LRB-2024-23
23/00371/FLL – Erection of a holiday accommodation unit, ancillary shed and associated works, land at A'phairc Loisgte, Rannoch

PLANNING DECISION NOTICE *(included in applicant's submission, pages 343-344)*

REPORT OF HANDLING *(included in applicant's submission, pages 355-366)*

REFERENCE DOCUMENTS

Pullar House 35 Kinnoull Street Perth PH1 5GD Tel: 01738 475300 Fax: 01738 475310 Email: onlineapps@pkc.gov.uk

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 100616624-001

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: *

T 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)

Re-submission of an application for the erection of a holiday accommodation unit which was refused 31 May 2022 under reference 22/00660/FLL.

Is this a temporary permission? * ≤ Yes T No

If a change of use is to be included in the proposal has it already taken place? (Answer 'No' if there is no change of use.) * ≤ Yes T No

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

T 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 T Agent

Agent Details

Please enter Agent details

Company/Organisation:			
Ref. Number:		You must enter a Building Name or Number, or both: *	
First Name: *	MARK	Building Name:	34
Last Name: *	WILLIAMSON	Building Number:	
Telephone Number: *	[redacted]	Address 1 (Street): *	34 HERMITAGE DRIVE
Extension Number:		Address 2:	
Mobile Number:		Town/City: *	PERTH
Fax Number:		Country: *	UK
		Postcode: *	PH1 2SY
Email Address: *	[redacted]		

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

T 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: *	EDWARD MUSTIN &	Building Number:	
Last Name: *	LOUISE PATTERSON	Address 1 (Street): *	
Company/Organisation		Address 2:	
Telephone Number: *		Town/City: *	
Extension Number:		Country: *	
Mobile Number:		Postcode: *	
Fax Number:			
Email Address: *	[redacted]		

Site Address Details

Planning Authority: Perth and Kinross Council

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

Address 1: CAMUSERICHT FARM

Address 2: BRIDGE OF GAUR

Address 3: RANNOCH

Address 4:

Address 5:

Town/City/Settlement: PITLOCHRY

Post Code: PH17 2QD

Please identify/describe the location of the site or sites

Northing 757102 Easting 250291

Pre-Application Discussion

Have you discussed your proposal with the planning authority? * T Yes ≤ No

Pre-Application Discussion Details Cont.

In what format was the feedback given? *

≤ Meeting ≤ Telephone ≤ Letter T 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)

Re-submission of previous application 22/00660/FLL

Title: Mr Other title:

First Name: ANDREW Last Name: BAXTER

Correspondence Reference Number: 22/00660/FLL Date (dd/mm/yyyy):

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: 5410.00

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

Existing Use

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

Rough grazing land

Access and Parking

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

If Yes please describe 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 T 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)? * 3

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? * T Yes ≤ No

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

≤ Yes – connecting to public drainage network

T No – proposing to make private drainage arrangements

≤ Not Applicable – only arrangements for water supply required

As you have indicated that you are proposing to make private drainage arrangements, please provide further details.

What private arrangements are you proposing? *

T New/Altered septic tank.

≤ Treatment/Additional treatment (relates to package sewage treatment plants, or passive sewage treatment such as a reed bed).

≤ Other private drainage arrangement (such as chemical toilets or composting toilets).

What private arrangements are you proposing for the New/Altered septic tank? *

T Discharge to land via soakaway.

≤ Discharge to watercourse(s) (including partial soakaway).

≤ Discharge to coastal waters.

Please explain your private drainage arrangements briefly here and show more details on your plans and supporting information: *

Please see Drainage Statement and Drainage Plan

Do your proposals make provision for sustainable drainage of surface water?? * (e.g. SUDS arrangements) * T 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

T 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 T 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 T No ≤ Don't Know

Trees

Are there any trees on or adjacent to the application site? * T 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)? * T Yes ≤ No

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

See block plan

Residential Units Including Conversion

Does your proposal include new or additional houses and/or flats? * ≤ Yes T No

All Types of Non Housing Development – Proposed New Floorspace

Does your proposal alter or create non-residential floorspace? * ≤ Yes T No

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 T 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 T 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 T No

Is any of the land part of an agricultural holding? * T Yes ≤ No

Do you have any agricultural tenants? * ≤ Yes T No

Are you able to identify and give appropriate notice to ALL the other owners? * T 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 Callum Robertson
Address:	[redacted]
Date of Service of Notice: *	10/03/2023

(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:	MARK WILLIAMSON
On behalf of:	Mr EDWARD MUSTIN & LOUISE PATTERSON
Date:	13/03/2023

T 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 T 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 T 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 T 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 T 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 T 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 T 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:

T Site Layout Plan or Block plan.

T Elevations.

T Floor plans.

≤ Cross sections.

≤ Roof plan.

≤ Master Plan/Framework Plan.

T Landscape plan.

T Photographs and/or photomontages.

T Other.

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

Drainage Plan

Provide copies of the following documents if applicable:

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

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

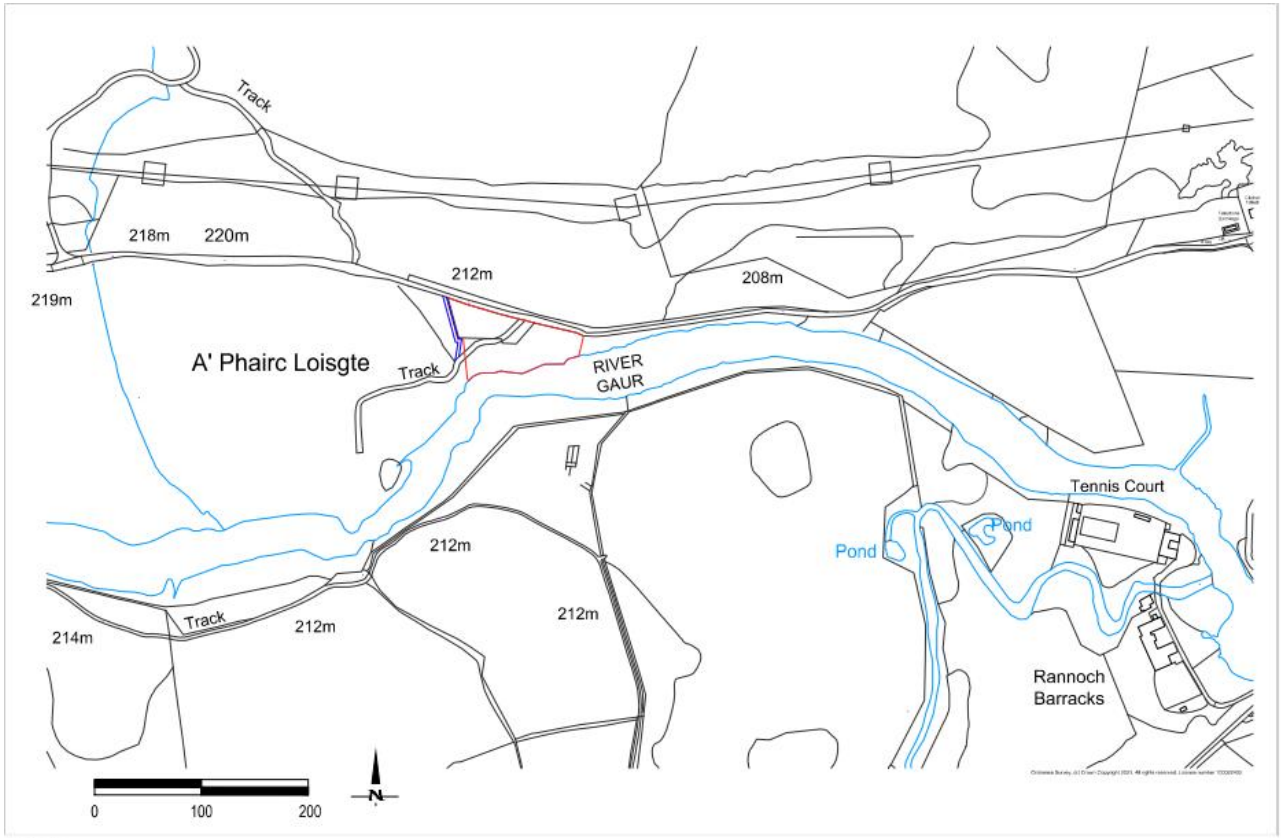
Otter Survey, Arboricultural Survey, Business Plan, Supporting Planning Statement.

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 MARK WILLIAMSON

Declaration Date: 13/03/2023



OS PLAN
Scale 1:2500

NICKCARROLLARCHITECTS

DRAWING TITLE: BLOCK PLAN - OS PLAN
CLIENT: MUSTIN
PROJECT: PITLOCHRY
SCALE: 1:2500 @A1
DATE: MARCH 2022

DRAWING NO: 2134 / P / 01

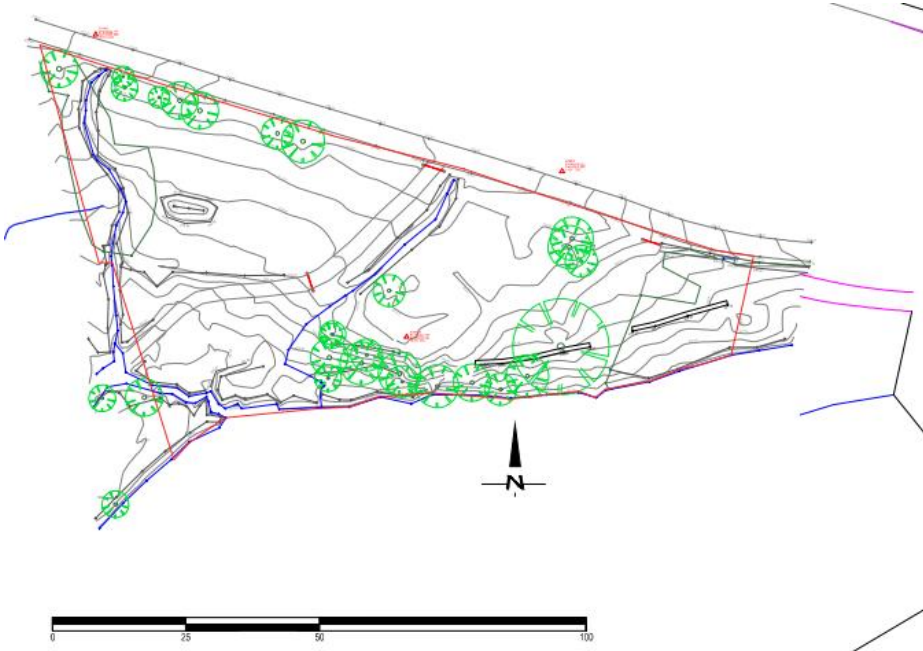
GOOGLE EARTH REFERENCE

DO NOT SCALE DRAWING

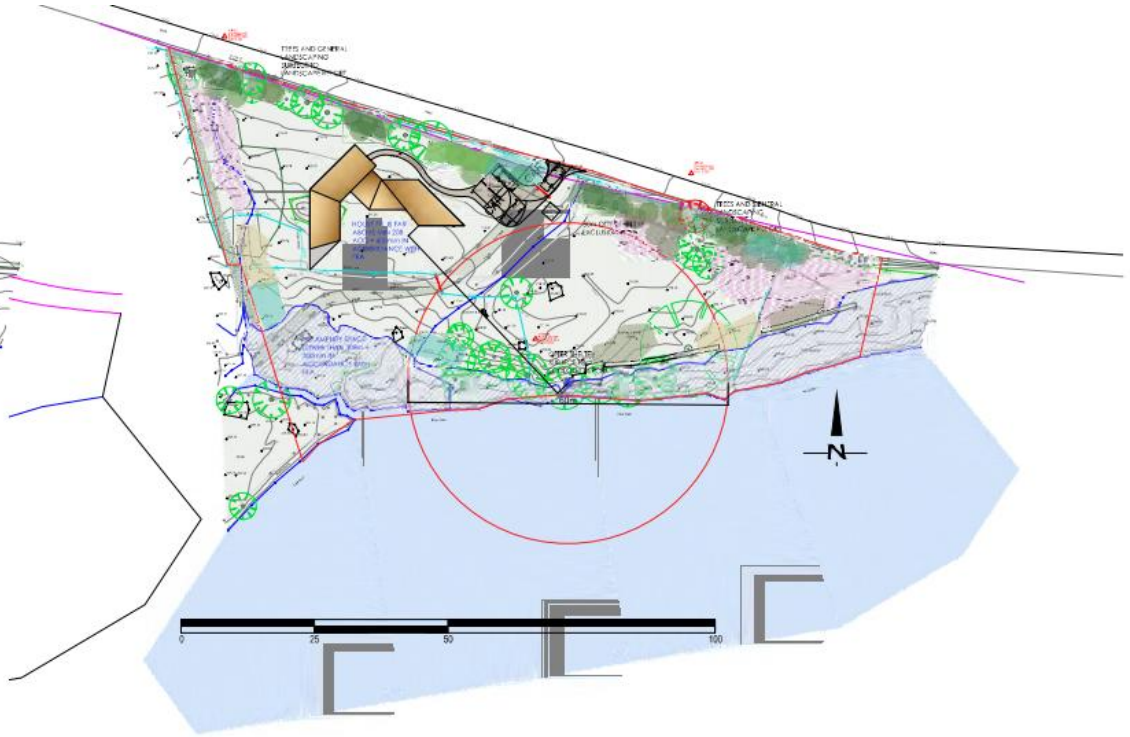
NICK CARROLL ARCHITECTS

DRAWING TITLE: SITE PLAN
CLIENT: MUSTIN
PROJECT: FITLOCHRY
SCALE: 1:500 1:100 @A1
DATE: APRIL 2022

DRAWING NO: 2134 / P / 04



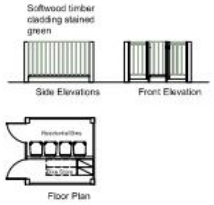
EXISTING BLOCK PLAN
Scale 1:500



PROPOSED BLOCK PLAN
Scale 1:500

GROUND FLOOR
180m²

FLOOR PLAN
Scale 1:100

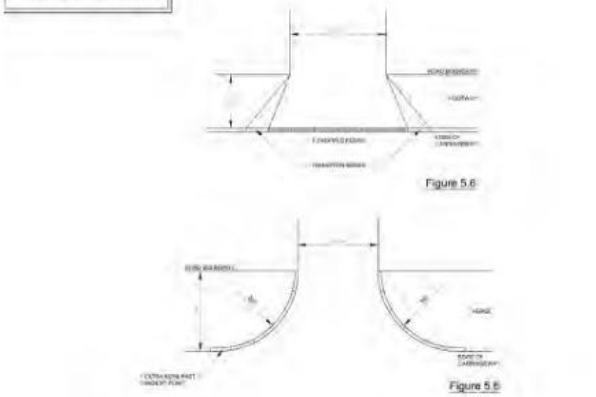


BINS AND BIKE STORE
Scale 1:100

NEW ACCESS GATE

Scale 1:100

Perth & Kinross Council
TYPE **B** JUNCTION



Vehicular access in accordance with P & K Council Road development Guide
Scale 1:100

NICK**CARROLL**ARCHITECTS

DRAWING TITLE: EXISTING AND PROPOSED BLOCK PLANS - FLOOR PLAN
CLIENT: MUSTIN
PROJECT: PITLOCHRY
SCALE: 1:500 1:100 @A1
DATE: SEPTEMBER 2022

DRAWING NO: 2134 / P / 02e

The Studio
42 Broad Street
Worcester
WR1 3LR
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nickcarrollarchitects@gmail.com

Holiday Accommodation | Pitlochry | Scotland

Design and Access Statement

Rev A – August 2022

Table of Contents:

Nick Carroll Architects Limited
Registered in England
Company Number 05878039

1.0 Introduction

- This statement has been prepared by Nick Carroll Architects Ltd on behalf of their client Edward Mustin, who is seeking planning permission for new holiday accommodation on land at A'Phairc Loisgte, Rannoch, Pitlochry, Scotland. New dwelling to be known as Meoraich.

- This proposed holiday accommodation, by virtue of its scale and position, will have a positive and innovative impact on the surrounding character of the rural environment, including the local ecology.

- This statement is a comprehensive justification for the design, whose aim is to inform Perth & Kinross Council and its consultees; -

- **What is being proposed, by whom and why,**
- **What effects the proposal will have on the existing built environment.**

2.0 Assessment

The site is located Land at A'Phairc Loisgte, Rannoch. Pitlochry, Scotland

Its location is illustrated in fig. 1 below.

