Loch Lomond & The Trossachs National Park Authority
Carrochan
Carrochan Road
Balloch
G83 8EG

[redacted]

Ref: EIR 2024-020
Date 14 November 2024

[redacted]

REQUEST UNDER FREEDOM OF INFORMATION (SCOTLAND) ACT 2002

Thank you for your request for access to information held by the National Park Authority, which we received by email on the 17th of October 2024. The information you have requested is environmental information, as defined in Regulation 2 of the Environmental Information (Scotland) Regulations 2004 (EIRs). We have therefore applied the exemption in section 39(2) of FOISA and dealt with your request under the EIRs alone.

Your Request

Please provide me with the following documentation which is referred to in the delegated report on this application but has been removed from the planning portal:

- *Montage views of the building from the car park and river.*
- *Tree Survey Report*
- *Landscape and Visual Appraisal*
- *Preliminary Ecological Appraisal*
- *Supporting Statement*
- *Photographs towards site from Balloch Park to demonstrate there is no impact on the heritage assets at Balloch Park.*

Please also provide me with a copy of the application form.

Our Response

The information you have requested is attached to this response.

Further Information

If you are unhappy with our decision, you have the right to request that we conduct an internal review of our handling of your request. Further information about the review process, and details of your right to appeal to the Scottish Information Commissioner, are provided below.

Yours sincerely

Information Management
Loch Lomond and the Trossachs National Park Authority

Review Procedure

If you are dissatisfied with this decision, or the way in which the Authority has dealt with your request, you are entitled to require the Authority to review its decision. Please note that in order for a review to take place you are required to:

- Send your request for review in writing, setting out in full the reasons why you are requesting a review.
- Submit your review request within 40 working days of either the date on which you received a response from the Authority or the date by which you should have received a response under the terms of the Freedom of Information (Scotland) Act 2002, whichever is the later.
- address your review request to:

  Information Manager
  Loch Lomond & The Trossachs National Park Authority
  National Park Headquarters
  Carrochan
  Carrochan Road
  Balloch
  G83 8EG
  E-mail: info@lochlomond-trossachs.org

The review will be handled by staff who were not involved in the original decision. You will receive notice of the result of your review within 20 working days.

If you are not satisfied with the response to your request for review, you can contact the Scottish Information Commissioner, the independent body which oversees the Freedom of Information (Scotland) Act 2002, at:

Scottish Information Commissioner
Kinburn Castle
Doubledykes Road
St Andrews
Fife
KY16 9DS
Tel: 01334 464610
Website: www.itspublicknowledge.info
E-mail: enquiries@itspublicknowledge.info

LANDSCAPE AND VISUAL APPRAISAL

IN RESPECT OF PROPOSED RESCUE BOAT STATION

PIER ROAD, BALLOCH, WEST DUNBARTONSHIRE

Prepared by James S. Truscott DipLA (Glos.) CMLI

on behalf of the Applicants, Loch Lomond Rescue Boat

November 2023

THE JAMES TRUSCOTT CONSULTANCY

JTC 23008 Balloch Rescue Boat Station LVA

Status: Final 28.11.21

Contents

List of Figures

1. Introduction

1.1 Author details

1.1.1 The author of this report was a Partner and later Director and co-owner of ASH design+assessment Limited, (ASH), Chartered Landscape Architects, between 1997 and 2018. Since then, he has worked as a freelance landscape consultant and Director of The James Truscott Consultancy Limited (JTC). JTC has been commissioned on this occasion by Loch Lomond Rescue Boat (the Applicant) to produce a Landscape and Visual Appraisal (LVA) (this Report) and to advise The Hay Partnership (the Project Planners) and Gordon Harrison (the Project Architects) on other outline landscape matters in respect of the proposed Balloch Rescue Boat Station (the proposed development).

1.2 Project Background and Outline Development Description

1.2.1 The Applicant is promoting the proposed development at Riverside, Pier Road, Balloch, West Dunbartonshire (see Figure 1 for location plan), which falls within Loch Lomond and the Trossachs National Park Planning Authority (LLTPA) planning jurisdiction. A boathouse and slipway, office, and messing facilities together with associated parking and landscaping are proposed on a relatively narrow, roughly rectangular parcel of land, currently occupied by mainly native trees (hereto referred to as the development site or the site). This lies between the existing Balloch Pier car park immediately to the southwest and the source of the River Leven as it drains Loch Lomond immediately to the northeast. Access would be via a new single-track road opening off Pier Road immediately to the east of the existing pier car park, with new parking for eleven cars provided adjacent, with one disabled space beside the Boat Station. Selective felling of both young and mature, predominantly native trees and shrubs, would be required over the construction footprint.

1.2.2 The sloping mono-pitch roofing, facing the river, would be dark grey metal sheeting. The top half of the building facades will be finished with vertical larch boarding which would be allowed to weather to a light grey colour; and the rendered underbuilding will be coloured dark grey as this would complement the weathered grey timber finish and the roof above. The whole is intended to blend in with the adjacent landscape. External lighting will be Passive Infrared sensor (PIR) controlled and only illuminated when the building is in use (which will mostly be during daylight hours and summer evenings). Planting of native trees, shrubs and hedging around the site periphery, of similar species to those to be felled, would as they grow and mature, help to soften and part-screen the building outline and tie it into the riverside landscape.

1.2.3 Further details of the project may be found in the Design and Access Statement (DAS) and drawings produced by the Project Planners and Architects that accompany and support the Application alongside this Report.

1.3 Approach

1.3.1 As this is a high-level appraisal, potential effects are regarded as “likely” or “potential” and will focus upon those occurring during the operational period, with mitigation factored in; i.e., residual effects. There will therefore be no consideration of either construction effects or decommissioning in this instance.

1.3.2 As the proposal represents a non-EIA development, this report takes the form of a LVA (rather than a full Landscape and Visual Impact Assessment, or LVIA) and makes no reference to “significant effects” as required by the EIA Regulations but does however observe when effects are potentially “notable.”

1.3.3 Planning aspects do not form a part of this Appraisal but are covered by the Project Planners in supporting Application documents.

1.3.4 The LVA involved an initial desk study, reviewing the local baseline, landscape character types, and potential local visual receptor locations.

1.3.5 This was followed by field study to appraise the spatial juxtaposition and composition of the various landscape elements which contribute to the local and regional landscape character. It also included a high-level appraisal of views towards the proposed development from representative viewpoint receptor locations whilst considering existing screening and containment characteristics. Being late autumn when the site appraisal took place it is acknowledged this is not the "worst case scenario," i.e., when deciduous trees and hedgerows have entirely lost their foliage; but this has however been allowed for in the appraisal, using experience combined with professional judgement.

1.3.6 An evaluation was subsequently carried out of the sensitivity of the various landscape components and landscape character types (LCTs) encompassing the site and in the wider focussed study area to development of the type proposed and the sensitivity of visual receptor groups to the potentially changed aspect of their view, bearing in mind the importance of that change to their obtainable views. This was followed by an evaluation of the likely magnitude of change and an appraisal of potential effects of the proposed development.

1.3.7 In addition, as this is a LVA, it focussed only on those aspects and elements of the landscape and visual resource of the study area which are directly impacted, or which potentially may receive indirect effects on account of being intervisible with the proposed development and hence subject to potential change in either characteristics or visual amenity. These areas of study are indicated by the Zone of Theoretical Visibility Diagram as superimposed upon designations (Figure 2) landscape character areas, (Figure 3) and visual receptor routeway and viewpoint locations (Figure 4).

1.3.8 This LVA therefore defines the existing landscape and visual baseline environments; appraises their sensitivity to change; describes the key landscape and visual related aspects of the proposed development; describes the nature of the anticipated changes and appraises the potential effects arising once completed (i.e., residual effects).

1.4 Landscape and Visual Effects

1.4.1 Although closely related, landscape and visual effects differ, and are considered separately in this LVIA for clarity and robustness.

Landscape Effects

1.4.2 The character of the landscape relates to the natural processes and human activities that have been at work over time to shape the land to its present form. Factors contributing to landscape character include topography, vegetation cover, sense of space or enclosure and past and present land use. Landscape character and resources are considered to have an importance in their own right and are valued for their intrinsic qualities.

1.4.3 Landscape effects may occur when elements of the landscape which contribute to its key characteristics are changed.

Visual Effects

1.4.4 Visual amenity relates to the way in which people visually experience the surrounding landscape.

1.4.5 Visual effects may occur through the introduction into established views of new features which modify the existing structure, scale, and composition of the view. Visual effects may also occur where existing features in the view are removed or altered.

1.5 Scope of Appraisal

1.5.1 The LVA considers all aspects of the proposed development during operation. It gives consideration to potential effects on the character of the landscape and also the visual amenity of those present within the landscape.

Zone of Theoretical Visibility (ZTV)

1.5.2 As an aid to establishing the scope for the LVA, ZTVs have been produced for the proposed development and are presented on Figures 2-4 inclusive. The ZTV is a computer-generated diagram which uses a terrain model to indicate areas from which the proposed development would be theoretically visible. The ZTV for the proposed development has been generated using ESRI ArcGIS software based on a terrain modelled using Ordnance Survey (OS) T5 DTM data and has been run from points representing the height of the proposed building.

1.5.3 Whilst the ZTV is a useful tool for establishing potential visibility, it is not indicative of a visual effect in itself; which is dependent on the relationship of potentially visible features within the existing view and setting. The ZTV shows a "bare ground" situation and does not take with account existing visual barriers such as tree groups and buildings.

Study Area

1.5.4 A study area of 1.0 km was used for this LVA. The extent of the study area has been informed through analysis of ZTVs for the proposed development and site survey. The study area comprises the area within which it is considered any "notable" landscape and visual effects would be likely to be experienced.

Consultation with LLTPA

1.5.5 After the initial request to the Applicant for a LVA to support the Application, consultation with LLTPA took place via the Project Planners to agree the scope and approach. The feedback and responses are summarised in Table 1 below. An arboricultural survey was also requested by LLTPA and this is the subject of a separate supporting report by Others.

TABLE 1: LLTPA LANDSCAPE CONSULTATION

LLTPA Landscape/ Visual Issue	Appraisal/ Design Response
The main Special Landscape Quality that will be affected by the proposal would be the banks of broadleaved woodland along the River Leven. The development will lead to a loss of woodland in this location and therefore result in an unavoidable detrimental effect on an important baseline character feature. All opportunities should be taken to minimise the loss of the woodland including careful attention to construction methods and retained tree protection during construction as well as replacement planting. New native tree planting in the gap that now exists to the west between the building and the existing car park would help soften views of the west elevation from the car park and slipway areas.	Retained trees would be fenced off at the root zone extent and protected during construction in accordance with current best practice. Planting of native trees, shrubs and hedging around the site periphery, of similar species to those to be felled are proposed, and would on maturing, help to soften and part-screen the building outline and tie it into the riverside landscape. Details of proposed species can be found in the mitigation section of the report below.

The building ought to be designed so as to be as discrete as possible in this woodland and loch-edge context. The unfinished natural timber cladding suggested for the facades would soften and blend into the landscape over time. All other sections of the building and associated infrastructure should also use muted colours and materials.	The building proposed is a one storey construction and at c.5m at its highest point is a similar or lesser height than the existing nearby pier and steam slipway buildings and the Maid of the Loch steamship currently being renovated on the nearby slipway. Sloping mono-pitch roofing, facing the river, would be dark grey metal sheeting. The top half of the building facades will be larch boarding which would be allowed to weather; and the rendered underbuilding will also be coloured dark grey as this would complement the weathered grey timber finish and the roof above. The whole is intended to blend in with the adjacent landscape.
How the design of the development looks and blends in from the adjacent shore from Balloch Castle Designed Landscape will be important to consider. A landscape and visual appraisal should be undertaken to demonstrate how the building would be viewed from this key public vantagepoint.	The LVA has appraised views from a number of locations within the Designed Landscape including the area around the castle and the river shore opposite.
Lighting (both internal and external) should be only what is necessary…this is to retain the dark skies and minimise light pollution.	External lighting will be Passive Infrared sensor (PIR) controlled and only illuminated when the building is in use (which will mostly be during daylight hours and summer evenings). A night-time appraisal was therefore considered unnecessary and accordingly scoped-out.

2. Appraisal Method

2.1 Appraisal guidance

2.1.1 The LVA has been prepared with reference to the Guidelines for Landscape and Visual Impact Assessment (Third Edition), 2013, published by the Landscape Institute and the Institute of Environmental Management and Assessment (GLVIA3).

Professional Judgement

2.1.2 GLVIA3 places a strong emphasis on the importance of professional judgement in identifying and designing the significance of landscape and visual effects. As part of this appraisal, professional judgement has been used in combination with structured methods and criteria to evaluate value, sensitivity and magnitude and significance of effect.

Key Stages of Appraisal

2.1.3 The GLVIA methodology involves an appreciation of the existing landscape and visual resource and the ability of its key components to accept potential change. An understanding of the proposed changes which could occur and the degree to which they could alter these key components is required. The appraisal considers the potential for changes to result in notable effects and considers the potential to mitigate these effects. There are four key stages to the appraisal:

- Establishment of the baseline;
- Appreciation of the development proposed;
- Identification of key landscape and visual receptors; and
- Identification of potential effects and mitigation measures.

2.2 Establishment of the Baseline

2.2.1 Establishment of the baseline conditions has been undertaken through combination of desk study and site appraisal. The following specific tasks have been undertaken:

- Review of Landscape Character Types and descriptions from the Scottish Natural Heritage (SNH) National Landscape Character Assessment;
- Review of the report on the Special Qualities of the Loch Lomond and the Trossachs National Park (LLTNP) produced by SNH (now NatureScot);
- Review of Historic Environment Scotland (HES) online register of Gardens and Designed Landscapes;
- Review of other desk sources including Ordnance Survey (OS) mapping and aerial photography to identify potential receptors;
- Field Survey and appraisal of individual landscape and visual receptors in terms of their contribution to, and relationship with, the baseline situation.

2.2.2 Establishment of the baseline includes the consideration of the baseline landscape value. The relative value of the landscape is an important consideration in informing later judgement of the degree of effects. Landscape value concerns the perceived importance of the landscape when considered as a whole, and within the context of the study area and is established through consideration of the following factors:

- Presence of landscape designations, other inventory or registered landscapes / landscape features or identified planning constraints;
- The scenic quality of the landscape;
- Perceptual aspects, such as wildness or tranquillity;
- Conservation interests such as cultural heritage features or associations, or if the landscape supports notable habitats or species;
- Recreational value; and
- Rarity, either in the national or local context, or if it is considered to be a particularly important example of a specific landscape type.

2.2.3 It should be noted that absence of a designation does not necessarily mean that a landscape or component is not highly valued, as factors such as accessibility and local scarcity can render areas of nationally unremarkable quality highly valuable as a local resource.

2.2.4 Criteria for the allocation of perceived landscape value are outlined in Table 2 below:

TABLE 2: LANDSCAPE VALUE CRITERIA

Landscape Value	Criteria
High	• The landscape is closely associated with features of international or national importance which are rare within the wider context; • The landscape is of high scenic quality and forms a key part of an important designated landscape or planning constraint; and/or • The landscape is an example of a scarce resource within the local context and is of considerable local importance for its' scenic quality, recreational opportunities or cultural heritage associations.
Medium	• The landscape is associated with features of national or regional importance which are relatively common within the wider context; • The landscape forms part of a designated landscape or is associated with other features of importance but is not rare or distinctive within the local context; and/or • The landscape is one of a number within the local context appreciated for its scenic quality, recreational opportunities or cultural heritage associations.
Low	• The landscape characteristics are common within the local and regional context and the landscape is not associated with any particular features or attributes considered to be important; and/or • The landscape is of poor scenic quality and is not appreciated for any recreational or cultural associations.

Appreciation of the Development Proposed

2.2.5 Appreciation of the proposed development involves the accumulation of a thorough knowledge of the proposal, its nature, scale and location within the baseline landscape, and any peripheral or ancillary features proposed. Analysis of the proposed activities and changes which would take place leads to an understanding of the potential effects that may occur to the landscape and visual resource. In this case a detailed review of the Project

Architect's drawings of the proposed development followed by correspondence on certain technical areas of clarification required, formed the basis of this appreciation.

Identification of Key Landscape and Visual Receptors

2.2.6 The identification of landscape and visual receptors is the first step in the analysis of the potential for significant effects to occur. Landscape and visual receptors can be described as follows:

- **Landscape receptors** comprise key characteristics or individual features which contribute to the value of the landscape and have the potential to be affected by the proposed development. Landscape receptors are identified through analysis of baseline characteristics when considered in relation to the impacts which might result from a development of the type proposed.

- **Visual receptors** comprise individuals experiencing views from locations such as buildings, recognised routes and popular vantage points used by the public. Potential visual receptors are identified through analysis of desk resources, mapping and field survey, as described under 'Establishment of the Baseline' above.

2.3 Identification of Potential Effects and Mitigation Measures

2.3.1 The second step in the appraisal process involves the identification of potential effects which may occur as a result of the interaction the proposed development with the identified landscape and visual receptors.

2.3.2 The appraisal considers direct effects upon existing site landscape components and key characteristics and also indirect effects which may occur secondarily to changes affecting another landscape component or area. The identification of potential effects is a two-fold process, giving consideration to how these effects may arise from aspects of the proposed development and how they may be accommodated by the existing baseline features. Where it is established that potential effects could be limited or reduced by mitigation measures, these are also given consideration.

2.3.3 Potential effects are evaluated through the allocation of criteria for sensitivity and magnitude of change.

2.3.4 Sensitivity considers the nature of the landscape or view and its ability to accommodate development of the type proposed without compromising its key characteristics and components. There are two aspects which are considered when establishing the landscape or visual sensitivity:

- **Value:** the baseline value of the landscape as detailed below and the contributory value of individual landscape receptors to the landscape as a whole; or the value of the overall view and particularly, the affected part of the view, to the viewer; and

- **Susceptibility to change:** the ability of the landscape receptors or existing visual composition to accommodate development of the type proposed without changing the intrinsic qualities of that landscape or view.

2.3.5 It is important to note that the judgement of visual sensitivity is considered in relation to an understanding of both the existing view and the development proposed and therefore perceived value of the area of change as a part of the view as a whole contributes to the sensitivity evaluation.

2.3.6 Criteria for sensitivity are presented in Table 3 below.

TABLE 3: LANDSCAPE AND VISUAL SENSITIVITY CRITERIA

Sensitivity Rating	Landscape Sensitivity	Visual Sensitivity
High	A highly valued landscape of particularly distinctive character susceptible to relatively small changes of the type proposed.	Views from: • Dwellings and publicly accessible buildings where the changed aspect is an important element in the view and there are no detracting features present; and • Recreational routes and locations where the changed aspect is an important element in the view and there are no detracting features present.
Medium	A reasonably valued landscape with a composition and characteristics tolerant of some degree of change of the type proposed.	Views from: • Dwellings and publicly accessible buildings where the changed aspect is a less important element in the view and / or where some detracting features are present; • Recreational routes and locations where the changed aspect is a less important element in the view and / or where some detracting features are present; • Roads and transport routes where the changed aspect is an important element in the view and there are no detracting features present; and • Workplaces where the changed aspect is an important element of the view and there are no detracting features present.
Low	A relatively unimportant landscape which is potentially tolerant of a large degree of change of the type proposed.	Views from: • Dwellings and publicly accessible buildings where the changed aspect is an unimportant element in the view and / or numerous detracting features are present; • Recreational routes and locations where the changed aspect is an unimportant

Sensitivity Rating	Landscape Sensitivity	Visual Sensitivity
		element in the view and / or where numerous detracting features are present; • Roads and transport routes where the changed aspect is a less important element in the view and / or where some detracting features are present; and • Workplaces where the changed aspect is a less important element in the view and / or where some detracting features are present.

2.3.7 Magnitude of change concerns the degree to which the proposed development would alter the existing characteristics of the landscape or view. The appraisal of magnitude involves consideration of the nature and scale of the change which would occur and also duration and potential reversibility of the effect. Only one rating is given for this appraisal; operation, ten years post-completion.

2.3.8 Criteria for Magnitude of Change are detailed in Table 4.

TABLE 4: LANDSCAPE AND VISUAL MAGNITUDE OF CHANGE CRITERIA

Magnitude Rating	Landscape	Visual
High	Notable change in landscape characteristics over an extensive area ranging to a very intensive change over a more limited area.	Where the proposed development would result in a very noticeable change in the existing view.
Medium	Perceptible change in landscape characteristics over an extensive area ranging to notable change in a localised area.	Where the proposed development would result in a noticeable change in the existing view.
Low	Virtually imperceptible change in landscape characteristics over an extensive area or perceptible change in a localised area.	Where the proposed development would result in a perceptible change in the existing view.
Negligible	No discernible change in any landscape characteristics or components.	No discernible change in view.

Appraisal of Effect Significance

2.3.9 Evaluation of the predicted significance of effect has been carried out through the analysis of the anticipated magnitude of change in relation to the landscape or visual sensitivity, taking into account any proposed

mitigation measures, and is established using professional judgement. Only one rating is given for this appraisal; operation, ten years post-completion.

2.3.10 The significance of effect for landscape and visual elements is considered as follows:

Landscape Effects: The appraisal takes into account identified effects upon existing landscape receptors and assesses the extent to which these would be lost or modified in the context of their importance in determining the existing baseline character.

Visual Effects: The appraisal takes into account likely changes to the visual composition, including the extent to which new features would distract or screen existing elements in the view or disrupt the scale, structure or focus of the existing view.

2.3.11 Effect significance has been evaluated using the following criteria in Table 5.

TABLE 5: LANDSCAPE AND VISUAL EFFECT SIGNIFICANCE CRITERIA

Effect Significance	Landscape Effects	Visual Effects
Major	The proposed development would be at considerable variance with the landform, scale and pattern of the landscape and may become an influential feature, resulting in considerable alteration to scenic quality and large-scale change to the intrinsic landscape character of the area	The proposed development would become a prominent and very detracting feature and would result in a very noticeable deterioration to an existing highly valued and well composed view
Moderate	The proposed development would be inconsistent with the landform, scale and pattern of the landscape and may become locally influential and/or result in a noticeable alteration to scenic quality and a degree of change to the intrinsic landscape character of the area	The proposed development would introduce some detracting features to an existing highly valued and well composed view, or would be prominent within a valued or less well composed view, resulting in a noticeable deterioration of the view
Minor	The proposed development would not quite fit with the scale, landform or local pattern of the landscape and may become locally influential but would result in an inappreciable alteration to scenic quality or change to the intrinsic landscape character of the area	The proposed development would form a perceptible but not detracting feature within a valued and well composed view or would be a more prominent feature within a poorly composed view of limited value, resulting in a small deterioration to the existing view
Negligible	The proposed development would result in a virtually imperceptible change in the existing landscape character	The proposed development would form a barely perceptible feature within the existing view and would not result in any

Effect Significance	Landscape Effects	Visual Effects
	of the area	discernible deterioration to the view.

2.3.12 The above criteria and levels of impact represent points on a continuum. Where required, interim ratings, such as Minor-Moderate, have been used to indicate the anticipated level of impact.

3. Landscape and Visual Appraisal

3.1 Assumptions and Limitations

3.1.1 The limitations of the ZTV are as outlined above in 1.5.4.

3.1.2 The longer-term appraisal of operational effects is considered after ten years post-completion, when it is assumed that any mitigation or other planting would have successfully established but may not yet necessarily have matured, depending on species.

3.1.3 For the purposes of this appraisal, following the precautionary principle, all effects assessed as resulting from the proposed development assume the "worst case scenario" i.e., a clear winters day with no foliage on deciduous trees and shrubs; and are in all cases considered to be adverse to a greater or lesser extent.

3.1.4 For the purposes of this appraisal, effects with a rating of Moderate-Major or Major are considered to be potentially notable.

3.2 Baseline conditions; Landscape and Visual Context

Introduction

3.2.1 The proposed development site lies in a semi-rural location within the urban fringes of the northern side of Balloch, on the southern shores of Loch Lomond. As mentioned above in 1.2.1, the site lies within a narrow rectangular parcel of land, currently mostly native riverside woodland, lying between the Balloch Pier car park immediately to the southwest and the source of the River Leven as it leaves Loch Lomond immediately to the northeast.

3.2.2 The area of the proposed development is dominated by the Maid of the Loch steamship, currently being renovated out of the water on the old steam slipway beside the associated historic boatshed. Another more recent slipway lies adjacent, for the launching of boats of all sizes and beside this is the large, modern pier building (Duncan Mills Memorial Slipway and Hall) on the old pier station site; and Balloch Pier itself, now the site of an outdoor café. There is much wharf-side clutter in the area including large storage containers, refuse bins, traffic cones and signage, boats on trailers and a somewhat confused surface agglomeration of public and private car parks, roundabouts and footpaths. A little further downriver are two riverside marinas with boats in various stages of repair and disrepair; all combining locally to reinforce the "marine services" characteristics within which the proposed development would look very much in keeping.

