



**Land off Pimlico Link Road, Pimlico Village,
Clitheroe, Lancashire**

Ecological Impact Assessment

Simply Ecology Limited

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For:

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This report has been prepared by Simply Ecology Limited with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management. (www.cieem.org.uk).

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1.0 INTRODUCTION

1.1 Background Information

1.1.1 Simply Ecology Limited was commissioned by JWPC in August 2018 to undertake a renewed ecological assessment of Land off Pimlico Link Road, Pimlico village, Lancashire, BB7 4PZ (OS grid ref: SD749432). See Plan 1: The Site Location. The site had previously been surveyed by Simply Ecology in 2014 and the 2018 survey was to update the previous work.

1.2 Aims

1.2.1 The aims of this ecological assessment were to:

- To provide clear advice to the client and the Local Planning Authority on the nature conservation value of the site and surrounding area.
- To confirm the presence or absence of protected species, such as badgers, bats, great crested newts, otter, etc) within the proposed development site.
- To enable the client to comply with legislation afforded to protected sites and species.
- To make nature conservation recommendations.

1.2.2 To achieve this, an ecological appraisal of the habitats and any protected species on the site was undertaken on 5th September 2018. This submission presents the results of the ecological surveys at the site.

1.3 Site description and Proposed Works

1.3.1 The site covers an area of approximately 0.8ha and is located in the small village of Pimlico on the northern edge of Clitheroe, Lancashire (See Plan 1). The current site use is predominantly improved grassland with a narrow belt approximately 10-12m wide of woodland ground flora and tall ruderal vegetation in a ditch-like feature which dissects the site. Similar herbaceous vegetation, as well as woodland ground flora is also evident along the steeper southern slope of the site, which is adjacent to woodland. (See Plan 3). The site is roughly triangular in shape with the Pimlico Link road and road-side native hedge along the northern boundary and younger woodland and scrub towards the eastern boundary (See Plan 3). Residential areas with gardens form the western boundary of the site (See Plan 3). Along the southern boundary and out of the site is a linear mature woodland ranging from approximately 15-40m wide. Beyond the woodland in a southerly direction is the disused Coplow Quarry SSSI and further mature woodland.

1.3.2 The surveys described in this report were commissioned to inform future development plans to construct 19 residential homes on the site. It is noted that since the previous 2014 Simply Ecology report, proposals for the site have changed, indicating a reviewed southern site boundary (See Plan 2). This report will form part of the planning submission for which the Local Planning Authority which requires up-to-date survey data on habitats and protected wildlife. The survey encompassed the entire site.

2.0 SURVEY METHODOLOGY

2.1 Extended Phase 1 Survey

- 2.1.1 The initial Phase 1 survey was undertaken by Mr Richard Lowe BSc on 19th March 2014. A renewed survey was also carried out by Mr Kevin Heywood BSc ACIEEM on 5th September 2018. The survey followed the Phase 1 habitat survey methodology (JNCC, 2010) which is a standard technique for recording and mapping habitats. During the Phase 1 survey the presence or potential for presence of protected species was recorded and assessed.
- 2.1.2 The survey involved walking the whole site, mapping and describing different habitats (for example: woodland, grassland, scrub). Evidence of fauna and faunal habitat is also recorded within and within 30m surrounding the site (for example droppings, tracks, excavated material or habitat such as ponds for breeding amphibians). The methods used for ecological survey are in accordance with those established and generally accepted methodologies for field survey, as published by the professional body, the Chartered Institute of Ecology and Environmental Management (CIEEM).

2.2 Invasive Alien Plants

- 2.2.1 During the Phase 1 habitat survey, observations of invasive alien plants listed under Schedule 9 of The Wildlife and Countryside Act 1981 (as amended) were made. The search included species such Giant Hogweed (*Heracleum mantegazzianum*), Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*).

2.3 Bat Survey

- 2.3.1 As part of the Phase 1 habitat survey, a visual survey of all trees was carried out using 8x25 binoculars and a 77mm telescope. The survey was undertaken in accordance with the standard methods described in the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2016). The survey was carried out by Mr Kevin Heywood BSc ACIEEM, an experienced surveyor with over six years of bat survey experience. In accordance with best practice, the survey comprised the following elements:
- 2.3.2 Trees were categorised into high, medium or low potential for bats. The following signs which can be indicators of bat presence were used for the categorisation:
- Woodpecker holes with small cracks/crevices
 - Cracks/crevices, ivy cover and flaking bark
 - Loose or flaking bark deadwood in canopy or stem low/no ivy cover
 - Medium to dense ivy cover
 - Deadwood in canopy or stem
 - Snagged branches
 - Hollow stems or limbs
 - Hole in buttresses/hollow core
- 2.3.3 The following signs were searched for in all of the above places as these would indicate bat presence:
- Staining around a hole, caused by natural oils in the bats' fur.
 - Stains beneath a hole, caused by bat urine.
 - Scratch marks around a hole, caused by bat claws.

- Bat droppings beneath a hole.
- Audible squeaking from within a hole, especially on hot days or at dusk.
- Insects (especially flies) around a hole.

2.4 Badger Field Survey

2.4.1 This involved walking habitats within and up to ~30m outside site searching for signs and clues of badger activity/habitation. Any evidence of badger activity (in the form of setts, droppings, pathways, snuffle holes, hair and footprints) observed during the ecological walkover were recorded. All holes were examined closely to determine if they displayed signs of use, past or present. Particular attention was paid to areas where the vegetation and/or the topography offered suitable sett sites. Areas with dense ground cover (hedges, scrub, woodland, etc.) were examined closely. Where dense vegetation (e.g. bramble) precluded a thorough search, the perimeter was searched for badger runs or pathways into the vegetation, which might suggest the presence of a concealed sett.

2.5 Personnel

2.5.1 All surveys were carried out by Richard Lowe BSc and Kevin Heywood BSc (Hons) ACIEEM. Richard has been undertaking bat surveys since 2006 and is an experienced botanist with a broad range of ecological and conservation knowledge gained over 12 years working as an ecologist for consultancies. Richard holds protected species survey licences for the great crested newt.

2.5.2 Kevin graduated with a first-class honours degree in Ecology from Lancaster University in 2015. In addition to this, he has acquired experience since 2012 working as an ecologist in a freelance capacity and since 2015 as a full-time employee for Simply Ecology Ltd. During this time, he has developed numerous field skills and carried out a wide range of botanical and protected species surveys. His expertise predominantly lies with habitat mapping and undertaking protected species surveys including: bats, great crested newts, badgers, otters and reptiles. Kevin holds a protected species licence for all British bats.

