – Marginal and inundation – marginal vegetation	0.13	0.03%
Grand Total	474.04	100.00%

Figure 1: Overview of Habitats within Glaston Parish Boundary



2 SURVEYED AREAS

No additional sites within Glaston were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, poor semi-improved grassland and broadleaved plantation woodland (88% of the total land area), with arable land accounting for 70% of the Parish as a whole. It is likely that these arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Glaston Parish should include:

- Improve the areas of broadleaved woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (a large part of the Glaston settlement area lies within an Amber Risk zone for GCN - see Figure 2);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Areas of land across the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Glaston Great Crested Newt Risk Zones

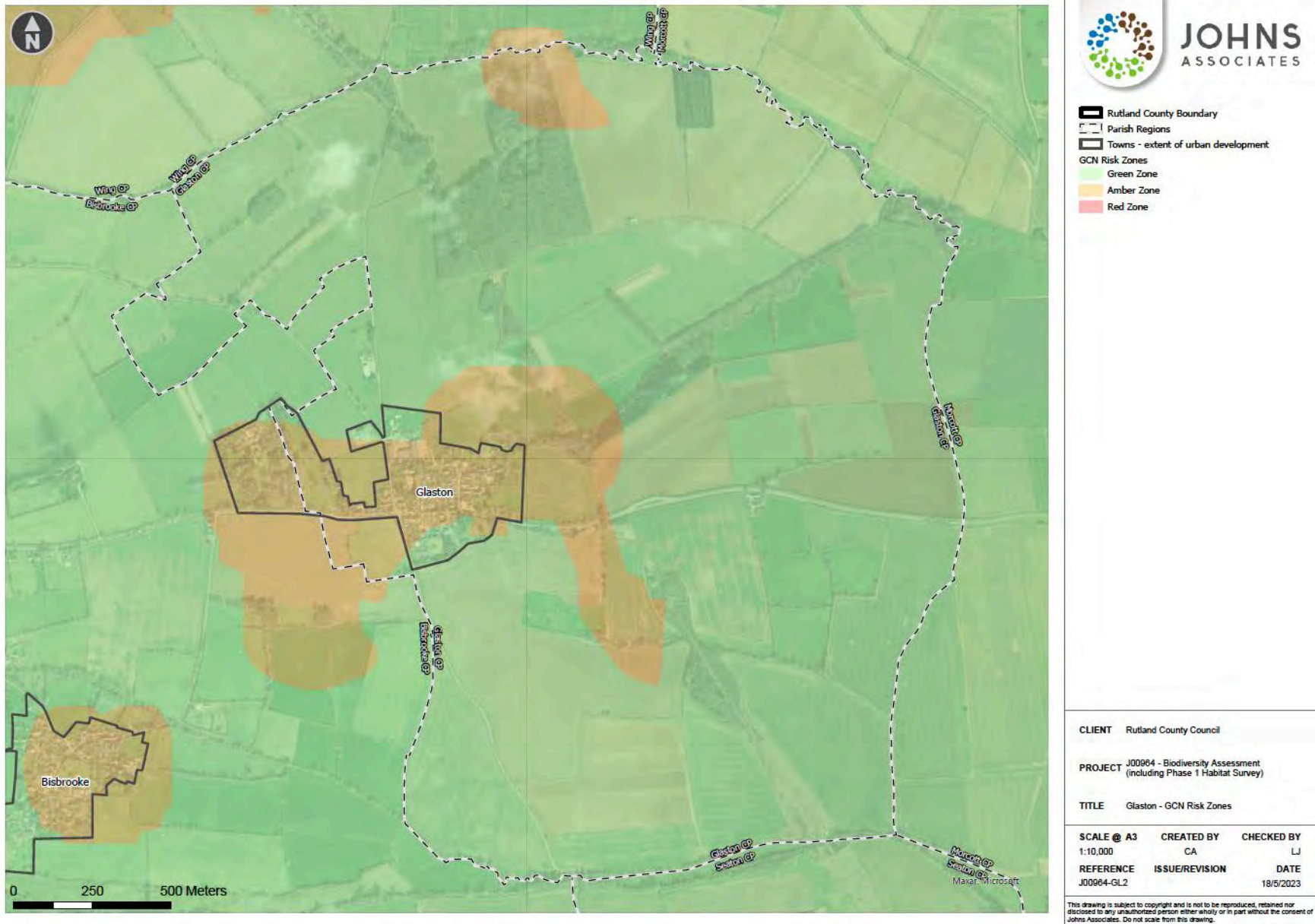
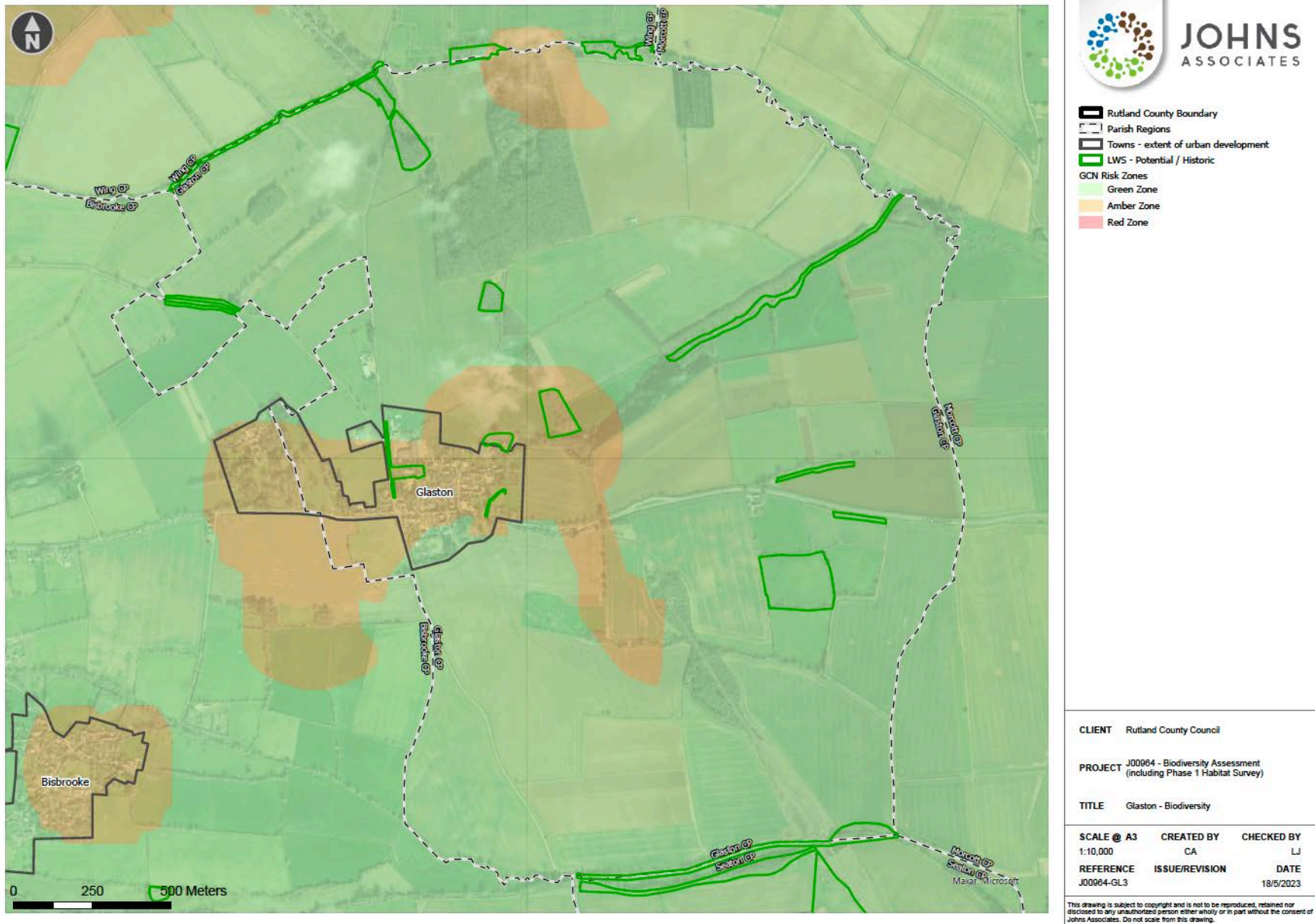


Figure 3: Glaston Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Essendine Parish - Biodiversity Summary Report

1 INTRODUCTION

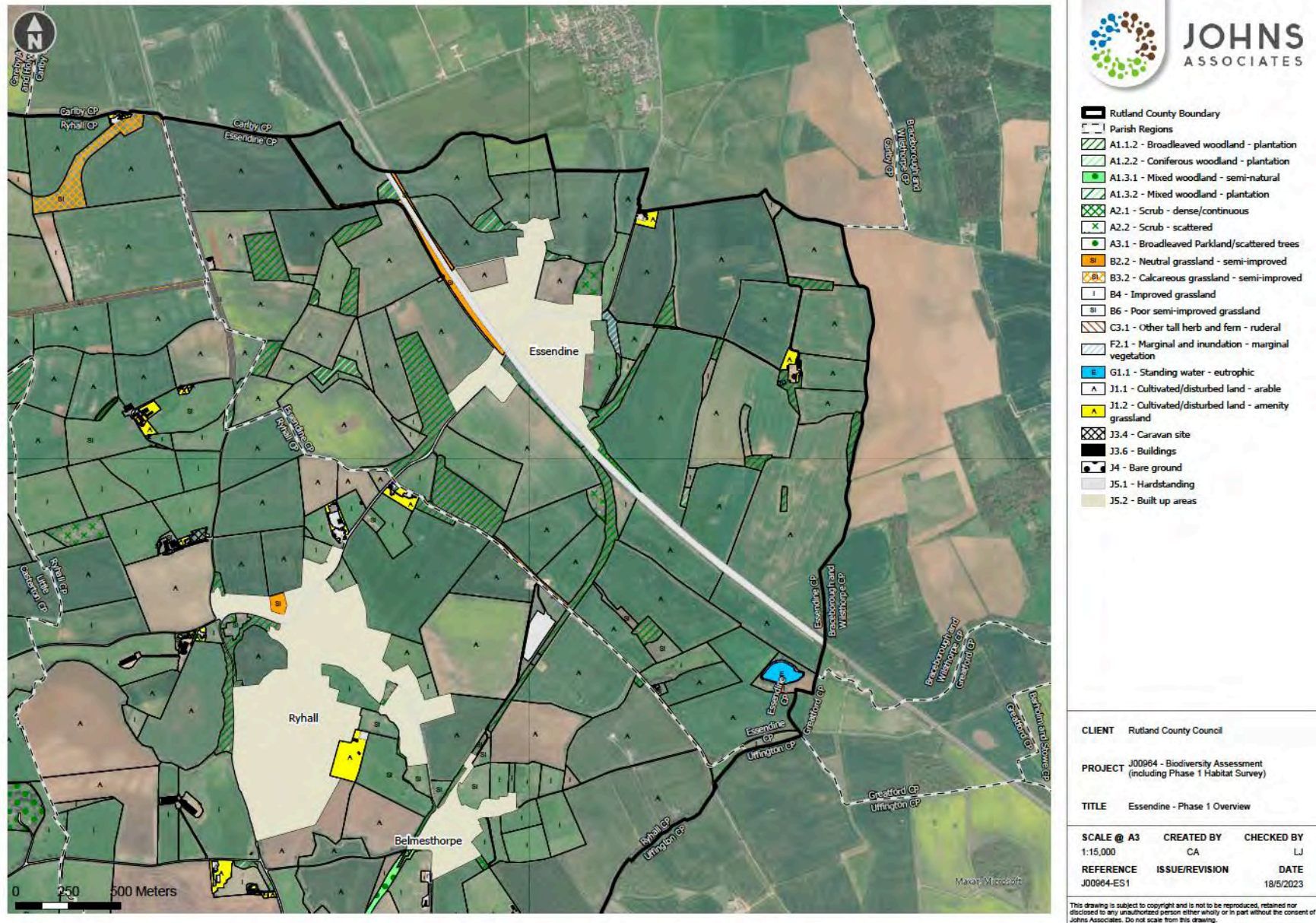
Essendine is a small Parish in the far east of Rutland, located to the northeast of Ryhall. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type.

The three most frequent habitats within the Parish were: arable, improved grassland and broadleaved plantation woodland. These habitat types account for 89% of the habitats within the Essendine parish boundary. Of these habitat types, arable land makes up approximately three-quarters (76%) of land within the Parish.

Table 1: Habitats within Essendine Parish

Habitat type	Habitat area (Ha)	Percent of Essendine Habitat
J1.1 - Cultivated/disturbed land - arable	454.02	75.94%
B4 – Improved grassland	43.11	7.21%
A1.1.2 – Broadleaved woodland - plantation	34.02	5.69%
J5.2 – Built up areas	30.01	5.03%
J5.1 - Hardstanding	13.13	2.20%
A2.2 – Scrub - scattered	5.31	0.89%
B2.2 – Neutral grassland – semi-improved	4.17	0.70%
A1.3.2 – Mixed woodland - plantation	2.96	0.50%
B6 – Poor semi-improved grassland	2.36	0.39%
A1.2.2 – Coniferous woodland - plantation	1.67	0.28%
G1.1 – Standing water - eutrophic	1.38	0.23%
J4 – Bare ground	1.35	0.23%
J1.2 – Cultivated/ disturbed land – amenity grassland	1.24	0.21%
F2.1 – Marginal and inundation – marginal vegetation	1.11	0.19%
B3.2 – Calcareous grassland – semi-improved	1.09	0.18%
A2.1 – Scrub – dense/ continuous	0.75	0.13%
J3.6 - Buildings	0.11	0.02%
Grand Total	597.83	100.00%

Figure 1: Overview of Habitats within Essendine Parish Boundary



2 SURVEYED AREAS

No additional sites within Essendine were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within Essendine Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (76%) with improved grassland, broadleaved plantation woodland and built-up areas contributing a further 18%. There is therefore very little habitat of significant biodiversity value present within the Parish as a whole. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Essendine Parish should include:

- Improving the areas of broadleaved and mixed woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (a small area within the Parish lies within an Amber Risk zone for GCN - see Figure 2);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole (known to be present – see Figure 3) and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

An area of land in the west of the Parish falls within an Amber risk zone for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Essendine Great Crested Newt Risk Zones

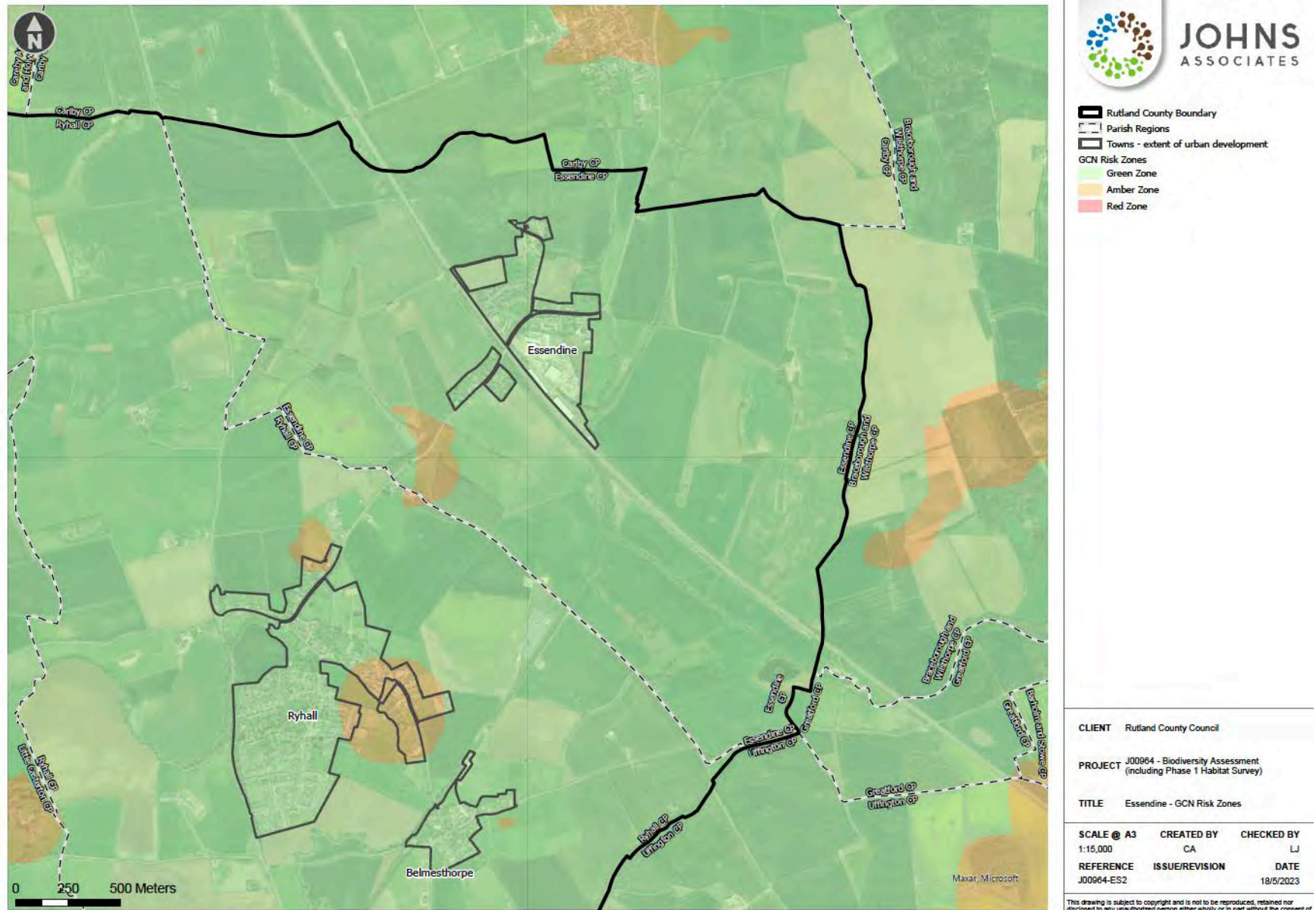
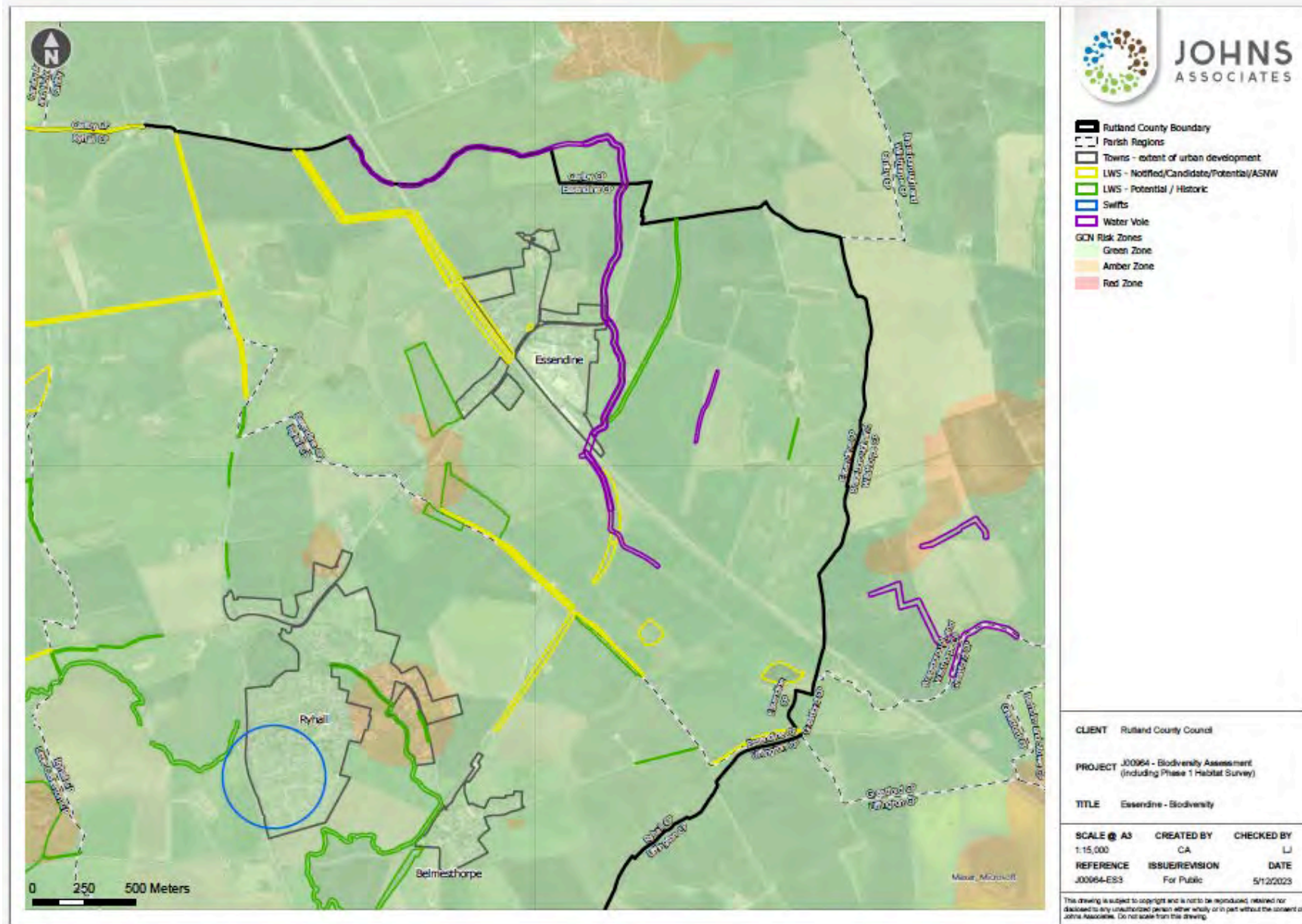


Figure 3: Essendine Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Wing Parish - Biodiversity Summary Report

1 INTRODUCTION

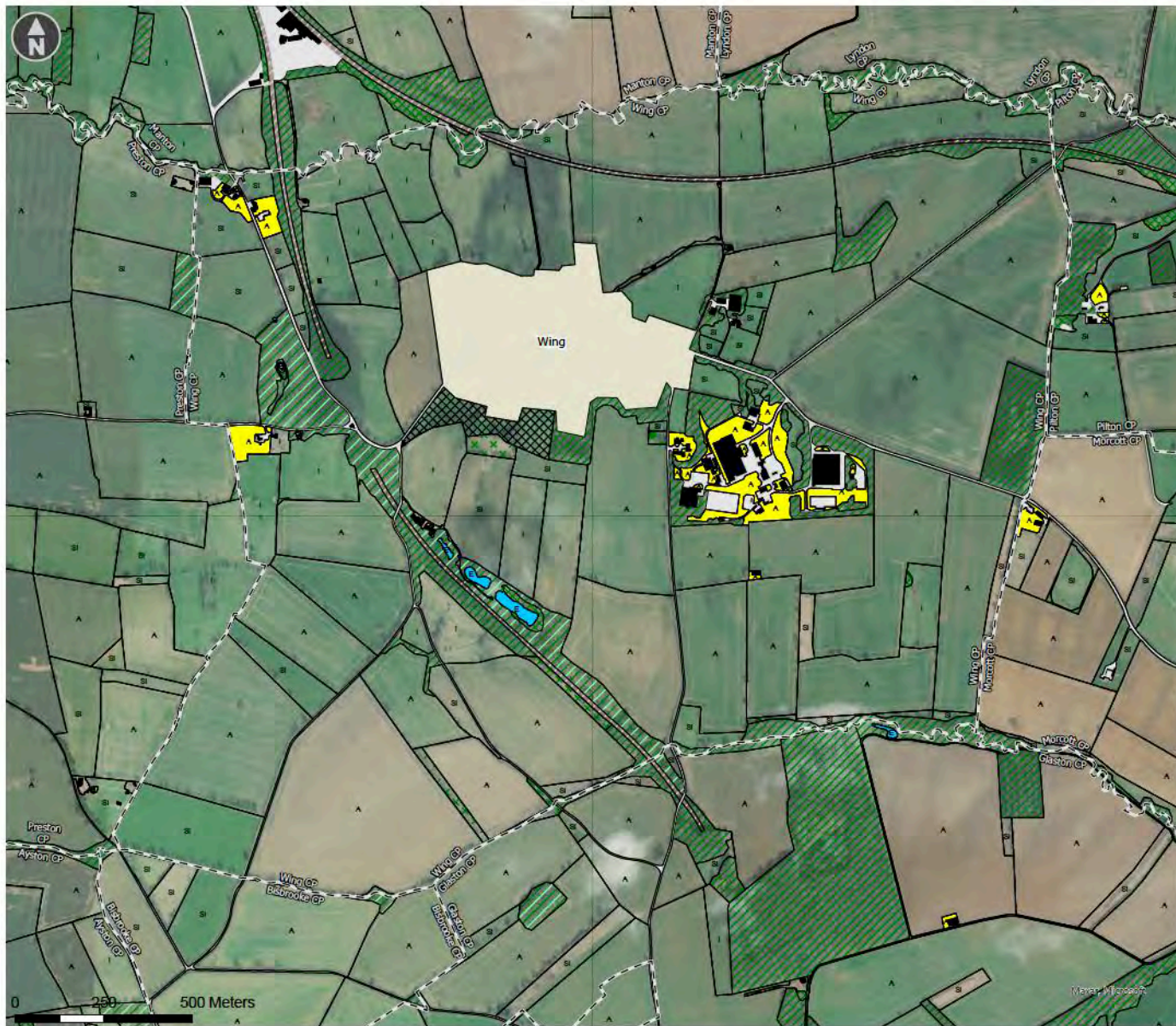
Wing is a small Parish in the south of Rutland, located north of Glaston and south of Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which also shows the percentage cover of each habitat type.

