

Kirklees Local Plan Examination Hearing Statement

Our ref 50579/JG/AJk Date January 2018

Subject Matter 41 Hearing Statement on behalf of Persimmon Homes West Yorkshire and Conroy Brook – Site H502 (land south of

Huddersfield Road, Skelmanthorpe)

1.0 Introduction

- 1.1 This Hearing Statement has been prepared by Lichfields on behalf of Persimmon Homes West Yorkshire ("Persimmon") and Conroy Brook, and responds to the questions set by the Inspector in relation to site H502 (land south of Huddersfield Road, Skelmanthorpe) within Matter 41.
- 1.2 This Hearing Statement should be read in conjunction with our representations submitted during the Local Plan Consultation (2016) on behalf of Persimmon (Lichfields representor ID: 969464, Persimmon representor ID: 975291).

Persimmon in Kirklees

- 1.3 Persimmon has control of the following proposed allocations and is committed to delivering residential development at these sites at the earliest opportunity in accordance with the emerging Plan:
 - Housing allocations H102 and H660 at Netherton;
 - Housing allocation H502 at Skelmanthorpe discussed in this Statement; and,
 - Part of site mixed-use site MX1911 in Lindley
- 1.4 Persimmon also has control of Urban Green Space designation UGS2151 at Rumble Road in Dewsbury (also referred to as rejected housing site H357) where planning permission has recently been granted for 149 dwellings, as well as the following rejected housing allocations:
 - H575 in Kirkburton;
 - H231 in Gomersal; and,
 - H476 in Mirfield
- 1.5 Given the need for additional sites to be identified in the Plan to address the full objectively assessed need for housing and make up for the shortfall in delivery from the three strategic allocations (H1747, H2089 and MX1905), as well as other sites which have been demonstrated to be undeliverable as proposed, Persimmon would welcome the opportunity to bring the above rejected sites into the Plan in order to help meet identified housing needs. A suite of technical information is available for each of Persimmon's sites which show that they are suitable and deliverable for residential development.



2.0 Issue – Are the proposed housing and safeguarded land allocations in Denby Dale justified, effective, developable/deliverable and consistent with national policy?

Site H502, land south of Huddersfield Road (203 dwellings) (part Green Belt release) - General Questions

Question (a) - Is the site suitable for the proposed use? In the case of housing allocations, does the Plan provide clear guidance on requirements and constraints, and seek appropriate mitigation measures?

- 2.1 The area of allocation H502 within the control of Persimmon and Conroy Brook is suitable for residential use. It is within Flood Zone 1 and does not contain any significant ecological or landscape constraints (the reservoir/pond within the allocation is a BAP Priority Habitat but is within land outside of Persimmon and Conroy Brook's control and has been removed from the net developable area of the allocation). A Desk Study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey were carried out in April 2017, along with a great crested newt (GCN) survey. Bat and breeding bird surveys are currently ongoing (see **Annex 2**).
- 2.2 The GCN survey concluded a likely absence of GCN at the pond within the allocation boundary, but did identify a continued presence of great crested newt in the school ponds approximately 200m west of the site. These ponds are separated from the allocation by arable land, and as a result of this separation and the likely absence of GCN within the pond at the allocation (outside of developable area) it is considered that this species will not occupy terrestrial habitat within the developable area of the allocation. Bat and breeding bird surveys are currently ongoing; the results of which will be available at the application submission stage. Results to date do not suggest that the site is used by important assemblages or large numbers of bats or breeding birds, and it is considered that these species will not pose a constraint to development.
- 2.3 The site is surrounded by residential development and is within close proximity to public transport links, schools and local amenities. Furthermore, the allocation of the vast majority of the site as Provisional Open Land in the adopted Unitary Development Plan (UDP) demonstrates that the Council considers that the site is suitable for development. Paragraph 2.15 of the UDP states:

'These sites are also <u>judged to be capable of development</u> either now or when new infrastructure such as roads and sewers can be provided. The aim of the provisional open land designation is to maintain the character of the land so designated at least during the period until the plan is reviewed when it will be considered for allocation for development.'

- 2.4 The time has now come through the preparation of the Local Plan to allocate this site for residential use to help meet identified housing needs.
- 2.5 The Plan lists a number of constraints and site specific requirements for site H502. These are replicated in Table 1 below alongside our response or commentary on the constraint.

Table 1 H502 site specific requirements/constraints

Constraint / requirement	Response
Third party land required to achieve sufficient visibility	Persimmon has produced a site layout with access taken
splays	from Cumberworth Road. Visibility splays can be



	achieved without the need for third part land outside of Persimmon and Conroy Brook's control, beyond land in the control of Highways England. See response to question (i) below.
Part of this site lies within a UK BAP priority habitat	This is part of the site is not within the developable area of the allocation and is within land outside of Persimmon and Conroy Brook's control. An ecological desk top assessment and Phase 1 habitat survey have been carried out which concludes that the site is of low ecological value (see Annex 2). Specific areas of higher value (reservoir and boundary hedgerows) will be retained in any future development of the site.
Part/all of the site is within a High Risk Coal Referral Area	The 'Development High Risk Area' for shallow coal workings only affects a small part of the southern strip of the site. A Coal Mining Risk Assessment would be submitted with any planning application.
Development may need to contribute to improvements to the strategic road network if committed schemes will not provide sufficient capacity	As referred to in our Hearing Statement for Matter 26, it is understood that this requirement was taken from an initial consultation response from Highways England to the Regulation 19 Local Plan consultation. A follow up letter from Highways England sought to retract this general comment regarding strategic road network improvements, and states that 'other site specific considerations' that relate to the strategic road network should only be applied to a closed list of sites. Site H502 was not included in this closed list, and this reference should therefore be removed from the Plan.

2.6 The reports listed in Part 2 of the Plan as being required to accompany a planning application for residential development at the site are noted and agreed (except for the potential requirement for improvements to the strategic road network, as referred to in Table 1 above).

Question (b) - Is the indicative site capacity appropriate, taking account of constraints and the provision of necessary infrastructure?

- 2.7 Persimmon and Conroy Brook have control over the vast majority of allocation H502 and has produced an indicative layout for the site (see **Annex 1** of this Statement). The layout, which includes two generous areas of public open space and takes access from Cumberworth Road, provides 182 dwellings.
- 2.8 The north-eastern part of the allocation has been subject to two planning applications in recent years, and one of these has now been built out. Planning permission was granted for the construction of two dwellings in the eastern most corner of the allocation with access taken from Huddersfield Road in between Nos. 35 and 37/39 (ref: 2013/93610 & 2016/91566) this development is now complete. A reserved matters planning application is also currently pending determination on land to the immediate west of the above site for the erection of five dwellings (ref: 2017/92504). If approved, four of the dwellings will be accessed via Heather Fold, and the fifth will fill the gap between 49 and 51 Huddersfield Road.
- 2.9 Taking into account the recently constructed development of two dwellings, the proposed appended indicative layout, and assuming the application for 5 dwelling is approved, the total capacity of the allocation would be 189 dwellings. The Plan states that the indicative capacity of the allocation is 203 dwellings, and, given that further work on the appended indicative layout is



likely to occur prior to the submission of an application, it is considered that capacity is broadly correct and therefore appropriate.

Question (c) - Is the site available and deliverable in the timescales envisaged?

- 2.10 Persimmon has entered into an agreement with Conroy Brook to jointly develop the site, and there are no barriers or land ownership issues which would prevent early delivery of this allocation.
- 2.11 A planning application is in the process of being prepared, and, as such, the proposed trajectory set out within EX30.2 showing delivery commencing in 2019/20 is realistic.

Question (d) - For sites currently in the Green Belt - what effect would the proposed boundary change and allocation have on the Green Belt and the purposes of including land within it? Are there exceptional circumstances that justify altering the Green Belt?

2.12 District wide it is clear that it is not possible to accommodate the full objectively assessed housing need without removing land from the Green Belt. In this part of the District the built up areas are highly constrained by Green Belt, and as such it is simply not possible to deliver an appropriate level of housing within the Huddersfield sub-area without amending Green Belt boundaries. The Council's assessment of the allocations includes an assessment of exceptional circumstances, which notes:

Exceptional circumstances exist to amend the green belt boundary as this site is required to meet the objectively assessed need for housing in the district. After due consideration of all relevant non-green belt alternatives, the need to promote sustainable development patterns, the role and function of the green belt and the specific characteristics of this site, it is deemed that in this instance the benefits of facilitating housing development on the site outweigh the loss of this part of the green belt.'

- 2.13 The Green Belt boundary which runs along the southern part of the allocation is identified as Green Belt edge SK3 in the Council's Green Belt Review (SD19/SD20). The review of edge SK3 found that there are no topographical or physical constraints which would prevent development along this edge. GCN are noted as an environmental constraint, but, as discussed above, these are present in the ponds within the Shelley High School and College site and not the allocation site.
- 2.14 In terms of the Green Belt purposes (paragraph 80 of NPPF), the review found that the extensive gap to the next settlement means that there is no prospect of settlements merging. It also found that the existing field pattern offers the potential for containment and concluded that the landform and existing trees would restrict the impact of development on the wider landscape.
- 2.15 Persimmon and Conroy Brook fully agree with the findings of the Council's Green Belt review in respect of this site. The Council has previously earmarked the site as a suitable location for meeting the housing needs of the District by removing the majority of it from the Green Belt and designating it as Provisional Open Land in the UDP. As is discussed in further detail in our response to Question (i) below, the only suitable location to create a vehicular access to serve the site is from Cumberworth Road, and it is therefore essential that the southern strip of the allocation is removed from the Green Belt as the Council currently proposes. The existing



2.16

hedgerow along the new Green Belt boundary at the south-west of the site will be retained in order to provide a green edge to future development and preserve its ecological value.

In summary, it is considered that the development of the site will have little impact upon the wider Green Belt and the purposes of including land within it by virtue of the limited amount of Green belt land which needs to be released, the containment provided by the existing hedgerow, and the large separation between the site and the closest settlement/built up area.

Site H502, land south of Huddersfield Road (203 dwellings) (part Green Belt release) – Site Specific Questions

- i) What are the access and development options for the site? Can the bulk of the site be developed without accessing the southern strip?
- 2.17 The Council's assessment of the site within the Technical Appraisal at BP29.1 notes the following with regards to transport and access:
 - 'Access via Cumberworth Road unlikely because of required visibility splays. Access could be provided from Bedale Drive. Huddersfield Road offers potential access for part of site.'
- 2.18 To inform future development options for the site, Persimmon has commissioned Optima Highways to undertake an assessment of the access opportunities into the proposed allocation. A copy of this assessment is included at **Annex 3**.
- 2.19 The assessment considered seven different options for accessing the bulk of the site (i.e. the land which is within Persimmon and Conroy Brook's control). These are summarised in Table 2 below. A plan showing the location of the options is included within Annex 3.

Table 2 Site access options

Option	Comments
A - Huddersfield Road in between Nos. 35 and 37/39	Land outside of Persimmon/Conroy Brook control. Has been built out for permission 2016/91566 and offers no access to bulk of the site.
B - Huddersfield Road in between Nos. 49 and 51	Land outside of Persimmon/Conroy Brook control. Current pending application 2017/92504 would close off this access.
C - Huddersfield Road in between Nos. 63a and 65	Corridor width is 5.9m. West Yorkshire Highway Design Guide states that only a Mews Court style development of up to 25 units can be served from this corridor width. Not suitable for majority of site.
D - Huddersfield Road to west of No. 73	Corridor width is 3.5m. Not suitable for serving residential development.
E - Access from Heather Fold	Land outside of Persimmon/Conroy Brook control. Current pending application 2017/92504 would use this access to serve 4 dwellings with no link into balance of site.
F - Access from Bedale Drive	Bedale Drive is circa 5.5m in width with a single point of access capable of accommodating up to 200 dwellings. 40 dwellings are already served from this access leaving a remainder of 160 which is well below the allocation capacity. Pedestrian/cycle permeability of the site would be reduced.
G - Direct access from Cumberworth Road	Preferred option. Adoptable access serving up to 200 units can be provided. Visibility splays in accordance with DMRB can be achieved.



- 2.20 Based on the evidence shown in the Optima Highways assessment, it is clear that Option G (direct access into the site from Cumberworth Road) is the only viable access location to serve the bulk of the site, and does not require third party land. A drawing showing a proposed junction arrangement with adequate visibility splays taking into account 85th percentile wet weather design speeds is provided within Annex 3. The Council's comments regarding visibility splays on Cumberworth Road are therefore disputed.
- 2.21 The bulk of the site cannot be developed without accessing the southern strip of land, and it is therefore essential that this land is removed from the Green Belt as proposed by the Council and included as part of the allocation. If the southern strip of the allocation is not utilised in this way, the maximum capacity of the allocation will be in the order of 32 dwellings (25 units from a new access at Option C, plus recently developed/submitted applications), a shortfall of 171 dwellings compared to the Local Plan capacity.
- Furthermore, creating the main vehicular access on Cumberworth Road at Option G will allow for a dedicated pedestrian and cycle link to be created between Nos. 63a and 65 Huddersfield Road (Option C). This will improve the accessibility of Shelley High School and College for residents off Cumberworth Road, as well as the general permeability of the site in accordance with national and local guidance.
- 2.23 The indicative layout at Annex 1 shows how the site could be developed by taking access from Cumberworth Road and also providing a pedestrian and cycle link through the site to Huddersfield Road. Persimmon is currently preparing the necessary technical information to support an application for residential development at the site as soon as possible. It is therefore requested that the site be allocated as proposed, but with the reference to third party land being 'required to achieve sufficient visibility splays' and the reference to the potential for 'improvements to the strategic road network' removed from the Plan.



