

OnSide Youth Zones  
Atria  
Spa Road  
Bolton  
BL1 4AG

Our ref: 18843/NF  
28<sup>th</sup> April 2022

FAO: Adam Poyner, Head of Property & Construction

## RE: Barnsley Activity Park – Update Ecological Walkover

Dear Adam,

### Introduction and Background

Ecus Limited (Ltd) was commissioned by OnSide Youth Zones in April 2022 to undertake an update Ecological Walkover in relation to proposed development at land west of Harborough Hill Road, Barnsley (central Ordnance Survey National Grid Reference (OSNGR): SE 34835 06631), hereafter referred to as 'the Site'. A PEA was undertaken in 2019 by Ecus Ltd (*'Land at Schwabisch Gmund Lane, Barnsley - Preliminary Ecological Appraisal'*, ref. 11373, January 2019) and update Preliminary Ecological Appraisal of part of the Site was undertaken in February 2021 (*'Land at Schwabisch Gmund Lane, Barnsley – Update Preliminary Ecological Appraisal'*, ref. 16656, March 2021). Given the time since these surveys, an update ecological walkover was considered to be required to confirm the current status of habitats and identify any new ecological constraints potentially associated with the Site.

The Site currently comprises approximately 0.95 of the original 1.4 hectares (ha) Site (Ecus, 2019) located off Harborough Hill Road, in the centre of the town of Barnsley, South Yorkshire. The Site is managed by Henry Boot Construction and used as storage for construction materials.

This letter report acts as an addendum to the 2019 and 2021 Ecus Ltd reports and provides an update on the status of the Site habitats/ecological constraints following the April 2022 ecological walkover. Details of methodologies employed, any changes to the Site and any additional recommendations (where relevant) are included within the report.

### Methodology

The Site was surveyed on 14<sup>th</sup> April 2022 by Senior Ecologist Natasha Firth BSc (Hons) MSc MCIEEM using the extended Phase 1 habitat survey methodology (JNCC, 2016). This survey method aims to characterise habitats and communities present and is not intended to provide a complete list of all plants occurring across the Site. The Phase 1 habitat survey methodology was used to maintain consistency with previous walkovers at the Site and adjacent land.

Habitats and vegetation types present inside the Site were recorded on to a field map and notable, rare or scarce plant species, including other features of ecological interest, were highlighted and marked using



Target Notes (TN). Evidence of protected species or species of nature conservation importance were also recorded where present at the time of survey. Survey findings are detailed below and annotated on Figure 1.

The abundance of plant species recorded was classified according to the DAFOR rating. The standardised terms are as follows:

- D – Dominant;
- A – Abundant;
- F – Frequent;
- O – Occasional, and,
- R – Rare.

Habitats present that are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 or the Local Biodiversity Action Plan (LBAP) for Barnsley were also noted.

The main aim of the update ecological walkover was to assess for any changes in the status of Site habitats and/or potential for protected species (including evidence of presence) since the 2019 and 2021 surveys. Habitats and potential for protected species at the Site were recorded to provide an up to date assessment of the ecological value of the Site habitats.

## **Survey Limitations**

An extended Phase 1 habitat survey is intended to provide a rapid assessment of habitats present within a site and is not intended to replace detailed vegetation or protected species surveys, where deemed necessary.

The Site survey was undertaken in April, outside the optimal botanical survey season, therefore it is possible that some flowering plants may have been under recorded. However, taking into account the nature/land use of the Site and the previous data collected by Ecus Ltd, it is considered that sufficient information was obtained to undertake an accurate assessment of the Site habitats and provide a robust evaluation of their importance to nature conservation.

It has not been considered necessary to update the desk study as the Site habitats have not significantly changed since the previous Ecus PEA and Ecological Walkover reports and due to the commonly occurring habitats and frequent human disturbance leading to only very limited potential for any new ecological constraints to have arisen and be associated with Site. Details of the previous desk study data are detailed within the original PEA report.

## **Site Context**

The Site comprises of hardstanding, with two large rubble piles and a border of scattered trees to the north and areas of introduced shrub along the eastern and southern boundaries. Scattered scrub is distributed across the entire Site, including on the rubble piles and two mature trees are present at the southern extent of the Site.

