




Station Area, Leamington SpA

Ecology Constraints

June 2008

QM

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	FINAL			
Date	June 2008			
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Project number	12261313			
File reference				

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1 Known Statutory and Non-Statutory Sites

1.1 WITHIN OR ADJACENT TO THE STATION AREA

1.1.1 Statutory and non-statutory consultees were contacted to obtain a list of known nationally important and non-statutory sites within the site and a 2km radius around the site.

1.1.2 There are no known nationally important sites which are located within or adjacent to the site.

1.1.3 There are 3 non-statutory sites within or in close proximity to the site boundary, of which the Great Western Railway pSINC (potential Site of Importance for Nature Conservation) falls partly within the site. This active railway line is located within the northern parts of the site and is designated for its good range of plant species. This pSINC comprises broad leaf semi-natural woodland and associated scrub and grassland communities.

1.1.4 Furthermore, Grand Union Canal (Myton Wood) runs along the southern boundary of the site. This water features is designated as a pSINC and is of District value because it is designated for its notable species including water vole (*Arvicola terrestris*), kingfisher (*Alcedo atthis*) and pipistrelle bats (*Pipistrellus sp.*), with possible roosts in associated bridges and toll houses. The River Leam which is part designated as a Local Nature Reserve (LNR) and part as a pSINC. It is located 300m to the north of the site and is a site of County value due to its importance for a number of rare, notable and protected species in Warwickshire (i.e. kingfisher (*Alcedo atthis*), water vole (*Arvicola terrestris*) and white clawed crayfish (*Austropotamobius pallipes*)). Another LNR, Newbold Comyn is located 2.2km to the-east of the site and is designated for its wet meadows which are important for floral species assemblages and breeding/over wintering birds. Otter (*Lutra lutra*) has been reported to be returning to the Avon catchments, and its presence on the River Leam is also a possibility.

1.2 WITHIN 2KM OF THE STATION AREA

1.2.1 There are no known statutory sites which fall within 2km of the site.

1.2.2 Table 1 provides a summary of other non-statutory sites of nature conservation value within 2km of the site.

Table 1: Summary of non-statutory sites not directly affected by the development

Non-statutory designated sites	Designation	Description	Distance and direction from the site
River Avon and tributaries	pSINC	This linear feature is important to internationally important species including white clawed crayfish and otter. Water vole has also been recorded along the Avon as has the kingfisher, a Schedule 1 bird species. The river is also important for its population of over-wintering/breeding birds. The river contains diverse habitats with a range of natural and semi-natural features.	1.2km to west
Myton hamlet Mill Pond	Unknown	The site consists of a large mill pond with good range of associated habitats.	1.4km to west
Emscote Power Station	Unknown	A unique sand dune habitat to Warwickshire. The site may now be lost to development proposals in 1994.	1.9km to north-west
Railway-Leamington Spa to Birmingham	Unknown	Important wildlife corridor.	2.3km to west
Brownfield site	pSINC	A semi-improved area with common tall ruderal species.	1.9km to south-west
Brownfield site	pSINC	A partially developed site re-colonised by common floral	2km to south-



