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Preliminary Ecological Appraisal

August 2024



39 Station Road, Desford

SMARTECH Design



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Non-Technical Summary

Three Shires Limited was commissioned by SMARTECH Design to undertake a Preliminary Ecological Appraisal (PEA) of an area of land at 39 Station Road, Desford. The proposed development is for the construction of a single residential property and the removal of trees and vegetation. There is a second proposed development for an area of land adjacent to 39 Station Road, discussed in a separate PEA.

The Site is predominantly vegetated garden with a priority habitat native hedgerow towards the north. There are two large sections of introduced shrub containing trees, one forms the east Site boundary and the other creates a central island in the garden. A section of the central island will be removed for the development. On Site there are two individual non-native oak, three silver birch, and five apple trees.

The additional area contains lawn, a gravel driveway, a line of trees, and modified grassland.

The wider landscape has some pockets of woodland but is dominated by arable farmland bordered by hedgerows and scattered trees. The Site is bordered on the south by the village of Desford and is located 11km to the west of the Leicester city centre.

It is considered unlikely that there will be impacts on the statutory site within 2km due to the distance and scale of the proposed development.

Where possible the mature onsite trees should be maintained. Damage to the native hedgerow should be prevented due to it being a priority habitat. There should be no dust pollution and silt runoff into Pond one (P1).

GCN Environmental DNA testing of **P1-P4** should be conducted to determine whether GCN are present in the surrounding area. Nesting birds may utilise habitats onsite and in the additional area, thus a nesting bird check is required prior to vegetation or tree removal. There is some suitable habitat for reptile that should undergo a fingertip search if it is to be removed. If the native hedgerow must be removed it should be done so with a two-stage cut to avoid harming hedgehogs or amphibians. There is potential for badger presence, thus a badger survey must be completed one to three months before works begin. If the suspected invasive non-native species are to be moved or soil near them disturbed, then a further survey would be required to identify them to a species level and determine whether special mitigation measures are required.

Overall, the Site has low ecological value.

Table 1: Overview of Required Mitigation for each Ecological Receptor

Factor	Present	Within 2km	Recommendation(s)
Sites of Nature Conservation			
Statutory Site	No	Yes	No action required.
Non- Statutory sites	N/A	N/A	N/A
Habitat			
Modified Grasslands	No	Yes	No action required.
Other Neutral Grasslands	No	Yes	No action required.
Trees and Shrubs	Yes	Yes	Retainment of sections of the onsite line of trees.
Hedgerows	Yes	Yes	Retainment of the native hedgerow.
Waterbodies	No	Yes	Prevention of dust pollution and silt runoff into P1 .
Protected and Notable Species			
Badger	No	Possible	A badger walkover prior to vegetation clearance and works.
Bats	No	Yes	No action required.
Birds	Possible	Yes	Works to commence out with nesting season, or nest checks of the additional area completed prior to vegetation clearances.
Great crested newt	Possible	Possible	Retainment of the native hedgerow and eDNA testing of P1-P5 .
Widespread Amphibians	Possible	Possible	Retainment of the native hedgerow.
Reptiles	No	Possible	A fingertip search to identify if any or reptiles are present before hibernacula or refugia is removed. If any are found, they should be moved to a suitable area offsite.
Invasive Non-Native Species (INNS)	Possible	Possible	Appropriate removal and disposal if the species are INNS.
Hedgehog	Possible	Possible	Retainment of the native hedgerow.

1.0 Introduction

1.1 Background

Three Shires Ltd was commissioned by SMARTECH Design on behalf of their client to undertake a Preliminary Ecological Appraisal (PEA) of an area of land in the north of Desford, Leicester LE9 9FN. The area of land contains two sites for two separate proposed residential developments, 39 Station Road and 39a Station Road. This PEA is for 39 Station Road, hereafter referred to as the 'Site'. The surveyed area of land not included in the 39 Station Road or the 39a Station Road site boundaries will be referred to as the additional area.

1.2 Purpose of this Report

The aim of this report is to provide an assessment of the current biodiversity value of the Site and additional area, highlight any other ecological features that have the potential to be impacted by the proposed development, and inform the design of the proposed development. The additional area was surveyed for its potential to deliver Biodiversity Net Gain (BNG) for the 39 Station Road and the 39a Station Road developments. The report follows the good practice guidance and follows the principles of the mitigation hierarchy and British Standard (BS) 42020 2013¹.

1.3 Site Location and Context

The Site is in the north of the village of Desford, Leicestershire (**Figure 1**). The Site is 0.1ha and the additional area is 0.42 ha. The approximate centre of the Site is at British National Grid Reference (NGR) SK48350373. The Site is approximately 11km west of the centre of the City of Leicester and approximately 3km north of the A47.

The surrounding landscape is dominated to the south by the village of Desford (**Figure 2**). To the north is mainly arable farmland and modified grassland bordered by hedgerows and scattered trees (**Figure 2**). There is a pocket of forestry approximately 10m to the south and 300m to the north.