2.6 Timing and Constraints

2.6.1 The original Phase 1 survey was undertaken on 19th March 2014 and a subsequent renewed survey was carried out on 9th September 2018. According to the habitat types present and remaining evidence from dead stems, seed cases etc., it is possible to carry out a comprehensive habitat assessment at this time. It was therefore possible to comprehensively record the species present and no constraints were encountered. Similarly, the timing posed no problems for the protected species assessment, and no constraints were encountered.

3.0 PHASE 1 SURVEY RESULTS

3.1 Habitat Results

- 3.1.1 The site covers approximately 0.8 ha and consists largely of agriculturally improved grassland (approximately 0.5ha) with areas of woodland ground flora along the southern boundary slopes, eastern boundary and along a shallow ditch-like linear depression in the field. Mature trees were located along the southern section of the site on a slope leading up to woodland outside of the site. A native hedgerow formed the northern boundary of the site along the Pimlico Link road. A Phase 1 Habitat Plan is included in Plan 3.
- 3.1.2 During the renewed 2018 survey it was apparent that the previously cleared on the south eastern slope, and the linear ditch section, both comprised tall herbs and grasses, with much of the woodland flora now outcompeted.
- 3.1.3 The following habitats were recorded at the site (in no particular order):
- Improved Neutral Grassland
 - Broadleaved Woodland
 - Native Hedgerow
 - Tall Ruderal

Improved Grassland

- 3.1.4 Improved short sward grassland covered the majority of the site and constitutes a very common and widespread habitat of a low ecological value (See Plan 3 and Plates 1 and 2). The species composition of the improved grassland was as follows: the sward contained dominant Yorkshire fog (*Holcus lanatus*), with occasional perennial rye-grass (*Lolium perenne*), common bent (*Agrostis capillaris*), creeping bent (*Agrostis stolonifera*), with very locally frequent annual meadow-grass (*Poa annua*). Forbs consisted of abundant daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*), common chickweed (*Stellaria media*), shepherd's purse (*Capsella bursa-pastoris*) and ribwort plantain (*Plantago lanceolata*). Occasionally occurring species such as lesser celandine (*Ranunculus ficaria*), spear thistle (*Cirsium vulgare*), common knapweed (*Centaurea nigra*) and creeping thistle (*Cirsium arvense*) were present with very locally abundant dandelion (*Taraxacum officinale* agg.), broad-leaved dock (*Rumex obtusifolius*), and occasional cow parsley (*Anthriscus sylvestris*).



Plate 1: The improved grassland which covered the majority of the site; looking south west from the eastern boundary of the site.



Plate 2: A band of ruderal and rank vegetation stretched out to the building in the centre of site.

Broadleaved Woodland

- 3.1.5 The trees along the southern site boundary (see Plates 3 and 4) consist of mature and semi-mature ash (*Fraxinus excelsior*), lime (*Tilia sp.*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*) with dog rose (*Rosa canina agg.*), bramble (*Rubus fruticosus*) and ivy (*Hedera helix ssp.*). The ground flora below the trees consisted of the following species; lesser celandine, dandelion, broad-leaved dock, stinging nettle (*Urtica dioica*) and rosebay willowherb (*Chamerion angustifolium*), broad buckler fern (*Dryopteris dilatata*), lords and ladies

(*Arum maculatum*), great willowherb (*Epilobium hirsutum*), white clover (*Trifolium repens*), red campion (*Silene dioica*), ramsons (*Allium ursinum*), germander speedwell (*Veronica chamaedrys*), wild strawberry (*Fragaria vesca*), cleavers (*Galium aparine*), garlic mustard (*Alliaria petiolata*) and dog's mercury (*Mercurialis perennis*).

- 3.1.6 The far eastern section of land alongside the eastern fenceline had regenerated since being cut in 2014, therefore representing a continued part of the adjoining woodland (see Plate 5). Regeneration here included the following: blackthorn, hazel, ash, bramble, greater willowherb and nettle.



Plate 3: A view of the southern slopes near to the centre of site; looking towards the south-east.



Plate 4: The woodland towards the south west meets the bottom of the slope.



Plate 5: The woodland edge along the eastern boundary.

Hedgerow

3.1.6 The hedgerow along the northern boundary of the site and parallel with the road (see Plate 6) consists of dominant hawthorn, with occasional ash, elder (*Sambucus nigra*), wych elm (*Ulmus glabra*), sycamore (*Acer pseudoplatanus*) and ivy. The hedgerow does have a poor diversity of plant species but provides a valuable corridor of suitable habitat for wildlife to feed and nest.

3.1.7



Plate 6: A view of the hedgerow along the northern boundary of the site looking in an westerly direction.

Tall Ruderal

3.1.8 During the initial survey in 2014 the south eastern north facing slope had recently been cleared. The emerging vegetation was described as comparable to the

adjacent woodland flora. However, during the 2018 survey, vegetation indicative of damp open unmanaged land was present and outcompeting the remaining woodland floral indicators (see Plate 7). Meadowsweet (*Filipendula ulmaria*) was particularly abundant and the most prominent feature of this area, with accompanying neutral grasses and an assemblage of other forbs also present. Small scrub species were also present with increasing age upslope towards the adjacent woodland.

- 3.1.9 The following accompanying species were recorded: frequent cocksfoot (*Dactylis glomerata*), false oat grass (*Arrhenatherum elatius*) and hogweed (*Heracleum sphondylium*), as well as occasional rough meadow grass (*Poa trivialis*), smooth meadow grass (*Poa pratensis*), Yorkshire fog, creeping buttercup, birds foot trefoil (*Lotus corniculatus*), wood dock (*Rumex sanguineus*), lords and ladies, garlic mustard, dog's mercury and locally abundant Himalayan balsam (*Impatiens glandulifera*). Scrub and underscrub species included: dog rose, blackthorn (*Prunus spinosa*), hazel and butterfly bush (*Buddleja davidii*).
- 3.1.10 The band of vegetation through the centre of site had also altered in its floral composition, with fewer species indicative of woodland ground flora being expressed (see Plate 8). Species indicative of rank neutral conditions, with limited interference had become prevalent. This included similar species to those on the north facing slope, however, there was a clear lack of meadowsweet. Instead, there was greater coverage of grasses, also including couch grass (*Elymus repens*) and annual meadow grass (*Poa annua*). Additionally, here the forb coverage largely comprised locally frequent nettle and creeping thistle, as well as occasional cow parsley, hedge woundwort (*Stachys sylvatica*), meadow vetchling (*Lathyrus pratensis*), raspberry (*Rubus idaeus*), wild strawberry, spear thistle, greater willowherb, rosebay willowherb (*Chamerion angustifolium*) and cleavers. Woody species here comprised rare wych elm, hazel and ash saplings.



