

Marie Fraser
Red Hall Avenue,
Wakefield,
West Yorkshire,
WF1 2UL

By email

Date: 01/06/2023

Dear Marie,

Re: Hollins Bank, Littleborough – Update Breeding Bird Survey and Badger Survey

This letter details the survey methodology, findings, and subsequent assessment for a recent breeding bird survey (BBS), and badger presence/ likely absence survey, of the land at Hollins Bank, Littleborough. The surveys and assessments have been requested in advance of the vegetation clearance at the site in order to facilitate the construction of 127 2-5 bed residential dwellings including two vehicular accesses, landscaping, and associated works.

Background

The site is located off Hollingworth Road, north of Hollingworth Lake Country Park (central British National Grid Reference SD 93379 15719 and forms the footprint of the Azo Nobel chemical works which was decommissioned in 2004. This site is now formed of sparsely vegetated ruderal bare ground with a surrounding buffer of willow scrub and mixed woodland. Immediately adjacent to the north of the site is the Rochdale Canal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). Further afield, the South Pennine Moors SSSI, SAC, and Special Protection Area (SPA) are present, approximately 1.3 km to the southeast of the site.

Previous surveys undertaken by Envance between 2021 – 2023 had identified the presence of badgers *Meles meles*; and probable breeding birds within the site, including Lapwing *Vanellus vanellus*; which is listed within the qualifying moorland and moorland fringe migratory breeding bird assemblage for the South Pennine Moors SPA. Lapwing is also a high conservation priority within the UK and internationally, listed as a priority species within S41 of NERC Act 2006, a 'Red' listed species within the Birds of Conservation Concern red list for birds of Great Britain¹, and, are listed as Near Threatened on the global IUCN Red List of Threatened Species.

A possible badger main sett and outlier sett were also identified along the southern boundary of the site. The outlier sett has since been closed under license to facilitate the development, with an appropriate exclusion zone planned around the remaining main sett in order to protect it during both the construction and post-development phase of the development.

These surveys have been requested to confirm the presence/ likely absence of both badgers and breeding birds (including lapwing) within the site prior to vegetation clearance and to provide a reasonable avoidance method statement. This is to be implemented during clearance in order to prevent any significant negative impacts on both these species groups.

Methodology

The survey was undertaken by Envance Senior Ecologist Paul Wolstenholme ACiEEM and assisted by graduate ecologist Phoebe Parry on the 1st of June 2023. Weather conditions were appropriate for the survey type: 8°C, overcast with a gentle breeze (Beaufort Scale (BF) 3).

¹ Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I (2021) *Birds of Conservation Concern 5: the population status of birds in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114, 723-747

Breeding Bird Survey

Breeding bird surveys were carried out in accordance with guidance provided by the Bird Survey & Assessment Steering Group (2022)² with a transect route walked around the site covering all vegetated areas, with open areas of the site viewed using close focussing binoculars from suitable vantage points in order to prevent significant disturbance of any sensitive ground nesting birds that may be present. All species observed were recorded with a note of their behaviour made, as appropriate. Following the survey, each species observation was assessed according to the following categorisation of breeding status:

- Non-breeding: Species observed in unsuitable habitat and/or flying over the site
- Possible Breeding: Species observed in suitable breeding habitat
- Probable Breeding: Pair observed in suitable nesting habitat; territorial behaviour observed on at least two visits; courtship and display observed; adult observed visiting probable nest site; agitated behaviour or anxiety (alarm) calls from adults; or nest building observed
- Confirmed Breeding: Distraction display/injury feigning observed, used nest or eggshells found; recently fledged young observed; adults entering/leaving nest site or incubating nest; adult carrying faecal sac or food for young; nest containing eggs; nest with young seen/heard

Badger Presence/ Likely Absence Survey

During the walked transect, a search for any field signs of badger (or any other notable/protected species) was undertaken with any signs recorded as observed. This included an updated survey of the activity levels currently present at the previously identified main sett.

