Biodiversity Management Plan

Bowland Lakes Leisure Village, Forton, Lancashire

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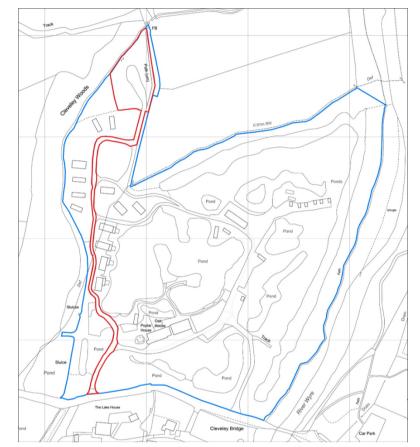


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1.0 Introduction

1.1 This report comprises a Biodiversity Management Plan in respect of planning consent 23/00308/FUL granted on the 1st November 2023 for the proposed siting of eight lodges with associated access road, timber decked areas, parking and drainage at Cleveley Bridge Fisheries, Cleveley Bank Lane, Forton, Preston. The site will be subsequently referred to as Bowland Lakes.

Figure 1 Site location plan



1.2 The purpose of the Biodiversity Management Plan is to provide information regarding the management of proposed habitat along with the management and enhancement of existing, retained habitats within the planning (red line) boundary as shown in *Figure 1* below. This is in accordance with planning condition 7. which states the following:

Prior to first occupation a Landscape and Habitat Creation and Management Scheme, including a timetable for implementation, shall be submitted to and approved in writing by the Local Planning Authority. The Scheme shall identify the opportunities for biodiversity enhancement on site including (but not limited to):

- Native tree and shrub planting
- Bird Boxes
- Bat Boxes

The Landscape and Habitat Creation and Management Scheme shall be carried out in accordance with the approved details.

1.3 An overview of the proposals is provided in the landscape plan Ref: PR/20240101/GA/01 (The Plant Room 2024) which should be read in conjunction with this report. This includes details of the existing, retained and any proposed new habitats. Planting schedules and specifications for management and aftercare for these areas are provided separately (The Plant Room 2024).

Figure 2 Screenshot of the proposed site layout (for illustrative purposes only). The landscaping plan prepared by The Plant Room (2024) should be consulted for full details. The area subject to this management plan comprises all proposed habitat as listed below, located within or adjacent to the red line boundary. Landscape features where the primary purpose is amenity such as amenity grassland and ornamental shrub beds, either existing or proposed, are not subject to this management plan and will be management as part of a standard grounds maintenance regime



- 1.4 It should be noted that this management plan covers only the proposed or existing habitat that occurs within the *Red Line Boundary* as shown in *Figure 1* above. Management of all other landscape features, either existing or proposed, where the principal aim is amenity (i.e. amenity grassland, ornamental shrubs) will be treated separately and are either covered by the Landscape Management Plan and associated schedules (The Plant Room 2024) or will form part of a standard grounds maintenance regime.
- 1.5 For the avoidance of doubt, this management plan is applicable to the following habitats as indicated on the landscaping proposals by colour coding and hatching and shown in the screenshot of *Figure 2* above.
 - Broadleaved woodland (existing)
 - Native trees and shrubs (proposed)
 - Meadow grassland (proposed)
 - Stream (existing)
- 1.6 Details of the required management of these habitats only for ten-years post development/establishment are provided within this document.