The Site is surrounded on all sides by urban development, with residential dwellings to the north and Harborough Hill Road with residential dwellings beyond to the east, and infrastructure and industrial buildings to the south and west. The wider area is highly urbanised with residential buildings, industrial units, car parks and recreational buildings dominating the north, south and west. Further east, lies the River Dearne and the Dearne Valley Park LNR, an area of woodland and parkland. These and the fishing lake “The Fleets” to the north are the closest areas of semi natural and natural habitats, located approximately 750 m from the Site.

## Survey Findings

### **Habitats**

#### Hard standing

In 2019 and 2021 the majority of the Site was dominated by hard standing, this largely remains the same following the update survey. The Site is still dominated by hard standing with little to no apparent change in the management of these areas. In line with the findings of the Ecus surveys in 2019 and 2021, these are considered to be of negligible botanical value.

#### Ephemeral/short perennial vegetation

Areas of ephemeral/short perennial vegetation were present around the edges of areas of hardstanding and adjacent to the areas of introduced shrub along the eastern and southern boundaries of the Site. Species includes frequent cock's-foot *Dactylis glomerata*, false-oat grass *Arrhenatherum elatius* and stonecrop sp. *Sedum spp.* Coltsfoot *Tussilago farfara* and spurge *Euphorbia spp.* were occasional. These areas contained commonly occurring species and were considered to be of no greater than site level value for nature conservation.

#### Scattered scrub

In 2019, scattered scrub was sparsely but extensively distributed across the entire Site, including on the rubble piles and hard standing. Scattered scrub is still present throughout the Site with little to no apparent change in the management of these areas. Species recorded in 2022 are in line with those previously recorded such as buddleia *Buddleja davidii* plants with occasional willow species *Salix sp.* and silver birch *Betula pendula* (Ecus, 2019). These areas contain commonly occurring species and so are of no greater than site level importance.

#### Scattered trees

There have been few changes in the presence of scattered trees at the Site since the 2019 survey. Species noted include bird cherry *Prunus padus*, occasional beech *Fagus spp.*, and rare hawthorn *Crataegus monogyna*, apple *Malus domestica* and ash *Fraxinus excelsior*. The trees on Site are of low species diversity and limited in extent and considered of importance to nature conservation at the site level only.

#### Introduced shrub

Introduced shrub was recorded at the Site in 2019 along the eastern boundary adjacent Harborough Hill Road and the southern boundary. Several introduced shrub species have encroached onto Site from the adjacent land. This habitat remains relatively the same with little to no apparent change in the management or species recorded in these areas. Given the dominance of non-native and commonly occurring species, this habitat is considered to be of value at the site level only.

#### Poor semi-improved grassland

Areas of ephemeral vegetation towards the south-east of the Site had developed into poor semi-improved grassland since the previous surveys. Species included abundant cock's-foot, perennial rye-grass *Lolium perenne*, red fescue and false-oat grass with occasional ribwort plantain *Plantago lanceolata*, vetch sp. *Vicia spp.*, and bindweed sp. *Convolvulus sp.* Ox-eye daisy *Leucanthemum vulgare* and vetch sp. *Vicia spp.* were rare. These areas of grassland were unmanaged with a relatively tall sward. Given the small area of this habitat within the Site and the commonly occurring species, this habitat is considered to be of no greater than site level importance.

### Other Habitat - Rubble

Two large areas of bricks and rubble (TN2, Figure 1) are present on Site: one in the south east corner covers the majority of this area; and, a second on the northern part of the Site which stretches half the width of the Site (see Figure 1). Both rubble piles, identified during the 2019 survey, were still present at the time of the 2021 and 2022 surveys. These rubble piles support scattered scrub and so are considered to be of no greater than site level importance.

### **Species**

Foraging and commuting bats and nesting birds, were previously identified as potential ecological receptors to the development. No other potential receptors were identified. This is considered to remain the same in 2021, with no new species constraints identified following the update survey.

### Common Amphibians

No new ponds are located within 500 m of the Site and the existing terrestrial habitat is of limited suitability for Great crested newts (GCN) *Triturus cristatus* or other common amphibians, as reported in 2019 (Ecus, 2019). Whilst the rubble piles and scrub provide some suitability for sheltering GCN and common amphibians, given the lack of aquatic habitat within 500 m and the location of the Site within an urban area, lac with significant barriers to amphibian dispersal, these species are not considered to be receptors at the Site.

### Badger

No new evidence of badger activity at the Site was recorded during the update survey. The habitats present on Site are of poor suitability for badgers due to dominance of hardstanding, and the lack of sheltering opportunities and the dominance of bricks and other rubble within the rubble piles, which significantly limits their value to badgers as sett building habitat. Badger are not currently considered to be a receptor at the Site.

