SF 3045 | LAND OFF HARLOW MOOR RD, HARROGATE

REVIEW OF ECOLOGICAL INFORMATION SUBMITTED WITH RESPECT TO PLANNING APPLICATION REF: 19/05245/DVCMAJ

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SMEEDEN FOREMAN
Landscape Architecture • Ecology • Arboriculture

Quality Assurance

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1.0 INTRODUCTION

1.1.1 Smeeden Foreman Limited has been commissioned by Pinewoods Conservation Group to undertake a review of supporting documentation submitted with respect to ecology for the proposed development on land to the west of Harlow Moor Rd, Harrogate (central grid reference SE 28578 54616).

1.1.2 This report has been prepared to form part of an objection in response to a planning application originally submitted by Harrogate Spring Water in May 2017 (outline planning reference: 16/05254/OUTMAJ) with new information submitted with regards to a reserved matters application (planning reference: 19/05245/DVCMAJ).

1.1.3 This report will consider the potential impacts of the development based on the most recent ecological findings by Wold Ecology in July 2019 (*Harrogate Spring Water Ecology Report 2019*), existing knowledge of the site and information previously submitted in support of the original planning application. A review of all relevant information will be made to discuss features identified to be of ecological interest on site and the potential impact which the development may have.

1.1.4 It is noted that the ecology report was only made available as part of the planning submission in early March 2020, seven months after the original issue date of the report (July, 2019) and following comments from Harrogate Council's ecologist (January 2020) stating no updated ecological information had been received in support of the application.

1.1.5 This report will also discuss the site with respect to biodiversity net gains, with reference to the Biodiversity Metric 2.0 calculation completed by Wold Ecology, February 2020.

2.0 SITE DESCRIPTION

2.1.1 The proposals site is located to the west of Harrogate, North Yorkshire and comprises an area of approximately 1.2ha in size.

2.1.2 Habitats within the proposals site were identified by Wold Ecology following a Phase 1 habitat survey, predominantly comprising plantation woodland with grassland, bracken and tall ruderal habitats also recorded. A hedgerow bounds the site to the west with fencing and walls to the east and north respectively. Refer to *Figure 01* below.

Figure 01: Aerial view of the proposals site location

2.1.3 The site is very well connected within the wider landscape with surrounding habitats including mature broadleaved woodland immediately adjacent to the south of site, further plantation woodland to the north and grazed pasture to the west. Beyond the site habitats include Birk Crag LPA/SINC (450m to the north), farmsteads, residential dwellings, large areas of public open space and mature gardens.

2.1.4 The applicant, Harrogate Spring Water, are proposing to extend their existing bottling plant and have submitted a Section 73 application to amend condition 1 of the outline planning permission granted in May 2017. Revised proposals for the site have not yet been finalised but are anticipated will increase the previously proposed building footprint by 25% resulting in further loss of existing plantation woodland, as detailed within information provided by Barton Wilmore in support of the application.

3.0 POTENTIAL ECOLOGICAL IMPACTS

3.1 HABITAT

3.1.1 A phase 1 habitat survey undertaken by Wold Ecology (25th July 2019) identified habitats on site which have been reviewed and discussed in further detail below.

Timing

3.1.2 Condition 12 of the outline planning permission states the following:

"A further ecological survey of the application site and the immediately surrounding area shall be undertaken in late spring/early summer. The results shall be utilised to inform an ecological mitigation and management scheme which shall be submitted for the written approval of the local planning authority prior to the submission of any reserved matters or full application for the site. The ecological mitigation scheme shall consider the range of habitats on the application site and on the existing Harrogate Spa Water Site and should be fully integrated with the landscaping scheme for the site. Full mitigation for the extent of loss of plantation woodland may require consideration of compensation on adjacent land off-site in accordance with Condition 10. Any such proposals will require to be integrated into the ecological mitigation and management scheme for the site…"

3.1.3 The phase 1 habitat survey was undertaken in late July 2019, outside of the period stipulated within the condition and therefore further survey of the site during the appropriate season is considered necessary, with early summer generally accepted to be within the months of May/June.

