Corby Borough Council

Former Railway Halt

Oakley Vale, Corby

Ecological Appraisal

March 2018

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1.2 The habitats present on site comprised predominately of species-poor semi-improved grassland, with patches of low bramble scrub around the margins and a patch of dense woody scrub in the south-west around an underpass under the adjacent train line. Loss of these habitats is unlikely to result in a significant impact to local biodiversity.

1.3 No trees with potential to support roosting bats were identified within the site or immediately adjacent to the site boundary.

1.4 The potential presence of GCN within the site has been identified as a possible constraint to development. Development operations will be undertaken following the granting of a Natural England mitigation licence, the principles of which are outlined in this report.

1.5 Reptiles (common lizard and grass snake) are considered likely to be present on site. Mitigation and compensation measures will be provided in conjunction with the provisions for great crested newts.

1.6 The removal of woody vegetation from the site should avoid the bird breeding season (March ï September, inclusive). If this is not possible then vegetation removal should be preceded by precautionary checks for nesting birds, as detailed in this report.

1.7 Off-site retained trees will be protected from damage and from soil compaction during construction works where appropriate by maintaining fenced Root Protection Areas (RPAs) determined in accordance with BS 5837 (2012) or following arboricultural advice.

1.8 The lighting scheme will be designed to minimise light spill onto vegetated areas.

1.9 Native species planting and the provision of bat boxes is recommended to provide ecological enhancements in the long-term.

2.0 INTRODUCTION

2.1 This report has been produced by FPCR Environment and Design Ltd. on behalf of Corby Borough Council and provides an assessment of nature conservation interest on an area of land to the south of Aintree Road, Corby. An extended phase 1 habitat survey was undertaken 3rd January 2017 and updated on 25th April 2017.

Site Context

2.2 The site is approximately 0.42 ha and is located between Aintree Road to the north, the Kettering ï Corby railway line to the south-east and Chepstow Road to the west (centred on grid reference SP883860). It is comprised predominately of poor semi-improved grassland, with patches of low bramble scrub around the margins and a patch of dense woody scrub in the south-west around an underpass under the adjacent train line.

Development Proposals

2.3 Proposals are for the development of affordable housing with associated infrastructure.

3.0 METHODOLOGY

Desk Study

3.1 A desktop survey was undertaken for existing ecological data regarding statutorily and non-statutorily protected species and habitats or sites of interest to nature conservation. The search radius around the site was 10km for the presence of statutorily protected sites of international value including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) and Ramsar sites, 2km for Sites of Special Scientific Interest (SSSIs), and 1km for species information, sites of local importance with statutory designation of Local Nature Reserve (LNR), or non-statutory designation of Local Wildlife Site (LWS) or equivalent. The following organisations were contacted:

- The Northamptonshire Biological Records Centre (NBRC)
- The Multi-Agency Government Information for the Countryside (MAGIC) website (www.magic.gov.uk)
- Corby Borough Council online planning application search[1].

Existing Ecological Information

3.2 In 2014 Lockhart Garratt conducted a series of aquatic surveys for GCN and reptile presence / absence surveys in relation to an adjacent application to the west of the site[2].

3.3 In 2015 FPCR conducted a series of surveys of seven ponds within 500m in relation to the proposed development of a parcel of land to the immediate north of the site[3].

1 https://publicaccess.corby.gov.uk/publicaccess/applicationDetails.do?activeTab=summary&keyVal=NMHAADFFJYJ00
2 *15_00138_OUT-ECOLOGICAL_REPORT_2-44130*: Lockhart Garratt, February 2015: Oakley Vale Phases 8 & 9, Ecology Statement
3 FPCR (2015) *Phase 5 Oakley Vale, Corby Phase I Habitat Survey Report*. Barratt Homes

3.4 The methodologies employed and detailed results from the above surveys can be found in the respective reports. Summary results are provided in this document in support of the current application.

Habitats

3.5 The area of survey is indicated in Figure 1. This area was surveyed on 3rd January 2017 and 25th April 2017 using the standard Extended Phase-1 Habitat Survey Methodology (Joint Nature Conservation Committee 2003). The survey involved a systematic walk over of the survey area to classify the habitat types present, which were then marked on a base map. Target notes were used to record features or habitats of particular interest, as well as any sightings or evidence of protected or notable species. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types. The abundance of species was quantified using the DAFOR scale, ranging from Dominant (>75%) to Abundant (75-51%), through Frequent (50-26%) and Occasional (25-11%) to Rare (10-1%).

Fauna

3.6 Throughout the Extended Phase I habitat survey consideration was given to the actual or potential presence of protected species or notable species, such as those protected under the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 or/and listed as Species of Principal Importance in England under the provisions of the Natural Environment and Rural Communities (NERC) Act 2006 and Northamptonshire Biodiversity Action Plan (BAP) Species.

Bats

3.7 A visual assessment of trees was undertaken by an experienced ecologist from FPCR. The methodology used takes into account the statutory guidance from Natural England[4] and current Bat Conservation Trust guidelines[5] and the 2004 Bat Workers Manual[6].

3.8 No mature trees were located within the site boundary, however, a number of trees occur immediately outside the application boundary.

Visual Assessment of Trees

3.9 Tree assessments were undertaken from ground level, with the aid of a torch and binoculars (where appropriate). The survey was undertaken on 3rd January 2017 by an experienced ecologist from FPCR. During the survey, Potential Roosting Features (PRFs) for bats such as the following were sought (based on p16, British Standard 8596:2015[7]):

- Natural holes (e.g. knot holes) arising from naturally shed branches or branches previously pruned back to a branch collar.