### Bats

Trees T2 and T3 located on the southern boundary of the Site were re-assessed for their potential to support roosting bats during the survey. T2 was mature and clad in ivy which may have obscured suitable roosting features whilst T3 was mature with some rot holes in the canopy. Both trees were found to display low suitability for roosting bats. Based on the habitats present and the location of the Site in an urban environment, it is considered to be of limited value to foraging and commuting bats as identified by Ecus in 2019 and 2021.

### Birds

During the 2022 survey, a dunnock *Prunella modularis* was recorded using the Site. This species and other commonly occurring bird species are likely to use the scattered trees and scrub present around the boundaries of the Site for foraging and nesting. Based on the habitats present and those of higher or similar ecological value found within the nearby area the importance of the Site to birds is considered to be at the site level only, as identified in 2019 and 2021 by Ecus.

### Reptiles

Reptiles are still considered unlikely to be found within the Site. Rubble piles in the Site have the potential to offer shelter and possible hibernacula for reptiles, however they are isolated from other areas of suitable habitat by areas of open hard standing. Slow worm *Anguis fragilis* is the species most likely to utilise urban habitats, however given the presence of gardens in the surrounding area, it is considered unlikely that this species would be associated with the Site. The Site habitats, disturbance from human activities and isolation from other suitable habitats are considered likely to deter reptiles from using the Site and so reptiles are not discussed further.

### Riparian mammals and White-clawed crayfish

No waterbodies are present within 30 m of the Site and the closest waterbody, the River Dearne is 830 m from Site and separated from it by several main roads, therefore otters *Lutra lutra*, water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes* are still not considered to be a receptor to the development.

### Invasive species

Cotoneaster *Cotoneaster* sp. species were recorded at numerous locations on Site during the 2022 survey, and were recorded in the same locations as previously recorded during both the 2019 and 2021 surveys (Figure 1, TN1).

## **Evaluation and Recommendations**

### ***Habitats***

There has been little to no change to Site habitats; each of the habitats are still considered to be of importance to nature conservation at a site level only due to their commonly occurring nature and presence within an urban setting. Additionally the introduced shrub is limited in extent and invasive species are present. These are not considered to be habitats of principal importance on Section 41 of the NERC Act 2006, nor are they included within the LBAP for Barnsley. There has been no significant change since the 2019 and 2021 surveys.

Removal of all habitats is anticipated to facilitate the development works. Proposals for the Site include the creation of an Activity Park which will include areas of native wildflower grassland, native shrub and scrub planting, an attenuation pond and a number of new trees. Replacement planting should focus on those species which would maximise flowering, pollen/nectar production and/or berries/fruit production to benefit invertebrates, birds and small mammals. It is anticipated that removal of trees will be required to facilitate the development however T2 and T3 are due to be retained. As compensation for the loss of scattered trees, replacement planting of trees within the Site is recommended at a minimum rate of one planted for every tree lost. Any trees to be retained or those offsite but where their roots may encroach into the Site, should be protected throughout the development, using Root Protection Zones (RPZs) in accordance with British Standard 5837 (2012): Trees in relation to design, demolition and construction.

### Ash die back (*Hymenoscyphus fraxineus*)

Ash die back (ADB) also known as Chalara or Chalara dieback of ash, is a disease of ash trees caused by a fungus called *Hymenoscyphus fraxineus*. ADB causes leaf loss, crown dieback and bark lesions in affected trees. Once a tree is infected the disease is usually fatal, either directly or indirectly by weakening the tree to the point where it succumbs more readily to attacks by other pests or pathogens, especially Armillaria fungi, or honey fungus.

It has caused widespread damage to ash populations in continental Europe, where experience indicates that it can kill young ash trees quite quickly, while older trees can resist it for some time, until prolonged exposure or another pest or pathogen attacking them in their weakened state, eventually causes them to succumb.

A number of ash trees were present at the Site, none of these trees were observed to display signs of having ADB.

If ash trees are to be retained, it recommended that the Site be subject to a survey by a suitably qualified arboriculturalist in order to exercise the tree owners' duty of care in relation their responsibility in respect of tree safety. If they are to be lost it is recommended that they should be felled and disposed of

appropriately to avoid causing the potential spread of ADB; the Environment Agency should be consulted for advice.