Plate 7: The slope on the far south west had tall ruderal vegetation with abundant meadowsweet.



Plate 8: *There was a linear ruderal/rank section of land throughout site.*

3.2 Invasive Alien Species

- 3.2.1 Since the 2014 surveys, Himalayan balsam had become established on this site. This was present in a relatively discrete location on the south eastern north facing slope (see Plate 9 and Plan 3, TN1).



Plate 9: *One small area of Himalayan balsam was present within the ruderal banking on the south-eastern slope (see also TN1).*

3.3 Bat Tree Inspection

- 3.3.1 The trees on the site were once again inspected for their potential to support a bat roost. The mature ash tree on the south-western corner of site had greater coverage of ivy present, further impeding the view (see Plate 10 and Plan 3 TN2). It was therefore concluded that this tree still had potential for roosting bats. Similarly, another ash tree nearer to the centre of site also had great ivy coverage and a full inspection was not possible from ground level (see Plate 11 and Plan 3 TN3). Therefore, it is not inconceivable that any works affecting this tree could also affect a bat roost. All other trees on site were cleared of any bat roosting potential. **It is concluded that if these two ash trees are to be felled or pruned, a bat survey will be required.**
- 3.3.2 The remaining trees across the site were inspected and found to have no potential for bats. No obvious holes or crevices were found. **It is concluded that there was no possibility for bats to roost in the remaining trees.**



Plates 10 and 11: Two mature ash trees located on the south-western corner and south centre slope had bat roosting potential (see also Plan 3 TN2 and TN3 respectively).

3.4 Bat Building Inspection

- 3.4.1 One building was identified on site and therefore searched for potential for roosting bats. This was a simple structure of corrugated wall/roof lining with uPVC windows and doors (see Plate 12). Such buildings generally tend to have little bat potential due to a lack of suitable crevices or gaps for bats to gain access. All frames were in excellent order and well-sealed (see Plate 13). Similarly, the eaves of the building were fully sealed, offering no potentially suitable access (see Plate 14). Finally, no signs of bat activity were observed anywhere around the building.
- 3.4.2 **To conclude, this building had zero potential for roosting bats, due to a complete lack of any suitable roost/access locations.**



***Plate 12:** The building on site had a flat corrugated metal roof. Structures like these typically have very little bat roosting potential.*



***Plate 13:** All windows and doors were fully sealed around the building.*



Plate 14: All gaps in the eaves were sealed up with no potentially suitable areas of entry.

3.5 Badger Field Survey

- 3.5.1 The surveyor walked the entire site, and over 30m surrounding the site in search of any likely badger signs, (such as setts, digging, footprints, snuffle holes, droppings or snagged guard hairs). No signs of activity were recorded and it was concluded that there was no risk of badgers being present above or below ground on this site. **To conclude, this site had no badgers present on or near site.**

4.0 IMPACT ASSESSMENT

4.1 Designated Sites

- 4.1.1 As described in the previous Simply Ecology Report (April 2014), part of the site boundary is located within the Coplow Quarry and Pimlico Grasslands Biological Heritage Site (see Annex D). In addition, the Coplow Quarry SSSI boundary meets up to the BHS site boundary on the southern slope, also being partially located within the site itself (see Annex C).
- 4.1.2 The 2018 proposals for site (see Plan 2) show revised housing boundary fences which abut the edge of the BHS and SSSI but do not go into them; (i.e. the edge of the adjoining woodland). Therefore, there will be no loss of protected sites as a result of the development. In addition, assuming this new boundary line is a standard garden fence, it is considered that any likely impacts from adjoining residential dwellings will be avoided (i.e. garden encroachment, spread of invasive species, disturbance from residents/pets). This corresponds with the Natural England consultation in September 2014 which stated that the proposals must not “damage or destroy” the adjoining SSSI. It is also considered that there should be no storage of materials or tracking of machinery on or near to the SSSI. No pollution impacts are anticipated to affect the SSSI, particularly given the height difference due to the steep sloping along the south aspect.
- 4.1.3 **Therefore, it is concluded that there is no reasonably foreseeable likelihood of significant effects upon the nearby statutory and non-statutory conservation sites as a result of the development.**

4.2 Habitats

- 4.2.1 The most valued habitat on site represents the woodland that falls within the red line boundary (also part of the BHS/SSSI described above). This habitat will be retained in its current form (see Plan 2) and therefore **no impact is anticipated**.
- 4.2.2 However, in addition to this are two sections of land comprising tall ruderal, and known to have woodland ground flora seed stock. This included a band stretching from the north eastern corner towards the centre of site, and a section along the south eastern slope. These areas will be lost by the development proposals. This therefore represents a **moderate** loss of woodland ground flora at the site level. Whilst it is noted that there will be a net increase of hedgerow Priority Habitat on site, and this can be of great ecological benefit, (particularly if comprising a native species rich assemblage), this would not outweigh the loss of the ruderal/woodland ground flora. It is therefore anticipated that appropriate compensation for this loss would need to be addressed via an appropriate soft landscaping scheme under the Reserved Matters.
- 4.2.3 A small section of hedgerow will be lost on the northern boundary. This represents a **not-significant** impact. However, the significant addition of new hedgerow is proposed (See Plan 2). It is therefore concluded that there will be a net gain in relation to this priority habitat type at the site level.
- 4.2.4 The majority of habitat to be lost in this case comprises improved grassland. This represents a widespread and abundant habitat type in the surrounding countryside, which has relatively limited ecological value. Whilst there will be a net loss in green space, the overall increase in hedgerow will help to mitigate this as will the creation

of new gardens, which will mature and have increased species diversity with time. The loss of this habitat type is therefore considered to be **not significant** at the site level.