4 Mitchell-Jones AJ (2004) *Bat Mitigation Guidelines. English Nature, Peterborough.* Under revision

5 Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).* The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

6 Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).* The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

7 British Standard 2015. BS 8596:2015 *Surveying for bats in trees and woodland ï Guide*, October 2015.

- Man-made holes (e.g. cavities that have developed from flush cuts or cavities created by branches tearing out from parent stems).
- Woodpecker holes.
- Cracks/splits in stems or branches (horizontal and vertical).
- Partially detached, loose or bark plates.
- Cankers (caused by localised bark death) in which cavities have developed.
- Other hollows or cavities, including butt rots.
- Compression of forks with occluded bark, forming potential cavities.
- Crossing stems or branches with suitable roosting space between.
- Ivy stems with diameters in excess of 50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk).
- Bat or bird boxes.
- Other suitable places of rest or shelter.

3.10 Certain factors such as orientation of the feature, its height from the ground, the direct surroundings and its location in respect to other features, may enhance or reduce the potential value.

3.11 Trees were classified into general bat roost potential groups based upon the presence of these features. Table 1 broadly classifies the potential categories as accurately as possible and discusses the relevance of the features. This table is based upon Table 4.1 and Chapter 6 in The Bat Conversation Trust survey guidelines[4].

3.12 Although the British Standard document groups trees with moderate and high potential, these have been separated below (as per Table 4.1 in the BCT Guidelines) to allow more specific survey criteria to be applied.

Table 1: Classification and Survey Requirements for Bats in Trees

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey Work / Actions
High Potential	A tree with one or more Potential Roosting Features that are obviously suitable for larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter protection, conditions (height above ground level, light levels, etc) and surrounding habitat. Examples include (but are not limited to); woodpecker holes, larger cavities, hollow trunks, hazard	Aerial assessment by roped access bat workers (if appropriate) **and** / **or** nocturnal survey during appropriate period (May to August). Following additional assessments a tree may be upgraded or downgraded based on findings. If roost sites are confirmed and the tree or roost is to be affected by proposals a

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

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey Work / Actions
	beams, etc.	licence from Natural England will be required. After completion of survey work (and the presence of a bat roost is discounted), a precautionary working method statement may still be appropriate.
Moderate Potential	A tree with Potential Roosting Features which could support one or more potential roost sites due to their size, shelter protection, conditions (height above ground level, light levels, etc.) and surrounding habitat but unlikely to support a roost of high conservation status (i.e. larger roost, irrespective of wider conservation status). Examples include (but are not limited to); woodpecker holes, rot cavities, branch socket cavities, etc.	A combination of aerial assessment by roped access bat workers **and / or** nocturnal survey during appropriate period (May to August). Following additional assessments a tree may be upgraded or downgraded based on findings. After completion of survey work (and the presence of a bat roost is discounted), a precautionary working method statement may still be appropriate. If a roost site/s is confirmed a licence from Natural England will be required.
Low Potential	A tree of sufficient size and age to contain Potential Roosting Features but with none seen from ground or features seen only very limited potential. Examples include (but are not limited to); loose/lifted bark, shallow splits exposed to elements or upward facing holes.	No further survey required but a precautionary working method statement may be appropriate.
Negligible/No potential	Negligible/no habitat features likely to be used by roosting bats	None.

* The Conservation of Habitats & Species Regulations 2017 affords protection to ñbreeding sitesò and ñresting placesò of bats. The EU Commissionôs Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC, February 2007 states that these are places ñwhere there is a reasonably high probability that the species concerned will returnò.

Reptiles

3.13 Habitats were evaluated for their potential to support reptiles following guidance set out within the Herpetofauna Workers Manual. Habitats suitable for reptiles included south facing banks and field margins, transitional areas between long and short vegetation, together with other areas which provide basking and sheltering opportunities.

Other

3.14 Any sightings, evidence of or suitable habitats for other protected fauna, local Biodiversity Action Plan (LBAP) or otherwise notable species including breeding birds, amphibians and invertebrates were recorded during the site visit. A thorough search of the site and accessible areas within 30m of the site was conducted for signs of badger activity (runs, snuffle holes, latrines, sett holes).

4.0 RESULTS

Desk Study

Statutory Sites

4.1 No statutorily protected sites of international importance are located within 10km of the site and no Sites of Special Scientific Interest (SSSIs) are located within 2km of the site.

Non-statutory Sites

4.2 Four non-statutory designated sites are located within 1km of the site boundary. These comprise two Local Wildlife Sites (LWS), and two potential Local Wildlife Sites (pLWS), as detailed below.

Table 2: Non-Statutory designated sites within 1km of site.

Ref	Name	Classification	Reason for Designation	Size (ha)	Approx. distance from Site (km) and direction
C1475	Great Oakley Parkland	pLWS	This site has limited botanical interest but has been retained as a PWS for its parkland habitat which is not common in Northamptonshire.	10.6	1 W
C85	Great Oakley Quarry	LWS	The sloping grounds of the Brooke Weston Academy have developed a neutral to somewhat calcareous grassland from more open, ruderal vegetation. Alongside the grassland the scattered scrub and wetland vegetation surrounding the ponds provides a	3.5	0.9 E

Ref	Name	Classification	Reason for Designation	Size (ha)	Approx. distance from Site (km) and direction
			good site for wildlife and qualifies as Wildlife Site with 12 neutral grassland indicators recorded.		
K/17.3.86	Oakley Bushes	LWS	A broadleaved woodland with a varied canopy and understorey as well as a decent ground flora.	3.7	1 S
K1532	-	pLWS	-	0.5	0.9 SE

Protected and Notable Species Records

4.3 A number of species (faunal and floral) records were provided by NBRC, however, none were recorded within the application site, whilst the majority were recorded in association with Kings Wood LNR. Notable records beyond the 1km search area included::

- Badger *Meles meles*: 2km (approximately) south-east of the site from 2006,
- Otter *Lutra lutra:* 1.9km (approximately) east-south-east of the site from 1998,
- Water vole *Arvicola amphibious:* 1.6km (approximately) east of the site from 1996; 1.85km (approximately) west-south-west of the site from 2000,
- Common lizard *Zootoca vivipara:* 1.1km (approximately) west of the site from 2006; 1.75km (approximately) north-east of the site from 2006; 1.3km (approximately) north-east of the site from 2002.
- Great crested newt *Triturus cristatus:* 1.5km (approximately) north-west of the site (Kings Wood LNR) from 1986, 2005 & 2006; 0.5km (approximately) north of the site from 2013.