Limitations

To avoid any detrimental disturbance of nesting birds, where nesting activity was observed the presence of an active nest could not always be confirmed through close inspection. This was particularly evident for ground nesting birds for which nests are typically well camouflaged to avoid predation. Close visual inspection of these nests was avoided to reduce the risk of nest abandonment. Therefore, a precautionary approach has been undertaken using behavioural signs to indicate the probable location of active nests.

Legislation

Nesting Birds

The active nests of all species of birds are protected by the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to: kill, injure or take any wild bird; take, damage or destroy the nest of any wild bird while that nest is in use or being built; or, take or destroy an egg of any wild bird. Special penalties are applied for offenses relating to birds listed on Schedule 1 of the Act.

Badgers

Badgers and their setts are protected under the Protection of Badgers Act 1992. It is an offence under the act to kill, injure or take a badger. It is also an offence to destroy, damage or obstruct a currently active badger sett, or to disturb animals within the sett. Any operation likely to affect badgers by direct disturbance to the animals or an active sett is required under the Act to be licensed by the appropriate authority.

Results

Breeding Bird Survey

Four pairs of lapwing were observed breeding within the site, with females appearing to be sitting on nests in the eastern and western sections of the site within mud scrapes created by plant movement. Nesting activity

² <https://birdsurveyguidelines.org/>

was confirmed by regular alarm calling of this species when in closer proximity (within 50m) to the nesting areas. Due to the proximity of these observations (avoiding significant disturbance) no direct observations of nests holding eggs were confirmed. However, from the behaviour exhibited by the lapwing pairs present within the site, nesting is presumed to be taking place in these areas. A further pair displaying similar behaviour was observed within the grassland immediately south of the site boundary. The location of lapwing nesting is shown in **Figure 1**.

Additional species observed within the open areas of the site included jackdaw *Corvus monedula*; carrion crow *Corvus corone*; and oystercatcher *Haematopus ostralegus*; however, no territorial or breeding behaviour was observed from any of these species. The scrub and woodland buffer around the boundary of the site supported populations of blue tit *Cyanistes caeruleus*; long tailed-tit *Aegithalos caudatus*; chaffinch *Phylloscopus collybita*; wren *Troglodytes troglodytes*; and willow warbler *Phylloscopus trochilus*; the two later species observed displaying territorial singing behaviour. All species identified in this habitat are considered to be in suitable habitat for breeding, however, no direct observations of nest or nest building was observed within this habitat during the survey. Considering the behaviour of the birds present and the density of the habitat, however, it is considered highly likely that bird nesting will be occurring within this habitat in some form.

Other species observed flying over the site included Canada goose *Branta canadensis*; swift *Apus apus*; and wood pigeon *Columba palumbus*. Full results are provided in **Appendix 1**, with the location of each observation shown in **Figure 1**.

Badger Survey

A total of eight sett entrances, all located in the areas of the originally identified main sett, were observed within the site. All entrances were relatively clear with some minor debris, typically with spoil at the entrance. This did not, however, appear to be recently excavated and no confirmed signs of recent use were observed in any of the entrances or within the wider site. It is considered likely the sett is currently inactive, but it may be possible that individual badgers may return to the sett on an infrequent basis. Full results are provided in **Appendix 2**, with the location of all sett entrances and field signs shown in **Figure 1**. Photograph references are provided in **Appendix 3**.

Evaluation

Confirmed nesting of lapwing has been identified within the site, as well as a high likelihood of nesting passerines within the woodland and scrub that buffers the site boundary.

Lapwing is a ground-nesting migratory bird that selects nesting sites with a wide field of view to easily escape predators, relying on the camouflaged nature of their eggs to obscure them from predation. Prolonged disturbance may cause nests to be abandoned (indirectly causing its 'destruction' as a successful nest) and it is, therefore, recommended that strict precautions are taken during site visits and preparation to avoid any significant negative effects on their nests and their young.

Studies have found that lapwing will usually fly away from the nest at an approaching distance of 50 – 100 m³. NatureScot Research Report 1283 - Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species, recommends a buffer zone for similar species of ground-nesting birds to be between 100 -250 m to avoid disturbance⁴. Specific recommendations are provided below.