		species, with a ditch around the edge of the site.	west
Heathcote Lane/gallows Hill Road Verge	Potential important Hedgerow	This site consists of two separate sections of species rich hedgerows.	2km to south-west
Pond at Bishop Bright School	Ungraded	Pond surrounded by mature trees.	1.5km to north-west
Welches Meadow	LNR and PSINC	Semi-improved grassland that floods, with an area of swamp.	1.4km to north-east
Fosse Wood	Unknown	Derelict, hazel and oak coppice woodland.	1.8km to east
Campion Hills and Newbold Comyn	Unknown	Mostly of Parish value. The site is a large golf course with a young woodland plantation and a number of ponds. Ponds on site have recorded great crested newts (<i>Triturus cristatus</i>).	2.1km to north-east
Leam Valley LNR	LNR	The site includes the river and its immediate floodplain corridor and wet meadows. The site is important for its breeding and over-wintering birds and kingfisher population.	1.5km to north-west
Northumberland Road	Unknown	Semi-improved grassland with ancient meadow indicator species.	1.7km to north
Myton Grange NR	Ungraded	A narrow strip of woodland bounded on both sides by Myton Brook. The site is noted for a range of birds including wren (<i>Troglodytes troglodytes</i>), mistle thrush (<i>Turdus viscivorus</i>), song thrush (<i>Turdus philomelos</i>) and kingfisher.	1.2km to west
Milverton Cemetery	Ungraded	Regularly mowed grassland with a good mix of flower species.	1.3km to north-west
Leamington Spa Cemetery	Unknown	Site of low Parish value. The site contains an interesting range of typical churchyard grassland and tall herb flora.	1.4km to south-east
Midlands Counties Hospital Pond	Unknown	Site of District value. Breeding pond for a large population of newts (possibly great crested newts).	1km to south-east
Grassland to the rear of Northumberland Road	Ungraded	Improved and semi-improved fields.	1.9km to north
Greshaw Lane Hedgerow	Unknown	Hedgerow, supporting a good range of woody species.	2km to north-east
Leamington Reservoir	pSINC	Site noted for its bird population.	1.8km to north-east



2 Known Protected Species Records

Badgers (*Meles meles*)

2.1.1 No records of badger activity or road casualties within 2km of the site have been provided. However, a lack of records does not constitute absence from the search area. No evidence of badgers was identified during the constraints walkover survey of the site, and a lack of suitable habitat within the site suggests that this species does not pose a constraint to this development.

Bats

2.1.2 Records have been provided by Warwickshire Biological Record Centre (WBRC) for a 5km search area in recognition of the extensive areas that this group of species cover. Records have been received for the following species:

- Barbastelle (*Barbastella barbastellus*);
- Noctule (*Nyctalus noctule*);
- Common pipistrelle (*Pipistrellus pipistrellus*);
- Soprano pipistrelle (*P. pygmaeus*);
- Natterer's bat (*Myotis Nattereri*);
- Whiskered bat (*Myotis mystacinus*);
- Brandt's bat (*Myotis brandtii*);
- Brown long-eared (*Plecotus auritus*); and
- Daubenton's (*Myotis daubentonii*).

2.1.3 There are no records of bats within the site. However, bats use rivers and canals for foraging and commuting and there are records of brown long eared, Brandt's, whiskered and unidentified bats along the Grand Union Canal and River Leam. **WBRC Ecological Data Search** summarised in **Figure 1** identifies the locations of these records.

Reptiles

2.1.4 The data search provided by WBRC has identified common reptile species including grass snake (*Natrix natrix*), common lizard (*Lacetta vivipara*) and slow worm (*Anguis fragalis*) within a 2km radius of the site. The closest records identified are of a grass snake and slow worm, approximately 1km south-east and 1.2km north-east of the site, respectively (**WBRC Ecological Data Search**). Suitable terrestrial habitat is present within the site to support reptile species.

Amphibians

2.1.5 Records received from WBRC indicate that common frog (*Rana temporaria*) and common toad (*Bufo bufo*) utilise the northern parts of the site. Widespread species of amphibians including common toad (UKBAP species) and frog are protected only by Section 9(5) of the Wildlife and Countryside Act 1981, which prohibits sale of these species. Records of great crested newts have also been received from WBRC and the Environment Agency (EA) within the surrounding area, with the closest record being 1.1km to the south-east of the site. Suitable terrestrial habitat is present within the site which may accommodate amphibian species.

Water vole

2.1.6 Records have been provided from WBRC that water vole is present along sections of the Grand Union Canal (which lies adjacent to the southern boundary of the site) and the River Leam (which is in close proximity of the northern boundary of the site). The closest record provided is 1km to the north-west of the site along the River Leam. No suitable habitat is present within the site to support water voles. However, consideration should be given to this species should these water features be affected by the development, i.e. flood alleviation measures or discharge.



