# Appendix 12.1: Preliminary Ecological Appraisal

# Ecological Appraisal

## Wealdon Brickworks

## Britaniacrest Recycling Ltd


**Date:** March 2018

**Our Ref:** JER6755

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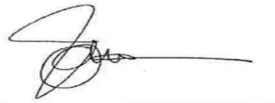
| **Authorised by:** | Tim Oliver |  |
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# 1 Introduction

## 1.1 Scope of works

1.1.1 RPS Planning and Development were commissioned to undertake an Ecological Appraisal of the Britaniacrest Recycling site situated north of Horsham in West Sussex (centred on Grid Ref TQ 171 343).

1.1.2 Britaniacrest Recycling Ltd (referred to as Britaniacrest) proposes to submit a planning application to redesign the site. The scheme involves the construction of a new waste facility which will require the demolition of the existing industrial buildings and redesign of the existing operational site.

1.1.3 This Ecological Appraisal Report has been produced to provide baseline ecology information for the redevelopment planning application.

## 1.2 Site Context

1.2.1 The Britaniacrest Recycling facility consists of approximately 3ha of land, consisting of a large metal shed surrounded by hardstanding, several smaller buildings and patches of regenerating vegetation. An access road connects the site to Langhurstwood Road to the east.

1.2.2 Land immediately north, south and east of the site is used for industrial purposes, including manufacturing centres and a landfill. To the west the site is bounded by railway, beyond which are fields divided by sections of woodland.

1.2.3 The site is situated within a rural area of West Sussex, with the surrounding landscape mostly comprising arable and pastoral fields. The town of Horsham lies approximately 0.9km south east of the site.

## 1.3 Previous Surveys

1.3.1 An ecological site survey and ecology desktop study were undertaken in 2013 (The Ecology Consultancy, 2013) in support of the permitted waste transfer station (WTS). A full ecological appraisal of the site immediately to the north of the WTS site was also undertaken in 2013 providing additional information on the habitats adjoining the northern edge of the WTS.

1.3.2 The 2013 ecological surveys concluded that the majority of the onsite habitats have low ecological value. Surveys for bats and reptiles were not required for the WTS development due to the low suitability of the on-site habitats to be used by these species at the time of surveying.

1.3.3 A great crested newt presence / absence survey was undertaken in 2013 and identified a small population of great crested newt using ponds approximately 220m north-east of the site boundary. The 2013 EIA concluded there would be no impacts on great crested newt and it is understood

that a European Protected Species (EPS) mitigation licence with regard to great crested newt was not considered necessary.

# 2 Methods

## 2.1 Desk Study

2.1.1 A request was submitted to the Sussex Biodiversity Records Centre (SBRC) for information on non-statutory designated nature conservation sites within 1km of the survey site and for records of protected or otherwise notable species (e.g. species listed under the local or UK BAP) within 2km of the survey site.

2.1.2 Information on nationally and internationally designated sites within 2km and 10km respectively of the site was sought from the Multi-Agency Geographic Information for the Countryside and the Joint Nature Conservation Committee website.

## 2.2 Building Inspection

2.2.1 The basic structure of on-site buildings was described as part of the site walkover survey. A detailed external visual assessment was undertaken of on-site buildings to assess their bat roost potential. The daytime survey methodology was consistent with the published best practice survey guidelines (Collins, 2016).

2.2.2 The buildings were inspected from the ground to assess their structure and to identify features such as gaps / openings, box eaves etc. that could potentially be used as, or provide access to roost features. This included a visual search for signs that might indicate use by bats, such as claw marks, droppings, feeding remains, and grease marks. Close focusing binoculars and a torch were used to inspect elevated features.

## 2.3 Site Walkover

2.3.1 The site walkover survey, undertaken on 7th March 2016, was conducted in accordance with The Handbook for Phase I Habitat Survey (JNCC, 2010) and guidelines on Ecological Appraisal (IEEM 2012).

2.3.2 Habitats within the site were classified, mapped and described in terms of their structure and broad floristic composition. Consideration was also given to adjacent habitats to understand the sites ecological context. Searches were made for invasive non-native plant species focussing on those species currently listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended in 2010). Botanical nomenclature in this report follows that of Stace (2010).