³ Israel, M., & Reinhard, A. (2017, June). Detecting nests of lapwing birds with the aid of a small unmanned aerial vehicle with thermal camera. In *2017 International Conference on Unmanned Aircraft Systems (ICUAS)* (pp. 1199-1207). IEEE.

⁴ Goodship, N.M. and Furness, R.W. (MacArthur Green) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

It is considered unlikely, however, that the badger sett present within the site is currently in use. Despite this, badgers are a wide-ranging species and may visit the from time to time and may even re-occupy the sett. Therefore, precautionary working measures should be implemented during vegetation clearance in order to avoid any impacts on badgers, should they be present.

Mitigation and Recommendations

Lapwing

Lapwings are sensitive to human disturbance and will become alert, take flight and sound alarm calls typically within 50 -100m of a nest, however, it should be noted that disturbance may occur at distances greater than 100 m. It is therefore recommended that a **buffer zone of at least 100m** is established between any vegetation clearance or other potentially disturbing activities (such as vehicle movements) and that an Ecological Clerk of Works (ECoW) is present on-site during all clearance activities.

The appointed ECoW will be an experienced ecologist and will monitor the nests present for any signs of disturbance. Should any of the nesting lapwings become alert due to on-site activities, contractors will be alerted by the ECoW, and work should cease. With this measure in place, it is considered that minor activities, such as the use of hand tools may be possible between 50 – 100 m without disturbance. However, it is highly unlikely that any activities can occur within 50 m of an active lapwing nest without disturbance.

Figure 2. highlights the identified active lapwing nests within the site and the recommended buffer zones to avoid/limit disturbance. As large areas of the are within 100 m of an active nest it is therefore considered highly unlikely that any large-scale clearance activities can occur lawfully, without disturbance at this current time. Should advanced vegetation clearance be required an alternate access may need to be created and vegetation clearance limited to areas outside of exclusion areas using low-noise hand tools. It may be possible to install perimeter fencing around part of the site (or from outside the site boundary) under supervision, however, it should be noted that works may be instructed to cease should distressed lapwings be observed.

The lapwing incubation period is typically 3 – 4 weeks, with young ready to fly at 5 – 6 weeks old. Lapwing also only lay a single clutch each year, therefore, this restriction may be required for a maximum of 10 weeks. The restricted period may be reduced through regular monitoring of nesting activity to determine when the chicks have fledged and vegetation clearance activities can resume. This period may be significantly reduced if nests are abandoned for other reasons, such as predation.

Nesting birds: Other Species

The nesting bird season occurs between the 1st March – 31st August. If vegetation clearance can commence during this period, it is recommended that nesting bird checks are undertaken a minimum of 48 hours before any clearance. Should an active nest be identified, the appointed ECoW will establish a suitable buffer zone and the nest will be regularly monitored until the chicks have fledged. Following this period, the vegetation can be cleared.

Badgers

Where vegetation clearance is required within 30 m of the identified badger set, it is recommended that the appointed ECoW undertake a pre-works check for any signs of recent activity. Should the set be found to be in use, there may be the potential to disturb badgers even if there is no direct interference or damage to the sett. The following guidelines provide a rough approximation of the types of activities that may potentially disturb badgers and their setts:

- using heavy machinery within 30 metres of any entrance to an active sett;

- using lighter machinery (particularly for any digging operation) within 20 metres;
- light work such as hand digging or scrub clearance within 10 metres.

If any of these activities are required when the sett has been confirmed to be active a licence may be required. A licence to disturb badgers can only be obtained between 1st July and November 30th when pregnant females and dependent young are not present. There is no mechanism that permits disturbance to badgers or their setts out with this period and therefore only works that will not disturb badgers or their setts can be undertaken between 1st December and 30th June.

In addition to this, it is further recommended that reasonable avoidance measures pertaining to badgers (and other terrestrial mammals) are implemented during vegetation clearance.