Fig 1 Site Location. Google Maps

The key design objectives for redevelopment are;-

1. **To satisfy** holiday market requirements
2. **To safeguard and enhance** the existing natural environment of the site
3. **To innovate** new design and sustainable building techniques

This project has been subject to Pre-Planning - 20/00473/PREAPP where the principle of development has been considered.

Following initial feedback, the site underwent laser survey of its topography, a tree survey and an ecology survey. This information has informed the proposal now tabled.

2.1 Existing Site

The site is rough grazed grassland with granodiorite boulders bordering the southern edge boundary with the river Gaur. The northern boundary is marked by a tarmac road and is interspersed with spruce and birch trees. West and Southern boundaries continue with open grassland but are marked with simple agricultural post and wire fending. The site is located within Breadalbane Environmentally Sensitive Area and Rannoch Forest Special Landscape Area. See fig 02

Fig 02 – Existing site

2.2 Existing local identity

The natural setting of this site is sensitive to its natural and ecological identity. Tree and ecology surveys reveal the extent and impact of our proposals and the views over the river Gaur and beyond create an opportunity to provide a holiday retreat that will respect and enhance the natural environment.

2.3 Existing access

The site is already served by the tarmac road B846 via a field gate which serves a private track leading through the site.

3.0 Use

The brief is for the development of bespoke high-end holiday accommodation (economy and tourism policies). There would be no question as to why this environment would not serve this use successfully but an economic justification is included in this application.

4.0 Amount

There is one proposed unit – 180m2 with sufficient car park space for 3 cars. The accommodation provides three bedrooms with open plan living for up to six people.

5.0 Layout

The house is located on a strategic area of the site, above flood zones, allowing the dwelling to have sufficient private amenity. The current vehicular access position is retained with a new path to the entrance of the house.

The house has 2 wings, one wing dedicated for bedroom and bathroom areas and the other side is dedicated to an open plan, living kitchen and balcony. The building aspects are toward the River Gaur and long-reaching views beyond. Existing grassland and the surrounding landscape is enhanced

6.0 Access

The proposed access is retained as existing with sufficient parking area and turning space for 3 cars. The access is modified to provide recessed access of 5m so that gates can be operated without affecting the highway.
Parking will be adjacent to this vehicular access and a level path will lead to the front door.
All of the accommodation is on one level making the accommodation, subject to part M requirements, totally disabled accessible.

7.0 Scale

The proposed building is one storey in height and its size is dependent on the prefabrication method considered appropriate in this setting. (see “appearance” section)

8.0 Appearance

How does a designer consider what will fit into this unique landscape? There are only natural references to inspire a concept.

Issues that affect the final design:

1. **Buildability.**

There is a need to construct the building off-site using current prefabrication techniques. This strategy lowers the impact on the site.

There will be no excavation, no site clearance (minimal waste on site), and no long-term presence of workers or heavy machinery, which safeguards the site and its wider environment.

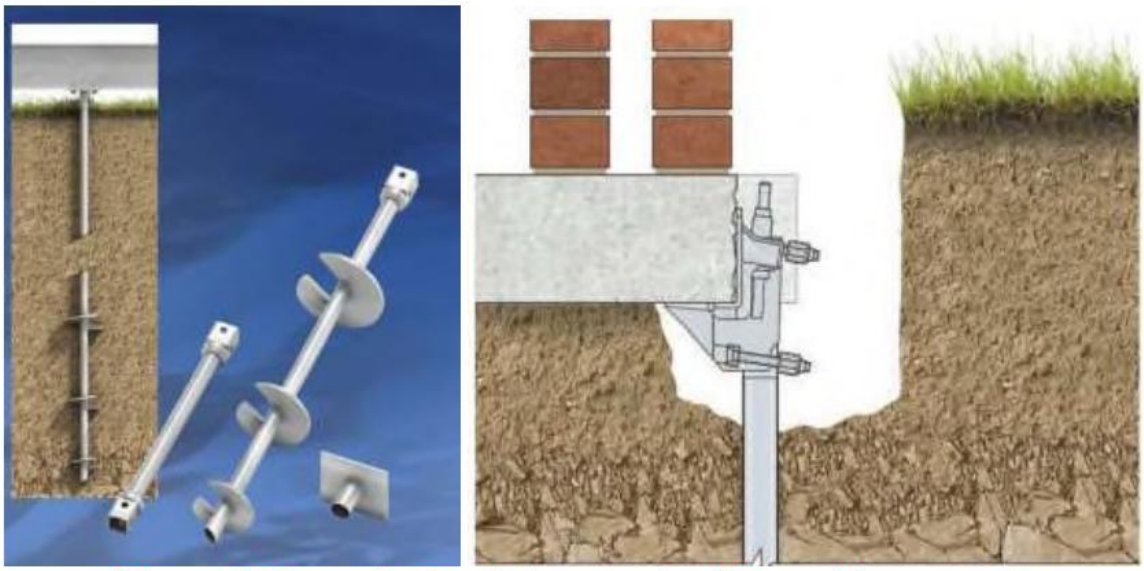
This type of construction uses much less than traditional methods which reduce the impact on the environment.

Having an off-site construction also have the advantage of making the construction more efficient, by avoiding variables like weather conditions, therefore the construction time is reduced.

Transportation to the site is also reduced, as fewer vehicles are required due to the construction in a factory.

The building has to fit within pre-defined dimensions – the height is from 3.2m to a maximum of 4m in height and the building is delivered onto the site via standard haulage and stitched together to form the shape defined by the design.

Prior to this, screw-piles are fixed into the ground – this is the most minimally invasive technique for foundations – such would not affect any of the grassland or ecology of the site and allow wildlife to pass underneath the dwelling.



Reference for Screw-piling foundation system for off-site modular construction

The other benefit of lifting the building off the ground is to preserve the current topography – the building will hover up to 1200mm in parts above the ground level.
The building is not "of" the ground but is "off" the ground.

The spatial and temporal dimensions of human interference in this complex ecosystem is acknowledged by the construction of something that can be removed and recycled fully leaving no footprint in the ground.

2. **Views.**
   The site is a place of contemplation with far-reaching views of mountains and meandering rivers.
   The concept is to create a place, a space for contemplation, rest and reintegration with the natural environment.
   All aspects of the building are orientated to the southern views with minimal modification of the natural grassland topography. Balconies hover over this to accommodate outdoor living requirements – as a result, the design retains a light touch on its environment.
3. **Shape.**
   According to Antonio Gaudi, "There are no straight lines or sharp corners in nature, therefore, buildings must have no straight lines or sharp corners."
   While we agree with such sentiment in certain contexts, the resultant form of straight lines and sharp corners can sit comfortably in a natural environment as long as it does not impose its form on such.
   The shape is bent and angled but sits perfectly against the more weathered undulations of the mountains in the distance.
   The amorphy of this proposal reflects detritus washed up and weathered on a shore, a reinforcement and affirmation of our own temporal existence when visiting the site.

4. **Materials.**
   Corten steel used on the facades reflects this amorphous, almost nautical build quality with a hue that is perfectly reflected in autumnal bracken/heather in the local environment.

   Windows are powder-coated aluminium and there are areas of burned larch cladding to bring together materials that weather and age in a manner that alters their character.
   To provide security and daylight protection, windows have sliding timber shutters that effectively open and close the building to its environment.

5. **Sustainability**
   The building seeks rely on local resources, not only for its amenity value, but also its renewable energy resources.
   Plans yet to be defined include water source heat recovery and PV with battery back-up which could lead to the building being "off-grid".
   Sewerage will be dealt with via a treatment plant (small and none invasive) which will discharge clean water back into the River Gaur (subject to environment agency approvals)
   The result is a building that will change and alter in appearance from the day it is erected.

6. **Drainage,** see fig below – See Drainage Strategy PDF.
   Surface water: All rainwater will be collected from the roofs and treated in a rainwater harvesting system for further use in toilets, laundry and irrigation.

Foul water: will be directed into a treatment plant, processed and cleaned and directed into a soakaway. The soakaway is located min 30m away from the river for indirect discharge.
Grey water: collected from hand-wash basins, showers and baths will be directed into a treatment tank, processed and cleaned for safe usage and redirected into the house for WC flushing.

Inspiration?:

Final appearance:

Nick Carroll Architects Limited
Registered in England
Company Number 05878039

9.0 Landscape

To be read in accordance with the ecology reports.
The natural grassland and ecological habitats are the primary reason why this proposal has been presented, without enhancing this character, there is no justification for this proposal.

The point of the proposal is to hover over the existing topography and ecology without impact, but it is acknowledged that the minimal impact has to go further and define how the natural environment is enhanced.

With reference to the attached ecology and arboricultural report, the following enhancements have been included.

1. Retention of boulders on the River Gaur.
2. Low impact gravel drive/pathway to form access to the building.
3. Retention and addition of trees as informed by tree report. This will effectively screen the building from the public realm and provide further ecological habitat. See plan 2134 - P - 05 Drainage and Landscape
4. Formation of native hedgerow to northern/eastern/western boundaries. This will provide further ecological habitat.
5. Addition of bird / bat boxes to south/west/east aspects of the building. This will provide further ecological habitat. See plan 2134 - P - 05 Drainage and Landscape
6. Reinforcement of planting grassland species generally over the site. This will provide further ecological habitat

10.0 Conclusion

We believe that this revised proposal will;-

1. **Satisfy** market requirements in the proposal for 1 unique holiday accommodation and bring ongoing economy and tourism benefits.
2. **Improve** the existing rural natural environment and its surroundings by being in keeping with the local Land at A'Phairc Loisgte, Rannoch area.
3. **Safeguard** the integrity of River Tay and its wider environment by implementing sustainable design and construction techniques and sustainable drainage solutions.
4. **Respect and enhance** the wildlife of the land.
5. **Innovate** new building methods and design that can change the vernacular.
6. **Implement** sustainable drainage solutions

To that end, we welcome support from Perh and Kinrooss Council for this proposal and look forward to their recommendation in due course.

Hinshelwood Arboricultural Consultants

Urban Tree Specialists

Survey of Trees

Land at A'Phairc Loisgte,

Rannoch. Pitlochry

21 February 2022

CONTROL SHEET

Project Title:	AiA Land at A'Phairc Loisgte, Rannoch
Agent for Client:	Nick Carroll Architects
Council:	Perth and Kinross
Survey Date:	11 February 2022
Prepared by:	Graham Hinshelwood
Date of Issue:	21 February 2022
Status:	Draft
Version No:	1

Hinshelwood Arboricultural Consultants
7 Forth Reach, Dalgety Bay, Dunfermline.
Fife. KY11 9FF
07775525274
01383820968
info@hinshelwoodarb.com
www.hinshelwoodarb.com

DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques, in sufficient detail to gather data for and inform the design of the current project only. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or located in areas of restrictive ground vegetation, cannot therefore be expected. Detailed tree safety appraisals are only conducted under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only. Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regard to tree structural integrity, and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.
Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can be seen from within the site. Stem diameters and other measurements of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potential risk to persons and/or property has been identified during our survey or, if applicable, where permissible works are required to implement a proposed development. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will inform the relevant Council of the matter. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.
Where tree stem locations are not included on the plan(s) provided then they are plotted by the arboriculturist at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.
This document is intended as a guide to identify key tree related constraints to site development only, and the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

Third Parties: Any disclosure of this document to a third party is subject to this disclaimer. The report was prepared by Hinshelwood Arboricultural Consultants at the instruction of and for use by our client. This report does not in any way constitute advice to any third party who is able to access it by any means. Hinshelwood Arboricultural Consultants excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage arising from reliance on the contents of this report.

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1.0 INTRODUCTION

Terms of Reference

Hinshelwood Arboricultural Consultants were instructed to:

a) Survey, either as individuals or by group, all trees having reasonable potential to be adversely affected by or to affect the development of the site under consideration.

b) Prepare a tabulated Tree Survey Schedule based on guidance specified BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations.

c) Evaluate the potential tree related impacts and design conflicts of the proposals.

d) Advise on removal, retention and management options for the trees in the current context and in the context of the proposed development.

e) Advise on suitable tree protection measures required during development.

f) Annotate the existing site proposal plan to produce a Tree Constraints Plan and a Tree Impact Plan identifying tree retention categories, crown spreads, Root Protection Areas, projected tree related impacts, approximate temporary protective fencing locations, new tree planting suggestions, and other pertinent details; and

g) Produce an Arboricultural Impact Assessment report outlining the main tree related issues and potential tree related impacts in relation to the proposed development and indicating suitable mitigation provisions and retained tree protection measures.

Scope and Purpose of Report

1.1 By detailing foreseeable tree related issues this report is intended to assist the Local Planning Authority (LPA) in their review of the proposed development and, as such, should be supplied to them in support of the planning application to which it pertains.

1.2 The report provides an initial analysis of the impacts that the proposed development is projected to potentially have on trees located both within the site and immediately adjacent to its boundaries. It also offers guidance on suitable retained tree management and mitigation for projected losses, along with appropriate tree protection measures in the context of the proposed development in accordance with current guidance.
Site Visit, Data Collection and Tree Plans

1.3 Further to our instruction I confirm that I visited the site on 11 February 2022 and conducted a survey of trees. My survey was conducted in accordance with the preceding disclaimer, and all tree data collected on site is set out in the attached tabulated Tree Survey Schedule (TSS) at Appendix One which, for ease of interpretation, should be read alongside the associated BS5837:2012 Table 1 (as appended).

1.4 During my survey review I identified thirty-one individual trees (prefixed 'T') and have numbered them accordingly on the Tree Constraints Plan (TCP) and Tree Impact Plan (TIP), as appended. The plans are based on a topographical survey-based site plan that was provided in electronic format by the client's agent, Nick Carroll Architects and for the purpose of this report, the plans' details are presumed to be accurate.

1.5 The TCP details the existing site with the readily definable tree constraints.

2.0 STATUTORY PROTECTION IN RESPECT OF TREES AND ASSOCIATED WILDLIFE

Tree Preservation Orders and Conservation Area Designations

2.1 Town and Country Planning (Scotland) Act (the Act) and associated Regulations empower Local Planning Authorities (LPAs) to protect trees in the interests of amenity by making Tree Preservation Orders (TPOs). The Act also affords protection for trees of over 75mm diameter that stand within the curtilage of a Conservation Area (CA).

2.2 Subject to certain exemptions, an application must be made to the LPA in question to conduct works upon or to remove trees that are subject to a TPO, whilst six weeks' notice of intention must be given to conduct works upon or to remove trees within a CA that are not protected by a TPO.

2.3 I have not been informed if the site stands within a CA, or if any of the trees are the subject of a TPO. As such, it is therefore essential to contact the Planning Department of the Local Authority prior to scheduling or conducting any tree works that are not specifically related to the implementation of a detailed (i.e. full) planning consent granted under the Act.

Protected Species

2.4 Nesting birds are afforded statutory protection under the Wildlife & Countryside Act (1981) (as amended) and their potential presence should therefore be considered when clipping hedges, removing climbing plants and pruning and removing trees. The breeding period for woodlands runs from March to August inclusive. Hedges provide valuable nesting sites for many birds and clipping should therefore be avoided during March to July. Trees, hedges and ivy should be inspected for nests prior to pruning or removal and any work likely to destroy or disturb active nests should be avoided until the young have fledged.

2.5 All bat species are protected under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). In this respect it should be noted that it is possible that unidentified bat habitat features may be located high up in tree crowns and all personnel subsequently conducting tree works at the site should therefore be vigilant and mindful of the possibility that roosting bats may be present in trees with such features. If any bat roosts are identified then it is essential that works are halted immediately and that a suitably qualified and experienced ecologist investigates and advises on appropriate action(s) prior to works continuing.

3.0 THE SITE AND THE SURROUNDINGS

3.1 The site is located within a rural area on the banks of the River Gaur at the western point of Loch Rannoch, approximately 19 kilometres from Kinloch Rannoch. It is bordered by agricultural settlement and commercial forestry plantation with the River Gaur to the south and the access road of the B846 to the north.

3.2 The site, without riparian rights covers an area of approximately 5000m^2 presently being used to graze and feed cattle. The ground condition is poor. The site has inadequate drainage and is heavily poached by the cattle (see Figs. 1 & 2, below). The geomorphic conditions has resulted in poor and shallow soils for trees to establish. Topography the site is grading north to south towards the river.

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4.0 THE TREE POPULATION

4.1 As noted previously, thirty-one individual trees were surveyed for the purpose of this appraisal. The surveyed trees are a mix of sycamore, spruce, birch and alder. All of the trees included in this appraisal are located within the site redline boundary.

4.2 The quality and structure of the tree population is poor for the reason of the environmental conditions found on site. This is why the species found are pioneering taxum.