Previous Ecological Survey Work Undertaken Locally

4.4 Reptile surveys of a parcel of land to the immediate south west conducted by Lockhart Garrett in 2014[5] yielded: six records of grass snake *Natrix natrix,* 81 records of common lizard and one record each for great crested newt and toad *Bufo bufo.*

4.5 In 2014 Lockhart Garratt[2] conducted a series of aquatic surveys in relation to an adjacent application to the west of the site. These surveys encompassed five ponds located within 500m of the sitegs boundary (ponds: P3-6, Figure 3). Results of the Lockhart Garratt surveys are provided in Table 3.

4.6 In 2015 FPCR conducted a series of surveys of seven ponds (P1-P6 and D1) within 500m in relation to the proposed development of a parcel of land to the immediate north of the site Results of the FPCR surveys are provided in Table 4 whilst pond Habitat Suitability Index data is provided in Appendix 2.

Table 3: Results summary of 2014 Lockhart Garratt GCN surveys

Pond #	GCN Peak Count		GCN Eggs
	Bottle Trapping	Torching	
P2	Not Surveyed	Not Surveyed	Not Surveyed
P3	5	2	None
P4	2	9	None
P5	6	2	None
P6	9	14	None

Table 4: Results summary of 2015 FPCR GCN surveys

Pond #	GCN Peak Count		GCN Eggs
	Bottle Trapping	Torching	
P1	None	None	None
D1	20	15	None
P2	20	15	None
P3	7	12	Yes
P4	6	9	Yes
P5	1	5	None
P6	None	None	None

Habitats

4.7 The site is comprised predominately of species-poor semi-improved grassland, with patches of low bramble scrub around the margins and an area of dense woody scrub in the south-west around an underpass under the adjacent train line. The site is separated from a scrub-lined railway embankment to the south by a metal fence and a permanent newt fence. Residential

housing lies to the west and north with a grassed area leading to a linear attenuation ditch to the north-east. A list of plant species recorded is provided in Appendix 1 and a map of the habitats recorded is provided in Figure 2.

Poor Semi-improved Grassland

4.8 Semi-improved grassland was the principle habitat recorded within the development site. Sward height varied from c.5cm on an informal path through the grassland up to 30-40cm in the centre of the site. It was apparent that the area had not been subject to management for several years, as the grassland was rank with a deeply thatched layer.

4.9 The sward was dominated by creeping bent *Agrostis stolonifera* and false oat-grass *Arrhenatherum elatius* with abundant Yorkshire fog *Holcus lanatus*. Perennial rye-grass *Lolium perenne* and annual meadow grass *Poa annua* occurred occasionally through the sward. Forb species present included teasel *Dipsacus fullonum,* ribwort plantain *Plantago lanceolata*, dandelion *Taraxacum officinale* agg, creeping cinquefoil *Potentilla reptans*, tufted vetch *Vicia cracca*, common vetch *Vicia sativa* and broad-leaved dock *Rumex obtusifolius*.

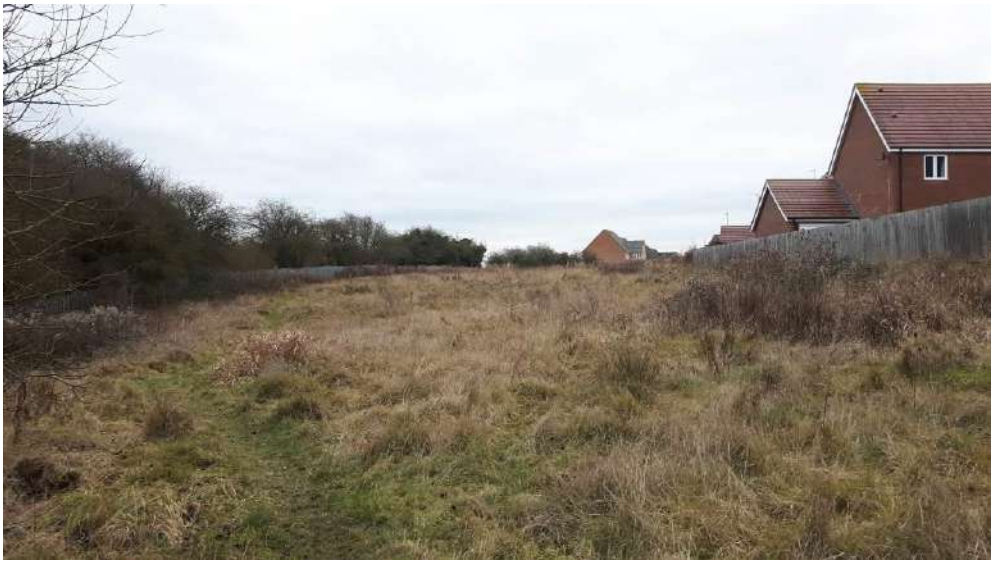

Photo 1: View from northern site boundary, looking South-West

Dense Continuous Scrub

4.10 A strip of dense continuous scrub was recorded on the southern boundary in association with the fence separating the site from the railway line. The scrub predominantly comprised hawthorn *Crataegus monogyna* with occasional goat willow *Salix caprea* immediately adjacent to the railway embankment. There was a transition to bramble scrub with hawthorn whips, rosebay willowherb *Chamerion angustifolium* and dog rose *Rosa canina* as you moved towards the grassland.