The four most frequent habitats within the Parish were: arable, improved grassland, poor semi-improved grassland and broadleaved plantation woodland. These habitat types account for 85% of the habitats within the Wing parish boundary. Of these habitat types, arable land makes up approximately 53%.

Table 1: Habitats within Wing Parish

Habitat type	Habitat area (Ha)	Percent of Wing Habitat
J1.1 - Cultivated/disturbed land - arable	239.19	52.93%
B4 – Improved grassland	78.88	17.45%
B6 – Poor semi-improved grassland	37.57	8.31%
A1.1.2 – Broadleaved woodland - plantation	28.04	6.20%
J5.2 – Built-up areas	25.58	5.66%
A1.3.2 – Mixed woodland - plantation	11.96	2.65%
J5.1 - Hardstanding	8.10	1.79%
J1.2 – Cultivated/ disturbed land – amenity grassland	7.45	1.65%
J5 – Other habitat	3.54	0.78%
J3.4 – Caravan site	3.33	0.74%
J3.6 - Buildings	3.06	0.68%
A2.2 – Scrub - scattered	2.28	0.50%
J4 – Bare ground	1.06	0.24%
A2.1 – Scrub – dense/ continuous	0.94	0.21%
G1.1 – Standing water - eutrophic	0.75	0.17%
A3.1 – Broadleaved parkland/ scattered trees	0.19	0.04%
F2.1 – Marginal and inundation – marginal vegetation	0.03	0.01%
Grand Total	451.95	100.00%

Figure 1: Overview of Habitats within Wing Parish Boundary



- Rutland County Boundary
- Parish Regions
- A1.1.2 - Broadleaved woodland - plantation
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- F2.1 - Marginal and inundation - marginal vegetation
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.4 - Caravan site
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Wing - Phase 1 Overview

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2 SURVEYED AREAS

No additional sites within Wing were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Wing Parish boundary, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (53%) with improved and poor semi-improved grassland and broadleaved plantation woodland representing a further 32% of the Parish. There is therefore relatively little habitat of significant biodiversity value present within the Parish as a whole. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Wing Parish should include:

- Improving the areas of broadleaved and mixed woodland to provide a diverse age and species structure and to ensure the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (a large area within the Parish boundary lies within an Amber Risk zone for GCN - see Figure 2. Figure 3 shows confirmed records of GCN within the Parish);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

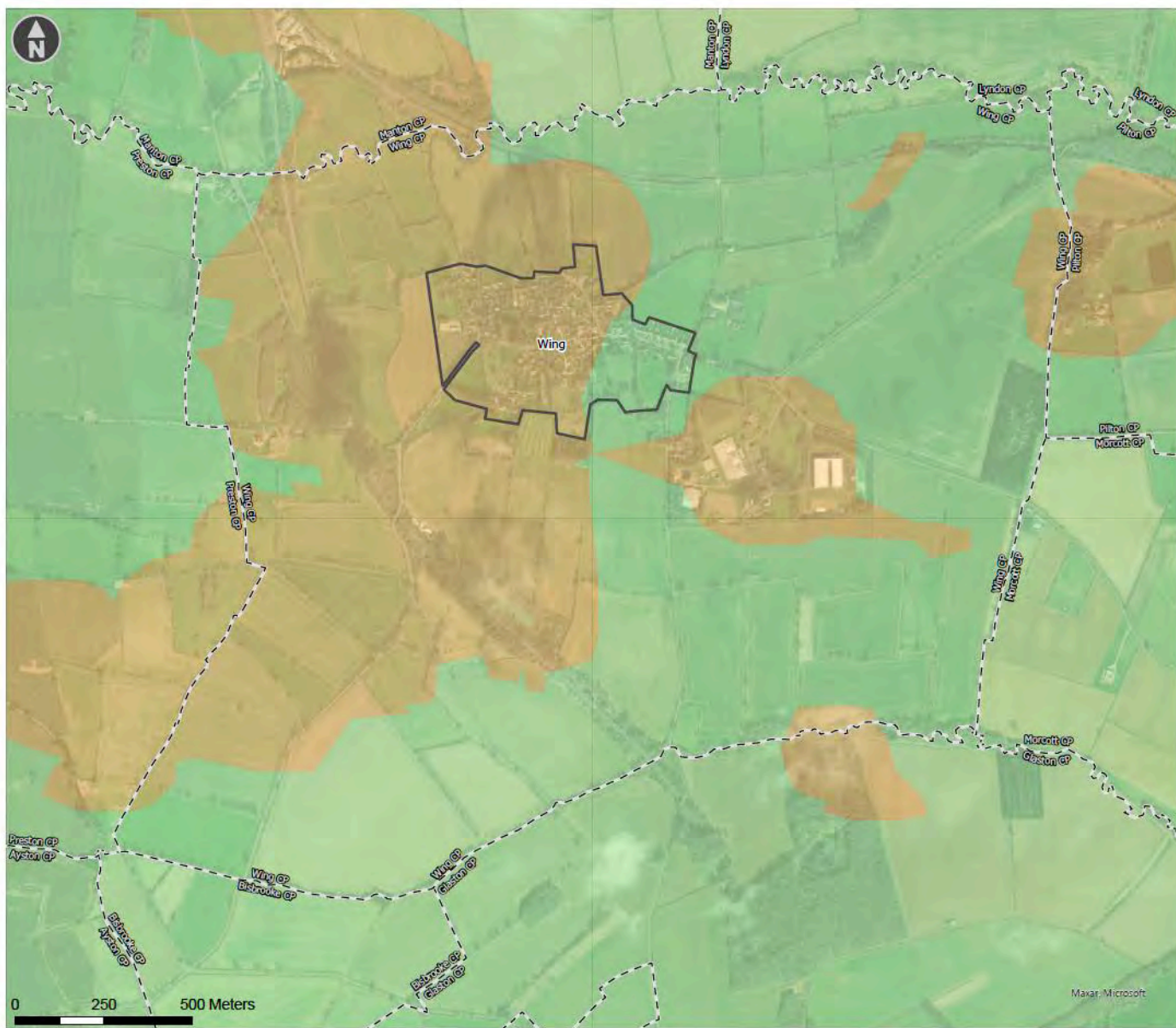
The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

A large part of the Parish falls within an Amber risk zone for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Wing Great Crested Newt Risk Zones

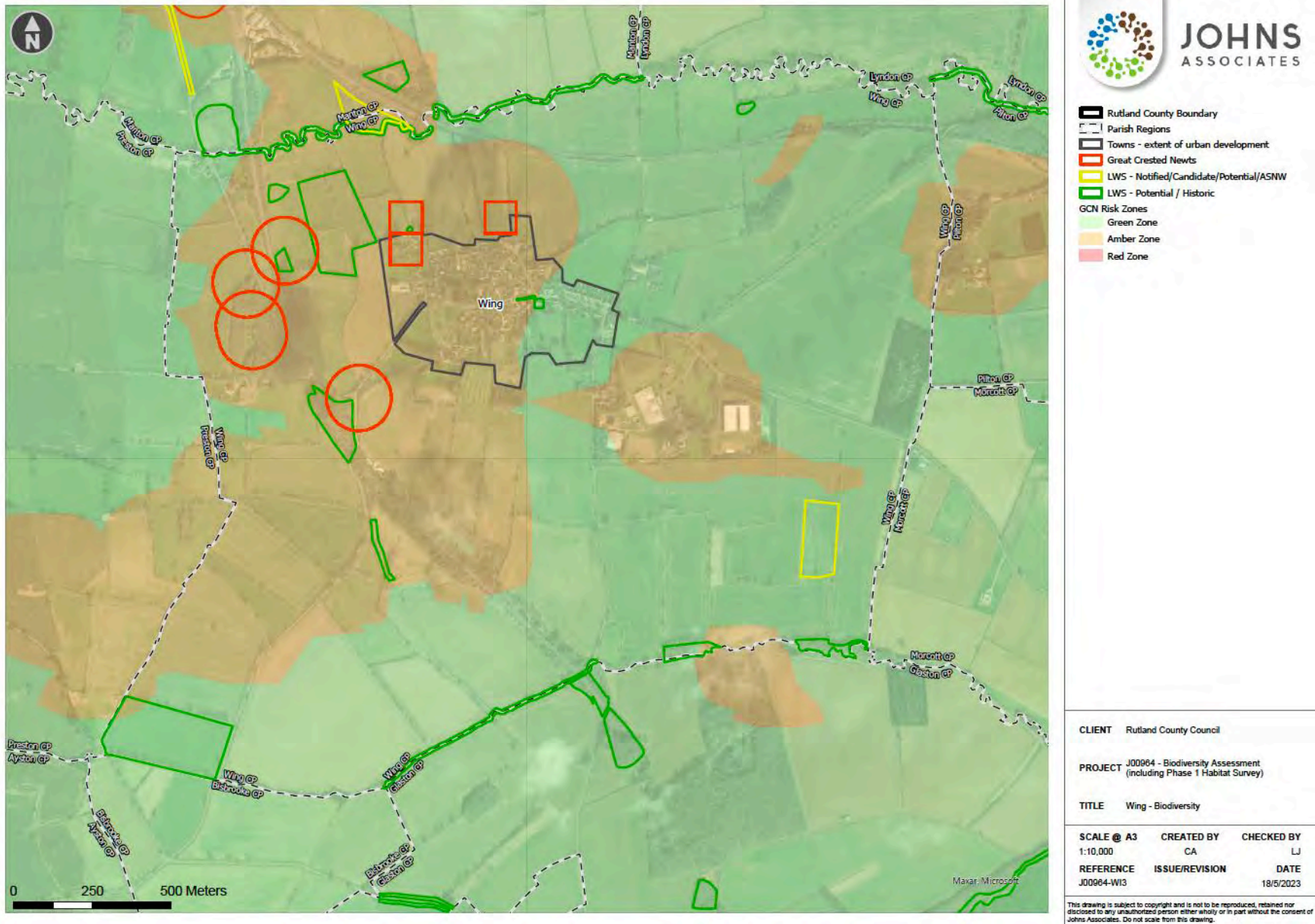


- Rutland County Boundary
- Parish Regions
- Towns - extent of urban development
- GCN Risk Zones
 - Green Zone
 - Amber Zone
 - Red Zone

CLIENT	Rutland County Council	
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)	
TITLE	Wing - GCN Risk Zones	
SCALE @ A3	CREATED BY	CHECKED BY
1:10,000	CA	LJ
REFERENCE	ISSUE/REVISION	DATE
J00964-WI2		18/5/2023

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Figure 3: Wing Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Caldecott Parish - Biodiversity Summary Report

1 INTRODUCTION

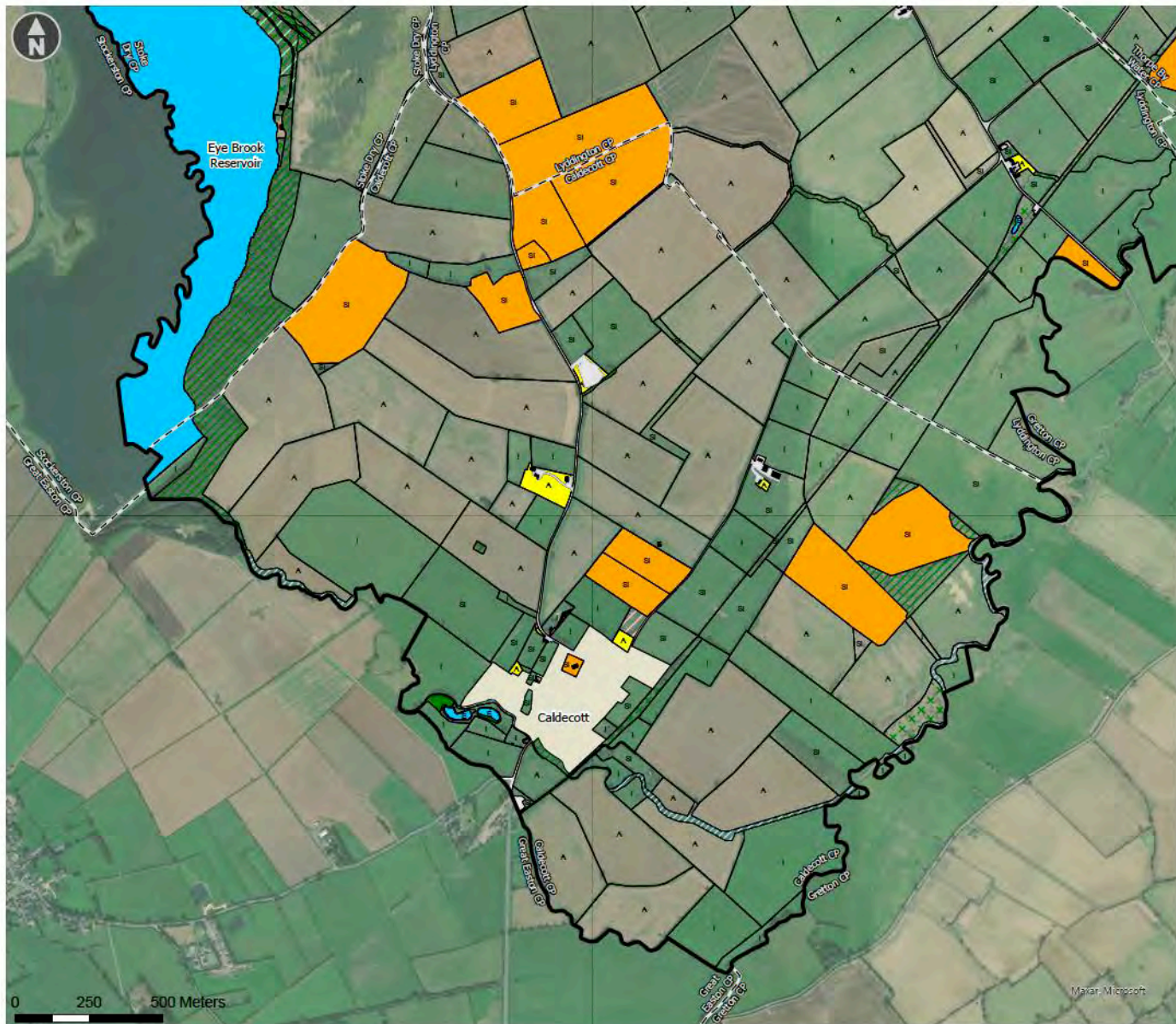
Caldecott is the southernmost Parish in Rutland, located west of Gretton and close to Eye Brook Reservoir. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type within Caldecott Parish.

The four most frequent habitats within the Parish were: arable, improved grassland, poor semi-improved grassland and semi-improved neutral grassland. These habitat types account for 91% of the habitats within the Caldecott parish boundary. Of these habitat types, arable land makes up approximately 49%.

Table 1: Habitats within Caldecott Parish

Habitat type	Habitat area (Ha)	Percent of Caldecott Habitat
J1.1 - Cultivated/disturbed land - arable	229.86	49.02%
B4 – Improved grassland	97.99	20.89%
B6 – Poor semi-improved grassland	53.58	11.43%
B2.2 – Neutral grassland – semi-improved	47.26	10.08%
J5.2 – Built-up areas	13.74	2.93%
A1.1.2 – Broadleaved woodland - plantation	8.87	1.89%
F2.1 – Marginal and inundation – marginal vegetation	5.14	1.10%
J1.2 – Cultivated/ disturbed land – amenity grassland	7.45	1.65%
J5.1 - Hardstanding	3.34	0.71%
A2.2 – Scrub - scattered	3.15	0.67%
J1.2 – Cultivated/ disturbed land – amenity grassland	2.32	0.49%
G1.1 – Standing water - eutrophic	2.11	0.45%
J5 – Other habitat	0.52	0.11%
A1.1.1 – Broadleaved woodland – semi-natural	0.34	0.07%
J4 – Bare ground	0.31	0.07%
J3.6 - Buildings	0.31	0.07%
A2.1 – Scrub – dense/ continuous	0.12	0.03%
Grand Total	468.94	100.00%

Figure 1: Overview of Habitats within Caldecott Parish Boundary



- Rutland County Boundary
- Parish Regions
- A1.1.1 - Broadleaved woodland - semi-natural
- A1.1.2 - Broadleaved woodland - plantation
- A1.3.2 - Mixed woodland - plantation
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B6 - Poor semi-improved grassland
- C3.1 - Other tall herb and fern - ruderal
- F2.1 - Marginal and inundation - marginal vegetation
- G1.1 - Standing water - eutrophic
- J1.1 - Cultivated/disturbed land - arable
- J1.2 - Cultivated/disturbed land - amenity grassland
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J5.1 - Hardstanding
- J5.2 - Built up areas

CLIENT Rutland County Council

PROJECT J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)

TITLE Caldecott - Phase 1 Overview

SCALE @ A3	CREATED BY	CHECKED BY
1:12,000	CA	LJ
REFERENCE	ISSUE/REVISION	DATE
J00964-CA1		18/5/2023

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2 SURVEYED AREAS

No additional sites within Caldecott were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (49%) with improved, poor semi-improved and semi-improved neutral grasslands contributing a further 42%. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Caldecott Parish should include:

- Improving the areas of broadleaved woodland (currently representing 1.96% of the total area within the Parish boundary) to provide woodlands with a diverse age and species structure. Ensuring the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.
- Provide a buffer to the habitats associated with Eye Brook Reservoir.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (large parts of the Parish lie within Amber Risk zones for GCN - see Figure 2 and there are records of this species – see Figure 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Large parts of the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Caldecott Great Crested Newt Risk Zones

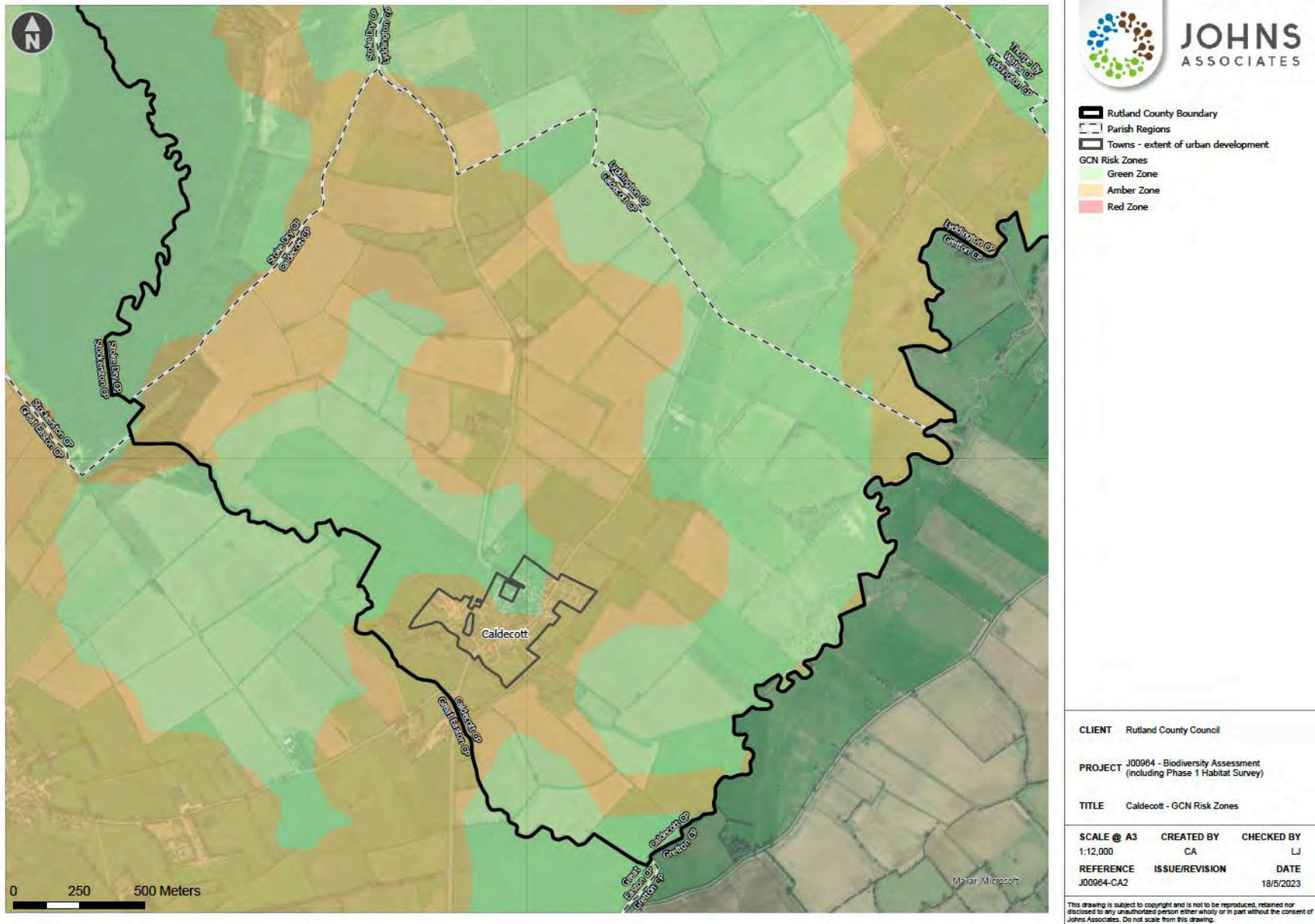
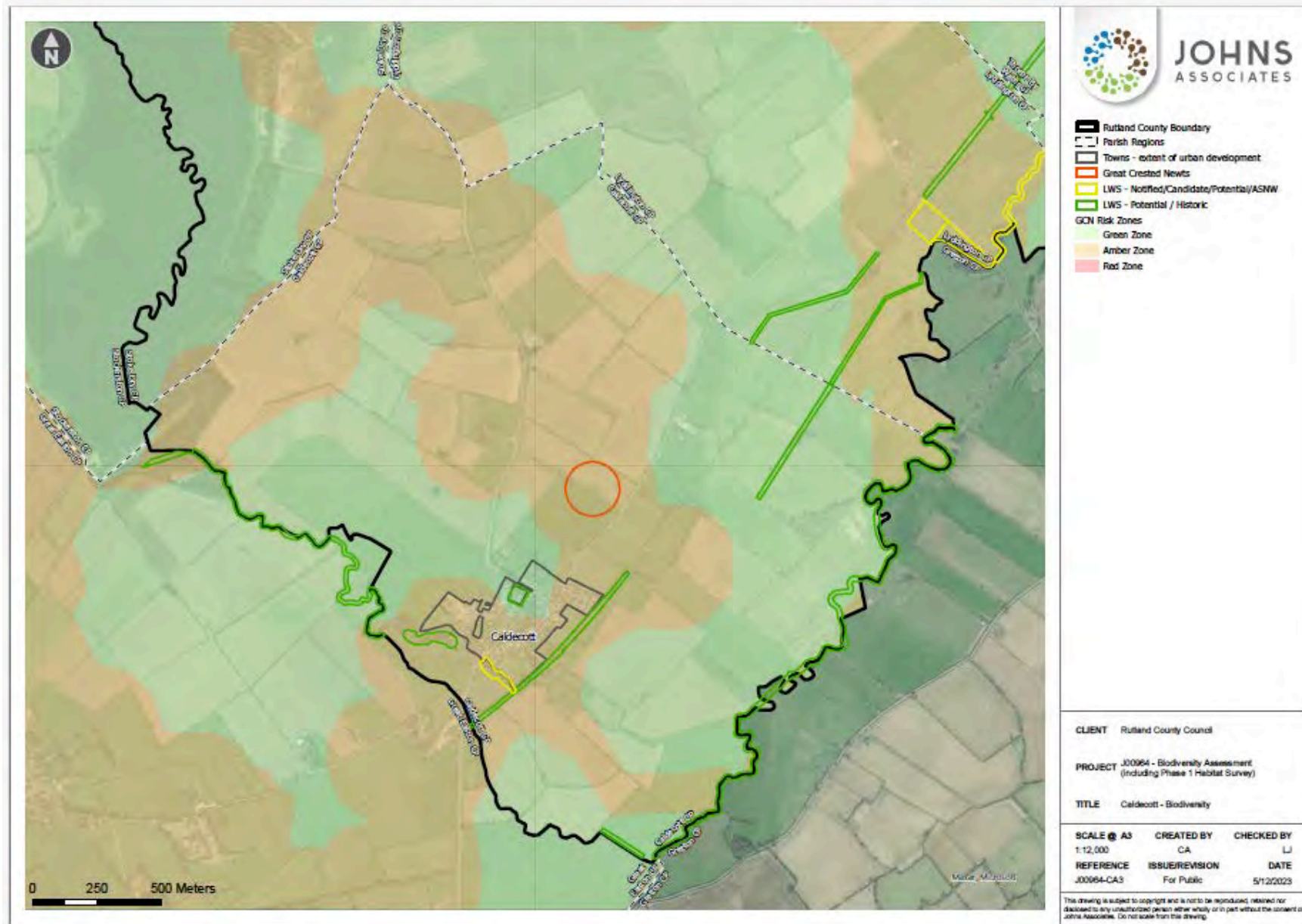