4.3 The surveyed trees range from early-mature to mature in age. Tree sizes range from small to moderate, with heights of up to 12 metres, maximum diametrical crown spreads of up to 18 metres and stem diameters of up to 600 millimetres. Detailed tree dimensions and other pertinent, information such as structural defects and physiological deficiencies, are included in the Tree Survey Schedule (TSS) at Appendix One.

4.4 In respect of the TSS it should be noted that tree quality is categorised within the existing context without taking any site development proposals into account. However, recommendations for works included in the TSS take both current site usage into consideration and the proposed site development where there is definable development related issues with regard to specific trees.

4.5 The TSS includes a column ('Cat. Grade') listing the trees' respective retention values, where they are rated either 'A,' 'B,' 'C' or 'U', as per BS5837:2012 Table 1 (Appendix One). 'A' category trees are those considered to be of 'high quality' and, accordingly, the most suitable for retention, whilst 'B' category trees are those considered to be of 'moderate quality.' As detailed in Table A (below), twenty-six trees were categorised as low quality ('C') and five trees categorised as ('U') trees that should be removed for sound management reasons regardless of site proposals.

Table A: BS5837-2012 Retention Categories of the Surveyed Trees

	Ret. Cats.	Tree Numbers	Totals
Those of a moderate or high quality that should be afforded	A	-	-
appropriate consideration in the context of development	B	-	=
Those of a low quality that should not be considered a material constraint to development	C	T5701 T5702 T5704 T5705 T5707 T5708 T5709 T5710 T5711 T5712 T5713 T5714 T5715 T5719 T5720 T5721 T5722 T5724 T5726 T5727 T5728	*26 Trees*

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		T5729 T5730 T5731 T5732 T5733	
Those that should be removed for sound management reasons regardless of site proposals	U	T5703 T5716 T5717 T5723 T5725	*5 Trees*
			= 31 Trees in Total

4.6 The site under consideration has been used for grazing and feeding cattle over a prolonged period of time and, as such, all of the surveyed trees, have had the ground within their RPAs areas extensively damaged (see Figs. 3 & 4, below). It is therefore reasonable to conclude that the land use will along with the geomorphic rock deposits have affected the both the morphology and extents of the trees' roots.

5.0 THE DEVELOPMENT PROPOSAL AND ITS PROJECTED ARBORICULTURAL IMPACTS

5.1 The proposal is for the creation of holiday accommodation, with a single vehicular access point from the B846 to the north. In order to appraise the projected impacts that any development would potentially have on the trees, the tree constraints details will be overlaid onto a site proposal plan for planning submission.

Projected Arboricultural Losses Relating to the Proposal

5.2 As detailed in Table B (overleaf), implementation of the proposed development as it stands is projected not to require the removal of any trees in order to form the proposal, whilst all of the trees on the site are proposed for retention it is recommended that with the consent of the site owner the category 'U' trees are removed along with the nominated "C" value trees, all spruce. Please see paragraphs 6.1 and 6.2 with regard to the retention or trees during development at the site under consideration.

	Ret. Cats.	Removals necessary to implement development	Removals suggested for non-development related reasons	Total number of tree removals
Those of a high quality that should be afforded appropriate consideration in the context of development	**A**	-	-	-
Those of a moderate quality that should be afforded appropriate consideration in the context of development	**B**	-	-	-
Those of a low quality that should be afforded appropriate consideration in the context of development	**C**	-	T5719 "Spruce T5721 "Spruce T5722 "Spruce T5724 "Spruce T5726 "Spruce T5727 "Spruce T5728 "Spruce T5729 "Spruce T5730 "Spruce	9 trees
Those that should be removed for sound management reasons regardless of site plans	**U**	-	T5717 "Alder T5703 "Birch T5716 "Birch T5723 "Spruce T5725 "Spruce	5 trees-
Totals				= 14 trees in total

Mitigation for Projected Tree Losses as Part of Site Landscaping

5.3 It is indicated that extensive site landscaping, including new tree and hedge planting as part of the development. Considering the site's location in a rural area I would recommend that the landscaping should include the provision of a range of tree species planted as individuals throughout the site. Overall, such new tree planting is projected to deliver a substantial long-term visual amenity in the local landscape and to enhance the ecological value of the site.

5.4 Accordingly, detailed tree planting proposals can be included as part of a detailed landscape plan for the site, which can be conditioned to a planning approval.

6.0 RECOMMENDATIONS FOR SUCCESSFUL TREE RETENTION IN THE CONTEXT OF DEVELOPMENT

Root Protection Areas and Construction Exclusion Zones

6.1 Adequate protection of the Root Protection Areas (RPAs) of retained trees during construction is essential if their long-term viability is to be assured. RPAs, which are calculated through a method provided in BS5837:2012, are ground areas that should be protected by temporary protective fencing as Construction Exclusion Zones (CEZs) throughout the development process, thereby keeping the trees' root zones free from disturbance. Consequently, the RPA distances, as detailed in the TSS (see 6.2, below), and on the TCP and TIP give an idea of the on-site below-ground constraints in respect of tree roots and assist in planning for appropriate tree retention in relation to feasible development. In certain situations, such as at the site under consideration, there is a limited degree of flexibility in the CEZ positioning, as discussed in paragraph 6.2.

6.2 The TSS includes two columns listing the RPAs of the individually surveyed trees and, where applicable, the largest of the trees in any surveyed groups as overall areas in square metres and as radial distances. The radial RPAs are indicated as magenta-coloured circles on the TCP and TIP, which indicate the locations and extents of the applicable CEZs.

6.3 With regard to CEZs the design, materials and construction of the fencing should be appropriate for the intensity and type of site construction works, should conform to at least section 6.2 of BS5837:2012 and should be secured by the imposition of a suitably worded planning condition. A Temporary Protective Fencing Specification is included at Appendix Two.

6.4 The installation of underground utilities in close proximity to trees can cause serious damage to their roots. As such, it is essential that utilities be routed outside RPAs unless there is no other available option, and specifics regarding these routes should be included as part of a detailed planning application. Where RPAs cannot be avoided then guidelines set out in the National Joint Utilities Group publication 'Volume 4: NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2) – Operatives Handbook' should be followed (e.g. trenches of a very limited width to be hand dug or the use of directional drilling).

Arboricultural Method Statement

6.5 Government guidance recommends that, where considered expedient by the LPA, an Arboricultural Method Statement (AMS) be prepared detailing special mitigation construction. The AMS should describe and detail the procedures, working methods and protective measures to be used in relation to retained trees in order to ensure that they are protected during the construction process. Production of and adherence to an AMS can be conditioned as part of a planning approval.

7.0 OTHER RECOMMENDATIONS

Non-Development Related Tree Works and Recommendations

7.1 Any general management pruning works for retained trees that are stated to be nondevelopment related, as detailed in the TSS, are recommended in accordance with prudent arboricultural management and should therefore be conducted regardless of any site development proposals and potential changes in land usage. All tree works should be conducted in accordance with BS3998:2010 - Tree Work – Recommendations.

Tree Work Related Consents

7.2 No tree pruning or removal works should commence on site until necessary consents have been obtained from the LPA as part of a planning approval or in respect of any statutory tree protection (e.g. TPOs) that may exist.

Arboricultural Contractors

7.3 All tree works should be conducted by suitably qualified and experienced arboricultural contractors carrying appropriate public liability insurance cover and be implemented to the minimum current CE and UK industry standards and in accordance with industry codes of practice. Only certificated personnel should, in accordance with The Control of Pesticides Regulations, apply any pesticides

Contractors and Subsequently Identified Tree Defects

Tree contractors should be made aware that, should any significant tree defects become apparent during operations that would not have been immediately obvious to the surveyor, then such defects should be notified immediately to the client and subsequently confirmed to the consultant within five working days.

New Tree Planting

7.4 All tree planting and associated new tree management at the site should be conducted in accordance with BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations. Retained Tree Management

7.5 Any tree risk management appraisals and subsequent recommendations made in this report were based on observations and site circumstances at the time of my survey. Trees are dynamic living organisms whose structure is constantly changing and even those in good condition can succumb to damage and/or stress.

7.6 In this respect I would note that, under the Occupiers' Liability Act (1957 & 1984), site occupants have a duty of care to take reasonable steps to prevent or minimise the risk of personal injury and/or damage to property from any tree located within the curtilage of the land they occupy. It is accepted that these steps should normally include commissioning a qualified and experienced arboriculturist to survey their trees in order to identify any risk of harm to persons or damage to property that they may present and, where unacceptable risks are identified, taking suitable remedial action to negate those risks.

8.0 SUMMARY AND CONCLUSIONS

8.1 The subject site is a field of rough grazing located in the rural edge of Loch Rannoch on the banks of the River Gaur. Thirty-one individual trees were surveyed in respect of a proposal to develop holiday accommodation with an associated vehicular access at the subject site.

8.2 All of the trees are located within the site's redline boundary.

8.3 Twenty-six trees were allocated a low retention value. Five trees should be removed for sound management reasons regardless of site proposals. A further nine are indicated for removal for good silvicultural practice.

8.4 An evaluation of the proposed development in the context of the existing site has indicated that it will not be necessary to remove trees in order to accommodate site layout and drainage. The exact number of surveyed trees be retained in the context of the proposals will be determined when the full requirements of civil engineering works are developed with trees to be retained protected in accordance with current Government guidance.

8.5 Nonetheless, although implementation of the development will not directly necessitate the removal of any trees, widespread tree planting is suggested as part of the landscaping for the development, which is projected to deliver a substantial long-term visual amenity in the local landscape and to significantly enhance the ecological value of the site.

8.6 Accordingly, the provision of and adherence to a suitably detailed landscape proposal plan should be conditioned to a planning permission.

8.7 In consideration of the above findings I therefore conclude that, from the details provided to date, the site in question can be developed as proposed whilst both retaining tree cover and improving its overall quality and enhancing its long-term sustainability by further landscape development.

8.8 However, in order to ensure successful existing tree preservation, it is essential that the retained trees are protected in strict accordance with current Government guidance and the recommendations included herein.

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Nominative References

The following documents are indispensable in the application of the recommendations in this report:

- R.G. Strouts, T.G. Winter (1994). Diagnosis of Ill-Health in Trees. DoE
- D. Lonsdale (1999). Principles of Tree Hazard Assessment and Management. ODPM
- C. Mattheck, K. Bethge, K. Weber (1994). The Body Language of Trees. DoE
- C. Mattheck (2007). Updated Field Guide for Visual Tree Assessment. Forschungszentrum Karlsruhe GmBH
- F.W.M.R. Schwarze, J. Engels, C. Mattheck (1999). Fungal Strategies of Wood Decay in Trees. Springer
- Common Sense Risk Management of Trees (2011). National Tree Safety Group / Forestry Commission
- Tree Surveys: A Guide to Good Practice – Guidance Note 7 (2015). The Arboricultural Association
- British Standard BS3998: 2010 Tree Work – Recommendations. BSI

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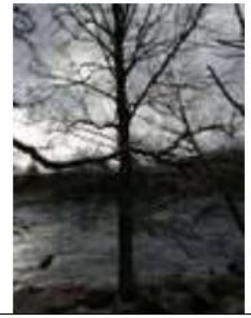
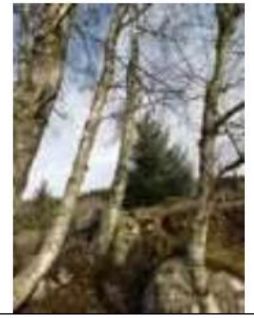
Ref.	Species	Full Structure	Measurements	Spread	General Observations	Retention Category	RPA	Comments	Measurements	Photo
T5701	Sycamore *(Acer pseudoplatanus)*	Tree	Height (m): 12 Stem Diam (mm): 600 Spread (m): 9N, 9E, 9S, 9W Crown Clearance (m): 4 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: <10 years	N:9 E:9 S:9 W:9	Poor overall Physiological and Structural condition. Unstable root plate. Root decay (fungi). Inadequate stem.	C2	Radius: 7.2m. Area: 163 sq. m.	This tree does merit retention due to large decay pocket in stem	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Poor Structural Cond: Poor Bat Habitat: Medium	
T5702	Birch *(Betula sp.)*	Tree	Height (m): 12 Stem Diam (mm): 300 Spread (m): 4N, 4E, 4S, 4W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: 10+ Years	N:4 E:4 S:4 W:4	Fair overall Physiological and Structural condition.	C2	Radius: 3.6m. Area: 41 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5703	Birch *(Betula sp.)*	Tree 4 stems	Height (m): 10 4 stems, avg.(mm): 300 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Dead	N:2 E:2 S:2 W:2	Poor overall Physiological and Structural condition. Root decay (fungi).	U	None - due to Retention Category of U.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Dead Structural Cond: Poor Bat Habitat: Low	
T5704	Birch *(Betula sp.)*	Tree	Height (m): 12 Stem Diam (mm): 240 Spread (m): 3N, 3E, 2S, 1W Crown Clearance (m): 4 Lowest Branch (m): 2(N) Life Stage: Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:2 W:1	Fair overall Physiological and Structural condition.	C2	Radius: 2.9m. Area: 26 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5705	Birch *(Betula sp.)*	Tree 2 stems	Height (m): 10 2 stems, avg.(mm): 300 Spread (m): 2N, 4E, 2S, 3W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: 10+ Years	N:2 E:4 S:2 W:3	Fair overall Physiological and Structural condition.	C2	Radius: 5.1m. Area: 82 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Dead Structural Cond: Poor Bat Habitat: Low	

T5707	Birch *(Betula sp.)*	Tree	Height (m): 10 Spread (m): 4N, 5E, 4S, 4W Crown Clearance (m): 2 Lowest Branch (m): 1(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:4 E:5 S:4 W:4	Poor overall Physiological and Structural condition. Root decay (fungi).	C2	Radius: 5.4m. Area: 92 sq. m.	The RPA includes ... This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	
T5708	Birch *(Betula sp.)*	Tree 4 stems	Height (m): 10 4 stems, avg.(mm): 300 Spread (m): 4N, 5E, 4S, 4W Crown Clearance (m): 2 Lowest Branch (m): 1(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:4 E:5 S:4 W:4	Poor overall Physiological and Structural condition. Root decay (fungi).	C2	Radius: 7.2m. Area: 163 sq. m.	The RPA includes ... This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	
T5709	Birch *(Betula sp.)*	Tree 4 stems	Height (m): 10 4 stems, avg.(mm): 300 Spread (m): 4N, 5E, 4S, 4W Crown Clearance (m): 2 Lowest Branch (m): 1(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:4 E:5 S:4 W:4	Poor overall Physiological and Structural condition. Root decay (fungi).	C2	Radius: 7.2m. Area: 163 sq. m.	The RPA includes ... This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	