4.11 There was a path through the dense scrub in the south western corner of the site that led to an off-site underpass railway bridge. The scrub in this area comprised of hawthorn over 4m in height with a ground flora more typical of woodland forbs including lords and ladies *Arum maculatum*, wood avens *Geum urbanum*, garlic mustard *Alliaria petiolata*, common nettle *Urtica dioica* and cleavers *Galium aparine*.

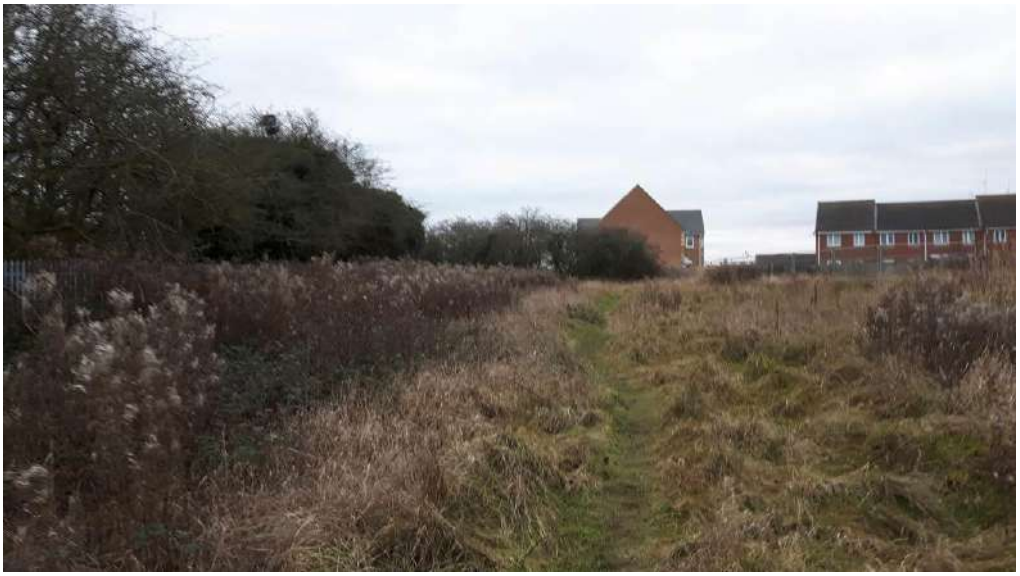

Photo 2: View looking south-west showing low bramble scrub along southern site boundary

Tall Ruderal

4.12 An area of tall ruderal vegetation was recorded along the north eastern boundary comprising mostly rosebay willowherb and occasional common reed *Phragmites australis*.

Marshy Grassland

A small area of sedge *Carex* sp., occasional common reed and goat willow occurred in the north western corner of the site, indicating damper soil conditions.

Faunal Surveys

Bats

4.13 No mature trees occur within the site boundary. Trees immediately outside the application site did not exhibit any features which could offer potential roosting habitat for bats.

4.14 The scrub line along the railway line to the south provided suitable habitat for use by foraging and commuting bats. The grassland within the site provided further, limited suitable foraging habitat for bats due to the low plant diversity and small area.

Birds

4.15 Patches of bramble scrub and a small area of woody scrub within the application site provided suitable nesting habitat for a range of common bird species. The sward within the central grassland area was of sufficient height and density to provide nesting habitat for ground nesting species, though it is extremely limited in extent. Therefore, the site is considered to be of negligible value for bird species within the local area.

4.16 Hedgerows, trees and scrub immediately outside the application site also offer potential for nesting birds.

Great Crested Newts

4.17 The site contained good-quality terrestrial habitat suitable for commuting and foraging by great crested newts (GCN) during their terrestrial phase, as it comprised of dense scrub, tall ruderal vegetation, scattered scrub and unmanaged, thatched grassland.

4.18 There were no ponds recorded on site, with seven waterbodies recorded within 500m of the site (see Figure 3). Descriptions of these ponds are detailed below:

- **P1** was a balancing pond located approximately 340m north east of the site. Water quality was good and marginal vegetation consisted mainly of bulrush *Typha latifolia* and common reed *Phragmites australis* making up about 30% of the pond surface. Amphibian hibernacula were installed during early summer 2015 around the pond as part of an adjacent EPS licence application relating to the nearby railway line.
- **P2 / D1** was 30m, at its closest point, from the northern site boundary and comprised two sections connected by a ditch. The northern ditch section was dry in 2014, 2015 and 2017. Both were dominated by common reed and occasional bulrush, with saplings such as willow *Salix sp*, alder *Alnus glutinosa* and silver birch *Betula pendula* present. Amphibian hibernacula were installed during early summer 2015 around the ponds as part of an adjacent EPS licence application relating to the nearby railway line.
- **P3** was located approximately 170m north of the site and was a small pond within an area of amenity grassland (in public open space). Aquatic vegetation comprised common reed, bulrush and soft rush *Juncus effusus*.
- **P4** was located approximately 200m north of the site and was a small pond within dense woodland/scrub adjacent an informal footpath. The pond was completely over shaded, had no aquatic vegetation and showed signs of pollutants in the water.
- **P5** was located approximately 350m south west of the site and was a large pond located south of the site, off Haydock Close adjacent to P17. Aquatic vegetation included marsh marigold *Caltha palustris.* There were waterfowl present in P5.
- **P6** was located approximately 320m south west of the site, in close proximity to P5. In periods of wet weather P5 and P6 may flow into each other. Pond P6 was dry when visited in 2017.

4.19 Table 5 provides a summary of GCN surveys carried out on five of the seven waterbodies within a 500m buffer of the site during the 2014 survey season by Lockhart Garrett.