3.2.3 To the west of the site but largely screened from it by mounding and tree planting, is Drumkinnon Bay, enclosing the "Loch Lomond Shores" development; a crescent of two-storey retail units overlooking the bay adjacent to the locally dominant three-storey "Sea Life Centre" building and associated car parking. To the north on the old Cameron Bear Park site is a boat sales and services centre, and to the north of that, chalets, a marina and "The Boathouse" restaurant and bar, all part of the Cameron House Hotel loch-side development.

3.2.4 To the south of the site, but largely buffered from it by tree groups alongside the River Leven, the landscape is characterised by the developed outskirts of Balloch, a village on the northernmost outskirts of the Vale of Leven conurbation which includes Alexandria, Renton, Bonhill and Jamestown. Composed of residential development of mixed age and type, there is a railway station and shops, a post office, pharmacy, hotels, and restaurants focussed on the village centre at the bridge crossing. The river itself, at this location, is characterised by large loch trip boats and moored boats, all of which use the river to access Loch Lomond, near to the site.

3.2.5 To the east of the site on the opposite bank of the River Leven, lies Balloch Country Park, which is open to the public and is well-used by local people and visitors alike. It is accessed on foot from the village along the riverside and from a formal entrance to the east; and by car and pedestrians from the car park near the castle to the northeast. Rising to above 50m AOD, its wooded slopes have panoramic views over the southern shores of Loch Lomond as described above. The focus of the park is Balloch Castle, currently undergoing renovations. The Country Park as a whole is a designated historic garden/ designed landscape as described below in more detail in 3.2.10-3.2.13

National Landscape Designations (see Figure 2)

Loch Lomond National Scenic Area (LLNSA)

3.2.6 The LLNSA lies just outwith the study area to the north and northeast; and hence is not considered further in this report.

Loch Lomond and Trossachs National Park (LLTNP)

3.2.7 The Site falls within the LLTNP which has a number of identified "Special Landscape Qualities."[1] Of these, the woodland qualities of the lochside and along the River Leven have been highlighted by LLTPA for consideration in the appraisal (see above, Table 1).

3.2.8 These woodland qualities demonstrate "…a distinct sense of place and a luxuriant sense of growth, fertility and shelter in comparison with the high, rugged mountain tops and rough, uneven, steep and often deeply fissured hill slopes. Frequently, woodlands or groups of trees fill the promontories jutting out into the water, emphasising the sinuous loch shore, and contributing to low-lying watery views receding into the distance. Woodlands structure the landscape further by framing near and distant views to opposite shores and high mountain tops."

3.2.9 Its sensitivity to change of the type proposed in the location proposed, is considered to be **Medium.**

Balloch Castle Gardens and Designed Landscape (GDL 00042)

3.2.10 The HES designation entry[2] states that the GDL lies "…within a spectacular lochside setting, the landscape park typical of the early 19th century remains strongly evident, while improvements in the second half of the 20th century, associated with Country Park status, introduced shrubberies and woodland walks." Artistic, architectural and scenic attributes are all listed as "outstanding"; with horticultural and nature conservation aspects rated as "high".

3.2.11 The entry goes on to record that "…the Castle designed by Robert Lugar in 1809 is listed category B…there are two main areas of pleasure grounds; the first is immediately to the north of the house and consists of small terraced paths in the shape of a capital D which enclose a seating area and fountain …the second area of ornamental planting, interspersed with woodland walks, surrounds the walled garden to the south of the Castle; many of the original hedges are now overgrown although some topiary remains." It goes on to note that "…a circular walk links the Castle with both pleasure gardens and follows a path through the northern wood to the shore of Loch Lomond, then extends south along the lochside past the slipway and the si(t)e of the old Balloch Castle (a Scheduled Ancient Monument) and along the east bank to the River Leven towards Balloch." It is this latter area which lies opposite the site across the River Leven.

3.2.12 The entry notes regarding the parkland that it "…has retained its character and is well stocked with individual parkland trees (and)…provides a fine setting to the house and is particularly significant from the loch and the

[1] Scottish Natural Heritage and Loch Lomond and The Trossachs National Park Authority (2010). The special landscape qualities of the Loch Lomond and The Trossachs National Park. Scottish Natural Heritage Commissioned Report, No.376 (iBids and Project no 648).

[2] http://portal.historicenvironment.scot/designation/GDL00042

opposite west bank." It also notes that "…the mixed deciduous woodland belts surround the Park and effectively screen it from the surrounding road and housing estate to the south…Moss Plantation to the south of the Park was planted in the early 1900s and has been partially felled for additional parking spaces."

3.2.13 Its sensitivity to change of the type proposed is considered to be **Medium.**

Local Landscape Designations

3.2.14 There are no local landscape designations within the study area.

Landscape Character; Scotland's Landscape Character Types

3.2.15 Between 1994 and 1999, Scottish Natural Heritage (SNH) commissioned a series of thirty regional Landscape Character Assessment (LCA) studies. Each study typically covered a local authority area. Since the studies were produced there have been significant advances in digital technology; additional complementary datasets produced; and changes in development patterns and pressures.

3.2.16 In 2019, in response to these changes and to ensure consistency in approach across Scotland, SNH reviewed Scotland's 1990s LCAs at the level of Landscape Character Type (LCT), which is defined as an area of consistent and recognisable landscape character. Building on the original LCA studies, a single Scotland-wide dataset was created which can be viewed online within the Scottish Landscape Character Types Map and Descriptions.

3.2.17 It should be noted that since August 2020, SNH has been re-branded as NatureScot.

3.2.18 As can be seen from Figure 3, the Study Area for the proposed development falls within three of these NatureScot LCTs:

- LCT261 – Rolling Farmland – Loch Lomond and the Trossachs
- LCT263 – Lowland Loch Basin - Loch Lomond and the Trossachs; and
- LCT0 - Urban.

3.2.19 As can be seen in Figure 3, LCT 261 only impinges on the periphery of the study area to the northeast and following field appraisal was found not to be intervisible with the proposed development due to foreground trees. Consequently, for the purposes of this study, it has been scoped out and not considered further in the appraisal.

3.2.20 The Urban LCT is not allocated an LCT number or description, and following field appraisal was found not to be intervisible with the proposed development due to foreground trees and/ or buildings. Consequently, for the purposes of this study, it has been scoped out and not considered further in the appraisal.

LCT263 – Lowland Loch Basin - Loch Lomond and the Trossachs: Baseline Description

Key Characteristics Relevant to Study Area	• Expansive loch basin rising to steep-sided hills and mountains to the east and west, and a low ridge to the south. • Shoreline of rocky promontories and sand or pebble beach. • Breaking down the expanse of water visible in loch or shore views to form narrow straits and more intimately scaled areas of water. • Extensive native oak dominated woodlands fringing the

	eastern side of the loch and wisps of birch threading up through narrow gullies which cut deeply into bracken/rough grass covered hill slopes. • Well-settled loch margins with tourism and recreation developments such as chalet parks, golf courses and hotels, some accommodated in former estates. • The settlement of Balloch has a more urban character. • Loch shores a focus for estates and their designed landscapes with mixed policy woodlands and parkland contributing to the diversity of the loch basin. • The heavily trafficked A82 aligned close to western side of the loch. Views to the Loch often restricted by shoreline vegetation. • Boating activities including sailing, canoeing, kayaking, and power boats and other sport activities such as jet skis on Loch Lomond. Ferries are a feature of the water bodies. • Highly scenic landscape composition of island, water and indented shoreline, especially when viewed from surrounding hills and the south of the loch. • At the southern end of this character area is Balloch, the most significant settlement on Loch Lomond, with a pier, slipway and associated buildings on the shoreline. It is dominated by the designed landscape of Balloch Castle on the eastern shores and the western shore has remnant ancient woodland integrated with post-industrial self-colonised woodland.
Landscape Susceptibility to change of type proposed	Although this area is generally rural or semi-rural in nature, within the study area it has some urban fringe characteristics as it is located immediately north and adjacent to LCT:0 Urban, represented here by the edge of Balloch. The site itself lies within an area of marine services developments of a similar size and scale to the proposed development and also adjacent to major commercial loch-side developments. Landscape Susceptibility to change of the type proposed is therefore considered to be **Low-Medium**
Landscape Value	This landscape falls within the nationally designated LLTNP and in addition forms a locally valued edge to the Vale of Leven to the south. On a national level it is widely regarded as the “Gateway to the Highlands” for Glasgow and the Central Belt - and for tourists from further afield, and the Loch as a whole is celebrated in song, poetry and prose. The LCT within the study area therefore forms an important transition between the urban edges of the Vale of Leven conurbation to the south and the more remote and largely and less settled Loch Lomond landscapes to the north.Landscape Value is considered to be **Medium-High**

Visual Receptors

3.2.21 Visual Receptors are people experiencing visual amenity from different locations with differing sensitivities to the changed view, as described above in 2.3.4-2.3.6.

3.2.22 Within the study area the visual receptors identified can be subdivided into three separate categories:

- Those obtaining views from outside publicly accessible buildings;
- Those obtaining views from outdoor locations accessible to the public; and
- those obtaining views from routeways.

3.2.23 These have been appraised on site from a number of representative viewpoints (VPs) as listed in Table 6 below.

TABLE 6: REPRESENTATIVE VIEWPOINT LOCATIONS

VP	Location	OS Grid Ref.	Receptors Represented by VP
1	Steam Slipway Boathouse	NS38597,82452	Visitors to boathouse, steamship Maid of the Loch and pier house slipway
2	River Leven, west riverside beach, south of site	NS38762,82427	Pedestrians using riverside beach and nearby core footpath S0777; walkers on John Muir Way
3	Balloch Pier Head	NS38512,82587	Visitors to pier, pier building and café and to those assimilating views from this destination vantage point; boats arriving and departing from adjacent pier slipway and heading for the River Leven
4	Disused slipway at mouth of Drumkinnon Bay	NS38381,82405	Pedestrians on woodland/lochside walks west of Drumkinnon Bay
5	"The Boathouse" restaurant/bar and adjacent marina	NS37892,82737	Visitors on outside areas of restaurant/bar and marina
6	Balloch Castle, Balloch Country Park, GDL	NS39021,83028	Pedestrians visiting outside of castle and gardens in GDL on core paths S0667/S0755 and assimilating panoramic view; walkers on John Muir Way
7	Slipway by Boathouse, Balloch Country Park, GDL	NS38686,82975	Pedestrians visiting Country Park /GDL on lochside core paths S0791 and S0161 and assimilating lochside view; walkers on John Muir Way; users of adjacent

			play park and café (when open)
8	River Leven, east riverside picnic area, in Balloch Country Park, GDL, east of site on opposite side of river	NS38710,82546	Pedestrians in Country Park/ GDL using riverside picnic area and nearby lochside core footpath S0787; walkers on John Muir Way; passing boats on River Leven
9	East riverside footpath by car park & slipway, Balloch	NS39066,82146	Pedestrians on riverside core footpaths S0780; S0159; walkers on John Muir Way; users of boats and slipway on River Leven

3.2.25 VP locations included in the appraisal are located in Figure 4 and fully described and appraised in Table 10 below.

3.2.26 In terms of receptors on recognised routeways and having checked potential visibility as indicated by the ZTV against actual visibility in the field, the following were scoped out due to very limited, or no intervisibility with the proposed development due to foreground/ midground tree groups, buildings, or localised topography;

- Traffic-Free Cycle Route 7, through Balloch Castle Country Park, Loch Lomond Shores and along the Old Luss Road;
- Pier Road up to the junction with Ben Lomond Way;
- Balloch Road and Leven Bridge, Balloch;
- A811;
- A82;
- Railway Line and Balloch Station;
- Core Paths west and southwest of River Leven; S0786 /S0661/62/(Old Luss Road/Lower Stoneymollan Road); S0711/12/13/14; SO658/59 (Lomond Shores); S0774(Ben Lomond Way); S0172/S0651 (Balloch Road)
- Core Paths east of River Leven; S0649 (Balloch Road); S0775 (Carrochan Road/A811); S0778 (Drymen Road); S0166/67/68;S0153/157;S0863 (Moss o'Balloch); S0160;S0162;S0663;S0666; S0170;S0175; S0791;S0806; S0872/74/78/79; (Balloch Country Park)

3.2.27 These can all be located on Figure 4.

3.3 Potential effects

Mitigation

3.3.1 Potential effects have been appraised after considering inherent mitigation measures designed into the project, which are summarised below.

3.3.2 The architectural design contains a number of features which would mitigate potentially adverse landscape and visual effects. These are outlined above in Table 1 and described in further detail in the DAS submitted in support of the application.

3.3.3 The building layout produced by the Project Architects has also been submitted as part of the Application and illustrates the following landscape and visual mitigation features.

- To help screen parked cars and views of the proposals from the existing car park, the steam slipway area (VP1), and Pier Road, the existing hedgerows adjacent to the existing car park and peripheral young birch trees immediately adjacent to the new car park , will be retained and protected; as will any other trees which do not have to be removed for construction purposes.

- Additional planting of native trees and shrubs within the site boundaries in the locations indicated on the Architects plans will provide some screening and softening to the building. Initially planted as three-year old transplants, these would develop in size and maturity over the first ten years.

- Additional hawthorn hedging to the north and south of the building would both aid screening effects and help security.

3.3.4 Native tree and shrub species would be selected to reflect those which will be removed for construction, and would be suitable for this riverside location, as follows.

- Alnus glutinosa (Alder)
- Betula pubescens (Downy Birch)
- Corylus avellana (Hazel)
- Crateagus monogyna (Hawthorn)
- Quercus petraea (Sessile Oak)
- Salix caprea (Goat Willow)
- Tilia cordata (Small-Leaved Lime)

Residual Effects

3.3.5 The mitigation measures proposed should are considered integral to the design of the proposed development and therefore the appraisal of operational landscape and visual effects assumes that these mitigation measures would be implemented and that plants will grow successfully. The operational effects identified after ten years should therefore be considered as the residual effects.

3.4 Landscape Effects

3.4.1 The extent to which the proposed development would affect the existing landscape varies depending on the individual components of the project and the ability of the existing landscape to accommodate these various components. This Section provides an appraisal of the effects of the proposed development on the LCT within the Study Area, which then feeds into an appraisal of effects on the Special Qualities and integrity of the LLTPA and the Balloch Castle GDL.

Landscape Character

3.4.2 The following section provides an appraisal of the effects that the proposed development would have on the LCT and designated landscape areas within the study area during the operational phase, in accordance with the effects criteria outlined in the methodology above.

TABLE 7: LCT263 LOWLAND LOCH BASIN LOCH LOMOND AND THE TROSSACHS: APPRAISAL OF EFFECTS

Relevant Local Landscape Receptors	• Shoreline of rocky promontories and sand or pebble beach. • Breaking down the expanse of water visible in loch or shore views to form narrow straits and more intimately scaled areas of water. • Extensive native oak dominated woodlands fringing the eastern side of the loch and wisps of birch threading up through narrow gullies which cut deeply into bracken/rough grass covered hill slopes. • Well-settled loch margins with tourism and recreation developments such as chalet parks, golf courses and hotels, some accommodated in former estates. • Loch shores a focus for estates and their designed landscapes with mixed policy woodlands and parkland contributing to the diversity of the loch basin. • The heavily trafficked A82 aligned close to western side of the loch. Views to the Loch often restricted by shoreline vegetation • Boating activities including sailing, canoeing, kayaking, and power boats and other sport activities such as jet skis on Loch Lomond. Ferries are a feature of the water bodies. • Highly scenic landscape composition of island, water and indented shoreline, especially when viewed from surrounding hills and the south of the loch. • At the southern end of this character area is Balloch, with an urban character and the most significant settlement on Loch Lomond, with a pier, slipway and associated buildings on the shoreline. It is dominated by the designed landscape of Balloch Castle on the eastern shores and the western shore has remnant ancient woodland integrated with post-industrial self-colonised woodland.
Landscape Sensitivity	This is a medium-high valued landscape with low-medium susceptibility to change of the type proposed. Sensitivity to change of type proposed is considered to be **Medium**

Local Landscape Receptors with potential to receive direct and indirect effects	• Sand/pebble shoreline of upper River Leven • Extensive native oak dominated woodlands fringing the shores of the Loch and River Leven • Nearby tourism and marine developments • Pier, slipway and associated buildings on the shoreline • The designed landscape of Balloch Castle
Local Landscape Character Description	As observed above, the area of the proposed development is dominated by the Maid of the Loch steamship, on the slipway beside the historic boatshed. Another more recent slipway lies adjacent to the large, modern pier building and Balloch Pier, site of an outdoor café. There is much wharf-side clutter in the area including large storage containers, large refuse bins, public and private car parks, boats on trailers and a short distance further downstream, two riverside marinas. These features all combine locally to reinforce the "marine services" local landscape characteristics, within which the proposed development would look very much in keeping.
Potential Effects	Direct effects would arise from the selective removal of predominantly native, young and mature trees and shrubs. There would however be limited potential indirect effects, due to screening by extensive adjacent woodland (West Riverside) and estate woodland (Balloch Castle Country Park) as well as buildings and the Maid of the Loch (Pier area) and tree planting and mounding (Lomond Shores).
Magnitude of Change	Direct change on the site would initially be High, reducing to **Medium** after mitigation planting has grown and matured. Elsewhere due to distance and limited intervisibility, indirect magnitude of change is anticipated to be Low reducing to **Negligible** after ten years with the growth of mitigating tree and hedge planting.
Effects Significance	Bearing in mind the Medium sensitivity, direct landscape effects on the site would initially be Moderate-Major, reducing to **Moderate** after mitigation planting has matured. Elsewhere in the LCT due to existing local characteristics described above, distance and limited intervisibility, indirect degree of landscape change is anticipated to be Low reducing to **Negligible** after ten years with the growth of mitigating tree and hedge planting. These are not considered to be notable residual landscape effects.

TABLE 8: BALLOCH CASTLE GDL

Relevant Local Landscape Receptors	• Balloch Castle designed by Robert Lugar in 1809 is listed category B • There are two main areas of pleasure grounds; the first is immediately to the north of the house and consists of small, terraced paths in the shape of a capital D which enclose a seating area and fountain …the second area of ornamental planting, interspersed with woodland walks, surrounds the walled garden to the south of the Castle • A circular walk links the Castle with both pleasure gardens and follows a path through the northern wood to the shore of Loch Lomond • The walk extends south along the lochside past the slipway and the site of the old Balloch Castle and along the east bank to the River Leven towards Balloch. It is this area which lies opposite the site across the River Leven • The parkland provides a fine setting to the house and is particularly significant from the loch and the opposite west bank • The mixed deciduous woodland belts surround the Park and effectively screen it from the surrounding road and housing estate to the south
Landscape Sensitivity	This is a medium-high valued landscape with low-medium susceptibility to change of the type proposed. Sensitivity to change of type proposed is considered to be **Medium**
Local Landscape Receptors with potential to receive indirect effects	• The walk which extends south along the lochside past the slipway and the site of the old Balloch Castle and along the east bank to the River Leven towards Balloch. It is this area which lies opposite the site across the River Leven • Extensive native oak dominated woodlands fringing the shores of the Loch and River Leven • The mixed deciduous woodland belts which surround the Park
Potential Effects	There would be no direct effects. Indirect effects on landscape receptors would be very localised; arising on a short section of the riverside walk due to the local character being changed across other side of the River Leven. There would furthermore be very limited potential indirect effects to landscape receptors elsewhere in the GDL, due to screening by extensive adjacent mature policy woodland.

Magnitude of Change	Indirect magnitude of change is therefore anticipated to be locally Medium-High reducing to **Medium** after ten years with the growth of mitigating tree and hedge planting. Elsewhere in the GDL the degree of change would be **Negligible.**
Effects Significance	Bearing in mind the Medium sensitivity and Medium degree of change local to the site, indirect landscape effects on the GDL would initially be locally Moderate-Major, reducing to **locally Moderate** after mitigation planting has matured and softened and part-screened the building outline. Elsewhere in the GDL due to limited or no intervisibility, the indirect degree of landscape change is anticipated to be **Negligible.** These are not considered to be notable residual landscape effects.

LLTNP

3.4.4 The landscape effects of the proposed development on the LLTNP would be very similar to those predicted for LCT263 – Lowland Loch Basin - Loch Lomond and the Trossachs i.e., Direct landscape effects on the site would initially be Moderate-Major, reducing to **Moderate** after mitigation planting has matured.

3.4.5 Elsewhere due to existing local characteristics described above, distance and limited intervisibility, indirect degree of landscape change is anticipated to be Low reducing to **Negligible** after ten years with the growth of mitigating tree and hedge planting.

3.4.6 This would not therefore lead to any notable residual adverse effects on the LLTNP Special Qualities described above in paragraph 3.2.8; nor would it have any effect upon the overall integrity of the LLTNP.

Summary of Residual Landscape Effects

Anticipated residual landscape effects arising from the proposed development and the reasons behind these appraisals are described in detail above, in paras. 3.4.1 to 3.4.6 inclusive, and the overall findings are summarised in Table 9 below. As previously stated, for the purposes of this appraisal, those effects with a Moderate-Major rating or greater should be considered to be notable.

TABLE 9: SUMMARY OF RESIDUAL LANDSCAPE EFFECTS (AFTER 10 YEARS)

LCT /Designation	**Negligible**	**Negligible-Minor**	**Minor**	**Minor - Moderate**	**Moderate**	**Moderate - Major**
LCT 263; **Direct Effects** (Localised to Site)					X	
Indirect Effects	X					
Balloch Castle GDL (L)=Localised opposite site **Indirect Effects**	X				X (L)	
LLTNP **Direct Effects** (Localised to Site)					X	
Indirect Effects	X					

3.4.7 As can be seen from the table, although LCT263 Lowland Loch Basin would potentially receive **Moderate direct** residual effects **on the site** after ten years taking account of the maturing mitigation planting, in terms of indirect effects on the wider LCT, effects would potentially be **Negligible and indirect**. This would be due to compatibility with the localised "marine services" landscape context or limited/no intervisibility with the proposals on account of screening by foreground or mid-ground tree groups, woodland, localised topography, or buildings. These are not notable effects.

3.4.8 The same effects apply equally to the LLTNP, of which the LCT forms a part. The proposals would not therefore lead to any notable adverse effects on the LLTNP Special Qualities described above in paragraph 3.2.8; nor would it have any effect upon the overall integrity of the LLTNP.

3.4.9 The Balloch Country Park GDL would potentially receive **very localised** and **Moderate indirect** residual landscape effects along the riverside walk on the opposite bank of the Leven near to the site. Elsewhere the GDL would be likely to receive **Negligible** effects due to the screening of the adjacent policy woodland.

3.4.10 The proposals would not therefore lead to any notable residual adverse effects on the GDL Special Qualities described above in Table 8; nor would it have any effect upon the overall integrity of the GDL.

3.5 Visual Effects

3.5.1 This Section gives a description of predicted effects on visual receptors identified within the Study Area. Individual receptor references relate to locations indicated on Figure 4 and described in detail in below in Table 10.