T5710	Birch *(Betula sp.)*	Tree	Height (m): 11 Stem Diam (mm): 200 Spread (m): 3N, 2E, 1S, 1W Crown Clearance (m): 4 Lowest Branch (m): 2(N) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:2 S:1 W:1	Fair overall Physiological and Structural condition.	C2	Radius: 2.4m. Area: 18 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5711	Birch *(Betula sp.)*	Tree	Height (m): 11 Stem Diam (mm): 200 Spread (m): 3N, 2E, 1S, 1W Crown Clearance (m): 4 Lowest Branch (m): 2(N) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:2 S:1 W:1	Fair overall Physiological and Structural condition.	C2	Radius: 2.4m. Area: 18 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5712	Birch *(Betula sp.)*	Tree 3 stems	Height (m): 11 3 stems, avg.(mm): 300 Spread (m): 6N, 4E, 5S, 2W Crown Clearance (m): 3 Lowest Branch (m): 4(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:6 E:4 S:5 W:2	Fair overall Physiological and Structural condition.	C2	Radius: 6.2m. Area: 121 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5713	Birch *(Betula sp.)*	Tree	Height (m): 11 Stem Diam (mm): 300 Spread (m): 6N, 4E, 5S, 2W Crown Clearance (m): 3 Lowest Branch (m): 4(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:6 E:4 S:5 W:2	Fair overall Physiological and Structural condition.	C2	Radius: 3.6m. Area: 41 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5714	Birch *(Betula sp.)*	Tree 2 stems	Height (m): 11 2 stems, avg.(mm): 400 Spread (m): 6N, 4E, 5S, 2W Crown Clearance (m): 3 Lowest Branch (m): 4(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:6 E:4 S:5 W:2	Fair overall Physiological and Structural condition.	C2	Radius: 6.8m. Area: 145 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5715	Birch *(Betula sp.)*	Tree	Height (m): 12 Stem Diam (mm): 300 Spread (m): 2N, 4E, 5S, 2W Crown Clearance (m): 3 Lowest Branch (m): 4(S) Life Stage: Mature Rem. Contrib.: 10+ Years	N:2 E:4 S:5 W:2	Fair overall Physiological and Structural condition.	C2	Radius: 3.6m. Area: 41 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5716	Birch *(Betula sp.)*	Tree	Height (m): 7 Stem Diam (mm): 200 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 2 Lowest Branch (m): 1(S) Life Stage: Mature Rem. Contrib.: <10 years	N:2 E:2 S:2 W:2	Poor overall Physiological and Structural condition. Unstable root plate.	U	None - due to Retention Category of U.	This tree does not merit retention due to condition	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Structural Cond: Bat Habitat:	
T5717	Alder *(Alnus sp.)*	Tree	Height (m): 6 Stem Diam (mm): 300 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 2 Lowest Branch (m): 1(S) Life Stage: Early Mature	N:2 E:2 S:2 W:2	Poor overall Physiological and Structural condition. Root decay (fungi).	U	None - due to Retention Category of U.	This tree does not merit retention due to condition	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	
T5719	Spruce *(Picea sp.)*	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5720	Birch *(Betula sp.)*	Tree	Height (m): 13 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Fair overall Physiological and Structural condition.	C2	Radius: 3.6m. Area: 41 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5721	Spruce *(Picea sp.)*	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5722	Spruce *(Picea sp.)*	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5723	Spruce (*Picea sp.*)	Tree	Height (m): 12 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	U	None - due to Retention Category of U.	This tree does not merit retention due to condition	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5724	Spruce (*Picea sp.*)	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5725	Spruce (*Picea sp.*)	Tree	Height (m): 12 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	U	None - due to Retention Category of U.	This tree does not merit retention due to condition	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5726	Spruce *(Picea sp.)*	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not merit retention due to condition	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5727	Spruce *(Picea sp.)*	Tree	Height (m): 14 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5728	Spruce *(Picea sp.)*	Tree	Height (m): 11 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 4.8m. Area: 72 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5729	Spruce *(Picea sp.)*	Tree 2 stems	Height (m): 12 2 stems, avg.(mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Poor overall Physiological and Structural condition.	C2	Radius: 6.8m. Area: 145 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5730	Spruce *(Picea sp.)*	Tree	Height (m): 8 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1 Lowest Branch (m): 1(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:3 E:3 S:3 W:3	Fair overall Physiological and Structural condition.	C2	Radius: 3.6m. Area: 41 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5731	Birch *(Betula sp.)*	Tree	Height (m): 12 Spread (m): 5N, 5E, 5S, 5W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: 10+ Years	N:5 E:5 S:5 W:5	Fair overall Physiological and Structural condition.	C2	Radius: 6.5m. Area: 133 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

T5732	Birch *(Betula sp.)*	Tree	Height (m): 12 Spread (m): 5N, 5E, 5S, 5W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: 10+ Years	N:5 E:5 S:5 W:5	Fair overall Physiological and Structural condition.	C2	Radius: 6.5m. Area: 133 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	
T5733	Birch *(Betula sp.)*	Tree	Height (m): 10 Stem Diam (mm): 200 Spread (m): 2N, 3E, 5S, 5W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:2 E:3 S:5 W:5	Fair overall Physiological and Structural condition.	C2	Radius: 2.4m. Area: 18 sq. m.	This tree does not form a constraint to the redevelopment of the site.	Other Reference: Distance1: Distance2: Custom Number 3: Physiological Cond: Fair Structural Cond: Fair Bat Habitat:	

BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

Cascade Chart for Tree Quality Assessment

TREES UNSUITABLE FOR RETENTION		
Category and Definition	**Criteria**	**Identification on Plan**
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other Category U trees (eg, where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. *NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*	

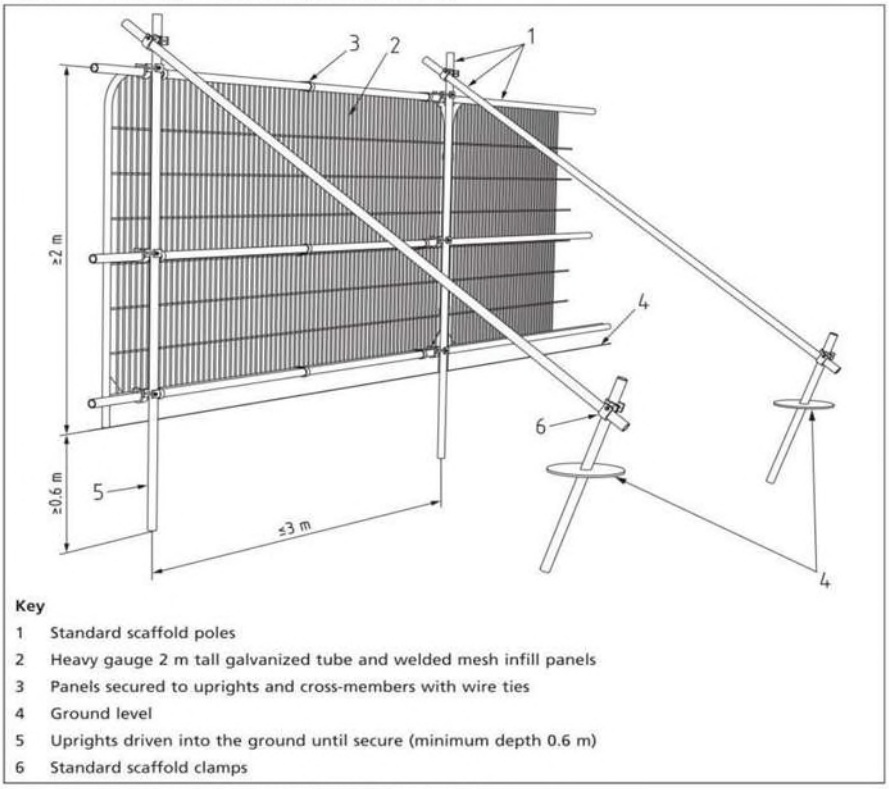
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	**Criteria**			**Identification on Plan**
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (eg, the dominant and/or principal trees within an avenue.	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e, veteran trees or wood-pasture).	
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (eg, presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	

Tree protection barriers & ground protection

- Design of welded mesh, Heras type tree protection barrier
- Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place. The default specification should be in accordance with 6.2.2.2 of BS 5837, as set out below.
- **Specifications**: Barrier shall be a minimum 2 m high. It shall consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated below. The vertical tubes should be spaced at a minimum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.
- Where site circumstances and associated risk of damaging incursions into the RPA do not necessitate the default level of protection, an alternative specification may be used if agreed with the local authority. An example would be 'Heras' type welded mesh panels on rubber or concrete feet. The panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts. All-weather notices should be attached to the barrier with words such as 'TREE PROTECTION ZONE - NO ACCESS.
- **Location**: Barriers shall be positioned on the perimeter of the Root Protection Area to define the Tree Protection Zone or as specified in the Tree Protection Plan.
- **Shown on the Tree Protection Plan by a solid black line**.

Example of welded mesh barriers in use

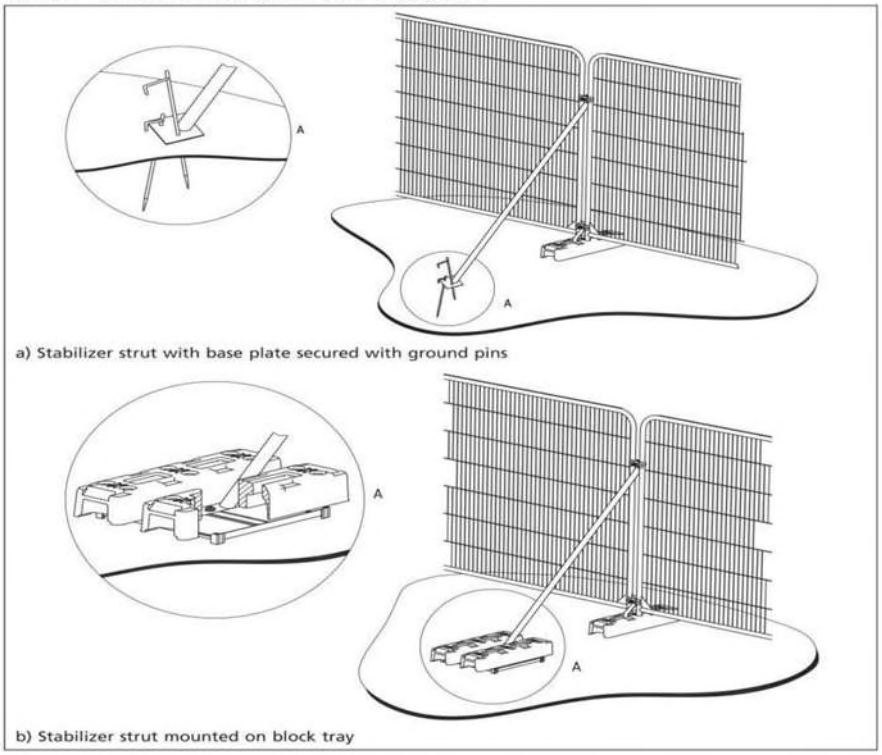
Figure 2 **Default specification for protective barrier**



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 3 **Examples of above-ground stabilizing systems**



Design of box protection for tree trunks

Tree protection boxes must not be fixed directly to the tree stem as damage could occur either as a direct fixing or by means of transmitting forces to the tree if the box sustains a collision. The box must be self-supporting and ideally anchored to the ground. There must be a minimum of 150mm between the tree stem and any part of the box. The materials used must be robust and durable enough to be fit for the purpose of preventing damage to the trunk and last the lifetime of the development. Usually, 18mm exterior ply fixed to 50mm x 50mm battens is sufficient.

Signs should be fixed to the boxes stating that they are for tree protection and not to be removed.

Annotated on the tree protection plan where specified.

Example of trunk protection box in use

Suggested protective fencing warning sign format.

Ground protection

In areas where it is not possible to erect protective fencing, ground protection must be used to protect the TPZ of trees. Where it has been agreed during the design stage, and as shown on the tree protection plan, that vehicular or pedestrian access for the construction operation may take place within the TPZ, the possible effects of construction activity should be addressed by a combination of barriers and ground protection. The position of the barrier may be within the TPZ at the edge of the agreed working zone but the soil structure beyond the barrier to the edge of the TPZ should be protected with ground protection. **This must be installed before any site activity, by tracked or wheeled plant or machinery, takes place, to protect soil structure and tree roots.**

Ground protection must be fit for the purpose of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil. It might comprise one of the following:

- for pedestrian movements or the erection of scaffolding within the RPA the installation of ground protection in the form of a single thickness of scaffold boards either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip laid onto a geotextile.
- for pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards or panels placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane; or
- for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the loading to which it will be subjected.
- Cellular confinement no-dig systems can also be used.

Examples of proprietary ground protection panels

Photographs

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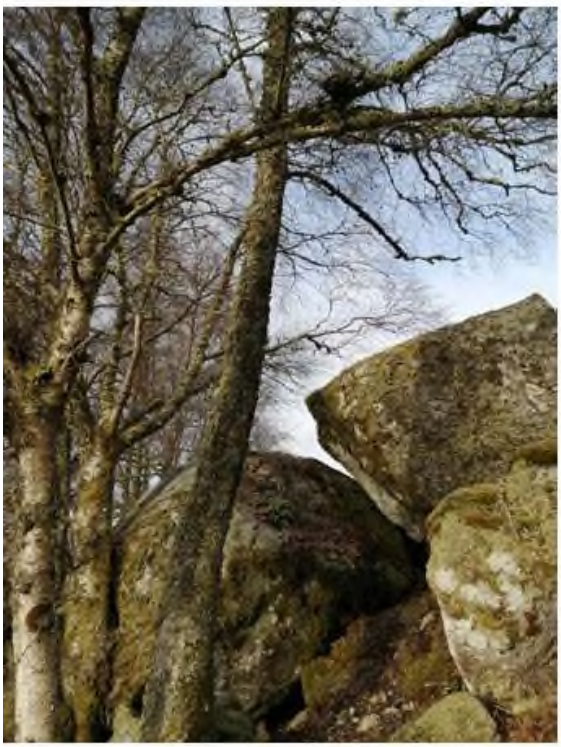

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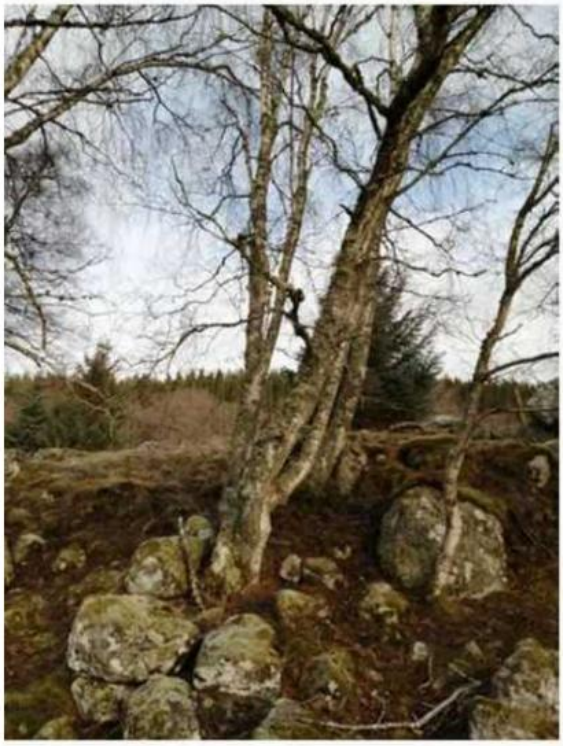

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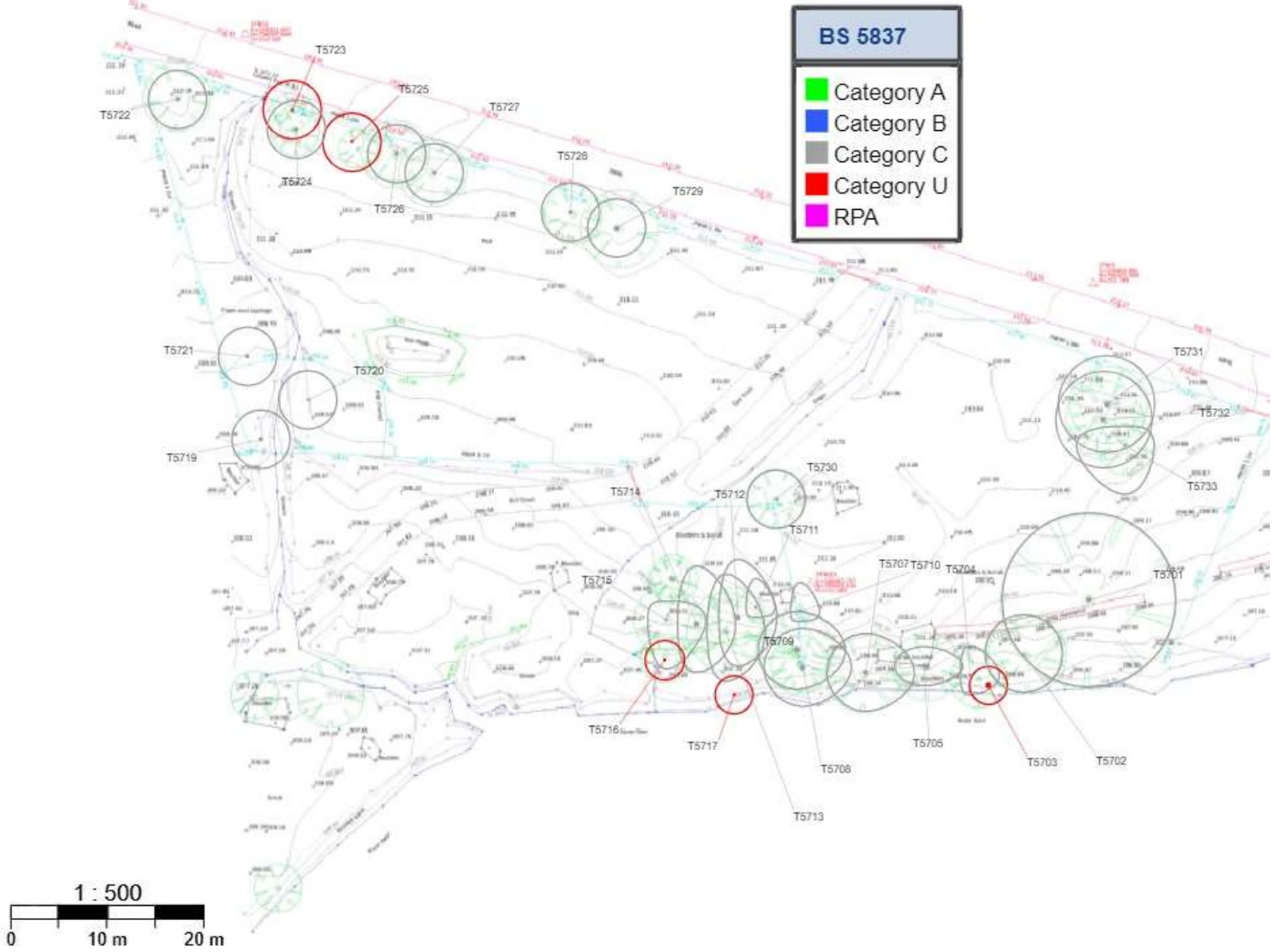