Figure 3: Caldecott Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Manton Parish - Biodiversity Summary Report

1 INTRODUCTION

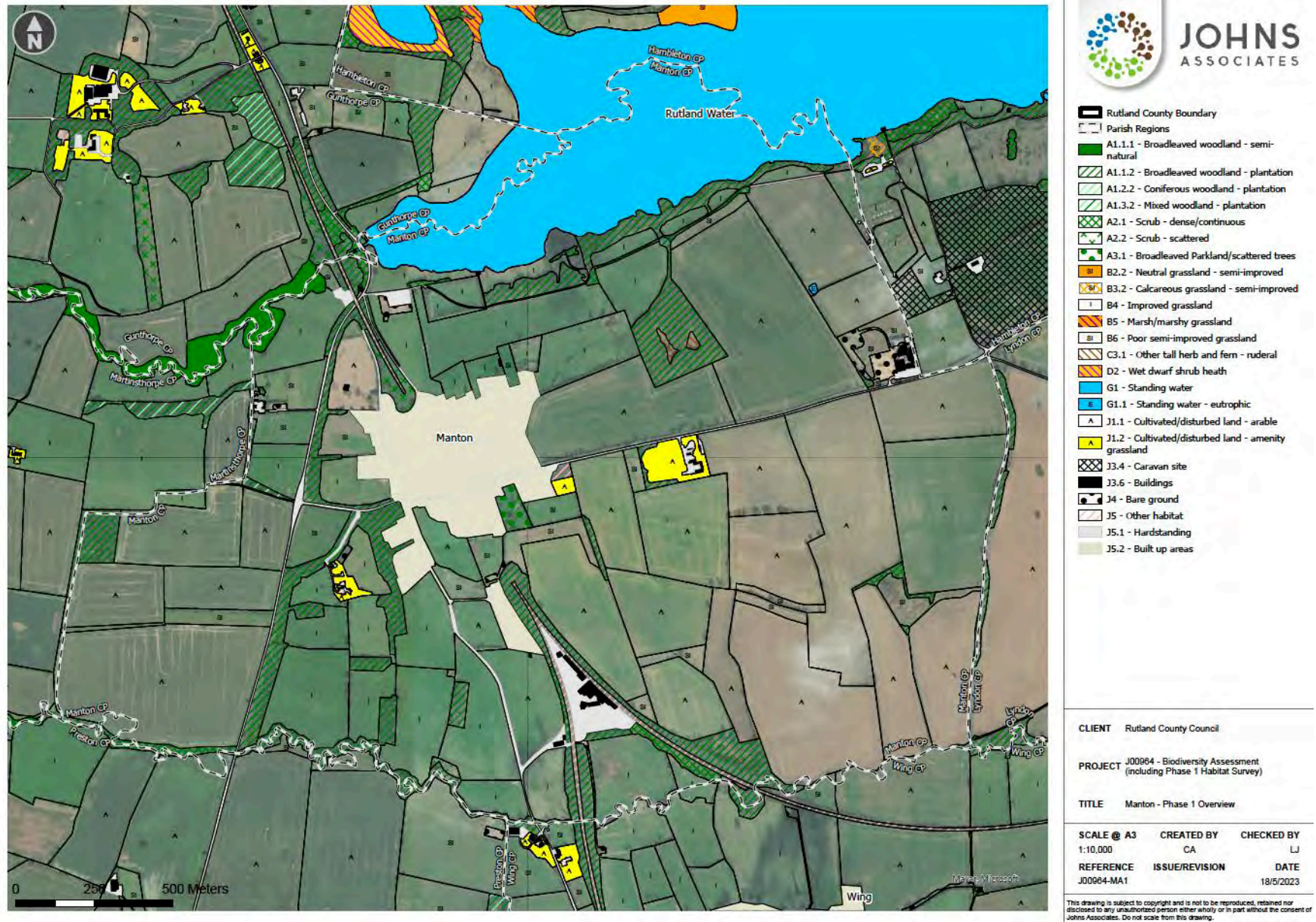
Manton is a small Parish in the west of Rutland, located just east of the A6003 and close to the southwestern shore of Rutland Water. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type.

The four most frequent habitats within the Parish were: arable, improved grassland, eutrophic standing water (part of Rutland Water), and broadleaved plantation woodland. These habitat types account for 84% of the habitats within the Manton parish boundary. Of these habitat types, arable land makes up approximately 50%.

Table 1: Habitats within Manton Parish

Habitat type	Habitat area (Ha)	Percent of Manton Habitat
J1.1 - Cultivated/disturbed land - arable	237.64	49.90%
B4 – Improved grassland	87.69	18.41%
G1.1 – Standing water - eutrophic	36.41	7.65%
A1.1.2 – Broadleaved woodland - plantation	36.22	7.61%
B6 – Poor semi-improved grassland	25.89	5.44%
J5.2 – Built-up areas	24.61	5.17%
J5.1 - Hardstanding	9.04	1.90%
A2.1 – Scrub – dense/ continuous	3.62	0.76%
J1.2 – Cultivated/ disturbed land – amenity grassland	3.34	0.71%
A2.2 – Scrub - scattered	3.15	0.67%
J5 – Other habitat	3.05	0.64%
J1.2 – Cultivated/ disturbed land – amenity grassland	2.93	0.61%
J4 – Bare ground	2.67	0.56%
A2.2 – Scrub - scattered	2.46	0.52%
J3.6 - Buildings	1.30	0.27%
A3.1 – Broadleaved parkland/ scattered trees	1.02	0.22%
A1.1.1 – Broadleaved woodland – semi-natural	0.95	0.20%
C3.1 – Other tall herb and fern - ruderal	0.38	0.08%
A1.3.2 – Mixed woodland - plantation	0.33	0.07%
Grand Total	476.19	100.00%

Figure 1: Overview of Habitats within Manton Parish Boundary



2 SURVEYED AREAS

No additional sites within Manton were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within the Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (50%) with improved grassland, eutrophic standing water (part of Rutland Water), and broadleaved plantation woodland contributing a further 34%. Arable land and improved grassland are both of negligible biodiversity value. The area of Rutland Water that falls within Manton Parish is legally protected as a statutory site of nature conservation importance (SSSI, Special Protection Area and Ramsar Site) and any development that will impact the lake will have to be properly assessed and a Habitats Regulations Assessment may be required.

It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Manton Parish should include:

- Improving the areas of broadleaved woodland (currently representing 7.81% of the total area within the Parish boundary, of which only 0.20% is semi-natural) to provide woodlands with a diverse age and species structure. Ensuring the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.

- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.
- Provide a buffer to the habitats associated with Rutland Water.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (parts of the Parish lie within Amber Risk zones for GCN - see Figure 2 and there are records of this species – see Figure 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole (known to be present along watercourses within the Parish – see Figure 3) and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Parts of the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 shows part of the parish (particularly associated within the Manton settlement area) to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a small number of non-statutory historic/ notified/ candidate Local Wildlife Sites within/along the parish boundary, particularly in the south. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Manton Great Crested Newt Risk Zones

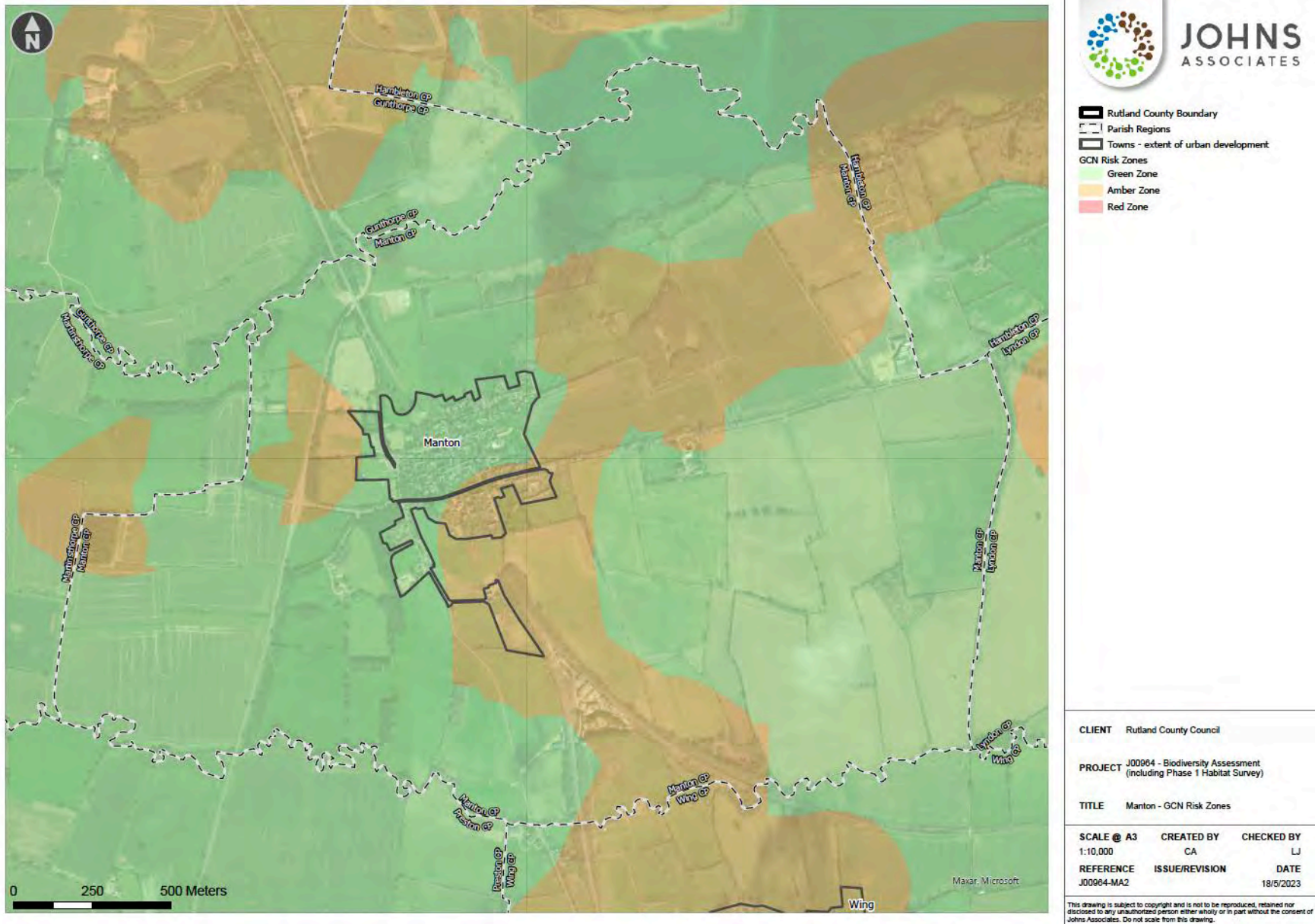
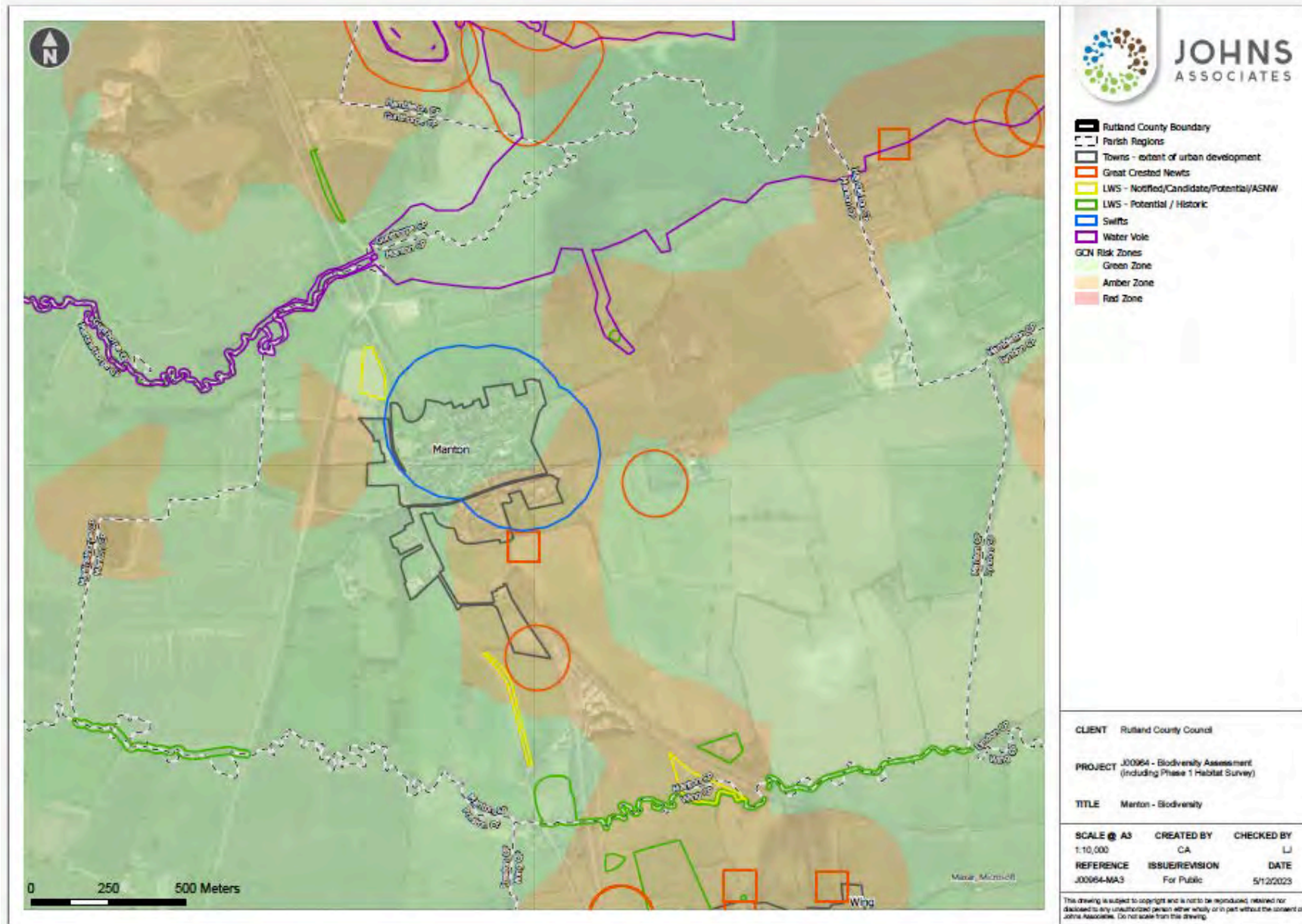


Figure 3: Manton Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Lyddington Parish - Biodiversity Summary Report

1 INTRODUCTION

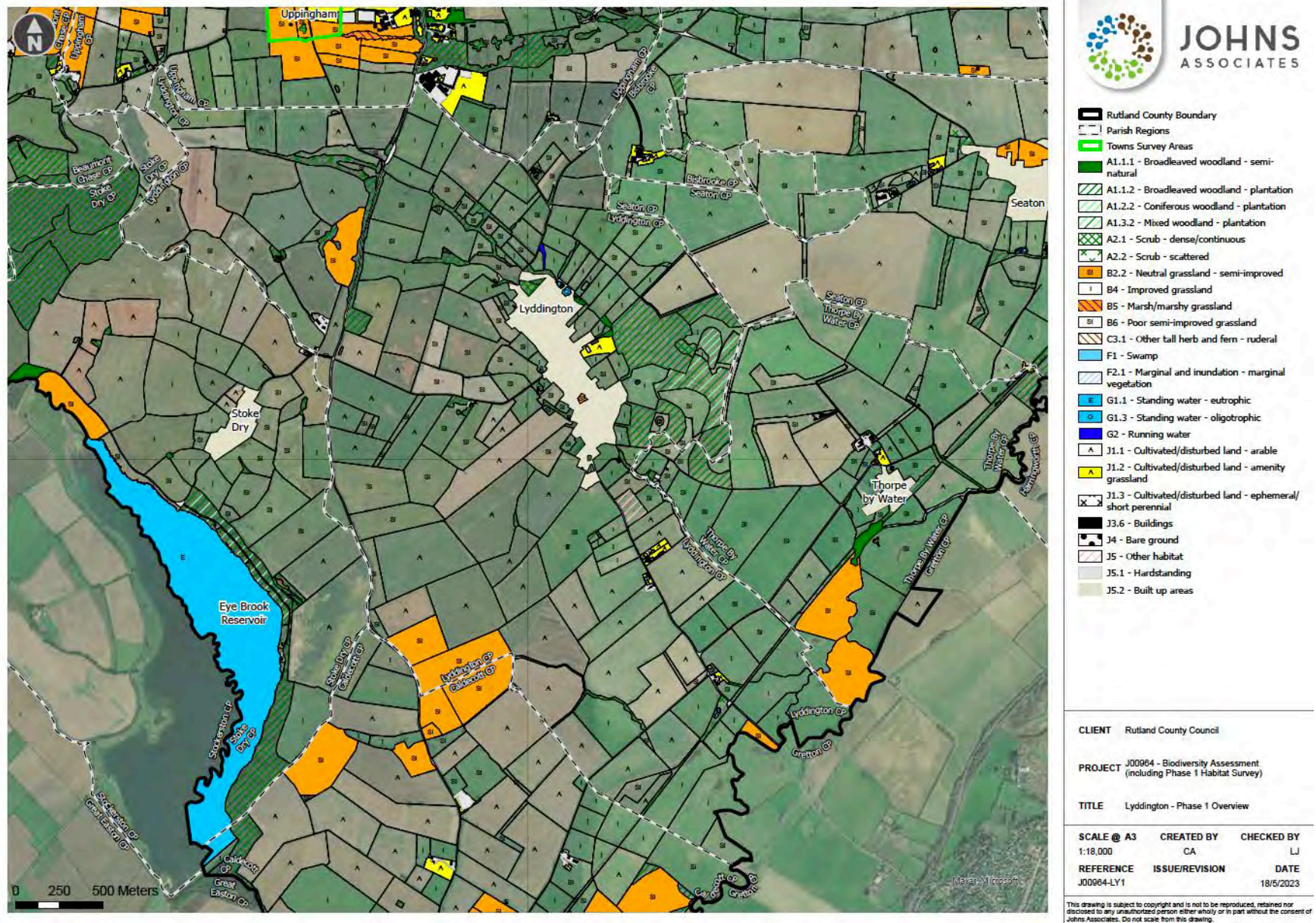
Lyddington is a Parish in the south of Rutland, located between the parish of Caldecott to the south and Uppingham town to the north. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type.

The three most frequent habitats within the Parish were: arable, poor semi-improved grassland, and improved grassland. These habitat types account for 85% of the habitats within the Parish boundary. Of these habitat types, arable land makes up approximately 46%.