Woodland

3.1.4 Woodland on site is recorded as plantation woodland which was planted by the Rotary Club in 2005 as part of a community project (Rotary Centenary Wood) and comprises a mix of native and European tree species. More mature trees are identified as present to the north, south and east of the site. The proposals will result in a 25% increase in the loss of woodland from the site including older trees to the east being affect by an extension to the existing bottling plant. The developing woodland on site is considered to be a valuable and well-established community resource and contributes to the general diversification and variation in age structure of the larger areas of established woodland which adjoin the site.

3.1.5 The plantation woodland on site is an important part of a green corridor connecting woodland to the north and south, the loss of which would cause fragmentation of the existing woodland habitat. The woodland provides an essential buffer for wildlife from the existing HSW development, providing cover, foraging and commuting habitat for supporting a wide variety of bird, mammal, invertebrate species and potentially amphibians. The extended building footprint as proposed within the revised application would result in an increased degree of severance of connectivity between existing areas of woodland with no compensatory habitat to reinstate this connectivity put forward.

3.1.6 Provision has not yet been made to mitigate the loss of this woodland although it is understood the applicant is in discussions to obtain adjacent land for inclusion within the site boundary to provide some degree of on-site provision (Barton Wilmore statement). This would be preferable as opposed to a more distant and unconnected off-site contribution, given the site is of such local community significance. To avoid fragmentation the land must be located immediately adjacent to the site in order to

provide a continued link between the existing woodland to the north and south of the site.

3.1.7 Woodland within the Harrogate District is afforded an individual habitat action plan by Harrogate Borough Council with objectives outlined as follows:

"…to conserve, maintain, restore and enhance woodland in Harrogate district, and increase woodland cover from 6 per cent to the national level of 11.6 per cent, concentrating on extending and linking existing sites."

With reference to fragmentation as follows:

"Some woodland species require large blocks of woodland in which to survive and many species do not readily disperse. Fragmentation of woodland is, therefore, a particular threat and protecting, expanding and linking existing woodland blocks is especially important for the conservation of biodiversity."

3.1.8 The development proposals will result in the loss of developing woodland which serves as an important functional link both ecologically and recreationally within the local area. The woodland provides connectivity for both wildlife and people and the loss of the woodland habitat on site would contradict the above statements within the Local Biodiversity Action Plan.

3.1.9 The arboriculture/landscape architect team at Smeeden Foreman have reviewed documentation associated with this application and are in full agreement with comments put forward by Harrogate Borough Council (January/February 2020).

3.1.10 For any woodland scheduled for retention within the proposals, an appropriate Arboricultural Impact Assessment and Tree Protection Plan should be provided to accurately assess the condition of the establishing trees on site, identify trees of higher value for retention and ensure protection of any overhanging tree canopies adjacent to the site boundaries.

3.1.11 No photographs of the site have been included within the ecology report – Pinewoods Conservation Group have provided the following recent images to support their objection:

Native plantation woodland on site, photograph taken in 2017 (PCG)

Aerial view of the site in 2017 (PCG)

Recent photograph taken January 2020 (PCG)

Grassland

3.1.12 Open areas of grassland provide 'glades', breaks in the canopy which are an important feature within developing woodland structure. It is understood that drainage of the site is poor in general, this would undoubtedly improve as a direct result of trees being allowed to mature, with root systems stabilising the ground. The ground flora as it currently stands is low in value, but re-establishing woodland indicator species recorded at the site such as wood horsetail *Equisetum sylvaticum,* wood avens *Geum urbanum* and broad buckler-fern *Dryopteris dilatata* would be expected to further develop as the canopy continues to mature.

3.1.13 Amenity grassland on site is identified within the ecology report as having negligible conservation value. The location of this grassland set within woodland forms part of the habitat mosaic particularly of value to hedgehog while providing alternative foraging opportunities for a number of bird species and wildlife in general.

Hedgerow

3.1.14 The existing hedgerow which bounds the proposals site to the west is over 20m in length and therefore qualifies as UKBAP Priority habitat. The legal diversion of a public footpath along the western boundary of the proposals site was approved in July 2019 (reference: 19/02763/PROWNY). With this in mind, reference to section 9.2.2.6 of the

ecology report should be made, and the importance of this hedgerow re-considered. It is understood this hedgerow would be retained within the proposals, however, the relative importance of this linear feature needs to be more adequately reflected when establishing the site habitat baseline within the BNG metric (refer to section 4.0 of this report).