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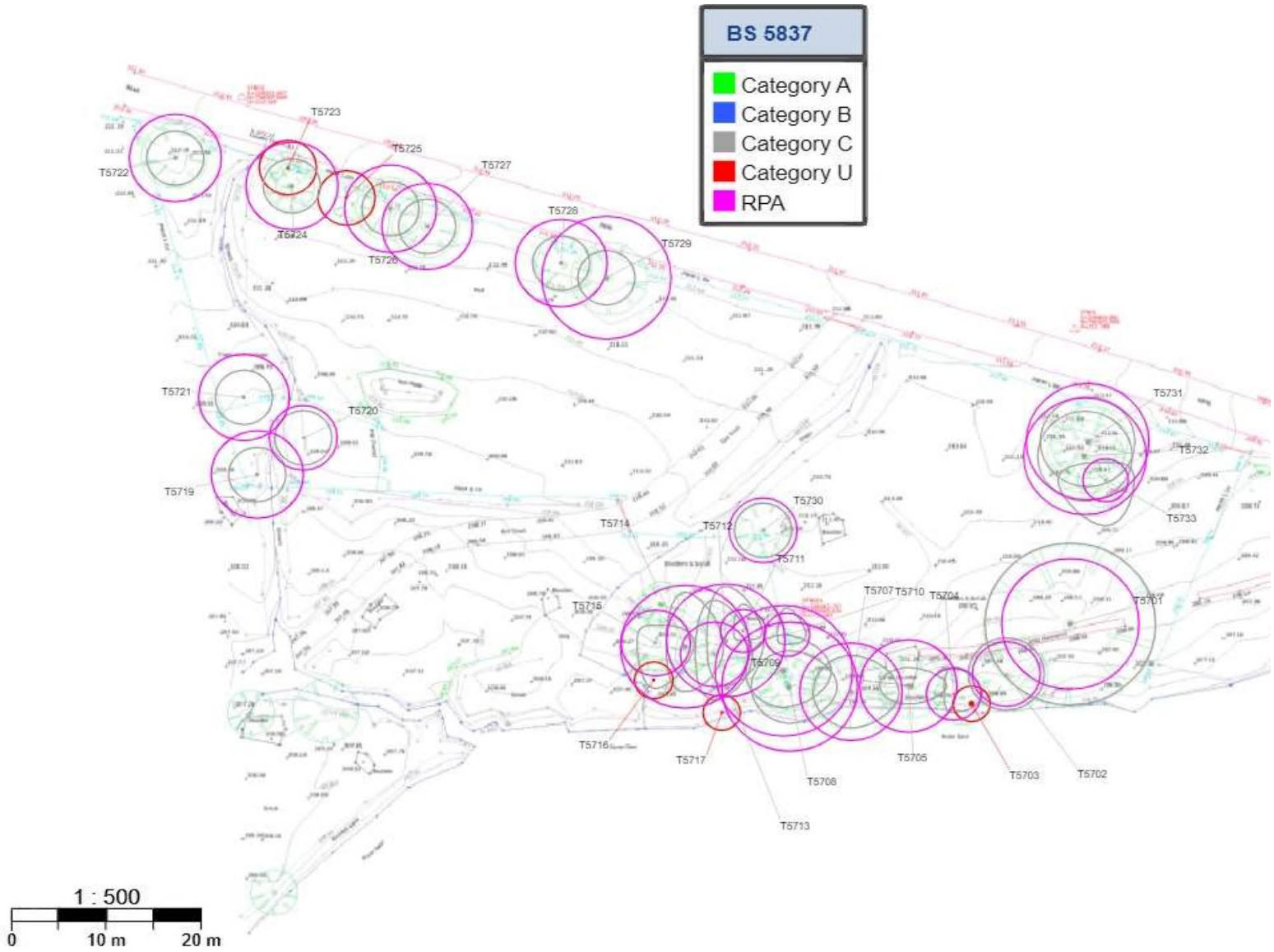

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Figure 2

UNIQUE HOMESTAYS

EST. 2001

03/03/2022

RE: Meoraich, Loch Rannoch

To whom it may concern,

Here at Unique Homestays, we're seeking individualistic homes in beautiful locations. As specialists in the luxury homestay market, Unique Homestays has led the way for over 20 years. We're passionate about the private homes that we represent, and our hand-selected portfolio features the most unique and inspirational properties throughout the British Isles.

With each home exuding a unique edge, we're extremely selective in regards to the properties we look to feature. With this in mind, we have a small yet curated portfolio of homes which allows us to dedicate our resources to ensuring that every home we represent is as successful as possible.

We currently feature a capsule collection of properties in Scotland so based on existing demand, we know the area proves to be very popular with our discerning clientele. Occupancy rates for this region are above average and coupled with the striking architectural merits of Meoraich, we are confident that it has huge potential to be an extremely popular addition to our portfolio, with guests travelling year round to experience a holiday home outside of the norm.

Given we feature self-catering properties, our guests look to the immediate area for dining options, making purchases in local shops or restaurants to sample food authentic to the area. Likewise, our guests crave experiences so this too will contribute towards the local economy. As a booking and marketing agency, we don't provide a property management service, instead this will need to be managed by a team; from gardens to housekeepers and tradespeople, employment will need to be sourced locally.

If you would like to find out more about the homes we represent, please visit our website at www.uniquehomestays.com or contact the Property Team on 01637 882046.

Kind regards,

Charlotte Jenkins

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Supporting Planning Statement

Erection of a holiday accommodation unit, ancillary shed and associated works on land at Camusericht Farm, Bridge of Gaur.
Re-submission of application 22/00660/FLL

Introduction

This is a re-submission application following refusal of application 22/00660/FLL on 31 May 2022 for a holiday accommodation unit on Camusericht Farm, Bridge of Gaur.

The applicant's wife is from the area and is a friend of the farmer at Camusericht. It was envisaged that the sale of the land for tourist use would complement the farm business through providing farm produce to service the accommodation and capital investment to secure future viability. The previous application submission did not emphasise that the proposal would be very important in helping to sustain the future viability of the farm.

The proposal would provide unique and high-quality tourist accommodation in the local area and is easily accessible, being closely connected to the existing road and national rail network. It will provide financial benefit helping to support the viability of Camusericht Farm, in accordance with the overall vision of the TAYplan which states:-

"By 2036 the TAYplan area will be sustainable, more attractive, competitive and vibrant without creating an unacceptable burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit, and where businesses choose to invest and create jobs."

The reasons for refusal were:-

1. The site is located outwith any settlement boundary identified within the adopted Perth and Kinross Local Development 2 (2019), and the proposed holiday accommodation unit does not relate to an expansion of an existing business or a new business that is connected to an existing site-specific resource or opportunity. The proposal is therefore contrary to the specific requirements of Policy 8 (Rural Business and Diversification) of the adopted Perth and Kinross Local Development Plan 2 (2019) which only allows for new rural businesses in the open countryside in certain circumstances.

2. It has not been demonstrated that the proposal would not adversely impact upon the integrity and the qualifying interests associated with the River Tay Special Area

of Conservation. The proposal is therefore contrary to Policy 38A (Environment and Conservation) of the adopted Perth and Kinross Local Development Plan 2 (2019), which seeks to protect internationally designated nature conservation sites from inappropriate new developments.

3. It has not been demonstrated that the proposal would protect and enhance the nature conservation interests associated with the River Tay Catchment Area. The proposal is therefore contrary to Policy 47 (River Tay Catchment Area) of the adopted Perth and Kinross Local Development Plan 2 (2019), which seeks to protect the nature conservation interests of the River Tay from inappropriate new developments.

4. Additional otter surveys are required to be undertaken and reported upon to enable a full assessment of the required mitigation measures. In the absence of these, the proposal is contrary to Policy 41 (bio-diversity) of the adopted Perth and Kinross Local Development Plan 2 (2019) which seeks to ensure that both protected and local wildlife is fully considered as part of the planning application process.

The re-submitted application has looked to address the reasons for refusal and in this submission additional surveys and assessments on drainage and ecology have been provided which were considered deficient in the first submission. The application site is part of Camusericht Farm and is marginal land which is not productive in terms of providing financial benefit to the farm business.

Policy 8 (Rural Business and Diversification) Perth and Kinross LDP

In particular it was considered by PKC that in terms of Policy 8, the most relevant policy, the proposal did not relate to an existing site specific resource, where it is stated in the policy that:-

The Council will give favourable consideration to the expansion of existing businesses and the creation of new ones in rural areas. Sites outwith settlements may be acceptable where they offer opportunities to diversify an existing business, or are related to an existing site-specific resource or opportunity.

Following the refusal, we consulted the Council's Development Plan Policy Team to understand more clearly what would constitute an *existing site-specific resource or opportunity.* The response is given below:-

You were asking about the requirement in policy 8 for proposals to be related to an existing site-specific resource or opportunity? It's difficult to give examples as each proposal has to be considered on its own merits and we do try to take a pragmatic approach to this requirement, but it's really a case of the applicant demonstrating that there's something specific or unique about their particular site which means that the proposal has to be located there rather than anywhere else. One example might be a

proposal for holiday accommodation on a site which has a good landscape setting but to meet the requirement we'd be looking for the applicant to demonstrate why the proposal couldn't instead be located on a site with a similar setting in another location. Another might be where a site had to have good connection to the strategic road network which would mean that only certain locations might be suitable.

In this case the proposed site's location is exceptional with a high-quality landscape setting. Along with this, however, the site is located adjacent to the public road network and is 3.5 miles from the national rail network at Rannoch Station. This proximity to transport links separates the application site from other sites in the area and is an important site-specific resource encouraging demand and allowing connectivity to the tourism market.

There is an existing farm business on the site and the use of the proposed site for tourism will benefit the farmer through the sale of the land and the demand for his produce in servicing the holiday accommodation.

With regard to the other criteria in Policy 8 these are considered below.

a) The proposal will contribute to the local community through the creation of permanent employment as explained in the Business Plan and provide added value through visitor spend in the local area.

b) The proposal will not result in suburbanisation as the building will not be close to any other neighbouring buildings and has a good landscape framework and is self-contained.

c) The proposed use as holiday accommodation is compatible with the surrounding land uses in this part of rural Perthshire and there will be no detrimental impact on any neighbouring residential properties.

d) As indicated in the Delegated Report for the previous submission, it is considered that the proposal can be accommodated within the landscape at this location and further planting/screening has been proposed in line with the recommendation outlined in that report.

e) It was highlighted in the Business Plan that there is a demand/need for this high quality type of accommodation in the area:-

Health and wellness is a huge growing industry, and we feel strongly that Meoraich, could offer a sanctuary for idyllic group health and wellness retreats. Businesses such as Yoga, Pilates, Meditation, Nutritionists, Masseuses, Beauty Therapists, Chefs (to name a few) can all visit the property and offer sessions to our staying guests. There is a significant lack of anything similar in the area.

f) The proposal is of a high-design standard as confirmed in the previous Delegated Report and at single storey and self-contained the proposal will not be detrimental to the visual amenity or character of the surrounding countryside – see the Design & Access Statement submitted in support.

g) There were no objections to the proposal as originally submitted in terms of traffic impact, access and parking. The local road network will be able to accommodate the traffic generated by the proposal.

h) N/A

i) N/A

The proposal is related to an existing farm business and the development of the site for tourism will help to secure the future viability of Camusericht Farm, in accordance with the criteria of Policy 8 of the adopted local plan.

Nature Conservation and the River Tay Catchment Area

Reasons for refusal 2 and 3 relate to the impact of the proposal on the nature conservation interests in the River Tay Special Area of Conservation and the River Tay Catchment Area. There was concern from NatureScot that the proposal could potentially impact on the Atlantic Salmon population in the catchment area and on otter habitat. Reason for refusal 4. requested that additional otter surveys be undertaken and reported upon to enable a full assessment of the required mitigation measures required to protect any nearby habitat. An additional otter survey has been completed.

The applicant has provided a Drainage Strategy for the proposal where the foul water will be directed into a treatment plant, processed and cleaned and directed into a soakaway, as recommended. The soakaway will be located a minimum of 30m away from the river for indirect discharge. This will mitigate any impact from drainage on the nature conservation interests in the river catchment area.

As indicated in the Design & Access Statement the holiday unit will be constructed off-site. This strategy lowers the environmental impact on the site and surrounding area. There will be minimal excavation to secure the unit to the ground, no site clearance (minimal waste on site), and no long-term presence of workers or heavy machinery, which will protect the site and its wider environment through reducing transport movements through and to and from the site. These points will be highlighted in any Construction Management Statement required on a consent for the proposal.

With regard to the otter survey the additional report has concluded that:-

The surveys have indicated that the otter shelter is a non-breeding shelter and should be protected by a buffer zone of 30m during works, however, access along the existing track should be maintained where it passes through this area. It is not anticipated that the construction of the proposed development will have a long-term detrimental impact on the otter population at the site providing the shelter is protected and the tree cover is retained and enhanced in the vicinity of the shelter

and along the riverbank. The existing access track is located above, and out of sight of the shelter.

A 30m buffer around the non-breeding shelter is indicated on the submitted drawings and the existing track which the otter uses will be maintained.

Appropriate mitigation has been incorporated in the re-submitted application and the proposal will not have any adverse impact on nature conservation interests in and around the application site and within the River Tay catchment area, in accordance with policies 38A, 41 and 47 of the adopted local plan.

Other Planning Policy Considerations

The design and colour of the proposed building will blend sympathetically with it's surroundings and particularly in the autumn/winter months when the proposed building colour will reflect the brown and orange hues of the bracken in the landscape.

The proposal will not have any impact on any neighbouring residential amenity.

There were no objections in terms of flood risk or any impact on existing trees on the site as outlined in the previous Delegated Report.

There were also no objections in terms of impact on the existing road network or parking and access.

The proposal will not have any detrimental impact on any cultural heritage assets.

Conclusion

It is concluded that the application is an acceptable high quality rural business proposal which satisfies the principle and criteria of Policy 8 where the development of tourism use on Camusericht Farm will benefit the farm's viability and contribute positively to the local economy.

In this re-submission any previous concerns raised on the impact on the nature conservation and biodiversity interests in and around the site have been mitigated satisfactorily, in accordance with the relevant adopted local plan policies.

For the above reasons it is respectfully requested that the application is recommended for approval.

Proposed Development Site
A'Phairc Loisgte, Bridge of Gaur, Rannoch
Habitat and Protected Species Assessment

Friday 11th February 2022

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CONTENTS

EXECUTIVE SUMMARY

Tay Ecology was commissioned to undertake a habitat and protected species assessment at the site at A'Phairc Loisgte. Field surveys included habitat, vegetation and for bats, badgers, birds, pine martens, red squirrels, otters, water voles and reptiles. The presence/absence of any other protected or local biodiversity action plan species of flora and fauna was assessed. The existing data search shows a range of protected species recorded within a 5km radius. The River Tay SAC borders the site along its southern boundary. The site is dominated by acidic species-poor grassland interspersed with granodiorite boulders. There are a number of native and non-native tree species on the site, predominantly towards the river and along the roadside, and some large glacial erratic boulders on the riverbank. It is anticipated that there will be negligible direct impact to the wider area from the construction of the proposed development and that any potential indirect impacts can be mitigated. Construction will result in the loss of bare ground and acidic grassland which is of low ecological value. It is recommended that the majority of trees are retained and that root areas are protected.

There is an otter shelter located along the riverbank underneath the large boulders. There was no indication of a natal den being present at the time of the surveys, however, further survey is recommended during the breeding season to confirm the status. For non-breeding otter shelters a 30m protection zone is required, and for natal dens a 100-200m protection zone is required, where protection zones of the required distance are not possible a licence must be applied for from NatureScot. The survey has established that there is a low potential that any badger, pine marten, freshwater pearl mussel or water vole will be detrimentally impacted. There is a negligible to low potential that the trees contain bat roosts. It is likely that Myotis and Pipistrelle bats will forage in the wider area, however, foraging habitats will be retained, and the area will remain favourable for bats with opportunities to enhance bat roosting locations as part of the development with the incorporation of bat boxes. It is anticipated there will be a low impact to reptiles, though it is recommended the ground is checked for reptiles before construction commences. There is low likelihood as to the presence of rare, or protected species of birds at the site. Species of conservation concern were recorded, and recommendations to provide nesting locations are provided. There is a high likelihood of common breeding birds utilising the trees and grassland, and any work involving ground vegetation clearance, should be aware of the potential for breeding birds in the nesting season and disturbance minimised. For any construction commencing during the breeding season a pre-construction breeding bird survey should be undertaken and appropriate buffer zones established around any nests which are protected until chicks have fledged.