2.3.3 The habitats within the site were assessed for their potential to support legally protected or otherwise notable flora and fauna. Where species are not specifically mentioned, this indicates that no habitat of potential value for these species was identified during the survey.

# 3 Results

## 3.1 Desk Study

### Designated Sites

3.1.1 There are no RAMSAR sites, Specially Protected Areas or Special Areas of Conservation within 10km of the site. There are no Sites of Special Scientific Interest (SSSI) designated for biological interest within 2km of the site.

3.1.2 There are four non-statutory designated sites, and one statutory designated site, within 2km of the development site (Table 3-1).

***Table 3-1: Designated Sites within 2km of the Development Site***

| Designated Site | Designation | Distance from Development Site | Description |
|---|---|---|---|
| **Statutory Designated Site** | | | |
| Warnham Mill Pond | Local Nature Reserve | 0.9km south | A 40ha site comprising freshwater marsh and broadleaved plantation. The reserve is of ornithological interest and supports breeding great crested grebes. |
| **Non-statutory Designated Site** | | | |
| - | Ancient Semi Natural Woodland | 0.2km to the south and east of the site | Woodland composed of native trees and shrubs that do not obviously originate from planting. |
| Brookhurst Wood & Gill & Morris's Wood | Site of Nature Conservation Importance (SNCI) | 0.4km north-east | 30ha of semi-natural woodland, dominated by hornbeam. Situated on and around stream valley sides, with a sparse but occasionally species-rich ground flora. |
| Two sections of road verge | Notable Road Verges | 1.1km and 1.6km north-east of the site | Road verges designated for their wildlife interest, often supporting diverse, protected, uncommon or declining habitat or flora. |
| - | Wood Pasture and Parkland | 1.2km south-west | Typically veteran trees in a matrix of grazed grassland or heathland, often providing habitat for roosting bats, birds and invertebrates. |

### Protected Species

3.1.3 For each legally protected or notable species an abbreviated reference is given to their legal and conservation status (Table 3-2).

***Table 3-2: Abbreviations for Species Legal and Conservation Status***

| Abbreviation | Legal / Conservation Status |
|---|---|
| EPS | European Protected Species. Fully protected under the Conservation of Habitats and Species Regulations 2010 (as amended) |
| WCA | Species given full protection under the Wildlife and Countryside Act 1981 (as amended) |
| WCA 1 | Bird species subject to special protection |

| | |
|---|---|
| | Listed on Schedule 1 Wildlife & Countryside Act 1981 as amended |
| S41 | Species of principal importance of conservation in England<br>(Listed under Section 41 of the Natural Environment and Rural Communities Act 2006) |
| UK BAP | UK Biodiversity Action Plan Priority Species |
| LBAP | Local (Sussex) Biodiversity Action Plan priority species |
| UKBRed | RSPB UK Red List - Birds of high conservation concern in the UK |
| UKBAm | RSPB UK Amber List - Birds of high conservation concern in the UK |
| PBA | Protection of Badgers Act |

3.1.4 Table 3-3 provides a summary of records of legally protected species from within 2km of the proposed development, for which there is suitable habitat on or adjacent to the site.

***Table 3-3: Records of Protected Species within 4km of the site***

| Common Name | Scientific Name | Number of Records | Closest Record to Site | Roosts (within 2km) | Protected Species Legislation |
|---|---|---|---|---|---|
| *Bats* | | | | | |
| Common Pipistrelle | *Pipistrellus pipistrellus* | 4 | Activity recorded within site<br>Roost: 2km south | 1 | EPS, WCA |
| Soprano Pipistrelle | *Pipistrellus pygmaeus* | 1 | 1.9km south | - | EPS, WCA, S41, UK BAP |
| Pipistrelle Species | *Pipistrellus sp.* | 5 | 0.2km south-east | 2 | EPS, WCA |
| Long-eared Bat | *Plecotus sp.* | 1 | Activity within site | - | EPS, WCA, S41, UK BAP |
| Brown Long-eared Bat | *Plecotus auritus* | 4 | 1.7km south-east | 2 | EPS, WCA, S41, UK BAP |
| Natterer's Bat | *Myotis nattereri* | 1 | 1.7km south | - | EPS, WCA, |
| Daubenton's Bat | *Myotis daubentonii* | 1 | 1.7km south | - | EPS, WCA, |
| Noctule | *Nyctalus noctula* | 2 | 1.7km south | - | EPS, WCA, S41, UK BAP |
| Serotine | *Eptesicus serotinus* | 2 | 1.7km south | - | EPS, WCA |
| Unknown Bat Species | *Chiroptera sp.* | 1 | 1.9km south-east | 1 | EPS, WCA |