TABLE 10: EFFECTS ON RECEPTORS NR.REPRESENTATIVE VIEWPOINT LOCATIONS AND ON ROUTEWAYS

VP	Location/ Receptors	Description of View	Sensitivity	Change to view	Residual Magnitude	Potential Residual Effect
1	**Steam Slipway Boathouse** Visitors to boathouse, steamship Maid of the Loch and pier house slipway	Maid of the Loch on slipway, pier house, steam slipway boathouse, pier house; cars with boats on trailers in foreground awaiting launch; pier car park surrounded by hedges with riverside trees in background; clutter by Maid of Loch and elsewhere; bins, containers, traffic cones, signs, rescue boat on trailer	Medium	Riverside trees in background removed; roof and top of rear wall of proposed building visible over hedges in its place; but seen in context of existing nearby built development of similar size, scale, type. Mitigation planting would soften/ part-screen building outline after 10 years	Low-Medium	Minor-Moderate
2	**River Leven, west riverside beach, south of site** Pedestrians using riverside beach and nearby core footpath S0777; walkers on John Muir Way	Riverside trees on either side frame view to Loch Lomond in direction of site; and in opposite direction, views downriver of moored boats	Medium	Removal of trees not notable due to foreground filtering/ screening by trees. Proposed building also partially screened /filtered by retained riverside trees in views towards loch; but slipway visible. Mitigation proposals will assist in reducing longer term effects by softening the edges of the building and tying it into the landscape.	Low	Minor-Moderate

3	**Balloch Pier Head** Visitors to pier, pier building and café and to those assimilating views from this destination vantage point; boats arriving and departing from adjacent pier slipway and heading for the River Leven	Panoramic views in all directions of Loch Lomond, with mid-distance views of Inchmurrin Island and Ben Lomond in the background to the north. To the south, views are dominated in the foreground by The Maid of the Loch on the slipway, the Pier building, and the "Sea Life Centre" building.	High	Views of the proposals including tree removal from this location are opposite to the main focus of views and would largely be screened by foreground riverside trees, shipping containers, and the old station building.	Negligible	Negligible
4	**Disused slipway at mouth of Drumkinnon Bay** Pedestrians on woodland/lochside walks	Panoramic views to the north of Loch Lomond, with mid-distance views of Inchmurrin Island and Ben Lomond in the background. To the east, views are focussed in the foreground on The Maid of the Loch on the steam slipway, the associated boathouse and Balloch Pier. The Lomond Shores Development is mostly screened by foreground trees.	High	Views of the proposals including tree removal from this location will largely be screened by the Maid of the Loch and the boathouse building with a glimpse of the proposed building in the gap between. Proposed tree planting will in due course screen/ filter even this glimpse.	Negligible	Negligible
5	**"The Boathouse" restaurant/bar terrace and adjacent marina** Visitors to restaurant/bar terrace and marina	South-facing views over marina towards Balloch Pier, Pier House and Maid of the Loch in mid-ground, with Balloch Country Park in the background.	Medium-High	Views of the proposals including tree removal would be relatively distant and largely screened by the Maid of the Loch and the boathouse building with a glimpse of the proposed building between these elements and the Pier building.	Negligible	Negligible

				Proposed tree planting will in due course screen/ filter even this glimpse.		
6	**Balloch Castle, Balloch Country Park, GDL** Pedestrians visiting castle and gardens in GDL on core paths S0667/S0755 and assimilating panoramic view; walkers on John Muir Way	Panoramic elevated westerly views over policy woodland and parkland in foreground and Drumkinnon Bay and Cameron House development with hills behind.	High	Views of the proposals from this location would be screened by foreground policy woodland.	Negligible	Negligible
7	**Slipway by Boathouse, Balloch Country Park, GDL** Pedestrians visiting Country Park /GDL on lochside core paths S0791 and S0161 and assimilating lochside view; walkers on John Muir Way; users of adjacent play park and boathouse café (when open)	East-facing lochside view taking in Balloch Pier, Maid of the Loch, "Sea Life Centre," Drumkinnon Bay, "Boathouse Restaurant", marina and Cameron House.	Medium-High	The proposed development would be screened by mid-ground trees at the mouth of the River Leven.	Negligible	Negligible
8	**River Leven, east riverside picnic area, in Balloch Country Park, GDL, east of site on opposite side of river** Pedestrians in Country Park/ GDL using riverside picnic area and nearby lochside core footpath S0787; walkers on John Muir Way; passing boats on	Riverside trees on either side frame view to Balloch Pier to north; and to south, views downriver of moored boats. Filtered views of the pier car-park, steam slipway boatyard, the old station building, can be seen through riverside trees opposite.	Low-Medium	In views from the picnic area, footpath and passing boats, the tree removal and proposed building on the opposite shore would be very noticeable. However, the new building would be seen in the context of other nearby buildings in the background and on entering the river from the loch.	Medium-High	Moderate

	River Leven			Mitigation would assist in reducing longer term effects by softening the edges of the building and tying it into the landscape.		
9	**East riverside footpath by car park & slipway, Balloch** Pedestrians on riverside core footpaths S0780; S0159; walkers on John Muir Way; users of boats and slipway on River Leven	Views across and up the River Leven, with foreground dominated by Balloch Bridge and moored boats with large trip boats manoeuvring opposite. The riverside is bordered by woodland on both sides.	Low	Views of the proposals from this location including tree loss will be largely screened by adjacent woodland, foreground moored boats and ultimately mitigation planting.	Low	Minor

Summary of Residual Effects on Visual Amenity

3.5.2 As previously stated, for the purposes of this appraisal, those effects with a Moderate-Major rating or greater are for the purposes of this study considered to be "notable". Nine VPs representative of visual receptor views falling within the ZTV throughout the study area were reviewed for potential adverse effects. It should however be borne in mind that the ZTV shows "bare ground" and does not reflect screening by woodland or buildings. This was reviewed on site and the findings are reflective of this.

3.5.3 The appraisal identified that no publicly accessible spaces outside buildings, outdoor spaces or route receptor locations within the study area would be likely to receive notable adverse residual effects after ten years. This is due to a combination of;

- Foreground or mid-ground screening/ filtering effects by trees/ woodland, buildings and artefacts and / or localised topography; reducing a majority of intervisibility to a very limited and localised area near the source of the River Leven as it exits Loch Lomond (ref. Balloch Pier, West Riverside River Leven Beach and East Riverside Picnic Area, VPs 2,3,&8) and an already developed small landward area just south of Balloch Pier (ref.VP1);

- Where visible, the changed element would frequently comprise a negligible, small, or less important element in the overall view;

- Existing localised visual context of marine-themed buildings and facilities forming the backdrop to many of the views, thereby reducing both the sensitivity to, and magnitude of, the proposed changes;

- Mitigation proposals for planting native trees, hedging and shrubs, aiming with developing maturity to screen, filter and soften the views of the proposed building and help it blend into the adjacent riverside landscape.

3.5.4 It should further be noted that, as appraised at VPs 6, 7 and 8 (see above, Table 10) no notable residual visual effects arising from the proposed development are likely to accrue to the Balloch Castle GDL. Although on the opposite side of the River Leven, (ref. VP 8), due to the existing background building context and screening function of existing riverside and policy woodland, effects would be very localised and limited to a short section of footpath and a picnic area. After landscape mitigation, the level of residual visual effects are considered to be potentially very localised and **Moderate**.

4. Overall Conclusions

4.1.1 Mitigation planting of native trees, hedging and shrubs is proposed, aiming with developing maturity to screen, filter and soften the views of the proposed building; which, together with the single storey building design and colour scheme, would help it blend into the adjacent riverside landscape; thus, helping to reduce residual effects to below notable levels. Furthermore, lighting during the hours of darkness is considered highly unlikely, thereby reducing or eliminating potential adverse effects during these periods. This was all taken account of in the appraisal.

4.1.2 LCT263 Lowland Loch Basin would be likely to receive no notable residual landscape effects. This would be due to compatibility of the scale and nature of the proposed development with the localised "marine services" landscape context and/or limited or no intervisibility with wider landscape receptors, on account of screening by foreground or mid-ground woodland, localised topography, or buildings.

4.1.3 The proposals would equally not lead to any notable adverse effects on the LLTNP Special Qualities; nor would it have any effect upon the overall integrity of the LLTNP.

4.1.4 Localised adverse residual landscape and visual effects would occur in the Balloch Castle GDL opposite the proposed development across the River Leven, but these would not be notable in the longer term either in landscape or visual terms; nor would they lead to any notable adverse effects on the GDL Special Qualities or the overall integrity of the designation.

4.1.5 The appraisal further identified that no outdoor spaces, publicly accessible outside spaces by buildings or route receptor locations within the study area would be likely to receive notable adverse visual residual effects after ten years. This is due to screening/ filtering effects by trees/ woodland, buildings and artefacts reducing a majority of intervisibility to a very limited and localised area near the source of the River Leven as it exits Loch Lomond together with a small landward area at the head of Pier Road. Where visible, the proposed development would frequently comprise a negligible, small, or less important element in the overall view.

4.1.6 Furthermore, the appraisal found that existing localised visual context of marine-themed buildings and facilities forming the backdrop in many views had the effect of reducing both the sensitivity to, and magnitude of, any proposed changes.

4.1.7 Overall therefore, this appraisal has found that the residual adverse effects arising from the proposed development would not constitute a notable change, either to the landscape or visual resource of the study area.

Report on tree survey at Balloch Pier, Balloch

Commissioned by Loch Lomond Rescue Boat

By Keith Logie MICFor

25 October 2023

Keith Logie MICFor BSc (Hons)
Chartered Forester
[redacted]
Edinburgh
[redacted]

1. General introduction and summary

This tree survey has been carried out for the Loch Lomond Rescue Boat. It relates to 77 trees and a woodland group within and adjacent to the site. The survey has been commissioned because there is a proposal to build a new slipway with access road on the site. The proposal will involve the removal of at least 70 trees of 150mm diameter or larger, and a number of smaller trees. Trees standing outside the site boundary may need protection depending on the nature of excavations close to them. The loss of woodland would amount to about 0.13 ha and may be subject to Scottish Government policies relating to control of woodland removal. The report consists of:

- this written section;
- 4 no drawings showing: an overview of tree positions; surveyed trees with woodland groups and hedges shown; surveyed trees with their root protection areas; and finally trees removed with the likely tree retentions and the position of temporary protective fences.
- the schedule.

2. Site description

The site is within the Loch Lomond & Trossachs National Park, comprises roughly 0.13 hectares and is occupied by a woodland which is adjacent to a relatively new car park surrounded by a hedge. To the south is the Balloch Pier access road and roundabout; to the north is the River Leven, close to where it meets Loch Lomond; to the west is the car park; and to the east is continuous woodland. Elevation is about 10m above sea level with a moderately sheltered aspect.

3. The Tree Survey

77 trees and one woodland group within and adjacent to the site have been recorded and assessed. Trees were tagged at about 1.8m with a round metal tag. Trees smaller than 15cm DBH and bushes were not tagged or recorded in detail. Tag numbers are 7066 – 7143. Fieldwork was done on 24 October 2023.

The location of some of the trees has been plotted according to the topographic survey supplied. Most of the trees actually present on site had been omitted from the topo so these were plotted by handheld GPS with an accuracy of 2-3m at best. Prior to construction tree positions should be adjusted if necessary by a suitably detailed topographic survey. Information on each numbered tree is provided in the attached Tree Survey Schedule. The position of the trees is shown on the attached drawings.

All trees within the site have been ascribed a Retention Category. In line with the recommendations contained within BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations", this takes account of the health, condition and future life expectancy of the tree, as well as its amenity and landscape value. The retention category for each tree is shown in the Tree Survey Schedule which records relevant data and comments on condition.

A – High category: trees whose retention is most desirable
B – Moderate category; trees where retention is desirable
C – Low category; trees which could be retained
U – Unsuitable for retention; trees which should be removed

Recommendations are made, where appropriate, on appropriate remedial action as regards tree surgery or felling works. These are specified where there is a significant current risk to public safety or tree health and are consistent with sound arboricultural practice. All tree work recommendations, where made, are in line with BS 3998: 2010 "Tree work recommendations". The felling of more than 5 cubic metres of timber will require a felling license from Scottish Forestry unless the felling forms part of the granted Planning Permission. It is believed that the trees are not subject to a Tree Preservation Order or within a conservation area.

4. Survey results and discussion

77 trees of at least 15 cm DBH within and close to the site were plotted and assessed. Details of the trees are shown in the Schedule below. Some trees are part of a woodland group on an adjacent site. Note that the Schedule is a summary of the data gathered and assessments made.

The **BS 5837 retention categories** of the trees assessed in detail on and around the site were as follows:

Category A	11
Category B	41
Category C	25
Category U	0

In terms of their **condition,** they are as follows:

Good	38
Fair	37
Poor	2
Dead/dying	0

The **species** mix is as follows, by number

Alder, common	10
Ash	4
Birch, downy	23
Birch, silver	4
Elm	3
Hawthron	1
Oak, pedunculate	1
Sycamore	7
Willow, goat	24

Findings:

All of the trees surveyed form a part of a larger woodland group. They have been ascribed individual categories appropriate to their status as components of a woodland group.

The group has been assessed according to BS5837 and details are below. Trees comprise the range of species that might be expected in such a woodland, though oak is mostly lacking. The mature trees which dominate the canopy are sycamore, elm, ash with some large downy birch and willows.

There is dense planting around the fringe of the site alongside the car park and the access road which forms the southern boundary of the site. Much of the more recent planting is still under 150mm and was not recorded in detail, but there are large numbers of birch, hazel and willow now at the thicket stage, with some oak. These trees are perhaps 15 years old. The older trees are probably a mixture of plantings and natural regeneration and are mostly in good or fair condition given their setting.

Group assessment: As a whole the trees surveyed, together with others, form continuous woodland cover, and are part of a larger extent of similar woodland which is shown on the drawing below. Note that the eastern and western extents of the larger woodland were not plotted and it extends outside of the survey area. The woodland shows few signs of active management other than the plantings around the car park, which would benefit from selective thinning as soon as possible. However there is diversity of species, age and structure here. The woodland forms a belt alongside the River Leven, with gaps in it where footpaths run through. The group is an important landscape feature locally, is broadly in good health and is **categorised A.**

The car park is surrounded by a **hedge** as shown on the drawings below. It was probably planted at the time of car park construction. It is mainly hawthorn with some elder, regularly cut, about 1.5m high and about 0.75 wide.

Details of each tree surveyed are contained in the Schedule below.

5. Constraints posed by existing trees – considerations (see drawings below)

As the proposal involves development in a woodland it is inevitable that trees will need to be felled in order to allow the proposals to proceed. In general terms felling through sections of woodland such as this proposal requires may tend to destabilise the remaining trees due to the introduction of a new patter of wind circulation, and this type of felling coup has to be done with caution. Trees 7066-7068 can perhaps be retained as they are west of the development footprint. Trees 7069 – 7141/1 will require to be removed. It may be possible, with care, to retained trees 7092 and 7093, which are mature trees, but their respective root protection areas are large and overlap with the proposed development site. It seems unlikely that trees 7106 – 7111 can be retained. These are located towards the top of a slope adjacent to the site and any excavation of the embankment here might cause instability.

Trees 7066-7068, trees 7141 & 7142 could be retained. More detailed work will be required to assess whether 7092/7093 & 7106-7111 are capable of being retained. It is suggested that the

actual development site be pegged out at these points and if necessary method statements covering construction activity in these areas be created.

Care will be required to ensure that trees which are proposed for retention are not damaged by either the demolition of construction phases.

Trees can be badly damaged or killed by construction operations, and particular care is required to protect them from damage. The ability of trees to recover from damage to roots is often very limited. Root systems can be damaged by ground excavations, soil compaction, contamination or spillages of e.g. diesel or cement, and changes in soil moisture content (both drying and waterlogging). Wet concrete is toxic to tree roots.

The drawings below show an RPA for each tree, shown as a hatched circle, which shows the area near to the trees where activity needs to be carefully controlled during construction if the tree is to be retained.

6. Tree protection plan

In general terms, where trees are recommended for retention they must be protected by barriers and/or ground protection prior to commencement of any development works, including demolition. This should exclude access to the RPA's as shown on the drawing below.

Temporary protective fencing - specification. This specification applies to all tree protection fences. Fencing to consist of 2m high welded mesh panels (Heras or similar) on rubber or concrete feet joined with a minimum of two anti-tamper couplings. The distance between the couplings should be at least 1m and should be uniform throughout the fence line. The panels should be supported on the inner side by stabiliser struts, which should be anchored at ground level by a block tray or stakes driven into the soil. All-weather notices should be affixed to the fence with the wording "Construction exclusion zone – no access."

Other trees and the woodland groups are adjacent but outside the site and their RPA's are unlikely to be affected by development proposals.

7. Recommendations

1. **Carry out more detailed work to determine whether trees 7092, 7093 & 7106-7111 can be retained, including creating a method statement to guide construction activity.**
2. **Note that the proposed felling might result in destabilisation of adjacent trees due to windthrow;**
3. **Inspect the retained trees on an ongoing 5 year cycle.**

STANDARD CONDITIONS RELATING TO TREE SURVEY INFORMATION

1. Unless otherwise stated in the report, inspection has been carried in accordance with Visual Tree Assessment (VTA) Stage 1.

2. The survey has been carried out in accordance with the recommendations of BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations".

3. Recommendations for tree works assume that they will be carried out in accordance with BS 3998: 2010 "Tree work recommendations" by suitably qualified and experienced persons.

4. Unless otherwise stated, tree surveys are undertaken from ground level using established visual assessment methodology. The inspection is designed to determine the following:

   a. The presence of fungal disease in the root, stem, or branch structure that may give rise to a risk of structural failure of part or all of the tree;

   b. The presence of structural defects, such as root heave, cavities, weak forks, hazard beams, included bark, cracks, and the like, that may give rise to a risk of structural failure of part or all of the tree;

   c. The presence of soil disturbance, excavations, infilling, compaction, or other changes in the surrounding environment, such as adjacent tree removal or erection of new structures, that may give rise to a risk of structural failure of part or all of the tree;

   d. The presence of any of the above or another factor not specifically referred to, which may give rise to a decline or death of the tree.

4. Where further investigation is recommended, whether by climbing, the use of specialised decay detection equipment or the exposure of roots, this is identified in the report.

5. The findings and recommendations contained within this report are valid for a period of twelve months. Trees are living organisms subject to change and it is strongly recommended that they are inspected at regular intervals for reasons of safety.

6. The recommendations relate to the site as it exists at present, and to the level and pattern of usage it currently enjoys. The degree of risk and hazard may alter if the site is developed or significantly changed, and as such will require regular re-inspection and re-appraisal.

7. Whilst every effort has been made to detect defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. Extreme weather conditions can cause damage to apparently healthy trees, and phenomena such as summer branch drop may occur and are difficult to predict. In particular caution must be exercised if inferring or assuming matters relating to tree roots in the case where they cannot be visually assessed, as is normal and likely. It should be assumed that underground roots cannot be seen unless otherwise stated.

8. This report in no way constitutes a professional opinion on the integrity or status of buildings. Its primary purpose is to report on the status of trees. The status of built structures, if in doubt, should be reviewed by a suitably qualified person.

9. This report has been prepared for the sole use of Loch Lomond Rescue Boat and their appointed agents. Any third party referring to this report or relying on information contained within it does so entirely at their own risk.

Explanation of terms used in the schedule

Tag	Identification number of tree
Species	Common name of species.
DBH	Trunk diameter in metres measured at 1.5m.
North, South East West	Radial dimensions of crown at cardinal points
Height	Estimated height of tree in metres.
RPA radius	The radius of the root protection area in metres
Crown height	Height of lowest part of crown
Cr Hr Dir	Direction of lowest part of crown
Age	Age class category. **Y** Young, **E-M** Early Mature, **M** Mature, **M-A** Advanced mature, **Vet** Veteran.
Stems	Single stemmed or multi-stemmed
Condition	Condition category (**Good**, **Fair**, **Poor**, **Dying** or **Dead**).
SULE	The tree's safe useful life expectancy, estimated in years. Note that this may be less than the tree's biological life expectancy.
BS Cat	BS 5837 Retention category (**A, B, C or U** – see explanation above)
Comments	General comments on tree health, condition and form, highlighting any defects or areas of concern and any **recommendations**.

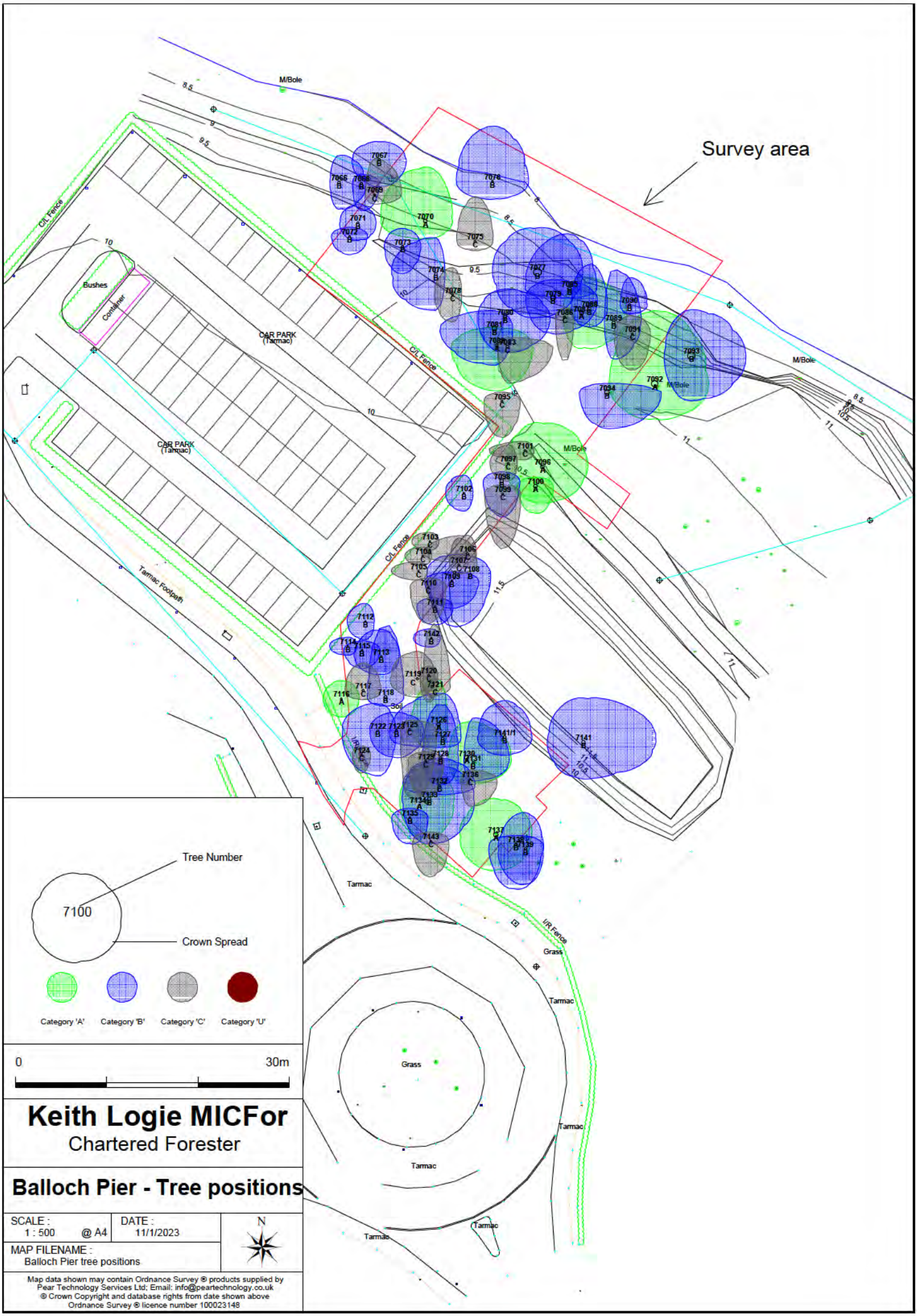
Tree condition categories

Good (1) Healthy trees with no major defects
(2) Trees with a considerable life expectancy
(3) Trees of good shape and form

Fair (1) Healthy trees with small or easily remedied defects
(2) Trees with a shorter life expectancy
(3) Trees of reasonable shape and form

Poor (1) Trees with significant structural defects and/or decay
(2) Trees of low vigour and under stress
(3) Trees with a limited life expectancy
(4) Trees of inferior shape and form

Dead (1) Dead, dying and dangerous trees
(2) Trees of very low vigour and with a severely limited life expectancy
(3) Trees with serious structural defects and/or decay
(4) Trees of exceptionally poor shape and form.