2.0 Site Description

- 2.1 The wider site is located to the north of Scorton village within an existing course fishery and holiday-let lodge park. The part of the site proposed for development includes a stream, grassland, scrub, trees and blocks of woodland. These habitats are described in greater detail in the ecological assessment reports prepared in support of the planning application (Envirotech 2008, Arbtech 2023).
- 2.2 There are no priority habitats within the site boundaries or that will be adversely affected by proposals. However, the woodland situated immediately to the west of the red line boundary is designated as a Biological Heritage Site (BHS 2003). This site will not be directly affected by proposals and does not form part of this management plan.
- 2.3 Further details of the existing ecological value of habitats on site, including an evaluation of the adjacent BHS, can be found within the ecological appraisal reports prepared respectively by Envirotech (2008) and Arbtech (2023) and should be consulted for further detail. The retained habitats (within the red line boundary) that are proposed for management and enhancement are summarised as follows:
 - Broadleaved Woodland
 - Mixed scrub
 - The Stream

3.0 Biodiversity Management Plan

3.1 Overview

- 3.1.1 As illustrated in *Figure 2* the site subject to this management plan comprises both existing and new habitat within the Red Line Boundary but excludes any habitat where the primary purposes is amenity, specifically, amenity grassland and ornamental shrubs. The management plan also allows for non-vegetational habitat, specifically bat and bird boxes.
- 3.1.2 This management plan describes the management practices regarding the following proposed and existing habitats:
 - Woodland (Native trees and shrubs, existing and proposed);
 - Scattered trees (existing and proposed);
 - Scrub (existing and proposed);
 - Grassland (proposed)
 - Water course (existing stream)
 - Bat boxes (to be fitted to existing trees)
 - Bird boxes (to be fitted to existing trees)

Management Objectives

- 3.1.3 The management objectives regarding biodiversity at Bowland Lakes are as follows:
 - (1) To maintain and enhance the proposed area of neutral (meadow) grassland by control of scrub and tall-ruderal vegetation and increase both botanical and structural diversity
 - (2) To maintain and enhance the proposed and existing native woodland, scrub, and grassland habitat that will be established or maintained across the site to create or maintain an effective wildlife corridor, promote and maintain botanical diversity, and provide cover/screening for wetland birds as well as other associated species
 - (3) To establish and manage bird and bat boxes on suitable trees to provide nesting and roosting potential for a number of bird and bats species that may use the site

3.2 Habitat Creation and Management Principles

3.2.1 The principles behind the management techniques described within this report are summarised below:

Site Wide

- (1) An extensive area of locally native woodland, scattered trees and native mixed scrub (shrub) habitat to be implemented across the whole site to link in with existing wildlife corridors and establish new ones, to allow passage of animals around the operational site as well as to and from adjacent sites and the proposed environmental enhancement
- (2) All works and management techniques to take account of the bird breeding and overwintering periods to avoid disturbance
- (3) Later removal of mature trees (where required) to take account of potential bat roosting

Watercourse

(1) Existing water course to be maintained by control of vegetation and periodic dredging, where required

3.3 Establishment Principles

3.3.1 This section describes the measures to be implemented during the establishment stage. This applies to proposed new habitat only (proposed areas of new trees and native shrubs). The proposed planting scheme is illustrated in the Landscape Plan (The Plant Room 2024). Establishment of grassland (meadow) areas is detailed in the landscaping plan.

General

- (1) Topsoil and subsoil resources on site to be used to inform the detailed design of the planting regime. This will include soil depths and any requirement for improvement of the soil quality. If soil improvement is required ameliorants will be used sparingly
- (2) Soil from any excavated pits to be reused when backfilling the pit or alternatively the backfill soil should be as close as possible in texture and structure to the original soil
- (3) Topsoil stored in temporary stockpiles will be retested prior to use to check for soil quality
- (4) Topsoil to be stored well away from any existing waterbodies and to avoid areas identified as scree or species-rich grassland (to be first confirmed by the site ecologist)
- (5) If topsoil is not available within the site, imported topsoil will be used. Imported topsoil will be from an approved site, in accordance with BS3882:2007 and be classified as premium grade
- (6) No ameliorants to be added to soil where waterbodies are or will be located
- (7) Topsoil will be kept separate from all other materials e.g. hardcore, so as not to be contaminated
- (8) All plants used to be in accordance with BS 3936 Part 1(1992), 'Nursery Stock Specification for Trees and Shrubs', BS3936 Part 10: 1990 'Nursery Stock Specification for Ground-cover Plants', and 'Handling and Establishing Landscape Plants' HTA 1985, revised edition March 2002
- (9) Any stock planted outside the recognised planting season to be containerised. Containerised plant stock to have fully developed root system within the specified pot size before planting is allowed. If the stock plant requires growing-on in the nursery all plant material is to be re-potted to the next approved pot size, re-spaced to allow for 15-20% growth per growing season and maintained to healthy vigorous growth irrespective of weather conditions
- (10) All planting areas to be weed free prior to planting. Allow for an application of an approved translocated systemic herbicide in line with 1997 Control of Pesticide Regulations and 2003 COSHH
- (11) All planting works to comply with BS4428:1989
- (12) Planting to be carried out during suitable weather conditions, avoiding periods of frost, water-logging or strong winds, during the period late October to late March inclusive