Birds

2.1.7 Records received from WBRC show that the River Avon and tributaries, River Leam, Grand Union Canal (Myton Wood), Leam Valley LNR and Myton Grange NR are known to hold records of kingfisher, a Schedule 1 and an Amber list bird species. No habitat is present on site which could support breeding or foraging kingfisher. This species should be considered if any of the above listed sites are to be directly affected by the development.

Otter

2.1.8 Otters have been reported by WBRC from the River Avon and tributaries and the River Leam to the north of the site. The closest otter record is 300m to north, along River Leam. No habitat is present on site which could support foraging or commuting otters. This species should be considered if any of the above listed sites are to be directly affected by the development

Brown Hare (*Lepus europeus*)

2.1.9 WBRC have returned two records of brown hare from Leam Valley LNR (2.3km to east) and Heathcote Farm (1.9km to south-west). Brown hare is a UK BAP species. No habitat is present on site which could support brown hare.

White-clawed Crayfish

2.1.10 The River Avon and tributaries and the River Leam are known to hold white clawed crayfish. The closest record has been identified 600m to north-east of the site. No habitat is present on site which could support white clawed crayfish.



3 Constraints

3.1.1 The field survey and desk base studies have identified the following potential constraints. This section should be read in association with the annotated map (**Figure 1**), Ecological Constraints Plan (**Figure 2**) and Protected Species Checklist (**Appendix A**).

3.2 LIMITATIONS

3.2.1 Access was not available to parts of the Station Area. Where possible these sites were viewed from the road but detailed inspections of the sites were not possible and so the information available for these areas is limited. Full survey will need to be carried out of these areas when access is available.

3.3 DESIGNATED SITES

3.3.1 The Grand Union Canal runs along the southern boundary of the site, and it is recommended that although this watercourse is off-site, it should be considered as an ecological feature/constraint on the site if it is to be directly affected by the development, i.e. flood alleviation works or discharge into it. This site will also need to be protected during development from accidental impacts such as spillage and runoff. This watercourse was considered sub-optimal for water vole due to the patchy nature of the grassland along the southern bank (the northern bank is an engineered tow path), but may be utilised as expansion habitat for young during summer months. This habitat may also be suitable for commuting otter. Following the quinquennial review, water vole is now fully protected under schedule 9 of the Wildlife and Countryside Act (as amended) 1981 which means both the animal and its resting places are fully protected. Otters and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Habitats Regulation 1994. Therefore, it is an offence to intentionally or recklessly kill, injure or disturb otters and their breeding or resting places.

3.3.2 Furthermore, the construction activities and discharge of surface water runoff from the site could potentially lead to pollution of the Canal. Therefore, it is recommended that the Environment Agency Pollution Guidelines (PPGs) to be followed to minimise the risk of pollution incidents and of contaminated surface runoff entering the Canal. Leaving a buffer zone to maintain and enhance the wildlife of the Canal and associated terrestrial habitat will also minimise potential pollution incidents and enhance biodiversity.

3.3.3 Parts of Great Western Railway pSINC is within the site and may be lost or negatively impacted depending on the development proposals. Therefore, it is recommended that the embankment and cuttings of this railway which comprise broad leaf semi-natural woodland, scrub and grassland communities are retained and enhanced for local wildlife.

3.3.4 Due to their distance from the site, the presence of roads, residential areas and semi-natural habitats separating the rest of the non-statutory designated sites from the development area, it is not anticipated that the future development of this site would result in any impacts on these non-designated areas.


3.4 PROTECTED HABITATS

3.4.1 The main body of the site is of negligible ecological value being either hard standing, warehouse style metal units or earthworks relating to the recent demolition works. There are no legally protected habitats present on site; however, there are a number of habitats, including buildings, mature trees and rubble/grassland areas, which are of greater ecological interest as they have the potential to support protected species such as bats, reptiles and nesting birds.