Keith Logie MICFor

Chartered Forester

Balloch Pier - Tree positions

SCALE :	DATE :	N
1 : 500 @ A4	11/1/2023	
MAP FILENAME : Balloch Pier tree positions		

Keith Logie MICFor

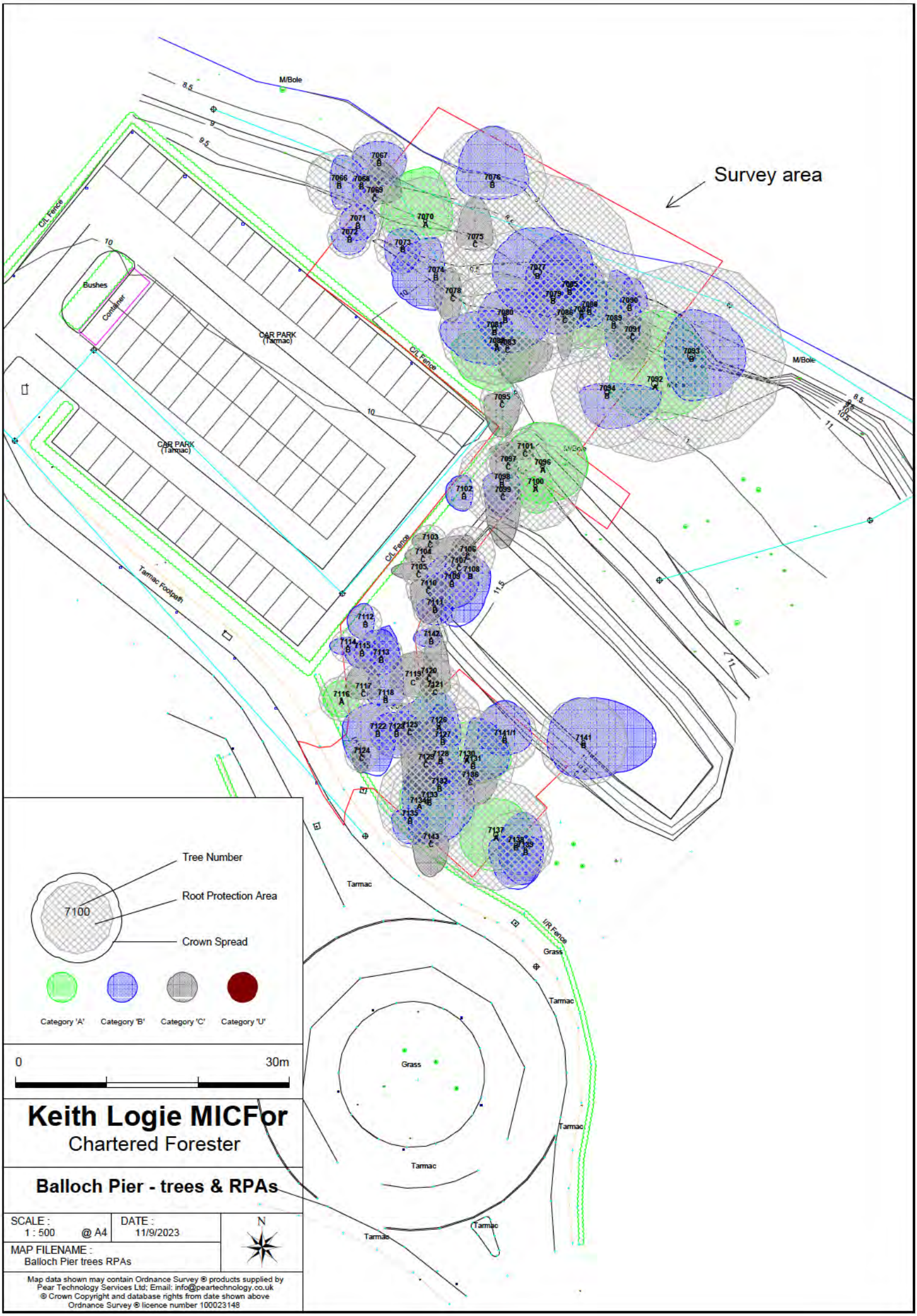
Chartered Forester

Balloch Pier - woodland & hedge

SCALE :	DATE :
1 : 500 @ A4	11/1/2023

MAP FILENAME :
Balloch Pier woodland & hedge

N

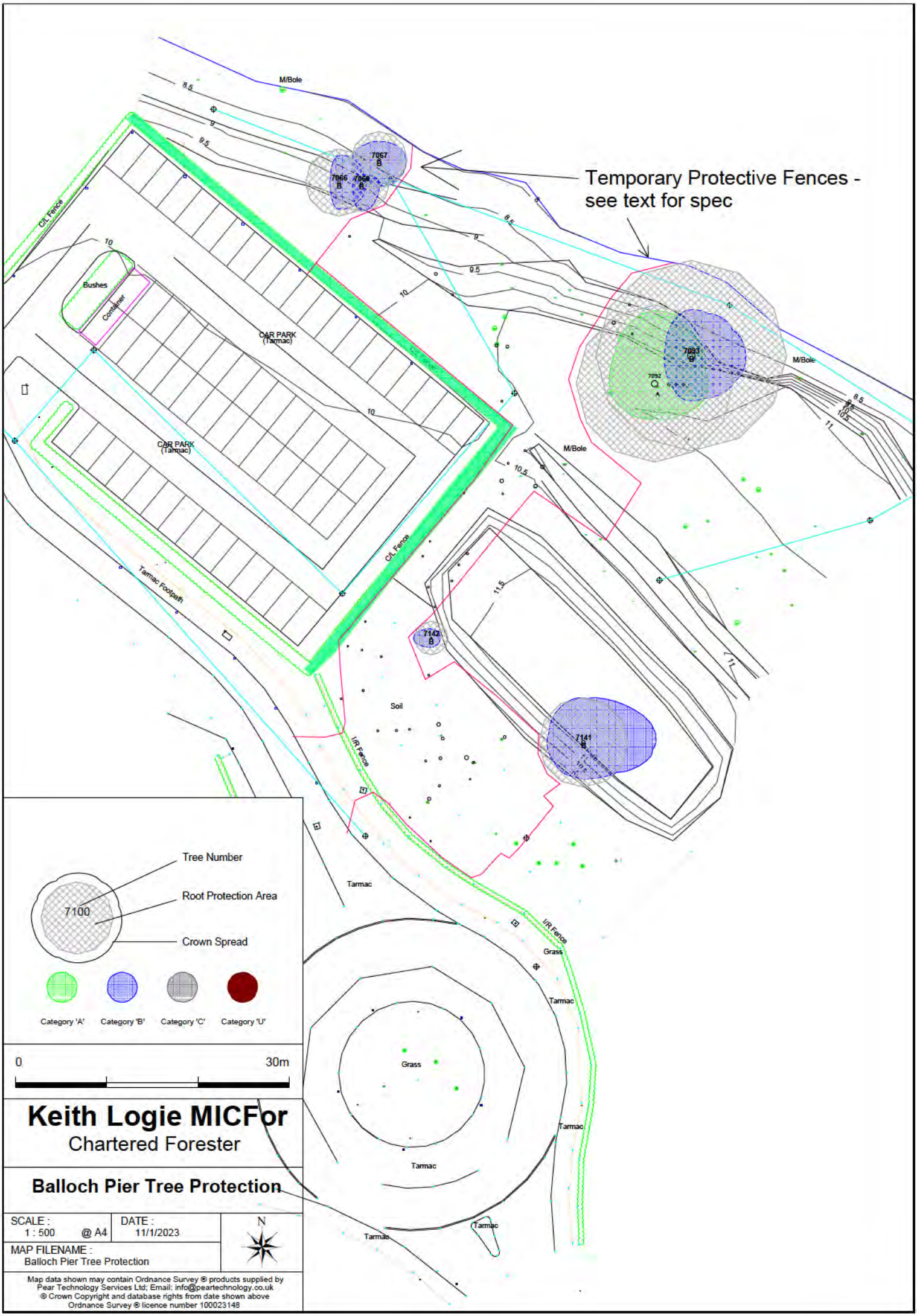


Keith Logie MICFor

Chartered Forester

Balloch Pier - trees & RPAs

SCALE :	DATE :	N
1 : 500 @ A4	11/9/2023	
MAP FILENAME : Balloch Pier trees RPAs		



Keith Logie MICFor

Chartered Forester

Balloch Pier Tree Protection

SCALE : 1 : 500 @ A4	DATE : 11/1/2023	N
MAP FILENAME : Balloch Pier Tree Protection		

Balloch Pier, Loch Lomond - Schedule

Tag no	Species	DBH	North	South	East	West	Height	RPA radius	Crown Ht	Crn Ht Dir	BS Cat	Condition	Age	Stems	SULE	Comments
7066	Ash	0.3	3	3	3	1	15	3.6	5	S	B2	Good	M	1	>40	Stem lean.2 sub stems at base
7067	Alder-common	0.25	2	3	3	3	11	2.9	4	S	B2	Good	M	2	20 to 40	2 stems, right on shore
7068	Birch-downy	0.25	1	3	2	1	14	3	4	N	B2	Fair	M	1	20 to 40	Level changes in root zone.Minor cavity/decay in stem.Some erosion of roots
7069	Birch-downy	0.2	4	1	3	1	12	2.4	4	N	C2	Fair	M	1	10 to 20	Stem lean.Leans north
7070	Alder-common	0.4	6	2	3	5	14	7.5	4	N	A2	Good	M	2	>40	Level changes in root zone.Limb ascends north from low fork
7071	Birch-downy	0.2	2	2	2	2	8	2.4	3	S	B2	Fair	E-M	1	20 to 40	Canopy suppressed.Narrow crown
7072	Birch-downy	0.2	1	2	2	2	11	2.4	5	S	B2	Good	E-M	1	20 to 40	Narrow crown
7073	Ash	0.25	2	3	2	2	11	3	6	S	B2	Good	E-M	1	20 to 40	No obvious dieback
7074	Willow-goat	0.3	4	4	1	5	13	3.6	5	W	B2	Fair	M	1	20 to 40	Stem lean.Minor cavity/decay in stem.Leans northwest
7075	Birch-downy	0.2	5	1	2	2	12	3.3	4	N	C2	Fair	E-M	2	10 to 20	Level changes in root zone.Stem lean. Roots eroded. Leans ne. 2 stems 20/20
7076	Willow-goat	0.2	6	2	4	4	8	2.9	2	N	B2	Good	M	6	20 to 40	Nice clump of 6 stems on water edge
7077	Sycamore	0.9	5	5	5	5	19	10.8	5	N	B2	Good	M	1	20 to 40	Ivy growth obscuring detailed assessment.Minor cavity/decay in stem.Included bark, weak fork in main scaffold limb.
7078	Hawthorn	0.2	3	3	1	2	7	2.4	3	N	C2	Fair	M	1	10 to 20	Canopy suppressed.
7079	Ash	0.5	2	4	5	3	19	6	6	S	B2	Fair	M	1	20 to 40	Ivy growth obscuring detailed assessment.Stem lean.Slight lean east. Crown suppressed to west
7080	Elm	0.35	3	4	5	3	16	4.2	3	S	B2	Good	M	1	20 to 40	Crown interlocked with neighbors
7081	Birch-downy	0.5	2	4	2	6	17	6	5	W	B2	Good	M	1	20 to 40	Stem lean.Ivy growth obscuring detailed assessment. Thick ivy on stem and crown
7082	Sycamore	0.35	2	5	4	5	16	4.2	5	W	A2	Good	M	1	>40	Ivy growth obscuring detailed assessment.Shares rb with willow
7083	Willow-goat	0.3	1	4	5	1	8	3.6	3	S	C3	Poor	M-A	1	10 to 20	Significant cavity/decay in stem.Stem lean.Canopy suppressed.major cavity in stem. Bird/bat check
7085	Ash	0.4	6	1	3	5	15	4.8	6	N	B2	Fair	M	1	20 to 40	Level changes in root zone.Stem lean.
7086	Alder-common	0.25	1	5	1	1	10	3	>6	S	C2	Fair	M	1	10 to 20	Stem lean.Canopy suppressed.
7087	Elm	0.4	4	4	5	2	14	4.8	4	E	A2	Good	M	1	>40	Level changes in root zone.Upright
7088	Birch-downy	0.35	5	2	2	2	14	4.2	>6	N	B2	Fair	M	1	20 to 40	Level changes in root zone.Stem lean.
7089	Birch-downy	0.35	6	4	3	1	14	4.2	5	N	B2	Fair	M	1	20 to 40	Level changes in root zone.Stem lean.Co crowned with willow
7090	Birch-downy	0.25	3	1	2	1	13	3	6	N	B2	Fair	M	1	20 to 40	Level changes in root zone.Stem lean.
7091	Willow-goat	0.2	2	4	2	2	9	2.4	2	S	C2	Fair	M	1	10 to 20	Ivy growth obscuring detailed assessment.Canopy suppressed.
7092	Birch-downy	0.7	8	4	6	5	18	8.4	6	N	A2	Good	M-A	1	>40	Stem lean.Very spreading,
7093	Sycamore	0.85	5	5	6	3	16	10.2	5	E	B2	Fair	M	1	20 to 40	Level changes in root zone.Measured below fork. Included bark, union seems stable
7094	Birch-downy	0.5	1	4	6	3	14	6	4	W	B2	Fair	M-A	1	20 to 40	Stem lean.Ivy growth obscuring detailed assessment.
7095	Willow-goat	0.2	1	4	2	2	7	2.4	2	S	C2	Good	E-M	1	10 to 20	Canopy 1-sided.
7096	Sycamore	0.4	5	4	5	4	15	6.7	5	E	A2	Good	M	2	>40	2 stems 40/40cm, low fork, union looks ok
7097	Birch-downy	0.2	2	2	1	2	9	2.4	3	W	C2	Fair	M	1	10 to 20	Ivy growth obscuring detailed assessment.Canopy suppressed.
7098	Willow-goat	0.4	1	4	2	2	13	6.7	3	S	B2	Fair	M	2	20 to 40	Ivy growth obscuring detailed assessment.Stem lean.Canopy 1-sided.Choked with ivy
7099	Willow-goat	0.2	1	6	2	2	6	2.4	5	S	C2	Fair	M	1	10 to 20	Stem lean.Ivy growth obscuring detailed assessment.
7100	Birch-downy	0.4	1	3	2	2	16	4.8	>6	S	A2	Good	M	1	>40	Stem lean.
7101	Willow-goat	0.2	1	1	1	4	7	2.4	1	W	C2	Fair	E-M	1	10 to 20	Stem lean.Canopy suppressed.
7102	Birch-silver	0.15	2	2	1	2	10	1.8	4	W	B2	Good	E-M	1	20 to 40	Stem lean.
7103	Alder-common	0.15	1	1	1	2	8	1.8	3	W	C2	Fair	E-M	1	10 to 20	Canopy suppressed.
7104	Alder-common	0.15	1	1	1	2	10	1.8	6	W	C2	Fair	E-M	1	10 to 20	Ivy growth obscuring detailed assessment.Canopy 1-sided.
7105	Alder-common	0.15	1	1	1	3	9	1.8	3	W	C2	Fair	E-M	1	10 to 20	Canopy 1-sided.

7106	Willow-goat	0.25	2	1	1	5	11	3	5	W	C2	Fair	M	1	10 to 20	Stem lean.Canopy 1-sided.
7107	Willow-goat	0.2	3	1	2	1	11	2.4	>6	N	C2	Fair	E-M	1	10 to 20	Canopy suppressed.
7108	Willow-goat	0.3	2	6	4	3	13	3.6	4	S	B2	Good	M	2	20 to 40	Spreading , upright
7109	Willow-goat	0.2	1	3	3	3	12	2.4	5	S	B2	Good	E-M	1	20 to 40	Ivy growth obscuring detailed assessment.Canopy 1-sided.
7110	Birch-silver	0.2	1	4	2	2	9	2.4	5	S	C2	Fair	E-M	1	10 to 20	Canopy suppressed.
7111	Alder-common	0.2	1	2	2	2	12	2.4	>6	S	B2	Good	E-M	1	20 to 40	At base of slope
7112	Alder-common	0.15	2	2	1	2	9	1.8	4	W	B2	Good	E-M	1	20 to 40	Probably planted when car park was built
7113	Willow-goat	0.2	3	2	2	3	10	2.4	4	N	B2	Good	E-M	1	20 to 40	Probably planted when car park was built
7114	Birch-silver	0.15	1	1	1	2	10	1.8	6	W	B2	Good	E-M	1	20 to 40	Stem lean.
7115	Birch-silver	0.15	1	2	2	2	10	1.8	6	E	B2	Good	E-M	1	20 to 40	Probably planted when car park was built
7116	Oak-pedunculate	0.2	2	2	2	2	11	2.4	>6	E	A2	Good	E-M	1	>40	Probably planted when car park was built
7117	Willow-goat	0.25	3	1	2	2	13	3	1	S	C2	Fair	M	1	10 to 20	Significant cavity/decay in stem.Better balanced tree. Cavity at base
7118	Willow-goat	0.35	8	1	2	2	12	4.2	6	N	B2	Fair	M	1	20 to 40	Stem lean.Ivy growth obscuring detailed assessment.Severe lean north
7119	Sycamore	0.25	3	2	2	3	11	4.2	3	N	C2	Fair	E-M	2	10 to 20	Shares rb with birch 15cm
7120	Alder-common	0.2	1	3	1	1	7	2.4	5	S	C2	Poor	E-M	1	10 to 20	Canopy suppressed.Poor suppressed
7121	Birch-downy	0.25	7	1	2	1	13	3	>6	N	C2	Fair	M	1	10 to 20	Stem lean.Ivy growth obscuring detailed assessment.
7122	Willow-goat	0.2	3	5	2	4	13	2.4	1	W	B2	Fair	M	1	20 to 40	Canopy 1-sided.
7123	Willow-goat	0.25	2	3	3	3	14	3	1	S	B2	Good	M	1	20 to 40	In dense canopy
7124	Birch-downy	0.15	1	2	1	1	10	1.8	>6	S	C2	Good	E-M	1	10 to 20	Stem lean.Canopy 1-sided.
7125	Willow-goat	0.2	1	8	3	1	9	2.4	6	S	C2	Fair	M	1	10 to 20	Stem lean.
7126	Sycamore	0.4	5	3	1	3	18	4.8	6	N	A2	Good	M	1	>40	Shares rootball with neighbour
7127	Birch-downy	0.3	5	1	2	6	15	3.6	5	N	B2	Fair	M	3	20 to 40	Stem lean.Canopy suppressed.Severe lean north, and west. 3 stems 30/25/25
7128	Willow-goat	0.3	6	3	2	2	15	3.6	6	N	B2	Good	M	1	20 to 40	Included bark, compression fork.Crown a bit compresssed
7129	Willow-goat	0.2	1	4	2	2	9	2.4	4	S	C2	Fair	M	1	10 to 20	Stem lean.Canopy suppressed.
7130	Birch-downy	0.45	4	3	5	2	17	5.4	>6	N	A2	Good	M	1	>40	Very upright, low fork, good union
7131	Willow-goat	0.25	5	2	4	1	13	2.9	4	N	B2	Fair	M	3	10 to 20	Ivy growth obscuring detailed assessment.Canopy 1-sided.
7132	Birch-downy	0.25	3	1	4	4	16	3	5	E	B2	Good	M	1	20 to 40	Twisting stem
7133	Elm	0.35	4	5	5	3	15	4.2	3	E	B2	Good	M	1	20 to 40	Probably self seeded
7134	Birch-downy	0.45	4	4	3	3	17	5.4	>6	N	A2	Good	M	1	>40	Co crowned with elm
7135	Birch-downy	0.15	1	3	2	2	10	1.8	3	S	B2	Good	E-M	1	20 to 40	Stem lean.Canopy 1-sided.
7136	Willow-goat	0.15	1	3	3	1	7	1.8	1	E	C2	Good	E-M	1	10 to 20	Probably self seeded
7137	Birch-downy	0.5	4	4	4	4	18	6	6	S	A2	Good	M-A	1	>40	Particularly good birch, well balanced
7138	Birch-downy	0.3	1	5	3	3	16	3.6	6	S	B2	Fair	M	1	20 to 40	Canopy 1-sided.
7139	Sycamore	0.25	4	4	2	3	16	2.9	3	S	B2	Good	E-M	2	20 to 40	2 stems
7141	Birch-downy	0.3	4	2	3	3	18	3.6	>6	N	B2	Fair	M	3	20 to 40	Stem lean.3 stems 30 30 25 CM
7141	Willow-goat	0.4	5	4	8	4	17	4.8	5	S	B2	Good	M	1	20 to 40	Stem lean. Top of bank, leans east
7142	Alder-common	0.15	1	1	1	2	13	1.8	>6	S	B2	Good	E-M	1	20 to 40	Small high crown
7143	Willow-goat	0.15	1	4	2	2	5	1.8	2	S	C2	Fair	E-M	1	10 to 20	Stem lean.Canopy 1-sided.

National Park Authority Headquarters Carrochan 20 Carrochan Road Balloch G83 8EG Tel: 01389 722024 Email: planning@lochlomond-trossachs.org

Applications cannot be validated until all the necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 100658247-001

The online reference is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the planning Authority about this application.

Type of Application

What is this application for? Please select one of the following: *

☒ Application for planning permission (including changes of use and surface mineral working).

☐ Application for planning permission in principle.

☐ Further application, (including renewal of planning permission, modification, variation or removal of a planning condition etc)

☐ Application for Approval of Matters specified in conditions.

Description of Proposal

Please describe the proposal including any change of use: * (Max 500 characters)

NEW RESCUE BOAT STATION @ SITE ADJACENT TO CAR PARK / RIVERBANK, PIER ROAD, BALLOCH.

Is this a temporary permission? * ☐ Yes ☒ No

If a change of use is to be included in the proposal has it already taken place? ☐ Yes ☒ No
(Answer 'No' if there is no change of use.) *

Has the work already been started and/or completed? *

☒ No ☐ Yes – Started ☐ Yes - Completed

Applicant or Agent Details

Are you an applicant or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application) ☐ Applicant ☒ Agent

Agent Details

Please enter Agent details

Company/Organisation:	GH Architects LTD		
Ref. Number:		You must enter a Building Name or Number, or both: *	
First Name: *	GORDON	Building Name:	
Last Name: *	HARRISON	Building Number:	73
Telephone Number: *	[redacted]	Address 1 (Street): *	GLASGOW ROAD
Extension Number:		Address 2:	
Mobile Number:		Town/City: *	DUMBARTON
Fax Number:		Country: *	SCOTLAND
		Postcode: *	G82 1RE
Email Address: *	[redacted]		

Is the applicant an individual or an organisation/corporate entity? *

☐ Individual ☒ Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title:	Mr	You must enter a Building Name or Number, or both: *	
Other Title:		Building Name:	[redacted]
First Name: *	James	Building Number:	
Last Name: *	Macrae	Address 1 (Street): *	[redacted]
Company/Organisation	Loch Lomond Rescue Boat	Address 2:	
Telephone Number: *		Town/City: *	[redacted]
Extension Number:		Country: *	[redacted]
Mobile Number:		Postcode: *	[redacted]
Fax Number:			
Email Address: *	[redacted]		

Site Address Details

Planning Authority: Loch Lomond & The Trossachs National Park Authority

Full postal address of the site (including postcode where available):

Address 1:

Address 2:

Address 3:

Address 4:

Address 5:

Town/City/Settlement:

Post Code:

Please identify/describe the location of the site or sites

SITE ADJACENT TO CAR PARK / RIVERBANK, PIER ROAD, BALLOCH

Northing 682477 Easting 238661

Pre-Application Discussion

Have you discussed your proposal with the planning authority? * ☒ Yes ☐ No

Pre-Application Discussion Details Cont.

In what format was the feedback given? *

☐ Meeting ☐ Telephone ☐ Letter ☒ Email

Please provide a description of the feedback you were given and the name of the officer who provided this feedback. If a processing agreement [note 1] is currently in place or if you are currently discussing a processing agreement with the planning authority, please provide details of this. (This will help the authority to deal with this application more efficiently.) * (max 500 characters)

Pre-Application submitted with feedback given. Feedback contained within attached supporting statement.

Title: Ms Other title:

First Name: Caroline Last Name: Strugnell

Correspondence Reference Number: PRE/2022/0023 Date (dd/mm/yyyy): 23/01/2023

Note 1. A Processing agreement involves setting out the key stages involved in determining a planning application, identifying what information is required and from whom and setting timescales for the delivery of various stages of the process.

Site Area

Please state the site area: 1493.00

Please state the measurement type used: ☐ Hectares (ha) ☒ Square Metres (sq.m)

Existing Use

Please describe the current or most recent use: * (Max 500 characters)

Vacant River bank

Access and Parking

Are you proposing a new altered vehicle access to or from a public road? * ☒ Yes ☐ No

If Yes please descr be and show on your drawings the position of any existing. Altered or new access points, highlighting the changes you propose to make. You should also show existing footpaths and note if there will be any impact on these.

Are you proposing any change to public paths, public rights of way or affecting any public right of access? * ☐ Yes ☒ No

If Yes please show on your drawings the position of any affected areas highlighting the changes you propose to make, including arrangements for continuing or alternative public access.

How many vehicle parking spaces (garaging and open parking) currently exist on the application Site? 0

How many vehicle parking spaces (garaging and open parking) do you propose on the site (i.e. the Total of existing and any new spaces or a reduced number of spaces)? * 12

Please show on your drawings the position of existing and proposed parking spaces and identify if these are for the use of particular types of vehicles (e.g. parking for disabled people, coaches, HGV vehicles, cycles spaces).

Water Supply and Drainage Arrangements

Will your proposal require new or altered water supply or drainage arrangements? * ☒ Yes ☐ No

Are you proposing to connect to the public drainage network (eg. to an existing sewer)? *

☒ Yes – connecting to public drainage network

☐ No – proposing to make private drainage arrangements

☐ Not Applicable – only arrangements for water supply required

Do your proposals make provision for sustainable drainage of surface water?? * (e.g. SUDS arrangements) * ☒ Yes ☐ No

Note:-

Please include details of SUDS arrangements on your plans

Selecting ‘No’ to the above question means that you could be in breach of Environmental legislation.

Are you proposing to connect to the public water supply network? *

☒ Yes

☐ No, using a private water supply

☐ No connection required

If No, using a private water supply, please show on plans the supply and all works needed to provide it (on or off site).

Assessment of Flood Risk

Is the site within an area of known risk of flooding? * ☒ Yes ☐ No ☐ Don't Know

If the site is within an area of known risk of flooding you may need to submit a Flood Risk Assessment before your application can be determined. You may wish to contact your Planning Authority or SEPA for advice on what information may be required.

Do you think your proposal may increase the flood risk elsewhere? * ☐ Yes ☒ No ☐ Don't Know

Trees

Are there any trees on or adjacent to the application site? * ☒ Yes ☐ No

If Yes, please mark on your drawings any trees, known protected trees and their canopy spread close to the proposal site and indicate if any are to be cut back or felled.

Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste (including recycling)? * ☒ Yes ☐ No

If Yes or No, please provide further details: * (Max 500 characters)

Hard standing refuse.

Residential Units Including Conversion

Does your proposal include new or additional houses and/or flats? * ☐ Yes ☒ No

All Types of Non Housing Development – Proposed New Floorspace

Does your proposal alter or create non-residential floorspace? * ☒ Yes ☐ No

All Types of Non Housing Development – Proposed New Floorspace Details

For planning permission in principle applications, if you are unaware of the exact proposed floorspace dimensions please provide an estimate where necessary and provide a fuller explanation in the 'Don't Know' text box below.