Proposed New Woodland (Native Trees and Shrubs)

- 3.3.2 The following species are to be included within the landscape proposals for the woodland areas:
 - Alder Alnus glutinosa
 - Silver birch Betula pendula;
 - Dogwood Cornus sanguinea
 - Hazel Corylus avellana;
 - Spindle tree Euonymus europeaus
 - Ivy Hedera helix
 - Blackthorn Prunus spinosa
 - English Oak Quercus robur;
 - Rowan Sorbus aucuparia; and
 - Guelder Rose Viburnum opulus
 - Dog Rose Rosa canina
 - Broom Cytisus scoparius
 - Gorse Ules europeaus
 - Goat willow Salix caprea
- 3.3.3 The following measures will be implemented during the establishment stage of the proposed new woodland areas:
 - (1) Trees to be planted into prepared tree pits, backfilled with topsoil/soil ameliorants as specified. During the preparation of the tree pit, the base of the tree pit should remain undisturbed unless specific problems are identified such as poor drainage, soil smearing or pans, which require rectification
 - (2) At the time of planting, the tree pit diameter is to be 500mm greater than the root ball, wide enough to accommodate roots when fully spread. The natural thickening between the trunk and the root collar (the root flare) shall be level with the ground surface and should not be buried by excess soil or mulch
 - Young seedlings (whips) to be planted in prepared pits of 300 x 300 x 300mm. Pits to be backfilled with topsoil/soil ameliorants as above
 - (4) All plants to be well firmed into the soil
 - (5) All trees are to be watered-in when planted with a minimum 45 litres, and then when required within the maintenance period to ensure survival
 - (6) A 1000mm diameter circle around the base of the trunk should be maintained free from grass and weeds by the use of 75mm medium grade mulch (5-75mm particle size and of British origin, FSC certified) or by the use of mulch mats
 - (7) Mulch is not to be placed against the stem of the tree
 - (8) All trees to be fitted with proprietary rabbit guards to prevent browsing by mammals, staked and protected with spiral guard or shrub shelter (Tubex or similar approved) with at least 0.6m in height

3.4 Maintenance and Aftercare Principles

- 3.4.1 Regular maintenance visits shall be made for a minimum of five consecutive seasons following planting. In general, a minimum number of visits to be:
 - Tree and shrub areas min. 8 visits per annum;
- 3.4.2 The following measures will be implemented during the initial maintenance stage:
 - (1) Maintenance visits to include watering, pruning, mowing, pest/disease control, weed control, litter removal, re-mulching as required
 - (2) A diameter of 1m around each tree or shrub to be kept weed free by means of a suitable herbicide to be administered by a licenced operative and also mulched to a depth of 50mm to reduce weed growth and conserve moisture. Care should be taken to ensure any vegetation developing beneath trees and shrubs beyond the 1m diameter around the plant remain un-mulched and should not be treated with herbicide, to allow the establishment of ground flora
 - (3) Once trees are established (5 years after planting) good arboricultural practice to be implemented to encourage long-term good health and vitality of trees and maintain well balanced crowns
 - (4) Any losses of trees or shrubs in excess of 20% of the total to be replaced on a like for like basis for the first ten years after establishment
 - (5) Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 must be removed and controlled, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