Annex 1: Indicative Site Layout Plan





Annex 2: Ecological Assessments



Preliminary Ecological Appraisal

Huddersfield Road, Skelmanthorpe

Report reference: R-2847-01

June 2017

Report Title:	Preliminary Ecological Appraisal Huddersfield Road, Skelmanthorpe
Report Reference:	R-2847-01
Written by:	Sam Kitching BSc (Hons) Grad CIEEM Ecologist
Technical review:	Rob Weston BSc MSc MCIEEM Technical Director
QA review:	Joshua Birchall BSc (Hons) Grad CIEEM Assistant Ecologist
Approved for issue	Rob Weston BSc MSc MCIEEM Technical Director
Date:	01.06.17

The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice.



Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX Phone: 01943 884451 01943 879129

Email:<u>admin@brooks-ecological.co.uk</u> www.brooks-ecological.co.uk Registered in England Number 5351418





Contents

Summary	3
Introduction	4
Site context	5
Designated Sites	6
Habitats	9
Fauna	14
Invasive Species	17
Conclusions and Recommendations	18
Fcological Enhancement	19



Summary

Purpose of report

This report is produced to present an initial assessment of a Site known as land off Huddersfield Road, Skelmanthorpe; to inform the Site's potential for development.

The report has been prepared to advise the client of potential ecological constraints and opportunities, in preparing an application for planning permission.

Further surveys are on-going to gather a more informed ecological baseline for this Site.

Methodology

The report is based on a Desk Study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey carried out in April 2017.

Findings Key-Points

The majority of the Site is occupied by pasture, assessed as being of low ecological value. Its presence will not pose a constraint to development. The layout should seek to retain areas of higher value - hedgerows and reservoir.

Bat activity, and breeding bird surveys are ongoing. To date, results suggest that these species will not have significant effects on the potential layout of the Site.

A likely absence of great crested newt from the on-Site pond has been concluded, though a small population is present in ponds c.200m west. It is concluded that work could proceed on Site, under a method statement without having any impact on the local great crested newt population.



Introduction

- 1. Brooks Ecological Ltd was commissioned by Persimmon Homes to carry out a Preliminary Ecological Appraisal of land off Huddersfield Road, Skelmanthorpe (SE 22543 10561).
- 2. This report is produced with reference to British Standard BS42020 'Biodiversity Code of Practice for Planning and Development' and the CIEEM (2013) Guidelines for Preliminary Ecological Appraisal.

Scope

- 3. The application site 'the Site' includes a number of small pastures on the western edge of the small town of Skelmanthorpe. It is defined in figure 1 below.
- 4. The assessment uses a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

Figure 1 The Site





Proposals

5. Proposals for the Site have not yet been provided, as such it is assessed against impacts of generic residential development.

Site context

- 6. The Site is located in a rural environment, the landscape being dominated by small pastures. Bedrock is made up of members of the Pennine Lower Coal Measures, such bedrock may give rise to neutral slightly acidic ground conditions.
- 7. The Site is bound to the north west, north east and south east by existing residential development. The south west boundary separates the Site from further pasture and a small grable field.
- 8. Beyond these boundaries further development of Skelmanthorpe extends to the south east while development to the north and west soon gives way to agricultural land, primarily pasture, as found to the south west.
- 9. Small pastures dominate the landscape with occasional semi-natural and plantation woodlands scattered throughout.

Wildlife corridors

10. The railway line which wraps around the west and north of Skelmanthorpe, c.400m north of the Site at its closest point, provides the best wildlife corridor in the area. This is flanked by woody vegetation on both sides and connects small areas of woodland along its length.

Water bodies

11. The Site contains one standing water body, the reservoir to the north. Additionally, three standing water bodies are shown on mapping within 500m of the sites boundaries. The closest is a pond within the grounds of Shelley College, 200m west of the northern most part of the Site. A field pond is located c.270m west while a large garden pond is located 450m north west.



Figure 2 Analysis of wildlife corridors (white dash and higher value habitat



Designated Sites

Statutory Designations

12. A search has been made to identify any nationally designated sites within a 2km radius of the Site, and for internally designated sites within a 10km radius. No Site's meet the 2km criteria.

Table 1 Statutory Designated Sites

Site name	Distance from Site	Designation	Summary Interest
South	9.8km	SAC/SPA	European Dry Heath, Blanket
Pennine			Bogs, Old Sessile oak Woods.
Moors /			
Peak			Golden Plover, merlin, peregrine,
District			Short-eared owl, Dunlin
Moors			

13. At this distance, development of the application Site would not impact on the qualifying interests or features of these Site's.



SSSI Impact Risk Zones (IRZs)

- 14. The western most section of the Site lies within the 10km IRZ for dark Peak SSSI, but does not fall into one of the highlighted categories which requires consultation between the Local Planning Authority (LPA) and Natural England (NE).
- 15. The eastern half of the Site lies within the 10km IRZ of Denby Grange Colliery SSSI, but again, does not fall into one of the highlighted categories which requires consultation between the Local Planning Authority (LPA) and Natural England (NE).
- 16. The development is of a scale and nature which is unlikely to impact on either SSSI.

Non-Statutory Designations

- 17. There are six locally designated sites within 2km of the Site. Four of which are designated as Local Wildlife Site's (LWS), with three listed as Kirklees Site's of Wildlife Significance (SWS)- one Site is both an LWS and SWS.
 - Blacker Wood LWS, 1.2km north east.
 - High Bridge Wood LWS, 1.2km south east.
 - Hob Royd Shrogg and Miry Greave LWS, 1km south east.
 - Park Gate Dyke LWS and SWS, 1.7km north east.
 - Oakcliff Hill Knoll SWS, 1km south west.
 - Whither Wood SWS, 1km south east.
- 18. Each local Site is considered to be sufficiently distant, and without functional links to ensure they will not be impacted by this development.

Kirklees Wildlife Habitat Network

19. The Site does not include, nor is it well linked to any land highlighted as forming part of the Kirklees Wildlife Habitat Network (KWHN).



Blacker
Weod
Park Gate
Byte

High Bridge
Wood

Oakclift Hill Knott

DENRY DALE CP

Wither Wood

Oakclift Hill Knott

DENRY DALE CP

Figure 3 Locally designated sites and KWHN provided by West Yorkshire Ecology.



Habitats

Method

20. The survey was carried out during April 2017¹ and followed Phase 1 habitat survey methodology (JNCC, 2010).

Limitations

- 21. The vast majority of the Site was accessible with exceptions being the densest bramble scrub which accounts for no more than 5 % of the Site by area.
- 22. Sufficient time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

Results

23. The Site is primarily occupied by small pastures, though livestock were absent at the time of survey.



Figure 4

Characteristic view of the Site – looking south.

- 24. The following habitats were identified within the Site and on its immediate boundaries:
 - Improved Pasture
 - Hedgerows and trees

¹ This Report has been prepared during May 2017 following a visit to the site in April 2017 and our findings are based on the conditions of the site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not reasonably visible or accessible, nor for any subsequent alteration, variation or deviation from the site conditions which affect the conclusions set out in this report.



- Scrub
- Bare ground
- Standing water
- Rough grassland

Improved Pasture

- 25. This habitat type occupies the largest area of the Site, including the central and the southern fields, all areas of pasture on Site are separated by dry stone walls. The sward is species poor, reflecting its agricultural management, and was found to be relatively short at the time of survey, suggesting recent grazing.
- 26. Perennial rye grass (Lolium perenne) dominates the sward with occasional Yorkshire fog (Holcus Ianatus) and common bent (Agrostis capillaris) and very occasional cocksfoot (Dactylis glomerata).
- 27. A very limited range of forbs was noted including; occasional creeping buttercup (Ranunculus repens), clover (Trifolium sp.), chickweed (Stellaria media) and broad leaved dock (Rumex obtusifolius).



Figure 5

Shows improved pasture sward occupying much of the Site.

- 28. The two smaller pastures to the north, show a slightly greater sward diversity, and lower dominance by a single grass species, though again, perennial rye grass does dominate. Yorkshire fog, red fescue (Festuca rubra agg.), meadow foxtail (Alopecurus pratensis), common bent and cocksfoot are also present.
- 29. The array of forbs present is slightly greater than that seen in the improved pasture with, cleavers (Galium aparine), hogweed (Heracleum sphondylium), nettle (Urtica dioica), creeping buttercup, common sorrel (Rumex acetosa), spear and creeping thistle (Cirsium spp.) and broad leaved dock are occasional. Very occasional



scattered hawthorn (Crataegus monogyna) are present across these two small pastures.



Figure 6

Semi-improved pasture to north.

Hedgerows and Trees

30. A continuous, managed, hedge runs the length of the western boundary. This is dominated by hawthorn, with small amounts of field maple (Acer campestre), blackthorn (Prunus spinosa), elder (Sambucus nigra) and holly (Ilex aquifolium). The sward of the associated pasture run tightly to the hedge bottoms, their management has restricted the development of hedgerow ground flora though nettle, bramble (Rubus fruiticosus agg.) and cow parsley are present in places.



Figure 7

Hedge on western boundary.

31. A short section of hedge runs between the northern most pasture and the area associated with the reservoir. Again, this is dominated by hawthorn, with occasional elder, and ash (Fraxinus excelsior), but appear to be free of management, being very overgrown and becoming gappy. Ground flora is occupied by the adjacent scrub, as described below.



- 32. Hedges are also present along the eastern boundary of the southern part of the Site, and separating the central pasture from the small area of rough grassland/trees. Again, both are dominated by hawthorn, rose (Rosa sp.) and honeysuckle (Lonicera periclymenum) are also present reflecting the position of these hedges adjacent to neighbouring properties.
- 33. The small eastern most section of the Site appears to be disused land, half of which is now occupied by hawthorn and willow.

Scrub

- 34. Small patches of scrub are developing in areas where management is reduced. Principally this habitat was noted around the boundary between the northern pasture and the reservoir area, small sections were also noted along parts of the dry-stone walling around the Site.
- 35. Scrub is dominated by bramble, with nettle, cow parsley, willowherb and cleavers.



Figure 8

Bramble scrub between pasture and reservoir.

Bare ground

36. The small field in which the reservoir is present is clearly well trafficked by farm machinery, leaving it almost devoid of vegetation, though scattered hawthorns remain in this area.

Standing water

37. Cliffe Hill reservoir is located in the northern most portion of the Site. This held water at the time of survey although it was not possible to gauge its depth. The reservoir supports common reed (Phragmites australis), Bulrush (Typha latifolia) and greater willowherb (Epilobium hirsutum) as well as dense mats of the invasive species, New Zealand pygmy weed (Crassula helmsii) close to its north-eastern bank. The banks of



the reservoir are occupied by dense hawthorn, elder and cherry laurel (Prunus laurocerasus) with bramble and nettle being abundant.



Figure 9
Reservoir.

Rough grassland

38. A small pocket of rough grassland is found in the eastern section of the Site. Yorkshire fog is the dominant grass in this area with perennial rye grass, common bent and cocksfoot. Forbs include broad leaved dock, creeping buttercup, common sorrel, spear thistle, creeping thistle and ribwort plantain (Plantago lanceolata).



Fauna

Bats

- 39. A total of 37 bat records have been returned from West Yorkshire Ecology; these cover pipistrelle species bats, noctule, brown long eared and a number of records of indeterminate species. The closest roost records are c.900m from the Site, relating to pipistrelle species bats. These records reflect the range of species that would be expected to inhabit the area considering its topography and relatively exposed location.
- 40. The majority of the Site area provides only very limited value to bats, with pastures providing a low value foraging resource. However, the reservoir provides an area of high value, likely to be well used by foraging bats. The reservoir is linked to other areas of value such as woodland pockets to the south east and potential roost site's associated with housing to the east by viable hedgerow commuting routes including those on the Site's boundaries.
- 41. The Site provides no suitable roost features.