| |
|---|
| *Herptiles* |

| | | | | | |
|---|---|---|---|---|---|
| Great crested newts | *Triturus cristatus* | 19 | Adjoining site boundary to north | - | EPS, WCA, S41, UK BAP, LBAP |
| Adder | *Vipera berus* | 1 | 1.7km south | - | WCA, S41, UK BAP, LBAP |
| Grass snake | *Natrix natrix* | 13 | Adjoining site boundary to north | - | WCA, S41, UK BAP, LBAP |
| Common lizard | *Zootoca vivipara* | 2 | 1.7km south | - | WCA, S41, UK BAP, LBAP |
| Slow-worm | *Anguis fragilis* | 8 | Adjoining site boundary to east | - | WCA, S41, UK BAP, LBAP |

**Birds**

3.1.5 Notable species recorded within the search area, for which there is suitable nesting habitat within the site include: black redstart *Phoenicurus ochruros* (WCA 1, UKBAm), house martin *Delichon urbicum* (UKBAm), and swift *Apus apus* (UKBAm) with swallow *Hirundo rustica* also recorded.

## 3.2 Building Inspection

**Main Building and Small Northern Buildings**

3.2.1 The main building within the site is a large steel-framed storage shed measuring 70 x 190m (Figure 3-1). The building is open and well-lit, with corrugated metal panelled walls and roof. The southern section of the building is older and in poorer condition than the recently extended northern section. The building is classified as being unsuitable for roosting bats.

***Figure 3-1: Main steel frame building***

3.2.2 Two small buildings lie to the north of the main storage shed, the first of which is a flat, felt roofed brick building and the second a wooden shed (Figure 3-2 and 3-3). Both are recently constructed and in good condition, with no suitable features for roosting bats.

***Figure 3-2: Small 'kiosk type' building***

***Figure 3-3: Wooden storage shed***

**Reception Building**

3.2.3 A disused former reception building is located to the south of the site (Figure 3-4). The reception is brick walled with a pitched asbestos roof. A large crack along the brickwork on the north-western elevation provides an opening in the exterior wall creating potential access in the wall cavity (Figure 3-5). The opening has low potential to be used as a roost site by bats. A disused nest lies in the base of the crevice.

***Figure 3-4: Reception building***

***Figure 3-5: Damaged brickwork on the reception building***

3.2.4 All of the buildings windows have been boarded over with the exception of one, however no suitable features or signs of bats were recorded within the visible interior.

**Office Building**

3.2.5 To the centre of the site is a former office building of similar construction to the reception building though in a better state of repair (Figure 3-6). The building is generally well-sealed, with only a few small cavities considered to be of negligible value for use by bats.

***Figure 3-6: Office building***

**Small Outbuilding**

3.2.6 A small, brick building lies to the south-west of the site (Figure 3-7). The building has a flat corrugated metal roof and is in poor condition, with the door and windows removed. While the building is unsuitable for bats, several inactive bird nests were found inside.

***Figure 3-7: Outbuilding***

## 3.3 Site Walkover

**Hardstanding and Bare Ground**

3.3.1 The majority of the site comprises hardstanding and bare ground, as shown in Figure 3-8. Vegetation is limited to disused areas at the edges of the site, and small sections of regenerating vegetation around the buildings.

***Figure 3-8: Hardstanding***

**Tall Ruderal and Ephemeral / Short Perennial Mosaic**

3.3.2 A tall ruderal and ephemeral / short perennial mosaic has colonised open areas within the site, as shown in Figure 3-9. This is most extensive to the north-east of the site where ruderal vegetation has established on a large bank.