3.5 Long-term Management Principles

3.5.1 The site shall be subject to the following management regime for a minimum period of 10 years following establishment or completion of development works:

Woodland (Native Trees and Shrubs): Proposed and Existing

- (1) Trees and shrubs to be inspected annually for the first five years, then subsequently on the eight and tenth year to monitor their establishment
- (2) Following the fifth consecutive season, good arboricultural practice to be continued to encourage long-term good health and vitality of trees and maintain well balanced crowns with a natural shape when reaching maturity. To include any rogue, damaged or dead branches to be removed in accordance with BS3998
- (3) Following establishment of the native tree and shrubs, woody plants to be pruned annually or as required to maintain healthy growth
- (4) Any trees or shrubs in need of pruning to be pruned during September, or exceptionally, mid-October following completion of the bird breeding season, but prior to commencement of the overwintering period (to be confirmed prior to any cutting commencing)
- (5) Any vegetation developing beneath trees and shrubs to a distance of 0.75m each side of the centre to remain uncut to allow the establishment of ground flora

- (6) Any losses in excess of 20% of the total to be replaced on a like for like basis
- (7) Any species of tree or shrub that is becoming too dominant to be removed to maintain original proportions (+/-5%)
- (8) Trees to be thinned by 30% during Year 10, selecting for diversity rather than well-formed or vigorous trees (i.e. poorly-formed or stunted trees to be retained for structural diversity and provide habitat niches) to be determined by the appointed ecologist
- (9) In year 5 and year 10, a total of 20% of shrubs to be coppiced (cut back to ground level). Felling coupes to be evenly spaced across the whole planting area, each at least 20m from the next coupe, coupes to be a maximum of 10m diameter
- (10) No deadwood to be removed unless infected by a fungal, bacterial or viral disease that may affect other plants. Any pruned branches and brushwood to be stacked in suitable piles towards the rear or sides of each planting area
- (11) Botanical diversity (including woodland ground flora) to be monitored once every two years during August for a minimum of ten years
- (12) Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 must be removed and controlled, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

Existing Scrub

- (1) Existing scrub along the site margins or isolated patches within the site to be allowed to develop evenly spread across the areas of the site indicated on the plan but should not be allowed to increase in total area more than 15% of the total site area, nor onto vegetation otherwise designated. Scree and calcareous grassland flora to be kept clear of scrub. Any scrub development in excess of this to be removed and managed as per grassland management regime below
- (2) Botanical diversity of scrub vegetation to be monitored once every two years during August for a minimum of ten years
- (3) Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 must be removed and controlled, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

Proposed Grassland (meadow)

- (1) Once established (see the Landscape Plan for establishment details) grassland areas to be cut once a year to a minimum height of 100mm
- (2) Grassland cutting to take place ideally in September (no later than the first week in October or earlier than second week in August) to avoid impacting upon the bird breeding season and the overwintering period
- (3) Where footpaths/maintenance tracks exist, the grassland located either side of the path will be regularly mown up to one metre either side.
- (4) All grass cuttings to be removed from site

- (5) All litter and debris to be removed from site during the same period as cutting
- (6) Development of vascular plant species diversity to be monitored using fixedquadrats by a suitably qualified ecologist, twice annually during spring and summer, to be carried out every two years for a minimum of ten years. Results to be used to determine whether cutting frequency is adequate or may require amending
- (7) Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 must be removed and controlled, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

Water Course (existing)