Table 5: GCN Survey Summary Data 2014

Pond ref	GCN detected?	Peak adult count	Pop size class	HSI
P2	**No**	-	-	0.63
P3	**Yes**	5	Small	0.50
P4	**Yes**	9	Small	0.60
P5	**Yes**	14	Medium	0.85
P6	**Yes**	0	Small	0.53

4.20 Table 6 provides a summary of GCN surveys carried out on all seven of the waterbodies within a 500m buffer of the site during the 2015 survey season by FPCR.

Table 6: GCN Survey Summary Data 2015

Pond ref	GCN detected?	Peak adult count	Pop size class	HSI
P1	No	-	-	0.79
P2	**Yes**	20	Medium	0.97
P3	**Yes**	12	Medium	0.53
P4	**Yes**	9	Small	0.63
P5	**Yes**	5	Small	0.86
P6	No	-	-	-
D1	**No**	-	-	Dry

Reptiles

4.21 The site offered the habitats and structural heterogeneity preferred by reptiles for basking and shelter, as the sward structure varied greatly from being deeply thatched to sparser in the south west. Scrub, tall ruderal and rough grass margins were also present. In light of these factors the site is therefore considered to provide good quality habitat for native reptile species and has the potential to support a viable reptile population in conjunction with adjacent habitats.

Badger

4.22 Whilst it was considered that the grassland, tall ruderal and adjacent woodland habitats may provide suitable foraging habitat for this species, during the survey no signs attributable to badgers such as setts, latrines, hairs or footprints were recorded within the site or its immediate surrounds (where accessible).

5.0 DISCUSSION & RECOMMENDATIONS

Development Proposals

5.1 Although no scheme layout is currently available, for the purpose of this assessment it is anticipated that all existing site habitats will be lost to facilitate the construction of affordable housing.

Statutory and Non-Statutory Nature Conservation Sites

5.2 The degree to which designated sites receive consideration under the planning system and legislative protection depends on the designation itself and its level of importance and value. This ranges from sites of international importance protected by UK legislation that transposes European directives, to protection under UK legislation or national and local planning policy.

5.3 No statutorily protected sites of international importance are located within 10km of the site and no Sites of Special Scientific Interest (SSSIs) are located within 2km of the site.

5.4 Four non-statutory designated sites are located within 1km of the site boundary. These comprise two Local Wildlife Sites (LWS), and two potential Local Wildlife Site (pLWS).

5.5 Given the small size of the site (0.42ha) and the provision of a number of suitable and extensive areas of public open space within the existing Oakley Vale development area, it is not anticipated that the proposed development will result in any significant negative impacts on these non-statutory designated sites.

Habitats

5.6 The dominant habitat types across the proposed development area comprised poor semi-improved grassland with scattered scrub. These habitats are common and widespread within the wider landscape. These habitats were identified as being of no more than site level ecological value. The dense scrub, tall ruderal and marsh grassland supported commonly occurring species with no rare or notable plant species found on-site. Consequently, any loss of site habitats is unlikely to result in a significant impact to local biodiversity.

5.7 Given the proximity of off-site retained trees to proposed development operations, they should be protected from damage and from soil compaction during works where appropriate by maintaining fenced Root Protection Areas (RPAs) determined in accordance with BS 5837 (2012) or following arboricultural advice. No vehicular access will be permitted within the RPAs, unless suitable soil protection layers are used, and no storage of materials, installations of services, excessive cultivation for landscape installations or fires will be permitted.

Fauna

5.8 Principal pieces of legislation protecting wild species are Part 1 of the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Conservation of Habitats and Species Regulations 2017. Some species, for example badgers, also have their own protective legislation (Protection of Badger Act 1992). The impact that this legislation has on the Planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation ï Statutory Obligations and their Impact within the Planning System.

5.9 This guidance states that as the presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions.

5.10 In addition to protected species, there are those that are otherwise of conservation merit, such as species of principal importance for the purpose of conserving biodiversity under the Natural Environment and Rural Communities (NERC) Act 2006. These are recognised in the National Planning Policy Framework (NPPF), which advises that when determining planning applications, LPAs should aim to conserve and enhance biodiversity by applying a set of principles including:

- *If significant harm resulting from a development cannot be avoided……., adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *Development proposals where the primary objective is to conserve or enhance biodiversity should be encouraged.*

5.11 The implications that various identified species or those that are thought reasonably likely to occur may have for developmental design, planning and programming considerations are outlined below:

Bats

5.12 All species of bats and their roosts are listed on the Conservation of Habitats and Species Regulations 2017 making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal. Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection. Some bat species, including soprano pipistrelle, are species of principal importance under the NERC Act.

5.13 No records of bats were returned within the search area.

<u>Bat Activity</u>

5.14 Scrub and grassland habitats present provide limited foraging and commuting habitat for local bat populations. The adjacent off-site railway embankment scrub and tree planting provides potential habitat for commuting and foraging bats. Given the size of the site and the availability of substantial off-site resources for bats, on-site habitats are unlikely to constitute a significant resource for local bat populations. As such, their loss is unlikely to result in a significant impact on local bat populations.

5.15 Site landscape design plans should seek to incorporate new areas of native tree and shrub planting, and new areas of grassland. As new habitats mature such habitat enhancements should result in a minor positive impact on the ecological value of the site for local bat populations.

5.16 To further enhance the site for bats and therefore contribute to the National Planning Policy Framework (NPPF) recommendation that planning policies promote the protection and recovery

of priority species populations, consideration should be given to the provision of a variety of bat boxes, including hibernation and maternity designs to be erected within suitable retained trees within the off-site public open space (POS) areas or on new houses.

5.17 Lighting should be carefully designed along the southern site boundary to preserve the adjacent railway embankment as a potential bat foraging and commuting corridor. Where artificial lighting cannot be avoided the lighting scheme should be designed with reference to the Bat Conservation Trust and Institute of Lighting Professionals guidance[6,7,8] and designed to reduce spill and be downwardly directional. All new lighting should meet the current environmental standards of good practice in order to reduce potential light pollution and will use the lowest intensity possible for its purpose. This mitigation will ensure that the overall impact caused by lighting the site is negligible.