¹ CIEEM (2017) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester

Figure 1: Site Location

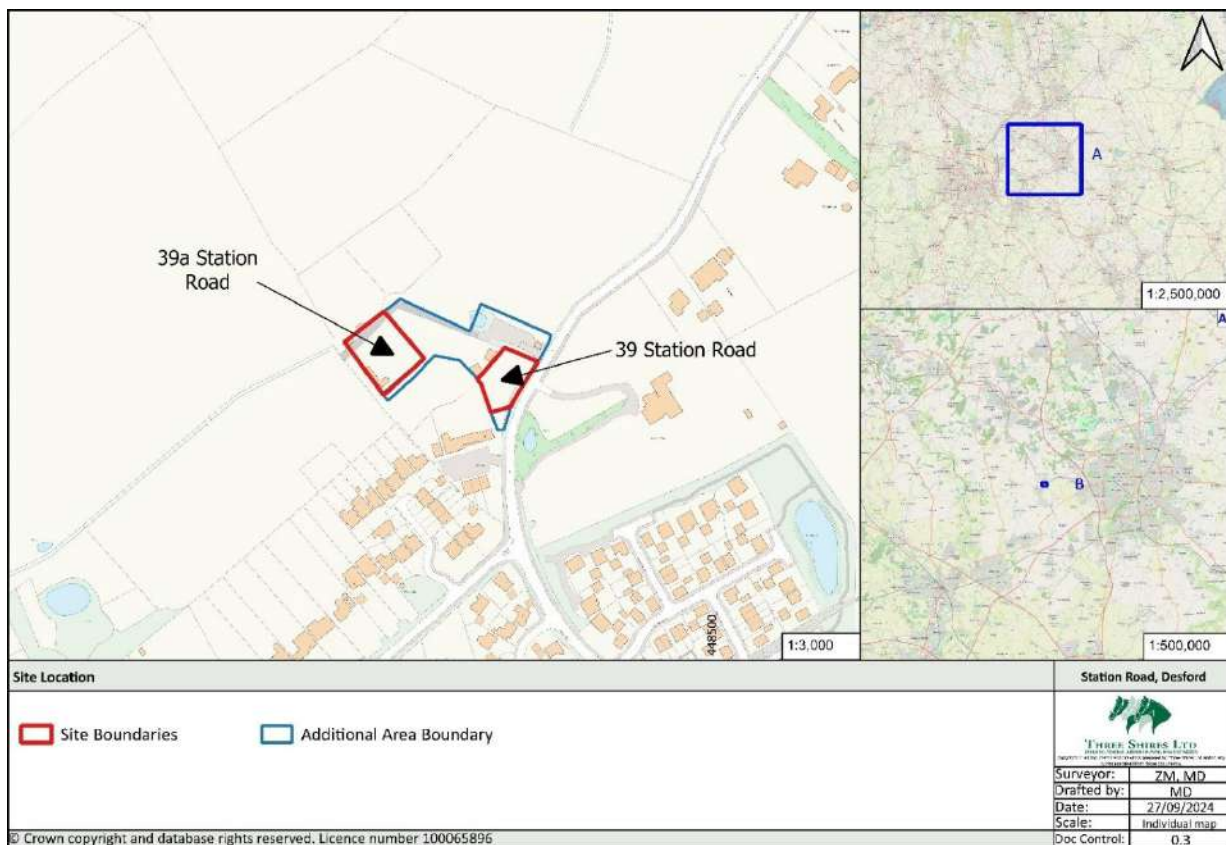
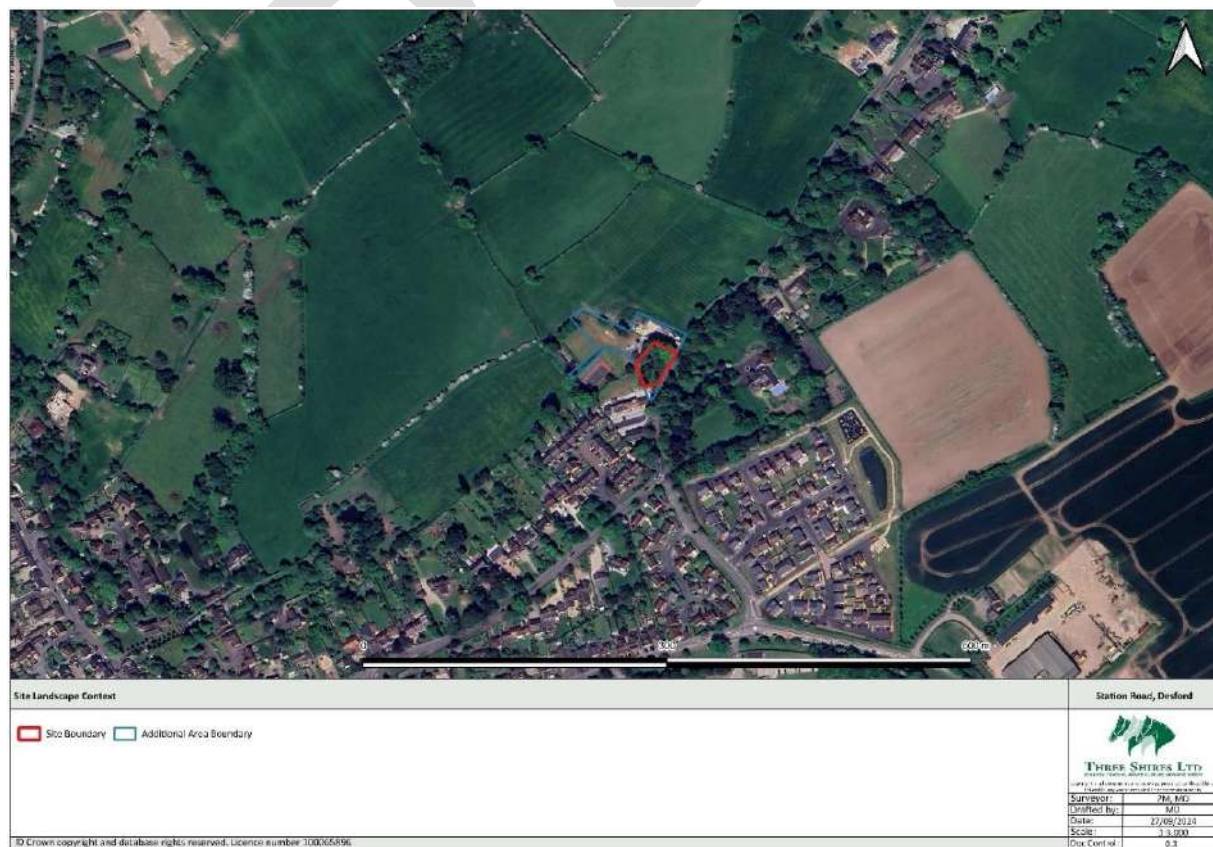


Figure 2: Site Landscape Context



1.4 Project Overview

The development proposal is for the construction of one residential property. A section of the trees and vegetation forming a central island on the Site will be removed. The additional area (**Figure 2**) will be directly affected by works on the Site. No detailed development plans for the Site were available at the time of writing.

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2.0 Relevant Legislation and Local Policy

Relevant legislation and National Planning Policies applicable to the Site can be found in **Appendix A**.

2.1 Local Planning Policies

Local planning policy is set out within the Hinckley and Bosworth Borough Council Local Plan 2006 – 2026 (Site Allocations and Development Management Policies DPD)², adopted July 2016. The policies of relevance to this assessment are detailed below.

DM6- Enhancement of Biodiversity and Geological Interest

“Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long term future management.

Major developments in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services.

Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the plan.

On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of local ecological networks can be secured.

If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

In addition to the above, where specific identified sites are to be affected the following will be taken into account:

Internationally and Nationally Designated Sites

International and Nationally Designated Sites will be safeguarded.

Development which is likely to have any adverse impact on the notified features of a nationally designated site will not normally be permitted.

In exceptional circumstances, a proposal may be found acceptable where it can be demonstrated that:

- a) A suitable alternative site with a lesser impact than that proposed is not available; and*
- b) The on-site benefits of the proposal clearly outweigh the impacts on the notified features of the site and where applicable, the overall SSSI or habitat network; and*
- c) All appropriate mitigation measures have been addressed through the development management process; and*
- d) Development likely to result in a significant effect on internationally designated sites will be subject to assessment under the Habitats Regulations and will not be permitted unless adverse effects can be fully avoided, mitigated and/or compensated.*

² hinckley-bosworth.gov.uk

Irreplaceable Habitats

Proposals which are likely to result in the loss or deterioration of an irreplaceable habitat would only be acceptable where:

- e) The need and benefits of the development in that location clearly outweigh the loss; and,*
- f) It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and*
- g) Appropriate compensation measures are provided on site wherever possible and off site where this not is feasible.*

Locally Important Sites

Development proposals affecting locally important sites should always seek to contribute to their favourable management in the long term.

Where a proposal is likely to result in harm to locally important sites (including habitats or species of principal importance for biodiversity), developers will be required to accord with the following sequential approach:

- h) Firstly, seek an alternative site with a lesser impact than that proposed;*
- i) Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site;*
- j) Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible."*

3.0 Methodology

3.1 Zone of Influence

The Zone of Influence (Zol) was defined considering the likely effects arising from the proposals, both during construction and in operation.

It is considered that the following impacts may result from the construction of single housing units:

- Temporary and permanent habitat loss;
- Injury or mortality of protected and notable species;
- Habitat degradation (e.g. dust pollution);
- Disturbance to protected and notable species resulting from works – machinery noise, vibration, light, increased human activity.

The distances from the site for these potential impacts are shown in **Table 1**.

Table 1: Zone of Influence used for this Assessment

Ecological Receptors	Zone of Influence
Special Areas of Conservation with bat species as features of interest	Within 10km of the Site boundary
Statutory protected sites	Within 2km of the Site boundary or where any site Impact Risk Zone (IRZ) covers the development site
Non statutory protected sites	Within 1km of the Site boundary
Habitats of Principal Importance and Ancient Woodland boundaries	Within 50m of the Site boundary
Waterbodies	Within 500m of the site boundary
Protected species evidence • Badger • Bat • GCN • Otter • Water vole	Within the Site boundary 30m from the location of disturbance 500m from the Site boundary 200m from the Site boundary along watercourses 200m from the Site boundary along watercourses
Habitats	Within the site boundary plus 50m, where visible

3.2 Desk Study

The following sources were used to provide data for the desk study:

- Aerial photography – in order to aid preliminary ecological and overall assessment of the site;

- Multi-Agency Geographic Information for the Countryside (MAGIC)³ – for statutory sites designated for nature conservation and recently granted (since 2009) European Protected Species (EPS) licences within 2km of the Site; and
- GCN Risk Zone (Leicestershire)⁴ – to determine if the area is important for GCN populations.
- Hinckley and Bosworth Borough Council Local Plan 2006 - 2026 adopted July 2016

A detailed description of the methodologies for habitats and protected species can be found in **Appendix B**.