3.3.3 Mosses dominate the ground cover in these areas, interspersed with herbs such as colt's-foot *Tussilago farfara*, barren strawberry *Potentilla sterilis* and creeping buttercup *Ranunculus repens*. Frequent strands of dead tall ruderal vegetation are present, including teasel *Dipsacus fullonum*, common ragwort *Jacobaea vulgaris* and docks *Rumex* species.

***Figure 3-9: Mounded ground in north-eastern part of the site***

**Scrub and Trees**

3.3.4 Butterfly bush *Buddleja davidii*, bramble *Rubus fruticosus* sp., grey willow *Salix cinerea* and silver birch *Betula pendula* scrub has self-seeded throughout the site, forming denser stands to the north and north-east of the site, as shown in Figure 3-10. Rose *Rosa* sp., hawthorn *Crataegus mongyna* and pedunculate oak *Quercus robur* saplings are additionally present along the eastern bank.

3.3.5 Along the access road to the site are lines of mature Lombardy poplar *Populus nigra* Italica, hawthorn hedge and large-leaved lime trees *Tilia platyphyllos*.

***Figure 3-10: Scrub on north-eastern site boundary***

**Amenity Grassland**

3.3.6 A narrow bank of amenity grassland borders the main recycling centre area to the south-east. Perennial rye-grass *Lolium perenne* is the dominant species in the grassland, with common grassland species such as ribwort plantain *Plantago lanceolata*, common daisy *Bellis perennis* and yarrow *Achillea millefolium* occasionally present. Patches of bramble sprawl across the grassland.

**Adjoining Habitat**

3.3.7 To the west, a mature woodland of oak and birch trees lies beyond the railway bordering the site. A small section of plantation woodland is located north of the access road to the site.

3.3.8 To the north of the site is a fenced area containing two ponds, surrounded by steep banks covered by scrub and tall ruderal vegetation (Figure 3-11). Observed from within the site, both ponds appeared to have good water quality with an estimated depth of at least 1m.

***Figure 3-11: Off-site ponds***

3.3.9 A total of eight ponds lie within 250m of the site. A great crested newt survey undertaken in 2013 found great crested newts to be present in two ponds located 220m north-east of the site (Appendix 1 of this report).

3.3.10 Great crested newts were found to be absent from the five other ponds that were surveyed. This includes the two aforementioned ponds north of the site, as well as one pond 20m north of the access road and two ponds 160m south of the site. An additional pond lies 150m west of the site beyond the railway.

# 4 Discussion

## 4.1 Protected Sites

4.1.1 The nearest designated site is located 0.2km from the site, comprising an ancient semi-natural woodland.

4.1.2 There is no woodland within the development site and the designation is separated from the site by Langhurstwood road. As such, no impact pathways between the development and the non-statutory sites are anticipated.

## 4.2 Habitats

4.2.1 The majority of the site comprises hardstanding and bare ground, with only small sections where vegetation has colonised. The typical ground cover in these areas comprises moss with scattered tall ruderal species and encroaching butterfly bush scrub.

4.2.2 The habitats present within the site support a relatively low diversity of common species typical of industrial sites. The vegetation was relatively sparse during the walkover survey, which is reflective of the time of year the survey was undertaken and due to part of the scrub recorded in 2013 having been felled.

## 4.3 Roosting Bats

4.3.1 It is evident that both the former reception and small southern building have degraded since the 2013 ecological site survey, with the corrugated metal panelling previously boarding the buildings now partially removed and significant cracks and holes in the brickwork of both.

4.3.2 The former reception building has potential to be used by crevice roosting bat species with a section of damaged wall providing an extensive opening the cavity wall. The feature is only 1.5m above ground level and has an old bird nest in the cavity. These characteristics would reduce the likelihood of use by bats but would not preclude use. With a single feature, the building is classified as having low potential value for bats.

4.3.3 A few small cracks and openings were also recorded on the office building, however none of these are likely to extend into cavities of significant value for bats.

4.3.4 The main storage shed building and smaller buildings to the north of the site are considered unsuitable for bats.

## 4.4 Nesting Birds

4.4.1 The small southern building and reception building both offer suitable habitat for small nesting birds and the remains of nests were found in both. The remaining buildings within the site are considered to be of negligible value for nesting birds.