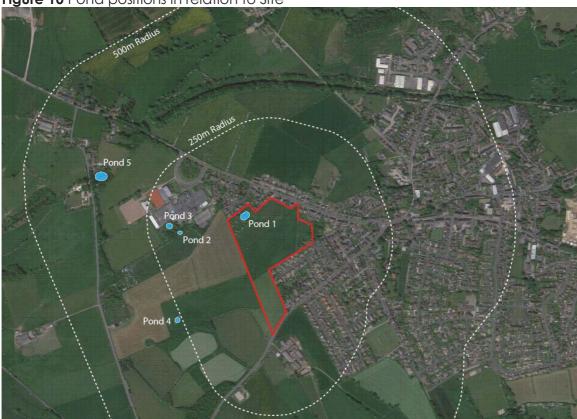
Amphibians

- 42. The application Site includes a small, apparently disused reservoir within its north western section. The reservoir is roughly rectangular in shape, with steeply sloping sides, it was not possible to gauge the current water depth. It supports emergent vegetation on all four sides, while the banks and margins are shaded by mature hawthorn and elder on the southern and western sides.
- 43. Additionally, mapping shows three ponds within 500m of the application Site.
- 44. The closest of these is a small pond within school grounds c.200m to the west of the Site, a second small pond apparently in the process of terrestrialisation is also present on the school grounds, but not shown on mapping. A single record of GCN dated 2012, relates directly to the position of the northern most of these two ponds, while two further records from 2004 centre on the school grounds. A fourth record from 2004 relates to land 100m west of this pond.
- 45. A shallow field pond is present within an adjacent pasture, c.270m west of the Site, this supports no aquatic or emergent vegetation.
- 46. A large garden pond is present c.430m north west of the site, this is separated from the Site by pasture and the developed school grounds. Given the separation



between this pond and the Site, it is concluded that should GCN be breeding in this pond, they would not access the application Site from here.

Figure 10 Pond positions in relation to Site



47. Survey of the Site pond, and three closest ponds revealed a continued presence of great crested newt in the school ponds, but likely absence in all others. The furthest pond was ruled out from further survey due to its separation from the Site. Full survey details are presented in the specific amphibian survey report, R-2847-02.

Birds

- 48. Records returned from West Yorkshire Ecology are very limited, covering sparrow, dunnock, goldfinch, yellowhammer, swallow and willow warbler. Additionally, a pair of curlew were seen on Site during the walkover survey.
- 49. The Site provides nesting opportunities associated with its hedges and scrub habitat, for a range of common urban and farmland fringe species. Additionally, the pastures provide opportunities for ground nesting species, though the occasional presence of dog walkers may limit the value of the Site for such species.



50. The Site is unlikely to contribute supporting habitat to the South Pennine Moors SPA and the qualifying species for this designation are unlikely to have any reliance on the Site.

Brown Hare

- 51. Records of brown hare have not been provided by WYE for land within 2km of the application Site, though a 1km grid square record is held on the National Biodiversity Network Atlas, c.1.8km south west at its closest point.
- 52. Although present in the wider area they are unlikely to occur within the Site, due to its proximity to development and the associated disturbance. It is concluded that the proposed development is unlikely to impact upon this species.

Badger

- 53. The Site provides an area of habitat suitable for use by foraging badgers, with limited potential for supporting setts.
- 54. A single badger field record has been provided by West Yorkshire Ecology, though this is over 1.3km from the Site and was recorded in 1987. No evidence of badger could be seen at the time of this survey and a likely absence is concluded. Furthermore, this risk of setts being established in the near future is considered to be low, given the absence of nearby, recent records, and the Site's proximity to human activity.

Reptiles

- 55. Two records of grass snake have been provided by WYE, recorded in 2014, these centre around a site c.1km south west. The Site generally lacks the habitat structure necessary to support reptiles with only very small areas of considered suitable for use by grass snake.
- 56. With this in mind, it is considered that full survey would be disproportionate to the risk of reptiles being on Site. As such, suitable areas of habitat, including the small areas of scrub and the banks of the reservoir should be cleared by hand to allow reptiles (in the unlikely event that they are present here) to flee the Site to other suitable habitat, thus avoiding contravention of wildlife law.

Hedgehog



57. Hedgehog are likely to forage within the Site and may find cover within areas of scrub and hedge bottoms. Providing appropriate measures are taken, the value of the Site to this species need not be lost.

Invasive Species

- 58. New Zealand pygmy weed (Crasula helmsii) is listed on Schedule 9 of the Wildlife and Countryside Act (1981), making it an offence to cause or allow it to grow in the wild.
- 59. This species is present in the reservoir on Site, regardless of the proposals for this part of the Site effort should be made to remove this species to prevent its accidental spread in the wild. If the reservoir is to be drawn down the control of this species must be taken into account.



Conclusions and Recommendations

- 60. The Site is principally occupied by semi-improved and improved pasture, habitat which is abundant in the wider area, its presence will not pose a constraint to development.
- 61. Hedgerows provide areas of higher value habitat, these are largely constrained to the Site's boundaries meaning they can easily be retained within the developed layout. All retained hedges should be protected with fencing in accordance with BS5837:2012. Where it is necessary to remove any length of hedge it should be replaced elsewhere on Site by planting an equal or greater length of species rich, native hedge.
- 62. Although the reservoir on Site does not meet the criteria of any of the standing open water body NERC Act Habitats of Principal Importance, it provides an area of value to native wildlife at a local level and should be retained within the Site if possible. Its retention provides an area on which biodiversity enhancements could be focused.

Constraints

- 63. A small population of great crested newt are present within the school ponds, c.200m from the application Site. The school grounds surrounding this pond provide optimal great crested newt terrestrial habitat. Beyond the high value terrestrial habitat found within the school Site, this pond is separated from the application Site by arable land. This, combined with the concluded likely absence of GCN within the on-Site pond suggests this species will not occupy terrestrial habitat within the application Site.
- 64. This species is concluded to likely be absent from within the application Site, the requirement to secure Natural England mitigation licence is therefore not deemed necessary. Instead, development of the Site could proceed under a method statement set out in a specific document which would detail precautions to take prior to works commencing to ensure absence of this species, this would focus around fingertip search of suitable terrestrial habitat.
- 65. Bat activity surveys are ongoing. Results to date do not suggest the Site is used by important assemblages or large numbers of bats. As such it is unlikely that bats will impose any major constraints on the layout or potential to develop this Site. However, this should not be taken as definite due to surveys being ongoing. This situation will be clarified by the forthcoming bat activity survey report. To date, the only constraint posed by bats on development will be restrictions to lighting on boundary hedges.



- 66. Similarly, breeding bird survey is ongoing, results to date suggest birds will not pose a constraint to development.
- 67. Hedgehog are likely to use the Site, to ensure its value to this species is not lost measures should be taken to ensure excessive fragmentation of suitable habitat does not occur. Where possible hedges should be used in place of fence panels. If fencing is necessary, a small hole should be cut in the base of each line to ensure the free movement of this species between gardens is not impacted.

Ecological Enhancement

- 68. The requirement for development to make a positive contribution to biodiversity is clearly set out in guidance such as the NPPF and BS:42020 beyond mitigating or compensating any potential impacts.
- 69. The following themes provide opportunities for the proposals to deliver such a contribution:
 - The reservoir on Site is of relatively low ecological value. This provides a potential focus for enhancement. Following the control of crassula within the water body it could be planted with a range of native emergent and marginal species. If the reservoir is to be infilled it offers the opportunity to create a pond elsewhere on Site with a varied profile offering greater potential wildlife value. In either case, suitable management should be put in place to ensure the value of the water body is not lost.
 - Efforts could be made to extend the hedgerow network through and around the Site. This would provide additional habitat, food sources and commuting routes for local wildlife.
 - New builds should incorporate artificial faunal habitat including bat and bird boxes. Ideally these should be integral designs, this ensures their longevity.
 These can be easily and cheaply bought and installed and, being sealed units, create no conflict with home owners.



Appendices

- 1. Extended Phase 1 Habitat Plan
- 2. Explanatory Notes and Resources
- 3. Bat Activity Survey Rationale
- 4. Information on legislation / protection



References

Andrews H. L. (2011) A habitat key for the assessment of potential bat roost features in trees.

Bat Conservation Trust (2016) Bat Surveys For Professional Ecologists – Good Practice Guidelines

BSI (2013) British Standards Institute BS 42020:2013 Biodiversity — Code of Practice for Planning and Development.

CIEEM. (2013). Guidelines for Preliminary Ecological Appraisal. CIEEM

English Nature (2004) Bat Mitigation Guidelines. English Nature, Peterborough.

English Nature (2001) Great Crested Newt Mitigation Guidelines. http://www.naturalengland.org.uk/Images/GreatCrestedNewts_tcm6-21705.pdf

Harris S, Jefferies D, Cheeseman C and Booty C (1994). Problems with Badgers, revised 3rd Edition. *RSPCA*, ISBN 0-901098-04-3

Gent T and Gibson S, 2003, Herpetofauna Workers' Manual, JNCC

IEA. (1995). Guidelines for Baseline Ecological Assessment. Chapman and Hall

Hill et al. 2005, Handbook of Biodiversity Methods. Cambridge

JNCC (2004) The Bat Workers Manual. 3rd Edition.

JNCC (2010). Handbook for Phase 1 Habitat Survey: A technique for environmental audit.

Ratcliffe, D.A. (1977) A Nature Conservation Review, Cambridge University Press



Appendix 1 – Extended Phase 1 Habitat Plan



Rough grassland

llmproved pasture

Bare ground

Scrub



Standing water

Hedgerow

Trees



Title: Extended Phase 1 Habitat Plan

Drawing Number: D-2847-01.1

Scale: Do not scale Date: June2017

Unit A. 1 Station Road Guiseley Leods LSO8 BX www.brooks-ecological.co.uk

Brooks

Ecologicα | Grounded achice

T: 01943 884451



Appendix 2 – Explanatory Notes and Resources Used

Site context

Aerial photographs published on commonly used websites were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This approach can be very useful in determining if a site is potentially a key part of a wider wildlife corridor or an important node of habitat in an otherwise ecologically poor landscape. It can also identify potentially important faunal habitat (in particular ponds) which could have a bearing on the ecology of the application site. Ponds may sometimes not be apparent on aerial photographs so we also refer to close detailed maps that identify all ponds issues and drains. We use Promap Street + scale maps for this purpose.

Designated Sites

A search of the MAGIC (Multi-Agency Geographic Information for the Countryside) website was undertaken. The MAGIC site is a Geographical Information System that contains all statutory (e.g. Sites of Special Scientific Interest [SSSI's]) as well as many non-statutory listed habitats (e.g. ancient woodlands and grassland inventory sites). It is a valuable tool when considering the relationship of a potential development site with nearby important habitats. In addition, information from the local record holders was referred to on locally designated sites.

Functional linkage with off-Site habitats

When assessing these we consider whether the Site could be functionally linked to them, considering links such as;

- Hydrological links is the Site upstream downstream, or could ground water issues affect it?
- Physical links is the site in close proximity and could it be directly or indirectly affected by construction and operational effects? Conversely it may be that despite proximity major barriers separate the two.
- Recreational links Do footpaths and roads make it likely that increased recreational pressure could be felt?
- Habitat links Is the site part of a network of similar habitat types in the wider area? These could
 be joined by linear corridors or could simply be 'stepping stones of habitat of similar form or
 function.

Kirklees Wildlife Habitat Network

The Kirklees Wildlife Habitat Network is referred to in Policy DLP31 – so is afforded a level of protection - but this should be in relation to being able to maintain physical linkages for wildlife.

Method

Phase 1 habitat survey methodology (JNCC, 2010). This involves walking the site, mapping and describing different habitats (for example: woodland, grassland, scrub). The survey method was "Extended" in that evidence of fauna and faunal habitat was also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995) and Guidelines for Preliminary Ecological Appraisal (CIEEM 2012).



Faunal appraisal

This section first looks at the types of habitat found on Site or within the sphere of influence of potential development, then considers whether these could support protected, scarce or NERC Act 2006 Section 41 species (referred to collectively as 'notable species').

Records of notable species supplied from a 1-2km area of search are used to inform this appraisal.

We discuss further only notable species or groups which could be a potential constraint due to the presence of suitable habitat and their presence (or potential presence) in the wider area. We screen out and do not present accounts of notable species or groups which do not meet these criteria – in some cases it may be necessary to explain this reasoning.

Evaluation

In evaluating the site the ecologist will take into account a number of factors in combination, such as;

- the baseline presented above,
- the site's position in the local landscape,
- its current management and
- its size, rarity or threats to its integrity.

There are a number of tools available to aid this consideration, including established frameworks such as Ratcliffe Criteria or concepts such as Favourable Conservation Status. Also of help is reference to Biodiversity Action Plans in the form of the Local BAP and Section 41 of the NERC Act (2006) to determine if the site supports any Priority habitats or presents any opportunities in this respect.

The assessment of impacts considers the generic development proposals from which potential effects include:

- Vegetation and habitat removal
- Direct effects on significant faunal groups or protected species
- Effects on adjacent habitats or species such as disturbance, pollution and severance
- Operation effects on wildlife such as noise and light disturbance

Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the 'Kirklees Biodiversity Action Plan'.