There was no evidence of red squirrel dreys recorded in the trees on or immediately adjacent to the site during the surveys. There is potential for red squirrels to be located in the area and there is suitable habitat. It is recommended that a pre-construction red squirrel survey is undertaken prior to any development taking place. In the event any active dreys are identified appropriate steps must be taken to protect the dreys with suitable exclusion zones or a red squirrel licence in place.

The survey demonstrates, with the exclusion of otters, that the proposed development will have a low overall impact on the site providing the recommendations are followed and opportunities to enhance the biodiversity at the site for the longer-term are put in place. Further survey of the otter shelter is recommended to confirm its status, and an otter licence will be required where protection zones of the required distances are not possible.

1.0 INTRODUCTION

1.1 Brief from Client

Tay Ecology was commissioned to undertake a habitat and protected species assessment at the site proposed for the development at A'Phairc Loisgte. Figure 1 Location Plan

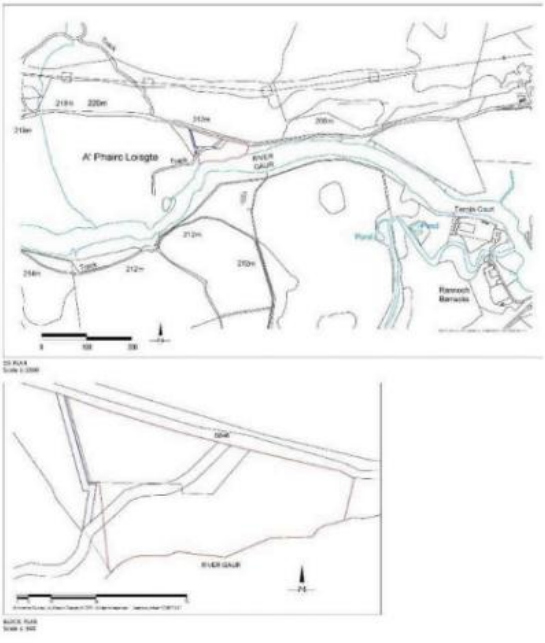
1.2 Site location

The proposed site is accessed from the B846 approximately 1km to the west of Bridge of Gaur at the west end of Loch Rannoch. It is located on the north side of the River Gaur. The grid reference is NN 494569, and the altitude is 210m above sea level.

1.3 Proposed works

It is proposed to construct a holiday accommodation unit at the site.

Figure 1 Location Plan



2. SURVEY AND SITE ASSESSMENT

2.1 Objectives

The site was surveyed by a visual ground survey and a habitat and protected species assessment undertaken. Field surveys were carried out to assess the existing habitat; potential of tree bat roosts; presence/absence of badgers and their setts; red squirrels and their dreys; pine martens and their dens; assess for the likely presence/absence of otters, reptiles, and water voles. The presence/absence of specially protected, sensitive, or very, rare, species of birds was assessed. The presence/absence of any other protected or local biodiversity action plan species of flora and fauna was surveyed. The survey area included the proposed site and up to 250m in the surrounding area.

2.2 Methods

2.2.1 Existing Data Sources

Web-based sources of information were examined, principally the National Biodiversity Network (NBN) Gateway (http://data.nbn.org.uk/) where a radius of 5km from the centre of the proposed development was searched to provide suitable coverage of the area. Nature designation classifications were obtained from NatureScot Site Link (https://sitelink.nature.scot/home).

The UK Biodiversity Action Plan (https://jncc.gov.uk/our-work/uk-bap-priority-species/); Scottish Biodiversity List (https://www.nature.scot/scottish-biodiversity-list); Tayside Biodiversity Action Plan were examined (https://www.taysidebiodiversity.co.uk/).

Other websites searched include Bat Conservation Trust (http://www.bats.org.uk/); Scottish Squirrel Survey (http://www.scottishsquirrelsurvey.co.uk/); and The British Trust for Ornithology (http://www.bto.org/). Positive records for species present in the survey area can be used to inform the assessment of biodiversity on the site but the lack of records clearly cannot be taken to imply that the species in question is absent.

2.2.2 Survey methodology

A site visit was carried out after receiving project information from Patsy Robinson, Office Manager, Nick Carroll Architects Ltd. A walk over survey and overall habitat assessment was carried out.

2.2.2.1 The main habitats present were surveyed according to the methodology of the Joint Nature Conservation Committee's 'Phase 1 Habitat Survey' (JNCC, 2010). Classification was given to each area according to JNCC (2010). Ground vegetation was then surveyed for the presence of any other rare or protected species by walk-over surveys. Target notes describe the habitats found and any protected or otherwise notable wildlife and any suitable habitats for these species. Nomenclature for higher plants follows Stace (2019) and for mosses and liverworts British Bryological Society (2010). Species abundance is described using DAFOR scale (D – Dominant, A – Abundant, F – Frequent, O – Occasional, R – Rare, where rare refers to local abundance not national scarcity).

2.2.2.2 Bat roost potential was assessed for trees within/adjacent to the proposed site using methodology to identify the possible presence of bats, and potential for bat roosts from Collins, J (2016) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' Bat Conservation Trust (3rd edition), Cowan, H (2004) 'Looking out for bats. They could be anywhere!' and NatureScot (2022a) 'Standing advice for planning consultations: bats'.

2.2.2.3 Evidence of badgers was surveyed for using information from Scottish Badgers (2022), 'Badger surveying' and 'Standing advice for planning consultations: badgers' (NatureScot, 2022b). The survey was based on the interpretation of field signs (footprints, foraging holes, latrines, and setts or potential setts) and assessment of suitable habitat rather than direct observation of the animals themselves.

2.2.2.4 The potential presence of red squirrels and red squirrel dreys was surveyed using the Forestry Commission Scotland (FCS, 2006a) 'FCS Guidance Note 33: Forest operations and red squirrels', NatureScot (2022c) 'Standing advice for planning consultations: red squirrels',

and UK BAP Mammals: 'Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation' (The Mammal Society, 2012, pp. 13-16). The survey was based on the interpretation of any field signs (feeding signs and dreys) and assessment of suitable habitat.

2.2.2.5 Evidence of pine marten presence was surveyed for using UK BAP Mammals: 'Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation' (The Mammal Society 2012, pp.71-76) and 'Standing advice for planning consultations: Pine Marten' (NatureScot, 2022d). The survey was based on the interpretation of field signs (scats, footprints, and dens or potential dens) and assessment of suitable habitat rather than direct observation of the animals themselves.

2.2.2.6 An otter survey was carried out following the standard otter survey methodology as set out in the 'New Rivers and Wildlife Handbook' (Holmes, Ward and Jose, 2001) and NatureScot (2022e) 'Standing advice for planning consultations: otters'. The survey was based on the interpretation of any field signs (spraints, footprints, tracks, slides, couches and holts or potential holts) and assessment of suitable habitat rather than direct observation of the animals themselves.

2.2.2.7 Evidence of water vole was surveyed for using information from NatureScot (2022f) 'Water vole survey methods', and 'Standing advice for planning consultations: water vole'. The survey was based on the interpretation of field signs (burrows, runs, tracks, feeding stations, droppings, and latrines) and assessment of suitable habitat rather than direct observation of the animals themselves.

2.2.2.8 A reptile survey was carried out following guidelines adapted from Froglife (2013) and NatureScot (2022g) 'Standing advice for planning consultations: reptiles' where an assessment of suitable habitat was made.

2.2.2.9 The presence of potential Schedule 1 birds was adapted from BTO (2022), 'Methodology and survey design for bird surveys' and NatureScot (2022h) 'Protected species: birds.'

2.2.2.10 The site was surveyed for the presence of any other rare or protected species, guidelines from FCS (2007) FCS Guidance Note 34: Forest operations and European protected species in Scottish forests.

2.2.3 Survey area

The survey area includes the proposed area for development and up to 250m in the surrounding area.

2.2.4 Timings, types, and weather conditions of field Surveys

The site was surveyed by walk-over and protected species surveys carried out in January and February 2022 by Tay Ecology. The main habitats present were surveyed according to the methodology of the Joint Nature Conservation Committee's Phase 1 Habitat Survey (JNCC 1993). Signs of the presence of protected species were sought and habitats were assessed for their potential to host protected species.

18/01/2022 9 degrees Celsius; wind speed 5mph; cloud cover 100%; showers.
26/02/2022 2 degrees Celsius; wind speed 5mph; cloud cover 60%; no precipitation.
04/02/2022 6 degrees Celsius; wind speed 5mph; cloud cover 80%; no precipitation.

2.2.5 Limitations

Survey data is accurate when the surveys took place. It was a ground survey, with no tree climbing element, and full access to the site was available. Surveys took place in January and February so some flowering plants may have been missed. Surveys took place out with the breeding bird season, and during the hibernation season for bat activity, reptiles, and amphibians. These limitations will not impact the habitat classification and are unlikely to impact the evaluation of the site as an assessment of suitable habitat was made rather than direct observation of any animal.

2.2.6 Personnel

Emma O'Shea, Ecological Consultant, Tay Ecology Ltd. Emma has worked in the environmental sector for seventeen years, during which time she has gained a wealth of experience and expertise. During the last seven years she has worked as an ecological consultant for Tay Ecology with lead responsibility for development projects requiring protected species surveys and species licensing. Emma has twelve years of experience surveying breeding birds, is a qualified tree inspector with a background in tree regeneration monitoring and habitat surveys. She has a Postgraduate Diploma in Environmental Management from the Open University and is a member of the Arboricultural Association and Institute of Environmental Assessment and Management.

3.0 LEGISLATION AND POLICY GUIDANCE

3.1 Wildlife and Countryside Act, 1981, as amended (WCA)

The WCA sets out the protection offered to various species of plants, birds and animals in England and Wales. Bird species listed in Schedule 1, animal species listed in Schedule 5 and plant species listed in Schedule 8 of the WCA are protected. Under section 14(2) of the WCA it is an offence to "plant or otherwise cause to grow in the wild" any plant listed in Schedule 9, Part II of the Act. Japanese knotweed *Fallopia japonica* is a Schedule 9, Part III species. The WCA has since been strengthened and updated by subsequent UK and Scottish legislation (see below).

3.1.1 The Conservation (Natural Habitats &c.) Regulations 1994, as amended (Habitat Regulations)

The provisions of the Habitats Directive were transposed into UK law by the Habitat Regulations. Schedule 2 of the Habitat Regulations lists the European protected species of animals whilst Schedule 4 lists the European protected species of plants. Under the Habitat Regulations, it is illegal to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4 without a licence granted by the appropriate authority. Licences can only be granted for certain purposes and if a set of conditions have been met.

3.2 Nature Conservation (Scotland) Act 2004

Deals with conserving biodiversity by introducing a duty on all public bodies to further the conservation of biodiversity and requires under Section 2(4) publication of a list of habitats and species for conservation action. Amends the 1981 Wildlife & Countryside Act in respect of protecting Sites of Special Scientific Interest, and similarly strengthens protection of

certain birds, animals, and plants. Updates the 1992 Protection of Badgers Act. The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004 Amends 1994 Habitats Regulations to bring provision for protection of European 'Natura 2000' sites into line with the protection regime set out in the Nature Conservation (Scotland) Act 2004 and affords protection to European candidate sites. It gives further protection to European protected species, introducing a new offence of 'reckless disturbance' in respect of European sites and species. The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2007 Significantly strengthened the regulations relating to European Protected Species of animals and enacting the requirement to assess developments plans (structure and local plans) with, regard to effects on Natura 2000 (EC Directive) sites.

3.3 Wildlife Legislation

3.3.1 Bats

Bats are a European Protected Species and given the highest level of protection. Bats and their roosts are legally protected, whether bats are occupying the roost or not. It is illegal to disturb a bat(s) in their roosts; damage or destroy a bat roosting place, even if there are no bats present at the time; and obstruct access to a bat roost. It is illegal to capture, injure or kill a bat or possess, advertise, sell, or exchange a bat dead or alive.

3.3.2 Badger

Badgers are protected under the Protection of Badgers Act 1992. Offences under the Act include taking, injuring, or killing badgers; cruelty to badgers; interference with badger setts; selling and possession of live badgers and marking and ringing. Exceptions and licences can apply.

3.3.3 Red Squirrel

The red squirrel is protected under schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). Under this legislation it is illegal to intentionally kill, injure or take or damage, destroy, or obstruct access to any structure or place used for shelter or protection, or to disturb any animal while it is in a drey.

3.3.4 Pine Marten

Pine martens are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). It is an offence to intentionally, or recklessly: kill, injure, or take a wild pine marten; damage, destroy or obstruct access to any structure or place which such an animal uses for shelter or protection (den); and to disturb such an animal when it is occupying a place for that purpose.

3.3.5 Otter

Otters are a European Protected Species and are legally protected in Scotland by the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) - "the Habitats Regulations". It is illegal to deliberately or recklessly kill, injure or take (capture) an otter; deliberately or recklessly disturb or harass an otter; damage, destroy or obstruct access to a breeding site or resting place of an otter (ie. an otter shelter). Otter shelters are legally protected whether, or not an otter is present.

3.3.6 Freshwater pearl mussel

Freshwater pearl mussels are protected by the Wildlife and Countryside Act 1981. It is an offence to intentionally: kill, injure, or take them; possess or control them (alive or dead) It is also an offence to intentionally or recklessly: damage or destroy a structure or place used for shelter or protection; disturb them in a place used for shelter or protection; obstruct access to a place used for shelter or protection.

3.3.7 Water vole

The water vole receives partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). It is an offence to intentionally or recklessly: damage, destroy or obstruct access to any structure or place that water voles use for shelter or protection; disturb a water vole while it is using any such place of shelter or protection.

3.3.8 Reptiles

Great crested newts, natterjack toads and all marine turtles are European protected species. They have full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). All other amphibian and reptile species found naturally in Scotland are given limited protection under the Wildlife and Countryside Act 1981 (as amended). These are the common frog, common toad, palmate newt, smooth newt, adder, common lizard, and slow worm. Common lizard, slow worm and adder are protected against intentional or reckless killing and injury and trade.

3.3.9 Breeding birds

The main legislation Wildlife and Countryside Act 1981, as amended by the Nature Conservation (Scotland) Act 2004 make it an offence to intentionally or recklessly kill, injure or take any wild bird, or take, damage, destroy, obstruct, or interfere with any wild birds' nest, whilst being built or in use, or their eggs or young.

4.0 RESULTS

4.1 Existing data search

Nature designations within 5km of the site include the River Tay Special Area of Conservation SAC which is designated as a Natura 2000 site for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, clear-water lochs and otters. It is also important for freshwater pearl mussel which is a protected species. The River Tay SAC borders the site along the length of its southern boundary with the River Gaur.

[redacted]

Tayside Biodiversity Partnership (2020) lists the priority species of the local area, and the full list can be found in Appendix 1 Tayside Biodiversity Local Action Plan Priority Species.

4.2 Habitat description

The site is dominated by rough grazed grassland interspersed with granodiorite boulders. In the eastern part of the site are a group of mature birch and a mature oak tree. The southern boundary is delineated by the River Gaur along which is a wooded strip dominated by birch trees with occasional oak. There are some large glacial erratic boulders on the riverbank. To the west the ground is bare and muddy and has been used by cattle. There are several scattered sitka spruce trees in this part of the site, predominantly along the roadside boundary. The road marks the northern boundary.