Table 1: Habitats within Lyddington Parish

Habitat type	Habitat area (Ha)	Percent of Lyddington Habitat
J1.1 - Cultivated/disturbed land - arable	398.92	46.34%
B6 – Poor semi-improved grassland	179.82	20.89%
B4 – Improved grassland	153.14	17.79%
A1.1.2 – Broadleaved woodland - plantation	41.86	4.86%
J5.2 – Built-up areas	29.46	3.42%
B2.2 – Neutral grassland – semi-improved	22.58	2.62%
A1.3.2 – Mixed woodland - plantation	8.83	1.03%
J5.1 - Hardstanding	7.94	0.92%
A2.2 – Scrub - scattered	6.11	0.71%
J1.2 – Cultivated/ disturbed land – amenity grassland	2.99	0.35%
J5 – Other habitat	2.32	0.27%
A1.2.2 – Coniferous woodland - plantation	2.03	0.24%
A2.1 – Scrub – dense/continuous	1.77	0.21%
J3.6 - Buildings	0.66	0.08%
A1.1.1 – Broadleaved woodland – semi-natural	0.63	0.07%
J4 – Bare ground	0.50	0.06%
C3.1 – Other tall herb and fern - ruderal	0.46	0.05%
G1.3 – Standing water - oligotrophic	0.27	0.03%
G2 – Running water	0.23	0.03%
G1.1 – Standing water - eutrophic	0.19	0.02%
F2.1 – Marginal and inundation – marginal vegetation	0.14	0.02%
F1 - Swamp	0.03	0.00%
Grand Total	860.86	100.00%

Figure 1: Overview of Habitats within Lyddington Parish Boundary



2 SURVEYED AREAS

No additional sites within Lyddington were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within Lyddington Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Overall, the Parish is dominated by arable land, (46%) with poor semi-improved and improved grassland representing a further 39%. Arable land and these types of grassland are typically of negligible biodiversity value. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Lyddington Parish should include:

- Improving the areas of woodland (currently representing 6.2% of the total area within the Parish boundary, of which only 0.07% is semi-natural broadleaved woodland) to provide woodlands with a diverse age and species structure. Ensuring the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (parts of the Parish lie within Amber Risk zones for GCN - see Figure 2 and there are several records of this species – see Figure 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

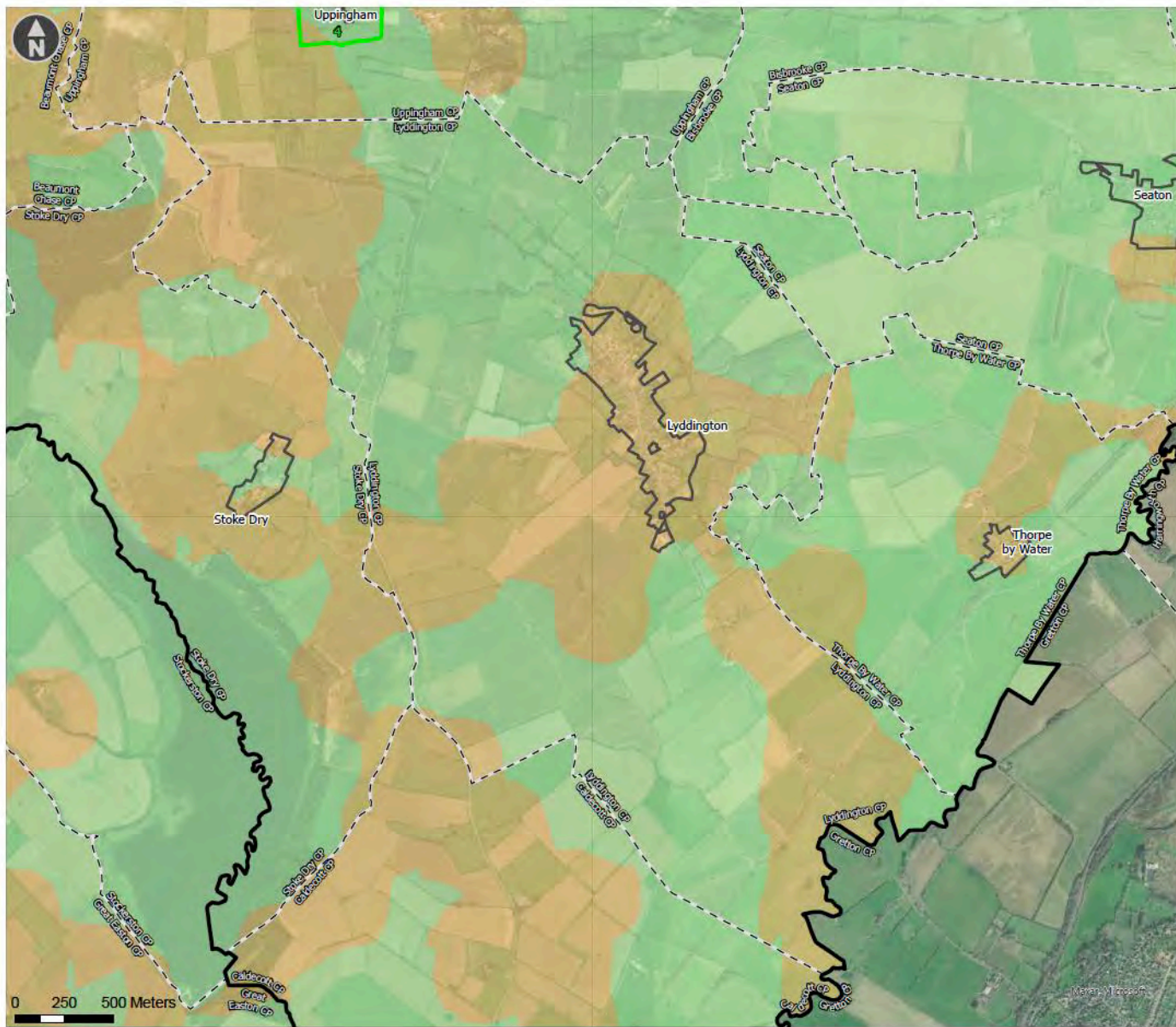
- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Parts of the Parish fall within Amber risk zones for GCN (see Figure 2) and records of this species were identified as part of this study. Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 shows part of the parish (particularly associated within the Lyddington settlement area) to be within an area known to support swifts, a Red Listed Bird of Conservation Concern. New residential development(s) within this area should incorporate swift bricks or suitable nest boxes to provide additional nesting habitat for this declining species.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Lyddington Great Crested Newt Risk Zones

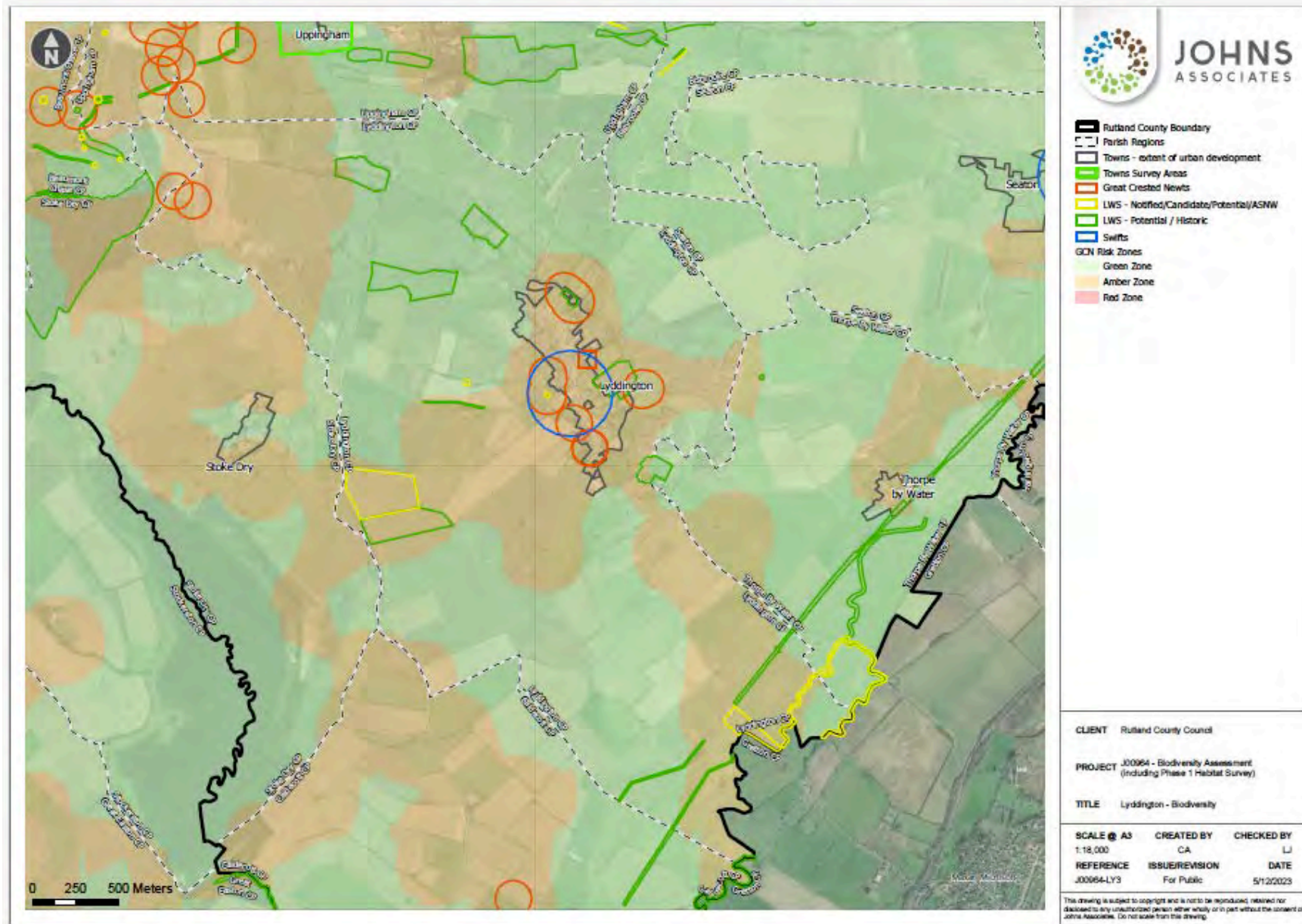


- Rutland County Boundary
- Parish Regions
- Towns - extent of urban development
- Towns Survey Areas
- GCN Risk Zones**
- Green Zone
- Amber Zone
- Red Zone

CLIENT	Rutland County Council		
PROJECT	J00964 - Biodiversity Assessment (including Phase 1 Habitat Survey)		
TITLE	Lyddington - GCN Risk Zones		
SCALE @ A3	CREATED BY	CHECKED BY	
1:18,000	CA	LJ	
REFERENCE	ISSUE/REVISION	DATE	
J00964-LY2		18/5/2023	

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Figure 3: Lyddington Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Belton-in-Rutland Parish - Biodiversity Summary Report

1 INTRODUCTION

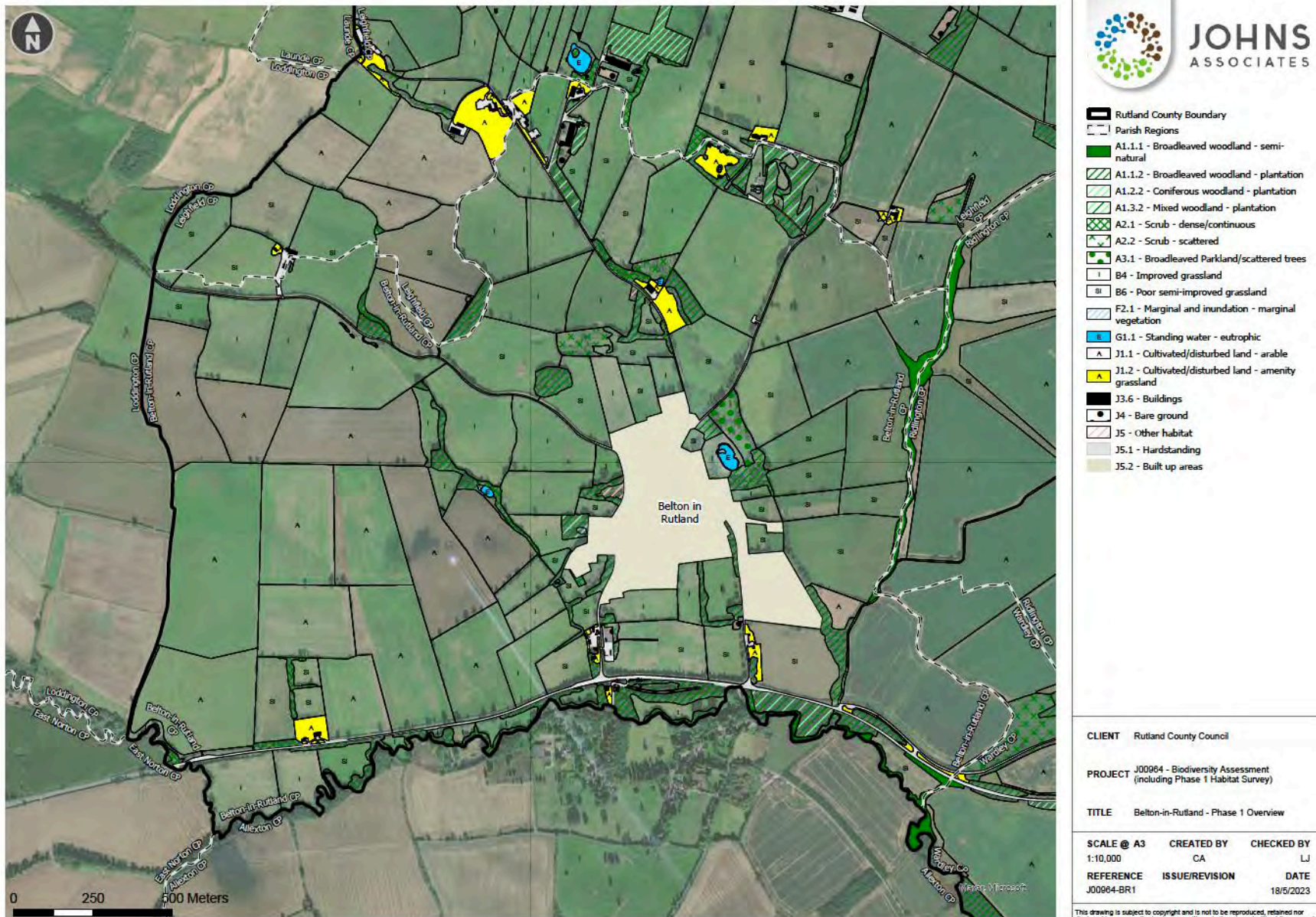
Belton-in-Rutland is the western-most Parish in Rutland. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which shows the percentage cover of each habitat type.

The three most frequent habitats within the Parish were: arable, improved grassland, and poor semi-improved grassland. These habitat types account for 83% of the habitats within the Belton-in-Rutland parish boundary. Of these habitat types, arable land makes up approximately 32%.

Table 1: Habitats within Belton-in-Rutland Parish

Habitat type	Habitat area (Ha)	Percent of Belton-in-Rutland Habitat
J1.1 - Cultivated/disturbed land - arable	134.33	32.49%
B4 – Improved grassland	105.51	25.52%
B6 – Poor semi-improved grassland	103.57	25.05%
J5.2 – Built-up areas	23.41	5.66%
A1.1.2 – Broadleaved woodland - plantation	17.49	4.23%
J5.1 - Hardstanding	6.27	1.52%
A1.3.2 – Mixed woodland - plantation	5.18	1.25%
J1.2 – Cultivated/ disturbed land – amenity grassland	3.99	0.96%
A2.2 – Scrub - scattered	3.58	0.87%
A2.1 – Scrub – dense/continuous	2.70	0.65%
A1.1.1 – Broadleaved woodland – semi-natural	2.37	0.57%
J4 – Bare ground	1.51	0.36%
A3.1 – Broadleaved parkland/ scattered trees	1.49	0.36%
J3.6 - Buildings	0.64	0.15%
G1.1 – Standing water - eutrophic	0.49	0.12%
A1.2.2 – Coniferous woodland - plantation	0.38	0.09%
J5 – Other habitat	0.36	0.09%
F2.1 – Marginal and inundation – marginal vegetation	0.21	0.05%
Grand Total	413.46	100.00%

Figure 1: Overview of Habitats within Belton-in-Rutland Parish Boundary



2 SURVEYED AREAS

No additional sites within Belton-in-Rutland were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within Belton-in-Rutland Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Arable land is the habitat type covering the largest area within Belton-in-Rutland Parish, although at 32%, this is a relatively small proportion when compared to other Parishes within the County. Improved and poor semi-improved grassland habitat types account for a further 50.57% of the total area within the Parish boundary. Arable land and these types of grassland are typically of negligible biodiversity value. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Belton-in-Rutland Parish should include:

- Improving the areas of woodland (currently representing 6.05% of the total area within the Parish boundary, of which only 0.57% is semi-natural broadleaved woodland) to provide woodlands with a diverse age and species structure. Ensuring the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (parts of the Parish lie within Amber Risk zones for GCN - see Figure 2);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Parts of the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a small number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish, particularly along the southern boundary. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Belton-in-Rutland Great Crested Newt Risk Zones

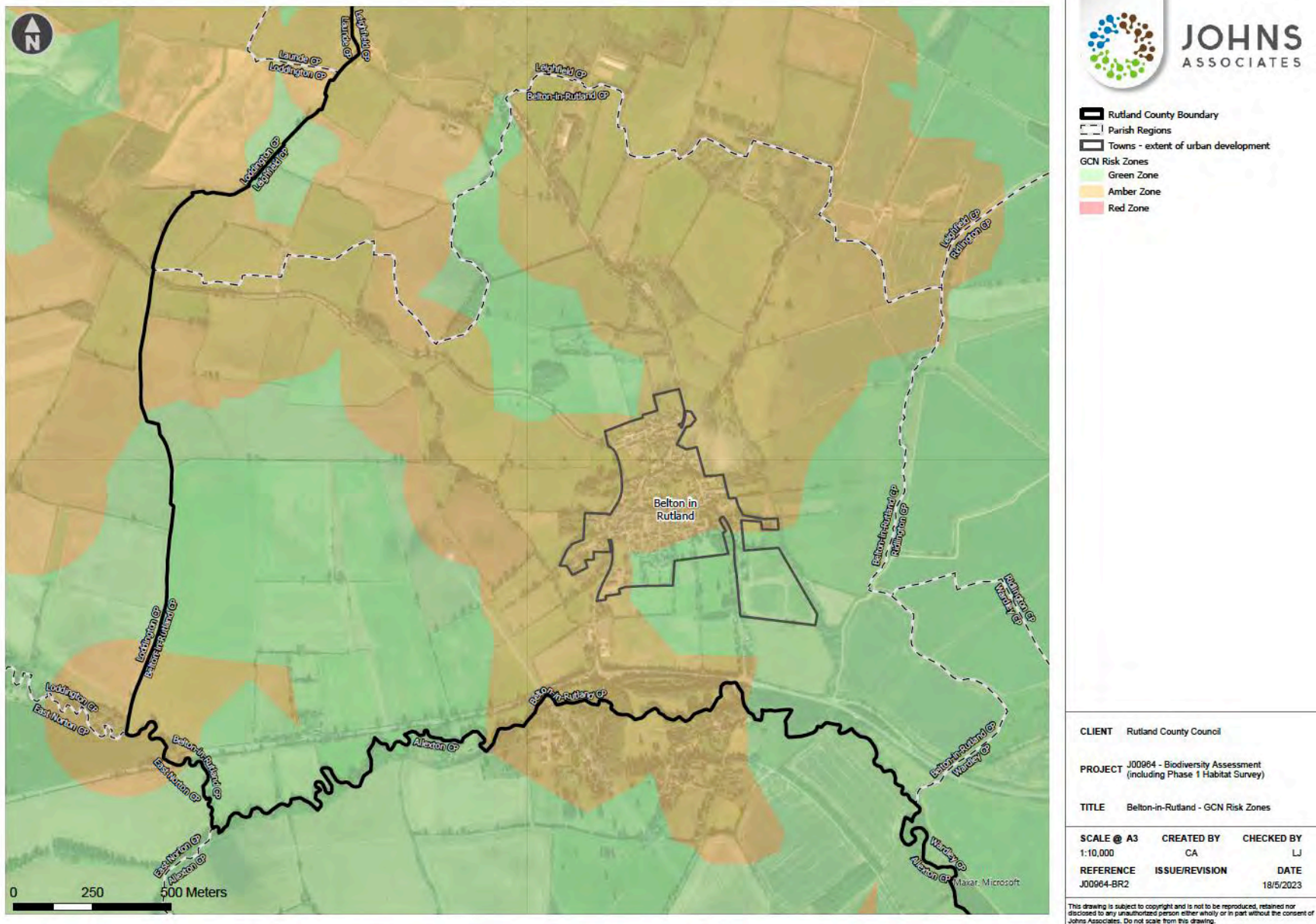
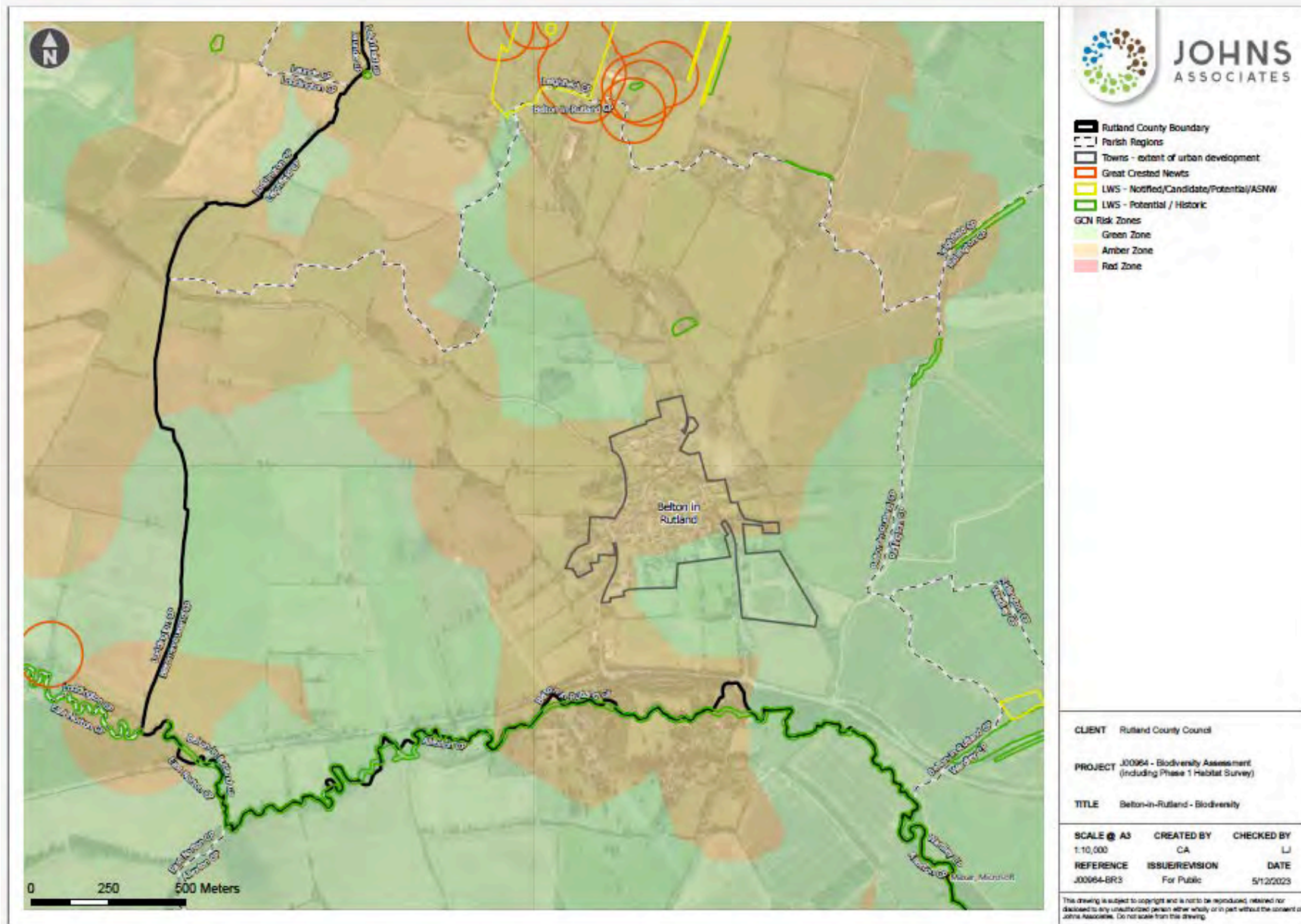


Figure 3: Belton-in-Rutland Biodiversity Map



RUTLAND COUNTY COUNCIL

J00964

Braunston-in-Rutland Parish - Biodiversity Summary

1 INTRODUCTION

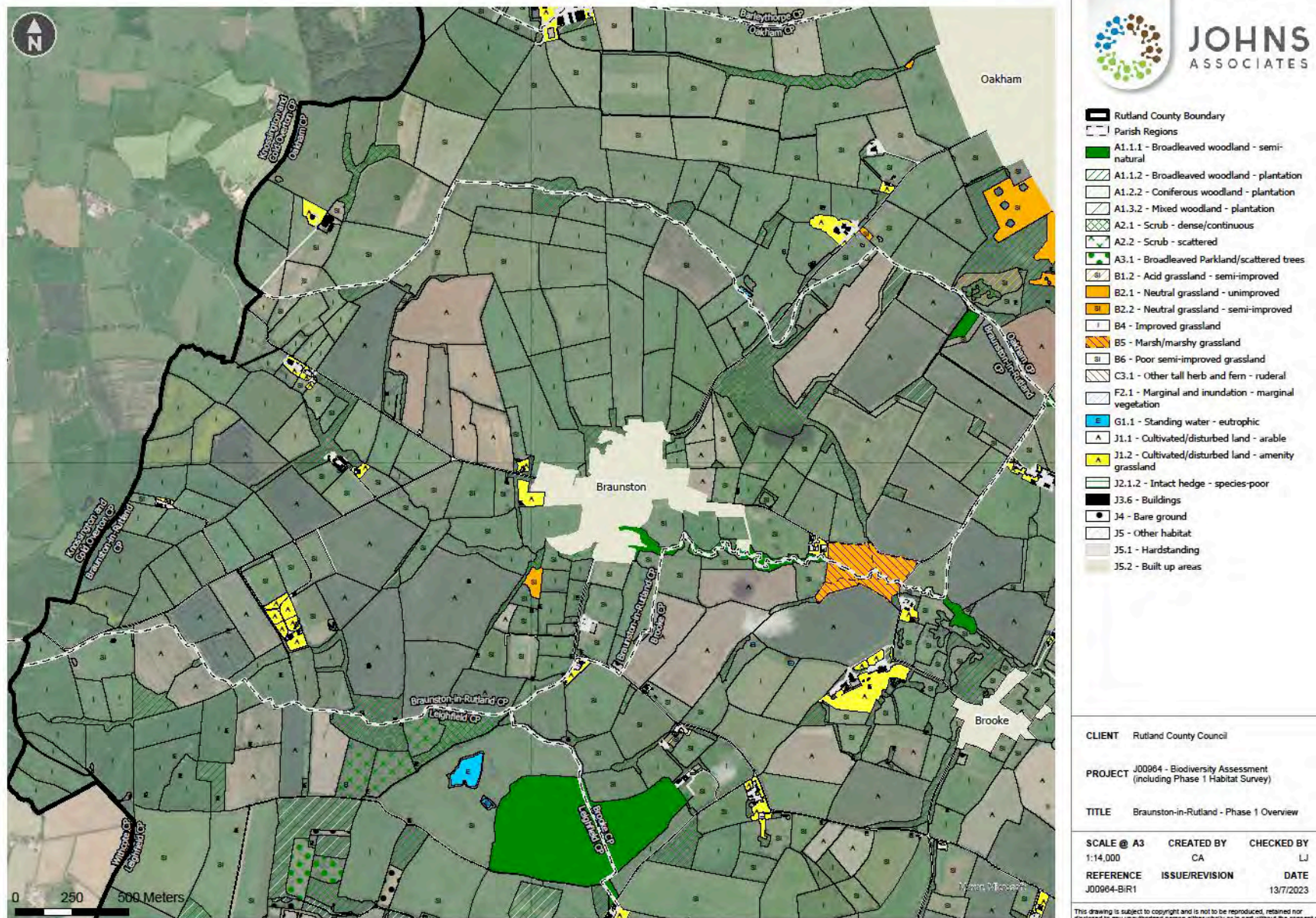
Braunston-in-Rutland parish is located at the western extent of Rutland County. Figure 1 shows the habitat types identified within the Parish boundary. A breakdown of the habitat areas is given in Table 1, which also shows the percentage cover of each habitat type.