3.3 Survey Constraints / Limitations

The surrounding habitats to the Site and additional area, and waterbodies and watercourses within 500m were not surveyed due to a lack of access to the land.

Ecological surveys are limited by factors which affect the field evidence and the presence of plants and fauna on-site such as, weather conditions, the time of year, and migration patterns and behaviour. The ecological surveys undertaken to support this PEA have not therefore produced a complete list of plants and animals, and the absence of evidence of any species on-site should not be taken as conclusive proof that the species is not present, or that it will not be present in the future.

³ magic.defra.gov.uk

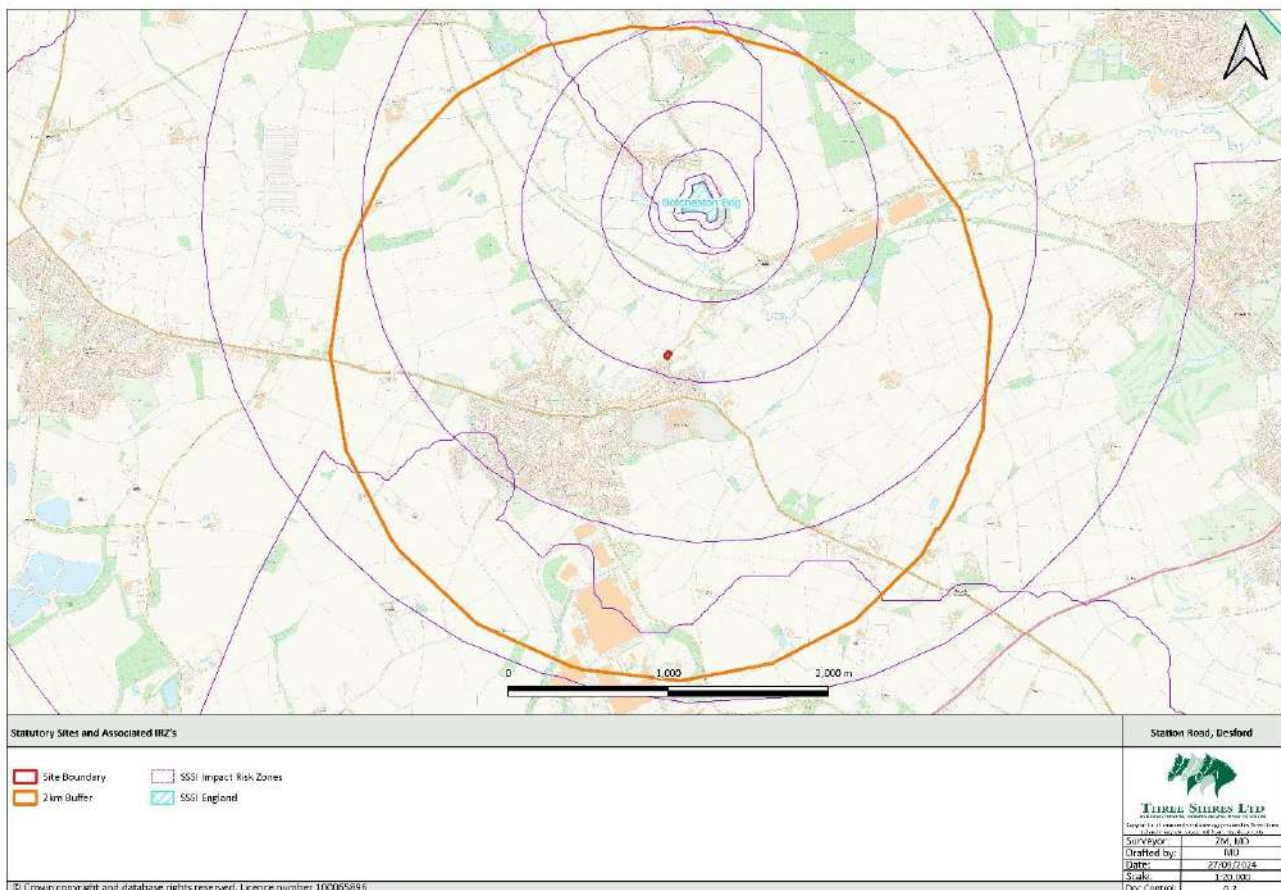
⁴ naturalengland-defra.opendata.arcgis.com

4.0 Results and Evaluation

4.1 Statutory Nature Conservation Sites

The Site boundary is 860m from Botcheston Bog Site of Special Scientific Interest (SSSI) and thus falls within its Impact Risk Zones (**Figure 3**). This SSSI is an area of lowland neutral grassland. Due to the extent and scale of the proposed development, it is not expected to have any impacts on the SSSI.

Figure 3: Statutory Sites and Associated IRZ's



4.2 Non-Statutory Sites

A background search for non-statutory sites was not undertaken as it was not considered to be proportionate due to the small scale of the development proposals and the localised impact within the Site boundary and additional area.

4.3 Priority Habitats

A native hedgerow forms the north Site boundary. There are no other priority habitats within 50m of the site boundary.

4.4 Waterbodies

There are no waterbodies on Site. Mapping and aerial imagery identified six ponds (P1-P6) within 500m of the additional area boundary (**Figure 4**). Further details of each pond are provided in **Table 3**. Two streams are present within 500m of the additional area boundary (**Figure 4**).

Figure 4: Waterbodies Within 500m

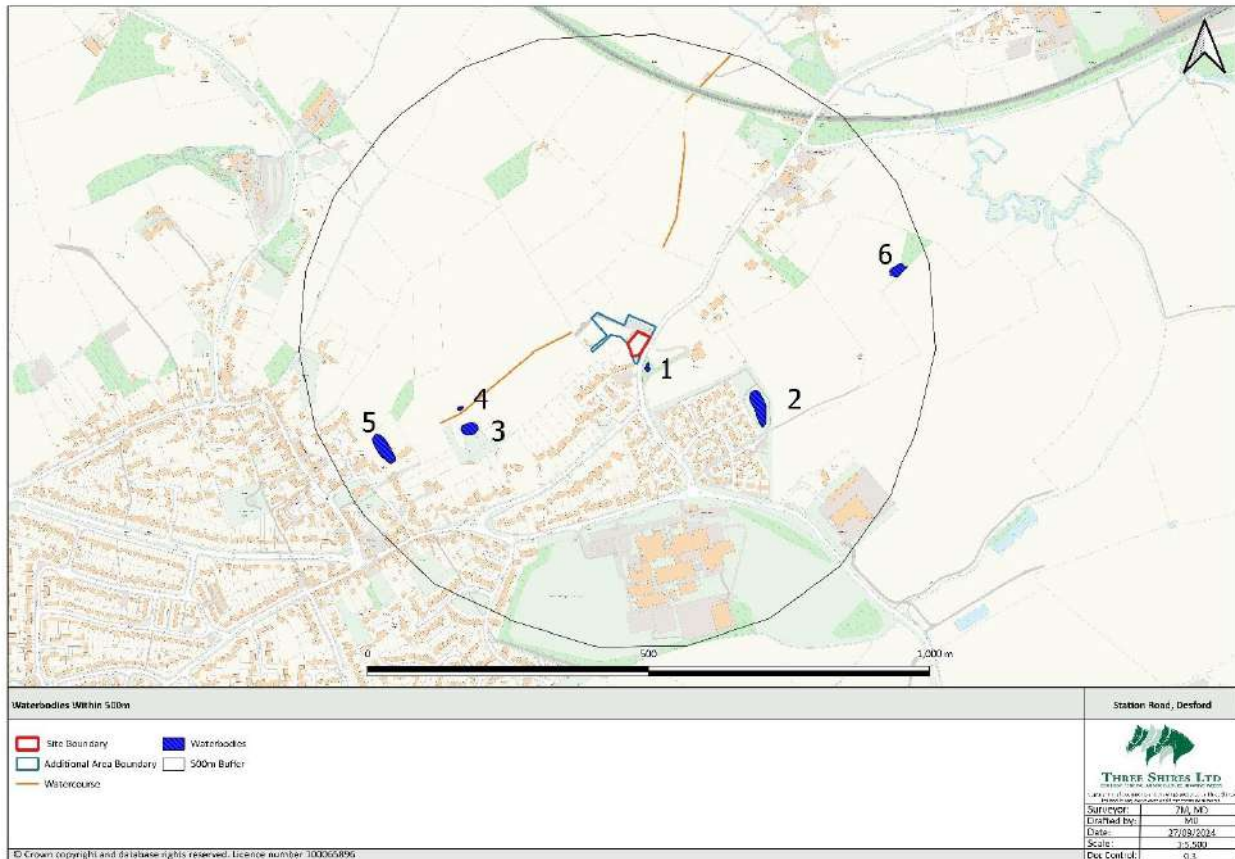


Table 2: Ponds within 500m of the Site Boundary

Pond Reference Number (Figure 4)	NGR	Distance Direction Additional Boundary and from Area	Separated From Site by Significant Barrier to GCN Movement?
1	SK48370368	17m east	No
2	SK48570361	224m east	No
3	SK48050357	239m west	No
4	SK48040361	240m west	No
5	SK47900354	387m west	No
6	SK48820386	442m east	Yes