Species/group	Habitat
Floating water plantain Great-crested newt Marsh helleborine Northern wood ant Twite Watervole White-clawed crayfish	Semi-natural pasture Lowland and upland meadows Lowland dry acid grassland Blanket bog Upland heathland Upland flushes Lowland heathland Upland oak woodland Lowland deciduous and other woodland Upland mixed ashwoods Wet woodland Arable field margins Hedgerows Rivers, riverine corridors and associated habitats Reedbeds Scrub and habitat mosaics on previously developed land
	24



Appendix 3 – Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2016) is now widely accepted as providing a basis and rationale for scoping and conducting bat surveys. It is acknowledged that the guidelines provide a wealth of background and are a very useful tool in standardising approaches to survey, it is also felt that an over reliance on some of the guidelines within this document can result in the provision of complicated surveys where they have significant consequences for the cost, or timescale of a large project, but could never deliver positives for bat conservation.

Taking the BCTG document as a whole, Chapter 2 helps the reader understand whether or not surveys are required, and that in the context of planning and development survey is required in relation to ensure;

- the avoidance of legal offences, and;
- the provision of a sufficient level of information such that will allow the Local Planning Authority to make an informed decision on the proposals and their potential impacts on the Favourable Conservation Status (FCS) of bats.

Attendance at seminars presented by, and discussions with, those involved in production of the BCTG document has emphasised the point that it is within the remit of the consultant ecologist to make a decision on the necessity and scope of surveys - they will use the guidelines in doing so but are not in any way bound by them: this is reflected in Section 1.1 of the guidelines -

'The Guidelines do not aim to either override of replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.

Such decisions require a consideration of the potential of the project to impact on bat habitat, alongside analysis of the value of habitat on and around the site and of local records and the likelihood that bats might occur in significant numbers. Our reports aim to present information on how we have arrived at our decision on the site, what assumptions we have based this on, and where further survey is recommended we indicate what the objective of this survey should be and how best this would be achieved.

The Site offers areas of habitat potentially of value to local bat populations, including the reservoir and hedgerows. Although the scale of these is limited in relation to the Site area it is important to understand how they contribute to the resources used by local bat populations, and what impact any development may have on their functionality. Seasonal transect will provide the information necessary to fully understand bats use of the Site, and provide detail on any mitigation which may be necessary.

Objectives of these surveys should be:

- confirm levels of use and the assemblage of bats present on the site generally
- confirm patterns of activity and identify key features
- identify levels of use of the affected foraging or commuting features to be and inform levels of mitigation require (if any).



Appendix 4 Wildlife Legislation, Policy and Guidance

This is not an exhaustive list but sets out briefly the relevance of Legislation, Policy and Guidance in terms of planning applications and this assessment.

Legislation

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

Provides framework at an international (EU) level for the consideration / protection of European Protected Species (EPS), and habitats through the designation of sites.

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive) and The Ramsar Convention on Wetlands of International Importance (1971)

Provides framework at an international (EU) level for the consideration / protection of important bird populations and the sites on which they are dependant.

The Conservation of Habitats and Species Regulations (2010)

This transposes 1 into UK law and provides the basis on which all EPS are protected and impacts on them can be licensed in the UK.

The Wildlife and Countryside Act (1981) as amended

This provides the basis on which UK species are legally protected or restricted and confers protection on Sites of Special Scientific Interest SSSIs. It contains annexes of plants and animals which are legally protected as well as those which are considered to be invasive or harmful. It provides the basis on which impacts on such species can be licensed in the UK and provides controls on work on or near SSSIs.

The Countryside and Rights of Way Act 2000 (CRoW)

Provides a statutory basis for nature conservation, strengthens the protection of SSSIs and UK protected species and requires the consideration of habitats and species listed on the UK and Local Biodiversity Action Plans (UKBAP / LBAP).

Natural Environment and Rural Communities Act 2006 (NERC)

Sets out the responsibilities of Local Authorities in conserving biodiversity. Section 41 of the Act requires the publishing of lists of habitats and species which are "of principal importance for the purpose of conserving biodiversity". At present these largely reflect those making up the UKBAP lists.

Hedgerows Regulations (1997)

Define and provide protection for Important Hedgerows.

Protection of Badgers Act (1992)

Protects badgers from persecution, this includes excavation / development in the proximity of setts.



Protected Sites

Statutory EU / International Protected Sites

Special Areas of Conservation (SACs); and Special Protection Areas (SPAs) and Ramsar Sites contain examples of some of the most important natural ecosystems in Europe. Work on or near these sites is strictly protected and Local Authorities will be expected to carry out 'Appropriate Assessment' of development in proximity of them. In this case there is often an increased burden on the developer in relation to provision of information and assessment.

Statutory UK Protected Sites

Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs) all receive strict protection under UK legislation. Work in or in proximity to these sites would be restricted with any needing to be agreed with Natural England. Natural England now provide guidance on the nature of development which could impact on SSSIs through Impact Risk Zones.

Locally Protected Sites

Local Authorities have a variety of protected wildlife sites designated at a local or regional level. These are gradually being brought under the banner of Local Wildlife Sites (LWS) but at present a plethora of different designations exist - all subject to local policy.

Protected Species

European Protected Species

A number of species (most relevantly bats, great crested newts [GCN], and otters) receive strict protection from killing, injury and disturbance under The Conservation of Habitats and Species Regulations (2010). Protection is also conferred on the habitats on which they rely such as roost space in the case of bats and ponds and fields etc. in the case of GCN.

UK Protected Species

A number of species (including bats, GCN, watervole and white clawed crayfish) are strictly protected under The Wildlife and Countryside Act (1981) as amended, from killing, injury, disturbance and damage or destruction of their resting places etc. Certain species (such as reptiles) and some birds (such as barn owl) receive partial protection e.g. at certain times of the year or form certain activities only. All nesting bird species are protected from damage or destruction of their nests - whilst active.

Invasive species

Schedule 9 of the Wildlife and Countryside Act (1981) as amended, lists these species and makes it an offence to cause or allow their spread in the wild. This often has impacts on development and planning in relation to the presence of invasive plant species such as: himalayan balsam (Impatiens glandulifera), japanese knotweed (Fallopia japonica) and giant hogweed (Heracleum mantegazzianum).



Planning Policy / Guidance

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was published in 27 March 2012 replacing the majority of previous Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs). The most relevant paragraphs from the NPPF are set out below.

The general approach to assessing the natural environment is now embedded within the definition of what 'sustainable development' is. Paragraph 7 (P7) of the NPPF states that sustainable development should "contribute to protecting and enhancing our natural environment" and "help to improve biodiversity". There is also a need for positive inclusion of the natural environment in development design and "moving from a net loss of bio-diversity to achieving net gains for nature" (P9). P14 sets out the Frameworks presumption in favour of sustainable development.

The natural environment is stated within the NPPF core principles: development should "recognise the intrinsic character and beauty of the countryside" and contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should, "prefer land of lesser environmental value, where consistent with other policies in this Framework" (P17).

Section 11 of the NPPF details the approach to the natural environment. The Framework states that development should "minimise impacts on biodiversity and provide net gains in biodiversity, where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures" (P109).

The Framework sets out ways to minimise the impacts on biodiversity through "promoting the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets" (P117).

The NPPF requires the consideration of the impacts of development on the natural environment. The Framework also encourages "opportunities to incorporate biodiversity in and around developments" (P118). Importantly this paragraph (P118) sets out the hierarchy of avoiding, mitigating and compensating harm from development - plans should ensure that they can demonstrate engagement with this hierarchy when required.

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services.

This strategy builds on the Natural Environment White Paper (June 2011) - The Natural Choice: securing the value of nature. Setting out the current UK Government's approach to nature conservation. It promotes a more coherent and inclusive approach to conservation and the valuing in economic and social terms of economic resources.

The strategy promotes initiatives such as Biodiversity Offsetting, Nature Improvement Areas and a focus on well-connected natural networks and introduces the concept of securing a 'no net loss' situation with regard to UKBAP / Section 41 habitats and species.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System

Provides guidance to Local Authorities on their obligations to biodiversity – particularly in relation to assessing planning applications and ensuring the adequacy of information.

BSI (2013) British Standards Institute BS 42020:2013 Biodiversity — Code of Practice for Planning and Development.

Provides a standard for the biodiversity assessment and development industries and decision makers such as Local Planning Authorities to work to.



Great Crested Newt Survey Huddersfield Road, Skelmanthorpe

> Report reference: R-2847-02 August 2017

Report Title: Great Crested Newt Survey

Huddersfield Road, Skelmanthorpe

Report Reference: R-2847-02

Written by Peter Brooks BSc (Hons), MA, MCIEEM, CEnv

Managing Director

Technical review: Peter Brooks BSc (Hons), MA, MCIEEM, CEnv

Managing Director

QA review: Daniel Ross BSc (Hons) Grad CIEEM

Ecologist

Approved for issue Peter Brooks BSc (Hons), MA, MCIEEM, CEnv

Managing Director

Date 07.08.17



Unit A, 1 Station Road, Guiseley Leeds LS20 8BX Phone **01043 884451**



www.brooks-ecological.co.uk



Summary Statement

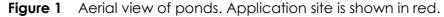
Despite presence in the vicinity, a likely absence of GCN from terrestrial habitat on Site is concluded based on confirmed absence (through eDNA analysis) from the onsite water body.

It is concluded that work can proceed on Site without the need of a Natural England mitigation licence. In proceeding without a licence, precaution should be put in place to ensure individuals of the known wider GCN population do not stray into the construction Site.



Introduction

 Subsequent to recommendations set out in an initial Preliminary Ecological Appraisal Report (R-2847-01), Brooks Ecological Ltd was commissioned to carry out great crested newt surveys of ponds on land off Huddersfield Road, Skelmanthorpe. Figure 1 below defines these ponds in relation to the Site.





- 2. The survey was required to determine if great crested newt was likely to be affected by any future developments on the land.
- 3. Records for the area are held by West Yorkshire Ecology which returned several records for great crested newt (GCN) within 2km of the application site. These all relate to ponds in the grounds of Shelley College, located less than 200m from the north-west corner of the Site.



Legal background

- 4. Great crested newts receive full legal protection being listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore subject to the provisions of Section 9 which make it an offence to:
 - intentionally kill, injure or take a great crested newt;
 - possess or control any live or dead specimen or anything derived from a great crested newt;
 - intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; or
 - intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- 5. It is also listed under the Conservation of Habitats and Species Regulations 2010 which under the provisions of Regulation 41 make it an offence to:
 - (a) deliberately capture, injure or kill any wild animal of a European protected species;
 - (b) deliberately disturb wild animals of any such species;
 - (c) deliberately take or destroy the eggs of such an animal; or
 - (d) damage or destroy a breeding site or resting place of such an animal.
- 6. Works affecting protected species require a licence from Natural England. Licences can only be granted if there is no satisfactory alternative or if the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in its natural range.

Habitat Description

- 7. The Site contains one standing water body (Pond 1), a reservoir to the north. Additionally, four standing water bodies occur within 500m of the Site's boundary.
- 8. Of these ponds, three are considered further. These are the closest two (Ponds 2 and 3), located within the grounds of Shelley College, 200m west of the northern Site boundary, and a field pond (Pond 4) located c.270m to the west.
- 9. A large garden pond (Pond 5) c.430m north west of the site was scoped out during the Preliminary Ecological Appraisal. This is separated from the Site by pasture and the developed school grounds. Given the separation between this pond and the Site, it is concluded that should GCN be breeding in this pond, they would not access the application Site from here.



Pond 1

10. Cliffe Hill reservoir is located in the north of the Site. This held water at the time of survey although it was not possible to gauge its depth. The reservoir supports common reed (*Phragmites australis*), Bulrush (*Typha latifolia*) and greater willowherb (*Epilobium hirsutum*) as well as dense mats of the invasive species, New Zealand pygmy weed (*Crassula helmsii*) close to its north-eastern bank. The banks of the reservoir are occupied by dense hawthorn, elder and cherry laurel (*Prunus laurocerasus*) with bramble and nettle being abundant.



Figure 2
View of reservoir.

Pond 2

11. A small pond located 200m west of the northern boundary of the proposed site. It is located within an area of rough neutral grassland, scrub and shrubs within the college Site. The water body is full of vegetation, giving complete cover to the surface of the water, which appeared shallow. Without management, it appears that this pond will soon terrestrialise.



Figure 3
Pond 2.



Pond 3

12. A second small pond within the school grounds, c.10m further north west than Pond 2, found in similar habitat. Again, supporting very high levels of vegetation, though the water column can be seen, this pond does not yet appear to be in the process of terrestrialisation.



Figure 4

Pond 3.

Pond 4

13. A shallow field pond located on adjacent pasture, c.270m west of the Site. The pond supports no aquatic or emergent vegetation and is surrounded by closely grazed grassland.



Figure 5

Pond 4.