The three most frequent habitats within the Parish were: improved grassland, arable and poor semi-improved grassland. These habitat types account for 86.5% of the habitats within the Braunston-in-Rutland parish boundary. Of these habitat types, arable land makes up approximately 33%.

Table 1: Habitats within Braunston-in-Rutland Parish

Habitat type	Habitat area (Ha)	Percent of Braunston-in-Rutland Habitat
B4 – Improved grassland	245.27	38.42
J1.1 - Cultivated/disturbed land - arable	208.42	32.65
B6 – Poor semi-improved grassland	98.62	15.45
A1.1.2 – Broadleaved woodland - plantation	32.86	5.15
J5.2 – Built-up areas	24.45	3.83
J5.1 - Hardstanding	6.56	1.03
J1.2 – Cultivated/ disturbed land – amenity grassland	4.65	0.73
B5 – Marsh/ marshy grassland	3.78	0.59
A1.3.2 – Mixed woodland - plantation	3.44	0.54
A1.1.1 – Broadleaved woodland – semi-natural	3.36	0.53
A2.2 – Scrub - scattered	1.58	0.25
A2.1 – Scrub – dense/continuous	1.37	0.21
J4 – Bare ground	1.34	0.21
B2.2 – Neutral grassland – semi-improved	0.79	0.12
J3.6 - Buildings	0.74	0.12
J5 – Other habitat	0.57	0.09
F2.1 – Marginal and inundation – marginal vegetation	0.27	0.04
G1.1 – Standing water - eutrophic	0.17	0.03
J2.1.2 – Intact hedge – species poor	0.16	0.02
Grand Total	638.39	100.00%

Figure 1: Overview of Habitats within Braunston-in-Rutland Parish Boundary



2 SURVEYED AREAS

No additional sites within Braunston-in-Rutland were surveyed as part of the current study, therefore a general Parish-wide commentary is provided below. Figure 2 shows the GCN Risk Zones within Braunston-in-Rutland Parish, whilst Figure 3 gives the overall biodiversity map.

2.1 GENERAL CONSTRAINTS/ OPPORTUNITIES

Improved grassland is the habitat type covering the largest area within Braunston-in-Rutland Parish (38%), with arable and poor semi-improved grassland habitat types accounting for a further 48.1% of the total area within the Parish boundary. Arable land and these types of grassland are typically of negligible biodiversity value. It is likely that the arable fields are farmed to the field boundaries, with little or no margins comprising longer vegetation, which can support a more diverse number of plants (including rare arable weed species) and provide habitat for wildlife including small mammals, invertebrates, amphibians and reptiles, which in turn will provide a food source for bats, birds (including birds of prey such as owls) and larger mammals (e.g. foxes).

The overall aims for future development within Braunston-in-Rutland Parish should include:

- Improving the areas of woodland (currently representing 6.22% of the total area within the Parish boundary, of which only 0.53% is semi-natural broadleaved woodland) to provide woodlands with a diverse age and species structure, and ensuring the development of a good ground flora/ shrub layer, thereby providing valuable habitat to a range of wildlife. Look to increase the percentage of woodland within the Parish where possible. Protect woodland edge habitats during the construction and operational phases of development by:
 - Protecting root zones from soil compaction and accidental damage to trunks and limbs from plant and machinery by installing suitable fencing in accordance with BS5837:2012.
 - Maintaining dark corridors along the boundaries of new developments to preserve valuable commuting corridors for nocturnal species such as bats. Lighting should be no more than 0.5 lux along site boundaries, with no direct lighting of trees/buildings with suitable bat roost features and light spill onto these features should be minimised.
- Improving the green-blue infrastructure within the parish and beyond, by improving existing hedgerows through additional planting with native species and managing these linear habitats to provide dense structures suitable for a range of wildlife and strong links into the wider local area. Where field/ development boundaries are not demarcated by hedgerows, these should be planted using a good mix of native species to provide valuable green corridors linking larger habitat areas within the parish and the wider County beyond.
- Work with landowners and other agencies (for example, the local Wildlife Trust and FWAG) to ensure valuable field margins are developed, comprising longer areas of vegetation which contain a greater species diversity of plants, and which provide good vegetation cover for a range of wildlife.
- Require developers to provide buffer areas of semi-natural habitats around developments to maintain dark corridors for nocturnal species such as bats and to build a strong network of green corridors around the County linking larger habitat areas to strengthen ecosystems.
- Prioritising development within areas of low ecological value e.g. arable and grasslands of low ecological value. Some brownfield sites may also be suitable, although note that these can be very ecologically diverse so will need proper assessment.
- Protecting watercourses by prioritising areas for development away from main rivers and significant streams/ ditch complexes. Buffers should be provided alongside watercourses to maximise their ecological value.

2.2 SURVEY RECOMMENDATIONS

All planning applications should be accompanied by a suitable ecological report, produced following an initial site walkover survey which has included:

- An Extended Phase 1 or UKHab survey of all on-site habitats, with condition assessments completed where necessary and an assessment of the suitability of the habitats present to support legally protected and/or notable species;
- Habitat Suitability Index (HSI) assessment of any ponds/ ditches within 250m of the development site for suitability to support breeding GCN (a significant area within the Parish lies within an Amber Risk zone for GCN - see Figure 2, and records of this species have been highlighted, particularly in the south of the Parish – see Figure 3);
- An assessment of buildings/ trees within the red-line planning application boundary for suitability to support bat roosts;
- Surveys of any ditches/ watercourses for signs of water vole and otter;
- Assessment of the site to support breeding birds, particularly Red-Listed, declining species such as swift and ground-nesting farmland species such as skylark.

The report should also include a desk study, plus the following sections:

- Recommendations for further (Phase 2) surveys, such as bat emergence/ re-entry, reptiles, GCN, breeding bird, invertebrate etc. (A reminder that under the NERC Act 2006 and the NPPF, these Phase 2 surveys cannot be conditioned as the Planning Authority must have all the necessary information available to inform its decision. There is case law to support this position).
- An assessment of the likely effects of the proposed development on the ecological receptors identified through the site survey and desk study.
- Details of mitigation measures and enhancement opportunities, where possible.
- From November 2023, most developments must also provide a BNG Assessment and Biodiversity Gain Plan to meet legal and planning policy requirements.

Parts of the Parish fall within Amber risk zones for GCN (see Figure 2). Surveys of any ponds/ ditches within 250m of a proposed development site should be undertaken to inform any planning applications within these areas.

Figure 3 also shows there to be a number of non-statutory historic/ notified/ candidate Local Wildlife Sites within the parish. These should be surveyed as necessary as part of any development proposals (to include condition assessments), and the potential impacts on their designated features properly assessed. Details of appropriate avoidance/ mitigation/ compensation/ enhancement measures should be included as part of planning submissions to ensure these LWS are protected, with green/blue infrastructure strengthened to ensure links between these sites and other areas of habitat in the wider local area are developed and/or maintained.

Figure 2: Braunston-in-Rutland Great Crested Newt Risk Zones

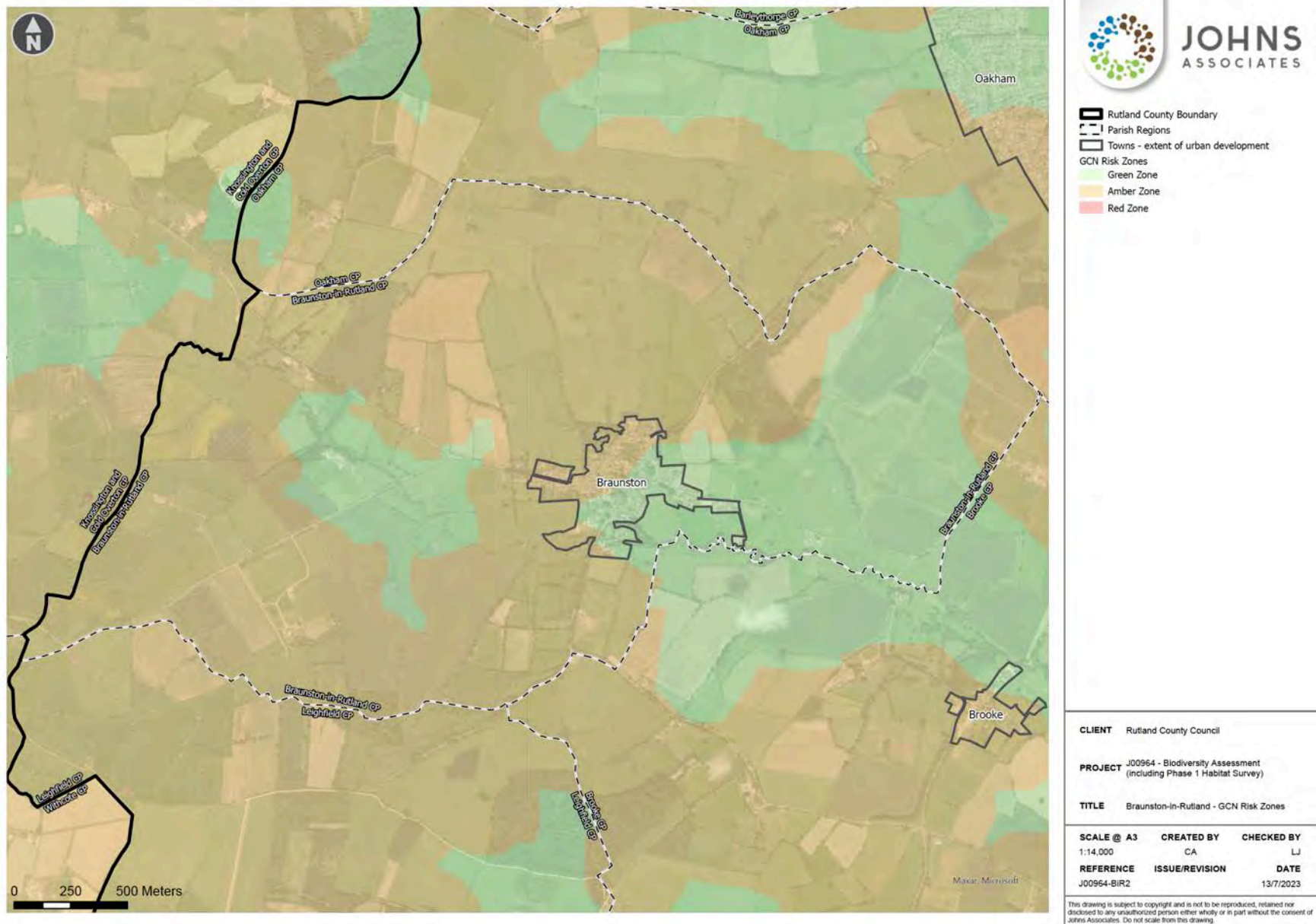
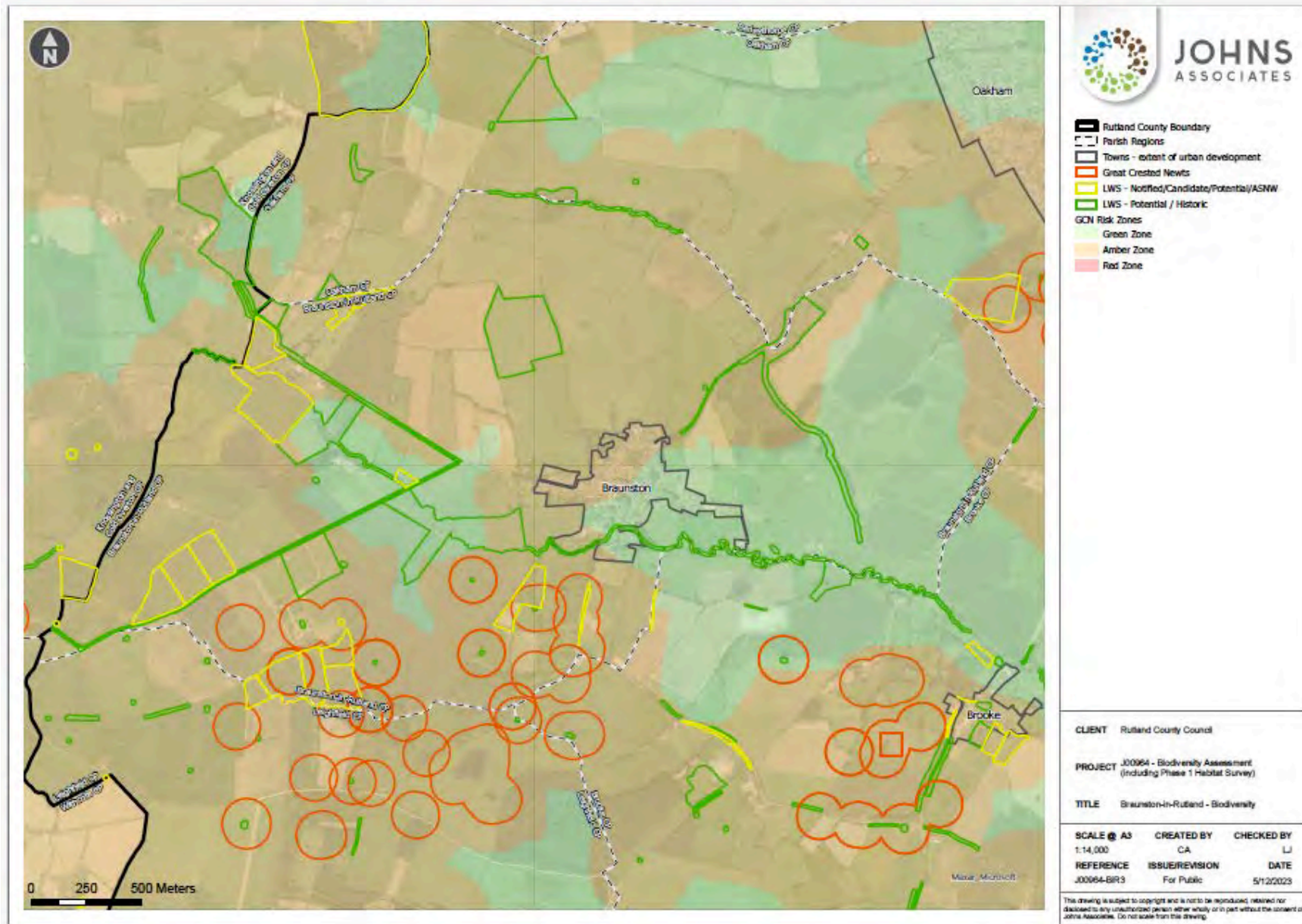


Figure 3: Braunston-in-Rutland Biodiversity Map



APPENDIX C – ST GEORGE’S BARRACKS: TECHNICAL NOTE

RUTLAND COUNTY COUNCIL

J00964

St. George's Barracks: Technical Note

1 INTRODUCTION

Johns Associates Ltd was asked by Rutland County Council to undertake a Phase 1 Habitat Survey of St. George's Barracks as part of the wider project that Johns Associates are carrying out in support of the new Rutland Local Plan. Johns Associates were asked to survey St Georges Barracks, an active MOD base in Edith Weston, Rutland. The Site has a central grid reference SK 94315 04682, and the survey focused on North Luffenham Airfield. The location of the Site is shown in Figure 1.

The airfield has been highlighted as a potential Local Wildlife Site (LWS) due to the large area of moderately species-rich calcareous/mesotrophic grassland it supports.

1.1 SUMMARY OF PROPOSALS

The government have committed to reducing the size of the Ministry of Defence (MOD) estate and as a result St. George's Barracks has become surplus to requirements. The site is currently being considered for redevelopment.

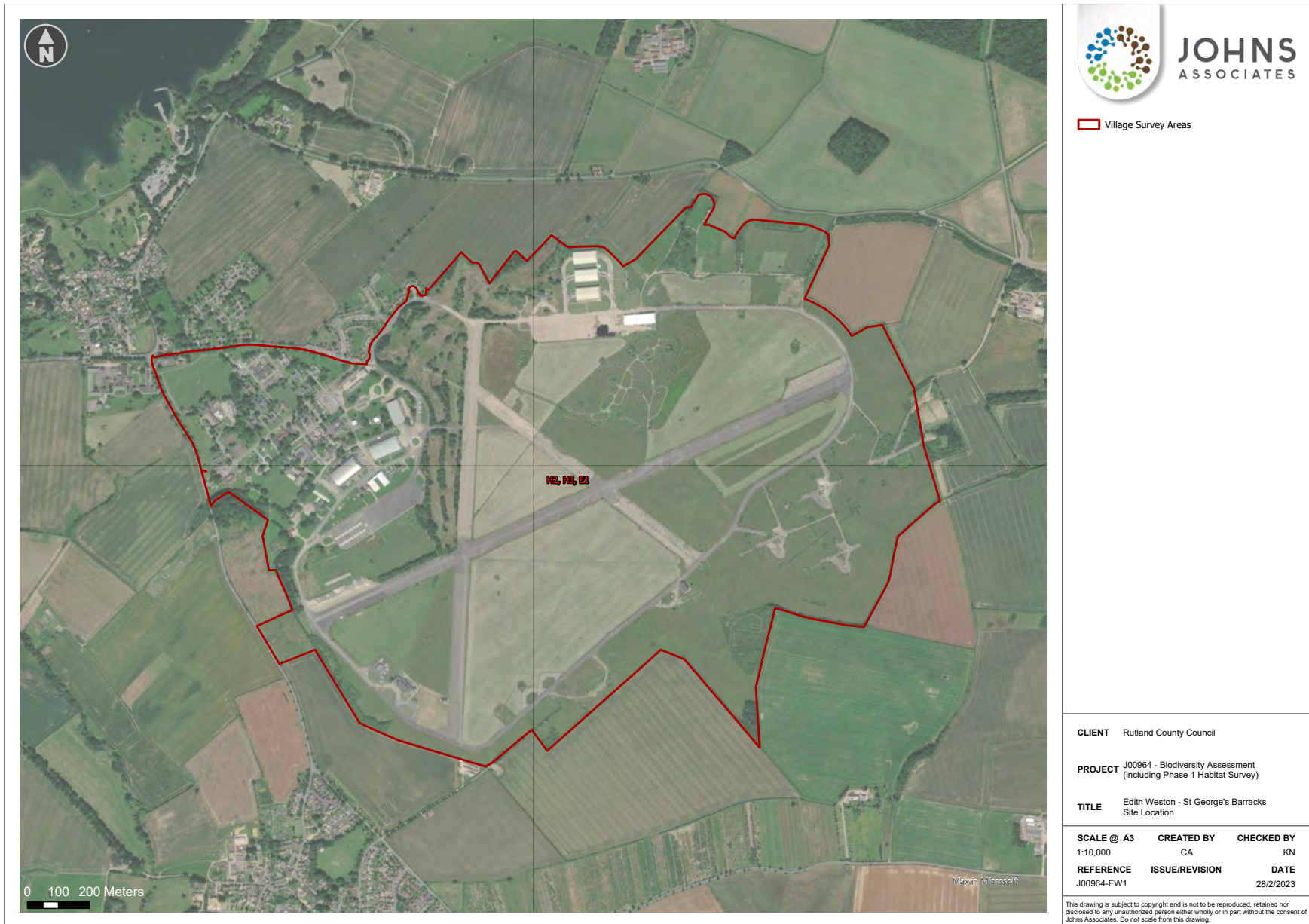
This Site has previously been considered for redevelopment for residential properties and Rutland County Council wanted an updated ecological assessment of the Site to ensure the habitats within the Site were sufficiently surveyed and not undervalued.

1.2 PURPOSE OF THIS TECHNICAL NOTE

The purpose of this Technical Note is to provide details of the methodology and results of a Phase 1 Habitat Survey of the survey area undertaken by Johns Associates to inform the updated Local Plan with regard to any future development proposals for St. George's Barracks. This report makes an assessment of the value of the habitats found within the Site at a county and landscape level, based on the professional judgement of a botanical specialist.

This technical note also considers previous ecological surveys carried out at the site by Derek Finnie Associates between 2018 – 2019.

Figure 1: Site Location



2 METHODOLOGY

A Phase 1 Habitat Survey of St. George's Barracks was undertaken on 25th October 2022 by experienced ecologist and botanical specialist Katherine Newbert BSc (Hons) MSc, Vice County Recorder for vascular plants in Wiltshire VC 7 & 8 and Tessa Pepler BSc (Hons) MSc MCIEEM, both from Johns Associates Ltd. The weather was sunny and bright with good visibility. This survey was completed in accordance with Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS 42020:2013 Biodiversity - Code of practice for planning and development (British Standards Institute, 2013) and followed the published JNCC methodology.

2.1 HABITATS

The on-Site habitats were classified following the standardized system for classifying and mapping British Habitats using the Joint Nature Conservancy Council (Joint Nature Conservancy Council, 2010), Handbook for Phase 1 Habitat survey – a technique for environmental audit. An annotated habitat map together with descriptions of the recorded habitat types was produced, which was subsequently digitized using a geographical information system (ArcGIS). The survey also included identification of any non-native invasive plant species. Flora taxonomy follows the nomenclature detailed in New Flora of the British Isles (4th Edition) (Stace C. , 2019). Flora, where appropriate, are given a descriptive score of abundance using the DAFOR scale, as follows:

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional
- R – Rare
- L – Locally (to be used as a prefix for any of the above)
- V – Very (to be used as a prefix for any of the above)

2.1.1 Ecological Context Assessment

An assessment of the ecological context of the Site was undertaken in terms of the habitats present in relation to the wider local area (particularly regarding connectivity to other ecological valuable areas of habitat), as well as the suitability of on-site habitats to support legally protected or notable species. The ecological context of a site can significantly influence the likelihood of it supporting protected species. For example, a site which has low habitat suitability is less likely to be used if it is located adjacent to an area of high suitability.