3.1.15 Development must ensure that the hedgerow is retained within the proposals to maintain functionality as a wildlife corridor and that this linear feature is not compromised by lighting or severance.

Orchids

3.1.16 Evidence for orchids being present on site has been provided by Pinewoods Conservation Group with approximately 50 common spotted orchid spikes *Dactylorhiza fuchsii* (likely hybrids) being recorded in 2017 increasing to in excess of 100 spikes following survey by Wold Ecology in 2019 (refer to section 7.3.8 of the ecology report). The location of these plants are not target noted within the phase 1 habitat plan, with only a six figure grid reference referred to in the report text. A more precise map of orchid spikes would be required to indicate areas of orchids which may be lost to the development, and to inform a possible translocation programme. This may require further survey during the appropriate season to establish exact occurrence on site.

3.1.17 No indication has been made within the ecology report as to whether there is scope for these orchids to be retained within the new proposals, or whether translocation of turfs is a viable option to unaffected areas on site (preferable) or off-site. A suitable location would need to be agreed with the local authority and a method statement for translocation produced for incorporation within a Construction and Environmental Management Plan. Subsequent monitoring of the translocation may also be an option to ensure the successful establishment of the plants.

3.2 PROTECTED AND PRIORITY SPECIES

3.2.1 The following protected species are discussed in more detail based upon the findings within the ecology report (Wold Ecology, 2019).

Bats

3.2.2 No further survey of the proposals site has been undertaken with respect to foraging and commuting bats. The woodland and hedgerow habitats on site provide foraging and commuting habitat for bats with pre-existing survey records obtained by Pinewoods Conservation Group in 2016. In particular, the mature woodland edge to the southern boundary of the site forms an established linear feature which may act as an important flight corridor. The potential implications of disturbance/habitat loss on bats should be appropriately assessed through bat transect surveys to evaluate actual use of the site and inform the scheme design. This would consist of at least three transect surveys over the active season including May, July and September in line with Bat Conservation Trust Survey Guidelines (2016).

3.2.3 Bats are also known to use the more established woodland areas adjacent to site. A number of bat boxes installed within Pinewoods and Harlow Carr (due south of the site) are utilised as roost sites by soprano pipistrelle and more historically, noctule and whiskered bats - as indicated by species records held by the local records centre (NEYEDC). Two Natural England development licences for common and soprano

pipistrelle bat roosts have also been granted within 1km of the proposals site indicating roost sites from which bats would forage and commute in proximity to the site.

3.2.4 Lighting from the proposed development has the potential to negatively impact local bat populations, particularly with the bottling plant operating during night hours. As stated within the ecology report, artificial lighting can have detrimental effects on roosting, foraging and commuting bats, from delaying emergence times resulting in critical feeding periods to be reduced or missed entirely through to loss of roosts in extreme cases. Foraging/commuting bats, particularly slow-flying species known to be less tolerant of lighting will actively avoid using lit features in favour of dark corridors. The loss of foraging/commuting habitats on site could potentially impact bats coming to the area from roosts in the vicinity of the site but also bats which may travel greater distances to utilise the habitats on site. Should roosts be present in mature woodland in proximity to the site, the impacts of lighting must be appropriately considered with regards to location, luminaire specifications and the reduction of light spillage from both internal and externally mounted lighting using screening/fencing to minimise impacts.

3.2.5 A lux contour plan and lighting specifications should be produced to minimise impacts on light sensitive bat species and ecological receptors on/adjacent to site i.e. mature woodland habitat. In particular, consideration should be given to the provision of a dark corridor in association with the existing boundary hedgerow to provide an unlit 'bridge' between woodland habitats. Reference should be made to the Bat Conservation Trust publication '*Bats and Artificial Lighting in the UK*' (2018).