4.3 Invasive Species

- 4.3.1 A small concentrated area of Himalayan balsam was recorded to be present on the southern slope of the site amongst the tall ruderal vegetation (see Plate 9 and Plan 3, TN1). Given the proposed plans, this area is likely to be cleared for garden space. **As such, provided the invasive species on site is cleared appropriately, this should no longer threaten the adjoining nature conservation sites.**

4.4 Protected Species

Bats

- 4.4.1 In accordance with the mitigation hierarchy, the two trees found to have limited bat roosting potential are to be retained (See Plan 2). In addition, the single building on site was checked for signs of bat roosting potential. There were no potential access points, or signs of activity anywhere on the building. **Therefore, it is concluded that there will be no loss of bat roosts on this site.**
- 4.4.2 The proposals will result in new lighting within the site. It was considered that there would not be any lighting impacts upon bat roosts, but there could be a possible impact upon bats as a result of light spill onto the roadside hedgerow and boundary trees. The avoidance of inessential public realm lighting and the incorporation of lighting to standards in accordance with best practice will ensure sensitive spatial design and will reduce any likely impacts upon commuting or foraging bats.
- 4.4.3 In all, given the site layout and the likely presence of the new lighting in relation to the location of the rear gardens, **it is concluded that lighting in accordance with best practice could result in not-significant impact upon foraging or commuting bats at the site level.**

Badgers

- 4.4.4 The surrounding fenceline was checked for signs of badgers gaining access, though none were found. The fenceline was in good order, with no 'pushed up' sections of fence, or snagged guard hairs present at all. No signs of badger activity were identified on site or within the surrounding area (such as: digging, snuffle holes or latrines). The lack of badgers in the area is likely due to the nature of the shallow soils and the underlying bedrock. **In conclusion, no impacts upon badgers are anticipated as a result of the proposals.**

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.0.1 In August 2018 Simply Ecology Ltd was commissioned by JWPC to carry out an updated Ecological Impact Assessment report of land off Pimlico Link Road, Pimlico, Clitheroe, Lancashire. This follows an initial site survey carried out in 2014. This information was to be used to support an application for a new development proposal on site (see **Error! Reference source not found.**).
- 5.0.2 The site has no statutory designations for nature conservation although it does lie immediately adjacent to Coplow Quarry (SSSI). Pimlico Grasslands BHS non-statutory conservation site lies right along the southern edge of the site boundary (see Annexes C & D). The vast majority of the site comprises of managed improved grassland which had very low floristic diversity. The grassland is a very widespread and common habitat with limited ecological value. The habitats with greater ecological value include the broadleaved woodland along the southern boundaries of the site, the boundary hedgerow and the tall ruderal vegetation with underlying woodland ground flora seedstock. Such boundary features also provide local wildlife value for nesting birds and bat foraging activity, particularly that to the south.
- 5.0.3 In accordance with the plans provide, the most valued habitat on site (broadleaved woodland) is excluded from the development and no impacts are anticipated to occur. The only habitat that is likely to be affected is the ruderal vegetation (with underlying woodland ground flora) which will be lost. Appropriate compensation for this loss would need to be addressed under the Reserved Matters. The loss of poor-quality grassland was considered to be negligible particularly given the compensatory introduction of large sections of hedgerow and new gardens.
- 5.0.4 Himalayan balsam was identified in one discrete area within the south-eastern tall ruderal vegetation. This is likely to be removed during site clearance and should be dealt with appropriately.
- 5.0.5 Two of the trees within the red line boundary were identified as having low potential for roosting bats, however these are outside of the proposed development boundary, and will therefore be retained. The building on site was identified as having zero bat roosting potential. Similarly, no signs of badger activity were identified within or outside the site. No protected species are therefore anticipated to be impacted.
- 5.0.6 Recommendations with respect to nature conservation issues follow:

5.1 Protected habitats

- 5.1.1 Coplow Quarry SSSI forms the immediately adjacent southern boundary of the site. Thorough consideration **MUST** be given to protect the conservation interest features of the SSSI. Given the geological interest of the site it is advised that the housing development is not predicted to have any negative consequences upon the hard rock features present provided no tracking or storage of materials takes place on the SSSI. **Reason:** This will ensure no adverse impacts upon biodiversity and therefore enables compliance with Ribble Valley borough Council's statutory duty to conserve and enhance biodiversity under The Wildlife and Countryside Act 1981 (as amended), The Natural Environment and Rural Communities Act 2006 and Core Strategy Key Statement EN4.

- 5.1.2 The Coplow Quarry BHS boundary appears to partially lie within the site along the southern slope of the site and along the eastern boundary of the site (See Plan 3 and Annex B). The development plans reflect the fact that it is essential to retain this habitat both during and after construction in order to ensure no detrimental impact upon the nature conservation interest of the BHS (See Plan 2). **This will be ensured by instating new permanent perimeter fencing surrounding the site** and preventing associated impacts (such as: spreading of non-native species, increased disturbance from pets and pedestrians). **Reason:** This will ensure no adverse impacts upon biodiversity and therefore enables compliance with Ribble Valley borough Council's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006 and Core Strategy Key Statement EN4, as per the National Planning Policy Framework 2018.

5.2 Protected Species

Bats

- The boundary vegetation, particularly the woodland on the south of site will provide an area for foraging bats as well as bat flight-lines. Any increased lighting on the site could have a potentially negative impact upon bats and so a bat sensitive lighting plan will be needed. A *key recommendation* is that any external public realm lighting is mounted as low as possible and away from the tree-line. Fitting of appropriate cowls or light shields to make the light as directional as possible is also recommended and lighting duration at night-time should of limited duration, as per best practice guidance in the Bat Conservation Trust document 'Bats and artificial lighting in the UK'. **Reason:** To ensure minimal long-term impacts upon wildlife in and around the site.
- A *key recommendation* to enhance the site is that 2 bat boxes should be attached to the mature ash trees identified in Plan 3 as having low bat roosting potential. These could be attached to the tree onto faces that are not illuminated by street lighting and onto a **south-facing** limb and be the Schwegler 2F and 2FN designs. New roosting opportunities should be no less than 3m above the ground and will enhance the site for bats. Bat roost boxes are available from suppliers such as: <https://www.nhbs.com/2f-schwegler-bat-box-general-purpose> or <https://www.nhbs.com/2fn-schwegler-bat-box> **Reason:** Bat boxes will have a beneficial effect upon site biodiversity and therefore enables compliance with the Local Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006, as per the National Planning Policy Framework 2018.

Breeding Birds

- A *key recommendation* is that, if any further trees/shrubs are removed or pruned (e.g. amongst the natural regeneration in the ruderal areas), all clearance should be undertaken outside of the bird nesting season. If this is not possible, the Appointed Ecologist must be present to oversee all vegetation removal. **Reason:** To ensure that no offences are committed under The Wildlife and Countryside Act 1981 (as amended). The bird-nesting season is generally regarded to extend between March and August inclusive.
- An *additional recommendation* is that 4 bird nesting boxes should be installed on the mature trees and other trees along the southern boundary of the site. This boundary presently forms a woodland edge habitat and offers an ideal

location for nesting birds. Nest boxes are available from suppliers such as: <http://www.nestbox.co.uk/Bird-Nest-Boxes>.