4.4.2 While the majority of the scrub within the site is sparse, denser areas are present on the margins of the site, which provide nesting opportunities. Given the context of these scrub and the industrial nature of the site, nesting birds would be expected to be limited to common and widespread species.

## 4.5 Great Crested Newt

4.5.1 Great crested newts were recorded in ponds 220m to the north-east of the site in 2013 when they were recorded as absent from the ponds adjoining the northern boundary and from the ponds to the south of the site.

4.5.2 Although great crested newts breed in the wider area, the known breeding pond is located over 220m north-east of the site boundary and there is a lack of good quality great crested newt habitat connectivity.

4.5.3 With the site supporting localised areas of tall ruderal and and scrub vegetation on the margins consistent with the 2013 conclusions, great crested newts are very likely to be absent from terrestrial habitat within the site.

## 4.6 Reptiles

4.6.1 Grass snake and slow-worm have previously been recorded in the woodland adjoining the site to the north and east respectively. At present, the sparse vegetation cover within the site provides very poor quality terrestrial habitat for reptiles which are likely to be absent from the site.

# 5 Conclusions and Recommendations

## 5.1 Buildings

### Bats

5.1.1 Since the 2013 ecological walkover survey the former reception and small southern building have noticeably degraded and are now in a poor state of repair. An opening between a cavity and external wall on the former reception building now confers this building with low potential value for bats.

5.1.2 In accordance with BCT guidelines, it is recommended that a dawn / dusk survey is undertaken to establish the status of the building as a bat roost. The survey should be undertaken between May and August. Further mitigation will be necessary if bats are found to be using the feature.

### Nesting Birds

5.1.3 The former reception and small southern building have previously been used by nesting birds and will be demolished in the proposed development. For demolition activities outside of the bird breeding season (March to August inclusive), there should not need to be any consideration of nesting birds. Between March and August it will be necessary to ensure beforehand that birds are not nesting within the buildings. This should be established by an ecologist undertaking a nesting bird survey within 48 hours prior to work commencement. Active nests, if present, would need to be protected.

5.1.4 The remaining buildings within the site are of negligible value for roosting bats and nesting birds.

## 5.2 Dense Scrub

### Nesting Birds

5.2.1 There is potential for nesting birds to use the denser areas of scrub to the north and north-east of the site. If scrub removal within the bird breeding season is necessary, it should first be ensured that no birds are nesting within the scrub. As with the pre-demolition building nesting bird survey, this should also be established by an ecologist visiting the site within 24 hours prior to work commencement.

## 5.3 Other Habitats

5.3.1 The remaining habitat within the site is unlikely to support protected species, comprising a low diversity of common flora with value in context of the site only. It is recommended that vegetation removal is phased, beginning with the innermost vegetation and extending outwards from the site's centre. This will allow a gradual movement of fauna outwards into surrounding the habitat.

## 5.4 Off-site Ponds

### Great Crested Newt

5.4.1 The habitat within the site is of poor quality for great crested newts and it is considered unlikely that they would be present on-site. It is therefore anticipated that, in line with the 2013 ES ecology chapter, the proposed development would have no direct impacts on great crested newts.

5.4.2 Great crested newts will move through terrestrial habitats in the landscape and can establish new breeding ponds. The presence / absence of great crested newts in the ponds adjoining the site boundary should be reconfirmed in 2016 given that several breeding seasons have lapsed since the previous survey.

### Habitat Protection

5.4.3 Due to the proximity of the ponds, good practice protection measures will be required to during construction and future operation to avoid the potential for pollution or contamination of the adjoining off-site ponds.