Great crested newts

3.2.6 The field survey results detailed within the ecology report state no ponds are present within 500m, however, a pond is located adjacent to Birk Crag LNR, an unobstructed 560m north-west of the proposals site boundary with fields and hedgerows providing connective habitat. A network of drainage channels are present adjacent to the site boundary and 120m north of the site. With poor drainage evident on site, the presence of wet flushes is likely to further contribute to the suitability of the site for supporting amphibians. Woodland, grassland and hedgerows on and in the vicinity of the site comprise good quality terrestrial habitat with evidence in the ecology report to indicate natural refugia are present on site. The claim stated within the ecology report (section 8.3.2.3) that all available natural refugia on site was searched at the time of survey is not possible given the nature of habitats occurring on site.

3.2.7 Given the above, the potential for amphibians to access the site during the terrestrial phases of their life cycle cannot be reasonably discounted. Precautionary measures with respect to amphibians should be incorporated during construction.

Badger

3.2.8 A badger survey was undertaken to inform the ecology report, however results were understandably not published in the interests of confidentiality. No setts or field signs were identified in proximity to the site. The site survey was undertaken in July, when trees/shrubs are in full leaf and ground vegetation is at its most dense, increasing the difficulty in detection of field signs and setts. Pinewoods Conservation Group hold information relating to badgers in the immediate local area and a more in depth survey is therefore recommended in early spring when vegetative cover is at a level more appropriate for identifying evidence of badger. If setts are identified in proximity to the site, the impacts of the development must be appropriately reviewed in order to avoid impacts on badgers as a result of the development.

3.2.9 Given the nature of the habitats present on site and in the wider area, badger are likely to access the site for foraging and commuting purposes. The ecology report states a badger survey has been undertaken, however evidence of this has not been supplied and therefore the potential impacts on badger as a result of the proposed development have not been adequately assessed.

3.2.10 Appropriate precautionary measures should be incorporated during construction to avoid accidental harm or injury to badger which may access the site.

3.3 INVASIVE NON-NATIVE SPECIES

3.3.1 Himalayan balsam *Impatiens glandulifera* was identified to the site boundaries by Wold Ecology in 2019. Himalayan balsam seed can be expelled up to 6m from the parent plant and can remain viable in the ground for up to 2 years, 3 in some instances. Consideration of the spread of this species as a result of the development is of particular importance with respect to adjacent established woodland habitat where the colonisation of this species could have detrimental effects on the existing ground flora.

3.3.2 If construction works are to take place during the seed dispersal period (mid-July - September), or contaminated ground is to be disturbed during works, a method statement is required to ensure the spread of this species to adjacent woodland is avoided during development and to comply with the relevant legislation.

4.0 BIODIVERSITY NET GAIN

4.1.1 Following comments from Harrogate Borough Council's ecologist requesting a biodiversity net gain calculation (BNG), Wold Ecology completed a Biodiversity Metric calculation on behalf of the applicant, based on the Biodiversity Metric compiled by DEFRA. This metric is a tool which provides ecologists with a means to quantify the value of on-site habitats and give an indication of how to limit/offset damage to habitats, accounting for and measuring biodiversity losses and gains. The use of the Metric is currently being defined within the Environment Bill, with a mandatory 10% increase in gains anticipated become mandatory in order to secure planning approval.

4.1.2 A number of discrepancies have been identified following a review of the BNG Metric calculation provided and the corresponding comments provided by Barton Wilmore. These are discussed in more detail as follows:

1) The site habitat baseline is incomplete. Habitats recorded within the ecology report also include bracken, tall ruderal vegetation and amenity grassland. The full area of the site has therefore not been fully accounted for within the calculation which will consequently not reflect the true ecological value of the proposals site prior to development.

2) Habitats listed within the site habitat baseline have been produced based on phase 1 habitat categories. The Biodiversity Metric is primarily based upon UK Habitat Classification types for which distinctiveness bands and scores have been pre-set. The ecology report makes no reference to DAFOR scores indicating the relative abundances of species occurring within habitats on site. Species lists and occurrence on site are vital for determining UK Habitat Classification types. Justification for why Phase 1 habitats have been used has not been provided.

3) The woodland block on site is not considered to represent one continuous block of habitat. The condition assessment for mature trees present to the north, south and east of the site should be considered in more detail. These sections of woodland are described within the ecology report as presenting different defining characteristics and as such are likely to be classed as a separate habitat type within the Metric calculation.