- (1) The existing stream to be managed to allow a swathe of aquatic vegetation to develop along the margins (where not too shaded by adjacent woodland). Alternative banks of the stream to be cut over a three-year cycle in the autumn. Rushes or reeds will not be allowed to dominate more than 30% of the water courses
- (2) Dredging of water courses to be considered if water quality decreases and/or high levels of silt are noted. If required, dredging to take place in autumn to reduce disturbance to birds
- (3) Botanical diversity to be monitored once every two years during August for a minimum of ten years
- (4) Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 must be removed and controlled, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

3.6 Bird and Bat Mitigation

3.6.1 The works outlined above should only be carried out in accordance with the following mitigation measures.

Bats

Likely Impacts: There are no proposals to remove any buildings or large trees so no impact upon roosting bats is reasonably likely. There will however be an initial loss of some areas of scrub, younger trees and other dense vegetation which will result in a slight loss of foraging areas or commuting routes. Later losses may also occur following thinning or coppicing operations.

Required Mitigation: No specific mitigation is required in respect of roosting bats with regard to current proposals. However, to ensure there is no impact upon foraging or roosting bats, the site has been designed to ensure that no lighting falls on adjacent habitat such as trees and hedges that may be used by bats (see lighting proposals). Losses of foraging and commuting habitat will be compensated for by provision of new woodland and scrub habitat. No habitat other than that indicated on the landscaping proposal shall be removed unless strictly necessary and any losses must be compensated for by additional planting of trees, scrub or other rank vegetation. Particular care must be given to the avoidance or severing any potential commuting routes (linear vegetation) during management operations. Should the removal or any significant works in respect of any mature trees be required, a specific night-time bat survey will be carried out by an appropriately licenced and experienced ecologist during suitable weather conditions to confirm that no bat roosts are present

within the respective tree concerned. Should bats be found or suspected to be roosting, further ecological advice will be sought and works will be carried out following an appropriate method statement. A licence may be required from Natural England before any such works can be undertaken. Specifically, where any proposed tree felling is to take place, the following measures must be observed and implemented:

- Any works that are likely to affect mature trees that are suitable for roosting bats, especially any that require felling or major tree surgery works shall only take place between mid-October and the end of March inclusive (but see bird mitigation below)
- Any such works required outside these periods shall only be undertaken following either (i) an emergence or roost return survey undertaken by an appropriately licenced and experienced ecologist, carried out during suitable weather conditions within 48 hours of works commencing, or (ii) following a climbing inspection carried out by a specialist surveyor using an endoscope to check cracks, crevices and cavities for signs of bat activity
- If signs of bats or indications of recent bat activity are found during the actions above, no further works shall take place in respect of the tree or trees concerned until a detailed method statement has been prepared and a licence has been obtained from Natural England
- All site workers must be fully briefed on the possible presence of bats and made fully aware of this method statement, prior to commencement of tree works

Breeding Birds

Likely Impacts: Removal of rough grassland, rush pasture, dense scrub, trees, shrubs or other mature vegetation during the breeding season (February-August) may result in disturbance to breeding birds and loss of breeding habitat.

Required Mitigation: No mature vegetation will be removed anywhere on site during the bird breeding season (February to August inclusive) until or unless checked for breeding birds by an ecologist. Should birds be found to be nesting, the area of vegetation will be avoided until it has been confirmed by the site ecologist that nesting has been completed. Losses of roosting and breeding sites will be compensated for by the siting of proprietary nesting boxes as indicated in the bird box plan in *Figure 3* below. Details are provided below, the location of proposed boxes is indicated on the landscaping landscape plan (The Plant Room 2024). Specifically, any works that may affect bird nesting habitat (existing or new) must observe the following:

- No trees, shrubs or other rough vegetation shall be removed or modified between February and August inclusive in any year unless absolutely essential
- Where works must take place within that period, the following actions will be required:
 - Any mature vegetation proposed for removal shall first be checked by the appointed ecologist for signs of nesting activity
 - Should any sign of active nesting be detected during site works where these are to take place between February and August inclusive (any year), or if there are signs of any birds attempting to build nests, all works shall cease and further advice shall be sought from the appointed ecologist
 - Where nests are confirmed to be active, these shall be left undisturbed with an appropriate stand-off until breeding has ended, as determined and confirmed by the appointed ecologist