2.1.2 Survey Constraints

Due to St. George's Barracks being an active MOD site, the surveyors had to arrange access in advance and were escorted at all times. During the survey, military dog training exercises were on-going, which meant that certain areas of the site were not fully surveyed as they were deemed to be unsafe. The military base and adjacent golf course were not surveyed on the ground at this time and these areas have been mapped using aerial photography and professional judgement.

The Phase 1 habitat survey was undertaken on the 25th October, which falls just outside the JNCC's optimum field survey season for the south of England, which is considered to be from late March to Mid-October, wherein an accurate picture of the vegetation communities present can be gained. As such, many annual species and non-dominant grass

and ground flora species may have been missed/ overlooked at this time given that the site was also subject to a recent annual hay cut, which had removed vegetation structure and composition from the sward. However, the surveyors are competent botanists, and many species were identified using vegetative characteristics therefore habitat classifications are considered to be an accurate representation of those present at the site.

Due to the time of year and the recent hay cut it is likely that some areas of calcareous grassland mapped as semi-improved could be unimproved calcareous grassland and may therefore have been undervalued. Update surveys by a competent botanical surveyor are recommended during the optimal JNCC survey period for grasslands (June and July).

3 RESULTS

3.1 PREVIOUS SURVEYS

Derek Finnie Associates previously undertook a number of surveys across the Site, the results of which are briefly described below.

3.1.1 Habitat Surveys

A Phase 1 Habitat Survey of the airfield was previously completed on the 7th and 8th of March 2018 and an NVC survey was completed in June 2019.

The Site has been previously mapped as semi-improved neutral grassland for the whole airfield although it is mentioned in the 2018 Ecological Appraisal that the Site does support some calcareous grassland. Unfortunately, the Phase 1 map produced following the 2018 survey does not show where these areas are within the Site boundary.

A further NVC survey was undertaken on the 12th and 13th June 2019 by Derek Finnie Associates to assess the quality of the grassland habitats within the Site. However, on review of the report it is not considered that the NVC methodology was followed.

Instead of assessing homogenous stands of vegetation on Site and placing quadrats within these areas to produce floristic tables to assess vegetation communities, the site was instead split by sub-dividing the airfield into five sections using the airfield runways as arbitrary delineating features. Furthermore, only 2 quadrats were taken in each area, the minimum required for an NVC survey assessment is 3-5 quadrats.

The results of the NVC survey were not mapped to show where the delineations of the NVC communities were located within the airfield.

The conclusion of the NVC survey suggested that majority of the airfield was *"an NVC classification of MG5 Cynosurus cristatus – Centaurea nigra or MG1 Arrhenatherum elatius, which are mesotrophic (neutral) grassland types. It should be noted that NVC is a classification system and not an evaluation tool.*

Towards the south of the airfield, the calcareous grassland community CG4 Brachypodium pinnatum is identified as the most likely NVC community. Although, when the characteristic species of the community are reviewed, the grassland within the airfield tends more towards CG3 Bromus erectus."

It appears from the survey results that key species were missed in the sward such as upright brome and tor grass, which were found frequently during the Johns Associates survey in October 2022. This may be due to poor placement of quadrats but no mention of these species being present outside of these quadrats were made; these species are key species needed to place grasslands into the lowland calcareous grassland NVC communities which is shown from only a 35% fit into a CG4 community and a 33% fit into a CG3 community.

The conclusion that the majority of the airfield is an MG5 community is considered to be incorrect due to overlooking key calcareous indicator species within the sward.

3.1.2 Great Crested Newts

Great Crested Newt eDNA surveys were carried out of two ponds in the north of the site in June 2019. Results were positive for both, and these waterbodies should therefore be considered to be great crested newt breeding ponds.

3.1.3 Wintering Birds

A winter bird survey was carried out between September 2018 and March 2019.

The conclusions of the survey solely focused on the effects of Site development on birds associated with Rutland Water SPA. The assessment concluded that *“From the data obtained, it would appear that none of the qualifying species for the SPA designation utilise the St. George’s site. Hence the re-development of the Site would not lead to a likely negative significant effect upon the SPA or its qualifying features through this pathway.”*

However, the survey did record good numbers of other amber and red listed species. Overall, the wintering bird assemblage within the Site showed moderate species richness, with moderate to good number of some species. Species associated with open grassland areas, such as skylark and meadow pipit, were recorded in good numbers, with maximum counts of 16 and 21 respectively.

Skylark, fieldfare, redwing, song thrush, mistle thrush, linnet and yellowhammer are include on the Birds of Conservation Concern (Eaton et al 2015) Red List, although their inclusion is due to decline in breeding populations. Similarly, dunnoek, bullfinch, meadow pipit and kestrel are included on the Amber list.

One curlew and two golden plovers were also recorded during the surveys which are listed as part of the qualifying species of Rutland Water SPA.

It is considered that the Site is important to a range of red and amber listed species, including skylark and meadow pipit both of which are ground nesting species and vulnerable to loss of habitat and displacement. Meadow pipit in particular prefer more natural habitats to nest within, such as unimproved grassland or rough grazing and normally where there is a good habitat mosaic. As this habitat (which is found within St. George’s barracks) is now quite rare within Rutland, any development and development related impacts such as recreational pressure will displace breeding populations of meadow pipit and there is limited similar habitat within the vicinity of the site for individuals to move to ensure continued viability of the population.

3.1.4 Reptiles

Derek Finnie conducted reptile surveys in 2019 and identified three species of reptile within the Site: adder, grass snake and common lizard.

There was a peak count of 13 common lizards, which indicates a ‘good population’, not a low population (see Table 1). Low populations of grass snake and adder were identified at the site, with peak counts of 2 individuals for each species.

Table 1: Estimated Population Size Based on Peak Adult Counts

Species	Low population	Good population	Exceptional population
Adder	<5	5 - 10	>10
Grass snake	<5	5 - 10	>10
Common lizard	<5	5 - 20	>20
Slow worm	<5	5 - 20	>20

Although the use of artificial refugia is the accepted best practise method, it does tend to underestimate the number of snakes present within an area. This, in combination with some areas being excluded from the survey, would suggest that the density of snakes within the Site is higher than the 2019 results suggest.

Conclusions of the survey suggested that given the paucity of reptile records from the wider area, the presence of three reptile species within the confines of the airfield and golf course must be considered to be of at least District importance.

3.2 2022 SURVEYS

Johns Associates undertook a Phase 1 habitat survey of St. Georges barracks on the 25th of October 2022.

The main habitat on Site was semi-improved calcareous grassland, with smaller areas of unimproved calcareous grassland and semi-improved neutral grassland, dense scrub and small areas of broadleaf woodland. These are described in more detail below and are illustrated in Figure 2.

3.2.1 Calcareous Grassland

The dominant grassland across the old airfield was calcareous grassland, the majority was mapped as semi-improved calcareous grassland with smaller areas mapped as unimproved (see Target note 1 Figure 2). As the survey was carried out late in the season and the majority of the grassland had been cut for hay it is considered likely that some areas of calcareous grassland mapped as semi-improved could actually be unimproved calcareous grassland and therefore be undervalued.

The ongoing management of the Site through yearly hay cutting has maintained the species rich sward; frequently occurring grass species across the Site included calcareous grassland indicator species such as upright brome *Bromopsis erecta*, Tor grass *Brachypodium pinnatum* and quaking grass *Briza media*. The grassland also had a number of mesotrophic grass species with the most common being cocks foot *Dactylis glomerata* and red fescue *Festuca rubra*. Even though the survey was completed outside of the main JNCC survey period for grasslands it was clear the sward was very diverse and, in some areas, it was evident there were areas of unimproved calcareous grassland. The areas shown on Figure 2 marked as TN1 are areas identified as unimproved calcareous grassland, but it is considered likely that this could be further expanded if the survey was carried out in the main flowing period.

The areas of unimproved calcareous grassland appeared overall to be more diverse, with a high number of calcareous grassland indicator species per m², such as chalk knapweed *Centaurea debeauxii*, common centuary *Centaureum erythraea*, fairy flax *Linum catharticum*, salad burnett *Poterium sanguisorba*, burnet saxifrage *Pimpinella saxifrage*, blue fleabane *Erigeron acris*, wild parsnip *Pastinaca sativa* and wild basil *Clinopodium vulgare*.

Some areas of calcareous grassland were very rank and dominated almost entirely by Tor grass (see Target Note TN3), where a large fenced off area was still currently being used by the MOD. This area of grassland was not regularly cut and was dominated by tall rank swards of Tor grass, cock's foot, creeping thistle, chalk knapweed and rarely salad burnett. The area had a large amount of scattered scrub developing due to the lack of management in this area. Scrub was dominated by hawthorn with occasional blackthorn and likely planted young trees of hornbeam and rowan. There were other areas dominated by rank tor grass scattered around the airfield Site, mostly where grassland management was low and scrub was developing.

Target Note 4, to the north of the Site, indicates areas set aside as horse paddocks. The grazing within these fields was a mix between over grazing and under grazing. This was having an effect on the sward: although there were still calcareous indicator species present, the sward was becoming less diverse. In the under grazed fields the sward was

becoming rank with Tor grass, cock's foot and false oat grass. The overgrazed area had limited calcareous indicator species. Overall, this area was slowly tending towards a more mesotrophic grassland community.

3.2.2 Semi-improved Neutral Grassland

There were a few areas to the south of the site around the old military missile area where grassland habitat along fence boundaries had become fairly rank from a lack of frequent management. In these areas the dominant grass species were mesotrophic species and lacked any clear calcareous indicators. These areas were dominated by cock's foot, false oat grass *Arrhenatherum elatius* and patches of wood small reed *Calamagrostis epigejos*. Forbs frequently found included ragwort, cut-leaved cranes-bill *Geranium dissectum*, doves foot cranes bill *Geranium molle*, and common vetch *Vicia sativa* and creeping cinquefoil *Potentilla reptans*.

3.2.3 Poor Semi-improved Grassland

An area in the far south of the site was identified as poor semi-improved grassland. The sward and species composition were completely different to those noted in other surveyed areas of the airfield: no calcareous grassland species were observed in this area. It appeared that this area might have previously been overseeded. The dominant species here was tall fescue, with perennial rye grass occurring occasionally with cock's foot. Forb species were very limited, and mostly comprised creeping buttercup, chickweed and cleavers all occurring rarely throughout the sward.

3.2.4 Dense Scrub

There were several large areas of dense scrub throughout the Site, dominated by hawthorn *Crategeous monogyna*, but blackthorn *Prunus spinosa*, elder *Sambucus nigra* and rose species were also noted. Rarely there were scattered occurrences of purging buckthorn *Rhamnus cathartica* and dogwood *Cornus sanguinea*. The scrub was often of a mixed age and had rides and glades present which graded out into tall grassland edges.

3.2.5 Woodland

In the southern section of the site was a small area of semi-natural secondary broadleaved woodland which was comprised of ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. A patchy understorey was present which included hawthorn, elder and young ash saplings. Ground flora was overall quite species poor with lesser celandine *Ficaria verna*, creeping soft grass *Holcus mollis*, cow parsley *Anthriscus sylvestris*, white dead nettle *Lamium album* and nettle *Urtica dioica* all recorded.

Other woodland located within the Site boundary was broadleaved plantation woodland which was dominated by ash and sycamore.

3.2.6 Hard Standing

The old airfield runways are still present and the edges of the runways before grading into grassland comprised small areas of ephemeral/short perennial vegetation with species such as biting stonecrop *Sedum acre* being abundant in some places. However, in some sections of the runway there were craters that had been purposefully made for military training exercises. These areas were generally sparsely vegetated and mostly comprised stonecrops and mouse ear-hawkweed, and rarely plants of great lettuce *Lactuca virosa*.

Table 2 overleaf gives the calcareous grassland Species List from the Phase 1 Habitat Survey.

English Name	Scientific Name	Abundance Scale (DAFOR)
Red fescue	<i>Festuca rubra</i>	F
Upright brome	<i>Bromus erectus</i>	F
Red clover	<i>Trifolium pratense</i>	F
Tor grass	<i>Brachypodium pinnatum</i>	F
Common Yarrow	<i>Achillea millefolium</i>	F
Smooth hawksbeard	<i>Crepis capillaris</i>	F
Cocks foot	<i>Dactylis glomerata</i>	F
Ribwort plantain	<i>Plantago lanceolata</i>	F
Meadow buttercup	<i>Ranunculus acris</i>	F
False oat grass	<i>Arrhenatherum elatius</i>	LF
Common centaury	<i>Centaureum erythraea</i>	LF
Perforate St John's wort	<i>Hypericum perforatum</i>	F
Wild parsnip	<i>Pastinaca sativa</i>	LO
Field scabious	<i>Knautia arvensis</i>	O
Fairy flax	<i>Linum catharticum</i>	O
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	O
Blue fleabane	<i>Erigeron acris</i>	O
Common knapweed	<i>Centaurea nigra</i>	O
Chalk knapweed	<i>Centaurea debeauxii</i>	O
Ladies bedstraw	<i>Galium verum</i>	O
Ragwort	<i>Senecio jacobaea</i>	O
Cats' ear	<i>Hypochaeris radicata</i>	O
Birds foot trefoil	<i>Lotus corniculatus</i>	O
Dandelion	<i>Taraxacum officinale</i>	O
yellow oat grass	<i>Trisetum flavescens</i>	O
Crested dogs tail	<i>Cynosurus cristatus</i>	O
Autumn hawkbit	<i>Scorzoneroides autumnalis</i>	O
Cow parsley	<i>Anthriscus sylvestris</i>	O
Tall fescue	<i>Schedonorus arundinaceus</i>	O
Creeping bent	<i>Agrostis stolonifera</i>	O
Hedge bedstraw	<i>Galium mollugo</i>	O
Common field speedwell	<i>Veronica persica</i>	O
Common Meadow grass	<i>Poa pratensis</i>	O
Quaking grass	<i>Briza media</i>	O
Wild Basil	<i>Clinopodium vulgare</i>	O
Salad burnet	<i>Poterium sanguisorba</i>	O
Daisy	<i>Bellis perennis</i>	O
Self-heal	<i>Prunella vulgaris</i>	R
Goats beard	<i>Tragopogon pratensis</i>	R

English Name	Scientific Name	Abundance Scale (DAFOR)
Burnet saxifrage	<i>Pimpinella saxifraga</i>	R
Creeping thistle	<i>Cirsium arvense</i>	R
Musk mallow	<i>Malva moschata</i>	R
Common vetch	<i>Vicia sativa</i>	R
Perennial rye grass	<i>Lolium perenne</i>	R
Broad leaved dock	<i>Rumex obtusifolius</i>	R

Table 2: Calcareous grassland species list

3.2.7 Target notes

1. Areas that could be clearly identified at the time of survey as unimproved calcareous habitat were mapped into different habitat polygons. Expected that larger areas can be clearly mapped when an update survey is carried out.
2. Locations of disused badger sets in hedgeline X3 and one in the field edge.
3. Large fenced off area used by the MOD, grassland not cut in this area and was dominated by tall rank swards of Tor grass, cock's foot, creeping thistle, chalk knapweed and rarely salad burnett. The area had a large amount of scattered scrub developing due to the lack of management in this area. Scrub was dominated by hawthorn with occasional blackthorn and likely planted trees of hornbeam and rowan.
4. To the north of the Site were areas set aside as horse paddocks. The grazing within these fields was a mix of over-grazing and under-grazing. This was having an effect on the sward although there were still calcareous indicator species present. However, the sward was becoming less diverse. In the under-grazed fields, the sward was becoming rank with Tor grass, cock's foot and false oat grass.

3.3 PROTECTED SPECIES

3.3.1 Badgers

A few disused badger setts were observed during the walkover survey, however not all areas of the Site were surveyed so this is not considered to be a full badger survey. Numerous animal tracks were observed through the Site and potential badger foraging signs were noted. It is considered that the Site offers suitable habitat for this species.

Target note 2 highlights the locations of disused badger sets in hedge line X3 and one in the field edge.

3.3.2 Bats

The old missile buildings present in the south of the Site offered low suitability for roosting bats.

The woodland, scrub and rich grassland habitats within the Site offer suitable foraging and commuting habitat for a range of bat species. The Site does have some connectivity into the wider local landscape via hedgerows and woodland belts to the west connecting the Site to Ketton Quarries SSSI and to the north to Rutland Water SSSI.

The Site has therefore been assessed as having a high suitability for both commuting and foraging bats considering the range of habitats available in the wider local area and the connectivity from the Site into the wider landscape.

3.3.3 Reptiles

The grassland, scrub and woodland offer an ideal matrix of habitats for supporting a range of reptile species. Potential hibernacula and foraging habitat were noted throughout the Site, although in some areas the grassland habitat is very open with limited cover. On this basis, the Site is assessed as having high potential to support a range of common reptile species.

3.3.4 Birds

During the survey several skylarks were observed displaying over the airfield. Red kites were also noted over the airfield and in trees on the perimeter of the site. A number of red and amber listed species were also recorded during the Phase 1 survey, including song thrush, starling and yellowhammer.

Given the mosaic of habitats present within the Site and surrounding habitats being very poor (mostly limited to arable and intensive grazing pasture), the Site is considered to offer high suitability to a range of nesting birds including common garden species as well as rarer species, including ground nesting birds.

3.3.5 Amphibians

There were two ponds located to the north of the site that could not be surveyed during the 2022 Phase 1 survey. However, previous eDNA surveys of these ponds carried out in 2019 returned positive results for GCN eDNA and these ponds should therefore be considered as breeding ponds for this Priority species. The surrounding habitat within the Site offers good quality foraging habitat and potential areas for hibernation for GCN.

3.3.6 Other Mammals

During the walk over survey six brown hares were observed. Brown hares are a Section 41 Priority Species (NERC Act, 2006), due to their population decline. Habitats within the Site offer suitable foraging and breeding habitat for this species due to the mosaic of habitats present.

The habitats on Site and in the surrounding area has potential to support hedgehogs. The Site offers suitable areas for both hibernation and foraging.

Figure 2: Phase 1 Habitat Map

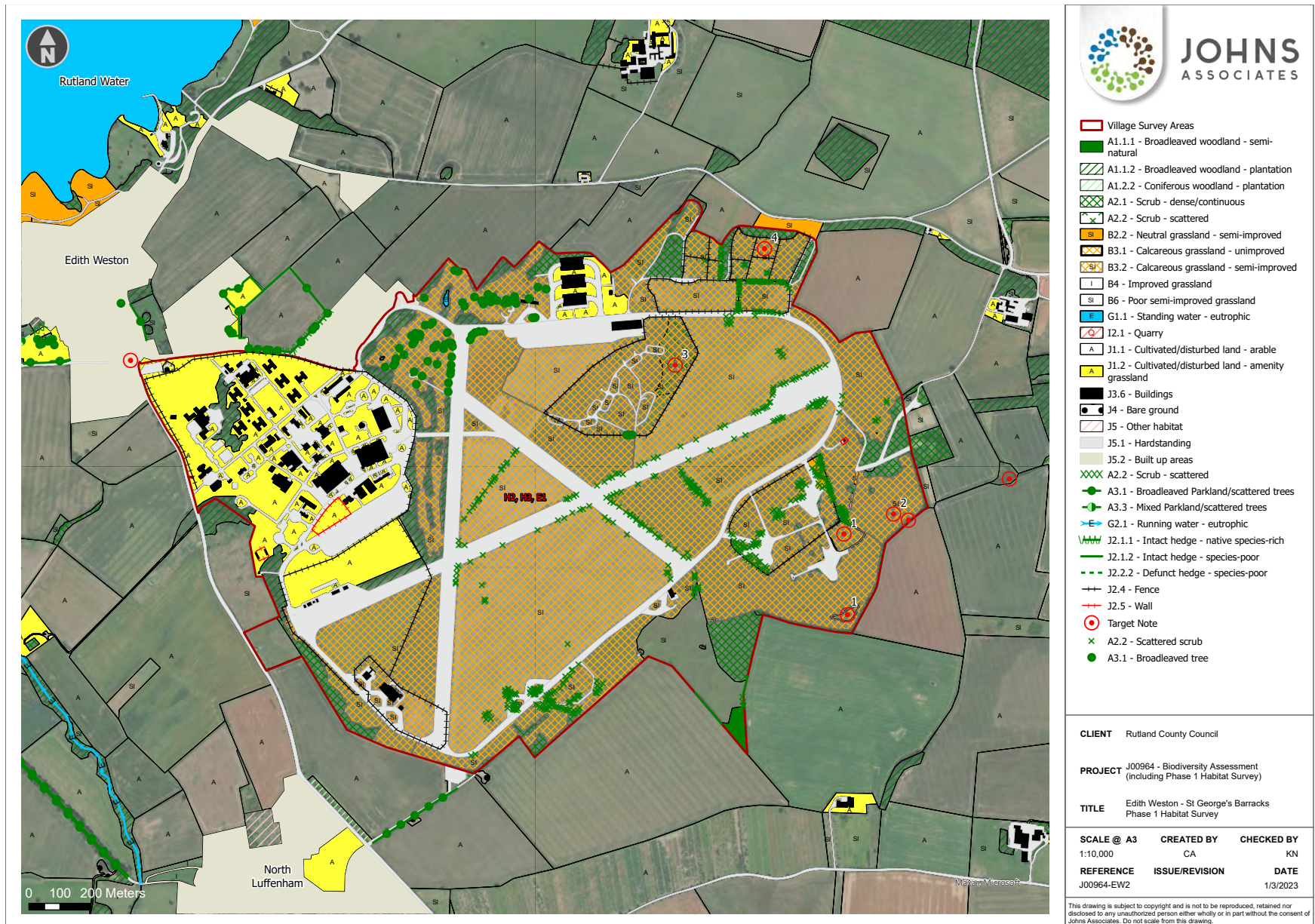
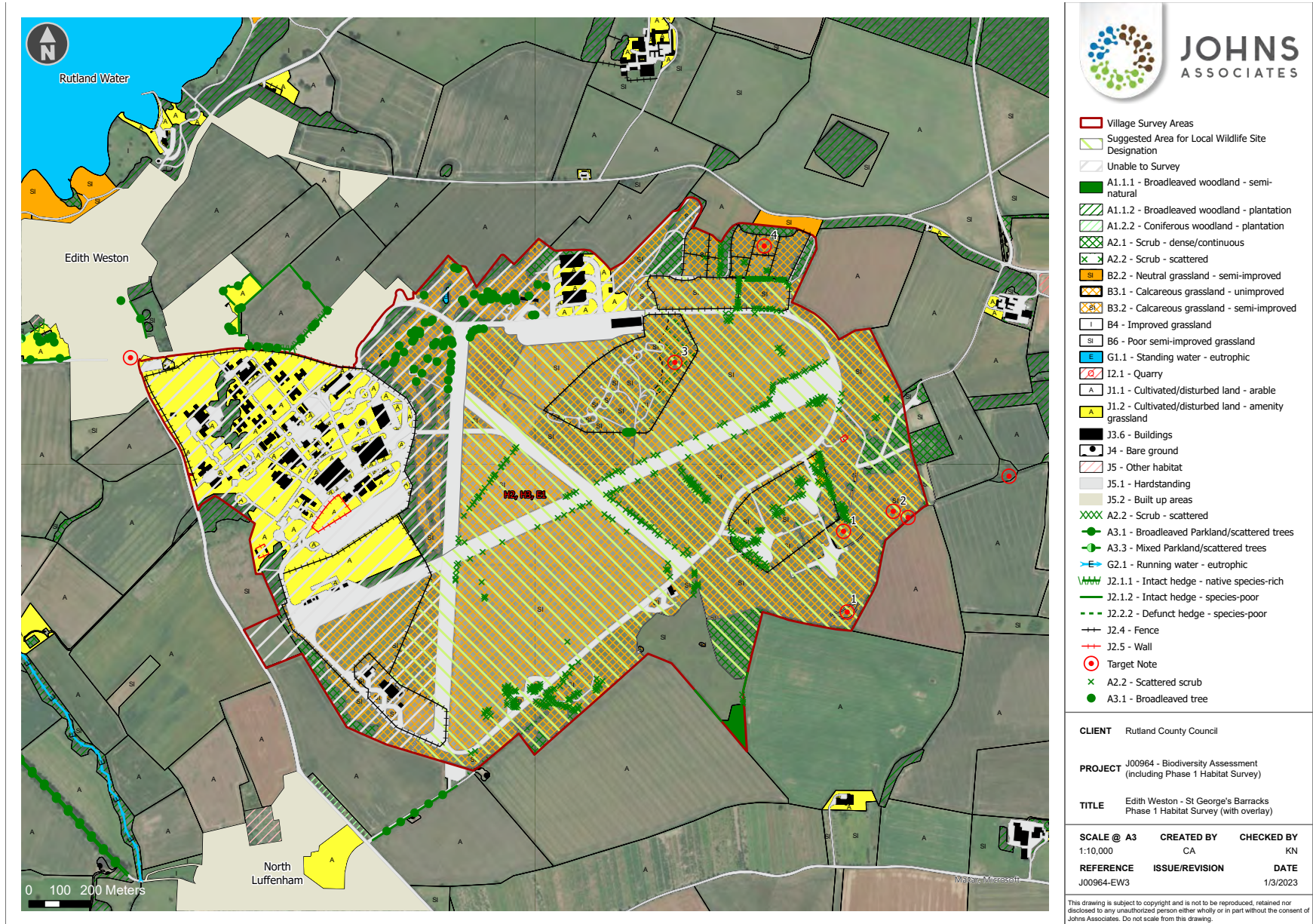


Figure 3: Intial Suggested Extent of Designation



4 CONCLUSIONS

4.1 PREVIOUS SURVEYS

It is considered that the NVC survey work previously carried out was not undertaken following the methodology outlined by Rodwell (1992). No clear map showing the delineation of NVC communities across the airfield has been produced and broad assumptions have been made on the NVC communities present within the Site. Therefore, based on this it is considered the grassland communities within St Georges Barracks were significantly undervalued.