5.3 Habitats

5.3.1 Several areas of the site hold the main nature conservation value which is associated with woodland cover. These are; the trees along the southern boundary of the site and the slopes within the site, the hedgerow and the ruderal habitat. All support woodland ground flora. The present development proposal plans would result in the loss of the ruderal habitat and a section of the hedgerow in the north eastern corner of the site (See Plan 3). Consideration should be given for the adoption of the recommendations as mitigation for this loss:

- *It is recommended* that the entire section of broad-leaved woodland along the southern boundary should be retained. The existing treeline represents the edge of the most valued habitat on site, as well as the BHS boundary line. Retention of the trees will retain the habitat value for wildlife and to ensure that the development of the site will have no detrimental impact upon nearby protected conservation sites. The trees and slopes containing the woodland ground flora should be protected throughout the development. **Reason:** This will ensure compliance with the Local Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006, as per the National Planning Policy Framework 2018.
- *It is recommended* that, during construction, all trees should be retained within the development and subject to protection measures for the duration of the works. Fencing to protect the trees, root protection zones and woodland ground flora should be installed in accordance with BS5837: 2012 'Guide for Trees in Relation to Construction Recommendations'. It will be particularly important to ensure that the mature sycamore, ash and beech trees on the boundary of the site are adequately protected from any excavations or accidental damage. **Reason:** This will ensure that trees and woodland ground flora are not accidentally damaged or destroyed.
- If tree or hedgerow removal does take place on the site, *it is recommended* is that additional new native tree planting should form a key part of the future soft landscaping scheme at the site. New planting should be in the ratio 2:1 for every tree removed and should use locally native species of hardwood from ash, pedunculate oak or rowan. **Reason:** This will ensure no adverse impacts upon biodiversity and therefore enables compliance with the Local Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006, as per the National Planning Policy Framework 2018.
- *It is recommended* that new hedgerow planting should take along the western boundary of the site in order to connect the wooded slope to the hedgerow that is present on the northern boundary. This will offset the loss of grassland habitat arising from the development proposals (See Plan 2). This linear habitat should be planted with common hawthorn, elder and holly as mitigation which will form a habitat corridor around the site and will provide alternative bat flight-lines to enhance the site. **Reason:** This will maintain the biodiversity of the site, thereby ensuring compliance with the Local Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and

Rural Communities Act 2006, as per the National Planning Policy Framework 2018.

- *It is recommended* that a soft landscaping scheme for the site which makes use of locally appropriate native plants is adopted. This will help to minimise any overall impacts upon biodiversity arising from the loss of woodland ground flora from the site slope areas. **Reason:** This will ensure compliance with the Local Authority's statutory duty to conserve and enhance biodiversity under The Natural Environment and Rural Communities Act 2006, as per the National Planning Policy Framework 2018.

5.4 Invasive Species

5.4.1 Himalayan balsam was identified along the southern and western fringes of the site (as indicated on Plan 3).

- *It is recommended* that appropriate measures be put in place to eradicate Himalayan Balsam from the site. This should include removal of all plants of this species with due regard given to their proper handling and disposal with advice sought from a suitably qualified contractor. **Reason:** To ensure that no offences are committed under The Wildlife and Countryside Act 1981 (as amended).

6.0 REFERENCES

Bat Conservation Trust (2016) *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

Bat Conservation Trust (2018) *Bats and artificial lighting in the UK*. Bat Conservation Trust, London.

JNCC (2010) *Handbook for Phase 1 Habitat Survey*. JNCC, Peterborough.

Ribble Valley Borough Council (2014) *Core Strategy 2008 – 2028*. Clitheroe

Web addresses for access to full UK legislation and policy text:

Conservation of Habitats and Species Regulations 2017:

<https://www.legislation.gov.uk/ukxi/2017/1012/contents/made>

Natural Environment and Rural Communities Act 2006

<https://www.legislation.gov.uk/ukpga/2006/16/contents>

Wildlife and Countryside Act 1981:

www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1981/cukpga_19810069_en_1

7.0 PLANS

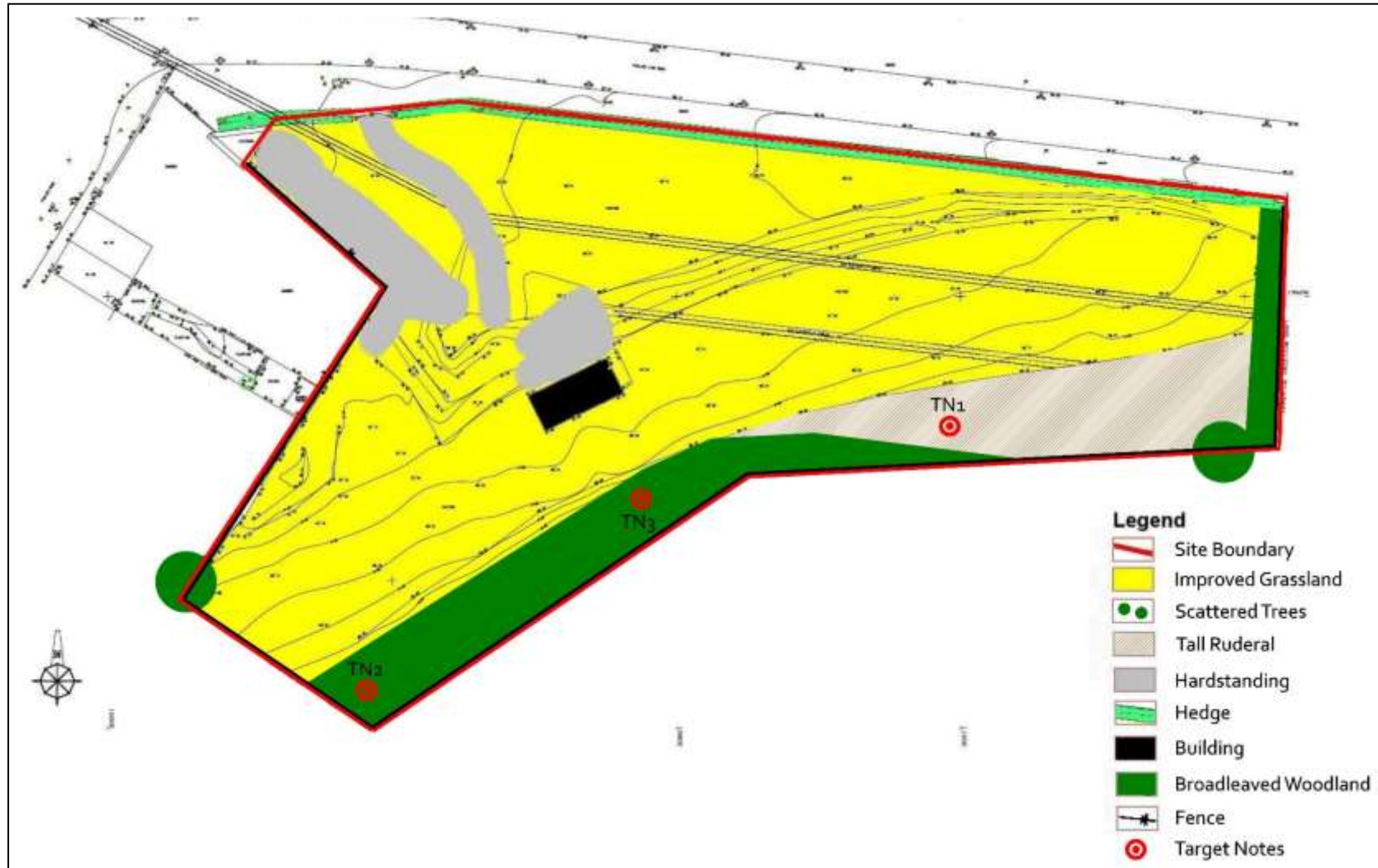
Plan 1: The Site Location.