4.5 Habitat Overview

The Site is a vegetated garden with two large areas of introduced shrubs (**Figure 5**). The garden consists of grass sward and ornamental species. The north Site boundary is a native hedgerow.

The additional area is primarily vegetated garden and an area of artificial unsealed, unvegetated surface to the north. There are two sections of modified grassland to the west. Adjacent to the west Site boundary there are three buildings (**B1-B3**). A line of trees is present in the northwest of the additional area.

Figure 5: Pre-Development Habitat Map



4.5.1 Vegetated Garden

The habitat within the Site boundary primarily consists of a frequently mown lawn forming a short even sward with two large areas of introduced shrubs. (**Photographs 1 and 2**). The dominant species forming the lawn are perennial rye (*Lolium perenne*) and white clover (*Trifolium repens*). Occasionally occurring species include ribwort plantain (*Plantago lanceolata*) and greater plantain (*Plantago major*).

A line of introduced shrub creates the east Site boundary (**Photographs 1 and 2**). The second area of introduced shrub forms a central island (**Photograph 2**). Both areas of shrub contain *prunus spp.* and Leyland cypress (*Cupressus × leylandii*). The vegetation consists of ornamental species, including rhododendron (*Rhododendron sp.*), and cotoneaster (*Cotoneaster sp.*). Common ivy (*Hedera helix*), wild carrot (*Daucus carota*), yarrow (*Achillea millefolium*) and purple toadflax (*Linaria purpurea*) occur in the very limited ground flora. It is understood from the landowner that the larger trees are to be maintained where possible.



Photograph 1: The north section of the east Site boundary.



Photograph 2: The south section of the east Site boundary.



Photograph 3: Looking east across the vegetated garden towards central island of shrubs.

4.5.2 Native Hedgerow

A native hedgerow forms the north Site boundary (**Photograph 4**). The dominant species are bramble (*Rubus fruticosus*), hawthorn (*Crataegus spp.*), and bindweed (*Convolvulus spp.*). Common ivy is occasionally occurring. The hedgerow is approximately 25m in length 3m high, and 1m wide and qualifies as a priority habitat. However, the hedgerow is a poor example and does not requiring further assessment as potentially important under the Hedgerow Regulations⁵.

⁵ The Hedgerows Regulations 1997, No. 1160



Photograph 4: Native hedgerow forming the north Site boundary.

4.5.3 Trees

Apple

The west Site boundary consists of a line of five small individual apple trees (*Malus sp.*) (**Photograph 5**). These trees have been considered against the definition of traditional and intensive orchard but it has been concluded they lack the features to be classified as either - notably for traditional orchard due to the lack of habitat structure and type not bearing sufficient characteristics of wood pasture and parkland (**Photograph 5**).



Photograph 5. Looking north at five apple trees.

Non-Native Oak

The northeast and northwest corners of the Site contain a large single non-native mature oak (**Photographs 6 and 7**).



Photograph 6. Non-native oak in the northwest corner of the Site.



Photograph 7. Non-native oak in the northeast corner of the Site in the left of the frame.

Silver Birch

The central island of shrubs has two medium sized silver birch (*Betula pendula*) towards the north and one medium sized silver birch to the south (**Photograph 8 and 9**).



Photograph 8. Looking north at silver birch in the north of the Site.



Photograph 9. Looking south towards silver birch in the south of the Site.

4.5.4 Additional Area Habitats

Within the additional area, the habitats are predominantly vegetated garden (**Figure 5**). The additional area contains a line of trees to the northwest, an area of artificial unvegetated- unsealed surface to the north, a strip of modified grassland to the southwest and an area of modified grassland in the centre. Adjacent to the west Site boundary there are three buildings (**B1-B3**). For detailed descriptions of the habitats in the additional area, see **Appendix C**.

4.6 Protected and Notable Species

4.6.1 Great Crested Newt and Widespread Amphibians

The desk study identified the Site as being in an amber risk zone for district licensing of GCN. Indicating they could be present, with suitable breeding ground and terrestrial habitats. MAGIC returned no records of GCN presence within 500m of the Site boundary.

P1 may have GCN and widespread amphibian presence and has connectivity to Site due to its close proximity. **P3-P5** may also have GCN and widespread amphibian presence and offer strong connectivity to Site via a stream and hedgerow (**Figure 2**). **P2** has created after 2019 as both a sustainable drainage systems pond and to provide habitat suitable for amphibian and reptile⁶. Amphibian and reptile hibernacula and refugia was installed in the vicinity of **P2**. **P2** has fair connectivity to Site via fragmented woodland despite the presence of a road and buildings.

More desirable habitat for GCN and widespread amphibian exists outside the Site and additional area boundaries as a mosaic of woodland, hedgerows and modified grassland. However, there is some suitable habitat onsite and within the additional area. The gravel and rocks in the modified grassland depression in the northeast of the additional area offers potential refugia. The strip of modified grassland and the onsite native hedgerow offer suitable terrestrial habitat and potential refugia.

4.6.2 Birds

The onsite line of trees, native hedgerow, and the modified grassland in the additional area provide habitat that could be utilised by nesting birds, some of which may be priority species. All wild bird species, their nests, and eggs are protected by law. Due to the limited extent of the Site, it is unlikely that important populations of these species occur.

4.6.3 Invasive Non-Native Species

A cotoneaster is located below the central line of the trees and a rhododendron is located below the east line of trees (**Photographs 11, 12, and 13**). Cotoneaster and rhododendron are genus which contain Invasive Non-Native Species (INNS) listed on Schedule 9 of the Wildlife and Countryside Act.



Photograph 11: Cotoneaster in the central line of trees.



Photograph 12: Rhododendron in the east line of trees.



Photograph 13: Rhododendron in the east line of trees.

⁶ https://www.hinckley-bosworth.gov.uk/info/200249/view_planning_applications_and_decisions

4.6.4 Reptiles

In the northeast corner of the additional area there is a pile of grass cuttings which is beginning to decompose (**Photograph 10**).



Photograph 10: Pile of grass cuttings in the northeast of the additional area.

The grass cuttings offer potential refugia for reptiles and is a suitable breeding site for slow worm (*Anguis fragilis*) and grass snake (*Natrix natrix*).

4.6.5 Hedgehog

The native hedgerow offers suitable foraging and hibernacula for hedgehog and the lawns on Site and in the additional area offer further foraging opportunities. The grass cuttings in the additional area provide hibernacula. In addition, there is connectivity to the Site adjacent section of woodland that provides foraging and hibernacula (**Figure 5**).

4.6.6 Badgers

There was no onsite evidence of badger (*Meles meles*) presence. However, Badgers are very mobile and the native hedge to the north of the Site and the surrounding woodland and open country offer some suitable habitat for sett building or foraging. As such, their presence on the Site cannot be ruled out.