Please state the use type and proposed floorspace (or number of rooms if you are proposing a hotel or residential institution): *

Not in a Use Class

Gross (proposed) floorspace (In square meters, sq.m) or number of new (additional) Rooms (If class 7, 8 or 8a): * 234

If Class 1, please give details of internal floorspace:

Net trading spaces:

Non-trading space:

Total:

If Class 'Not in a use class' or 'Don't know' is selected, please give more details: (Max 500 characters)

Relocation of an existing rescue boat centre.

Schedule 3 Development

Does the proposal involve a form of development listed in Schedule 3 of the Town and Country Planning (Development Management Procedure (Scotland) Regulations 2013 * ☐ Yes ☒ No ☐ Don't Know

If yes, your proposal will additionally have to be advertised in a newspaper circulating in the area of the development. Your planning authority will do this on your behalf but will charge you a fee. Please check the planning authority's website for advice on the additional fee and add this to your planning fee.

If you are unsure whether your proposal involves a form of development listed in Schedule 3, please check the Help Text and Guidance notes before contacting your planning authority.

Planning Service Employee/Elected Member Interest

Is the applicant, or the applicant's spouse/partner, either a member of staff within the planning service or an elected member of the planning authority? * ☐ Yes ☒ No

Certificates and Notices

CERTIFICATE AND NOTICE UNDER REGULATION 15 – TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND) REGULATION 2013

One Certificate must be completed and submitted along with the application form. This is most usually Certificate A, Form 1, Certificate B, Certificate C or Certificate E.

Are you/the applicant the sole owner of ALL the land? * ☐ Yes ☒ No

Is any of the land part of an agricultural holding? * ☐ Yes ☒ No

Are you able to identify and give appropriate notice to ALL the other owners? * ☒ Yes ☐ No

Certificate Required

The following Land Ownership Certificate is required to complete this section of the proposal:

Certificate B

Land Ownership Certificate

Certificate and Notice under Regulation 15 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

I hereby certify that

(1) - No person other than myself/the applicant was an owner [Note 4] of any part of the land to which the application relates at the beginning of the period of 21 days ending with the date of the accompanying application;

or –

(1) - I have/The Applicant has served notice on every person other than myself/the applicant who, at the beginning of the period of 21 days ending with the date of the accompanying application was owner [Note 4] of any part of the land to which the application relates.

Name:	Mr Derek Shaw
Address:	Scottish EnterpriseAtrium Court, 59, Waterloo Street, Glasgow, Scotland, G2 6HQ
Date of Service of Notice: *	23/01/2024

(2) - None of the land to which the application relates constitutes or forms part of an agricultural holding;

or –

(2) - The land or part of the land to which the application relates constitutes or forms part of an agricultural holding and I have/the applicant has served notice on every person other than myself/himself who, at the beginning of the period of 21 days ending with the date of the accompanying application was an agricultural tenant. These persons are:

Name:	
Address:	
Date of Service of Notice: *	

Signed:	GORDON HARRISON
On behalf of:	Loch Lomond Rescue Boat
Date:	22/01/2024

☒ Please tick here to certify this Certificate. *

Checklist – Application for Planning Permission

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

Please take a few moments to complete the following checklist in order to ensure that you have provided all the necessary information in support of your application. Failure to submit sufficient information with your application may result in your application being deemed invalid. The planning authority will not start processing your application until it is valid.

a) If this is a further application where there is a variation of conditions attached to a previous consent, have you provided a statement to that effect? *

☐ Yes ☐ No ☒ Not applicable to this application

b) If this is an application for planning permission or planning permission in principal where there is a crown interest in the land, have you provided a statement to that effect? *

☐ Yes ☐ No ☒ Not applicable to this application

c) If this is an application for planning permission, planning permission in principle or a further application and the application is for development belonging to the categories of national or major development (other than one under Section 42 of the planning Act), have you provided a Pre-Application Consultation Report? *

☐ Yes ☐ No ☒ Not applicable to this application

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

d) If this is an application for planning permission and the application relates to development belonging to the categories of national or major developments and you do not benefit from exemption under Regulation 13 of The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013, have you provided a Design and Access Statement? *

☐ Yes ☐ No ☒ Not applicable to this application

e) If this is an application for planning permission and relates to development belonging to the category of local developments (subject to regulation 13. (2) and (3) of the Development Management Procedure (Scotland) Regulations 2013) have you provided a Design Statement? *

☒ Yes ☐ No ☐ Not applicable to this application

f) If your application relates to installation of an antenna to be employed in an electronic communication network, have you provided an ICNIRP Declaration? *

☐ Yes ☐ No ☒ Not applicable to this application

g) If this is an application for planning permission, planning permission in principle, an application for approval of matters specified in conditions or an application for mineral development, have you provided any other plans or drawings as necessary:

☒ Site Layout Plan or Block plan.
☒ Elevations.
☒ Floor plans.
☒ Cross sections.
☒ Roof plan.
☐ Master Plan/Framework Plan.
☐ Landscape plan.
☒ Photographs and/or photomontages.
☐ Other.

If Other, please specify: * (Max 500 characters)

Provide copies of the following documents if applicable:

A copy of an Environmental Statement. *	☒ Yes	☐ N/A
A Design Statement or Design and Access Statement. *	☒ Yes	☐ N/A
A Flood Risk Assessment. *	☐ Yes	☒ N/A
A Drainage Impact Assessment (including proposals for Sustainable Drainage Systems). *	☐ Yes	☒ N/A
Drainage/SUDS layout. *	☐ Yes	☒ N/A
A Transport Assessment or Travel Plan	☐ Yes	☒ N/A
Contaminated Land Assessment. *	☐ Yes	☒ N/A
Habitat Survey. *	☒ Yes	☐ N/A
A Processing Agreement. *	☐ Yes	☒ N/A

Other Statements (please specify). (Max 500 characters)

Land, Visual Assessment Statement, Tree Survey.

Declare – For Application to Planning Authority

I, the applicant/agent certify that this is an application to the planning authority as described in this form. The accompanying Plans/drawings and additional information are provided as a part of this application.

Declaration Name: Mr GORDON HARRISON

Declaration Date: 22/01/2024

Payment Details

Pay Direct

Created: 22/01/2024 13:57

THE HAY PARTNERSHIP
ARCHITECTURAL & TOWN PLANNING SERVICES

SUPPORTING STATEMENT

Proposed erection of rescue boat centre (including a slipway, new vehicular access and parking)

Land to west of River Leven, Pier Road, Balloch.

Loch Lomond Rescue Boat

January 2024

73 Glasgow Road, Dumbarton G82 1RE T: 01389 733033

SUPPORTING STATEMENT

Proposed erection of rescue boat centre
(including a slipway, new vehicular access and parking)

Land to west of River Leven, Pier Road, Balloch.

Loch Lomond Rescue Boat

INTRODUCTION.

Following on from a series of meetings with Mr James Macrae and members of the Loch Lomond Rescue Boat (LLRB) in respect of the above project this statement has been prepared in support of an application for Full Planning Permission that is being submitted to Loch Lomond & The Trossachs National Park Authority.

It also follows on from a Pre-Application Enquiry that was processed by LLTNPA under reference PRE/2022/0023 and takes on board the guidance that was given within the Response dated 23/1/2023 and subsequent discussions with the Case Officer Caroline Strugnell – see copy attached as appendix.

The Planning application has been prepared by Gordon Harrison (chartered architect) and will be submitted via the eplanning portal. Likewise a series of consultant reports for Tree Survey, Protected Species and a Landscape & Visual Appraisal will also be included as part of the formal submission.

BACKGROUND.

By way of background, the Loch Lomond Rescue Boat (LLRB) was founded in 1977 and is a charity run by around 25 local volunteers experienced in watercraft, first aid, etc and who are very familiar with all parts of the loch. It operates in conjunction with Police Scotland, the Scottish Fire & Rescue Service, Scottish Ambulance Service, the Coastguard Search & Rescue, etc.

The current base is located on the western shoreline of Loch Lomond to the south of Luss village and pier and consists of an elderly white-rendered building with slated roofs that has been extended incrementally over the decades but is now considered to be a) inadequate in terms of practicality and safety for their current needs and expectations and b) inefficient in terms of accessibility by crew members, both of which aspects result in a less efficient service.

The demands on its services have increased as boating and recreational activities have increased in and around Loch Lomond over the decades and they can often attend 70-80 callouts per year. As one would expect, the majority of these callouts are during the spring and summer months and tend to be focussed toward the southern end of the loch and around the islands. However, increased tourist traffic on the A82 over the same period has resulted in over-lengthy delays for the crew members, most of whom live and work in the Vale of Leven and Dumbarton, being able to drive to the current base in Luss and likewise for emergency vehicles if they

also have to attend the base. It is not uncommon for crew members and emergency services to take 40-50 minutes during the summer months to reach the current base in Luss (or not at all if there has been a road traffic incident) whereas the temporary base at Balloch Pier has generally taken 5-10 minutes travelling time for most of the crew. To quote the LLRB Chairman "*a swift response time is crucial for any emergency service, especially LLRB, and as such the need to move to Balloch as proposed is no mere wish for convenience but is an urgent desire to avoid further possible tragedies*".

A re-construction on the current site was an initial option, pending agreement with the landowner of course, and could have addressed point a) above but it would not have benefitted the problems of road travel and accessibility in point b). It would also have meant a period during the construction whereby there would not be an available building and so this option was quickly determined to be non-feasible.

During 2021, and in conjunction with LLTNPA, a temporary base was tested at the Duncan Mills Slipway in Balloch and this proved to be far superior in terms of attendance times to rescues as these were greatly reduced. The same exercise has been repeated in subsequent years to great effect and the overall perception by LLRB and the other emergency services is that this has been worthwhile and very successful.

This experience has therefore confirmed to LLRB the need to be based closer to the southern end of the loch and after consideration of locations around Duck Bay, Cameron House and within Balloch itself the preferred location has been identified as being on the western shoreline of the River Leven near to its mouth. This location has ready access to the loch without encountering the private and commercial boats further down river or around Lomond Shores and is, of course, close to the main recreational boating areas at Cameron House / Duck Bay / Arden and Inchmurrin and

its surrounding islands. This location is also readily accessible by car for crew members and emergency vehicles alike.

THE PROPOSED LOCATION.

By its very nature the new facility must of course be positioned immediately adjacent to the lochshore or riverbank to facilitate the speedy launching and return of the rescue boat. Few if any such locations were available to LLRB in terms of land ownership and Planning policies governing visual impact, services connections, etc however a location has been identified in Balloch immediately to the east of the existing car park near the Duncan Mills Slipway and Maid of the Loch where the wooded shoreline could be partially cleared to allow the introduction of a new rescue base, a cable-fed slipway and adjacent viewing platform and a nearby car parking area to the southeast.

This site also benefits from being north of the various private and commercial jetties and also has enough river width to allow the rescue boat to be launched and returned outwith the central navigable channel (as indicated by the marker buoys - see site photos).

Title to the land in question is held by Scottish Enterprise, who it is understood has been in discussion with LLTNPA over possible transfer in order to allow a master planning exercise for the wider Balloch Slipway area, but feedback to date from both parties on the LLRB project has been positive and encouraging.

The application site is a narrow stretch of riverbank and native woodland approximately 35m in length, varying in width depending on the seasonal water levels, with the River Leven to the north and the LLTNPA car park to the south, with another area of self-seeded woodland to the southeast towards the roundabout leading to The Duncan Mills Slipway.

Along with utilising knowledge of other nearby projects on the River Leven and elsewhere around Loch Lomond a topo survey of the site was required to help determine an appropriate floor level relative to high and low water levels and balanced against the gradient of the slipway and a need for level pedestrian access.

At the time of the topographical survey by Phoenix Surveys the shoreline measured approximately 20m in width however it is usually a bit less, and with ground levels rising from 8.5m at the river edge to 10.7m AOD in parts. For reference the nearby car park sits at 10.00m AOD and offers a good assessment feature.

THE PROPOSED DEVELOPMENT.

The preliminary drawings at the Pre-Application Enquiry stage illustrated the site, the layout and the type of building that was being envisaged, being a stepped two-storey structure with an office / training room and viewing balcony above the boat store and kit / changing room and with the car parking immediately adjacent, but whilst generally favourable to the principle and design format given the LLTNPA Response the height of the building was reduced to single-storey (so as to be lower than the

roofline of the Duncan Mills building), and the staff car parking re-positioned to reduce the impact on the waterfront trees.

Initially it was considered to take access to the new building and a parking area from a corner of the existing car park using two or three of the current parking bays (see site photos) however during the pre-application discussions with Ms Strugnell and members of LLRB it was agreed that a more practical and less visually intrusive solution would be to create a new entrance point with controlled access for staff and emergency vehicles closer to the roundabout and just outwith the road barrier thereby avoiding any potential conflict with other parked vehicles during the busy summer months in particular. In terms of LLTNPA thinking a re-positioning the parking area away from the riverbank would allow more trees to be retained in this visually sensitive area whilst less important trees would be cleared nearer to the public road.

In addition to being self-controlled by LLRB this new access route would be restricted to use by police and other emergency services vehicles as well as a limited number of LLRB crew members (11 cars). A single track (minimum of 3.7m wide) pathway will link directly from the car park alongside the existing hedgerow to the new base solely for ambulance(s) which must be allowed direct access to the building. On training days and nights any additional crew members' cars should be able to park in the existing nearby car park.

The redesigned building, at 18m in breadth x 15m in depth, therefore remains in three parts with that to the north - primarily to accept the length of the existing boat on its trailer but also for a larger new boat in the next few years plus the winch etc - being at a lower floor level for the boat storage and slipway (at 1:12 gradient) to be self-draining and to also aid the launching of the boat. This boat store, and also the associated slipway, needs to be set at a level above AOD that is able to deal with the varying river levels and yet offer a safe and practical gradient and so they cannot be too elevated. A floor level of m AOD is therefore being proposed for the boat store but acknowledging that it will therefore potentially be subject to flooding in extreme cases.

Aside from this the floor level of the other part of the building including the locker room, comm's room, meeting & training room, kitchen and changing / toilet accommodation are between 1.0 – 2.1 metres or so higher at 11.3m AOD (and so a margin above the level of the adjoining car park at 9.9m AOD) to reduce any potential for flooding. Simply for reference, for previous *residential* projects elsewhere around Loch Lomond SEPA have suggested working to a finished floor level of 11.3m AOD thereby taking cognisance of 1 in 200 year climate change predictions, etc.

The stepped 3-part lean-to roof format has been retained but revised to reduce the highest part and so leaving the central section as the highest of the three roofline profiles. Rather than enlarging the footprint simply for storage, within the attic space of this central section of the building will be a secure store for ancillary equipment, training aids, etc.

From the building a cable pulley, as at Luss, will launch and retrieve the boat down a 1:12 gradient metal slipway projecting into the river to low water level and running alongside the viewing platform. This jetty will be angled downstream to benefit the

boat pilot when entering and leaving the slipway by using the current to steady the manoeuvring and this has therefore impacted upon and resulted in the stepped and angled design and orientation of the building.

A triangular viewing platform, visible and accessible from the communications room, will also be formed projecting out from the building towards the river and alongside the slipway to enable clearer and therefore safer views of other boats travelling up and down the River Leven plus the returning LLRB boat.

With regard to external materials, and in line with the recommendations of James Truscott in his Landscape & Visual Appraisal, it is proposed that the building be primarily timber clad to integrate it into the wooded setting to either side with shallow dark grey metal-clad roofs. However, given the variable river levels the basecourse for the entire building needs to be able to withstand / cope with water penetration and so a rendered blockwork specification is required (internal and external). The initial intention for white-coloured render has been revised to a less noticeable mid-grey which should in time complement the weathered appearance of the timber cladding above it.

Security in this location could be an issue, as could vandalism, and so each window will have an external recessed roller shutter so that unauthorised entry can be avoided. Likewise vandalism and spray-painting can hopefully be minimised or treated given the choice of external materials.

Given the riverbank's self-seeded, sylvan characteristics some tree felling will be required to create the requisite clearing for the building and also where the access and car park are to be formed. This impact has been addressed in detail within the Tree Survey Report & Recommendations as prepared by Keith Logie (chartered forester). There are few individual trees of particular merit and it is really the wider-ranging wooded character along the length of the riverside that gives the overall character (see front cover). However, a use such as is being proposed must, by necessity, be located immediately adjacent to the watercourse and so in this instance the tree loss, if minimised, can be justified. New hedgerow planting to either side of the building and at the car park will offer some bio-diversity compensation per NPF4 expectations however compensatory tree planting will also be anticipated as a requirement, either on site or perhaps at a nearby location.

ECOLOGICAL & FLOOD RISK CONSIDERATIONS.

As mentioned above, the application site is part of the informal native woodland immediately bordering the River Leven from Balloch northwards and with a sizeable open car parking area to the opposite boundary and with the Duncan Mills Slipway and the Maid of the Loch beyond this.

Both parts of the development site are mainly undulating rough mixed woodland with mature trees and some gorse and with hedging alongside the southwestern and southeastern edges. As such, and as suggested by LLTNPA at the Pre-App stage, a Preliminary Ecological Appraisal has recently been undertaken by Wild Surveys and this will be submitted as part of the Planning application.

Given the necessary removal of trees and subsequent period for construction works there is obviously potential for an impact upon any wildlife and environmental considerations. All guidance given by Wild Surveys in their report, and subsequent updated reports depending on timescales, will be accepted and actioned by LLRB, presumably as Fulfilment of Conditions attached to the Planning Permission.

With regard to climate change, at between the 8.5m – 10.0m AOD contours the plot sits at and slightly above loch level and is therefore likely to be subject to flooding during spells when the loch / river level is higher than usual. Whereas this would constitute a concern for a residential development for example it is a necessary element of the rescue boat building and as such the building, in particular the boat storage area, has been designed with flood resilient materials, floor levels and a self-draining floor gradient that should be able to cope with intermittent water intrusion.

In conjunction with this the floor level of the main part of the building will be set a metre or so higher and as such should be above the anticipated flood levels.

As such it is believed that the building is one of a very few examples whereby building alongside a variable level river can be justified and accepted as necessary.

SUSTAINABILITY CHECKLIST.

With regard to renewable energy considerations, in this instance it has not been possible to have the windows facing southwards for solar gain for example but rather the orientation and design of the building have been governed by practical issues such as accessing the river frontage, utilising the current, a need to have views of the river in both directions and of the loch to the north, site security (given intermittent use), safe and unobstructed vehicular access by LLRB crew and emergency vehicles, etc. Nevertheless green energy and sustainable materials have been incorporated wherever possible along with materials capable of withstanding occasional water penetration.

With regard to heat retention and thermal efficiency the building will be founded upon steel portal frames with traditional block cavity construction internal and external walls (including a flood resilient blockwork basecourse), it will have wall, floor and ceiling insulation throughout in accordance with the latest Building Standards Technical Handbook June 2023 (Sections 6 and 7) and all windows and glazed doors will be double or triple-glazed units. At the Building Warrant stage SBEM Calculations will be prepared to illustrate the energy efficiency of the new facility and from this the Energy Performance Certificate will show that the property will be in Band C or better.

Externally the building will be mainly clad with larch timbers and insulated composite metal cladding to the roof planes – dark grey in colour – with translucent panels over the boat bay for natural daylighting. This internal and external use of natural and re-cyclable materials therefore endeavours to meet Local Development Plan and NPF4 expectations.

The primary source of heating and hot water will be a high efficiency air source heat pump with a performance in compliance with the latest (June 2023) Building

Standards. The possibility of adding photo-voltaic panels will also be considered if necessary.

The building will be fitted with 100% low energy lights throughout while any white goods will be energy-efficient per the EU Energy Efficiency Labelling Scheme and there is scope for an internal drying area within the locker room. Again these measures ensure compliance with LLTNPA aims and expectations for the incorporation of green energy features.

To further ensure the new facility will be suitable for the proposed occupants the internal room arrangement, the entrance doorway and internal door widths and the toilet / shower-rooms will be such that they will be readily accessible in terms of injured / disabled / elderly access and as such the property should be suitable for all generations and abilities.

The site selection endeavours to minimise the impact on the existing trees and gorse bushes alongside the river that are considered to be the more visually important and with new landscaping measures (not yet defined) these should enhance the biodiversity for small wildlife etc per the expectations of NPF4.

With regard to noise and light pollution considerations, the usage of the building will be intermittent, perhaps for a few hours at a time and mostly during the summer months, and certainly not every day. Although some external lighting will be necessary for safety and security, most likely PIR-controlled with daylight cut-offs for efficiency, with most activity being during the summer months and daylight hours the need for external lighting should be limited. The only variance to this will be on crew training nights during the winter months when the building will be in use. Furthermore, the absence of street lighting etc allied to the woodland setting should ensure the proposed building and parking areas will minimise light intrusion into the rural character of the location.

Overall it is accepted that the proposed building will have a limited ecological impact upon the environment, by virtue of requiring some tree removal, however being in accordance with current Planning design expectations and Building Standards criteria should help to minimise the visual and ecological intrusion into the wooded area alongside the river. As such we are comfortable that under the somewhat unusual circumstances the principle, the site layout and the design of the new facility are sound and justifiable in terms of planning expectations, flood risk, security, ecology, etc.

ACCESSIBILITY & PARKING

As mentioned above, the internal layout of the building will be suitable for all generations and abilities, obviously including the transportation of injured parties, while externally the car parking and footpath accesses will also be in compliance with the requirements of the Building Standards. The access driveway and car parking bays will be laid with gravel, for reasons of surface water drainage, whereas a hard-surfaced parking bay and path will also be introduced giving access to the front door for the ambulance crew.

There will be provision for 11 car parking spaces for LLRB crew etc and a closer parking & turning space for an ambulance immediately adjacent to the main building.

For the avoidance of any doubt the new vehicular access will be a gated bellmouth between the roundabout and the barrier, and the site will continue to be enclosed by fencing and hedging, so as to ensure controlled entry and therefore the parking area will not be available for public use.

SERVICES CONNECTIONS.

As mentioned above, it is believed that mains electricity, water and sewage services will all available to the site. The finished floor level of the rescue centre will be set at a height that allows a gravity-fed connection to the mains while surface water will be discharged to the river in accordance with the latest SEPA General Binding Rules.

Refuse and re-cycling bins will be introduced in a small enclosure at the entrance gate in accordance with the existing local authority collection service arrangements.

PLANNING ASSESSMENT.

There are very few exceptions within the national park area where new development will be permitted so close to the lochshore and riverbank and where a number of trees will be removed to facilitate the project. However, the re-siting of a long established and well-respected rescue boat centre for practical, accessibility and public safety reasons is one such justifiable exception and this has been confirmed by LLTNPA in their Pre-Application Response. The principle of the project and the proposed siting of the new facility on the southern bank of the River Leven can therefore be strongly justified as addressing the shortcomings of the existing base in Luss.

Thereafter the scale and design of the building and ancillary works (subsequently revised to accord with the Pre-App Response and the V & L Appraisal), and their ecological and visual impact, require assessment and again the generally favourable initial comments from LLTNPA on the contemporary design when allied to the findings of the Visual & Landscape Appraisal are believed to mean that the submitted format will continue to receive a favourable response from the Planning Authority and statutory consultees.

It is acknowledged that there will need to be a clearing formed within the otherwise continuous length of woodland that runs alongside the River Leven and also near to the roundabout and as such there could be some ecological issues. As highlighted in the Pre-Application Enquiry Response "Natural Environment Policy 8 contains a strong presumption against loss of woodland unless there are overriding public benefits that outweigh the loss of the woodland habitat. In my view there is a strong public benefit case (the preservation of life) that would be sufficient to outweigh the woodland loss in this instance." and it is it is evident that the public benefits of the proposed development clearly justify this limited loss of woodland.

Natural Environment Policy 8 also "requires compensatory planting where development is accommodated" and LLRB are agreeable to the inclusion of a Condition requiring

matching, or indeed additional compensatory planting at a location and of tree species to be confirmed with LLTNPA.

It is also accepted from the outset that technical complexities arising from the varying water levels of the loch and river will need to be addressed using a flood resilient design and materials specification while also being respective of the requisite gradient for the slipway.

Furthermore, although illumination of the building will not be a significant issue there is no doubt that the development will be visible to some degree from the park pathway on the opposite side of the River Leven and from the existing car park however the external timber cladding and muted colours will weather to help diminish the resultant visibility and integrate it against the surrounding woodland.
Overall the need for a new facility in an appropriate location that will undoubtedly provide a better, quicker and therefore safer rescue service to loch users justifies any resultant visual intrusion and the scale and design of the centre endeavours to minimise this as far as possible.

CONCLUSION.

In the last few years there has been increasing public awareness of this project and the need for it, including political support, and fundraising is ongoing to assist it become a reality. It is appreciated by LLRB that question marks exist over securing a lease or purchase of the land, other imminent development projects alongside the River Leven and at the Maid of the Loch and how this project could tie in with these, and of course the sourcing of the necessary funding and timing of the development. These aspects are being addressed by LLRB with the relevant parties but given the positivity expressed within the Pre-Application Enquiry Response this new planning application now seeks a more formal assessment vis-à-vis Local Development Plan and NPF4 aims and expectations in the belief that the granting of Full Planning Permission will be a crucial step in taking the overall process forward to fruition.