Considering the findings of the Phase 1 habitat survey carried out in October 2022 by Johns Associates it is considered that the majority of the grassland is semi-improved calcareous grassland with areas that appear to be unimproved calcareous grassland. Further NVC surveys within then optimum survey period for grassland may identify a wider area of unimproved calcareous grassland than has been initially recorded. These surveys should be carried out by a botanical specialist to ensure accurate classification and mapping of all on-Site habitats.

4.2 SITE

The Site has extensive areas of both semi-improved and unimproved calcareous grassland habitat which is broadly classified as Lowland Calcareous grassland, a UK BAP Priority Habitat and listed as a Habitat of Principal Importance under S41 of the Natural Environment and Rural Communities (NERC) Act (UK Government, 2006). The grassland is considered to be of relatively high ecological value, and high ecological value when considered within its geographic context.

Lowland calcareous (calicolous) grasslands throughout the UK mostly occur on shallow, infertile lime-rich soils over chalk and limestone bedrock with pH in the range 6.5 to 8.5. They are occasionally found on other base-rich substrates such as basic igneous rocks and calcareous glacial drift deposits. These grasslands may be either unenclosed or enclosed, with many now being confined to steep valley slopes, escarpments, and coastal cliffs and headlands. More rarely they may occur on relatively level ground such as in the East Anglian Breckland and Salisbury Plain. These agriculturally unproductive grasslands were traditionally grazed by sheep or cattle. They are floristically rich and form an especially important habitat for butterflies and other invertebrates.

Due to the historic use of the site as an MOD airfield the grassland has been managed in a low intensity way. The current management regime is by annual hay crop in which the arisings are removed. This ongoing management is maintaining the rich sward diversity.

Overall, the landscape of Rutland is dominated by intensively managed agricultural land, both arable and pastoral. The underlying geology of Rutland in the east of the county includes a band of Calcareous bedrock of Lincolnshire limestone, which St. George's Barracks is located on. Due to the general land management practices across the county, (dominated by intensive agricultural practices), areas of calcareous grassland within the county have been lost over time and have now become increasingly rare and generally appear limited to roadside verges and a few larger areas created on former quarry sites which are now designated as Sites of Special Scientific Interest (SSSI's), such as Ketton Quarries located to the east of St. George's Barracks.

This Site is unusual in that the grassland has developed on low level, undisturbed ground, whereas the majority of calcareous grassland within the county has developed on former limestone quarry exposures/workings.

4.3 RECOMMENDATIONS

It is considered that any development of the Site is likely to have a detrimental effect of the habitats and protected and notable species present within the Site. Even if sections of the habitats are retained, (previous proposals have suggested that this area should be managed and maintained as a public park), recreational impacts are very likely to degrade the habitats present without careful planning and management. A loss of rarer species from the sward would cause the habitat to tend towards a more mesotrophic grassland sward. Also, the increased recreational impacts are likely to have a severe effect on ground nesting birds such as skylark.

Considering the scarcity of this type of grassland in the local landscape and that it is an undisturbed, low-lying calcareous grassland assemblage it is considered that this site is of high ecological value, and it is recommended that an update NVC survey should be carried out to ascertain the extent of the calcareous grassland communities present.

Currently the airfield has been highlighted as a potential Local Wildlife Site (LWS) due to the large area of moderately species-rich calcareous/mesotrophic grassland it supports. However, the results of an updated NVC survey may support the Site having a higher-level designation (dependant on the NVC sub-communities found within the Site and the vascular plant species present) - it may even qualify for designation as a Site of Special Scientific Interest (SSSI).

To enable sites to be properly evaluated against the guidelines, there is a requirement for detailed survey information to determine accurately the vegetation types present, their species composition and spatial configuration, including their area. Sites should be surveyed using the NVC survey methodology detailed in Rodwell (2006). It is essential that the surveyors are experienced botanists with a good knowledge of the grassland sections of the NVC (Rodwell 1991, 1992, 2000) and variations described subsequently. This survey should be completed within the optimum JNCC survey period for grasslands: June - July.

A minimum of five quadrats per sub-community type would be good practice and the accepted standard for complex or atypical sites. This will allow for the construction of constancy tables which can then be compared against the community keys and the published NVC tables (Rodwell 1991, 1992, 2000) and enable accurate NVC sub-communities to be assigned.

From the species assemblages observed within the Site it is assumed that the majority of the grassland will be a mixture of the following:

- CG3 – *Bromus erectus* grassland;
- CG4 - *Brachypodium pinnatum* grassland;
- CG5 – *Bromus erectus* – *Brachypodium pinnatum* grassland

All of these are considered to be grassland communities of high botanical nature conservation value, with both CG4 and CG5 having an estimated cover of less than 10,000ha in Great Britain.

Due to the size and extent of the Site, (approx. 160ha) it would qualify for designation as a SSSI also dependant on NVC community classification. It is likely that the Site may be classified as a SSSI if large areas are found to be both CG4 and CG5 having an estimated cover less than 10,000ha in Great Britain. However, even if the majority of the Site was assessed as being CG3, given the limited cover of this habitat community within Leicestershire and Rutland it could still be considered for designation.

Overall, in the context of calcareous grassland habitats within Rutland, St. George's barracks represents 38% of all calcareous grassland habitat within the county.

Table 2: Calcareous Grassland in St George's Barracks as a % within the County

% of Calcareous Grassland in St George's Barracks	
Habitat	Percent
B3.1 - Calcareous grassland - unimproved	7%
B3.2 - Calcareous grassland - semi-improved	39%
Grand Total	38%

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APPENDIX D – PLANNING POLICY REVIEW: FULL POLICY WORDING

RELEVANT EXISTING PLANNING POLICIES

Rutland County Council

Minerals Core Strategy & Development Control Policies, adopted October 2010:

MDC Policy 6 – Biodiversity and Geological Conservation Interests

Minerals development likely to adversely impact upon regionally or locally designated sites and priority habitats or species identified in the Leicester, Leicestershire and Rutland Biodiversity Action Plan (including Sites of Importance for Nature Conservation, Species of Principal Importance for Biodiversity, Regionally Important Geological Sites, Local Nature Reserves and Local Wildlife Sites), and which cannot reasonably be located on any alternative site to avoid harm, will only be permitted if the merits of development outweigh the likely impact.

MDC Policy 12 – Restoration and Aftercare

Mineral working will only be permitted where it can be demonstrated that an appropriate restoration scheme would be followed, to ensure that the site is restored in a way that is sympathetic to the character and setting of the wider area (having regard to the Rutland Landscape Character Assessment) and is capable of sustaining an appropriate after-use. Restoration should be carried out at the earliest opportunity and where appropriate, progressive restoration will be required. The applicant will be expected to demonstrate the expertise and commitment necessary to secure a high standard of restoration and aftercare for an appropriate period of time.

The restoration and after-care of mineral sites should also seek to meet the following planning objectives:

- a. The improvement of biodiversity - All habitat creation should contribute to meeting Leicester, Leicestershire and Rutland Biodiversity Action Plan targets, particularly the creation of limestone grassland to the adaption of wildlife to the effects of climate change, and to reducing fragmentation of natural habitats
- b. The creation or improvement of geodiversity
- c. Improving public access to the countryside including links to surrounding green infrastructure
- d. Improving the water environment and addressing the effects of climate change
- e. Ensuring that sites within aerodrome safeguarding zones for RAF Cottesmore and RAF Wittering are designed to avoid new or increased hazards to aviation.

Core Strategy, adopted July 2011:

Policy CS21 – The natural environment

Development should be appropriate to the landscape character type within which it is situated and contribute to its conservation, enhancement or restoration, or the creation of appropriate new features.

The quality and diversity of the natural environment of Rutland will be conserved and enhanced. Conditions for biodiversity will be maintained and improved and important geodiversity assets will be protected.

Protected sites and species will be afforded the highest level of protection with priority also given to local aims and targets for the natural environment.

All developments, projects and activities will be expected to:

- a) Provide an appropriate level of protection to legally protected sites and species;
- b) Maintain and where appropriate enhance conditions for priority habitats and species identified in the Leicestershire, Leicester and Rutland Biodiversity Action Plan;
- c) Maintain and where appropriate enhance recognised geodiversity assets;
- d) Maintain and where appropriate enhance other sites, features, species or networks of ecological interest and provide for appropriate management of these;
- e) Maximise opportunities for the restoration, enhancement and connection of ecological or geological assets, particularly in line with the Leicestershire, Leicester and Rutland Biodiversity Action Plan;
- f) Mitigate against any necessary impacts through appropriate habitat creation, restoration or enhancement on site or elsewhere;
- g) Respect and where appropriate enhance the character of the landscape identified in the Rutland Landscape Character assessment;
- h) Maintain and where appropriate enhance green infrastructure (see Policy CS23)

Policy CS23 – Green infrastructure, open space, sport and recreation

The existing green infrastructure network will be safeguarded, improved and enhanced by further provision to ensure accessible multi-functional green spaces by linking existing areas of open space. This will be achieved by:

- a) the continued development of a network of green spaces, paths and cycleways in and around the towns and villages;
- b) requiring new development to make provision for high quality and multifunctional open spaces of an appropriate size and will also provide links to the existing green infrastructure network;
- c) resisting development resulting in the loss of green infrastructure or harm to its use or enjoyment by the public. Proposals involving the loss of green infrastructure will not be supported unless there is no longer a need for the existing infrastructure or an alternative is provided to meet the local needs that is both accessible and of equal or greater quality and benefit to the community;
- d) resisting the loss of sport and recreation facilities where they are deficient and supporting the provision of additional new facilities in an equally accessible location as part of the development, particularly where this will provide a range of facilities of equal or better quality on a single site or provide facilities that may be used for a variety of purposes.

Policy CS24 – Rutland Water

Development in the defined Rutland Water Area will be carefully designed and located to ensure that it respects the nature conservation features of this internationally important site and does not have an adverse impact on the landscape and wildlife interests and the general tranquil and undisturbed environment of Rutland Water.

New development will be limited to small scale recreation, sport and tourist uses within the five defined Recreation Areas around the shores of Rutland Water where this is directly related to the use and enjoyment of Rutland Water and appropriate in scale, form and design to its location.

Outside the five defined recreation areas, new development will be restricted to small scale development for recreation, sport and tourism facilities only where essential for nature conservation or fishing or essential for operational requirements of existing facilities and subject to it being appropriate in terms of location, scale, design and impact on the landscape.

Caravan and camping sites will not be acceptable outside the defined recreation areas and only within the defined recreation areas where appropriate to the area in terms of its scale, location and impact on the surrounding area.

Sites Allocations & Policies Development Plan Document, adopted October 2014:

Policy SP19 – Biodiversity and geodiversity conservation

Development proposals will normally be acceptable where the primary objective is to conserve or enhance biodiversity or geodiversity.

All new developments will be expected to maintain, protect and enhance biodiversity and geodiversity conservation interests in accordance with Core Strategy CS21 (The natural environment).

Sites of biodiversity and geodiversity importance

a) Areas of international importance

Development proposals that may individually or cumulatively have an adverse effect on sites of international importance for nature conservation will be subject to the requirements of the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations”) and other legislation that may apply to such sites.

b) Areas of national importance

Development proposals within or outside a Site of Special Scientific Interest (SSSI) that may individually or in combination with other developments have an adverse effect on the site will not normally be acceptable.

Where an adverse effect on the notified special interest of the site is likely, an exception will only be made for development where its benefits clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.

In exceptional cases where development is permitted which would affect the special interest of a SSSI, development will only be permitted if the detrimental impact has been minimised through the use of all practicable prevention, mitigation and compensation measures.

c) Areas of local importance

Development that is likely to result in significant harm to a site of local importance for biodiversity or geodiversity conservation will not be acceptable unless the harm can be avoided (for example by locating development on an alternative site with less harmful impacts), adequately mitigated or as a last resort compensated for. Where compensatory habitat is created, it should be of equal or greater ecological value than the area lost as a result of the development.

Protected species

Where there is reason to suspect the presence of protected species, applications should be accompanied by a survey assessing their presence and if present the proposal must make necessary measures to protect the species.

Development proposals that are likely to have an adverse effect on protected species will be subject to the requirements of the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and other legislation that may apply to such species.

In exceptional circumstances, development may be acceptable that would have an effect on protected species, subject to requirements to:

- a) facilitate the survival of individual members of the species;
- b) reduce disturbance to a minimum;
- c) provide adequate alternative habitats to sustain at least the current levels of population.

Irreplaceable habitats

Development that would result in the loss or deterioration of irreplaceable habitats, including ancient woodland and ancient semi-natural grasslands and the loss of aged or veteran trees found outside ancient woodland will not be acceptable unless the need for, and benefits of development in that location clearly outweigh the loss.

Trees and hedgerows

Development that would result in the loss of trees and hedgerows of biodiversity importance will not be acceptable unless the trees or hedgerows are dead, dying, diseased or dangerous or in exceptional circumstances due to the practicalities of development - see also Policy SP15 (Design and amenity).

Policy SP21 – Important open space and frontages

Development will only be acceptable where it does not have an adverse impact on an Important Open Space and/or Important Frontage as shown on the Policies Map having regard to:

- a) its intrinsic environmental value by virtue of its landform, vegetation or tree cover, or the presence of any special features such as streams, ponds, important wildlife habitats or walls;
- b) its contribution to enhancing the attractiveness of the town or village setting when viewed from surrounding land, particularly the approaches to the built up area;
- c) the views and/or vistas out of and within the town or village that contribute to the character and attractiveness of the settlement;
- d) its peripheral or transitional open character in contributing to preserving the form and character of the settlement;
- e) its contribution, possibly in conjunction with other areas, to creating the overall character and attractiveness of the settlement;
- f) its contribution to the form and character of the settlement in terms of the relationship of buildings and structures one to another, to other open spaces or natural features;
- g) its contribution to the setting of a building or group of buildings or important natural features.

Policy SP26 – Rutland Water Recreation Areas

New development will be limited to small scale recreation, sport and tourist uses within the five defined Recreation Areas.

In all cases it will need to be demonstrated that the development within the designated Recreation Areas would:

- a) be in keeping with its surroundings in terms of its location, scale, form and design and would not detract from the appearance of the shoreline and setting of Rutland Water;
- b) not be incompatible with other uses of land and leisure activities;
- c) not be detrimental to the special nature conservation interests of Rutland Water (including the conservation objectives for the RAMSAR site, Special Protection Area and Site of Special Scientific Interest and the requirements of the Habitats Regulations);
- d) not be detrimental to local amenity including the impact of an unacceptable increase in the amount of car travel, parking and congestion in the Rutland Water Area, and ; e) not be detrimental to highway considerations.

New construction should be modest in scale and existing buildings utilised wherever possible and appropriate, particularly those of architectural or historic interest or of environmental value.

Leicestershire County Council

Minerals & Waste Local Plan, adopted 25/09/2019:

Policy DM7: Sites of Biodiversity/ Geodiversity Interest

Proposals for minerals and waste development should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and taking all opportunities to provide a net gain in biodiversity.

Internationally Important Sites of Biodiversity Conservation Value

Proposals for minerals and waste development that are likely to have significant effects on any Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site should be supported by sufficient information for the purposes of an appropriate assessment of the implications of the proposal, alone or in-combination with other plans and projects. The conclusions of the assessment, in accordance with Council Directive 92/42 EEC and the Conservation of Habitats and Species Regulations 2017, must show that a proposal can be delivered without any adverse effects on the integrity of any SAC, SPA or Ramsar site.

Nationally Important Sites of Biodiversity Conservation Value

Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and irreplaceable habitats, including ancient woodland, will be safeguarded from inappropriate minerals and waste development. Planning permission will only be granted for minerals and waste development on land within or outside a SSSI where: the status and quality of the SSSI or National Nature Reserve is retained and protected; the loss or deterioration of irreplaceable habitats is unlikely to occur; or the benefits of developments likely to impact on SSSIs, NNRs or irreplaceable habitats clearly outweigh such impacts and loss. In such circumstances, developments should follow the mitigation hierarchy outlined in the National Planning Policy Framework, and the development will be required to deliver a net-gain in biodiversity through the creation of priority habitat(s).

Locally Important Sites of Biodiversity Conservation Value

Planning permission will be granted for minerals and waste development where the status and quality of locally designated sites of biodiversity conservation value and sites meeting Local Wildlife Site criteria, and priority habitats and species identified in the Local Biodiversity Action Plan is retained and protected, and where the development cannot reasonably be located to an alternative site with less harmful impacts. If the benefits of the development outweigh the likely impact, the harm should be adequately mitigated or, as a last resort, compensated for, and the development will be required to deliver a net-gain in biodiversity through the creation of local BAP priority habitat.

Locally Important Sites of Geological Conservation Value

Planning permission will be granted for minerals and waste development where the development is unlikely to have any adverse effects on locally designated sites of geological conservation value, cannot reasonably be located to an alternative site to avoid damage to the geological feature, or where the merits of development outweigh the likely impact and the proposal results in geodiversity enhancements.

South Kesteven District Council

South Kesteven Local Plan, adopted January 2020

Policy EN2: Protecting Biodiversity and Geodiversity

The Council, working in partnership with all relevant stakeholders, will facilitate the conservation, enhancement and promotion of the District's biodiversity and geological interest of the natural environment. This includes seeking to enhance ecological networks and seeking to deliver a net gain on all proposals, where possible.

Proposals that are likely to have a significant impact on sites designated internationally, nationally or locally for their biodiversity and geodiversity importance, species populations and habitats identified in the Lincolnshire Biodiversity Action Plan, Geodiversity Strategy and the Natural Environment and Rural Communities (NERC) Act 2006 will only be permitted in exceptional circumstances:

- In the case of internationally designated sites (alone or in combination), where there is no alternative solution and there are overriding reasons of public interest for the development.
- In the case of National Sites (alone or in combination) where the benefits of development in that location clearly outweigh both the impact on the site and any broader impacts on the wider network of National Sites.

- In the case of Local Sites (e.g. Local Wildlife Sites) or sites which meet the designation criteria for Local Sites, the reasons for development must clearly outweigh the long term need to protect the site.

In exceptional circumstances where detrimental impacts of development cannot be avoided (through locating an alternative site) the Council will require appropriate mitigation to be undertaken by the developers or as a final resort compensation. Where none of these can be achieved then planning permission will be refused. Where any mitigation and compensation measures are required, they should be in place before development activities start that may disturb protected or important species.

Planning permission will be refused for development resulting in the loss, deterioration or fragmentation of irreplaceable habitats, including ancient woodland and aged or veteran trees, unless the need for, and benefits of, the development in that location clearly outweigh the loss or harm.

Development proposals that are likely to result in a significant adverse effect, either alone or in combination, on any internationally designated site, must satisfy the requirements of the Habitats Regulations. Development requiring Appropriate Assessment will only be allowed where it can be determined, taking into account mitigation, that the proposal would not result in significant adverse effects on the site's integrity.

Policy EN3: Green Infrastructure

The Council will maintain and improve the green infrastructure network in the District by enhancing, creating and managing green space within and around settlements that are well connected to each other and the wider countryside.

Development proposals should ensure that existing and new green infrastructure is considered and integrated into the scheme design, taking opportunities to enrich biodiversity habitats, enable greater connectivity and provide sustainable access for all. Proposals which may result in recreational and visitor pressure on designated biodiversity sites will be particularly expected to provide such green infrastructure.

Proposals that cause loss or harm to this network will not be permitted unless the need for and benefits of the development demonstrably outweigh any adverse impacts. Where adverse impacts on green infrastructure are unavoidable, development will only be permitted if suitable mitigation measures for the network are provided.

North Northamptonshire Council

Joint Core Strategy, adopted July 2016:

Policy 4 – Biodiversity and Geodiversity

A net gain in biodiversity will be sought and features of geological interest will be protected and enhanced through:

a) Protecting existing biodiversity and geodiversity assets by:

- Refusing development proposals where significant harm to an asset cannot be avoided, mitigated or, as a last resort, compensated. The weight accorded to an asset will reflect its status in the hierarchy of biodiversity and geodiversity designations;
- Protecting key assets for wildlife and geology, in particular the Upper Nene Valley Gravel Pits Special Protection Area and Ramsar Site, from unacceptable levels of access and managing pressures for access to and disturbance of sensitive habitats;
- Protecting the natural environment from adverse effects from noise, air and light pollution;
- Where appropriate requiring developments to provide or contribute to alternative green infrastructure (Policy 19); and
- Ensuring that habitats are managed in an ecologically appropriate manner.

b) Enhancing ecological networks by managing development and investment to:

- Reverse the decline in biodiversity and restore the ecological network at a landscape scale in the Nene Valley Nature Improvement Area (NIA);
- Reverse habitat fragmentation and increase connectivity of habitats where possible by structuring and locating biodiversity gain in such a way as to enlarge and/or connect to existing biodiversity assets such as wildlife corridors;
- Preserve, restore and create priority and other natural and semi-natural habitats within and adjacent to development schemes.

c) Supporting, through developer contributions or development design, the protection and recovery of priority habitats and species linked to national and local targets. Such measures could include the retention of, and provision of areas of open green space, and hard and soft landscaping to address habitat and visitor management.

d) Developments that are likely to have an adverse impact, either alone or in-combination, on the Upper Nene Valley Gravel Pits Special Protection Area or other European Designated Sites must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating against impacts where identified. Mitigation may involve providing or contributing towards a combination of the following measures:

- i. Access and visitor management measures within the SPA;
- ii. Improvement of existing greenspace and recreational routes;
- iii. Provision of alternative natural greenspace and recreational routes;
- iv. Monitoring of the impacts of new development on European designated sites to inform the necessary mitigation requirements and future refinement of any mitigation measures.

A Mitigation Strategy document concerning the Upper Nene Valley Gravel Pits Special Protection Area will be produced, with a view to its subsequent adoption as an Addendum to the Upper Nene Valley Gravel Pits Special Protection Area Supplementary Planning Document by June 2016, to support the adopted Joint Core Strategy 2011-2031.