4.6.7 Bats

According to Granted European Protected Species Applications there is evidence of bat presence within 2km of the Site boundary. The destruction of a brown long eared (*Plecotus auratus*) resting place or breeding site was allowed in 2010 at a location 850m north of the Site boundary. The destruction of a brown long eared and common pipistrelle (*Pipistrellus pipistrellus*) resting place was allowed in 2017 at a location 1.99km north of the Site boundary. Although, the bat locations only offer some connectivity to the Site through fragmented lines of trees and some hedgerows bordering arable farmland.

None of the trees onsite or in the additional area offer Potential Roosting Features (PRFs).

B1-B3 have negligible suitability for roosting bats. **B1** is exposed and illuminated during the day, and **B2** and **B3** have a lack of void spaces and experience active use.

4.6.8 Other Protected or Notable Species

The following protected species are considered to be absent from the Site due to a lack of suitable habitat and field evidence:

- Hazel dormouse (*Muscardinus avellanarius*)
- White-clawed crayfish (*Austropotamobius pallipes*)
- Riparian Mammals including otter and water vole
- Notable invertebrates
- Freshwater and Migratory Fish
- Other mammals

5.0 Conclusions and Recommendations

5.1 Conclusions

The biodiversity on the Site and in the additional area is considered to be low due to the predominant habitat being a maintained garden. However, the trees offer potential for nesting birds. The native hedgerow is a priority habitat and provides some foraging and hibernacula for hedgehog and amphibian and nesting for birds. The pile of hay in the additional area offers a potential breeding site for slow worm and grass snake, as well as further hibernacula for hedgehogs.

The wider landscape offers suitable badger habitat for sett building and foraging.

The proposals will likely result in the loss of ornamental species, vegetated garden, *prunus spp.*, and Leyland cypress.

The appropriate recommendations to mitigate for potential impacts to habitats and protected species are outlined in the next section. The results of the following recommendations should be used to inform a method statement.

5.2 Habitats

It is recommended that the trees on Site surrounding the central island are retained. Adherence to best practice guidelines in respect to working in the vicinity of trees should be employed, including the implementation of root protection areas (RPA)⁷.

Any lost trees will need to be mitigated for regarding BNG. The apple trees have high ecological value and thus contributions towards BNG. BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990. Due to the Site consisting of a private garden, any trees removed on Site could not be replanted on Site to regain lost biodiversity credits⁸.

The native hedgerow should be maintained and protected from damage as a priority habitat.

The development proposals have the potential to impact **P1**, which is 17m to the southeast of the additional area boundary. Standard mitigation measures for the prevention of dust pollution and silt runoff should be put in place to avoid impacts⁹.

5.3 Protected and Notable Species

5.3.1 Great Crested Newt and Widespread Amphibian

The native hedgerow should be maintained due to its potential for GCN and widespread amphibian refugia. If vegetation clearances of the native hedgerow must occur, a Precautionary Working Method Statement (PMWS) should be employed. This should involve a two-stage cut of the vegetation, the first stage will reduce the vegetation to no less than 150mm. The second cut to fully clear the vegetation will occur after a period of 48 hours. All arisings will be dispersed. This work must be supervised by a suitably qualified Ecological Clerk of Works (ECoW). If any GCN or widespread amphibian are found, they should be moved to a suitable area offsite.

It is recommended that environmental DNA (eDNA) testing of **P1-P4** is carried out to detect GCN presence where access is possible. Testing for eDNA requires water samples taken during a survey season from mid-

⁷ British Standards Institute (2012). BS 5837:2012 *Trees in relation to design demolition and construction – Recommendations*

⁸ Department for Environment, Food & Rural Affairs (2024). *Statutory biodiversity metric: user guide*.

⁹ Kwan, J., et al. (2023). *Environmental good practice on site guide*. 5th edn. CIRIA

April to the end of June¹⁰. If any eDNA testing returns a positive result, meaning GCN's are present, a District Level Licensing (DLL) scheme may be required¹¹.

5.3.2 Birds

It is recommended that vegetation clearances and removal of trees should commence outside nesting season (March - August) to prevent the loss of bird nests. If it is not possible to work outside this period, it is recommended that nesting bird checks are completed immediately prior to works commencing.

5.3.3 Invasive Non-Native Species

If the suspected INNS species are to be moved or soil near them disturbed, then a further survey would be required to identify them to a species level and determine whether special mitigation measures are required. If they are INNS, they must be responsibly disposed of to avoid them being spread into the wild. Spreading Schedule 9 species into the wild is an offence according to the Wildlife and Countryside Act 1981.

5.3.4 Reptiles

Prior to the removal of refugia or hibernacula (the pile of grass cuttings), a suitably qualified ecologist will be required to conduct a fingertip search to identify any reptiles. If any reptiles are found, they should be moved to a suitable area offsite.

5.3.5 Hedgehog

The section of native hedgerow should be maintained due to having suitability for hedgehogs. If vegetation clearances of the native hedgerow must occur, a PMWS should be employed. This should involve a two-stage cut of the vegetation, the first stage will reduce the vegetation to no less than 150mm. The second stage cut to fully clear the vegetation will occur after a period of 48 hours. All arising's will be dispersed. This work must be supervised by a suitably qualified ECoW. If any hedgehogs are found, they should be moved to a suitable area offsite.

Any hedgehogs identified in the fingertip search of the pile of grass they should also be moved to a suitable area offsite.

5.3.6 Badgers

A badger walkover prior to vegetation clearance and works is recommended to check for evidence of badgers onsite.

¹⁰ Natural England (2023). An evidence review for great crested newt eDNA monitoring protocols.

¹¹ Department for Environment Food and Rural Affairs (2023) How to join the great crested newt district level licensing scheme

Appendix A Relevant Legislation and Policies

Legislation

The main pieces of legislation regarding the protection of species and habitats in the UK are the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Other legislation is in force which gives protection to certain species, such as the Protection of Badgers Act 1992, specific activities, such as the Wild Mammals (Protection) Act 1996 and specific habitats, such as the Hedgerow Regulations 1997 (as amended).

Invasive non-native species are regulated via a combination of the Invasive Alien Species (Permitting and Enforcement) Order 2019 and Section 14/Schedule 9 of the 1981 Act.

Under the Natural Environment and Rural Communities (NERC) Act 2006, all public bodies are required to have due regard to the conservation of biodiversity when carrying out their function. Under this Act, habitats and species that are of principal importance for the conservation of biodiversity in England are identified and published under the provisions of Section 41 (S41).

Planning Policies

The biodiversity policies which are most relevant on a national level are the National Planning Policy Framework (NPPF)¹².

National Planning Policies

In terms of planning policy, at a national level, Chapter 15 of the NPPF (which relates to conserving and enhancement the nature environmental) requires Local Authorities to take measures to:

- Refuse planning permission if significant harm to biodiversity results from a development that cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for;
- Develop planning policies and decisions should contribute to and enhance the natural and local environment.
- Not usually permit development 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). The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;
- Refuse planning permission for development that 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; and
- Support development whose primary objective is to conserve or enhance biodiversity; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

¹² National Planning Policy Framework - GOV.UK (www.gov.uk)

Appendix B Methodology

Habitat Survey

This was conducted by undertaking a systematic walkover over of the Site habitats, using a route which allowed all habitats to be viewed and flora species identified where possible. Habitats were defined and mapped using the 'UKHab V2.01' classification system.

Dominant plant species were noted, as were any protected, uncommon, invasive species or species indicative of a particular habitat type, but there was no attempt to compile exhaustive species lists for this element of the Site assessment. Botanical nomenclature in this report follows Stace (2019)¹³ for both scientific and common names.

The survey also included:

- A preliminary search for evidence of protected or important species and species groups, and for habitats and features likely to host them if direct evidence is absent;
- The identification of other constraints (e.g., invasive non-native plant species) and any further opportunities for ecological enhancement; and
- An assessment to identify any potential roosting features (PRF) of significant buildings and trees providing bat roost potential.