Bats in Trees

5.18 No roosts or potential roost features have been identified on site or in association with trees immediately outside the site.

Birds

5.19 All wild bird species are protected while nesting by the Wildlife and Countryside Act 1981 *(as amended)*. This legislation protects wild birds and their eggs from intentional harm, and makes it illegal to intentionally take, damage, or destroy a wild bird nest while it is in use or being built.

5.20 Where removal of woody vegetation is required, it is recommended that this is carried out outside of the nesting season (March ï August inclusive) as all birds are protected whilst on the nest under the Wildlife and Countryside Act 1981 (as amended). If removal outside the nesting season is not feasible, all vegetation to be removed should be checked by an experienced ecologist for the presence of active nests. Should active nests be discovered, detailed advice would be provided by the supervising ecologist. Advice is likely to include a buffer zone around any located nests until the nest until all young have fledged.

Great Crested Newts

5.21 Great crested newts are afforded legal protection by Schedule 5 of the Wildlife and Countryside Act 1981 *(as amended)* and under the Conservation of Habitats and Species Regulations 2017. Great crested newts are also listed as a species of principal importance under the NERC Act.

5.22 Desk study consultations returned two records of great crested newts within 1km of the site boundary. GCN presence/absence surveys conducted by Lockhart Garrett and FPCR during 2014 and 2015 confirmed presence of GCN in ponds: P2-P5.

5.23 There are six ponds and a dry ditch within 500m of the site boundary (Figure 3). Ponds: D1, P2, P5 and P6 have good direct connectivity to the site via intervening habitats. Ponds P3 and P4 are less well connected. These ponds are separated from the site by residential areas, with the sole suitable habitat connectivity being a hedgerow running north-south, intersected by Chepstow road.

[6] Bat Conservation Trust. 2009. *Bats and Lighting in the UK*. Bats and the Built Environment Series

[7] Bat Conservation Trust. 2011. *Statement on the Impact and Design of Artificial Light on Bats*.

[8] Institute of Lighting Professionals. 2011. *Guidance notes for the reduction of Obtrusive Light*.

5.24 Pond surveys undertaken in 2014 and 2015 have confirmed the presence of GCN in association with ponds P2, P3, P4 and P5. The population size class assessment for these ponds concluded that this is a medium population size class. Given the distance between these ponds it is likely there would be some genetic interchange between the GCN using these ponds, therefore this is considered to represent a meta-population.

5.25 No breeding habitat is present within the application site. However, the poor semi-improved grassland, scrub, tall ruderal vegetation and adjacent woodland provide suitable terrestrial habitat for the species to reside and forage, including for the purpose of hibernation in denser vegetation. Given the small size of the application site and the availability of substantial off-site habitats suitable for use by GCN, it is anticipated that a relatively small number of newts are likely to use the site habitats.

5.26 Given that it is likely that GCN will use the application site habitats (albeit in small numbers), in order to ensure the development complies with protected species legislation pertaining to GCN the proposed mitigation strategy for the development is detailed below and will be implemented under a Natural England derogation licence. All mitigation and compensation measures are subject to reaching licensing agreement with Natural England, therefore subject to change to comply with the requirement of Natural England. It is envisaged that update GCN aquatic surveys may be required to support a licence application, dependent on the timescales for the construction phase.

5.27 Short term mitigation will comprise the removal of GCN from working areas using standard trapping equipment (pitfall traps, artificial refugia and exclusion fencing/drift fencing). Perimeter exclusion fencing will be installed and maintained for the duration of the construction phase to stop GCN ingress into temporary habitats and excavations. Given the overall medium population recorded within nearby ponds (P2, P3, P4 & P5) and the shelter habitat offered within the site, it is proposed that trapping of the whole site will take place for a minimum of 45 days and continue until 5 days clear of GCN captures is achieved (subject to agreement with Natural England).

5.28 Trapping days will only be considered acceptable in suitable weather conditions in the active period and with regard to night searching during suitable periods (night searching: March to late June and late August to end October).

5.29 The proposed receptor area will comprise the off-site woodland and / or scrub habitats and suitable habitats surrounding P2. Any captured newts will be moved to this location. Access to off-site ponds will be available to any translocated GCN throughout the construction phase.

5.30 The terrestrial habitats around P2 also provide the receptor area for the adjacent EPS licence (reference: 2015-13790-EPS-MIT-3). The GCN captured as part of works on the adjacent housing development will be part of the same population which utilises P2 (the closest pond) and Ditch D1. As such, it is considered appropriate to also move any GCN captured in proximity to P2 into receptor habitats surrounding P2. It is acknowledged that there are not suitable methods which could be employed to reduce the risk of double-handling newts. It is, however, considered that the risk of double handling newts is reasonably low given the available habitats within the receptor. Furthermore, the current application site habitats represent a small area when compared with all available suitable GCN habitat. As such, it is anticipated that a relatively small number of GCN are likely to use the site habitats and, therefore, will require translocation. It is not anticipated that double-handling represents a significant impact on the population.

5.31 GCN also have substantial alternate (off site) terrestrial resources comprising land extending to the south of the application site along the boundary with the railway line and POS land within the residential development in Phase 4 to the north and west. As such, it is considered that off-site boundary habitats (hedgerows and scrub) can accommodate the anticipated low numbers of GCN likely to be translocated from the site.

5.32 Recent habitat enhancements comprising hibernacula and deadwood log piles have already been constructed in areas to the east of P2 and D1 in association with adjacent EPS licenced works associated with the railway line and the phase 5 housing development. It is proposed that hibernacula are constructed in terrestrial habitats surrounding to the south and west of P2 on existing grassland areas. This area is not considered to represent an existing over-wintering habitat and, as such, hibernacula creation will provide a substantial habitat enhancement.