Plan 2: Development Proposals.



Plan 3: Phase 1 Habitats Plan.



ANNEX A: STATUTORY AND PLANNING CONTEXT

A.0.1 The client is advised that many species of British wildlife are legally protected. The following section provides a brief overview of the protection afforded to species commonly encountered during development. The Recommendations at the end of this report will advise as necessary, but it is also useful for the client to have an understanding of the legal protection as this helps to ensure that the law is complied with.

A.1 Badgers

A.1.1 Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) (WCA), and the Protection of Badgers Act 1992. It is illegal to:

- Kill, injure, take, possess or cruelly ill-treat a badger or to attempt to do so;
- Interfere with a badger sett by damaging or destroying it;
- Obstruct access to or any entrance of a badger sett;
- Disturb a badger when it is occupying a sett

A.1.2 A badger sett is “any structure or place that displays signs indicating current use by a badger”. Natural England, the Government’s statutory nature conservation body, classifies a sett as active if it has been occupied within the last 12 months.

A.1.3 Operations that might cause disturbance of an active sett entrance can be carried out under licence from Natural England. If any badgers are found during the course of the survey, this will be highlighted in this report.

A.2 Birds

A.2.1 All wild birds are protected against killing or injury under The WCA 1981 (as amended). This protection extends to bird’s nests during the breeding season, which makes it an offence to damage or destroy nests or eggs. Birds that are listed on Schedule 1 of the Act receive additional protection against intentional or reckless disturbance during the breeding season. This makes it an offence to disturb these species at or near to their nesting site.

A.3 European Protected Species (includes bats, otter, hazel dormouse, great crested newts, and others)

A.3.1 The client is advised that all bats and great crested newts are European Protected Species (EPS). These EPS are protected under European legislation that is implemented in England via The Conservation of Habitats and Species Regulations 2017 (Regulation 41). A full list of EPS is provided in Schedule 2 of the Regulations. In addition, these EPS also receive the protection of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9 (4)(b & c) and (5).

A.3.2 If both national and international legislation are taken together, the legislative protection afforded to these species makes it an offence to:

- Intentionally/ deliberately kill, disturb, injure or capture them.
- Intentionally or recklessly damage, destroy or obstruct access to any breeding site or resting place.
- Possess or control any live or dead specimen or anything derived from a European Protected Species.

A.3.3 If an activity is likely to result in any of the above offences, derogation from the legal protection can be issued in the form of a European Protected Species licence issued by Natural England. Licences for development purposes are issued under The Conservation Of Habitats And Species Regulations (2017) and only allow what is permitted within the terms and conditions of the licence. If any EPS are found during the course of the survey, this will be highlighted in this report.

A.4 Protected Mammals and Reptiles (includes water vole, red squirrel, reptiles and others)

A.4.1 All native reptiles and a variety of British mammals also receive protection under The WCA 1981 (as amended). Schedule 5 of The WCA lists animals that are protected. The degree of protection varies. Water voles and red squirrel are examples of species with full protection. The Act makes it an offence to intentionally kill, injure, take, possess, or trade in any wild animal listed in Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places.

A.4.2 All native reptiles in the UK are protected. The commoner species such as grass snake, common lizard, slow worm and adder are protected only from unlawful killing and injuring. In practice this may require a reptile protection scheme before implementing a planning permission but no specific licence is required. Sand lizard and smooth snake listed as EPS (see A3.3 above).

A.4.4 If any protected species are found during the course of the survey, this will be highlighted in this report.

A.5 Non-native invasive species

A.5.1 A number of non-native plant species growing wild in the UK are listed on Schedule 9 of the WCA due to their invasive nature and the detrimental impact they can have on native habitats and wildlife. This legislation makes it an offence to plant or otherwise cause to grow in the wild any plant species which is included in Part II of Schedule 9.

A.5.2 This legislation should be considered during site clearance works which could lead to the spread of Schedule 9 listed plant species from the site if plant material is not properly handled and disposed of. Development proposals should also consider the

removal of invasive species from areas of site that would otherwise remain unaffected by works in order to avoid the risk of these invasive plants spreading from the site in the future and enhance habitats within the site. This would in turn free up space for wildlife friendly planting, prioritising use of native species within planting schemes where appropriate.

A.6 Planning Considerations

- A.6.1 1. When considering each planning application, the presence of protected species, such as those listed above, is a material consideration which must be fully considered by the Local Authority when granting planning permission. If a licence from Natural England is required, then prior to issuing any planning consent, the local planning authority will need to be satisfied that there is no reason why such a licence would not be issued. Therefore, in reaching the planning decision the local planning authority will need to have regard to the requirements of the Conservation of Habitats and Species Regulations 2017. The three licensing tests given in the Regulations must be considered. In summary, these are that:

The development is required for the purpose of:

- preserving public health or public safety,
- for other imperative reasons of over-riding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment,
- for preventing serious damage to property.

2. There is no satisfactory alternative.

3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.

- A.6.2 All necessary information would need to be provided to the planning authority as part of the planning application in order to address the above tests.

- A.6.3 The Natural Environment and Communities Act (NERC Act) 2006 extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. The Duty is set out in Section 40 of the Act, and states that:

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"

- A.6.4 The Duty applies to all local authorities, community, parish and town councils, police, fire and health authorities and utility companies. Section 41 (S41) of this Act (the 'England Biodiversity List') also requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of

biodiversity in England. This list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40(1) of the Act.