Protected and Notable Species

Badger

Field signs for badger (*Meles meles*) within or adjacent to the Site (within 30m of the boundary, access permitted) were recorded in accordance with the standard methodology outline (Harris et al 1989) which includes surveying for active sett entrances, as well as spoil, bedding, latrines, hairs, prints, foraging signs and pathways.

A walkover of the whole site (including land, where accessible, within approximately 30m of the Site boundary) was undertaken and signs of badger activity were recorded in accordance with the standard methodology outline¹⁴. Signs of activity include:

- Sett entrances (entrances that are greater than 25cm in diameter with a flattened oval appearance);
- Presence of and size of any spoil heaps outside tunnel entrances;
- Presence of bedding material within or outside tunnel entrances;
- The degree of smoothness, or wear of the tunnel sides;
- The degree of any vegetation covering tunnel entrances, the presence of any debris within the tunnel;
- Faeces;

¹³ Stace, C (2019) *New Flora of the British Isles*. 4th edn. Cambridge University Press, Cambridge, UK.

¹⁴ Surveying Badgers, Harris S. et. al, 1989

- Paths between setts or leading to feeding habitats;
- Areas of scratching at the base of tree trunks or branches;
- Scrapes into the ground (snuffle holes) where badgers have searched for food;
- Bundles of vegetation where badgers may sleep above ground (day nests);
- Hair traces;
- Tracks.

When found, the activity level and status of the sett was based on the number of used, partially used and disused entrances. The definition of a badger setts “current use” is outlined in the Protection of Badgers Act 1992 (as amended) and further in a guidance by Natural England¹⁵; mainly smooth-sided entrances, clear of debris and vegetation, with spoil heaps and sometimes bedding material and footprints outside.

If setts were located, then they were categorised according to **Table 2**, with the activity status categorised according to **Table 3**.

Table 2: Sett Categories

Sett Type	Definition
Main	Typically, several active entrances with large spoil heaps and obvious paths leading from and between sett entrances. Signs of frequent and constant high levels of activity. May contain inactive entrances.
Annexe	Normally close to a main sett (<50m), comprising several entrances with well-worn paths between the main and annex sett. May not be in use all the time, even if main sett is very active.
Subsidiary	Usually some distance from main sett (>150m) with several entrances, but no obvious paths connecting to other setts. May only be used intermittently.
Outlier	Often comprise one or two entrances with little spoil outside. No obvious paths connecting to other setts and only used sporadically. May also be used by foxes and rabbits.

Table 3: Entrance and Overall Sett Activity Status Criteria

Sett status	Definition	Field signs
Active	Where field signs indicate that the sett or entrance is currently being occupied by badgers.	Field signs include recently excavated spoil, bedding material, footprints, hairs, fresh latrines and with well-worn paths present between entrances and leading into surroundings, entrances generally clear of vegetation and look well used.
Inactive	Where field signs indicate a strong likelihood of no or limited badger activity within the previous three months.	Absence of fresh spoil, bedding or footprints, leaf build up in tunnel entrances, extensive cobwebs in tunnels, seedlings growing in tunnel entrances etc. Paths may be present but less well defined.
Disused	Where field signs indicate that the sett has not been used for some	Large amount of leaf litter / debris collected at tunnel entrances and vegetation grown up around or

¹⁵ Guidance on ‘Current Use’ in the definition of a Badger Sett, *Natural England 2009*, https://webarchive.nationalarchives.gov.uk/ukgwa/20140523111208/http://www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

Sett status	Definition	Field signs
	considerable time, typically more than 3 months minimum.	inside entrances. No obvious paths visible leading to and from entrance and spoil heap has dispersed / weathered and become re-vegetated. May be partially collapsed or blocked.

Bats

A Preliminary Roost Assessment (PRA) was undertaken to determine the Potential Roosting Features (PRFs) which could support roosting bats. This was undertaken by suitably qualified and experienced Three Shires Ltd ecologists led by a suitably experienced ecologist for the complexity of the structure being surveyed and the assessment of the buildings and trees and their suitability for roosting bats were carried out from the ground using binoculars and torches (where necessary).

The external surfaces of any buildings were inspected using binoculars to check for loose or lifted roof tiles, soffit boards, fascias, guttering or cracked brickwork. Internal inspections were also undertaken, where access was permitted, to give a broader understanding of the suitability of the building and to identify any potential features that may provide roosting opportunities.

An assessment of the trees and their suitability for roosting bats was also carried out from the ground using binoculars and torches (where necessary). These were assessed for features such as woodpecker holes, fissures, cracks, cavities, and loose bark that could be suitable for use by roosting bats.

Where features were identified, observations of evidence of bat use or activity, such as droppings, urine stains, odour, feeding remains, scratch marks, grease stains, wear marks were recorded.

Table 4 below details the level of suitability for roosts and the features that classify each suitability level.

Table 4: Bat Roost Suitability Levels

Suitability Level	Typical Features / Evidence
Confirmed	Evidence or presence of bats within feature or on/within building/structure
High	A building/structure with one or more potential roost Sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.
Moderate	A building/structure with one or more potential roost Sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
Low	A building/structure with one or more potential roost Sites that could be used by individual bats opportunistically. However, these potential roost Sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity or hibernation).
Negligible	Negligible features present that are unlikely to support roosting bat species

Birds

The species of birds encountered during the survey were recorded and details of suitable habitats for nesting birds during the breeding bird season (March – August inclusive) were noted, with habitat suitability for

notable species or important assemblages being considered, including barn owl. Binoculars were used to aid vision and the presence of nests, where observed, was also recorded.

Great Crested Newt (GCN)

An assessment of all on-site waterbodies and those within the immediate vicinity of the Site boundary were surveyed for their potential to provide suitable habitat for GCN. If available to be surveyed, each pond was also given Habitat Suitability Index¹⁶ (HSI) score. This allowed a numerical value to be given to each pond based on its suitability based on variety of factors. These scores range from < 0.5 being poor to > 0.8 being excellent (Table 5).

Table 5: HSI Scores

HSI score	Pond Suitability
< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

Reptiles

Suitable habitat for grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*) and adder (*Vipera berus*) was identified and recorded. Evidence for field signs for reptile (e.g. sloughs, burrows, eggs) and an assessment of habitat potential for reptiles (e.g. edges/ecotones, ridges, hummocks, sunny slopes, brash heaps) were recorded.

Riparian Mammals

The waterbodies on Site were searched for signs of water vole (*Arvicola amphibius*), European otter (*Lutra lutra*) and Eurasian beaver (*Castor fiber*) and evaluated for suitability of habitat using binoculars where surveillance of the opposing bank was not possible. The aim of this survey was to look for and identify any signs of the presence of riparian mammal using field signs such as, visual confirmation by way of seeing the animal, latrines, footprints, (although these on their own do not indicate a positive presence) food caches, burrows, gardens, runways through vegetation, nesting material pulled into and blocking the entrance to burrows.

Otter

The survey for otter was undertaken following best practice guidelines and consisted of a bankside survey 200 metres upstream and downstream of the proposed footbridge on both banks searching for any visible signs of otter activity including visual confirmation by way of seeing the animal, scat, footprints, slides into the river, potential holt locations and any visible feeding remains.

Water Vole

The water vole assessment was undertaken following best practice guidelines and consisted of a bankside survey covering a distance of 200 metres upstream and downstream on both riverbanks. The aim of this survey was to look for and identify any signs of the presence of water vole using field signs such as, visual confirmation by way of seeing the animal, latrines, footprints, (although these on their own do not indicate a positive

¹⁶ <https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file>

presence) food caches, burrows, gardens, runways through vegetation, nesting material pulled into and blocking the entrance to burrows.

White-Clawed Crayfish

A bankside assessment of the river habitat and suitability for white-clawed crayfish (*Austropotamobius pallipes*) was carried out. The stream substrate, form, flow, bankside structure, vegetation were noted, as well as any signs of feeding upon crayfish (in the form of remains on banks).

Freshwater and Migratory Fish

The waterbodies on Site were visually evaluated for suitability of habitat for fish and observed for the presence of any species.