3.7 General

- 3.7.1 Further details of general site management and precautions to be implemented during site construction works are provided within the schedule of the landscaping proposals and the separate CEMP.
- 3.7.2 All new habitat and that proposed for retention shall be protected by means of a 2m Herras fence, for the duration of site works.
- 3.7.3 Full details of the proposed landscaping scheme including proposed tree and shrub planting and wildflower grassland are shown in the drawings and associated schedules prepared by The Plant Room (2024).

3.8 Bat and Bird Boxes

3.8.1 In addition to habitats retained and proposed, bat and bird boxes to be fitted to trees as indicated on the landscape plan (The Plant Room 2024), to be implemented and managed as follows.

Birds

- 3.8.2 To compensate loss of bird breeding, the following proprietary bird boxes or nesting features shall be fitted to appropriate existing trees as indicated in *Figure 3* below, prior to site works commencing:
 - 2 x Schwegler 1B general purpose nesting box
 - 4 x Schwegler 2GR, oval entrance (30cm x 45cm) nesting box
 - 4 x Schwegler 3S, Starling nesting box
- 3.8.3 All bird boxes to be fitted in accordance with manufacturer's recommendations, at a minimum height of 3m above ground level, using aluminium nails.
- 3.8.4 All bird boxes shall be inspected annually for security and condition and maintained, repaired or replaced as required (see below).
- 3.8.5 The bird boxes chosen have been designed for a variety of common species such as great tit, blue tit, robin and starling, but may also be used by less common species. The boxes will be fitted as per manufacturer's recommendations at a minimum height of 3m in a secure location (to deter tampering). Boxes need not be attached to the main stem but may be fitted to larger branches providing these are capable of supporting the weight of each box and not likely to require removal in the near future (i.e. flimsy, diseased or damaged branches will be avoided).
- 3.8.6 The proposed indicative location of boxes is shown in *Figure 3* below. The areas for the proposed boxes have been chosen to include trees of suitable size, away from possible disturbance from adjacent site usage, and with unobstructed access into suitable foraging habitat both within and beyond the site boundaries.

Bats

- 3.8.7 The proposed bat boxes, 8 x Schwegler 2F general purpose bat box, are designed for small to medium-sized species of bats including all bat species most likely to occur on site and have an integral nursery compartments to allow breeding. The boxes will be fitted to the main stems of the trees at the locations indicated above in an area unobstructed by crossing branches, to manufacturer's recommendations at a minimum height of 3m above ground level oriented broadly south, west and east.
- 3.8.8 Following fitting, all boxes will be checked once annually to check for security and usage, and maintained as follows:

- Bat boxes *not* to be cleaned out unless previously used by birds
- All checks and maintenance to take place between October and March (inclusive) to avoid the main bat roosting season
- Bat boxes must only be checked by a licenced bat worker
- No boxes to be moved and no works to take place in close vicinity (<5m) of any of the boxes during the main bat roosting season (respectively) except under ecological supervision
- Damaged boxes to replaced as required on a like for like basis
- No light from street or security lighting from adjacent parts of the site to be allowed to fall on bat box locations unless of a low-UV design, baffles to be fitted as necessary

Figure 3 Bird and Bat box locations



4.0 Schedule

4.1 Management & Monitoring

4.1.1 The site shall be maintained under the following management regime for a minimum period of 10 years following establishment.