3.5 PROTECTED SPECIES

Bats

3.5.1 There are numerous buildings on site which have varying degrees of potential to support roosting bats (see **Figure 1** and Constraints check list for further details on location). There are a number of brick structures with pitched and/or flat roofs and wooden slatted shed structures which could provide roosting habitat for bat species. The Grand Union Canal runs along the southern boundary of the site which could provide foraging habitat for this species. Bats are a European Protected Species under the Habitat Regulations (1994), and as such the animals and their roosts are protected at all times.



3.5.2 These buildings should be inspected by a suitably qualified and licensed ecologist to determine their potential for providing roost sites. If any bat roosts are identified, a European Protected Species Licence will be required from Natural England to remove these buildings. Mitigation measures, which could include the installation of bat bricks into new buildings and/or the erection of bat boxes onto existing features, will need to be implemented prior to the removal of the existing roost. The size, use pattern and species composition of the roost will need to be determined prior to the removal of the existing roost to ensure suitable mitigation measures are implemented. In order to determine this, further survey will need to be undertaken.

3.5.3 Building inspections can be undertaken at any time of year. However, if further activity surveys are required, there are seasonal constraints associated with these surveys. Activity surveys can only be undertaken when bats are active and as such can only be undertaken between April and September (weather dependant), with surveys between June and July to identify any maternity roosts.

3.5.4 Many areas of the site have mature trees associated with their boundaries consisting mainly of horse chestnut (*Aesculus hippocastanum*). There are also a number of mature trees along the Grand Union Canal which runs along the southern boundary of the site. The majority of these trees are semi-mature/mature and may have potential to support roosting bats. These will also need to be inspected by a suitably licensed ecologist to determine their status with regard to bats, prior to any works to them or their removal.

Nesting birds

3.5.5 There are various areas of scrub habitat associated with rough areas of land and overgrown habitats. There are also some areas of amenity planting comprising of non-native shrub species.

3.5.6 All of the areas of trees and scrub have the potential to support breeding birds. All species of wild bird and their nests are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) which prohibits the intentional killing, injuring or taking of any wild bird and the taking, damaging or destroying of the nest (whilst being built or in use) or eggs. Therefore, if trees or scrub are to be removed it is recommended that this is done outside of the nesting bird season (March to September). If it is not possible to time the works in this way, then a nesting bird check by a suitably qualified ecologist will be required. If any active nests are found then they will have to be protected from disturbance until the young have fledged naturally. This will need to be determined by a suitably qualified ecologist

Reptiles

3.5.7 There is a small area of rough ground, including bunding, rubble piles and rough grassland off Station Approach which is suitable to support reptiles. This area lies adjacent to the railway line in the north of the site, which has rough grassland and scrub along its boundaries. This habitat could provide commuting routes for reptiles. Residential properties which lie adjacent to this area could provide additional features such as ponds and compost heaps within private residential gardens which are suitable for reptiles. All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional or accidental kill or injury, and if this area is to be affected by any development works then a reptile survey should be undertaken to determine presence or absence of this group. If reptiles are found on the site then further work may be required to mitigate for any habitat loss.

Inaccessible Areas

3.5.8 Most of the Chilton Railway owned land to the north of the railway (area 8 on Figure 1) was inaccessible at the time of the WSP Environmental survey in 2008. An extended Phase 1 habitat survey was undertaken on the site in June 2005 by Carter Ecological, when the following habitats were identified within the area:

3.5.9 Secondary woodland;


3.5.10 Scrub;

3.5.11 Species poor neutral grassland;

3.5.12 Amenity grassland; and

3.5.13 Semi-ruderal vegetation.

3.5.14 Carter Ecological determined that there may be habitat suitable to support roosting bats, nesting birds and reptiles. Whilst we could not access this part of the site during the constraints walkover, it appears that no management of the habitat has been undertaken since the previous survey and it is therefore assumed, subject to



further survey, that the site still comprises similar habitats and still has the potential to provide habitat for bats, reptiles and nesting birds.