Appendix 4. details the reasonable avoidance method statement to be implemented during the vegetation in order to avoid any offense in relation to nesting birds and badgers.

Conclusion

The surveys confirmed the presence of nesting Lapwing within open areas of the site, as well as the likely presence of nesting birds within the scrub and woodland around the site boundary. An exclusion zone of 50m – 100m around all lapwing nests is recommended to avoid any detrimental disturbance. Due to the locality of the site entrance to active lapwing nests, it is not currently considered possible for any activities to occur within the site without significant disturbance. Unless alternative access can be established, it is therefore recommended that vegetation clearance is delayed until the lapwing chicks are confirmed to have fledged. Once fledged, nesting bird checks should be undertaken to confirm the presence/ absence of active nests within any vegetation to be cleared.

No recent badger activity was observed during the site activity. However, due to the historic presence of badgers within the site, reasonable avoidance measures are recommended following the commencement of vegetation clearance.

Appendix 4. provides a reasonable avoidance method statement to be implemented during the vegetation clearance to avoid any detrimental impacts to both nesting birds and badgers.

Please contact us for any further information,

Best wishes



Paul Wolstenholme

Senior Ecologist

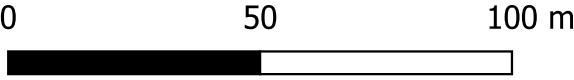
Paul.Wolstenholme@EnvanceUK.com

Tel: 078313343541

Figure 1. Breeding Bird and Badger Survey Map

- BTO Species Codes
- BT - Blue Tit
 - CG - Canada Goose
 - CC - Carrion Crow
 - JD - Jackdaw
 - L. - Lapwing
 - LT - Long Tailed-tit
 - OC - Oystercatcher
 - SI - Swift
 - WW - Willow Warbler
 - Wr - Wren
 - CH - Chaffinch

- Legend
- Site Boundary
 - Badger Survey Observations
 - Bird Singing
 - Bird Calling
 - Bird Distress Calling
 - Bird Flight Path
 - Bird Observed On Nest
 - Number of Individuals Observed