As mentioned above, the proposal is founded upon an essential rescue service that has specific requirements in terms of a loch-side location and so alternative site options are limited. The selected site has a number of positive benefits and as such it is believed that it can be regarded as being in accordance with LLTNPA aims.

January 2024

The Pre-Application Enquiry Response from LLTNPA dated 11/5/2022

PRE/2022/0023 – Erection of boathouse with slipway, access from car park and parking (relocation of Lomond Rescue Boat to River Leven, Balloch)

Please accept my apologies for the delay in providing this written response.

It is proposed to erect a building that would be the base for the Lomond Rescue Boat. The proposal is for a 2-storey boathouse with metal slipway, alongside parking for 16 vehicles accessed from the existing car park on its east side. The building would incorporate an area for boat storage, ancillary welfare facilities and storage and a first floor training area, possibly with external viewing balcony. The site in question is an area of native woodland occupying the shore of Loch Lomond/ mouth of the River Leven and on the immediate east side of the Duncan Mills slipway car park.

The principle of the development

This stretch of the loch shore is classified as native woodland ("Upland mixed ashwood" on the Native Woodland Survey of Scotland) and the proposal would result in the loss of an area of this woodland. Natural Environment Policy 8 contains a strong presumption against loss of woodland unless there are overriding public benefits that outweigh the loss of the woodland habitat. The assessment of the public benefit of this proposal would be important factor in assessing the acceptability of the proposed woodland removal. In my view there is a strong public benefit case (the preservation of life) that would be sufficient to outweigh the woodland loss in this instance.

It is noted that the selection of this specific site has taken many factors into account including operational requirements for boat launching. That said, given the presumption against development in such locations, potential alternatives should be explored and these, if not deemed suitable, should be clearly explained in any application to justify the chosen location.

Compensation Planting

Natural Environment Policy 8 requires compensatory planting where development is accommodated. Based on our site visit there were a range of species present such as, hawthorn, birch , hazel , alder and sycamore (with the sycamore and alder being generally more mature specimens). The extent of the compensatory woodland creation should be larger than the area removed as per woodland removal policy guidance (see annex 2 and 5). Indicative details of the proposed compensatory woodland creation should be provided prior to determination of any application (such as location, outline design, initial habitat survey(s)) to indicate site suitability for woodland creation. The compensatory woodland creation would require screening by Scottish Forestry under the Forestry EIA regulations. It is expected that this woodland creation would be within the Loch Lomond and Trossachs National Park and the woodland should be native. Given the extent of any compensatory woodland creation is likely to relatively small, the incorporation of this compensation in a larger woodland creation scheme could be considered.

Design/Siting

The proposal should seek to minimise the loss of the woodland, when viewed from both from the road and loch side. This is to reduce the appearance of a visual 'gap' in tree cover on the loch shore as well as to preserve woodland habitat where possible. Replanting around the building should be

undertaken where possible after construction to reduce the overall longer term visual impact. There would appear to be opportunities also to reduce the amount of parking (down from 16 spaces) to that level of reserved parking needed for the crew size required for the boat to be operational (plus ambulance turning facility). There may also be scope to relocate the parking away from the more sensitive loch shore to reduce visual impacts (particularly from the Balloch Park side) and minimise woodland loss. Not having access through a car park may also reduce the risk of accidents / conflicts with the public and emergency responders/ambulances. It is noted that there is a desire for the building to host training sessions however there is ample parking in the vicinity to accommodate parking for non-emergency activities. Because the site is within an area of flood risk, extended facilities for activities that are not undertaken in association with emergencies (such as 'general training' or use as conference room for hire etc) ought to be omitted unless direct access can be achieved from an area of the building above the flood level to safe ground.

A tree survey in line BS5837 and ecological assessment of the site should be submitted should an application come forward and such information would help inform approaches to minimise tree loss and impacts. Protected Species survey such as bat roost potential of any trees proposed for felling and possibly otter would also be required. Visualisation/photomontage from key public viewpoints would also be helpful to assess to visual impacts and compliance with landscape policies (NEP1).

As regards the building design, a 2 story building may be considered out of scale with other development in the vicinity and the height should be kept to a minimum given this visually sensitive loch-side location. In particular there may be opportunity to reduce the size of the 'training/briefing room' such that the upper floor can be reduced in scale and thus the overall massing of the building significantly reduced. Upper floor activity/facilities, if they must be located on an upper floor, should only be the minimum to meet the operational requirements. Careful and high quality design will be needed for the structure given the prominent loch edge location.

Along with the plans I anticipate the following supporting information would be needed at the application stage:

- Planning /Design Statement – with justification for the chosen location and design rationale for the building
- Flood Risk Assessment
- Tree Survey and Impact Assessment
- Phase 1 Ecological/Habitat Survey
- Landscape Assessment (with visualisations from public vantage points)

I trust the above is helpful and I would welcome further engagement in future design iterations prior to any formal application submission. Please note that any pre-application advice we provide is not a formal decision by the Authority and cannot bind its future decision making. Any views or opinions expressed are given in good faith and to the best of my professional ability, but are without prejudice to the formal consideration of any planning application following statutory consultation and evaluation of all available information.

Regards
Caroline

Caroline Strugnell MRTPI
Development Management Planner
Loch Lomond & The Trossachs National Park

Site Photographs

Looking east across the car park with the application site behind the hedgerow to the left hand side.

Looking north towards the application site behind the hedgerow.

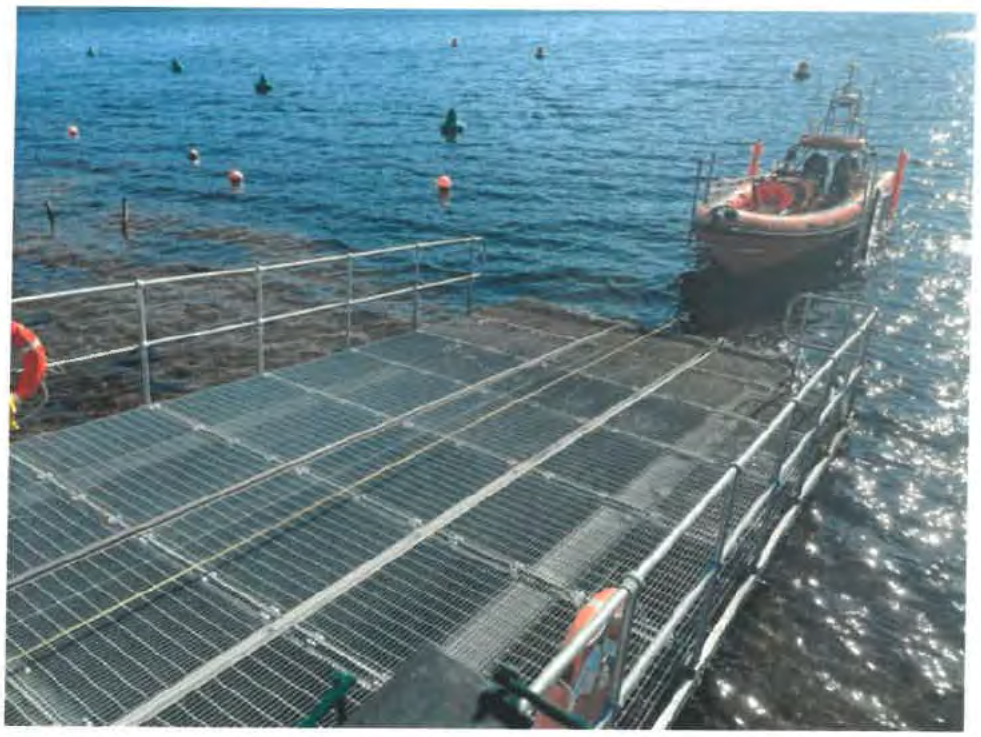
Looking northwest towards the proposed rescue base building with the slipway running off the beach to the right. The existing car park is to the left.

Looking north from the application site with the proposed slipway running off the beach.

Looking southwest from the shoreline towards the site of the proposed rescue base building (with the public car park behind the hedgerow) and with the slipway running off the beach in the foreground.

A view of the proposed development site from Balloch Park (to be set within the woodland on the opposite side of the river).

The locker-room of a similar rescue boat facility.



An example of a similar rescue boat slipway.

Preliminary Ecological Appraisal

River Leven, Balloch

For

The Hay Partnership

Final

24th November 2023

www.wildsurveys.co.uk

St James Business Centre, Linwood Road, Paisley, PA3 3AT

Quality Management

Project No: WS4246.23		
Prepared by: Charlotte Hartfree-Blair	Date: 24.11.2023	Signed by: [redacted]
Reviewed by: Morna McBean	Date: 11.12.2023	Signed by: [redacted]

Version No.	Date	Comments / Changes	Changed by
Final	20/12/2023	No changes from draft	CH

Contacts	
Charlotte Hartfree-Blair	[redacted]
NatureScot	Caspian House Mariner Court Clydebank Business Park Clydebank G81 2NR www.nature.scot

Table of Contents

Executive Summary

Wild Surveys Ltd was commissioned by The Hay Partnership to undertake a Preliminary Ecological Appraisal and desk study at the River Leven, Balloch. The aim of the survey was to provide an assessment of the ecological features present, or potentially present, within the site and the surrounding areas to determine whether further dedicated protected species surveys are required to inform the client prior to planning permission being sought.

As part of the Preliminary Ecological Appraisal, a Phase 1 habitat survey was completed during the site visit which aimed to provide a description and map of habitats within the site, including a plant species list and target notes (where appropriate) in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010). The survey was extended to identify any suitable habitat for protected/ notable species and field signs within the survey area were noted on an opportunistic basis in order to make recommendations for further survey effort, retention, avoidance and/ or mitigation, and enhancement as appropriate. A walkover survey was undertaken on 20th October 2023 by two ecologists of land within the site boundary and an additional 30 m survey area where access allowed. A further 200 m either side of the site boundary and the woodland in between was assessed for suitability to support otter.

The site is located within the Loch Lomond and Trossachs National Park at the southern end of Loch Lomond at the mouth to the River Leven. Balloch is located to the south of the site. The site is bordered by the River Leven, broadleaved woodland and the Balloch pier carpark.

The site is within the statutory designated site of The Loch Lomond and Trossachs National Park and within 2 km of Boturich Woodland, a Site of Scientific Special Interest, located approximately 1.3 km north. Boturich Woodland is designated for upland mixed ash woodland and wet woodland. In addition, there are a total of 86 non-statutory designated sites within 2 km of the proposed development. Balloch Castle Country Park is located approximately 40 m northeast on the other side of the loch; seven Local Nature Conservation Sites with the river Leven corridor located within the site boundary; 18 woodlands listed on the Ancient Woodland Inventory and 60 native woodlands, the nearest being an upland mixed ash woodland within the site boundary.

The habitat present within the site is a mixed ash native woodland with a species poor hedgerow to the southern boundary. The removal of the native woodland within the site boundary will create a permanent loss of woodland but will only temporarily affect connectivity during the construction phase. The habitat is suitable for otter, bats, red squirrel, badger, reptiles and nesting birds. Field signs of unknown squirrel species using the site were recorded. No field signs for any other protected species were found during the survey.

Recommendations have been made within the body of the report in line with the mitigation hierarchy.

As no proposed development design plan was available at the time of writing, an overarching strategy for enhancing biodiversity appropriate to the site has been set out. However, effective ecological enhancement measures cannot be recommended without knowing what affect the development design will have on the baseline habitat types, species supported and ecological connectivity within the site and surrounding area. Bespoke ecological enhancement measures for the development, incorporated within the design, along with long-term management requirements will be required to inform a planning application.

1 Introduction

1.1 Project Objectives

1.1.1 Wild Surveys Ltd (WSL) was commissioned by The Hay Partnership to undertake a Preliminary Ecological Appraisal (PEA) and desk study at the River Leven (hereafter referred to as 'the site'), Balloch (National Grid Reference NS 38707 82447).

1.1.2 It is understood that the survey is required to inform a planning application to relocate the Loch Lomond rescue boat to the site. All the trees are to be removed from the site to create an access road, office and messing facilities, associated parking and a loading slip.

1.1.3 The aim of a PEA survey is to provide an assessment of the ecological features present, or potentially present, within the site and the surrounding areas. The survey aims to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate) and also to identify any suitable habitat for protected species and note any field signs of protected species within the survey area. The key objectives are to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the mitigation hierarchy;
- Identify any additional surveys that may be required; and,
- Identify the opportunities offered by a project to deliver ecological enhancement with the aim to achieve positive effects on biodiversity.

1.1.4 As part of the Preliminary Ecological Appraisal, a key objective is to review the proposed development in relation to the pre-development biodiversity value, taking into account the baseline habitat types, species supported and ecological connectivity within the site and to the surrounding area. Bespoke ecological enhancement recommendations should be made as part of a strategy to achieve positive effects on biodiversity as a result of the proposed development. Long-term management requirements will require to be determined to ensure long-term success and to support this strategy.

1.1.5 This survey is completed in line with Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and comprises a dedicated Phase 1 habitat survey in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010).

1.2 Site Location

1.2.1 The site is located within the Loch Lomond and Trossachs National Park at the southern end of Loch Lomond at the mouth to the River Leven. Balloch is located to the south of the site. The site is bordered by the River Leven, broadleaved woodland and the Balloch pier carpark. The location of the survey can be found in **Appendix 1**.

2 Legislation and Policy

2.1 Wildlife Legislation

2.1.1 Full consideration has been given to all relevant nature conservation legislation when carrying out this assessment, these include:

- The Conservation of Wild Birds (the Birds Directive) 1979 (as amended);
- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended);
- Wildlife and Countryside Act 1981 (as amended in Scotland);
- Wildlife and Natural Environment (Scotland) Act 2011 (as amended); and
- Nature Conservation (Scotland) Act 2004 (referencing the Convention on Biological Biodiversity (1992) and the Scottish Biodiversity Strategy, which are implemented nationally through the Scottish Biodiversity List and locally through Local Biodiversity Action Plans (LBAP)

2.2 Planning Policies

Local Development Plan

2.2.1 The policies set out below are those relevant to nature conservation and include those from the Local Development Plan. The Local Development Plan was adopted by The Loch Lomond and Trossachs National Park in January 2017 and is the land use plan which sets out the policies and proposals which the Council wishes to use to guide development across the area from 2017 to 2026.

2.2.2 The Local Development Plan contains the following policies which focus on the natural environment and details how new developments can enhance habitats/biodiversity including through creating, enhancing, and better linking habitats and ecosystems:

- Natural Environment Policy 2: European sites - special areas of conservation and special Protection areas;
- Natural Environment Policy 3: Sites of Special Scientific Interest, National Nature Reserves and RAMSAR Sites;
- Natural Environment Policy 4: Legally Protected species;
- Natural Environment Policy 5: Species and Habitats;
- Natural Environment Policy 6: Enhancing Biodiversity;
- Natural Environment Policy 8: Development Impacts on Trees and Woodlands;
- Natural Environment Policy 9: Woodlands on or adjacent to development sites;
- Natural Environment Policy 10: Protecting peat lands; and
- Natural Environment Policy 11: Protecting the Water Environment.

2.2.3 Consultation should be undertaken with the individual responsible for biodiversity at the Local Planning Authority.

National Planning Framework 4 (NPF4) (Scottish Government, 2023)[1]

2.2.4 National Planning Framework 4 contains policies of relevance to biodiversity, including Policy 3 a, c, and d:

- NPF4 Policy 3.a states that development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats, and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible;
- NPF4 Policy 3.c states that proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity, in accordance with national and local guidance. Measures should be proportionate to the nature and scale of development; and
- NPF4 Policy 3.d states that any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the need to reverse biodiversity loss, safeguard the ecosystem services that the natural environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

Developing with Nature guidance (NatureScot, 2023)[2]

2.2.5 Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c). This guidance has been published in support of policy 3(c) of National Planning Framework 4 in relation to planning applications.

Scottish Pollinator Strategy (NatureScot, revised 2021)

2.2.6 The Pollinator Strategy for Scotland 2017-2027, and the accompanying Implementation Plan, were created to set out how we can make Scotland a place where pollinators can thrive.

Scottish Biodiversity List

2.2.7 Scottish Ministers created the Scottish Biodiversity List (SBL) in 2005 in order to satisfy the requirements under Section 2(4) of the Nature Conservation (Scotland) Act 2004 and to assist public bodies in carrying out conservation of biodiversity, and to provide the general public with information regarding conservation within Scotland. The list contains habitats, plants and species which are deemed to be of principal importance to the Scottish population and meet the social criteria, defined as being "*important for any reason including for conservation reasons, for their own personal enjoyment, as economically important, simply their favourites, as symbols of Scottish identity or just that they are nice to see*" (Blake, 2005).

Scottish Government's Policy on Control of Woodland Removal

2.2.8 The Scottish Government's Control of Woodland Removal Policy includes a presumption in favour of protecting woodland. Woodland removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting.

[1] https://www.gov.scot/publications/national-planning-framework-4/documents/
[2] https://www.nature.scot/doc/developing-nature-guidance

Local Biodiversity Action Plan

2.2.9 Loch Lomond Wild Park Biodiversity Action Programme (2018 – 2023) (BAP) incorporates the Loch Lomond and Trossachs National Park area and focuses attention on the key environmental threats to the national park and species of importance.

2.2.10 The adopted LBAP outlines actions for the following species:

- Lamprey (*Lampetra fluviatilis*);
- Otter (*Lutra lutra*);
- Atlantic salmon (*Salmo salar*);
- Water vole (*Arvicola amphibius*); and
- Red squirrel (*Sciurus vulgaris*).

2.2.11 In addition, the Wild Park National Park Biodiversity Action programme incorporates policies to safeguard, protect and enhance the following natural environments relevant to the site:

- Sites of Special Scientific Interest;
- Biodiversity;
- Habitats and species;
- Water environment; and,
- Trees and woodlands.

3 Methodology

3.1 Desk Study

3.1.1 A data search was undertaken by WSL to review information available within the public domain. Publicly available databases, such as the National Biodiversity Network (NBN) Atlas, Habitat Map of Scotland (HabMoS), Saving Scotland's Red Squirrels and our own internal records were consulted for historical evidence of protected and notable species and habitats within the 10 years and within 2km of the site. Listings in SBL and LBAP was also checked. This information was gathered to identify the status of notable or protected species or habitat within 2 km of the site.

3.1.2 In addition, a search using NatureScot sitelink and the relevant Local Authority nature conservation sites was carried out to discover any statutory or non-statutory designated sites within 2 km. Designated sites included within the desk study include:

- Special Area for Conservation (SAC);
- Special Protection Areas (SPA);
- Ramsar;
- Sites of Special Scientific Interest (SSSI);
- National Nature Reserves (NNR);
- National Parks;
- Local Nature Reserves (LNR);
- Local Authority designated site (such as Local Nature Conservation Sites (LNCS));
- Wildlife Nature Reserves (such as Scottish Wildlife Trust or Royal Society for the Protection of Birds);
- Ancient Woodland Inventory (AWI); and
- Native Woodland.

3.2 Phase 1 Habitat Survey

3.2.1 A Phase 1 habitat survey was carried out by an experienced ecologist on 20th October 2023 in line with the Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010), to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate).

3.2.2 The condition of habitat types was recorded using the DEFRA Biodiversity Metric 4.0 habitat condition assessment sheets (Natural England, 2022) according to the specified criteria for each habitat type.

3.3 Protected Species

3.3.1 The survey was extended to identify any suitable habitat for protected/ notable species and field signs within the survey area were noted in order to make recommendations for further survey effort, retention, avoidance and / or mitigation, as appropriate. The survey area comprised of the site itself plus an additional 30 m where access allowed, unless otherwise noted. A further 200 m of the River Leven bank was also surveyed for field signs of otter. Legal context with regards to protected species can be found in **Appendix 2 - 5**.

3.3.2 Given the habitat types present within the survey area, particular attention was given to the potential presence of the following species: bats (Chiroptera), otter (*Lutra lutra*), water vole (*Arvicola amphibius*), red squirrel (*Sciurus vulgaris*), pine marten (*Martes martes*), reptiles (Squamata), badger (*Meles meles*) and habitat suitable for use by birds. Methodologies are detailed below for each of these species.

3.3.3 There is no habitat within the survey area suitable for great crested newt (*Triturus cristatus*), or wildcat (*Felis silvestris)* and these species are not discussed further.

Bats

Daytime Bat Walkover (DBW)

3.3.4 A daytime bat walkover (DBW) was undertaken on 31st October 2023 to identify and record any structures, trees or other features that could be suitable for roosting bats and any habitats that could be suitable for foraging, commuting or swarming in/at. Roosting and foraging habitats, and flight paths were identified separately.

3.3.5 A DBW was undertaken to assess and record any habitats suitable for roosting, commuting and foraging bats within the proposed site and within land with ecological connectivity to the site. The suitability of the proposed site for bats was determined in line with Table 1. Suitability is categorised irrespective of the presence of a roost, but where a roost is found 'confirmed roost' will be added following the allocation of suitability. Where professional judgement has been used to assess the suitability of the proposed development site, it will be detailed within the results section.

3.3.6 The survey area consisted of the Zone of Influence which is defined as the area within proposed activities will take place and includes any areas which will be directly and/or indirectly effected by proposed activities. The Zone of Influence is shown on the Figure in **Appendix 1**.

3.3.7 The survey area was inspected in accordance with current best practice guidance from the Bat Conservation Trust 4th Edition (Collins, J. 2023) on 31st October 2023, in order to identify the suitability of the ZoI (Zone of Influence) to support roosting, commuting and foraging bats. Guidelines for determining suitability of structures and habitat features for bats is presented in the following table:

Table 1: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement (adapted from Table 4.1 on Page 44 of current guidelines (BCT, 2023):

Suitability	Description	
	Roosting habitat in structures	Potential flight paths and foraging habitats
None	No habitat features on site to be used by bats at any time of year (complete absence of crevices / suitable shelter).	No habitat features on site likely to be used by any commuting or foraging bats at any time of year (no habitats that form continuous lines of shade / protection for flight-lines or generate / shelter

		insect populations as prey for bats).
Negligible	No obvious features on site to be used by bats, however, uncertainty remains. Bats may use small or apparently unused features on occasion. Defined as "so small and unimportant as to not be worth considering, insignificant". Places a bat may roost but is unlikely to do so (due to another attribute).	No obvious habitat features on site likely to be used as flight paths or by foraging bats; however, a small element of uncertainty remains to take account of non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool / stable hibernation site but could be used by individual hibernating bats).	Habitat that could be used by small number of bats as flight paths such as a 'gappy' hedgerow or unvegetated stream, but isolated and not well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland setting) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity or hibernation – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flightpaths such as lines of trees, scrub and linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland and water.

High	A structure with one or more potential roost sites that are obviously suitable for bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts such as maternity or classic cool / stable hibernation site.	Continuous high quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used by bats regularly for foraging such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts

Hibernation Suitability Assessment

3.3.8 An assessment of suitability for hibernation was carried out considering the following:

- The suitability of features to support bats or allow access for roosting bats;
- The temperature and humidity conditions likely to be present within the structure during the winter period and the suitability in this respect for use by hibernating bats;
- The surrounding habitat and potential use by bats year-round; and
- The presence of known roosts in the structure, adjacent structures or surrounding area during the active season.

3.3.9 The current BCT guidelines (BCT, 2023) suggest that the potential suitability should be defined as follows:

- Low suitability - no or very limited roosting potential;
- Moderate suitability - roosting potential - non-classic site; and
- High suitability - roosting potential - classic site (such as tunnels / cellars / underground).

Otter

3.3.10 The River Leven was surveyed to assess the survey area's potential to support otter and to search for any field signs which would indicate use. The survey area consisted of 200 m either side of the site river, adjacent to the site boundary, where accessible. Field signs include:

- Holts – below ground resting places;
- Couches – above ground resting places;

- Prints; and,
- Spraints – faeces used as territorial markers.

3.3.11 Otters can be surveyed for at any time of year; however, it is good practice to leave at least two dry days before surveying a watercourse, as heavy rain can wash away evidence.

Red Squirrel

3.3.12 An assessment was made of the site and 100 m survey area for its potential to support red squirrels. Signs of red squirrel include:

- Squirrel dreys within trees;
- Feeding remains (*e.g*. chewed cones, split nuts); and,
- Sightings of red squirrels.

3.3.13 Surveys for red squirrel signs are best carried out in the season which corresponds to food availability for the tree crop present. For example, broadleaved tree seeds are generally available from autumn, declining through winter and spring.

Pine Marten

3.3.14 An assessment was made of the survey area for its potential to support pine marten. The following field signs were recorded, if encountered during the PEA walkover:

- Droppings (faeces);
- Prints;
- Paths;
- Resting sites; and,
- Feeding remains.