4.2.1 Site Photographs

a. Mature oak and River Gaur

b. Cluster of silver birch towards road

c. Sitka spruce and access gate

d. Rough grassland with boulders

e. Riverbank with mature trees

f. Glacial erratic boulders / otter shelter

[redacted]

g. Sitka spruce and bare ground

h. Sitka spruce and bare ground

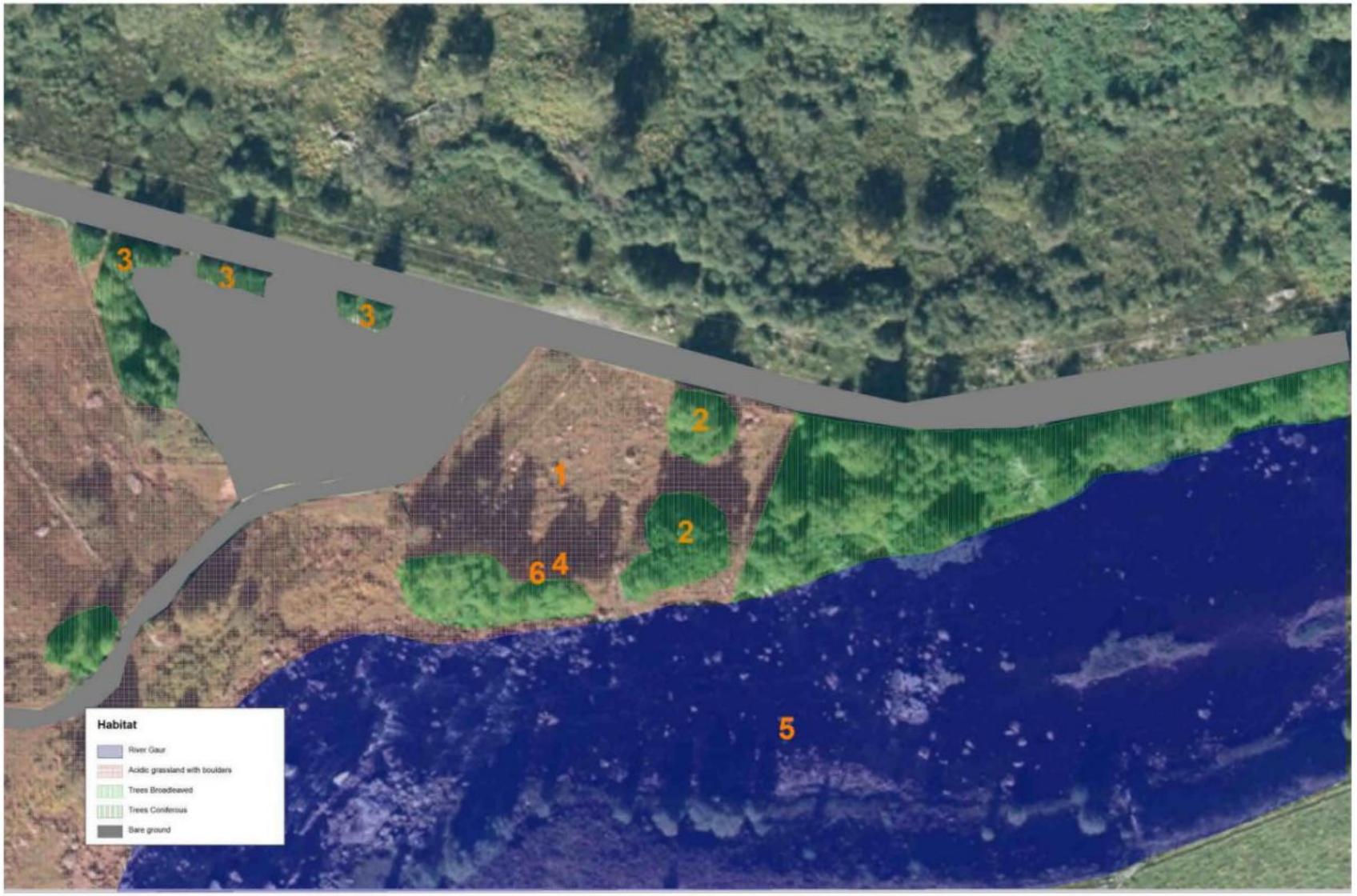
4.2.2 Phase 1 Habitat Classification

The most common habitat is rough grassland interspersed with granite boulders. There are scattered broadleaved and conifer trees, and a riparian corridor. There is an area of bare ground in the west of the site and a rough access track from the B846.

Table 1 Phase 1 Habitat Classification Codes

Code	Habitat description	Code	Habitat description
A1.1.1	Broadleaved woodland semi-natural	A1.2.2	Coniferous woodland plantation
B1.2	Semi-improved acid grassland	D6	Wet heath/acid grassland mosaic
G2.3	Running water oligotrophic	I1.4.1	Acid rock exposure
J2.4	Fence	J4	Bare ground

Figure 2 Phase 1 Habitat Classification with target notes (Appendix 2 Target Notes)



4.2.3 Grassland
The site is dominated by species-poor, semi-improved acidic grassland (TN1) which covers the vast proportion of the site. There is abundant wavy hair grass *Deschampsia flexuosa*, matgrass *Nardus stricta*, and heath rush *Juncus squarrosus*, and occasional heath bedstraw *Galium saxatile*, and sheep's sorrel *Rumex acetosella.* There are small patches of dwarf shrub cover dominated by ling *Calluna vulgaris* covering approximately 10% of the site.

4.2.4 Trees
To the east of the site is a small group of three mature silver birch *Betula pendula* and a large mature sessile oak *Quercus petraea*, with a stem diameter at breast height of 670mm. Along the north bank of the River Gaur silver birch trees dominate interspersed with occasional oak (TN2).

Towards the north and west are approximately ten Sitka spruce *Picea sitchensis* which are most likely self-seeded from the plantation on the north side of the B846 (TN3). Average stem diameters are around 300mm at breast height.

4.2.5 Boulders
Rannoch Moor is composed of granodiorite which is a coarse-grained igneous rock that is very similar to granite but with a slightly different mineral composition. The minerals within the rock include quartz, plagioclase, orthoclase, hornblende, and biotite. There are a range of boulder sizes across the site including large glacial erratics, which are ice transported boulders (TN4).

4.2.6 Water
The River Gaur borders the southern boundary of the site (TN5). This is part of the River Tay SAC which is designated for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, clear-water lochs and otters. It is also important for freshwater pearl mussel which is a protected species.

4.3 Protected Species

4.3.1 Badger survey
Badger activity and badger signs were surveyed for. There is suitable habitat amongst the boulders and in the adjacent woodland areas.
Species recorded No badgers recorded.
Signs recorded No badger setts or latrines recorded.

4.3.2 Preliminary Tree Bat Roost Assessment
A preliminary tree bat roost assessment was carried out to assess for the likelihood of the trees within the site boundary to have bat roosts. The assessment indicated that trees have negligible or low bat roost potential. Negligible bat roost potential is 'negligible habitat features likely to be used by roosting bats' (Collins, 2016, p.35). These trees do not display any cracks, crevices, ivy cover, deadwood in canopy or stem or decay cavities or hollows in stem (Andrews & Gardner, 2016). No further surveys are required for trees with negligible bat roost potential (Collins, 2016, p.52). Low bat roost potential is 'a tree of sufficient size and age to contain potential roosting features (PRFs) but with none seen from the ground or features with only very, limited roosting potential' (Collins, 2016, p.35). No further surveys are required for trees with low bat roost potential (Collins, 2016, p.52).

Daubenton's bat, Natterer's bat and Common pipistrelles have been recorded within 1km of the site and there is potential that bats will inhabit the local area. There is both foraging and commuting potential close to the site as the River Gaur is suitable for feeding and travelling.

4.3.3 Red Squirrel Survey

Red squirrel activity and red squirrel signs were surveyed for. The trees within and beyond the site boundary provide potential habitat for red squirrels. There are five red squirrel records within 1km of the site, both to the east and west. Therefore, it is likely that red squirrels will travel across the proposed site using the linear features such as the riparian corridor.
Species recorded No red squirrels recorded.
Signs recorded No feeding signs or dreys were recorded within 50m of the site.

4.3.4 Pine marten survey

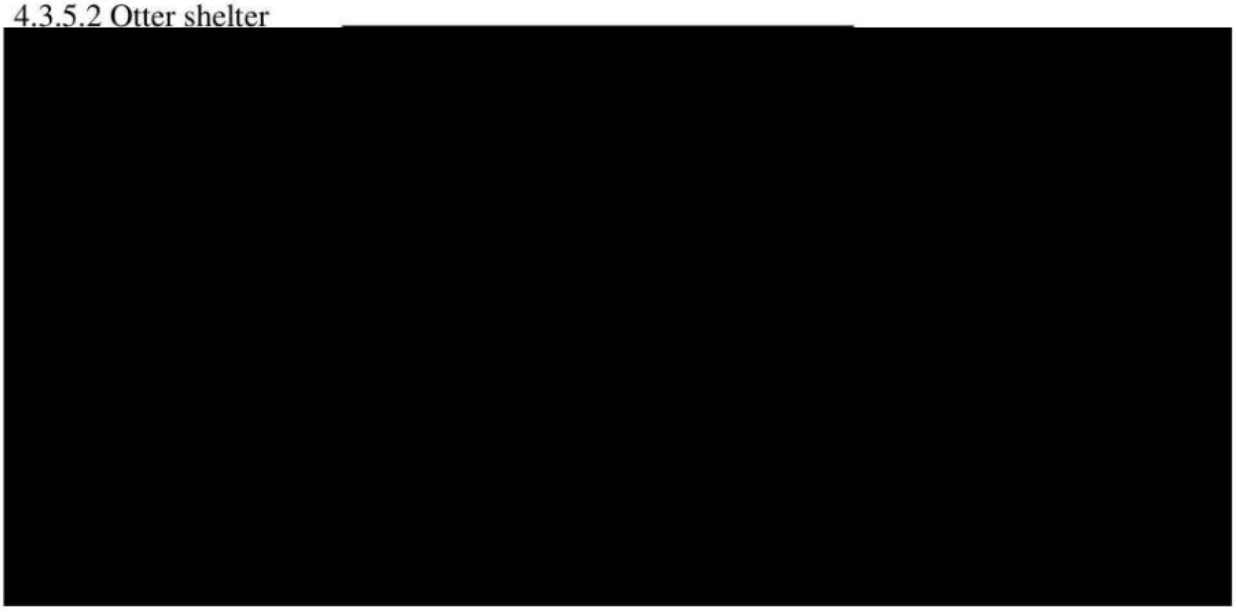
Pine marten activity and pine marten signs were surveyed for. The trees and large boulders within the site and woodland areas beyond the site provides a potential habitat for pine marten.
Species recorded No pine martens recorded.
Signs recorded No pine marten dens or scats recorded.

4.3.5 Otter Survey

Otter activity and otter signs were surveyed for. There is favourable suitable habitat on and adjacent to the site with large erratic boulders offering shelter and the River Gaur being located along the southern boundary which is part of the River Tay SAC.
Species recorded No otters recorded.
Signs recorded Multiple otter signs recorded within the site boundary (TN6).

4.3.5.1 Otter spraints

4.3.5.2 Otter shelter



Otter spraints

Figure 3 Otter Signs

Green = Otter shelter underneath boulders
Red = Otter spraints

4.3.6 Freshwater pearl mussel survey

A full freshwater pearl mussel survey was not undertaken as a licence is required for this. An assessment of suitable habitat and signs such as washed-up shells was made. The river substrate is predominantly bedrock and boulders making it less favourable for FWPM.
Species recorded n/a
Signs recorded No freshwater pearl mussel shells visible on the rocks or by the river.

4.3.7 Water vole survey

Water vole activity and water vole signs were surveyed for. The minor watercourse provides suitable habitat on the site.

Species recorded No water voles recorded.

Signs recorded No water vole signs i.e., burrows, runs, tracks, feeding stations, droppings, and latrines recorded.

4.3.8 Reptile survey

The grass banks and bases of trees have potential suitability for reptiles such as the adder, slow worm, and common lizard. Suitable habitat was searched, the winter timing is limiting.

Species recorded No adders, slow worms or lizards were recorded.

Signs recorded No other reptile signs were recorded.

4.3.9 Other species survey

Other species activity and signs were surveyed for. Species included amphibians, invertebrates, and small mammals. The grassland, boulders, and bases of trees provide favourable habitat for these species. There is potential for amphibians, invertebrates, and small mammals such as hedgehogs to utilise the site.

Species recorded No other rare or protected species were recorded.

Signs recorded No other rare or protected species signs were recorded.

4.3.10 Schedule 1 and Bird Activity Survey

Schedule 1 and bird surveys were carried out. Individual amber list bird species were recorded within the site boundary, amber – wren - though breeding was not confirmed due to the time of year. Common bird species were identified either by visual sighting or by bird call, breeding was not confirmed. Species recorded include Grey heron *Ardea cinerea*; Buzzard *Buteo buteo*; Treecreeper *Certhia familiaris*; Dipper *Cinclus cinclus*; Woodpigeon *Columba palumbus*; Carrion crow *Corvus corrone*; Jackdaw *Corvus monedula*; Blue tit *Cyanistes caeruleus*; Robin *Erithacus rebecula*; Chaffinch *Fringilla coelebs*; Great tit *Parus major*; Coal tit *Periparus ater*; Pheasant *Phasianus colchicus*; Dunnock *Prunella modularis*; Woodcock *Scolopax rusticola*; and Wren *Troglodytes troglodytes*. The grassland, trees and adjacent woodland provides cover, food, and nesting sites. Potential for migratory species such as swift, and swallow to feed locally, with potential for amber listed species such as skylark, meadow pipit and oystercatcher to travel inland in the summer months.

4.3.11 Protected flora

Rare and protected flora was surveyed for.

Species recorded No rare or protected flora species were recorded.

Signs recorded No other indications to the presence of rare or protected flora were recorded.

4.4 Summary

There is evidence of otters using the site with an otter shelter identified under the glacial erratics and old to fresh sprainting recorded in and around the shelter.

The trees on the site have negligible to low bat roost potential, though there is potential for foraging and commuting Myotis and Pipistrelle bats to utilise the site and adjacent habitat.

There is potential for red squirrels to utilise the trees on and adjacent to the site, though no evidence of dreys was identified within 50m of the site. The habitat is suitable for pine martens although no signs were recorded. There is low likelihood of badger or water vole at the site.

There is suitable habitat for reptiles (adder, slow worm, and common lizard), common amphibians, invertebrates, and small mammals. Common birds are highly likely to use the trees, grassland, and river for nesting, shelter, and food. Amber listed species wren was recorded. Potential for migratory species such as swift and swallow to feed in summer months. There is low likelihood of any protected species of flora to be present.

5.0 ASSESSMENT

5.1 Limitations

Survey data is accurate when the surveys took place. It was a ground survey, with no tree climbing element, and full access to the site was available. The curtilage of private property was not entered. Surveys took place in January and February so some flowering plants may have been missed. Surveys took place out with the breeding bird season, and during the hibernation season for bat activity, reptiles, and amphibians. These limitations will not impact the habitat classification and are unlikely to impact the evaluation of the site as an assessment of suitable habitat was made rather than direct observation of any animal.

5.2 Discussion

5.2.1 Designated sites

The River Tay Special Area of Conservation borders the site along the length of its southern boundary with the River Gaur. The River Tay SAC is designated as a Natura 2000 site for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, clear-water lochs and otters. It is also important for freshwater pearl mussel which is a protected species. Evidence of otters was found, and this is discussed in section 5.2.7.

5.2.2 Habitats and flora

The site is dominated by rough acidic species-poor grazed grassland interspersed with granodiorite boulders. In the eastern part of the site are a group of mature birch and a mature oak tree. The southern boundary is delineated by the River Gaur along which is a wooded strip dominated by birch trees with occasional oak. There are some large glacial erratic boulders on the riverbank. To the west the ground is bare and muddy and has been used by cattle. There are several scattered sitka spruce trees in this part of the site, predominantly along the roadside boundary. The road marks the northern boundary.

Construction will result in the loss of bare ground and grazed grassland. It is recommended that best practice working methods and pollution prevention and control measures are adhered to during construction to safeguard retained adjacent habitats. The habitat quality varies across the site. The bare ground and sitka spruce trees are of low ecological value and would not form an ecological constraint to the proposed works. The grazed grassland is of relatively low ecological value as it is species-poor. The native trees are of higher value, and it is recommended that they are retained, and the tree root protection areas should be identified and protected during construction. The large boulders along and above the

riverbank should be left in situ for otters and other wildlife to utilise. There is opportunity to enhance the biodiversity of the wider site as part of works. For example, where feasible a native hedge such as hawthorn and blackthorn could be planted along boundaries, and the retained grassland sown with a highland grassland mix. Planting of native species such as birch, hazel, holly, Scots pine, oak, and rowan would enhance the existing tree cover.

5.2.3 Badger surveys

There was no evidence of badgers recorded. There is suitable habitat amongst the boulders and in the adjacent woodland areas. Though it is anticipated that there will be low to negligible impact to badgers from the proposed development.