Breeding Bird & Badger Survey Map:
Visit 01/06/2023

Date	June 2023
Scale	1:1500@A3
Drawing Ref:	0289/BBS



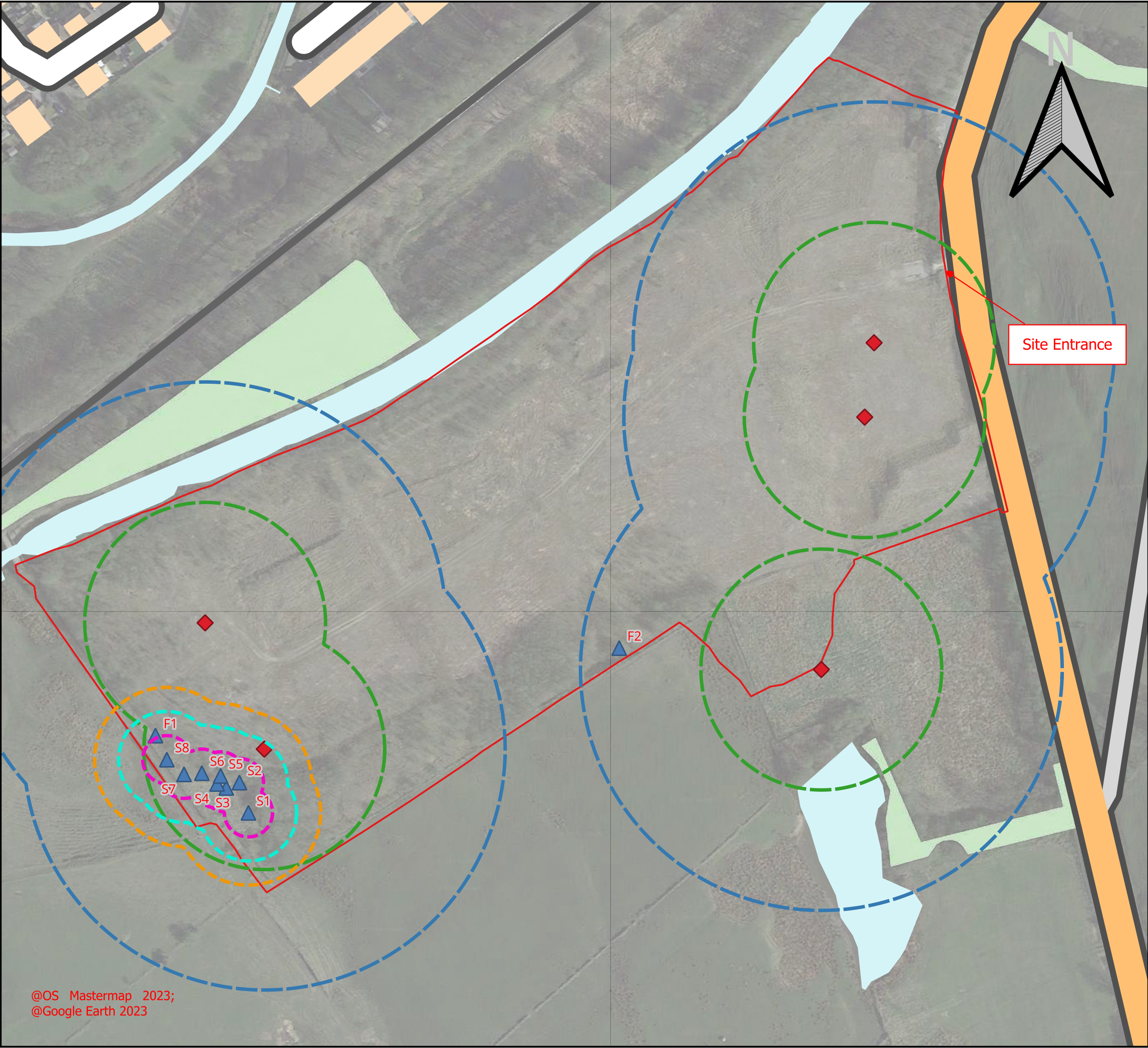
Houldsworth Mill Business Centre
Houldsworth Street
Stockport
SK5 6DA

0161 327 1 723

enquiries@envanceuk.com

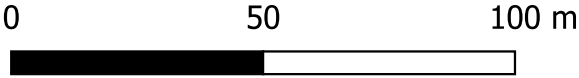
www.envanceuk.com

Figure 2. Lapwing and Badger Exclusion Zones



Legend

- Site Boundary
- Badger Survey Observations
- Active Lapwing Nesting
- 100 m Lapwing Exclusion Zone
- 50 m Lapwing Exclusion Zone
- 10 m Badger Exclusion Zone (if required)
- 20 m Badger Exclusion Zone (if required)
- 30 m Badger Exclusion Zone (if required)