3.5.15 Through review of previous ecological data available in association with the outline planning consent granted on this area of the site (application reference: W07/0912), Pre Commencement Condition 6 and Condition 7 state that a bat survey should be undertaken at Station House prior to the demolition of the existing offices and warehouse buildings.

3.5.16 Further representations to the planning committee on 19th September 2007, in Conditions 6 and 7 state that a landscaping scheme to be submitted for approval which incorporates existing trees and shrubs as well as new landscape planting proposed and that a bat survey is required of the buildings prior to their removal.

3.5.17 In addition to this, Conditions 1 and 2 of Planning Application no W06/0561 state the need to protect existing trees with an adequate buffer, and the provision of nest boxes for a range of species is implemented prior to the construction of 145 parking spaces on Land off Lower Avenue.

3.5.18 Similarly Planning Application W06/1058 has concerns raised about the removal of a number of trees with TPO's and those at the junction of Avenue Road and York Road. As a result, Condition 6 requires a landscaping scheme to be submitted for approval which incorporates existing trees and shrubs as well as new landscape planting proposed.

3.6 UKBAP SPECIES

Amphibians

3.6.1 No water bodies suitable for breeding amphibians were identified within the site. However, records received from the statutory and non-statutory consultees inform of the presence of common toad within the site. Common toad is a UKBAP species and in line with PPS9 principles which encourage the protection, conservation, enhancement and restoration of the diversity of the wildlife, it is recommended that suitable terrestrial habitats on site are retained and enhanced for this species, where possible.

3.7 INVASIVE SPECIES

Japanese knotweed

3.7.1 A small stand of Japanese knotweed (*Fallopia japonica*) was identified along the northern boundary of the Station Area. No other stands were identified where access was permitted. However, photographic evidence has been provided of additional areas believed to be encroached by Japanese knotweed. Therefore a full survey of the entire site should be undertaken to determine the extent of this invasive species. The presence of other invasive species not identified due to access restrictions will also be identified during this survey. It is an offence to allow Japanese knotweed to spread in the wild under the Wildlife and Countryside Act 1981 and all waste containing Japanese knotweed is subject to the control of Part II of the Environmental Protection Act 1990. A Japanese Mitigation Control Strategy will need to be produced, and implemented in order to ensure this noxious weed is dealt with correctly prior to development being undertaken in areas affected by this weed.



4 Further Surveys And Recommendations

4.1.1 In conclusion, much of the site was of limited ecological value, however some boundary features such as the watercourse, areas of open rough ground and mature trees are of higher ecological value. There are also a number of buildings within the site which could be of greater ecological value, subject to further survey. It is recommended that the mature trees are retained and incorporated within the scheme designs wherever possible. Where vegetation is to be removed, alternative planting should be implemented to provide alternative habitat, and prevent biodiversity loss.

4.1.2 Future survey work which may be required to support any planning application includes:

- Extended Phase 1 habitat survey;
- Invasive species survey;
- Nesting bird check;
- Reptile survey; and
- Bat survey.

4.1.3 Some of the surveys detailed above are seasonally constrained (Survey Calendar **Appendix B**). It should be noted that the need for further survey work will depend on the detail of the masterplan for the site and the extent and timing of the proposed works. It is recommended that the advice of a suitably qualified ecologist is obtained with regards to these potential issues prior to the submission of any planning application.

4.1.4 Additionally, consideration will need to be given to the protection of the watercourse from pollution incidents both during the construction phase and the operational phase.

4.1.5 Overall, there are no over-riding ecological constraints which would prevent the site from being brought forward for development. However, consideration of ecological issues will need to be included in the detailed masterplanning of the site, and further survey work may be required in order to support this process and any subsequent planning application.

4.1.6 No conclusions can be drawn regarding the areas where access was not available, and these areas should be surveyed as soon as possible to determine whether they pose any further ecological constraints to the development.