Water Vole

3.3.15 All suitable habitat (including terrestrial and riparian habitat) within the survey area were surveyed for water vole and the following field signs were searched for:

- Droppings – faeces recognisable by their size, shape, and content, and (if not too dried out) also distinguishable from rat droppings by their smell;
- Latrines – faeces are often deposited at discrete locations know as latrines;
- Feeding stations – food items are often brought to feeding stations along pathways and haul out platforms, recognizable by neat piles of chewed vegetation up to 10 cm long;
- Burrows – appear as a series of holes along the water's edge or on land, distinguishable from rat burrows by size and position;
- Tumuli – small earth mounds left behind by water vole when digging;
- Lawns – may appear as grazed areas around land holes;
- Nests – where the water table is high, above ground woven nests may be found;
- Footprints – tracks may occur at the water's edge and lead into vegetation cover, may be distinguishable from rat by size; and,
- Runways in vegetation – low tunnels pushed through vegetation near the water's edge or in terrestrial habitat, less obvious than rat runs.

3.3.16 Although water voles do not hibernate, they are not very active above ground during the winter; therefore, surveys are best carried out between March and October. An assessment of bank suitability and habitats present on site can, however, be made out with the active season.

3.3.17 A full survey of suitable habitat for water vole requires at least two surveys within the optimal period, therefore this survey should be considered a preliminary assessment of the site for water vole.

Reptiles

3.3.18 The habitat within the survey area was evaluated for suitability to support reptiles, additionally barriers to colonisation by reptiles from the wider area were noted if present.

3.3.19 The assessment of habitat does not definitively show presence or absence of reptiles, but incidental sightings of reptiles are recorded when found.

Badger

3.3.20 The survey area included a habitat assessment for badger and the following fields signs were searched for:

- Presence of holes with evidence of badgers such as footprints, discarded hairs; etc.;
- Presence of dung pits or latrines;
- Presence of well-used runs with subsidiary evidence of badger activity; and
- Presence of other indications of badger activity such as signs of foraging, snuffle marks and footprints.

3.3.21 In addition, any mammal holes which were either dug by badger or could be used by badger (known as setts) were also noted. Setts were examined for evidence of current use including:

- Identifiable badger hairs present within sett entrances or spoil heaps;
- Badger prints present within sett entrances or spoil heaps;
- Well-worn paths connecting the sett with other known setts, badger latrines or dung pits;
- Recent digging when associated with other evidence of badger; or
- Bedding present at sett entrances or recently buried within spoil heaps.

Day nests comprised of collections of bedding above ground were also noted if present.

3.3.22 Badger surveys can be carried out at any time of the year. However, the optimum period is between November and March when vegetation has died-back, and signs can be more easily seen.

Birds

3.3.23 The habitats within the survey area were evaluated for their suitability to support notable bird species and, in particular, nesting and wintering birds.

Invasive Non-native Species

3.3.24 Particularly common, invasive non-native species, such as giant hogweed (*Heracleum mantegazzianum*), Japanese knotweed *(Fallopia japonica),* and Himalayan balsam (*Impatiens glandulifera*) will have been noted, where found. Other non-native invasive species such as

rhododendron (*Rhododendron ponticum*), cotoneaster (*Cotoneaster spp*) and snowberry (*Symphoricarpos albus*) will be noted where incidentally encountered.

Other Notable Species or Habitats

3.3.25 Any suitable habitat for and field signs of SBL species brown hare (*Lepus europaeus*), hedgehog (*Erinaceus europaeus*) and common toad (*Bufo bufo*) will be recorded where present. No survey was undertaken specifically for SBL invertebrates or bird species, however, species were recorded where incidentally observed during the survey.

3.4 Limitations

Physical Limitations

3.4.1 There were no physical limitations to the survey area.

Seasonal Limitations

3.4.2 Ecological surveys provide a snapshot of the broad habitats and species present within the survey area at the time the survey is undertaken. Faunal species are transient in nature and can move in and out of an area. A lack of field signs of any particular species does not confirm absence, only that no field signs were present at the time of survey. Suitability for protected species and variation in use of the site by protected species on a seasonal basis has been considered based on the broad habitat types present.

3.4.3 There are seasonal limitations to all species and habitats surveys. A table of optimal survey periods can be found in **Appendix 6**.

4 Results

4.1 Desk study

4.1.1 The site is within the statutory designated site of The Loch Lomond and Trossachs National Park and within 2 km of Boturich Woodland, a Site of Scientific Special Interest located approximately 1.3 km north. The woodland is a site of interest for upland mixed ash woodland and wet woodland.

4.1.2 In addition, there are a total of 86 non-statutory designated sites within 2 km of the proposed development. Balloch Castle Country Park located approximately 40 m northeast on the other side of the loch; seven Local Nature Conservation Sites (LNCS) with the nearest site being the River Leven corridor located within the northern boundary of the site; 18 woodland listed on the Ancient Woodland Inventory (AWI), the closest site being Moss O'Balloch Plantation located approximately 40 m northeast in Balloch Country Park and 60 native woodlands, the nearest being an upland mixed ash woodland within the site boundary.

4.1.3 From the desk study it has been established that there are no publicly available records of protected species within or adjacent to the site boundary (within 100 m). There are records of the following species within 2 km of the site boundary: soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's (*Myotis daubentonii*), Leisler's (*Nyctalus leisleri*), brown long-eared (*Plecotus auratus*), and beaver (*Castor fiber*). The closest record to the site is a record for red squirrel located approximately 200-300 m north of the site boundary.

4.1.4 There are no records for Wild Park BAP or SBL species of relevance to the site identified in the desk study.

4.1.5 The full desk study results can be found in **Appendix 7.**

4.2 Phase 1 Habitat Survey

Habitat Types

4.2.1 This section should be read in conjunction with the Phase 1 habitat map, species list and target notes in **Appendix 8**. The following habitat was noted to be present within the survey area boundary:

- Semi-natural broadleaved woodland; and
- Species poor hedge.

Semi- natural broadleaved woodland

4.2.2 The site boundary is within a native woodland (OBJECTID_1 3300) an upland mixed ashwood which is listed on the SBL. Species found within the woodland include, alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), downy birch (*Betula pubescens*), ivy (*Hedera helix*) and dog's mercury (*Mercurialis perennis*). The condition of this habitat was recorded as good.

Species poor hedge

4.2.3 A species poor hedge borders the boundary to the south. Species within the hedge include hawthorn (*Crataegus monogyna*) and dog rose (*Rosa canina*). The condition of this habitat was recorded as being poor.

4.3 Protected Species

4.3.1 This section should be read in conjunction with Protected Species Target Note Location Map and target notes in **Appendix 9** of this report.

Bats

Bat Daytime Walkover Survey

4.3.2 The habitats within the ZoI consists of woodland, Loch Lomond and the River Leven. These habitats offer high suitability for foraging and commuting bats with known roost locations to the northeast at Balloch Castle.

4.3.3 A full ground level tree assessment was not carried out, but incidental observations of features in trees were recorded during the survey. Potential roost features were recorded in several of the trees, with suitability for individual bats only (PRF-I). Evidence of bird nests and potential red squirrel dreys were also noted.

Otter

4.3.4 The River Leven runs adjacent to the site boundary. The river and associated riparian woodland 200 m either side of the site, the ground between the site boundary and the river and within the site boundary was assessed for the suitability to support otter.

4.3.5 The riverbank, woodland within the site boundary and surrounding woodland is suitable for otter holts and resting sites (Target note 4), however no holts or resting sites were noted. No field signs of otter were noted during the survey within the survey area. Further details are shown in **Appendix 9**.

Red Squirrel

4.3.6 The trees within the site boundary and the surrounding woodland offers suitable habitat for red squirrel. Possible signs of a drey was noted in a tree within the site boundary to the south.

Pine Marten

4.3.7 The survey area offers suitable habitat for pine martin and connectivity to further suitable habitat which could support a viable territory (average 2 km within resource-rich lowland woodland (Cresswell, 2012)). However, no field signs of pine marten were found.

Water Vole

4.3.8 The survey area offers suitable habitat for water vole particularly along the riverbank, however there were no field signs to suggest water vole are using the site.

Reptiles

4.3.9 The habitat was assessed as being suitable for reptiles, however no field signs were found during the survey.

Badger

4.3.10 The survey area has suitability for foraging and commuting badger as well as for sett construction. No field signs were noted during the survey.

Birds

4.3.11 During the site visit the following species were noted: carrion crow (*Corvus corone*), blue tit (*Cyanistes caeruleus*), great tit (*Parus major*), robin (*Erithacus rubecula*) and chaffinch (*Fringilla coelebs*).

Invasive, Non-native Species

4.3.12 A stand of Japanese knotweed (*Fallopia japonica*) was located within the woodland, measuring approximately 3 m x 2 m. The location of which can be seen on the constraints map in **Appendix 9**.

Other Notable Species or Habitats

4.3.13 Upland mixed ashwood and hedgerows are on the Scottish Biodiversity List (SBL).

4.3.14 Mammal burrows were recorded on site outside the site boundary but within the 30 m buffer. The burrows were suitable for use by otter and pine marten, however there were no field signs for otter or pine marten and are most likely to be used by rabbit.

5 Discussion and Recommendations

5.1 Discussion

5.1.1 The site is within the statutory designated site of The Loch Lomond and Trossachs National Park with Boturich Woodland, a Site of Scientific Special Interest located approximately 1.3 km north.

5.1.2 In addition, there are a total of 86 non-statutory designated sites within 2 km of the proposed development. Balloch Castle, a Country Park and site of an ancient woodland is approximately 40 m northeast on the other side of the loch; seven Local Nature Conservation Sites (LNCS) with the nearest site being the River Leven corridor located within the northern boundary of the site; and 60 native woodlands, the nearest being an upland mixed ash woodland within the site boundary.

5.1.3 The proposed development will have both direct and indirect effects on the River Leven corridor and the native woodland it encompasses. All the trees within the site boundary are to be removed to allow an access road, lifeboat storage and offices and a slipway to be built.

5.1.4 During construction tree felling, noise, light, dust, root compaction, run-off / pollutions events and machinery tracking could all have negative effects on the surrounding habitats.

5.1.5 During operational phase human pressures such as trampling of woodland, lighting, increased runoff, barriers such as boundary fencing could all have negative effects on surrounding habitats.

5.1.6 Poor water quality, pollution and bank erosion are all key environmental threats to the national park, therefore measures will need to be put in place to eliminate these threats during the development.

5.1.7 The habitat present within the site is a mixed ash native woodland with a species poor hedgerow to the southern boundary. The removal of the native woodland within the site boundary will create a permanent loss of woodland but will only temporarily affect connectivity during the construction phase. Root protection measures should be put in place to protect the adjacent woodland root systems and to avoid any indirect impacts from compaction of ground / root systems, tracking of machinery or trampling during construction (short-term).

5.1.8 It was identified from the bat daytime walkover that the site may support foraging and commuting bats, particularly within the wooded area, within the surrounding habitats and along the river. The trees that are to be removed from the site could decrease connectivity with the surrounding habitats, however the impact will be a temporary disturbance, and there are other commuting and foraging opportunities in the surrounding habitats.

5.1.9 The proposed works will not have a direct impact on otter, with no holts or resting sites currently identified within 200 m of the proposed works. Otter are likely to forage and commute along the River Leven, associated tributaries and riparian habitats around the river. Otter was lost from most of England and Wales between the 1950s and the 1970s because of pesticide pollution of waterways, but it survived in Scotland's cleanest bodies of water in the north and west. Today, the species is flourishing across Scotland, and recovering well across the UK as waterways are cleaned up. The Scottish population is estimated to be around 8000 otters (NatureScot, No Date).

5.1.10 A possible red squirrel drey is located in a tree towards the southern boundary of the site. If this tree cannot be retained monitoring will need to take place to determine its use (breeding or non-breeding) and by which species as both grey and red squirrels can be found in this area.

5.2 Recommendations

Licensing Requirements

5.2.1 No licence is currently required but may be required following further survey work.

5.2.2 All site staff should be made aware of the risk of finding protected species and what to do if signs of protected species are found. A Tool Box Talk should be given to all contractors. If any signs of protected species are found during site works, then all works must cease immediately, and a suitably experienced bat ecologist contacted.

5.2.3 A summary of the legal position in relation to protected species is contained within **Appendix 2 - 5**.

Further Survey

5.2.4 Further surveys for protected species, with the exception of pre-construction surveys should be carried out to inform planning permission and a survey report should be submitted as part of the planning application. The presence, or potential presence, of any protected species is a material consideration in planning application decisions.

5.2.5 All trees within the development boundary and within 30 m of the proposed works should be subject to a Ground Level Tree Assessment (GLTA) for bats prior to any tree removal taking place. Bat activity surveys may need to be carried out upon the results of the GLTA to determine how the site and its surrounding habitats are being used by bats.

5.2.6 Monitoring of the tree with potential squirrel drey will need to take place to determine current use and by which species, as both grey and red squirrel are present in this area. If the drey is currently being used by red squirrel a licence will be required.

5.2.7 Pre-application protected species surveys normally remain valid for approximately two years or two survey periods[3] unless it is evident that there has been a substantive change in number, distribution, or activity of protected species since the original survey was undertaken.

Pre-construction Surveys

5.2.8 For all development proposals where protected species are a consideration, pre-construction surveys should be timetabled into project plans. Due to the high mobility of wildlife, if proposed works have not commenced within 12 months of a pre-application protected species survey being undertaken then the project ecologist should be contacted to determine the requirement for any repeat ecological surveys pre-construction. Pre-construction surveys should be completed as close to the construction period as possible, and no more than 3 months before the start of works or within the most recent survey period.

Nesting Birds

5.2.9 Should avoidance of the nesting bird season (March-September) not be possible a nesting bird survey should be undertaken no more than 48 hours prior to any work being undertaken on site by a suitably experienced ecologist.

Pre-construction Mammal Survey

[3] NatureScot Standing Advice for Planning Consultations
https://www.nature.scot/search?query=Standing+advice+for+planning+consultations

5.2.10 A pre-construction survey for otter and red squirrel should be carried out within eight weeks of works commencing due to the high mobility of wildlife.

5.2.11 Pre-construction monitoring using cameras should be carried out eight weeks prior to construction to determine if otter, pine marten or badger as using the mammal holes within the survey area.

Mitigation - Avoidance and Retention Measures

Protected and Notable Species

Protection Areas

5.2.12 The tree with a potential squirrel drey will need to be protected during monitoring. If works are confined to the non-breeding season, then the risk of disturbing red squirrel is much lower and only likely to occur where works are within 5m or one tree's distance of a potential drey location (whichever is less). If works are to take place in the red squirrel breeding season (February – September inclusive) then any works within 50 m of the tree containing a drey is likely to be a disturbance and will require a licence.

Sensitive Timing

5.2.13 Building and vegetation removal should be avoided during the nesting bird season (March – September).

Nesting Birds

5.2.14 Should avoidance of the nesting bird season (March-September) not be possible a nesting bird survey should be undertaken no more than 48 hours prior to any work being undertaken on site by a suitably experienced ecologist.

Reptiles

As determining presence or absence of reptiles is labour intensive it should be assumed that reptiles may be present within any suitable habitat.

Mammals

5.2.15 Further monitoring will be required to determine whether protected species are using the mammal holes found within the survey area. This may need to be determined prior to planning consent being sought. If protected species are found to be using the mammal holes a licence will be required.

5.2.16 The following methods should be employed during construction to avoid injury, obstruction or disturbance of any mammal species using the survey area:

- A temporary ramp to be placed in trenches over 0.5 m deep in order to allow a potentially trapped animal to exit the trench;
- Any open pipes should be capped to prevent animals gaining access;
- All excavations and pipe systems should be checked at the start of each working day;
- Site construction fencing should not interfere with the passage of animals through watercourses;
- Lighting to be directed away from watercourses and any lighting within 30 m of burns to be low-intensity lighting; and,
- Existing vegetation along the watercourses should be retained wherever possible.

Foraging Bats

5.2.17 Sensitive lighting designs should also be considered to avoid light spill or artificial light at night (ALAN) to avoid affected foraging or commuting bats. The proposed lighting scheme should be designed by a suitably qualified lighting engineer and should consider the following:

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used;
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- A warm white spectrum (ideally retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by the lighting professional;
- Column heights should be carefully considered to minimise light spill;
- Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance for the Reduction of Obtrusive Light;
- Luminaires should always be mounted on the horizontal, i.e. no upward tilt;
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed; and
- Light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding. In order to ensure that fencing makes a long-term contribution, it is recommended that it is supported on concrete or metal posts. Fencing can also be over planted with hedgerow species or climbing plants to soften its appearance and provide a vegetated feature which bats can use for navigation or foraging.

Amphibians

5.2.18 Design new roads to avoid trapping amphibians, for example by:

- Using sloping kerbs either side of gully pots, wildlife kerbs or toad ladders;
- Creating draining schemes without sumps;
- Not using kerbs; and
- Retain woodland / hedges – fill gaps in hedges to increase connectivity of habitats.

Protected and Ecological Sensitive Habitats

Tree and Hedgerow Protection

5.2.19 Advice should be sought from a qualified arboriculturist to determine the condition of the trees / woodland within 30 m of the site and establish the root protection areas required to avoid damage to the tree root systems adjacent to the site boundary.

Watercourse or Waterbody Protection

5.2.20 Scottish Environmental Protection Agency (SEPA) Guidelines for Pollution Prevention should be followed to avoid run off or contamination of River Leven.

5.2.21 The discharge of water run-off from a construction site can cause pollution of the water environment. As such, any discharge of water run-off from a construction site to the water environment must be authorised by SEPA.

5.2.22 Water run-off includes any water from rainfall (or any meltwater from ice or snow) that flows over (or horizontally through) the surface of the ground and any matter (for example soils) that are picked up by that water as it does so.

5.2.23 Construction includes any land preparation, demolition work or ground remediation required prior to construction taking place.

Authorisation requirement

Levels of authorisation:

5.2.24 There are two levels of authorisations that apply to the discharge of water run-off from construction sites to the water environment:

- General Binding Rule; or
- A licence.

5.2.25 The type of authorisation that you require depends on the scale of the construction site itself. Further information on the levels of authorisations can be found in the CAR Practical Guide.

Licence:

5.2.26 Construction sites that discharge water run-off to the water environment and:

- a) cover an area greater than 4 hectares; or
- b) contain a road (or track) greater than 5 kilometres in length; or
- c) include any land with an area greater than 1 hectare that has a slope more than 25 degrees; or
- d) include any road (or track) with a length greater than 500 metres that has a slope more than 25 degrees

5.2.27 Will be authorised under a licence. You must apply for, and be granted a licence from SEPA, before the activity can take place.

5.2.28 General Binding Rule:

5.2.29 Construction sites that discharge water run-off to the water environment and are below the licence level thresholds are authorised under general binding rule 10 of The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

5.2.30 You do not need to apply to, or notify SEPA, provided your construction site meets the requirements of GBR 10 – these can be found in the CAR Practical Guide on the SEPA website.

5.2.31 Construction practices should be carried out in line with the SEPA Guidelines for Pollution Prevention to avoid any runoff into the River Leven.

Non-native Invasive Species

5.2.32 Measures to be taken to avoid the spread of non-native invasive species. Advice should be sought from specialist contractor for the treatment and removal of non-native invasive species from the site.

5.2.33 Annex B in Developing with Nature guidance, *Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c)*[4] (NatureScot, 2023) provides a list of plant species that are commonly considered to be invasive and should be avoided. If

[4] https://www.nature.scot/doc/developing-nature-guidance

they are found to be present on site you are encouraged to remove them, and any invasive plant material or contaminated soils disposed of appropriately.

Biodiversity Enhancement Measures

5.2.34 Biodiversity enhancement measures should be committed to by incorporation into the development plans and submitted with the planning application. Biodiversity measures incorporated into the design are outlined below and the full biodiversity strategy can be found in **Appendix 10** which explains how appropriate measures have been included to deliver positive effects for biodiversity.

5.2.35 Long-term management requirements will require to be determined to ensure long-term success and to support this strategy and it is recommended that a Habitat Management Plan is produced outlining the long-term habitat management requirements.

Planting for Wildlife

5.2.36 The plants, where possible, will be locally grown to reduce the risk of introducing pests and disease. Non-natives, other than those trees and plants on a Wildlife and Countryside Act 1981 exemption list that can be planted anywhere, can only be planted in areas designated as "non-wild" (such as private gardens, amenity greenspace, public parks, and gardens, civic and play space). Plants should be native species or species of benefit to wildlife.

5.2.37 The following measures have been selected for use within the site:

- Planting for Pollinators
- Wildflower Meadow
    - Hedgerow borders – seed mixes specifically for hedgerows can tolerate a degree of shading, supplementing the range of wildflowers already present when the cutting regime allows for the growth of woody species through the hedge.
    - Verges beside roads and paths - creating linear meadows where shading, fertile soils and small plots do not constrain.
- Trees and Woodland Planting
    - Street trees - planted in tree pits along roads or pavements, and within the grounds beside them.
    - Scrub creation - low growing woody species and immature trees that will eventually grow into woodland planted as a transitional zone on the edge of existing or created woodland.
    - Woodland creation using species suitable for planting in woodlands near to red squirrel – either on site or nearby to mitigate for tree loss.
- Boundary Hedge
    - Native Hedge
- Planting design to maintain and enhance ecological connectivity.

Providing Homes for Wildlife

5.2.38 The best homes for nature are natural ones. Prior to installing artificial homes for wildlife, action will be taken to keep or provide natural features. This includes retaining mature trees and nesting features, planting new trees and hedgerows, and replicating existing or lost natural features. Artificial homes will be used to provide a valuable alternative and augment existing or lost natural features.

5.2.39 The following measures have been selected for use within the site:

- Log and Leaf Piles
- Homes for Small Birds
- Homes for Bats

Managing Water with Nature

5.2.40 Working with natural hydrological processes, existing water features and wetland areas should be retained where possible and managed for biodiversity. If development results in their modification their value for wildlife should be enhanced.

5.2.41 The following measures have been selected for use within the site:

- Rivers (safeguarding)

6 References

Bang, P. & Dahlstrom, P., 2001, *Animal Tracks and Signs*, Oxford University Press, Oxford

Blake, K. (2005). Production of the list of species and habitats considered to be of principal importance for the purpose of conservation of biodiversity in Scotland (The Scottish Biodiversity List). Part 2 – Technical Report. Final Report. Scott Wilson, Edinburgh.112pp.

CIEEM, 2019, Advice Note on the Lifespan of Ecological Reports & Surveys, April 2019 https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf-

Collins, J, 2023, *Bat Surveys – Good Practice Guidelines for Professional Ecologists, 4th Edition.* Bat Conservation Trust, London

Cresswell, W.J., 2012, UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation, The Mammal Society, Southampton.

Entwistle A.C, Harris S, Hutson A.M, Racey P.A, Walsh AL, Gibson S.D, Hepburn I & Johnston J, 2001, *Habitat Management for Bats – A guide for land managers, land owners and their advisors.* JNCC, Peterborough

Forestry Commission and The Bat Conservation Trust, 2005, *Guidance Note: Woodland Management for Bats*

Gurnel, J., et al., 2009, *Practice Note – Practical Techniques for Survey and Monitoring Squirrels*, Forestry Commission, Wetherby

Harris, S., Yalden D W (Eds.), 2008, Mammals *of the British Isles: handbook, 4th edition.* The Mammal Society, Southampton, 799pp

JNCC Joint Nature Conservation Committee, 2005, *Handbook for Phase I Habitat Survey: A Technique for Environmental Audit*, JNCC, Peterborough

JNCC, 2003, *Extended Phase 1 Habitat Survey*, England Field Unit, Nature Conservancy Council, Peterborough

Mitchell-Jones, A.J and McLeish, A.P, 2004, *The Bat Workers Manual*. JNCC, Peterborough

NatureScot, 2023, Developing with Nature guidance, Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c)

Roper, Timothy J., 2010, *Badger*, Collins, London

Rose, F. & O'Reilly, C., 2006, *The Wild Flower Key* (revised edition), Frederick Warne, London

Scottish Biodiversity Forum, 2012, www.biodiversityscotland.gov.uk

Scottish Natural Heritage, 2001, *Scottish Wildlife – Badgers and development*, SNH, Battleby.

Scottish Natural Heritage, 2014, *Licensing Guidance – What is a Badger Sett?*, SNH, Inverness

Scottish Government, 2023, National Planning Framework 4

Spoelstra. K., Van Grunsven. R. H. A., Ramakers. J. J. C., Ferguson. K. B., Rapp. T., Doners. M., Veenendaal. E. M., Visser. M. E. (2017) Response of bats to light with different spectra: light-shy and agile bat presence is affected by white and green, but not red light. Proceedings of the Royal Society of London B: Biological Sciences, 284

Spoelstra. K., Van Grunsven. R. H. A., Donners. M., Gienapp. P., Huigens. M. E., Slaterus. R., Berendse. F., Visser. M. E., Veenendaal. E. (2015) Experimental illumination of natural habitat- an experimental set-up to assess the direct and indirect ecological consequences of artificial light of different spectral composition. Phil. Trans. R. Soc. B. 370

The UK Biodiversity Action Plan (UK BAP), 2012, http://jncc.defra.gov.uk/page-5155

Voigt, C.C, C. Azam, J. Dekker, J. Ferguson, M. Fritze, S. Gazaryan, F. Hölker, G. Jones, N. Leader, D. Lewanzik, H.J.G.A. Limpens, F. Mathews, J. Rydell, H. Schofield, K. Spoelstra, M. Zagmajster (2018) Guidelines for consideration of bats in lighting projects

Appendix 1 – Site Location

0 25 50 75 100 m

1:1,000

Map data from OpenStreetMap.