Exclusion Zone Map

Date	June 2023
Scale	1:1500@A3
Drawing Ref:	0289/EZM



Houldsworth Mill Business Centre
Houldsworth Street
Stockport
SK5 6DA

0161 327 1 723

enquiries@envanceuk.com

www.envanceuk.com

Appendix 1. Breeding Bird Survey Results

Common Name	Scientific Name	Number Recorded	Behaviour Description	Breeding Status	Designation
Blue tit	<i>Cyanistes caeruleus</i>	1	Single individual observed foraging in scrub around boundary.	Possible breeding	Green
Canada Goose	<i>Branta canadensis</i>	11	Individual and groups of geese observed flying over site.	Non-breeding	Schedule 9 (non-native species)
Carrion Crow	<i>Corvus corone</i>	5	Group of crows observed mobbing lapwing.	Non-breeding	Green
Chaffinch	<i>Fringilla coelebs</i>	1	Single individual observed in scrub along boundary.	Probable breeding	Green
Jackdaw	<i>Corvus monedula</i>	2	Individual birds observed on ground and flying within site.	Non-breeding	Green
Lapwing	<i>Vanellus vanellus</i>	10	At least five pairs of lapwing observed within the site, with females appearing to be on nest. Significant alarm calling observed when in close proximity (within 50m), with pairs regularly returning to same location after moving away from area.	Confirmed breeding	Red; S41; SPA Qualifying species
Long-tailed tit	<i>Aegithalos caudatus</i>	5	Small groups of birds were observed foraging within scrub along boundary.	Non-breeding	Green
Oystercatcher	<i>Haematopus ostralegus</i>	1	Single individual observed in central area of site.	Possible breeding	Amber
Swift	<i>Apus apus</i>	1	Observed flying over the site only.	Non-breeding	Amber
Willow Warbler	<i>Phylloscopus trochilus</i>	4	Territorial behaviour (singing) observed in four locations around the site.	Probable breeding	Amber
Woodpigeon	<i>Columba palumbus</i>	1	Observed flying over site towards suitable nesting habitat.	Possible breeding	Green
Wren	<i>Troglodytes troglodytes</i>	1	Territorial behaviour (singing) observed within scrub around boundary.	Probable breeding	Green

Appendix 2. Badger Survey Results

Label	Description	Grid Reference	Photo reference (Appendix 4)
S1	Clear entrance hole but with no confirmed signs of recent use. No worn paths leading to and from. Disused or inactive	SD9324815582	1
S2	The entrance hole is hidden by dense bramble and not visible for assessment. No worn paths leading to or from or any other signs of attempted access. Disused or inactive.	SD9324415594	2
S3	Hole with some debris in the entrance. Spoil present but not recently excavated. Path leading to and from but not well used. Appears currently inactive.	SD9323815592	3
S4	Entrance with double hole. Possible bedding present at entrance but not fresh. No other confirmed signs of use. May have been used earlier in year but currently inactive	SD9323515594	4
S5	Entrance with spoil present but not recently excavated. Debris in entrance. Inactive or disused.	SD9323615597	5
S6	Narrow entrance, more likely to be of fox origin. Spoil present but not recently excavated. Debris in entrance. Inactive or disused.	SD9322815598	6
S7	Small entrance with spoil present but not recently excavated. Clear entrance but covered by thatch of grassland above. Possible prints in spoil but not confirmed as badger. Possibly recently active but no confirmed signs. To be monitored.	SD9322115597	7
S8	Entrance at top of embankment. Possible footprints present but not confirmed as badger. Fairly clear entrance but cobwebs present indicating an absence of recent use. No other confirmed signs present. Possibly recently active but no confirmed signs. To be monitored.	SD9321415604	8
F1	Clear mammal path leading to main sett.	SD9320915614	9
F2	Closed badger set. No signs of re-excavation.	SD9340115650	10

Appendix 3. Site Photographs



Legend

Photo 1. S1: Sett entrance in dense bramble

Photo 2. S2: Sett entrance completely obscured by bramble

Photo 3. S3: Clear entrance with some debris.

Photo 4. S4: Two-holed entrance, with old bedding outside.

Photo 5. S5: Smaller entrance with minor debris.

Photo 6. S6: Small clear entrance.

Hollins Bank , Littleborough
Breeding Bird & Badger Survey

Appendix 4: Site Photographs



Suite 450
Houldsworth Mill Business Centre
Houldsworth Street
Stockport
SK14 6DS

0161 327 1 723

enquiries@envanceuk.com



Legend

Photo 7. S7: Clear sett entrance on top of the embankment.

Photo 8. S8: Smaller entrance partially obscured by grass thatch.

Photo 9. F1: Closed sett location. No evidence of re-excavation.

Photo 10. F2: Well-worn mammal track observed.

Photo 11. Lapwing displaying vigilant behaviour around nesting site.



Hollins Bank , Littleborough
Breeding Bird & Badger Survey

Appendix 4: Site Photographs



Suite 450
Houldsworth Mill Business Centre
Houldsworth Street
Stockport
SK14 6DS

0161 327 1 723

enquiries@envanceuk.com