Methodology

- 14. The ponds were visited on six separate occasions between April and June 2017, with each visit using a range of methods including egg search, netting, torch counts and bottle trapping in accordance with English Nature Great Crested Newt Mitigation Guidelines 2001. Survey work was directed by Sam Kitching BSc (Hons) Grad CIEEM an experienced ecologist and registered to use Class Licence CL08 in respect of surveying for great crested newt.
- 15. Carrying out eDNA surveys involved taking water samples from 20 different locations in the pond, focusing on areas where newts were more likely to gather. For each pond, these were combined and redistributed into six sample tubes before being sent off for analysis. This involved using sterile kits supplied by Surescreen Scientifics laboratory and followed methodology as advised in the Natural England Technical Advice Note (WC1067), taking necessary measures to avoid contamination between ponds.
- 16. The egg search involved an examination of submerged marginal vegetation to determine the presence of newt eggs. A hand-held net was then used along the margins of the pond to collect any adult newts or larvae.
- 17. Torch counting involved 'sweeping' the whole area of the ponds using a powerful torch after dark to determine the presence and relative abundance of any adult amphibians and to note the presence of larvae.
- 18. Bottle traps were placed overnight in ponds and checked early next morning for collected amphibians.

Survey Constraints

19. The field pond (Pond 4) was dry by the time of the second survey on 27th April so further surveys at this pond were cancelled.

Results

Survey Results

- 20. Surveys were conducted in suitable weather conditions: low wind, dry and with air temperature ranging between 8°C and 15°C.
- 21. Great crested newts were not identified in Pond 1, the on-site reservoir. Other amphibians including Common Toad were present in this pond.



- 22. <u>Great crested newts</u> were confirmed as present in Ponds 2 and 3 (adjacent to Shelley College) during the surveys. Other amphibian species recorded included small numbers of smooth newt and frog/toad tadpoles.
- 23. Full survey results are shown in the tables provided in Appendix 1.

eDNA Results

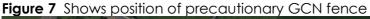
- 24. eDNA samples were taken from Pond 1 on 27.04.17. Ponds 2 and 3 were not subject to eDNA analysis given records of GCN being present here in the past. These ponds were subject to a full suite of surveys using traditional survey techniques.
- 25. The water sample from Pond 1 was returned as negative. Alongside the results of the traditional survey methods, this suggests a likely absence of great crested newt from Pond 1.

Evaluation and Recommendations

- 26. Dedicated amphibian surveys demonstrate the likely absence of great crested newt from Pond 1, the on-site reservoir.
- 27. A small number of great crested newts were identified in Ponds 2 and 3, located c.200m to the west of the northern boundary. However, no eggs, or juvenile GCN were seen suggesting these are not breeding ponds.
- 28. These newts will be using surrounding terrestrial habitat. However, the absence of GCN within the onsite water body, combined with the relatively low value terrestrial habitat available on Site, mean a likely absence of GCN from within the Site is also concluded.
- 29. It is therefore concluded that work can proceed outside a Natural England licence.
- 30. A Method Statement should be produced which details precautions which will be in place to prevent impacting on great crested newt and set out the approach to be taken should any be encountered. This could be delivered under a Construction Environment Management Plan (Biodiversity) which can be produced under a standard planning condition according to BS42020. This would be based on:
 - a pre-construction fingertip search carried out by a suitably qualified and licensed ecologist on all suitable terrestrial habitat to ensure an absence of great crested newt



• The erection of precautionary temporary exclusion fence along the Site's north and west boundaries as shown below, to prevent GCN entering the Site during works. To be erected prior to the start of works and remain in place and intact for the duration of the construction period.







References

English Nature (2001) Great Crested Newt Mitigation Guidelines.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155.

Natural England (2013) Standing Advice Species Sheet: Great crested newts http://publications.naturalengland.org.uk/publication/810429?category=30014

Analytical and methodological development for improved surveillance of the Great Crested Newt – WC1067 – Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. http://fera.co.uk/agriculture-

horticulture/documents/Natural%20England%20Protocol.docx



Appendix 1 Amphibian Survey Results

The below tables contain all data collected for each pond during the surveys. During each visit the condition of each pond, in terms of Vegetation Cover (VC) and Turbidity (TRB), was assessed. VC is scored from 0-5 with 0= no vegetation and 5= completely covered, whilst TRB is scored from 0-5 with 0= clear and 5= very turbid.

GCN=great crested newt SN=smooth newt PN= palmate newt F=frog T=toad FS=Frog spawn TS= Toad spawn FTP=Frog Tadpole TTP=Toad Tadpole $$\emptyset$$ = female

Table A1.1: Amphibian Survey Summary: Pond 1

		Weather Conditions						
Visit	Date		Amphib's	Torch	Bottle Traps	Netting	Egg Search	Notes
1	11.04.17	11°C - 9°C,	GCN	0	0	0	-	TRB = 2 VC = 2
l	11.04.17	1.04.17 Overcast, dry, beaufort 2	Other	2 toads	0	0	-	No. of Bottle = 20/20
2	07.04.17	9°C - 7°C,	GCN	0	-	0	No	TRB = 2 VC = 2
2	Full cloud, dry, still	Full cloud, dry, still	Other	0	-	0	No	No. of Bottle = N/A
3		eDNA analy:						

Table A1.2: Amphibian Survey Summary: Pond 2

		Weather			Survey Methods	urvey Methods Used			
Visit	Date	Conditions	Amphib's	Torch	Bottle Traps	Netting	Egg Search	Notes	
			GCN	0	2 (1우 + 1♂)		0	TRB = 5	
1	8.5.17	8°C - 9°C Mild	Other	2 SN	6 SN (3♀ + 3♂); Tadpoles	N/A	0	VC = 5 No. of Bottle = 10	
2	10.5.17	12°C - 9°C Warm &	GCN	13	2 (1♀+1♂)	N1/A	0	TRB = 5 VC = 5	
	10.5.17	Sunny	Other	0	5 SN (1♀ + 4♂)	N/A	0	No. of Bottle = 10	
		12°C - 10°C Warm	GCN	2♀	3 (1♀ + 2♂)		0	TRB = 5	
3	3 12.5.17	& Sunny	Other	2 SN (1우 + 1강)	4 SN (1♀ + 3♂); Tadpoles	N/A	0	VC = 5 No. of Bottle = 10	
		15°C - 16°C	GCN	2♀	2 (12 + 13)		0	TRB = 5	
4	16.5.17	Raining	Other	5 SN (2♀+ 3♂)	5 ♂ SN; Tadpoles	N/A	0	VC = 5 No. of Bottle = 10	
5	6.6.17	12°C Strong wind	GCN	0	0	N1/A	0	TRB = 5 VC = 5	
5	0.0.17	& heavy rain	Other	0	Tadpoles	N/A	0	No. of Bottle = 10	
		13°C - 14°C Mild, showers	GCN	0	0		0	TRB = 5	
6	8.6.17		Other	0	Tadpoles	N/A	0	VC = 5 No. of Bottle = 10	



Table A1.3: Amphibian Survey Summary: Pond 3

	Weather							
Visit	Date	Conditions	Amphib's	Torch	Bottle Traps	Netting	Egg Search	Notes
1	0 5 17	8°C - 9°C Mild	GCN	0	3♂	N1/A	0	TRB = 5
ļ	8.5.17	8 C - 9 C Mild	Other	1 SN	1♂SN	N/A	0	VC = 5 No. of Bottle = 10
0	10 5 17	12°C - 9°C Warm &	GCN	2 (12 + 13)	2♂	N1/A	0	TRB = 5
2	10.5.17	Sunny	Other	0	4 SN (2♀ + 2♂)	N/A	0	VC = 5 No. of Bottle = 10
	10 5 17	12°C - 10°C Warm & Sunny	GCN	0	19	N/A	0	TRB = 5
3	12.5.17		Other	0	0		0	VC = 5 No. of Bottle = 10
	1/517	15°C - 16°C	GCN	3 (12 + 23)	19		0	TRB = 5
4	16.5.17	Raining	Other	1♀ SN	0	N/A	0	VC = 5 No. of Bottle = 10
_		12°C Strong wind	GCN	13	0	N/A	0	TRB = 5
5	6.6.17	& heavy rain	Other	0	3 SN (2♂ + Eft)		0	VC = 5 No. of Bottle = 10
		13°C - 14°C Mild.	GCN	13	2♀		0	TRB = 5
6	8.6.17	showers	Other	2 (12 + 13)	0	N/A	0	VC = 5 No. of Bottle = 10

Table A1.4: Amphibian Survey Summary: Pond 4

		Weather									
Visit	Date	Conditions	Amphib's	Torch	Bottle Traps	Netting	Egg Search	Notes			
		11°C - 9°C, Overcast, dry,	GCN	0	N/A – too shallow	0	No	TRB = 1 VC = 3			
1	11.04.17	beaufort 2	Other	0	STIGIIOW	0	No	No. of Bottle = N/A			
		9°C - 7°C,									
		Full cloud, dry,									
2	27.04.17	still									



Folio No: E0477 Report No: 1 Order No: 2847

Client: BROOKS ECOLOGICAL

Contact: Sam Kitching

Contact Details: sak@brooks-ecological.co.uk

Date: 09/05/2017

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS

Date sample received at Laboratory: 02/05/2017 **Date Reported:** 09/05/2017

Matters Affecting Results: None

RESULTS

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
31144	R-2847-01	SE22432 10616	Pass	Pass	Pass	Negative	0

SUMMARY

When Great Crested Newts (GCN); Triturus cristatus inhabit a pond, they deposit traces of their DNA in the water as evidence of their presence. By sampling the water, we can analyse these small environmental DNA (eDNA) traces to confirm GCN habitation, or establish GCN absence.

The water samples detailed below were submitted for eDNA analysis to the protocol stated in DEFRA WC1067 (Latest Amendments). Details on the sample submission form were used as the unique sample identity.

RESULTS INTERPRETATION



Lab Sample No.- When a kit is made it is given a unique sample number. When the pond samples have been taken and the kit has been received back in to the laboratory, this sample number is tracked throughout the laboratory.

Site Name-Information on the pond.

O/S Reference - Location/co-ordinates of pond.

SIC-Sample Integrity Check. Refers to quality of packaging, absence of tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to results errors. Inspection upon receipt of sample at the laboratory. To check if the Sample is of adequate integrity when received. Pass or Fail.

DC- Degradation Check. Analysis of the spiked DNA marker to see if there has been degradation of the kit since made in the laboratory to sampling to analysis. Pass or Fail.

IC- Inhibition Check- PCR inhibitors can cause false results. Inhibitors are analysed to check the quality of the result. Every effort is made to clean the sample pre-analysis however some inhibitors cannot be extracted. An unacceptable inhibition check will cause an indeterminate sample and must be sampled again.

Result- NEGATIVE means that GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as no evidence of GCN presence. POSITIVE means that GCN eDNA was found at or above the threshold level and the presence of GCN at this location at the time of sampling or in the recent past is confirmed. Positive or Negative.

Positive Replicates- To generate the results all of the tubes from each pond are combined to produce one eDNA extract. Then twelve separate analyses are undertaken. If one or more of these analyses are positive the pond is declared positive for the presence of GCN. It may be assumed that small fractions of positive analyses suggest low level presence but this cannot currently be used for population studies. In accordance with Natural England protocol, even a score of 1/12 is declared positive.

METHODOLOGY

The laboratory testing adheres to strict guidelines laid down in WC1067 Analytical and Methodological Development for Improved Surveillance of The Great Crested Newt, Version 1.1

The analysis is conducted in two phases. The sample first goes through an extraction process where all six tubes are pooled together to acquire as much eDNA as possible. The pooled sample is then tested via real time PCR (also called q-PCR). This process amplifies select part of DNA allowing it to be detected and measured in 'real time' as the analytical process develops. qPCR combines PCR amplification and detection into a single step. This eliminates the need to detect products using gel electrophoresis. With qPCR, fluorescent dyes specific to the target sequence are used to label PCR products during thermal cycling. The accumulation of fluorescent signals during the exponential phase of the reaction is measured for fast and objective data analysis. The point at which amplification begins (the Ct value) is an indicator of the quality of the sample. True positive controls, negatives and blanks as well as spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared so they act as additional quality control measures.

The primers used in this process are specific to a part of mitochondrial DNA only found in GCN ensuring no DNA from other species present in the water is amplified. The unique sequence appropriate for GCN analysis is quoted in DEFRA WC 1067 and means there should be no detection of closely related species. We have tested our system exhaustively to ensure this is the case in our laboratory. We can offer eDNA analysis for most other species including other newts.

Analysis of eDNA requires scrupulous attention to detail to prevent risk of contamination. Kits are manufactured by SureScreen Scientifics to strict quality procedures in a separate building and with separate staff, adopting best practice from WC1067 and WC1067 Appendix 5. Kits contain a 'spiked' DNA marker used as a quality control tracer (SureScreen patent pending) to ensure any DNA contained in the sampled water has not deteriorated in transit. Stages of the DNA analysis are also conducted in



different buildings at our premises for added

SureScreen Scientifics Ltd also participate in Natural England's proficiency testing scheme and we also carry out inter-laboratory checks on accuracy of results as part of our quality procedures.