4) Values for ecological connectivity have not been entered within the site habitat baseline or site habitat creation sections of the calculation. These values are directly related to scores for distinctiveness and, as indicated within the automatically generated cells, the assessment is therefore not appropriate.

5) With regards to strategic significance, the habitats on site have been selected as "ecologically desirable but not in local strategy". Woodland as a blanket habitat is afforded its own action plan within the Harrogate Local Biodiversity Action Plan and features within local management policy (Area 4). The site was planted by members of the local community to form the Rotary Centenary Woodland in 2005 and has been managed by the Pinewoods Conservation Group since 2015. The site is recognised as a designated Asset of Community Value, an area of natural greenspace being of local importance and amenity value for residents within the area. It is regularly used by the general public to access connected areas of woodland, Harlow Carr and Valley Gardens. These factors all contribute to the developing woodland being of high strategic importance and this needs to be reflected within the BNG calculation.

6) Entries have not been made with respect to retention categories within the site habitat baseline. Areas of habitat to be retained or lost within the proposals should be outlined.

4.1.3 On site mitigation with respect to biodiversity net gains has been recommended within the ecology report in the form of bat/bird boxes and hedgehog habitats. Although these will be of benefit to the local wildlife population and enhance the site and surrounding areas in the interests of biodiversity, this type of mitigation is not considered within the Biodiversity Metric, and cannot be quantified within the calculation itself. Biodiversity enhancements are with respect to habitats only. At this stage, such enhancements are listed within the site calculation to include broadleaf woodland planting, wildflower grassland, a SuDs drainage pond, a green roof and a green wall.

4.1.4 Evidently the BNG calculation provided is considering outline proposals only, however, with no finalised development layout or landscape specifications currently available, the spreadsheet is purely speculative and cannot be used as a true measure of biodiversity net gains with respect to the proposals. It is anticipated that once the site habitat baseline has been more accurately reflected within the spreadsheet, the consequent biodiversity losses will be greater than has been demonstrated and the mitigation required to off-set these losses will require very careful consideration if positive net gains are to be achieved, particularly given the local value this woodland offers to the community and the proportion of valuable habitat which will be lost to the development.

4.1.5 Positive net gains as a result of the development proposals are considered highly unlikely to be achievable given the nature and scale of the site and consequently, the requirement for off-site mitigation will be necessary which is unlikely to compensate

for the community/fragmentation effects of habitat loss unless immediately adjacent to the existing site boundary.

5.0 SUMMARY

5.1.1 This report forms an ecological review of a site on land west of Harlow Moor Rd, Harrogate (central grid reference SE 28578 54616), commissioned to assess the adequacy of ecological information submitted to support proposals for the extension of the existing Harrogate Spring Water bottling plant. This report discusses findings reported by Wold Ecology and supporting information surrounding the planning application.

5.1.2 The site comprises developing woodland planted in 2005 by the local community which has been managed by the Pinewoods Conservation Group since 2015. The proposed development will result in the direct loss of a large proportion of establishing woodland on site and indirect impacts which would lead to the degradation and fragmentation of the adjacent habitats including loss of connectivity. Refer to section 3.1 for further information on the above.

5.1.3 The ecological survey was undertaken in late summer, not within the late spring/early summer period required to fulfil condition 12 of outline planning permission. Further survey is therefore required with respect to habitat, orchids and bats.

5.1.4 The proposals site has the potential to impact a range of protected species including bats, badger, breeding birds and amphibians. Refer to section 3.2 for further information.

5.1.5 The arboriculture/landscape architect team at Smeeden Foreman have reviewed documentation associated with this application and are in full agreement with comments put forward by Harrogate Borough Council (January/February 2020).

5.1.6 A review of the Biodiversity Metric 2.0 calculation provided for the site identified a number of discrepancies which are detailed within section 4.0. The calculation does not accurately define existing habitats within the baseline and therefore cannot be accepted, requiring further review upon production of a finalised layout and landscaping proposals.

5.1.7 Positive net gains as a result of the development proposals are considered highly unlikely to be achievable given the nature and scale of the site and consequently, the requirement for off-site mitigation will be necessary which is unlikely to compensate for the community/fragmentation effects of habitat loss unless immediately adjacent to the existing site boundary.

6.0 REFERENCES

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