5.33 Further compensation proposals could comprise the following planting and management in the existing off-site POS / landscaping areas:

- Native shrub planting,
- Native hedge planting,
- Meadow / tussock grassland creation,
- Tree planting,
- Tussock grassland management.

5.34 Amphibian friendly drainage will be implemented throughout the site and will comprise off set gulleys and dropped kerbs or ACO wildlife kerbs.

Reptiles

5.35 All British reptiles are protected from killing and injury under the Wildlife and Countryside Act 1981 *(as amended)* and are listed as species of principal importance for the conservation of biodiversity under the NERC Act, indicating that public bodies, such as the Local Planning Authority, have a duty to have regard to the conservation of these species.

5.36 Given the presence of the mosaic of scrub, tall herb and open grassland habitats on site and the known presence of native reptile species in proximity to the site it is considered likely that reptiles (principally common lizard and grass snake) would be present on site. Mitigation and compensation measures will be covered by that proposed in relation to great crested newts. Furthermore, following consultation with the local authority (Heather Webb, Principal Project Officer, Northamptonshire County Council, June 2017) it was agreed that any reptiles present within the development site would be translocated into the GCN receptor site during the GCN trapping and translocation exercise without the need for further detailed surveys for reptile species prior to determination of the planning application.

Badgers

5.37 There are no records of badger from within the 1km search area. No evidence of the presence of badger was recorded within the site during the survey and subsequently badgers are not considered to pose a constraint to development of the site.

Biodiversity Enhancements

5.38 In line with NPPF, it is recommended that the development of the site results in a gain in value for wildlife by incorporating biodiversity in and around the development via the use of ecological enhancement measures. In addition to the recommendations with respect to individual species and habitats outlined above, opportunities exist within the scheme for general biodiversity enhancements to be undertaken; the following are recommended for this specific site:

- A scheme of native tree and shrub planting could be implemented to ensure that the proposals will maintain and enhance connectivity across the site. The landscape scheme should be designed to preserve and enhance current linkages to areas of adjacent habitat, and ensure connectivity to the wider countryside is maintained and enhanced for local faunal populations, including birds, badgers and bats. This should include the retention and enhancement of a suitable buffer along the south eastern boundary.
- An ecological management plan should be devised and adhered to for all retained and created habitats in order for them to maintain existing value and/or realise enhanced value, making sure that management is appropriate and ongoing for the life of the development.
- Small gaps could be left under or in the corners of garden fences to permit access for wildlife such as hedgehog, badger and fox;
- Deadwood piles could be created in areas of retained open space to provide a habitat niche for amphibians and small mammals as well as deadwood for invertebrates such as saproxylic beetles.

Appendix 1: Botanical Species List

Common Name	Scientific Name	DAFOR
Species-Poor Semi-Improved Grassland		
False oat grass	*Arrhenatherum elatius*	D
Creeping bent	*Agrostis stolonifera*	D
Common ragwort	*Jacobaea vulgaris*	R
Ground ivy	*Glechoma hederacea*	R
Broad-leaved dock	*Rumex obtusifolius*	O
Tufted vetch	*Vicia cracca*	O
Clover	*Trifolium* sp.	O
Annual meadow grass	*Poa annua*	F
Creeping cinquefoil	*Potentilla reptans*	F
Yorkshire fog	*Holcus lanatus*	A
Cocks-foot	*Dactylis glomerata*	O
Soft rush	*Juncus effusus*	R
Wild teasel	*Dipsacus fullonum*	F
Ribwort plantain	*Plantago lanceolota*	A
Dandelion	*Taraxacum officinale agg*	F
Hedge woundwort	*Stachys sylvatica*	LA
Creeping thistle	*Cirsium arvense*	R
Dove's-foot Crane's-bill	*Geranium molle*	R
Perennial rye-grass	*Lolium perenne*	F
Tufted hairgrass	*Deschampsia cespitosa*	R
Horsetail	*Equisetum* sp.	R
Dense Scrub		
Dog rose	*Rosa canina*	F
Hawthorn	*Crataegus mongyna*	D
Crab apple	*Malus sylvestris*	R
Ivy	*Hedera helix*	O
Goat willow	*Salix caprea*	O
Bramble	*Rubus fruticosus*	A
Tall ruderal		
Rosebay willowherb	*Chamerion angustifolium*	A
Teasel	*Dipsacus fullonum*	F
Dog rose	*Rosa canina*	O
Common reed	*Phragmites australis*	O
Scattered Scrub		
Bramble	*Rubus fruticosus*	A
Common hawthorn	*Crataegus mongyna*	A
Dog rose	*Rosa canina*	O

APPENDIX 2: 2015 FPCR POND HSI DATA

Pond	SI -1		SI - 2		SI -3		SI -4		SI -5		SI -6		SI -7		SI -8		SI -9		SI -10		HSI score	Pond suitability	Predicted presence
	geographical location		pond area		pond drying		water quality		shade (perimeter)		fowl		fish		ponds		terrestrial habitat		macrophytes				
	Field result (A,B,C)	SI score	Field result (m2)	SI score	Field result	SI score	Field result	SI score	Field result (% cover)	SI score	Field result	SI score	Field result	SI score	Field result	SI score	Field result	SI score	Field result	SI score			
P1	A	1	1000	1	Rarely	1	Good	1	0	1	Absent	1	Absent	1	18	1	Moderate	0.7	10	0.4	0.87	Excellent	93%
P2/D1	A	1	400	0.8	Rarely	1	Good	1	2	1	Absent	1	Absent	1	23	1	Good	1	60	0.9	0.97	Excellent	93%
P3	A	1	25	0.1	Never	0.9	Good	1	0	1	Absent	1	Absent	1	24	1	Moderate	0.7	70	1	0.70	Good	79%
P4	A	1	42	0.1	Rarely	1	Good	1	60	1	Absent	1	Absent	1	24	1	Moderate	0.7	0	0.3	0.63	Average	55%
P5	A	1	1922	0.8	Never	0.9	Moderate	0.7	0	1	Minor	0.7	Absent	1	25	1	Good	1	40	0.7	0.86	Excellent	93%
P6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.00	Dry	N/A