Reported by: Derry Hickman Approved by: Sam Humphrey

End Of Report



Breeding Bird Survey

Huddersfield Road, Skelmanthorpe

Report reference: R-2847-03

November 2017

Report Title: Breeding Bird Survey

Huddersfield Road, Skelmanthorpe

Report Reference: R-2847-03

Written by: David M. Pearce

Consultant Ornithologist

Technical review: Sam Kitching BSc (Hons) GradCIEEM

Ecologist

QA review: Christopher Shaw BSc (Hons) ACIEEM

Ecologist

Approved for issue: Sam Kitching BSc (Hons) GradCIEEM

Ecologist

Date: 08.11.17



Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX Phone: 01943 884451 01943 879129

> Email:<u>admin@brooks-ecological.co.uk</u> www.brooks-ecological.co.uk Registered in England Number 5351418



Information regarding the location of protected species is <u>HIGHLY CONFIDENTIAL</u> and <u>MUST</u> <u>NOT</u> be circulated beyond that which is strictly necessary. This report may contain sensitive information concerning protected species and caution should be exercised when copying and distributing to third parties.



Introduction

 Subsequent to recommendations set out in the Preliminary Ecological Appraisal (R-2847-01), Brooks Ecological Ltd. was commissioned to carry out a Breeding Bird Survey at the Site off Huddersfield Road, Skelmanthorpe, grid reference: SE 22523 10574.

Methodology

- 2. Three breeding bird survey visits were made to the site at Skelmanthorpe between 0615 and 0745 on 28th April, 17th May and 14th June 2017. Weather conditions were good on all survey visits with light winds, no rain and good visibility. It was sunny, bright, cloudy and cold on the April visit (10°C), overcast, damp and humid following overnight rain on the May visit (16°C) and sunny and warm on the June visit (19°).
- 3. Amended visit Common Birds Census (CBC) territory mapping methodology was used to record breeding bird activity on site. Registrations of all bird species observed within or overflying the site, and heard singing and/or calling were entered onto field survey maps using standard British Trust for Ornithology (BTO) species and activity codes. The site was walked to less than 50m of every point within the red-line boundary and the survey route was reversed accordingly on each visit to alleviate recording bias.
- 4. Surveys were undertaken by David Pearce, an experienced consultant ornithologist with over 13 years professional experience undertaking ornithological research, bird surveys and monitoring, site and species evaluation, providing advice on mitigation and habitat enhancement for birds throughout the United Kingdom.
- 5. All birds were recorded along with any behaviour indicating active breeding such as territorial singing, carrying food, the presence of juveniles etc. The location of each bird was recorded on a map to produce a single plan showing the locations, or suspected locations, of all important breeding territories within the area. This plan is presented in Appendix 1.



Results

- 6. Analysis of data from breeding bird survey visits during April, May and June 2017 found that a total of 26 species were recorded in association with the site, including birds overflying the site (Tables 1 & 2).
- 7. Of these, 21 species (81%) showed evidence of breeding behaviour within the site, or within peripheral areas such as adjoining gardens or housing. This included males singing within breeding territories, birds giving territorial calls, adults observed with food for young or adults observed with recently fledged young or in family groups. The remaining five species were recorded foraging within the site but breeding elsewhere and were; Rook Corvus frugilegus, Carrion Crow Corvus corone, Swallow Hirundo rustica, House Martin Delichon urbicum and Lesser Redpoll Carduelis cabaret.

Table 1 Number and Conservation Status of Bird Species Recorded, April – June 2017.

Visit	Date	Species	Red	Amber	Green	Not	Schedule	UK
VISIL	Date	Species	Listed	Listed Ass		Assessed	1	BAP
1	28/04/2017	20	4	2	14	0	0	6
2	17/05/2017	19	2	2	14	1	0	4
3	14/06/2017	20	3	2	15	0	0	5
	Totals	26	5	3	17	1	0	6

- 8. Important breeding bird species recorded on site are those included as red listed (severe population decline over 25 years/longer term) and amber listed species of conservation concern (moderate population decline over 25 years/longer term) in Birds of Conservation Concern 4 (BoCC4) (Eaton et al 2015).
- 9. No Schedule 1 protected species were recorded during the three survey visits.
- 10. Six UK Biodiversity Action Plan (UKBAP) species requiring conservation action were recorded.



Table 2 List of Bird Species in order of Conservation Concern including Breeding Species

BBS - Skelmanthorpe	apo			Global &		Estimate of	
April - June 2017	Species Code	Schedule 1		European	Scientific Name	Breeding Pairs	
Bird Species (systematic order follows British	cie	edu	UK BAP	Conservation	Scientific Ivallie	breeding Fairs	
Ornithologists Union (BOU) August 2013)	Spe	Sch	ž	Status		or Territories	
Starling	SG		UK		Sturnus vulgaris	2 pairs	
House Sparrow	HS		UK		Passer domesticus	10 pairs	
Tree Sparrow	TS		UK		Passer montanus	1 territory	
Linnet	LI		UK		Carduelis cannabina	1 territory	
Lesser Redpoll	LR		UK		Carduelis cabaret	0	
House Martin	НМ				Delichon urbicum	0	
Willow Warbler	ww				Phylloscopus trochilus	1 territory	
Dunnock	D.		UK		Prunella modularis	7 territories	
Woodpigeon	WP				Columba palumbus	3 territories	
Collared Dove	CD				Streptopelia decaocto	3 pairs	
Magpie	MG				Pica pica	1 territory	
Jackdaw	JD				Corvus monedula	1 pair	
Rook	RO				Corvus frugilegus	0	
Carrion Crow	C.				Corvus corone	0	
Goldcrest	GC				Regulus regulus	3 territories	
Blue Tit	ВТ				Cyanistes caeruleus	2 territories	
Great Tit	GT				Parus major	3 territories	
Swallow	SL				Hirundo rustica	0	
Chiffchaff	СС				Phylloscopus collybita	1 territory	
Whitethroat	WH				Sylvia communis	1 territory	
Wren	WR				Troglodytes troglodytes	11 territories	
Blackbird	В.				Turdus merula	8 pairs	
Robin	R.				Erithacus rubecula	7 pairs	
Chaffinch	СН				Fringilla coelebs	2 territories	
Goldfinch	GO				Carduelis carduelis	3 pairs	
Pheasant (not assessed)	РН				Phasianus colchicus	1 br. fem	
				TOTAL NUME	BER of BIRD SPECIES RECORDED	26	
	В	BoCC	4 Re	d Listed Spe	cies of Conservation Concern	5	
BoCC4 Amber Listed Species of Conservation Concern							
BoCC4 Green Listed Species (Not currently considered of conservation concern)							
(not assessed) = not assessed by BoCC4							
Schedule 1 bird species afforded special protection at all times							
UK Biodiversity Action Plan (UKBAP) Species most threatened & requiring conservation action							
IUCN - Global Conservation Status (CR - Critically Endangered, VU - Vulnerable)							
	ERLOB (European Red List of Birds) - European red list species amber listed						
	0						

11. Of the red-listed breeding species recorded; Starling Sturnus vulgaris and House Sparrow Passer domesticus were recorded breeding within the eaves of adjacent housing along the northern and eastern boundaries and also foraging within the open fields (Starling) and hedgerows (House Sparrow). Tree Sparrow Passer montanus were recorded foraging on site and were probably breeding at the farm to the south of the site, one bird observed flying towards the farm on the April visit.



One Linnet Carduelis cannabina breeding territory was recorded within the scrub just to the south of the enclosed reservoir in the north of the site.

- 12. The key amber-listed breeding species recorded were; Dunnock *Prunella modularis* (seven territories), and Willow Warbler *Phylloscopus trochilus*, a summer migrant (one territory). Dunnock were found to be breeding in hedgerows and scrub, including within adjacent gardens along the northern and eastern site boundaries. House Martin were observed foraging over the cut silage fields on the June visit and were most likely birds that were breeding on housing locally.
- 13. More common, green-listed species, represented a large percentage (65%) of the breeding bird assemblage and were well distributed in peripheral hedgerows and scrub, including within gardens of adjacent housing. Wren *Troglodytes troglodytes* (11 territories), Blackbird *Turdus merula* (7 pairs) and Robin *Erithacus rubecula* (12 territories) were the most common breeding species recorded during surveys. Two species of summer migrant warblers (in addition to Willow Warbler), were recorded, with Whitethroat *Sylvia communis* (one territory) in the hedgerow along the northwestern boundary and Chiffchaff *Phylloscopus collybita* (one territory) within the trees in the north-eastern corner of the site.

Evaluation

- 14. Fields within the site red-line boundary are unsuitable for breeding by wader species such as Lapwing Vanellus vanellus, Snipe Gallinago gallinago and Curlew Numenius arquata and no wader species were recorded on site, overflying the site or within fields close to the site during surveys in April, May and June 2017. Grassland in fields managed for silage production precludes successful breeding by these wader species, firstly as the sward quickly becomes too tall and dense during the early part of the breeding season in April and May, and secondly with successive mowing of silage crops, the first cut is occasionally taken as early as mid-May. In addition, smaller more enclosed fields are also usually avoided by these three species, especially Lapwing and Curlew. Small fields may occasionally be used by Snipe if they are consistently wet and contain a relatively large percentage of rushes. The smaller fields on site appear to be relatively dry and have no rush content.
- 15. Overall, the open fields within the site red-line boundary are considered very poor for breeding birds, with no species were recorded breeding in these open areas. Birds were mostly recorded breeding on site within boundary hedgerows, peripheral areas of trees and scrub and also just outside the red-line boundary in gardens of adjacent housing. Given the relatively small size of the site, there is currently suitable breeding and foraging habitat present in these areas for a limited number of red and amber-listed species of conservation concern in very low densities and also for several more common green-listed species in low densities. The breeding bird assemblage on site should be considered within a local context.



16. Development of the open fields within the site will reduce the area of potential foraging habitat for birds breeding in peripheral areas.

Recommendations

- 17. To ensure that local bird biodiversity is increased and is not compromised or effectively reduced, existing boundary hedgerows and areas of trees and scrub should be retained and enhanced and additional areas of new planting including native trees, shrubs and also areas of amenity grassland should be incorporated within any development.
- 18. In addition, the incorporation of areas of 'wild-space' comprising natural vegetation which is allowed to become overgrown and produce seed would provide foraging habitat for the key red-listed species present such as Linnet, House Sparrow and Tree Sparrow. The increase in garden habitat, concomitant with new housing, will assist in providing foraging and breeding habitat for birds in this location as gardens gradually mature.
- 19. Construction of the eaves, soffit and roofs of new housing restricts access for breeding by House Sparrow Passer domesticus (red listed, UKBAP) and Starling Sturnus vulgaris (red listed, UKBAP), effectively excluding them from new housing developments. These two species may breed within older housing and buildings locally. Therefore, consideration should be given to including terrace nest-boxes within any proposed development to encourage House Sparrow (32mm entrance hole) and also larger size boxes for Starling (45mm entrance hole).
- 20. Several nest-boxes (28mm entrance hole) should be incorporated for Tree Sparrow (red-listed, UK BAP) within the existing trees and hedgerow lines, particularly within the south-east corner of the site. These may be located above 2m height, on more mature trees or fixed to tall stand-alone round timber poles (e.g. min. 100mm diameter) or posts (min. 100mm x 100mm), sunk and secured into the ground.
- 21. Nest-boxes for cavity nesting species such as Blue Tit Cyanistes caeruleus and Great Tit Parus major should also be provided within areas of existing taller trees. Nest box entrance hole sizes should be 25mm for Blue Tit and 28mm for Great Tit. Openfronted nest-boxes will also provide additional breeding sites for species such as Robin and Wren.
- 22. Given the presence of House Martin, recorded foraging on site, the inclusion of House Martin nest-boxes within any proposed development should also be considered.
- 23. Preliminary works on site, such as clearance of areas of scrub and vegetation, groundworks and initial landscaping, undertaken in advance of any proposed



development, should be completed during the period September to February to avoid any disturbance to breeding birds during the breeding bird season, which extends between March and August.

References

Eaton, M.A., Aebischer, N.A., Brown, A.F., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. & Gregory, R.D. 2015. Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. British Birds 108: 708 - 746.

Hayhow, D.B., Bond, A.L., Eaton, M.A., Grice, P.V., Hall, C., Hall, J., Harris, S.J., Hearn, R.D., Holt, C.A., Noble, D.G., Stroud, D.A. & Wotton, S. 2015. The State of the U.K.'s Birds 2015. RSPB, BTO, WWT, JNCC, NE, NIEA, NRW & SNH. Sandy, Beds.



Appendix 1 - Breeding Bird Plan



Appendix 2 - BoCC4 conservation concern status and UK BAP status

The fourth major review of the status of birds occurring in the United Kingdom, Channel Islands and the Isle of Man – Birds of Conservation Concern 4 (BoCC4) (Eaton et al 2015) presents lists of conservation concern based on assessments using objective listing criteria and most recent data. The listing criteria assess global conservation status, historical population decline, recent population decline (numbers and geographical range), European conservation status, rarity, localised distribution, and international importance of populations. Lists are denoted Red, Amber and Green in a simple 'traffic light' system to provide a single, easily understood measure for each species to convey concern and hence to help set priorities for conservation action. Species are assigned to each list depending upon the scale of population decline and concern which includes breeding and non-breeding populations;

- Red list criteria Severe population decline over 25 years/longer term
- Amber list criteria Moderate population decline over 25 years/longer term
- Green list criteria Species not currently considered of conservation concern.