# References

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The Ecology Consultancy (2013). Site Ha, Brockhurst Wood, Horsham, West Sussex Bat and Great Crested Newt Survey, Report for Sunninghill

# Drawings




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## Legend

- Site Boundary
- Amenity Grassland
- Building
- Dense Scrub
- Ephemeral / Short Perennial
- Hardstanding
- Standing Water
- Tall Ruderal
- Fence
- Wall
- Scattered Scrub

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Client BRITANIACREST RECYCLING

Project SUSSEX EfW, WARNHAM

Title HABITATS MAP

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| JER6755 | 1:1,500 | APR 16 |

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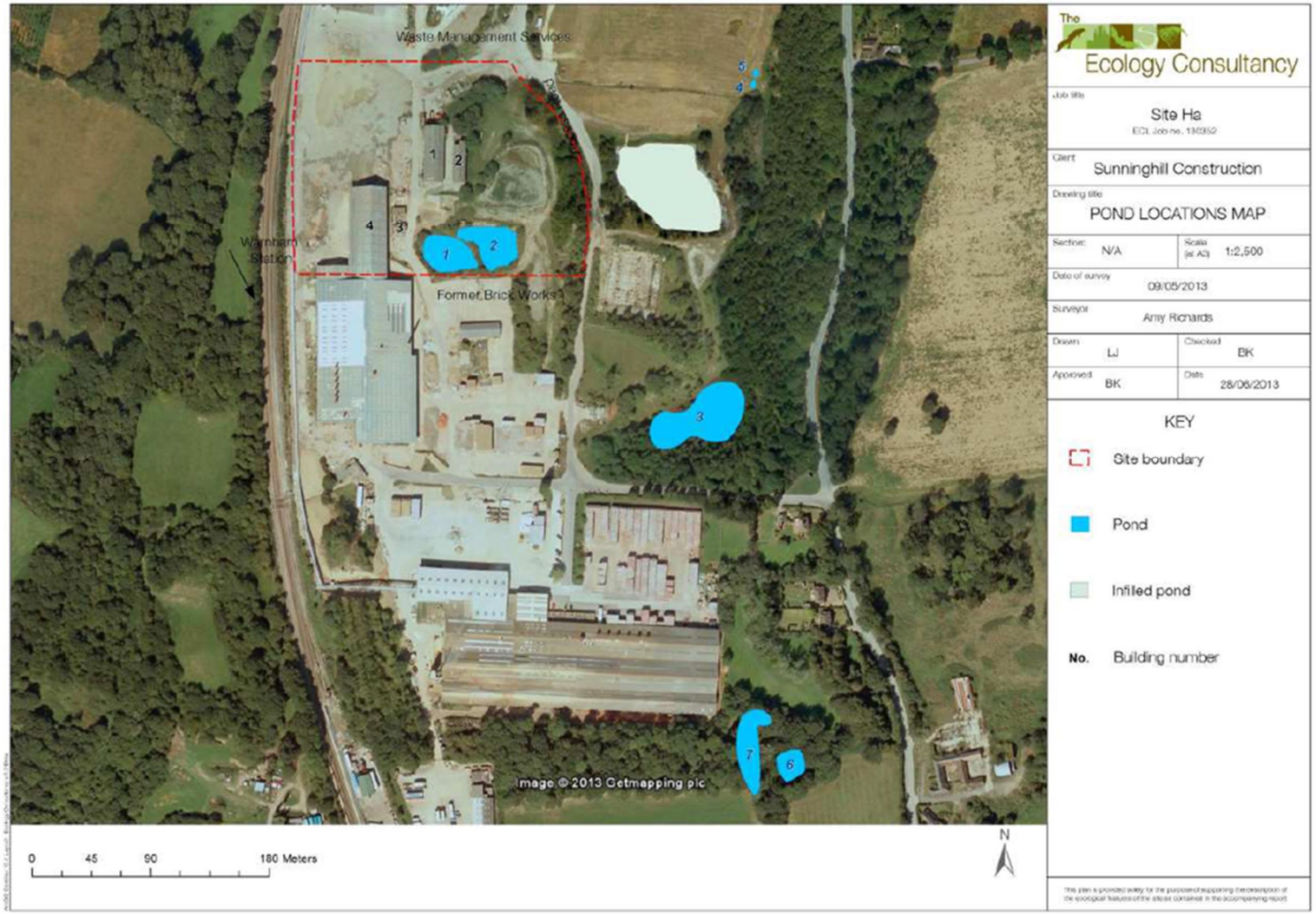
# Appendices

# Appendix 1

## Map showing ponds surveyed for great crested newt in 2013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