Development proposals will need to take account of the Northamptonshire Biodiversity Supplementary Planning Document, the Upper Nene Valley Gravel Pits Special Protection Area Supplementary Planning Document and the JPU Mitigation Strategy for the Upper Nene Valley Gravel Pits Special Protection Area. Where necessary, this will include new residential development contributing towards implementation of this Mitigation Strategy.

Melton Borough Council

Melton Local Plan, adopted October 2018:

Policy EN2 – Biodiversity and Geodiversity

The Borough Council will seek to achieve net gains for nature and proactively seek habitat creation as part of new development proposals. It will protect and enhance biodiversity, ecological networks and geological conservation interests throughout the Borough and beyond its boundaries, by supporting proposals which:

- A) protect, extend or strengthen the Borough's most ecologically sensitive areas, including the River Wreake Valley;
- B) contribute to the provision of coherent wildlife networks;
- C) create new habitat;
- D) re-naturalise rivers and streams wherever possible through the removal of hard engineered structures such as reinforced banks, weirs and culverts;
- E) promote the preservation, restoration and re-creation of priority habitats as listed in the UK Priority Habitat Species List and Leicestershire Local Biodiversity Action Plan; and
- F) promote the use of fencing which incorporates holes for wildlife; provided they do not harm;
- G) existing, potential or proposed internationally important sites, such as Rutland Water Special Protection Area/Ramsar either individually or cumulatively in association with other plans or projects;
- H) nationally important sites;
- I) Local Wildlife Sites (including candidate and potential), Local Geological Sites, including ancient woodlands, ancient and veteran trees, hedgerows and existing corridors such as disused railways, that allow movement of wildlife between sites;
- J) river corridors;
- K) biodiversity and geo-diversity designations identified in a Neighbourhood Plan; and
- L) priority habitats & species identified in the UK Priority Habitat Species List and Local Biodiversity Action Plans and the Melton Biodiversity and Geodiversity Study, unless it can be demonstrated that there is no alternative site available and there are clear and convincing benefits of the development that clearly outweigh the nature conservation or scientific interest of the site. In this case, adequate mitigation measures or, exceptionally, compensatory measures will be required at a level equivalent to the biodiversity value of the habitat lost. Such proposals must be accompanied by ecological surveys and an assessment of the impacts on biodiversity and geodiversity.

Proposals for allocated sites should be informed by the site survey results and the recommendations for mitigation and enhancement in the Biodiversity and Geo-diversity Study.

The Borough Council will support the need for the appropriate management and maintenance of existing and created habitats through the use of planning conditions, planning obligations and management agreement.

Policy EN3 – The Melton Green Infrastructure Network

A strategic approach to the delivery, protection and enhancement of green infrastructure will be taken by the Borough Council working with partners, in order to deliver new assets where deficits have been identified in the green infrastructure strategy and to enhance the following primary green infrastructure areas:

1. Melton North and Melton South Sustainable Neighbourhoods in accordance with Policy C1;
2. Areas of Separation in accordance with Policy EN4;
3. River Wreake and River Eye strategic corridor;
4. Jubilee Way;
5. Leicestershire Round Footpath;
6. Melton Country Park;
7. Grantham Canal;
8. The Wolds Escarpment;
9. Burrough on the Hill Country Park; and
10. Newark to Market Harborough disused railway line.

New development proposals will be supported where they retain and enhance important green infrastructure elements such as:

11. Watercourses (including ditches) and their riparian zones with buffers (free from development or formal landscaping) extending to a minimum of 8 metres from the top of the bank (on both banks) of any given watercourse;
12. Woodland, orchard, mature trees, hedgerows;
13. Local BAP Habitats and those supporting local BAP priority species and species in the UK Priority Habitat Species List;
14. Access routes (public rights of way and permitted routes);
15. Existing public green space including sports pitches in accordance with the Playing Pitch Strategy, allotments and designated Local Green Space;
16. Areas of geological and archaeological interest;
17. Green infrastructure identified in the Areas of Separation, Settlement Fringe Sensitivity and Local Green Space Study; and
18. Historic Parkland.

The Council will particularly support proposals which contribute towards:

19. The 6Cs Green Infrastructure and Strategic Networks; and
20. The Woodland Trust's Access to Woodland Standards.

New or enhanced green infrastructure corridors and assets should be as inclusive as possible and look to make provision for more than one of the following:

- A. access to employment and leisure facilities and to the countryside;
- B. physical activity and well-being opportunities for local residents such as formal sports in accordance with the Playing Pitch Strategy, parks and allotment provision;
- C. provide high quality bridleways, walking and cycling links between the corridor and towns and villages;
- D. educational resources for local residents;
- E. biodiversity opportunities including the provision of tree planting, shrubs and other natural features on all new development sites;
- F. mitigating and adapting to climate change, including through tree planting;
- G. enhancement of landscape character in accordance with Policy EN1;
- H. protection or enhancement of heritage assets and their setting in accordance with Policy EN13; and
- I. opportunities for sustainable leisure and tourism.

Where new development has an adverse impact on green infrastructure corridors or assets, alternative sites and scheme designs that have no or little impact should be considered before mitigation is provided (either on site or off site as appropriate). The need for and benefit of the development will be weighed against the harm caused.

Policy EN8 – Climate Change

All new development proposals will be required to demonstrate how the need to mitigate and adapt to climate change has been considered, subject to considerations of viability, in terms of:

- Sustainable design and construction in accordance with Policy EN9 – ensuring energy efficient and low carbon development.
- Provision of green infrastructure in accordance with Policy EN3 – the Melton Green Infrastructure Network.

- Provision of renewable and/or low carbon energy production, including decentralised energy and/or heat networks in accordance with Policy EN10 – energy generation from renewable sources.
- Flood risk in accordance with Policy EN11 – minimizing the risk of flooding and policy EN12 – sustainable urban drainage systems.
- Providing opportunities for sustainable modes of transport in accordance with Policy IN1 – delivering infrastructure to support new development.

Harborough District Council

Harborough Local Plan 2011-2031, adopted 30 April 2019:

Policy G11 Green infrastructure networks

1. Development which supports the potential of the following strategic green infrastructure assets to contribute to the wider green infrastructure network will be permitted:

- a. Welland, Sence, Soar, Swift and Avon river corridors;
- b. Grand Union Canal;
- c. dismantled railway lines;
- d. Saddington, Stanford and Eyebrook reservoirs; and
- e. traffic free cycle routes, and long-distance recreational paths and bridleways.

2. The green infrastructure assets listed above will be safeguarded and, where possible, enhanced by ensuring that:

- a. development does not compromise their integrity or value;
- b. development contributes wherever appropriate to improvements in their quality, use and multi-functionality; and
- c. opportunities to add to or improve their contribution to the green infrastructure network are maximised through partnership working.

Policy G15 Biodiversity and geodiversity

1. Nationally and locally designated biodiversity and geodiversity sites, as shown on the Policies Map, will be safeguarded.

2. Development will be permitted where:

- a. there is no adverse impact on:
 - i. the conservation of priority species;
 - ii. irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;
 - iii. nationally designated sites;
 - iv. locally designated sites; unless, in all cases, the need for, and benefits of, the development in that location clearly outweigh the impact.
- b. there is no loss of any 'best and most versatile agricultural land' unless this is demonstrably necessary to facilitate the delivery of sustainable development;
- c. there is no net loss or sterilisation of natural resources;
- d. opportunities for improving habitats and for improving the water quality of local water courses to improve the aquatic habitat are incorporated;
- e. unavoidable loss or damage to habitats, sites or features is addressed through mitigation, relocation, or as a last resort compensation to ensure there is no net loss of environmental value.

3. Development should contribute towards protecting and improving biodiversity and geodiversity through, as relevant:

- a. protecting and enhancing habitats and populations of priority species;
- b. protecting and enhancing the strategic biodiversity network and wildlife corridors, particularly river and canal corridors, disused railways and all watercourses;
- c. maintaining biodiversity during construction;
- d. providing contributions to wider biodiversity improvements in the vicinity of the development;
- e. including measures aimed at allowing the District's flora and fauna to adapt to climate change;
- f. including measures to improve the water quality of any water body as required by the Water Framework Directive; and
- g. protecting features and areas of geodiversity value and enhancing them to improve connectivity of habitats, amenity use, education and interpretation.

Policy CC1 Mitigating climate change

1. Major development will be permitted where it demonstrates:

- a. how carbon emissions would be minimised through passive design measures;

- b. the extent to which it meets relevant best practice accreditation schemes to promote the improvement in environmental and energy efficiency performance;
 - c. how the development would provide and utilise renewable energy technology;
 - d. whether the building(s) would require cooling, and if so how this would be delivered without increasing carbon emissions;
 - e. how existing buildings to be retained as part of the development are to be made more energy efficient;
 - f. how demolition of existing buildings is justified in terms of optimisation of resources in comparison to their retention and re-use; and
 - g. how carbon emissions during construction will be minimised.
2. In Strategic Development Areas applicants should demonstrate whether a decentralised energy network is viable and, if so, the arrangements for its delivery and future management.

Other climate change policies include:

- CC2 Renewable energy generation**
- CC3 Managing flood risk**
- CC4 Sustainable drainage**

Lincolnshire County Council

Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies, adopted June 2016

Policy DM2: Climate Change

Proposals for minerals and waste management developments should address the following matters where applicable:

Minerals and Waste

- Identify locations which reduce distances travelled by HGVs in the supply of minerals and the treatment of waste, unless other environmental/sustainability and, for minerals, geological considerations override this aim.

Waste

- Implement the Waste Hierarchy, and in particular reduce waste to landfill;
- Identify locations suitable for renewable energy generation;
- Encourage carbon reduction/capture measures to be implemented where appropriate.

Minerals

- Encourage ways of working which reduce the overall carbon footprint of a mineral site;
- Promote new/enhanced biodiversity levels/ habitats as part of restoration proposals to provide carbon sinks and/or better connected ecological networks;
- Encourage the most efficient use of primary minerals.

Policy DM7: Internationally Designated Sites of Biodiversity Conservation Value

Proposals for minerals and waste development that are likely to have significant effects on internationally important wildlife sites should be supported by sufficient, current information for the purposes of an appropriate assessment of the implications of the proposal, alone or in combination with other plans and projects, for any Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site. Where the conclusions of the appropriate assessment, carried out in accordance with Council Directive 92/42 EEC and the Conservation of Habitats and Species Regulations 2010 (as amended), show that a proposal can be delivered without adverse effect on the integrity of any SAC, SPA or Ramsar site, planning permission will be granted.

Policy DM8: Nationally Designated Sites of Biodiversity and Geological Conservation Value

Sites of Special Scientific Interest, National Nature Reserves and irreplaceable habitats (including Ancient Woodland and veteran trees) will be safeguarded from inappropriate minerals and waste development. Planning permission will be granted for minerals and waste development on or affecting such sites, provided that it can be demonstrated that the development, either individually or in combination with other developments, would not conflict with the conservation, management and enhancement of the site, or have any other adverse impact on the site. Where this is not the case, planning permission will be granted provided that:

- the proposal cannot reasonably be located on an alternative site to avoid harm; and
- the benefit of the development would clearly outweigh the impacts that the proposal would have on the key features of the site; and
- the harmful aspects can be satisfactorily mitigated or, as a last resort, compensated by measures that provide a net gain in biodiversity/ geodiversity; and

- in the case of a SSSI, there would be no broader impact on the national network of SSSIs.

Policy DM9: Local Sites of Biodiversity Conservation Value

Planning permission will be granted for minerals and waste development on or affecting locally designated sites (including Local Wildlife Sites and their predecessors: Sites of Nature Conservation Importance; County Wildlife Sites; Local Nature Reserves; Critical Natural Assets), sites meeting Local Wildlife Site criteria and un-designated priority habitats identified in the Lincolnshire Biodiversity Action Plan, provided that it can be demonstrated that the development would not have any significant adverse impacts on the site. Where this is not the case, planning permission will be granted provided that:

- The merits of development outweigh the likely impact; and
- Any adverse effects are adequately mitigated or, as a last resort compensated for, with proposals resulting in a net-gain in biodiversity through the creation of new priority habitat in excess of that lost.

FURTHER AFIELD

Cambridgeshire County Council

Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, adopted July 2021:

Policy 20: Biodiversity and Geodiversity

International Sites

The highest level of protection will be afforded to international sites designated for their nature conservation or geological importance. Proposals having an adverse impact on the integrity of such areas, that cannot be avoided or adequately mitigated to remove any adverse effect, will not be permitted other than in exceptional circumstances. These circumstances will only apply where:

- a) There are no suitable alternatives;
- b) There are imperative reasons of overriding public interest; and
- c) Necessary compensatory provision can be secured.

Development proposals that are likely to have an adverse effect, either alone or in combination, on European designated sites must satisfy the requirements of The Conservation of Habitats and Species Regulations 2017 (as amended), including determining site-specific impacts and avoiding or mitigating against impacts where identified.

National Sites

Development proposals on land within or outside a Site of Special Scientific Interest (SSSI), and which is likely to have an adverse effect on it (either individually or in-combination with other developments), will not be permitted unless the benefits of the development clearly outweigh both the adverse impacts on the features of the site and any adverse impacts on the wider network of SSSIs.

Local Sites

Developments likely to have an adverse effect on locally designated sites, their features or their functions as part of the ecological network, including County Wildlife Sites and Local Geological Sites, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained.

Habitats and Species of Local and Principal Importance

Where adverse impacts are likely on the protection and recovery of priority species and habitats, development will only be permitted where the need for and benefits of the development clearly outweigh these impacts. Where adverse impacts are likely on other locally important habitats and species as identified by the Cambridgeshire and Peterborough Biodiversity Partnership, the benefits of development must outweigh these impacts. In both cases, appropriate mitigation and/or compensatory measures will be required.

Biodiversity and Geodiversity in Development

All development proposals must:

- a) Conserve and enhance the network of geodiversity, habitats, species and sites (both statutory and non-statutory) of international, national and local importance commensurate with their status and give appropriate weight to their importance;
- b) Avoid negative impacts on biodiversity and geodiversity;
- c) Deliver a measurable net gain in biodiversity, proportionate to the scale of development proposed, by creating, restoring and enhancing habitats and enhancing them for the benefit of species;
- d) Where viable opportunities arise, contribute to the delivery of the Local Nature Partnership vision to 'double land for nature';
- e) Where necessary, protect and enhance the aquatic environment within, adjoining or functionally linked to the site, including water quality and habitat. Where appropriate, proposals should identify Water Framework Directive (WFD) (or equivalent, if superseded) waterbodies in the vicinity of the proposal, and set out how WFD status will be protected and, if opportunities arise, improved, with any mitigation proposed being suitable and appropriate to the water body affected. For riverside development, proposals should consider options for riverbank naturalisation. In all cases regard should be had to the Cambridgeshire Flood and Water SPD or Peterborough Flood and Water SPD (or their successors); and
- f) For mineral extraction proposals, enable periodic temporary access in order to record, sample and document the geodiversity.

Unless national policy or legislation provides an alternative but similar mechanism, mineral and waste management proposals must (unless a decision taker would clearly not benefit from it) be accompanied by a completed biodiversity checklist (see respective planning authority website for details) and must identify features of value on and adjoining the site and to provide an audit of losses and gains in existing and proposed habitat. Where there is the potential for the presence of protected species and/or habitats, a relevant ecological survey(s) must be undertaken by a suitably qualified ecologist. The development proposals must be informed by the results of both the checklist and survey.

Mitigation of Potential Adverse Impacts of Development

Development should avoid adverse impact on existing biodiversity and geodiversity features as a first principle. Where adverse impacts are unavoidable, they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort where there is no alternative.

Eastleigh Borough Council

Eastleigh Borough Local Plan 2016-2036, adopted 25 April 2022

Two climate change policies, DM2 and DM3.

The Council has produced a Biodiversity Supplementary Planning Document which explains the nature conservation interest and site designations in the Borough and the ways in which the Council will protect and enhance them.

Policy DM11, Nature conservation

General Approach

1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:
 - a) protect, conserve and enhance all:
 - i. international, national and local nature conservation designations; and
 - ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character;
 - and facilitate their adaptation to climate change wherever possible;
 - b) assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);
 - c) seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and
 - d) contribute to major elements of the PFSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).

International Designations

2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.
3. The Council will work with PFSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:
 - a) implementing:
 - i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and
 - ii. the interim and any future New Forest Recreation Mitigation Strategy if required;

or alternative agreed site specific measures to address recreational disturbance;

- b) preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;
- c) protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and
- d) seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

National and Local Designations

- 4. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:
 - a) there are no alternative solutions;
 - b) the adverse effects are unavoidable;
 - c) measures are taken to mitigate or, as a last resort, compensate for the adverse effects;
 - d) there is an overall biodiversity net gain; and
 - e) if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.

Priority habitats, protected and priority species and the local ecological network

- 5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:
 - a) there are no alternative solutions;
 - b) the adverse effects are unavoidable;
 - c) measures are taken to mitigate or, as a last resort, compensate for the adverse effects;
 - d) there is an overall biodiversity net gain; and
 - e) if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.

Irreplaceable habitats

- 6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Buffers

- 7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.

Surveys

- 8. Development will not be permitted unless it can be demonstrated that:
 - a) there have been thorough habitat and species surveys;
 - b) the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and
 - c) the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.

Core Policy 50 – Biodiversity and Geodiversity

Protection

Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource, and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.

Biodiversity enhancement

All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the Biodiversity Action Plan (BAP) or River Basin/ Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Local sites

Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

- i. Cannot be reasonably avoided
- ii. Are reduced as far as possible
- iii. Are outweighed by other planning considerations in the public interest
- iv. Where appropriate compensation measures can be secured through planning obligations or agreements

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term.

Core Policy 52 – Green Infrastructure

Development shall make provision for the retention and enhancement of Wiltshire's green infrastructure network, and shall ensure that suitable links to the network are provided and maintained. Where development is permitted developers will be required to:

- i. Retain and enhance existing on site green infrastructure
- ii. Make provision for accessible open spaces in accordance with the requirements of the adopted Wiltshire Open Space Standards
- iii. Put measures in place to ensure appropriate long-term management of any green infrastructure directly related to the development
- iv. Provide appropriate contributions towards the delivery of the Wiltshire Green Infrastructure Strategy
- v. Identify and provide opportunities to enhance and improve linkages between the natural and historic landscapes of Wiltshire

If damage or loss of existing green infrastructure is unavoidable, the creation of new or replacement green infrastructure equal to or above its current value and quality, that maintains the integrity and functionality of the green infrastructure network, will be required.

Proposals for major development should be accompanied by an audit of the existing green infrastructure within and around the site and a statement demonstrating how this will be retained and enhanced through the development process.

Development will not adversely affect the integrity and value of the green infrastructure network, prejudice the delivery of the Wiltshire Green Infrastructure Strategy, or provide inadequate green infrastructure mitigation.

Green infrastructure projects and initiatives that contribute to the delivery of a high quality and highly valued multi-functional green infrastructure network in accordance with the Wiltshire Green Infrastructure Strategy will be supported. Contributions (financial or other) to support such projects and initiatives will be required where appropriate from developers.

Bath & North East Somerset Council

Local Plan Partial Update (submitted 17/12/2021)

Policy NE3: Sites, Habitats and Species

Development resulting in significant harm to biodiversity will not be permitted. Harm to biodiversity must always first be avoided and minimised. Where avoidance of harm is not possible, mitigation, and as a last resort, compensation must be provided, to at least equivalent ecological value.

For designated sites and other important habitat, this means:

1. Development that would adversely affect, directly or indirectly, internationally designated sites (such as RAMSAR) and sites within the National Sites Network (including new and existing SACs and SPAS) will not be permitted other than in exceptional circumstances where:
 - There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
 - The proposal needs to be carried out for imperative reasons of overriding public interest.
 - The necessary compensatory measures can be secured.
2. Development that would adversely affect, directly or indirectly nationally designated sites including SSSIs, Internationally Important Sites will not be permitted except in exceptional circumstances where:
 - a) the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest.
 - b) mitigation measures can be secured to prevent any significant adverse effect on the site, including retention of existing habitat and vegetation in situ; and c) provision of replacement habitat creation and bespoke measures.
3. Development that would adversely affect, directly or indirectly other habitats or features of biodiversity/geodiversity importance or value will only be permitted in the following cases:
 - a) for Sites of Nature Conservation Importance; Local Nature Reserves, Regionally Important Geological/ Geomorphological Sites and other sites of equivalent nature conservation value, where material considerations are sufficient to outweigh the local biological geological/ geomorphological and community/ amenity value of the site; where impacts have been minimised; and where there are opportunities to replace and/or offset the loss to at least equivalent or greater ecological value.
 - b) for UK Priority Habitats (not covered by Clause 4), where the importance of the development and its need for that particular location is sufficient to override the value of the species or habitat; and where impacts have been minimised; and where it can be demonstrated that it is possible to replace and/or offset the loss to at least equivalent or greater ecological value.
 - c) for locally important habitats, where the importance of the development and its need for that particular location is sufficient to override the value of the habitat.
 - d) for features of the landscape such as trees, copses, woodlands, grasslands, baches, ponds, roadside verges, veteran trees, hedgerows, walls, orchards, and watercourses and their corridors if they are of amenity, wildlife, or landscape value, or if they contribute to a wider network of habitats, where such features are retained and enhanced unless the loss of such features is unavoidable and material considerations outweigh the need to retain the features.

4. Development is expected to protect and enhance irreplaceable habitats (within B&NES including (but not confined to) ancient woodlands; ancient and veteran trees; priority grasslands; or SAC bat habitat within juvenile sustenance's zones). Development negatively impacting irreplaceable habitat will not be permitted unless there are wholly exceptional circumstances* and a suitable mitigation and compensation strategy is provided.
5. In all cases:
 - a) Firstly, any harm to the nature conservation value of the site should be avoided where possible before mitigation and as a last resort compensation are considered, and
 - b) Secondly, compensatory provision of at least equal nature conservation value is made for any outstanding harm, and
 - c) Thirdly, Biodiversity Net Gain will be delivered and managed in perpetuity (minimum of 30 years) through the appropriate means e.g. a legal agreement.
 - d) Then, as appropriate:
 - i. Measures for the protection and recovery of priority species are made.
 - ii. Provision is made for the management of retained and created habitat features.
 - iii. Site lighting details are designed to avoid harm to nature conservation interests; including habitat connectivity and function as part of an ecological corridor.

*Note: wholly exceptional reasons mean, for example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat."

New Policy NE3a: Biodiversity Net Gain

Development will only be permitted for major developments where a Biodiversity Net Gain of at least 10% is demonstrated and secured in perpetuity (at least 30 years) subject to the following requirements:

- a) The latest DEFRA metric or agreed equivalent is used to quantify the biodiversity value of the site pre-development, post-development after application of the mitigation hierarchy and for any off-site areas proposed for habitat creation or enhancement both pre- and post development.
- b) That the assessment be undertaken by a suitably qualified and/or experience ecologist and is submitted together with baseline and proposed habitat mapping in a digital format with the application.
- c) A management plan will be required, detailing how the post-development biodiversity values of the site and any supporting off-site provision will be secured, managed and monitored in perpetuity.
- d) Any off-site habitats created or enhanced are well located to maximise opportunities for local nature recovery.

For minor developments, development will only be permitted where no net loss and appropriate net gain of biodiversity is secured using the latest DEFRA Small Sites metric or agreed equivalent.

Opportunities to secure Biodiversity Net Gain on householder developments and exempted brownfield sites will be supported.

Policy NE5: Ecological Networks and Nature Recovery

Development proposals will be expected to demonstrate that a positive contribution will be made to regional Nature Recovery Networks as shown on the Policies Map and for maintaining or creating local ecological networks through habitat creation, protection, enhancement, restoration and/or management.

Policy NE6

Development proposals directly or indirectly affecting ancient woodland and ancient trees or veteran trees will not be permitted.