- A.6.5 Also, Local Authorities must follow the National Planning Policy Framework (NPPF) which provides guidance on the interpretation of the law in relation to wildlife issues and development. For each development proposal considered by the Local Planning Authority the NPPF states that the authority must aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

UK Biodiversity Action Plan (UK BAP)

- A.6.6 The UK BAP, which was first published in 1994, was the UK government response to the 1992 Convention on Biological Diversity. It sets priorities for nationally important 'priority species' and 'priority habitats'. Each species and habitat action plan has costed actions and targets, and is used to inform the compilation of national lists such as the Section 41 List described above.

ANNEX B: IMPACT ASSESSMENT CRITERIA

Table 1: Valuing Ecological Features

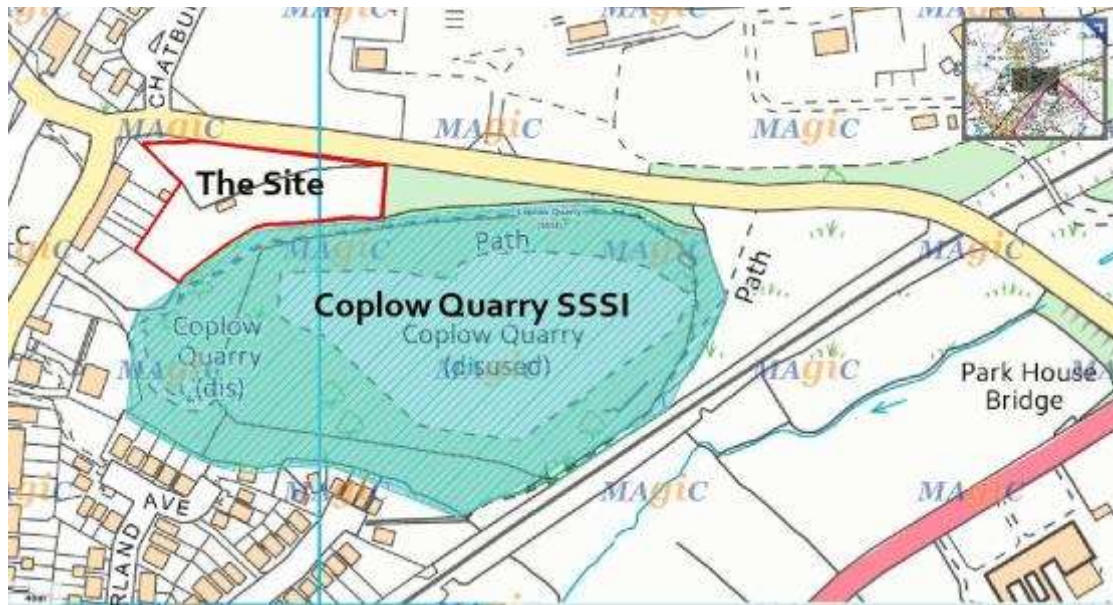
Level of Value	Examples
International	An internationally designated site or candidate site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site, Biogenetic Reserve). A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. Any regularly occurring population of an internationally important species, which is threatened or rare in the UK, i.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (Categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population of any internationally important species.
National	A nationally designated site (SSSI, ASSI, NNR, Marine Nature Reserve) or a discrete area, which meets the published selection criteria for national designation. A viable area of a priority habitat identified in the UK BAP, or of smaller areas of such habitat which are essential to maintain the viability of a larger whole. Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant number of a nationally important species.
Regional	Viable areas of key habitat identified in the Regional BAP or smaller areas of such habitat which are essential to maintain the viability of a larger whole. Viable areas of key habitat identified as being of Regional value in the appropriate Natural Area profile. Any regularly occurring population of a nationally important species which is not threatened or rare in the region. Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation. A regularly occurring, locally significant number of a regionally important species.
County	Semi-natural ancient woodland greater than 0.25ha. County/Metropolitan sites and other sites which the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on County/metropolitan ecological criteria. A viable area of habitat identified in the County BAP. A regularly occurring, locally significant number of a County/Metropolitan 'red data book' or BAP species, designated on account of its regional rarity or localisation. A regularly occurring, locally significant number of a County/Metropolitan important species.
District/Borough	Semi-natural ancient woodland smaller than 0.25ha. Areas of habitat identified in a sub- County (District/Borough) BAP or in the relevant Natural Area profile. Sites/features that are scarce within the District/Borough or which appreciably enrich the District/Borough habitat resource. A diverse and/or ecologically valuable hedgerow network. A population of a species that is listed in a District/Borough BAP, because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation. A regularly occurring, locally significant number of a District/Borough important species during a critical phase of its life cycle.
Site	Areas of habitat or populations/communities of species considered to appreciably enrich the habitat resource within the context of the parish or neighbourhood, e.g. species-rich hedgerows. NB: Where species or habitats occur in more than one

	category, the highest value is applicable.
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Table 2: Impact Magnitude

Major	Loss of over 50% of a site feature, habitat or population. Adverse change to all of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to gain of over 50% of a site feature, habitat or population.
Moderate	Loss affecting 20-50% of a site feature, habitat or population. Adverse change to over 50% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of 20-50% of a site feature, habitat or population.
Slight	Loss affecting 5-19% of a site feature, habitat or population. Adverse change to 20-50% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of 5-19% of a site feature, habitat or population.
Negligible	Loss affecting up to 5% of a site feature, habitat or population. Adverse change to less than 20% of a site feature, habitat or population. For benefits, an impact equivalent in nature conservation terms to a gain of up to 5% of a site feature, habitat or population.

ANNEX C: SSSI CITATION.



File ref: SD 74/3

County: Lancashire **Site Name:** Coplow Quarry

District: Ribble Valley

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: Ribble Valley Borough Council

National Grid Reference: SD 751432 **Area:** 4.9 (ha) 12.2 (ac)

Ordnance Survey Sheet 1:50,000: 103 **1:10,000:** SD 74 SW, SE

Date Notified (Under 1949 Act): 1951 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1983 **Date of Last Revision:** –

Other Information:

Boundary revised 1983 by a minor correction.