Key

- Site Boundary
- 1km buffer
- Common Lizard
- Great Crested Newt
- Grey Partridge
- Skylark
- Starling
- FPCR GCN Records
- Lockhart Garratt Common Lizard Records
- Lockhart Garratt Grass Snake Records
- Lockhart Garratt GCN Records

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client: DSPM Limited
project: Former Railway Halt Oakley Vale, Corby
drawing title: CONSULTATION PLAN

scale: 1:10,000 | drawn: DS/SJS | issue: 26/4/2017
drawing / figure number: **Figure 1** | rev: **7652-E-01**

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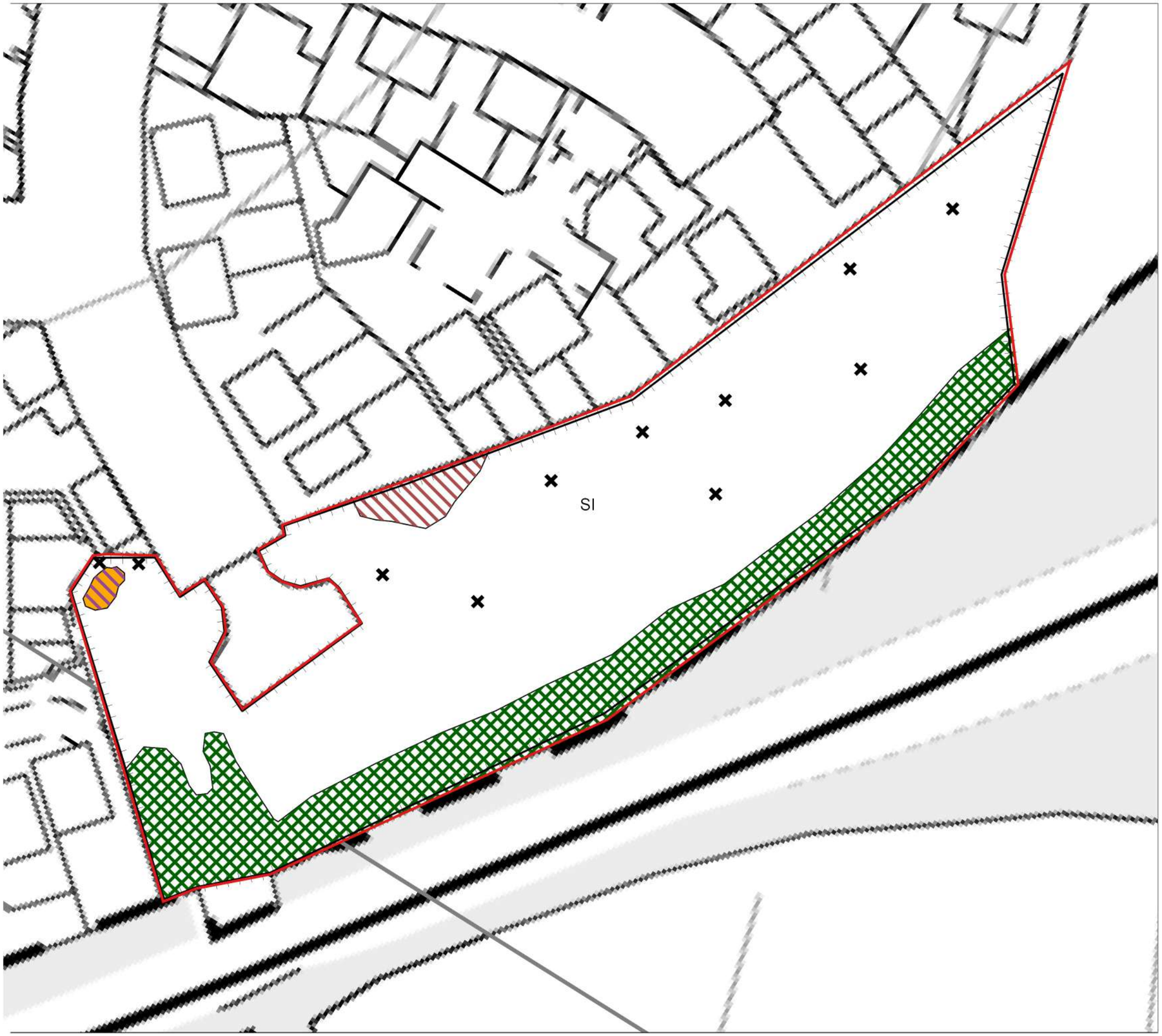

Key

- Site Boundary
- Scattered scrub
- Fence
- Marsh/marshy grassland
- Dense continuous scrub
- Tall ruderal
- SI — Poor semi-improved grassland

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client: DSPM Limited

project: Former Railway Halt
Oakley Vale, Corby

drawing title: PHASE 1 HABITAT PLAN

scale: 1:500 | drawn: SJS/JSE | issue: 26/4/2017

drawing / figure number: **Figure 2** | rev: **7652-E-02**

Key

- Site Boundary
- 500m Buffer
- Pond (P)
- Ditch (D)
- Pond not Present

DSPM Limited

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WATERBODY LOCATION PLAN

scale 1:4,600 | drawn DS/SJS | issue 26/4/2017

drawing / figure number **Figure 3** | rev **7652-E-03**

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