## **Species**

As reported in 2019 and 2021, the Site is still considered to be of site level importance for foraging and commuting bats and nesting birds. Invasive plant species have been recorded on Site during the 2019, 2021 and 2022 surveys. Recommendations for mitigation and enhancement measures remain the same as reported in 2019 and 2021, however are highlighted below.

### Bats

Trees T2 and T3 were assessed as displaying low suitability to support roosting bats. In accordance with bat survey guidelines no further survey of trees displaying low bat roost suitability is required. These trees are due to be retained as part of the development. However if this should change and their removal be required in the future, it is recommended that a precautionary approach in-line with best practice guidance (Collins, 2016) is applied, should felling become necessary. The tree should be sectioned during felling, taking care not to cross-cut into limb or stem sections that support cavities. Any felled sections supporting suitable roost features such as splits, cavities or rot holes should be lowered to the ground and left in-situ overnight, with the cavity facing upwards, prior to chipping or removal from Site the following day.

In order to provide an enhancement for roosting bats, it is recommended that roosting provision is incorporated across the development, with three bat boxes on retained trees e.g. Schwegler 1FD bat boxes.

### Birds

The scattered trees and introduced shrub provide nesting opportunities for common bird species, of value at the site level due to the limited extents of these habitats. Where removal of these habitats is required, it is recommended that it is undertaken between September and February inclusive i.e. outside of the typical bird breeding season. Where it is not possible to schedule clearance works for these months, a nesting bird check, to be undertaken by a suitably qualified ecologist will be required no more than 48 hours prior to clearance, to check for the presence of active bird nests. An active nest would require an exclusion zone to be established and adhered to until chicks had fledged and/or the nest is no longer in use (to be monitored and confirmed by an ecologist).

To compensate for the loss of vegetation which provides nesting opportunities for common bird species, and as an enhancement, it is recommended that nesting provision is incorporated into the development. Boxes such as the Schwegler 1SP Sparrow terrace should be incorporated. Bird boxes should be situated at least 3 m from the ground and ideally be along the northern or western edges of the Site, due to proximity to suitable off-site habitat, with boxes sited to face towards the north, west or east.

### *Invasive Species*

Cotoneaster species can be difficult to differentiate and as a precaution the species recorded on Site should be treated as if they are a Schedule 9 species.

Following best practice it is recommended that any of the cotoneaster on Site to be removed should be cleared, grubbed out and chipped, with care taken to avoid spread through transfer of berries in particular. Chipped arisings should be transported to a licenced composting/green waste facility in a covered container to avoid inadvertent spread of plant material. The receiving waste facility should also be made aware of the nature of the green material.

Yours sincerely,



**Natasha Firth BSc (Hons) MSc MCIEEM**  
Senior Ecologist

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### References

Ecus Limited. (2019). '*Land at Schwabisch Gmund Lane, Barnsley - Preliminary Ecological Appraisal*', ref. 11373, January 2019, Sheffield.

Ecus Limited. (2021). '*Land at Schwabisch Gmund Lane, Barnsley – Update Preliminary Ecological Appraisal*', ref. 16656, March 2021, Sheffield.

Joint Nature Conservation Committee (JNCC). (2016). '*Handbook for Phase 1 habitat survey – A technique for environmental audit*'. JNCC, Peterborough.

Natural England. (2010). '*List of habitats and species of principal importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006*'.




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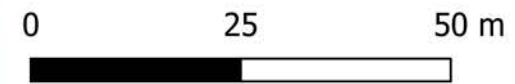
**Figure 1. Phase 1 Habitat Map**

**Appendix 1 – Site Photographs**



Legend

-  Site Boundary
-  SI Poor semi improved
-  Hardstanding
-  Dense / continuous scrub
-  Scattered scrub
-  Ephemeral/short perennial
-  Introduced shrub
-  Scattered trees
-  Target Notes



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Figure 1. Phase 1 Habitat Map

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- Plate 1 View of hardstanding in south-west extent of the Site
- Plate 2 View of rubble pile with scattered scrub and ephemeral/short perennial vegetation.
- Plate 3 View of rubble pile in south-east of Site with scrub and ephemeral/short perennial vegetation.
- Plate 4 View of poor semi-improved grassland and introduced shrub with Cotoneaster sp,
- Plate 5 View of T3.
- Plate 6 View of T2.

April 2022

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Barnsley Youth Zone & Activity Park  
Ecological Walkover

Appendix 1. Site Photographs