The review concerns native bird species only and not those introduced to the United Kingdom by humans, whether intentionally or accidentally. Populations of non-native bird species are not considered of conservation value, indeed introduced species can be harmful to the natural environment (Eaton et al 2015). These species are therefore not assessed for conservation attention.

United Kingdom Biodiversity Action Plan Bird (UK BAP) Species are those identified by the Joint Nature Conservation Committee (JNCC) as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan and included on a list of priority bird species, initially created between 1995 and 1999, and subsequently updated in response to the Species and Habitats Review Report published in 2007. Original species on the UK BAP list (1995 – 1999) have a Species Action Plan (SAP) which provides details of relevant conservation information and action. Following devolution, the UK BAP has recently (July 2012) been succeeded by the UK Post-2010 Biodiversity Framework which is focused at a country-level rather than at a UK-level with the list of priority bird species remaining an important reference source for bird conservation.



Appendix 3 – Wildlife & Countryside Act (1981)

The primary legislation affecting wild birds in England and Wales is the Wildlife & Countryside Act (1981) as amended. The basic principle of this act is that all wild birds, their nests, and eggs are protected by law and some rare species are afforded additional protection from disturbance during the breeding season.

The term wild bird is defined as any bird of a species which is resident in, or a visitor to, the European territory of any Member State, in a wild state. Game birds are not included in this definition (except in certain sections of the Act) but are covered by the Game Acts which give protection in the close season.

The Wildlife & Countryside Act (1981) states that 'it is an offence, with certain exceptions, to: intentionally kill, injure or take any wild bird

- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- 2. intentionally take or destroy the egg of any wild bird
- 3. have in one's possession or control any wild bird (dead or alive), part of a wild bird or egg of a wild bird which has been taken in contravention of the Act, the Protection of Birds Act 1958 or the law of any EU Member State (which implements the EU Birds Directive 1979)
- 4. intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependant young of such a bird
- 5. have in one's possession or control any birds of a species listed on Schedule 4 of the Act, unless registered and ringed in accordance with the Secretary of State's regulations.

Additional protection for birds is also provided to species listed within the EU Birds and Habitats Directive. This imposes strict legal obligations on EU member states to maintain populations of naturally occurring wild birds at levels corresponding to ecological requirements, to preserve a sufficient diversity and areas of habitats for their conservation. Bird species mentioned in Annex I (193 species and sub-species) are the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution (ec.europa.eu/environment/nature/legislation/birds/directive,

ec.europa.eu/environment/nature/conservation/wildbirds/threatened [01/17]).



Bat Survey

Land off Huddersfield Road, Skelmanthorpe

> Report reference: R-2847-04 November 2017

Report Title: Bat Survey

Land off Huddersfield Road, Skelmanthorpe

R-2847-04 Report Reference:

Written by: Sam Kitching BSc (Hons) Grad CIEEM

Ecologist

Technical review: Christopher Shaw BSc (Hons) ACIEEM

Ecologist

QA review: Joshua Birchall BSc (Hons) Grad CIEEM

Assistant Ecologist

Approved for issue: Christopher Shaw BSc (Hons) ACIEEM

Ecologist

Date: 08.11.17



Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX

Phone: 01943 884451

01943 879129

Email:<u>admin@brooks-ecological.co.uk</u> www.brooks-ecological.co.uk Registered in England Number 5351418



Summary Statement

Survey has revealed the Site to be of very low value to local bat populations and thus its development is highly unlikely to have a significant impact this group.



Introduction

- 1. Subsequent to the recommendations made in Brooks Ecological's report (R-2847-01) detailed bat survey was commissioned at land off Huddersfield Road, Skelmanthorpe (SE 22523 10574).
- 2. The need for survey and the scale of study applied to the Site is discussed in our previous report (R-2847-01) and not repeated here, however these two reports should be read in conjunction for full context.

Box 1 Legal background

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Conservation of Habitats and Species Regulations 2010 which means that it is important for detailed and well designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

Box 2 Bat roosts

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

<u>Transitional roosts:</u>

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts:

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

November 2017 R-2847-04 Bat Survey



Local Status

3. The application site is within the natural range of species of bats listed in Table 1.

Table 1: Bat species recorded within 100km of the application site

Species	National status
Pipistrelles (Pipistrellus pipistrellus and P. pygmaeus)	widespread/common
Nathusius' Pipistrelle (Pipistrellus nathusii)	widespread/rare
Noctule (Nyctalus noctula)	widespread/frequent
Leisler's (Nyctalus leisleri)	widespread/rare
Brown long-eared (Plecotus auritus)	widespread/common
Natterer's (Myotis nattereri)	widespread/frequent
Daubenton's (Myotis daubentonii)	widespread/common
Whiskered/Brandt's (Myotis mystacinus and M. brandtii)	widespread/scarce
Alcathoe's (Myotis alcathoe)	local/unknown
Serotine (Eptesicus serotinus)	south restricted/uncommon

Method

- 4. The objective of the survey was to characterise how local bat populations currently make use of the site, so that an accurate assessment of the potential impacts of development on the site could be made. Transect and remote monitoring surveys were carried out to collect the following data (BCT survey guidelines 2016):
 - The assemblage of bat species using the site;
 - The relative frequency with which the site is used by different species;
 - The nature of activity for different bat species, for example foraging, commuting and roosting.
- 5. The transects began around sunset and continued up to 2 hours after when all bats were thought to have emerged, and thus were actively foraging and commuting. Conditions and dates are summarised in table 1 below.
- 6. The transect was walked by a single surveyor, equipped with a heterodyne detector as well as a Titley Scientific Anabat Express, used to track the transect route and aid species identification. Notes taken during the survey were then used to produce the activity 'heat map' seen in the below figures. Activity was split into three categories; low irregular, low regular and medium regular. Low activity was classified as up to 2 individual bats, with medium being anything over 2.

3



Table 2: Survey summary

Survey	Date	Sunset	Weather	Invertebrate activity
Spring	22.05.17	21:12	16°C - 14°C, high cloud, Beaufort 0	Low
Summer	05.07.17	21:33	16°C - 14°C, clear sky, Beaufort 1	Low
Autumn	04.09.17	19:50	19°C - 18°C, 90% cloud, Beaufort 2, drizzle at 21:28	Low

- 7. To supplement data collected during transects, static monitoring devices (Wildlife Acoustic SM4+) were deployed in strategic locations around the site prior to the start of each survey. These were then left to run for a minimum of 5 nights.
- 8. Static monitoring can only reliably provide information on what species of bat are regularly making use of a site. More detailed information on bat activity, such as frequency of bats, nature of activity (foraging, commuting, flight path), etc. can only be gleaned through walked transects. The frequency of calls recorded can, to some extent, suggest whether activity on site is low, moderate or high, by comparing data collected with that of similar sites that have been surveyed.
- 9. A single registration accounts for up to 15 seconds of continuous bat call. Large batches of registrations can be interpreted in several different ways, i.e. a single bat foraging continuously for only an hour can result in many hundreds of registrations being logged; similarly, many hundreds of bats commuting quickly past the detector can result in the same number of registrations.
- 10. The data collected during the period of remote monitoring was run through Kaleidoscope Pro software, which is able to identify bat calls down to species level (with the exception of myotid). Identification is generally correct when using this software; however, results are double checked to ensure accurate data analysis.
- 11. Survey and assessment was directed by Sam Kitching BSc (Hons) Grad CIEEM. Sam is registered to use the new Class Survey Licence WML CL18 (Bat Survey Level 2). He is also an active member of the West Yorkshire Bat Group.



Results

Spring Transect

- 12. The transect began at the field entrance at the northern most point of the Site. Surveyors proceeded in an anti-clockwise direction around the Site's boundaries before making passes along the Site's inner field boundaries. A separate loop of the small section of the Site to the east was also made. This circuit was walked twice, with point surveys made in three locations.
- 13. Activity was very low around the entire Site, common pipistrelle being the only species observed. The first bat was seen at 22:13 when a brief pass by an individual bat was observed. Similar brief observations were made at 22:20, 22:30 and 22:33, first on the southern boundary then twice in close proximity to the reservoir.

Figure 1 Bat activity during Spring transect



Summer Transect

14. A similar transect route was walked to that followed during the spring survey. On this occasion no bats were seen or heard.

November 2017 R-2847-04 Bat Survey



Autumn Transect

- 15. Again, only very low levels of activity were observed, though on this occasion noctules were noted in addition to common pipistrelle. The survey followed the same route as previously described.
- 16. The first bat seen was a common pipistrelle, commuting through the middle of the site at 20:05, 20 minutes after sunset, travelling from north to south.
- 17. No further bats were seen until 20:22 when a noctule was observed commuting cross the Site from east to west.
- 18. At 20:58 a single common pipistrelle was seen foraging along the road (offsite), adjacent to the Site's southern boundary. At 21:05, similar activity was seen by a single common pipistrelle along a stretch of the sites western boundary hedgerow.
- 19. The final encounter was of a common pipistrelle, heard but not seen close to the Site's main, north entrance at 21:32.

Figure 2 Bat activity during autumn transect



November 2017 R-2847-04 Bat Survey



Spring Static Monitoring

- 20. A single SM2+ device was deployed, attached to a mature tree within the central field boundary. This was deployed on the 10th May 2017 and left to run for 5 consecutive nights. Its approximate location can be seen in the above figures.
- 21. During this period, no bat registrations were recorded

Summer Static Monitoring

22. A single SM2+ device was deployed, attached to the mature tree within the central field boundary. This was deployed on the 5th July 2017 and recorded for 7 nights and part of the eighth. Its approximate location can be seen in the above figure.

Table 3 Summer of summer monitoring

	05.07.17	06.07.17	07.07.17	08.07.17	09.07.17	10.07.17	11.07.17	12.07.17
C. Pip	1	4	19	19	10	68	0	1
Noctule	1	-	-	-	-	-	-	-

23. Monitoring has returned a very limited number of recordings, reflecting data gathered during walked transects. All but one registration is attributable to common pipistrelle. Over half of the 122 common pipistrelle recordings occur in one evening, with 53 of these occurring within the space of 1 hour. These are likely to relate to a single bat foraging continuously in the area around the monitoring device.

Autumn Static Monitoring

- 24. Monitoring was deployed on the 10th October, and wasn't collected back in until the 29th October. During the first 5 nights, monitoring logged only a single registration, this being of a noctule bat, at 02:52 on the 12th October.
- 25. The following 15 nights recorded a small number of common pipistrelle and noctule calls. Frequently, batches of registrations were recorded in discrete time periods suggesting multiple calls can be attributed to individual bats.



Evaluation and Recommendations

- 26. The Site is clearly of very limited value to the local bat population, the complete absence of bats during the Summer transect being notable, with only marginally higher levels of activity seen during Spring and Autumn.
- 27. Static monitoring corroborates the findings of transect data, highlighting use of the Site by very low numbers of the two most common species of bat.
- 28. It is therefore reasonable to conclude that the proposals are unlikely to result in significant adverse impacts on the local bat population.

Enhancement

- 29. UK government's guidance on nature conservation in relation to development (NPPF) makes it clear that opportunities should be sought through their planning system to use development as an opportunity to enhance sites for wildlife where possible.
- 30. The Site is currently of very low value to bats, its development presents the opportunity to create some areas of higher value for with the potential to be attractive for foraging and commuting. This can be achieved through adding structure to what is currently relatively open pasture. The provision of species rich native hedges could be included in the layout, these will provide both foraging resources and commuting routes, the inclusion of night flowering plants such as honeysuckle will further increase the value. Additionally, the inclusion of large scale green infrastructure such as native standard trees within hedges, or in groups in any POS, or the creation of areas of species rich grassland / meadow will provide further foraging resources.
- 31. To further enhance the Site, bat boxes could be erected on new buildings. These should be focused around the peripheries of the Site, in areas of minimal disturbance. Boxes built into the fabric of buildings are beneficial as they remain intact in the long term. Boxes such as these are relatively cheap and being maintenance free, create no conflict with home owners.

8



References

BS42020 2013. Biodiversity- Code of practice for planning development. BSI

Bat Conservation Trust (2012) Bat Surveys – Good Practice Guidelines

English Nature (2004) Bat Mitigation Guidelines. English Nature, Peterborough.

JNCC (2004) The Bat Workers Manual. 3rd Edition.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity

Conservation of Habitats and Species Regulations 2010 http://www.legislation.gov.uk/uksi/2010/490/contents/made

Stone, E.L. (2013) Bats and Lighting. Overview of current evidence and mitigation

9



Annex 3: Assessment of Site Access Options



30th January 2018

Mr Paul Thornton
Planning Manager
Persimmon Homes West Yorkshire
& Charles Church West Yorkshire
3 Hepton Court
York Road
Leeds
LS9 6PW

Dear Paul

LAND SOUTH OF HUDDERSFIELD ROAD, SKELMANTHORPE (SITE H502) SITE ACCESS OPTIONS APPRAISAL

As requested, an assessment of the access opportunities into the proposed H502 allocation has been undertaken. Our findings are based on the following:

- Topographical Survey;
- Highway Adoption Records (enclosed);
- Land Ownership Plans;
- Radar Speed Gun Survey undertaken on 25th January 2018 (enclosed);
- Site visit on 18th January 2018;
- Review of local, regional and national policy; and
- Previous experience working with Kirklees Development Control.