Years 1-5

- Maintenance visits annually to check trees and shrubs 8 times per year, grassland and aquatic vegetation twice per year, and wet grassland once per year, to include mowing, pest/disease control, weed/invasive species control (where required), litter removal, replacement of new trees and shrubs as required;
- Grassland areas within the environmental area to be maintained by mowing/strimming once per year as detailed above;
- Wet grassland/marginal vegetation to be cut annually in the late summer;
- Trees & shrubs to be monitored to check establishment annually for first five years;
- Any losses of new tree or scrub in excess of 20% of the total to be replaced on a like for like basis;
- Any species of tree or shrub in woodland areas that is becoming too dominant to be removed to maintain original proportions (+/-5%);
- In Year 5, 20% scrub areas to be coppiced;
- Scrub management to be implemented if total area increases by more than 15%;
- Management of aquatic vegetation (streamside), as required, including thinning of dominant vegetation (e.g. reeds and rushes), in September or removing seed heads of any dominant species (as soon as seed heads appear);
- Alternative banks of the stream to be cut in the autumn in Year 3;
- Botanical diversity of woodland, trees, shrubs, hedgerows, existing scrub to be assessed once every two years during August;
- Botanical diversity of wetland (streamside) vegetation to be assessed twice annually in spring and summer.
- Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 to be removed and controlled annually, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required

Years 6-10

- Grassland areas to be maintained by once per year mowing regime as detailed above;
- Grassland to be cut twice a year with the first cut between late July and September and the second between December and March;
- Wet grassland/marginal vegetation should be cut annually in the late summer;

- Good arboricultural practice to be implemented to encourage long-term good health and vitality of trees and maintain well balanced crowns;
- Trees & shrubs to be monitored to check for losses and diversity in Year 8 and 10;
- Woody plants to be pruned annually in September mid-October;
- Any losses of trees or shrubs in excess of 20% of the total to be replaced on a like for like basis;
- Any species of tree or shrub that is becoming too dominant to be removed to maintain original proportions (+/-5%);
- In Year 10, trees to be thinned by 30%;
- In Year 10, 20% of shrubs to be coppiced;
- Scrub management to be implemented if total area increases by more than 15%;
- Management of aquatic vegetation (streamside) as required, including thinning of dominant vegetation (e.g. reeds and rushes), in September or removing seed heads of any dominant species (as soon as seed heads appear);
- Alternative banks of the stream to be cut in the autumn in Year 6 and 9;
- Botanical diversity of woodland, trees, shrubs, hedgerows, existing scrub and wetland to be assessed once every two years during August;
- Botanical diversity of grassland to be assessed twice annually in spring and summer
- Any invasive species as listed on Schedule 9 of the Wildlife & Countryside act 1981 (Variation of Schedule 9) (England) (no 2) Order 2021 to be removed and controlled annually, in full accordance with the legislation and current best practice in respect of the species concerned under appropriate licence (IAS A02) as required.

5.0 Responsibilities

- 5.1 The person responsible for carrying out the above works for the duration of the period covered by this plan will be as follows:
 - Appointed Ecologist: Cameron S Crook or his appointed agent
 - Ecological Clerk of Works: As above
 - Site Management: Pure Leisure Site Operations/Grounds Maintenance Team
- 5.2 The planting, monitoring, maintenance and management of trees & shrubs will be carried out by appropriately qualified and/or skilled persons as appointed by the person named in section 5.1 above.
- 5.3 Monitoring of vegetation for biodiversity to be carried out by an appropriately qualified and experienced ecologist appointed by the person named in section 5.1 above.

6.0 References

Arbtech (2023). Preliminary Ecological Appraisal: Bowland Lakes Leisure Village at Cleveley Bridge, Cleveley Bank Lane, Forton, Preston PR3 1BY.

BHS (2008). *Biological Heritage Site Citation: Clevely Woods*. Biological Heritage Site Partnership.

Envirotech (2016). Ecological Appraisal: Cleveley Bridge Fisheries, Forton

The Plant Room (2023). *Proposed landscaping scheme*. Drawing PR/20240101/GA/01 plus associated schedules.