Other Notable Species

The Site was also assessed for suitability for other protected species such as barn owl (*Tyto alba*) and hedgehog (*Erinaceus europaeus*).

Appendix C Additional Area Habitats

Vegetated Garden

The vegetated garden is a frequently mown lawn (**Photograph 14**). There is a short, even sward with some less maintained areas. The dominant species are perennial rye and white clover. Occasionally occurring species include mugwort (*Artemisia vulgaris*), greater plantain, and ribwort plantain. Rarely occurring species include black medic (*Medicago lupulina*), red clover (*Trifolium pratense*), and self-heal (*Prunella vulgaris*).



Photograph 14: Looking southwest across the vegetated garden.

Modified Grassland, Tall Forbs

A strip of modified grassland occurs in the southwest of the additional area (**Photograph 15**). The vegetation is approximately 1.5m tall at its maximum. The dominant species include perennial rye, creeping thistle (*Cirsium arvense*), common nettle (*Urtica dioica*), and willow herb (*Epilobium spp.*). Occasionally occurring species include bindweed (*Convolvulus spp.*), hawthorn, ragwort (*Jacobaea vulgaris*), bitter dock (*Rumex obtusifolius*), and false oat grass (*Arrhenatherum elatius*).



Photograph 15: Looking northeast across the strip of modified grassland, tall forbs situated in northwest of the additional area.

Modified Grassland

An area of modified grassland is present in the centre of the additional area (**Photograph 16**). The habitat is a 7m by 3m depression in the lawn with gravel and rocks at its base. The dominant species are perennial rye, false oat grass, Yorkshire fog, bitter dock, greater willow herb, and creeping thistle. Occasionally occurring species include ribwort plantain and greater plantain. Bristly oxtongue (*Helminthotheca echioides*) rarely occurs.



Photograph 16: Looking west across area of modified grassland situated in the centre of the additional area.

Artificial Unvegetated- Unsealed Surface

A parking and storage area to the northeast consists of artificial unvegetated- unsealed surface (**Photograph 17**). The area contains scattered construction machinery and materials.



Photograph 17: Looking west across the parking and storage area.

Buildings

The additional area contains three buildings (**B1-B3**) that are adjacent to the west Site boundary. **B1** and **B2** are timber office spaces and **B3** is used for sheltering construction materials.

Table 3: Building Description

Building	Description	Photographs
B1	The larger of the two office buildings. Timber walls and a flat Polyvinyl Chloride (PVC) roof. Gaps are present between the top of the walls and the roof. There is no attic space.	  
B2	The smaller of the two office buildings. Timber walls and a flat PVC roof. Gaps are present between the top of the walls and the roof. There is no attic space.	 

Building	Description	Photographs
B3	Machinery storage. The structure is a timber frame with a tarpaulin roof. The west and south walls are covered with tarpaulin and the east and north have wire fencing leant against them.	 

Lines of Trees

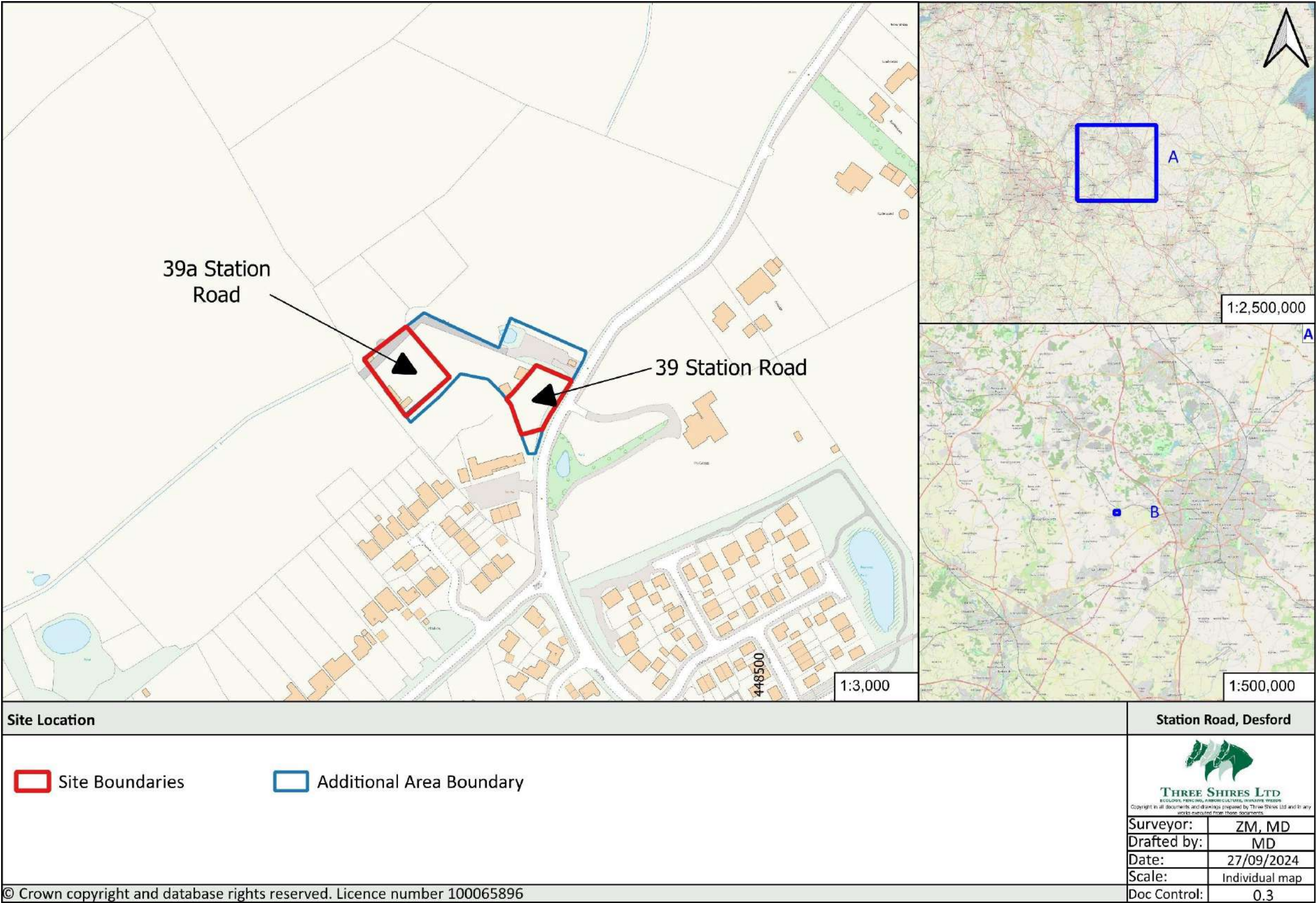
A line of trees is situated in the north of the additional area in the vegetated garden (**Photograph 18**). The line of trees consists of three mature silver birch (*Betula pendula*) to the east and an ash and a field maple (*Acer campestre*) to the west.



Photograph 18: Looking south to the line of trees to the north of the additional area.