N

Wild surveys ltd

Key

Site Boundary

30 m ZoI

Site Location
River Leven, Balloch

NGR at centre:
NS 38707 82447

Drawing by:
CH

Version:	Date:
1	19.10.2023

Appendix 2 – European Protected Species and the Law

Bats, otters, great crested newts, natterjack toad, wildcat, cetaceans, and several other animals are protected under European law, in Annexes II and IV of *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora* (The Habitats Directive 1992). The Habitats Directive is translated into Scots law under the *Conservation (Natural Habitats, &c.) Regulations 1994* (as amended in Scotland), often referred to as the Habitats Regulations, with these species being classified as European protected species. Under these regulations it is an offence to:

- Damage or destroy a breeding site or resting place of such an animal; and to, deliberately or recklessly:
- Capture, injure or kill a wild animal of a European protected species;
- Harass a wild animal or group of wild animals of a European protected species;
- Disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;
- Disturb such an animal while it is rearing or otherwise caring for its young;
- Obstruct access to a breeding site or resting place of such an animal, or otherwise to deny the animal use of the breeding site or resting place;
- Disturb such an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; and,
- Disturb such an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

There are also several plant, fungi, and lichen species protected under this legislation. EPS (European Protected Species) animals can potentially return to the same resting site every year; therefore, bat roosts, otter holts, etc. are protected even if there are no animals there all year round. These laws are not designed to prevent work, but to minimize its impact on the long-term survival of EPS. As such, some activities affecting EPS or their places of shelter may need to be done under and in accordance with the terms of a licence issued by the licensing authority, NatureScot. Licenses allow certain otherwise illegal actions to be undertaken legitimately. Such activities might include:

- Blocking, filling, or installing grilles over old mines or tunnels;
- Building, alteration, or maintenance work;
- Getting rid of unwanted bat colonies;
- Tree felling;
- Re-roofing;
- Remedial timber treatment;
- Rewiring or plumbing in roofs;
- Demolition;
- Maintenance or construction of watercourse crossings (e.g. culverts under roads, bridges);
- Vegetation clearance along riparian corridors;
- Any disturbing (e.g. loud or night works) within proximity to watercourses;
- Dewatering or infilling ponds;
- Removal of woodpiles and debris near waterbodies; and,
- Translocation of species.

If a licence is required:
Further survey will be required in order to gain sufficient information in order to supply a sufficient baseline and to inform the necessary mitigation plan required to support a licence application.
Application forms can be found on the NatureScot website along with guidance:
https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/species-licensing-z-guide/bats/bats-licences-development

Please note the need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an

application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the bat interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

A Habitats Regulations licence may be granted by NatureScot if the following three tests are met:

1. That the licence application must demonstrably relate to one of the purposes specified in Regulation 44(2) of the Habitats Regulations. These purposes include, among others:
    - Preserving public health or public safety;
    - Other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment; or,
    - Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, or any other form of property, or to fisheries.
2. That there is no satisfactory alternative; and
3. That the development will not be detrimental to maintenance of the populations of the species at a favourable conservation status.

If an EPS is found during the period of development:
The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 3 – Wildlife and Countryside Act Species and the Law

Red squirrel, pine marten, water vole, freshwater pearl mussel, as well as some species of fish and other invertebrates protected under national legislation, *the Wildlife and Countryside Act (1981)* (as amended in Scotland) Schedule 5. Several plants are also protected under this piece of legislation under Schedule 8. Species such as pine marten and red squirrel are fully protected, making it an offence to intentionally or recklessly:

- Kill, injure, or take any wild animal included in Schedule 5;
- Damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; and
- Obstruct access to any structure or place which any such animal uses for shelter or protection.

The water vole, though in sharp decline in the UK, and is listed on Schedule 5 in respect of section 9(4) only, *i.e.* their habitat is protected but the animals themselves are not, except while they are in their shelters. So while it is not an offence to kill, injure or take a water vole in Scotland, the other offences regarding damage to shelter and disturbance still apply. Although water voles are not currently protected from killing or taking in Scotland, England and Wales gave water vole full protection in April 2008, and they are expected to receive full protection in Scotland in the near future.

If a licence is required:
The recent *Wildlife and Natural Environment (Scotland) Act 2012* provided a new licensing purpose to apply to Schedules 5 and 8 species listed in the Wildlife and Countryside Act. The new purpose is designed to mimic the tests required for EPS species. Therefore, there is still a need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the Schedule 5 interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

The relevant purposes for which a licence can be granted include:

- Preserving public health or public safety;
- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, or any other form of property or to fisheries; or
- For any other social, economic, or environmental purpose; provided that
    a. Undertaking the conduct authorized by the licence will give rise to or contribute towards the achievement of, a significant social, economic, or environmental benefit; and,
    b. There is no other satisfactory solution.

Application forms can be found on the NatureScot website along with guidance:
https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/licensing-forms-and-guidance

If a Schedule 5 species is found during the period of development:
The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 4 – Badgers and the Law

Badgers are protected by the *Protection of Badgers Act 1992* (as amended in Scotland).
The purpose of the Act is to protect the animals from deliberate cruelty and from the incidental effect of lawful activities which could cause them harm. Under this legislation it is an offence to deliberately or recklessly:

- Kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so;
- Damaging or destroying it;
- Obstruct access to, or any entrance of, a badger sett; and,
- Disturb a badger whilst it is occupying a sett.

If a licence is required:
Application forms can be found on the NatureScot website along with guidance:
https://www.nature.scot/badgers-licence-forms-and-guidance-documents

Please note supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the badger interest on this site and to the works proposed. NatureScot also generally require that planning permission is in place before a licence will be considered.

If a badger is found during the period of development:
The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 5 – Birds and the Law

All species of wild bird and their nests are also protected under the *Wildlife and Countryside Act 1981* (as amended in Scotland), which makes it illegal if any person intentionally or recklessly:

- Kills, injures, or takes any wild bird;
- Takes, damages, or destroys the nest of any wild bird while that nest is in use or being built;
- At any other time takes, damages, destroys or otherwise interferes with any nest habitually used by any wild bird included in Schedule A1;
- Obstructs or prevents any wild bird from using its nest; and,
- Takes or destroys an egg of any wild bird.

There are also further offences for birds listed on Schedule 1 of the Act which includes intentionally or recklessly:

- Disturbing any wild Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; and,
- Disturbing dependent young of such a bird.

You should note that there is no licensable purpose of development for birds.

Should there be a risk of one of the above offences it is strongly advised that works are either micro-sited to avoid the nests or timed to avoid the nesting season (1 March to 31 August), depending on the species and type of work.

If live nests are found:
The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 6 – Guidance on Optimal Survey Periods

Protected Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Habitats & Vegetation	Surveys for mosses and lichens only			Recommended time to undertake Phase 1 habitat surveys						Surveys for mosses and lichens only		
Badgers	Best time for field surveys				Surveys possible, but sub-optimal if vegetation is high						Best time for field surveys	
Bats	Inspection of hibernation, tree and building roosts			Activity surveys; invasive surveys avoided	Activity surveys and inspection of building roosts. Emergence counts.				Activity surveys only; invasive surveys to be avoided		Inspection of hibernation, tree and building roosts	
Birds	Winter birds		Breeding birds/migrant species			Breeding birds		Breeding birds/migrant species			Winter birds	
Otters	Year-round surveying, though wet weather can limit visibility.			Surveys for otters can potentially be conducted all year round, preferably when weather condition are stable, though dense vegetation cover can be limiting							Year-round surveying, though wet weather can limit visibility.	
Pine Martens	Sub-optimal		Survey for breeding dens			Optimal spring to summer			Sub-optimal			
Red Squirrels	Survey at any time of year, breeding females			Survey at any time of year weather permitting, optimal in spring and summer. Breeding females can be surveyed December to September						Survey at any time of year		Breeding females
Water Voles	Reduced WV activity				First survey		Second Survey			Reduced WV activity		
Great Crested Newt	No surveys as newts in hibernation		Pond Surveys for adults: mid-March to mid-June. Must include visits undertaken between mid-April and mid-May. Egg surveys April to mid-June. Larvae surveys from mid-May Terrestrial habitat surveys				Larvae surveys to mid-August Terrestrial habitat surveys		Terrestrial habitat surveys		No Surveys – newts in hibernation	
Fish	For coastal, river and stream dwelling species, timing of surveys will depend on the migration pattern of the species. Breeding surveys will need to coincide within the breeding period of that species. This may be the summer or winter depending on the species.											

Appendix 7 – Desk Study Search Results

Location	River Leven, Balloch	OS Grid Reference	NS 38707 82447	Date of Search	20.10.2023	
NBN Species Protected and Notable Species (Publicly Available)	**No of Records within 2 km**	**Closest distance from site boundary (km)**	**Site name/Grid Ref**		**Date**	**Data Licence**
Red Squirrel	163	200 – 300 m East	Balloch, NS 389 824		Sept 2018	CC-BY / SWT
Beaver	1	1 km Southwest	Upper Stoneymollan Road, NS 3807 8156		Sept 2019	CC-BY / Mammal Society
Wild Surveys Data Protected Species	**No of Records within 2 km**	**Closest distance from site boundary (km)**	**Site name/Grid Ref**		**Date**	
No Records						
NBN Bat Species Data (Publicly Available)	**No of Records within 2 km**	**Closest distance from site boundary (km)**	**Site name/Grid Ref**		**Date**	**Data Licence**
Soprano Pipistrelle	4	550 m – 1.9 km Southeast	Within grid square NS 3981		Sept 2015	OGL / NatureScot
Daubenton's Bat	2	550 m – 1.9 km Southeast	Within grid square NS 3981		Sept 2015	OGL / NatureScot
Wild Surveys Bat Data	**No of Records within 2 km**	**Closest distance from site boundary (km)**	**Site name/Grid Ref**		**Date**	
Soprano Pipistrelle	2	640 m North	Balloch Castle, NS 39033 83031		Sept 2022	
Brown Long-eared	1	640 m North	Balloch Castle, NS 39033 83031		Sept 2022	
Leisler's Bat	1	640 m North	Balloch Castle, NS 39033 83031		Sept 2022	

Loch Lomond (Wild Park Biodiversity Action Programme 2018-2023)

Key Environmental Threats to national park:

- **Poor quality of some lochs and rivers**
- **Pollution from agriculture and forestry**
- **Regeneration of degraded waterbodies and peatland**
- **Bank erosion control, flood defenses and improving drainage**
- **Planting of riparian woodland**
- **Reduce pollution and litter levels**
- **Woodland by feral and wild herbivores**
- **Invasive non-native species**
- **Plants: Rhododendron, Japanese knotweed**
- **Animal: Grey squirrel and North American mink**
- **Climate change pressure**
- **Woodland creation**
- **Reduction of downstream flooding**

Species of importance present:

- **Lamprey**

- **Otter**
- **Atlantic salmon**
- **Water vole**
- **Red squirrel**

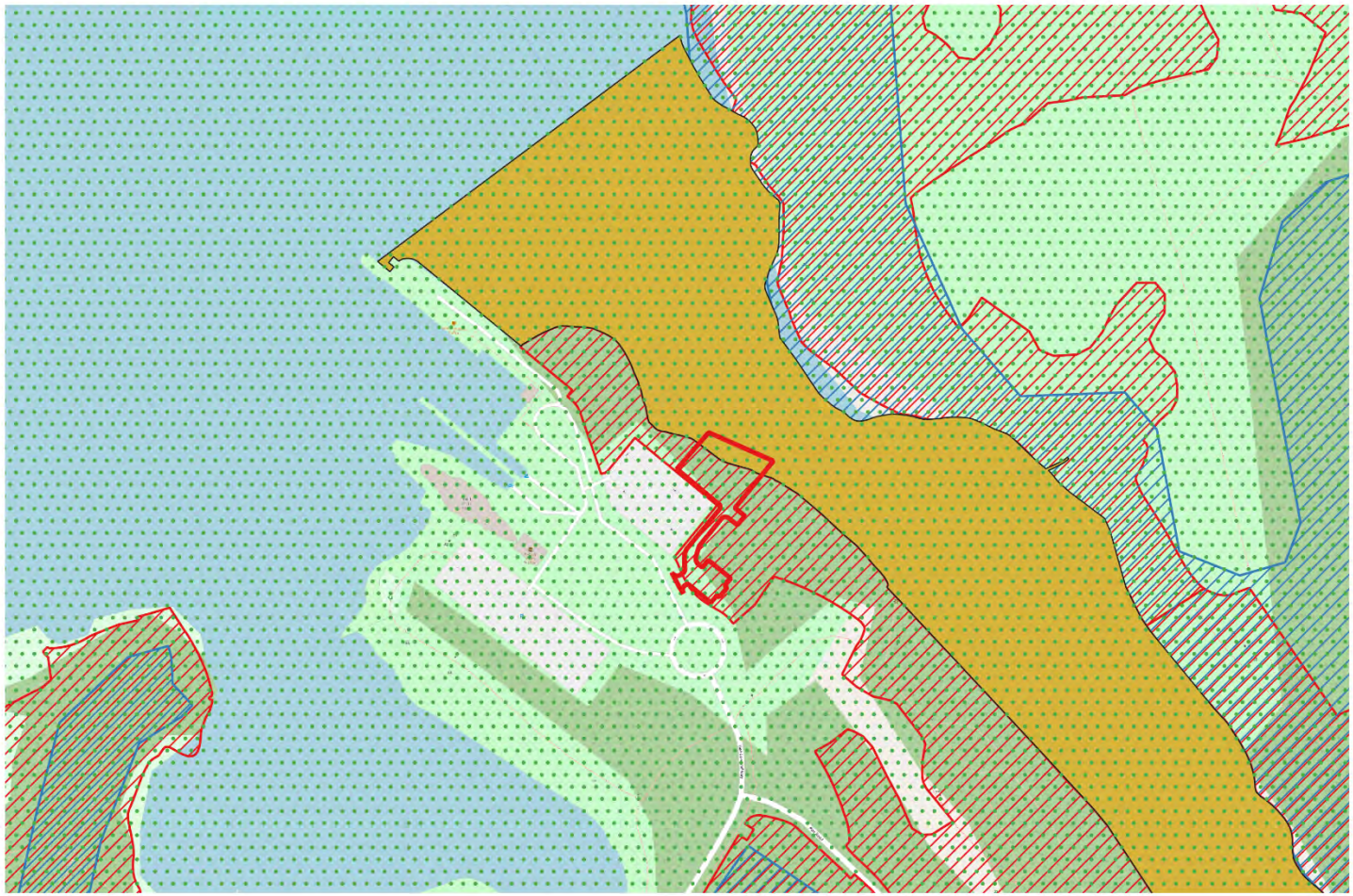
Bat species within Local Authority

- **Soprano pipistrelle**
- **Common pipistrelle**
- **Daubenton's bat**
- **Whiskered bat**
- **Natterer's bat**
- **Leisler's bat**
- **Brown long eared bat**

Designated Site Search- Statutory, Non-statutory and Local Nature Reserves within 2 km

Number of Sites Within 2km	Designation	Closest Site Name and Grid Reference	Closest Site Distance
1	National Park	Loch Lomond and Trossachs National Park	Within site boundary
7	Local Nature Conservation Site	River Leven Corridor, NS 38676 82483	Within site boundary to the north
1	Country Park	Balloch Castle, NS 38953 82941	40 m Northeast
1	SSSI	Boturich Woodlands, NS 38559 83914	1.3 km North
18	Ancient Woodland	Moss O' Balloch Plantation, NS 38734 82544	40 m Northeast
60	Native Woodland	OBJECTID_1 3300 Upland Mixed Ashwood, NS 38667 82473	Within site boundary

Designated Site Map



Appendix 8 – Phase 1 Habitat Survey Map, Species List, Target Notes and Photographs

Phase 1 Habitat Map

Target Note	Grid Reference	Notes
1	NS 38686 82482	Area of woodland with understorey consisting of dog's mercury.
2	NS 38665 82438	Area of Japanese knotweed. (3 x 2 m)
3	NS 38685 82440	Mammal burrows.

Species list	
Plant species	
Bracken	*Pteridium aquilinum*
Bramble	*Rubus fruticosus agg.*
Common nettle	*Urtica dioica*
Dog rose	*Rosa canina*
Dog's mercury	*Mercurialis perennis*
Elder	*Sambucus nigra*
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Ivy	*Hedera helix*
Japanese knotweed	*Fallopia japonica*
Male fern	*Dryopteris filix-mas*
Tutsan	*Hypericum androsaemum*
Wood avens	*Geum urbanum*
Tree / Shrub species	
Alder	*Alnus glutinosa*
Ash	*Fraxinus excelsior*
Downy birch	*Betula pubescens*
Elm	*Ulmus sp,*
Goat willow	*Salix caprea*
Oak	*Quercus spp.*
Sycamore	*Acer pseudoplatanus*
Yew	*Taxus baccata*

Photographs

Photograph 1: Site boundary to the north.

Photograph 2: Example of woodland within the site.

Photograph 3: Example of a tree with PRF-I.

Photograph 4: Example of woodland with dog's mercury understory within the site boundary (Target note 1).

Photograph 5: Patch of JKW (Target note 2).

Photograph 6: Example of the terrain within the site.

Photograph 7: Mammal burrows (Target note 3)

Photograph 8: Southwestern boundary of site.

Photograph 9: Western boundary of site.

Photograph 10: Northwestern boundary of site.

Appendix 9 – Protected Species Target Note Locations and Photographs

Protected Species Target Note Locations Map

Target Note	Grid Reference	Notes
1	NS 38652 82430	Squirrel drey.
2	NS 38665 82439	Japanese knotweed.
3	NS 38672 82476	Trees with potential roost features.
4	NS 38688 82490	Suitable resting places for otter.

Photographs

Photograph 1: Japanese knotweed (Target note 2).

Photograph 2: Example of tree with PRF-I (Target note 3).

Photograph 3: Example of feature with suitability for otter (Target note 4).

Photograph 4: Example of feature with suitability for otter (Target note 4).

Appendix 10 – Biodiversity Enhancement Strategy

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
Protection and enhancement of existing habitats on or adjacent to the site	Trees and hedgerows adjacent to the site are to be retained and protected, with a root protection area to be established in line with BS5837 Trees in relation to design, demolition and construction. A sensitive lighting design should be used to avoid effects on foraging or commuting bats. SEPA Pollution Prevention Measures should be followed to avoid run-off or contamination of the River Leven.	The opening up of the woodland along the proposed access road will allow enhancement to the existing boundary hedgerows. Seed mixes specifically for hedgerows can tolerate a degree of shading, supplementing the range of wildflowers already present when the cutting regime allows for the growth of woody species through the hedge. Removal of invasive Japanese knotweed from within the wooded area to the east would enhance the ecological value of this habitat.
Creation of new habitat on the site	Compensatory tree planting of matching native species should be planted either within the new site boundary or nearby at a location agreed by the LLTNP.	Verges beside roads and paths can be used to create linear meadows where shading, fertile soils and small plots do not constrain. Native species trees suitable for red squirrel, as mature as practicably possible could be planted in tree pits along roads or pavements, and within the grounds beside them. Scrub is formed of low growing woody species and immature trees that will eventually grow into woodland and can be planted as a transitional zone on the edge of existing or created woodland. It can provide shelter for development, and dense scrub can

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
		protect habitats from light, noise and air pollution, and discourage public access with thorny species. Or A species rich native hedge comprising of at least five hedge species that are native to the area in which it is planted and are as mature as practicably possible to achieve an instant result including its understorey and emergent trees. The edges of pathways and roads could be planted using a wildflower mix favoring high nectar value species.
Protection and enhancement of connectivity through the site and with its surroundings	Trees and hedgerows should be retained and protected within the design where possible, with a root protection area established in line with BS5837 Trees in relation to design, demolition and construction. A sensitive lighting design should be used to avoid effects on foraging or commuting bats.	Existing mature trees are valuable for biodiversity and are to be protected and retained adjacent to the development. Native species trees suitable for red squirrel could be planted in tree pits along roads or pavements, and within the grounds beside them. Lining a route provides a corridor for wildlife to move through the development, connecting landscape planting, hedgerows, woodland and greenspace on- and off-site.
Protection and enhancement of existing	A Ground Level Tree Assessment (GLTA) should be carried out prior to the works to	Bat and bird nest boxes can be fixed to buildings, structures and trees, or incorporated in the wall of the building itself.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
species on or adjacent to the site	determine the suitability of trees within the site for roosting bats. Due to the high mobility of wildlife, if proposed works have not commenced within 12 months of a pre-application protected species survey being undertaken then the project ecologist should be contacted to determine the requirement for any repeat ecological surveys pre-construction. Monitoring of mammal holes needs to be carried out to determine their use prior to planning and preconstruction. Vegetation and tree removal should be avoided during the nesting bird season (March – September) otherwise a bird nesting survey will be required.	Any trees to be removed that have been assessed as having PRF-I for bats will need to be compensated for prior to removal with the installation of a bat box. External bat boxes can be placed on buildings, structures or trees, or a specifically designed bat box can be mounted on top of a pole. There are records of swallows, swifts and house martins in the area. Swallows and house martins use similar bowl-shaped nests, with an open top for swallows or a side entrance for house martins. Made from plaster or concrete to reflect natural mud and grass nests, they are affixed under the eaves of a structure. A swift brick is a long rectangular hollow brick that replaces a standard brick in the wall under the eaves. The brick has a 'letter box' like slit for swifts to enter, and separate access for maintenance. A swift box of similar specification to the brick but is fixed to the outside of the structure can be used and is usually installed in clusters. The use of tree and scrub species suitable for red squirrel should be used throughout the design. This includes blackthorn, bird cherry, crab apple, Douglas fir, hawthorn, Norway spruce, Scots pine and holly.
Enhancement for new species	N/A	Log and leaf piles are loosely organised pile of logs and / or leaves that create a habitat of slowly decaying wood and leaf litter. The material should be sourced on site, for example using cut material from pruning, thinning or felling of trees, to reduce the risk of spreading pests and pathogens. Where existing habitats (especially hedgerows, scrub and woodland) contain deadwood, these are already important biodiversity features and both standing and fallen deadwood should be retained. Standing

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
		deadwood that has to be felled for safety reasons should be created into deadwood features on the ground.
Avoidance, control, and removal of invasive species from the site	Specialist advice should be sought for the removal of Japanese knotweed within the site.	Annex B in Developing with Nature guidance, Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3c (NatureScot, 2023) provides a list of plant species that are commonly considered to be invasive and should be avoided. If they are found to be present on site you are encouraged to remove them, and any invasive plant material or contaminated soils disposed of appropriately.
Protecting wildlife from negative interactions with people and / or infrastructure	A sensitive lighting design should be used to avoid effects on foraging or commuting bats. Precautionary methods should be employed during construction to avoid injury, obstruction or disturbance of any mammal species using the survey area. Vegetation removal should be avoided during the nesting bird season (March – September) otherwise a bird nesting survey will be required. Due to the high mobility of wildlife, if proposed works have not commenced within 12 months of a pre-application protected species survey being undertaken	Any maintenance or replacement of bat boxes must be done by a licenced bat worker. Development can unwittingly introduce dangers to the wildlife that it is seeking to encourage. Small mammals and amphibians naturally follow raised road kerbs and are in danger of falling through drain grating and into gullypots, with a significant impact on local populations of these species. Simple measures can reduce this risk, and where they are used in connection with other measures supporting these species (beyond mitigating the development's impact on existing wildlife), can enhance biodiversity.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
	then the project ecologist should be contacted to determine the requirement for any repeat ecological surveys pre-construction. Monitoring of mammal holes needs to be carried out to determine their use prior to planning and preconstruction.	
Promoting awareness and encouraging further actions for nature	N/A	No actions considered.
SUMMARY: Positive effects that will be delivered	**N/A**	Overall, the removal of trees within the site is likely to have a direct effect on any wildlife using the site. However, the introduction of mitigation measures and semi-mature compensatory planting should decrease the effects of the tree removal and eventually remove any detrimental effects all together once the new measures have matured. The inclusion of species suitable for red squirrel would further increase biodiversity on this side of the river corridor. Both pre-planning and pre-construction monitoring for protected species will be needed to determine use of the site and surrounding habitat. A Habitat Management Plan which details that the scope of any habitat management, who will undertake future management, responsibility for delivering the plan and

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
		means by which continuity over the long term will be secured will require to be produced to support the habitat enhancements.

Registered Address
Room 41,
St James Business Centre,
Linwood Road,
+44 (0) 141 887 2770


Dial 999


Balloch Castle & Country Park
National Cycle Rte 7
National Cycle Rte 7
Loch Lomond & The Trossachs National Park
Walled Garden
The Drir
Maid of The Loch
Drumchapel & Clydebank Kayak Club...
Google