Policy Requirement

The Site has a potential capacity for 203 dwellings, however the indicative layout (enclosed) shows 182 dwellings. As such in accordance with the West Yorkshire Highway Design Guide (WYDG) a single point of vehicular access to the Site is acceptable to be served by a traditional estate road for up to 200 dwellings. The WYDG confirms an estate road should have a carriageway of 5.5m, two footway to each flank measuring 1.8m each.

National and local guidance promotes increased pedestrian/cycle permeability for developments and therefore a link through the site between Huddersfield Road and Cumberworth Road is preferred. This will also improve the accessibility of Shelley High School and College for residents off Cumberworth Road

The Site is bound by agricultural fields to the west, housing to the east, Huddersfield Road to the north and Cumberworth Road to the south. Potential access opportunities are provided onto Cumberworth Road and/or Huddersfield Road. Figure 1 shows an overview of the access opportunities considered.

Access Via Huddersfield Road

Figure 1 shows that there are four potential access opportunities onto Huddersfield Road from the allocation. Two of these (options A and B) are outside of the Persimmon ownership. These two accesses have been discounted as option A has been recently built (planning app reference 2013/93610 & 2016/91566) and does not abut the Site. Whilst option B has a current planning application which will remove the potential for an access due to a proposed dwelling (planning app reference 2017/62/92504/E0/LB) blocking the access.

Option C and D are under Persimmon Homes control, however the existing corridor widths (5.9m for C and 3.5m for D) are insufficient to accommodate an appropriate access to serve the development entirely. In order to serve 200 units, a width of 9.1m is required, however the only access type available in the WYDG which can fit within the 5.9m (as available at Option C) is a Mews Court which requires a width of 5.7m. A mews court could serve up to a maximum of 25 dwellings. However due to the width constraints no segregated pedestrian link could be provided in addition to the Mews Court. Due to the proximity and attractiveness of the Secondary School on Huddersfield Road, it is considered that a pedestrian link would be beneficial. As such it is considered that access at point C should be provided as a pedestrian/cycle/emergency access only.

Access Via Cumberworth Road

Figure 1 shows that there are three potential access opportunities onto Cumberworth Road from the allocation. One taken directly from Cumberworth Road (Option G), one through an extension of Bedale Drive (Option F) and one through an extension of Heather Fold (Option E).

The land adjacent to Heather Fold (Option E) is outside the control of Persimmon Homes. The Heather Fold access is being utilised for access into planning application reference 2017/62/92504/E0/LB and no onward connection is proposed to the remainder of the allocation.

The western extent of Bedale Drive (Option F) appears to marry (with the Persimmon Ownership subject to confirmation of the extent of adopted highway. An existing tree and hedge row would need to be removed to gain access in this location. Bedale Drive is circa 5.5m in width with a single point of access capable of accommodating up to 200 dwellings. 40 dwellings are already served from this access and this leaves a remainder of 160 which is well below the number identified in the allocation. As such a second access point would be required to supplement this access. Furthermore, due to the alignment of the existing road, the pedestrian/cycle permeability of the Site would be reduced and a direct connection with Cumberworth Road is preferred.

A direct access onto Cumberworth Road (Option G) can be provided on the southern part of the Site. Due to the available width in this location an adoptable access serving up to 200 units can be provided. Visibility splays of 93m to the north and 109m to the south, in accordance with DMRB and the recorded 85th percentile wet weather design speeds of 42mph northbound and 38mph southbound, can be provided as shown in drawing 17136/GA/01 enclosed.



Mr P Thornton – 30th January 2018 Huddersfield Road, Skelmanthorpe

Conclusion

Based on the quantitative evidence contained within this letter and the enclosures I conclude that an access to serve the entire allocation is achievable without third party land from Cumberworth Road at Option G. An additional access serving a limited number of dwellings (up to 25) or the provision of an emergency access /pedestrian link can be provided onto Huddersfield Road at Option C. It is our recommendation that a dedicated pedestrian link is provided in this location to improve the permeability of the development and Skelmanthorpe. A further access onto Bedale Drive at Option F could also be provided (subject to adopted highway extent confirmation), however this access is not considered sufficient to serve the entire allocation on its own.

I trust that the content of this letter is clear, but should you have any queries please do not hesitate to contact me.

Yours sincerely

Steven Phillips

Associate

Encs Indicative Layout

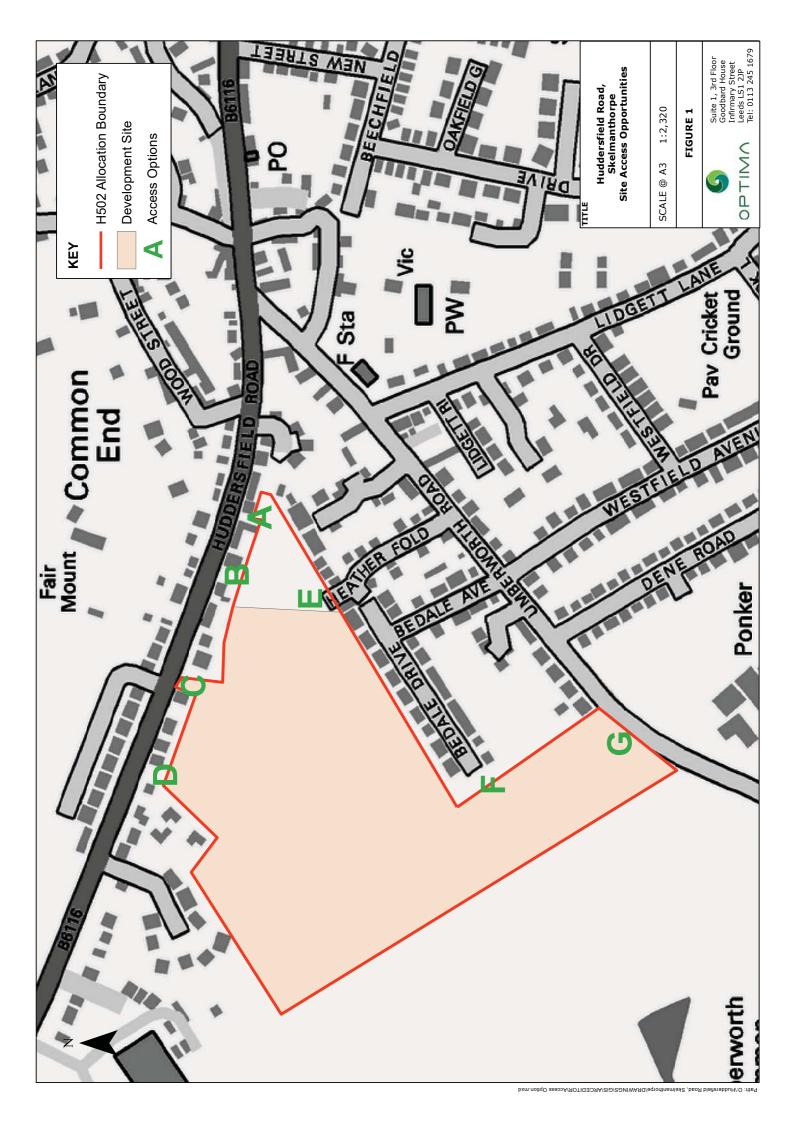
Figure 1 – Access Options Drawing 17136/GA/01

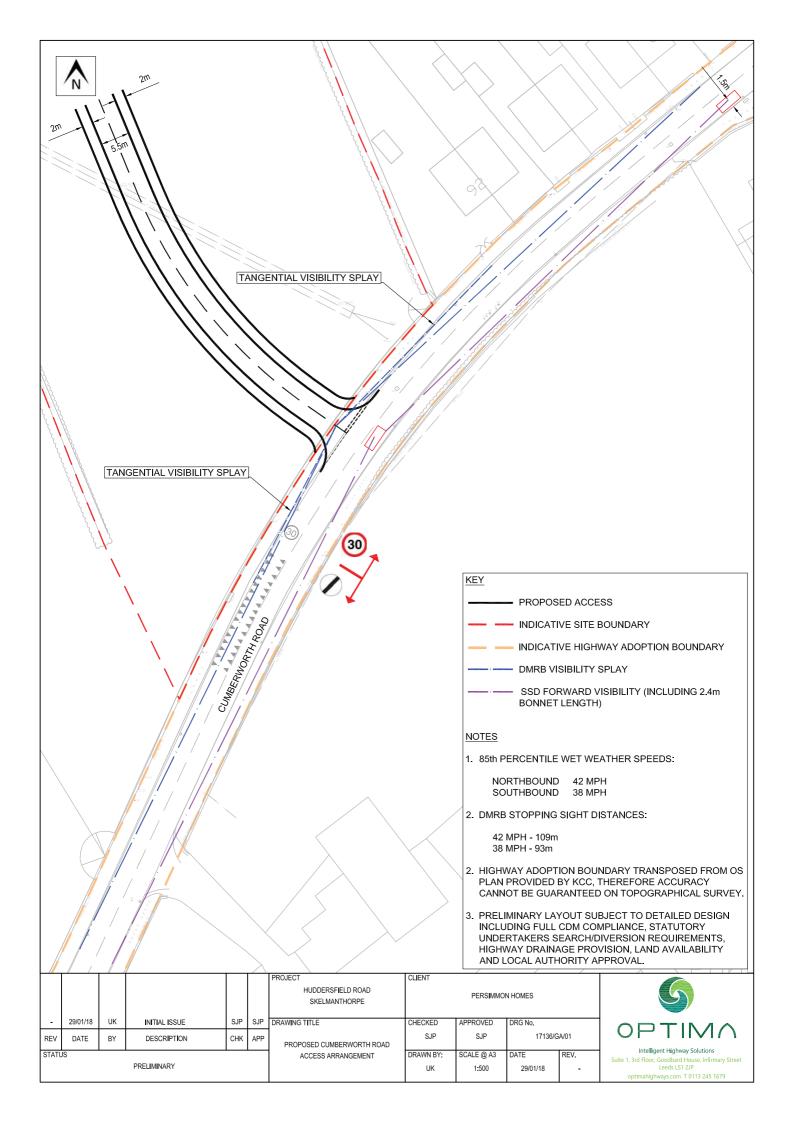
Speed Survey

Highway Adoption Records









Cumberworth Road, Skelmanthorpe - Speed Survey (Thursday 25th January 2018)

Weather Conditions - Fine, Mainly Sunny & Breezy/Road Surface - Damp

Southbound

40	37	39	32	37	28	32	36	39	32
34	31	35	39	31	34	25	38	29	33
31	34	38	40	33	26	29	34	32	35
34	32	28	33	35	25	39	32	27	34
31	28	34	29	31	33	36	28	34	37
28	36	30	34	28	36	45	34	29	36
35	29	33	36	41	31	37	25	41	30
31	42	36	30	32	35	42	33	36	45
34	30	38	32	37	27	32	25	34	31
38	32	28	35	31	41	36	31	29	42
32	28	30	38	35	31	28	33	37	31
26	31	33	37	28	34	23	32	28	34
31	38	26	34	31	28	36	32	28	34
26	36	40	29	37	27	30	36	32	29
35	31	24	33	30	34	38	27	34	37
42	35	31	37	40	35	31	28	42	30
37	26	34	30	26	41	29	35	27	35
33	28	30	36	32	30	35	29	47	31
30	37	33	41	35	38	31	35	38	31
34	29	40	32	30	26	35	32	42	32

Max - 47 Min - 23 85% - 38 Ave - 33 Sp. Limit - 30

40 - Cars/LGV's 26 - HGV's/PSV's

Weather Conditions - Fine, Mainly Sunny & Breezy/Road Surface - Dry

Northbound

41	29	36	30	41	36	33	38	35	37
37	34	44	37	34	32	36	44	37	32
33	37	29	46	38	31	46	36	30	37
36	33	35	37	32	40	36	45	41	35
41	35	26	30	40	36	28	40	33	44
31	41	38	33	27	42	37	34	40	28
34	32	42	56	34	39	43	36	32	48
44	35	28	44	40	32	37	29	34	39
36	44	39	27	35	31	41	29	35	32
42	37	31	35	28	42	36	39	32	28
36	40	34	31	40	36	30	44	27	35
40	35	31	37	34	37	40	38	34	40
31	43	31	41	26	31	36	28	44	33
38	32	40	27	33	42	39	31	29	42
41	36	27	32	42	40	33	29	37	32
33	42	36	27	32	46	37	33	30	39
31	37	50	39	35	38	42	37	34	46
43	32	36	23	41	31	35	43	37	34
37	34	40	37	24	35	41	32	35	38
43	35	33	38	36	33	37	28	34	36

Max - 56 Min - 23 85% - 42 Ave - 36 Sp. Limit - 60

41 - Cars/LGV's 30 - HGV's/PSV's