Appendix D A3 Maps

a Site Location

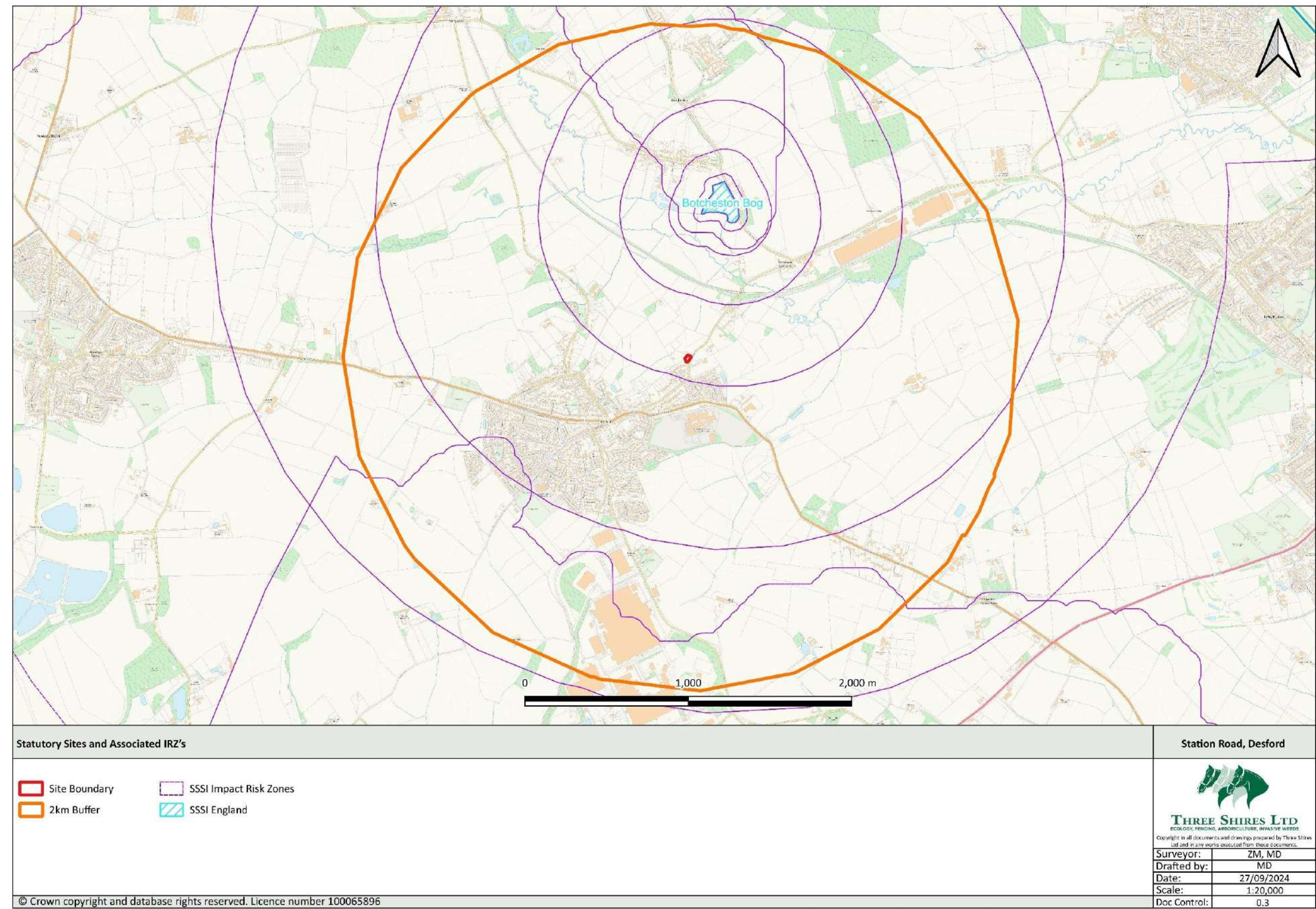


b Site Landscape Context

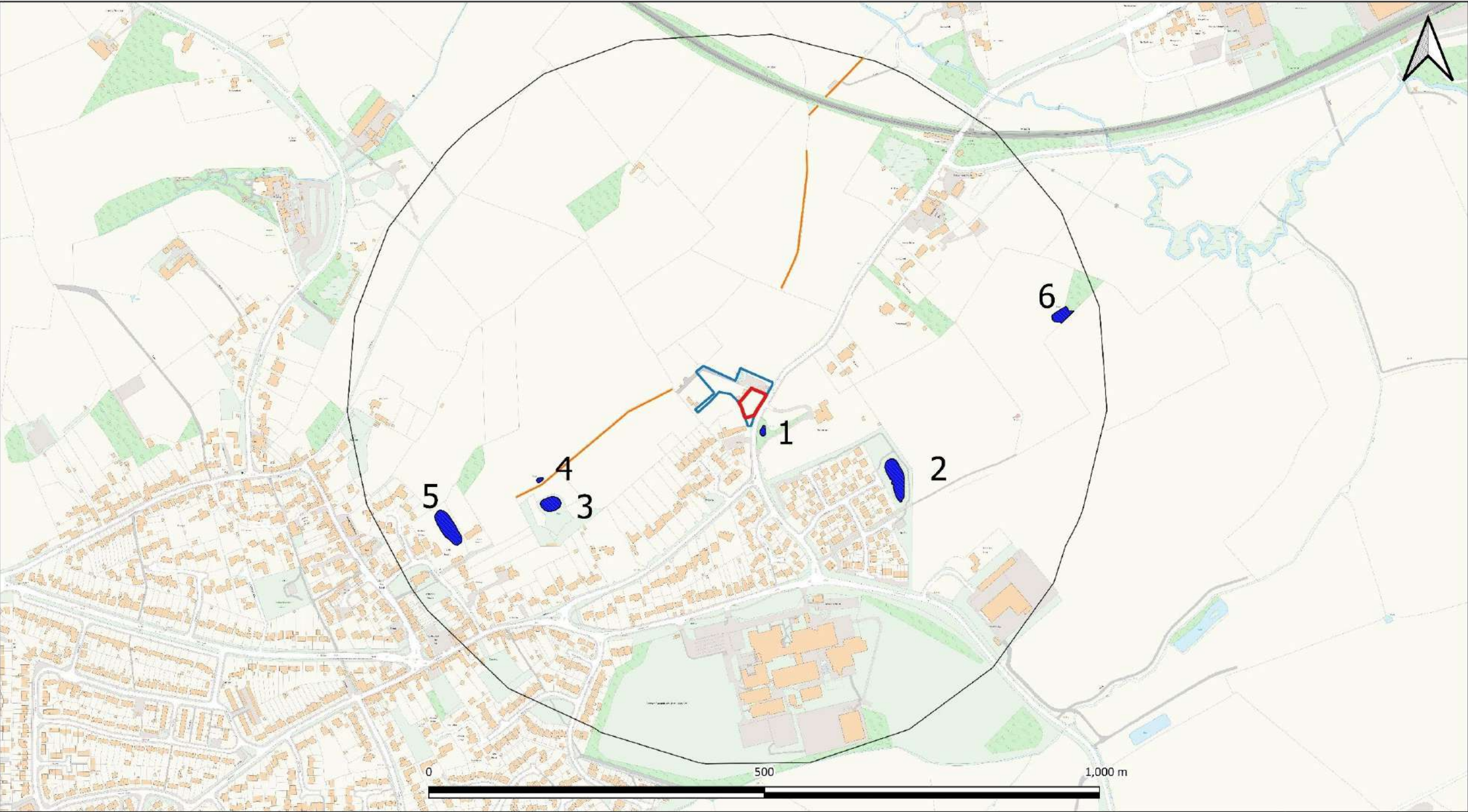


Site Landscape Context		Station Road, Desford	
Site Boundary Additional Area Boundary		 THREE SHIRES LTD ECOLOGICAL SERVICES, LANDSCAPE ARCHITECTURE, PLANTING, MAINTENANCE, INVASIVE WEEDS Copyright in all documents and drawings prepared by Three Shires Ltd and in any works executed from these documents.	
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		Date:	27/09/2024
		Scale:	1:3,000
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c Statutory Sites and Associated IRZ



d Waterbodies Within 500m



Waterbodies Within 500m		Station Road, Desford											
Site Boundary Additional Area Boundary Watercourse Waterbodies 500m Buffer		 THREE SHIRES LTD ECOLOGICAL SERVICES, ARBORICULTURE, INVASIVE WEEDS Copyright in all documents and drawings prepared by Three Shires Ltd and in any works executed from those documents. <table><tr><td>Surveyor:</td><td>ZM, MD</td></tr><tr><td>Drafted by:</td><td>MD</td></tr><tr><td>Date:</td><td>27/09/2024</td></tr><tr><td>Scale:</td><td>1:5,500</td></tr><tr><td>Doc Control:</td><td>0.3</td></tr></table>		Surveyor:	ZM, MD	Drafted by:	MD	Date:	27/09/2024	Scale:	1:5,500	Doc Control:	0.3
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e Pre-Development Habitat Map