Reasons for Notification:

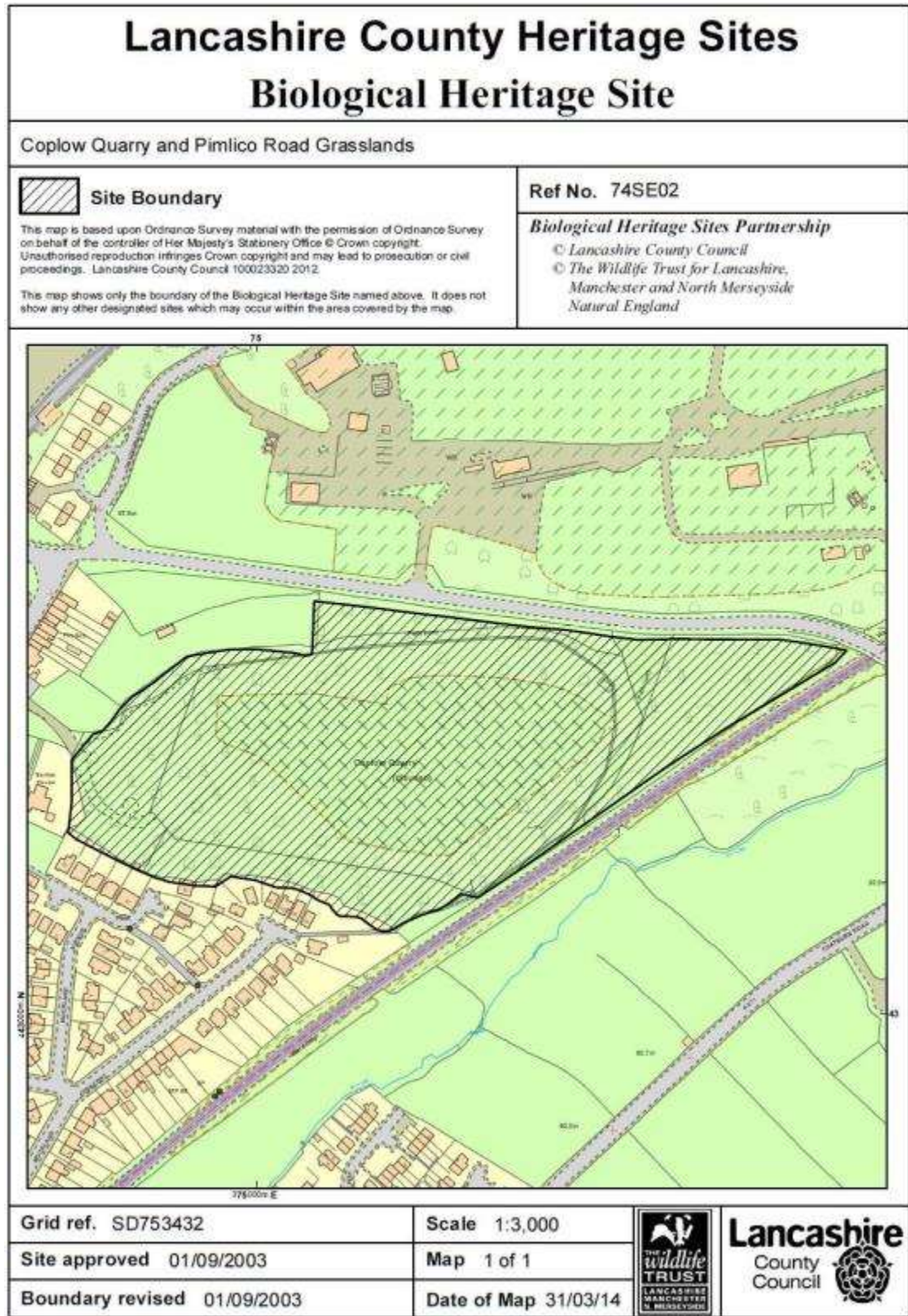
Coplow Quarry is a disused limestone quarry situated just north of Clitheroe. The geological interest of the site, in technical terms, may be defined as follows:

This site shows exposures of the Coplow Knoll, of Chadian age, and its associated sediments. These are the best exposures of their kind in the Lower Coplow Knoll "Series", a sequence of rocks famous for their echinoderm fauna. This is one of the richest sites in the whole of the British Dinantian for such fossil material and it has yielded many type specimens. Coplow is a significant site in studies of carbonate facies relationships (between bank, inter-bank and flank deposits), and the controversial subject of the origins of the knolls in the Bowland Trough. A key Clitheroe Limestone site of outstanding interest for its faunas and carbonate sedimentology.

In layman's terms, the interest of this site may be expressed more simply, and such a statement is provided below. This should not be taken as definitive and further information as to details of the interest can be obtained from the Nature Conservancy Council.

The faces of Coplow Quarry provide the best known exposures of a series of limestone layers, known as the Lower Coplow Knoll Series, originally formed in the Lower Carboniferous period of geological history, about 340 million years ago. The limestones formed on the bed of a warm, shallow sea which covered this area at that time and which contained a great variety of marine life. The rocks at Coplow Quarry are particularly noted for the rich and varied fossil remains they contain, some of which were first recognised here. An important feature of the Carboniferous limestones of this area is the occurrence of mound-like structures, generally referred to as "reef-knolls", which formed during deposition of the sediments, partly as a result of the growth, on the sea-bed, of large colonies of marine animals. The precise origin of these features has been debated for many years and Coplow Quarry is important in this context also, as it provides valuable evidence of the form and nature of these structures.

ANNEX D: BHS CITATION



	Lancashire County Heritage Sites Biological Heritage Site	Biological Heritage Sites Partnership: © Lancashire County Council © Wildlife Trust for Lancashire Natural England
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Site Name: Coplow Quarry and Pimlico Road Grasslands

Site Ref: 74SE02

Approved: 01 September 2003

Area (ha): 6.25

Date written/last updated: 25 September 2013

Grid Ref: SD753432

Owner/Occupier:

Districts: Ribble Valley
Parishes: Clitheroe

Description:

The site comprises of areas of species-rich, semi-natural calcareous grassland and developing scrub at Coplow Quarry. The site includes Coplow Quarry geological SSSI.

The developing soils are thin and often give way to aggregate. Grasses include Crested Dog's-tail, Cocksfoot, Tufted Hair-grass, Yorkshire Fog, False Oat-grass and Quaking Grass. Other species include abundant Ox-eye Daisy and Selfheal, with locally frequent Spiked Sedge, Cowslip, Lady's Mantle, Bird's-foot Trefoil, Meadow Vetchling, Germander Speedwell, Common Knapweed, Creeping Cinquefoil and Fairy Flax, plus occasional Hairy St John's-wort, Fragrant Orchid, Hoary Plantain, Marjoram, Wild Strawberry, Eyebright, Common Centaury, Common Spotted Orchid, Goat's-beard, Glaucous Sedge, Hairy Rock-Cress, Harebell, Burnet-Saxifrage, Small Scabious and Wild Thyme. Of particular note is the presence of Bee Orchid.

Areas of scrub with abundant Hawthorn, frequent Hazel, Ash, Goat Willow, Dog Rose and occasional Blackthorn have developed with a field layer of locally abundant Dog's Mercury, frequent Ivy, occasional Black Bryony, Ramsons, Hairy Brome, Harebell and scattered Zigzag Clover.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Other Information/Comments:

Site ungrazed with shrub invasion.