5.2.4 Bat surveys

There is a negligible to low potential that bat tree roosts may be present in trees at the site, and it is recommended that the majority of the trees are retained. Bat activity surveys were not carried out due to the time of year, though it is likely that Myotis and Pipistrelle species forage in the area as the habitat, particularly towards the River Gaur is favourable for bats. The provision of bat boxes on trees, and where practical the provision of integrated or external wall bat boxes as part of the new structure where practical will increase roosting potential. Bats are a UK Biodiversity Action Plan species and all bats, and their roosts are protected under UK and EU legislation.

5.2.5 Red squirrel surveys

No red squirrels were recorded and no dreys were identified in trees around the site. The trees on and adjacent to the site provide potential habitat for red squirrels. There are a small number of red squirrel records in the area and there is potential for red squirrels to travel across the site using the linear features and to inhabit the adjacent trees. It is recommended that a pre-construction red squirrel survey is undertaken prior to any development taking place as red squirrels can construct new dreys over a short time period. In the event any active dreys are identified at a later date appropriate steps must be taken to protect the dreys with suitable exclusion zones or a red squirrel licence in place if exclusion zones are smaller than those required by Nature Scot (5m for non-breeding drey, 50m for a breeding drey).

5.2.6 Pine marten surveys

There was no evidence of pine martens recorded. The trees and large boulders within the site and woodland areas beyond provides a potential habitat for pine marten. It is anticipated that there will be low impact to pine martens from the proposed development.

5.2.7 Otter surveys

There is favourable suitable habitat on and adjacent to the site with large erratic boulders offering shelter and the River Gaur being located along the southern boundary, part of the River Tay SAC. No otters were recorded, though multiple otter signs were identified including four sprainting locations and an otter shelter underneath two of the large boulders above the river. There was no indication of a natal den being present at the time of the surveys, and the shelter location close to a significant river makes a natal den at this locality less likely. However, further survey is recommended during the breeding season (May to August) to verify the status of the shelter, monitoring work of this nature would be carried out under licence. For non-breeding otter shelters a 30m protection zone is required, where protection zones of the required distance are not possible a licence must be applied for from NatureScot.

5.2.8 Freshwater pearl mussel surveys

A full freshwater pearl mussel survey was not undertaken as a licence is required for this. The river substrate is predominantly bedrock and boulders making it less favourable for FWPM and no washed-up shells were recorded.

5.2.9 Water vole surveys

There was no evidence of water voles recorded. The minor watercourse provides suitable habitat on the site. It is anticipated that there will be low impact to water voles from the proposed development.

5.2.10 Reptile surveys

The grass banks and bases of trees have potential suitability for reptiles such as the adder, slow worm, and common lizard. Suitable habitat was searched, though the winter timing was limiting, and no evidence of reptiles was found. It is anticipated there will be a low impact to reptiles from the proposed development, though it is recommended the ground is checked for reptiles before construction commences.

5.2.11 Other species surveys

Species such as amphibians, invertebrates and small mammals were surveyed for. The grassland, boulders, and bases of trees provide favourable habitat for these species. There is potential for amphibians, invertebrates, and small mammals such as hedgehogs to utilise the site.

5.2.12 Schedule 1 and breeding bird surveys

There were no signs of any Schedule 1 bird species in the area. Species of conservation concern including amber listed wren were recorded. Common breeding birds were recorded with the trees, grassland and river providing nesting sites, shelter and food. The provision of a range of bird boxes on retained trees and incorporation as part of the new structure where practical would increase nesting opportunities. All birds are protected, and it is an offence to intentionally or recklessly kill, injure or take a wild bird, or to take, damage or destroy its nest or eggs. Any work involving ground vegetation clearance should be aware of the potential for common breeding birds between March and August and steps taken to minimise potential disturbance. For any construction commencing during the breeding bird season a pre-construction breeding bird survey should be undertaken and appropriate buffer zones established around any nesting sites.

5.3 Conclusion

Tay Ecology was commissioned to undertake a habitat and protected species assessment at the proposed site at A'Phairc Loisgte. Field surveys included habitat, vegetation and those for bats, badgers, birds, pine martens, red squirrels, otters, water voles and reptiles. The presence/absence of any other protected or local biodiversity action plan species of flora and fauna was assessed. The existing data search shows a range of protected species recorded within a 5km radius. The River Tay SAC borders the site along its southern boundary.

The site is dominated by acidic species-poor grassland interspersed with granodiorite boulders. There are a number of native and non-native tree species on the site, predominantly towards the river and along the roadside, and some large glacial erratic boulders on the

riverbank. To the west the ground is bare and muddy and has been used by cattle. It is anticipated that there will be negligible direct impact to the wider area from the construction of the proposed development and that any potential indirect impacts can be mitigated. Construction of the proposed development will result in the loss of bare ground and acidic grassland which is of low ecological value. It is recommended that the majority of trees are retained and that root areas are protected during construction.

[redacted] However, further survey is recommended during the breeding season (May to August) to verify the status of the shelter, this monitoring work is carried out under licence. For non-breeding otter shelters a 30m protection zone is required, and for natal dens a 100-200m protection zone is required, where protection zones of the required distance are not possible a licence must be applied for from NatureScot.

The survey has established that there is a low potential that any badger, pine marten, freshwater pearl mussel or water vole will be detrimentally impacted by the proposal. There is a negligible to low potential that the trees surrounding the site contain bat roosts. It is likely that Myotis and Pipistrelle bats will forage in the wider area, however, foraging habitats will be retained, and the area will remain favourable for bats with opportunities to enhance bat roosting locations as part of the development with the incorporation of bat boxes. It is anticipated there will be a low impact to reptiles, though it is recommended the ground is checked for reptiles before construction commences.

There is low likelihood as to the presence of rare, or protected species of birds at the site. Species of conservation concern were recorded, and recommendations to provide nesting locations are provided. There is a high likelihood of common breeding birds utilising the trees and grassland, and any work involving ground vegetation clearance, should be aware of the potential for breeding birds in the nesting season and disturbance minimised. For any construction commencing during the breeding season a pre-construction breeding bird survey should be undertaken and appropriate buffer zones established around any nests which are protected until chicks have fledged.

There was no evidence of red squirrel dreys recorded in the trees on or immediately adjacent to the site during the surveys. There is potential for red squirrels to be located in the area and there is suitable habitat for red squirrels. It is recommended that a pre-construction red squirrel survey is undertaken prior to any development taking place. In the event any active dreys are identified appropriate steps must be taken to protect the dreys with suitable exclusion zones or a red squirrel licence in place.

The survey demonstrates, with the exclusion of otters, that the proposed development will have a low overall impact on the site providing the recommendations are followed and opportunities to enhance the biodiversity at the site for the longer-term are put in place. Further survey of the otter shelter is recommended to confirm its status, and an otter licence will be required where protection zones of the required distances are not possible.

6.0 RECOMMENDATIONS and MITIGATION

To minimize impact and enhance habitat it is recommended that:

6.1 Grassland

• Potential to enhance retained grassland at suitable locations across with the site with a Highland grassland mix with species including yarrow, alpine lady's mantle, heather, bell heather, heath bedstraw, lady's bedstraw, bird's foot trefoil, ribwort plantain, tormentil, selfheal, meadow buttercup, sheep's sorrel, devil's bit scabious, white clover, germander speedwell, common speedwell, common dog violet, common bent, brown bent, sweet vernal grass, crested dog's tail, wavy hair grass, sheep's fescue, red fescue, heath wood rush, purple moor grass and mat grass.

6.2 Hedgerow

• Where feasible creation of hawthorn and blackthorn hedge at suitable boundary locations.

6.3 Trees

• Retained trees/woodland, including tree root systems are protected during construction.
• New planting at appropriate locations around the site to enhance existing tree cover with species such as birch, hazel, holly, Scots pine, oak, and rowan.

6.4 Boulders

• Retain existing large glacial riverside boulders in situ.
• Potential to utilise any smaller boulders which are moved as part of construction to create new otter shelter at greater than 30m from the site.

To minimise disturbance or damage to protected species prior to work starting on site it is recommended that:

6.5 Otters

[redacted]

• Further survey required between May to August to confirm status of shelter as breeding or non-breeding. Monitoring carried out under licence.

6.5.1 Otter Species Protection Plan Recommendations and Mitigation

Avoidance of harm to otters

1. Pre-construction surveys of all works for otters to check for any new holt or resting place which may have become occupied after the initial survey.
2. Workers to be fully briefed regarding the possibility of otter on the site, the legal status of the animal, their shelters, and resting places. Any sightings of otter or discovery of a new holt or resting place should be reported immediately to the Site Manager and ECoW and appropriate action taken.
3. During construction there will be no work which directly negatively impacts the bank or water habitat to avoid damage or disturbance to otters and otter habitat. There will be no obstruction for otters moving between the bank and open water.

4. Construction work during the summer months should commence at least two hours after sunrise and cease a minimum of two hours before sunset, this time can be reduced in the winter months to 1 hour. There will be no work at night. This is to avoid working in the vicinity of otter habitat when otters are most likely to be active.
Mitigation
5. An exclusion zone of 30m to be marked around the otter shelter before work commences. No construction works will take place within the exclusion zone however, vehicle and pedestrian access should be maintained along the track where this falls close to and/or within the exclusion zone.
6. If a natal den for breeding otters is identified at a later date the exclusion zone should be at least 200m. However, there is capacity to reduce this too 100m dependent on the nature of the works, topography, and natural screening.
7. Where exclusion zones of the required size are not possible, works will require a licence from NatureScot.
8. In the event that there are any open pipe systems these will be capped when contractors are off site. Any holes or trenches will be covered or ramped overnight to prevent otters becoming trapped.
Compensation
9. Existing vegetation along the riverbank to be retained.
10. Potential to improve habitat cover with planting of shrubs and young trees.

6.6 Bats

• Workers to be fully briefed regarding the possibility of bats in mature trees on site, their legal status and that of their roosts. Discovery of a suspected bat roost should be reported immediately to the Site Manager.

6.7 Red Squirrel

• Pre-construction red squirrel survey prior to development taking place to identify any active dreys within 50m of the site.
• In the event any active dreys are subsequently identified appropriate steps must be taken to protect the dreys with suitable exclusion zones or a red squirrel licence in place if exclusion zones are smaller than those required by Nature Scot (5m for non-breeding drey, 50m for a breeding drey).
• Workers to be fully briefed regarding the possibility of red squirrels on site, the legal status of the animal and their dreys. Any sightings of red squirrel or discovery of a drey should be reported immediately to the Site Manager.

6.8 Amphibians and Reptiles

• Checks for amphibians and reptiles should be made prior to operations.
• Where amphibians or reptiles are found, they should be carefully moved to a similar habitat in a safe location out-with the development footprint.

6.9 Breeding birds

• Where ground vegetation is to be cleared it is recommended that this is carried out prior to the start or after the end of the bird breeding season (September to end of February). Any tree or ground works during the bird breeding season (March to August inclusive) will require a pre-operational survey by a suitably qualified ecologist. If no nests are present, trees should be felled/vegetation cleared following the survey.

• There is no NatureScot licence available to fell trees or clear ground containing active bird nests or ground nesting birds, felling must be delayed until chicks have fledged.
• For any construction taking place during the breeding bird season a breeding bird survey should be undertaken and appropriate buffer zones established around any nesting sites.

To increase biodiversity, in addition to native planting described above, it is recommended that:

6.10 Bat Boxes

• Provision of bat boxes by installing bat boxes on trees, woodcrete bat boxes are more durable. Group two to three bat boxes on a single large tree with boxes facing different aspects, positioned three or more metres in height.
• Where practical install external wall or integrated bat boxes such as bat tubes or bat bricks on the south, west and east elevations of the new structure. These boxes to be built into the walls and facade of a suitable building, with the advantage of offering a permanent space for bats with little maintenance and good thermal properties.

6.11 Bird boxes

• Provide nest boxes for woodland birds on trees. Bird boxes to include a range of entrance hole sizes: 25 mm for blue and coal tits; 28 mm for great tits; 32 mm for house sparrows; 45 mm for starlings; a 100 mm high open front for robins; 140 mm high front panel for wrens; and a tawny owl box. Position of bird boxes 3-4m up a tree, utilise nearby trees for shade and tilt box slightly forward.
• Where feasible incorporate external wall or integrated bird boxes into the new structure such as house sparrow and swift boxes. Boxes must be fitted either on a shady building aspect, or under an overhang to give protection from heat, but not over windows or near to vents, at least 5 metres above ground, with clear airspace for access. Position bird nest cups under eaves to attract swallows.

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8.0 APPENDICES

Appendix 1 Tayside Local Biodiversity Action Plan Priority Species

This is a working document - please also refer to Appendices 4 & 5 of the 1st Edition LBAP http://www.taysidebiodiversity.co.uk/action-plan/action-plan-appendices/ and the Scottish Biodiversity List http://www.gov.scot/Topics/Environment/Wildlife-Habitats/16118/Biodiversitylist/SBL

Tayside Biodiversity Partnership

BIODIVERSITY
THE VARIETY OF LIFE

Tayside Species List

LBAP Protected Species List.
(* = non-native invasive species)

Family	Common Name	Latin Name
Mammals	Common Seal	*Phoca vitulina*
	Otter	*Lutra lutra*
	Brown long-eared bat	*Plecotus auritus*
	Natterer's bat	*Myotis nattereri*
	Daubenton's bat	*Myotis daubentoni*
	Stoat	*Mustela erminae*
	Weasel	*Mustela nivalis*
	Common shrew	*Sorex araneaus*
	Water vole	*Arvicola terrestris*
	Mountain hare	*Lepus timidus*
	Wild cat	*Felis silvestris*
	Pipistrelle Bat	*Pipistrellus pipistrellus and Pipistrellus pygmeus*
	Hedgehog	*Erinaceus europeus*
	Roe Deer	*Capreolus capreolus*
	Badger	*Meles meles*
	Fox	*Vulpes vulpes*
	Red Squirrel	*Sciurus vulgaris*
	Pine marten	*Martes martes*
Birds	Ringed plover	*Charadrius hiaticula*
	Golden plover	*Pluvialis apricaria*
	Golden eagle	*Aquila chrysaetos*
	Dotterel	*Charadrius morinellus*
	Ptarmigan	*Lagopus mutus*
	Black grouse	*Tetrao tetrix*
	Red grouse	*Lagopus lagopus*
	Hen harrier	*Circus cyaneus*
	Merlin	*Falco columbarius*
	Ring ouzel	*Turdus torquatus*
	Twite	*Carduelis flavirostris*
	Curlew	*Numenius arquata*
	Short-eared owl	*Asio flammeus*
	Peregrine falcon	*Falco peregrinus*
	Stonechat	*Saxicola torquata*
	Song Thrush	*Turdis phelomelos*
	House Sparrow	*Passer domesticus*
	House Martin	*Delichan urbica*

	Sand Martin	*Riparia riparia*
	Swift	*Apus apus*
	Swallow	*Hirundo rustica*
	Moorhen	*Gallinula chloropus*
	Heron	*Ardea cinerea*
	Tawny Owl	*Strix aluco*
	Barn Owl	*Tyto alba*
	Kestrel	*Falco tinnulculus*
	Buzzard	*Buteo buteo*
	Osprey	*Pandion haliaetus*
	Sparrowhawk	*Accipiter nisus*
	Capercaillie	*Tetrao urogallus*
	Oystercatcher	*Haematopus ostralegus*
	Yellowhammer	*Emberiza citronella*
	Fieldfare	*Turdis pilaris*
	Redwing	*Turdis iliacus*
	Goldfinch	*Carduelis carduelis*
	Common scoter	*Melanitta nigra*
	Black-necked grebe	*Podiceps nigricollis*
	Whooper swan	*Cygnus cygnus*
	Kingfisher	*Alcedo atthis*
	Pochard	*Aythya farina*
	Black-throated diver	*Gavia arctica*
	Little tern	*Sterna albifrons*
	Arctic tern	*Sterna paradisaea*
	Common tern	*Sterna hirundo*
	Shelduck	*Tadorna tadorna*
	Red-breasted merganser	*Mergus serator*
	Goosander	*Mergus merganser*
	Pink-footed goose	*Ancer brachyrhynchus*
	Bar-tailed godwit	*Limosa lapponica*
	Eider	*Somateria mollissima*
	Mute swan	*Cygnus olor*
	Pintail	*Anas acuta*
	Goldeneye	*Becephala clangula*
	Water rail	*Rallus aquaticus*
	Marsh harrier	*Circus aeruginosus*
	Bearded tit	*Panurus biarmicus*
	Reed bunting	*Emberiza scheoniclus*
	Greylag goose	*Anser anser*
	Shag	*Phalacrocorax aristotelis*
	Herring gull	*Larus argentatus*
	Turnstone	*Arenaria interpres*
	Purple sandpiper	*Calidris maritima*
	Kittiwake	*Rissa tridactyla*
	Fulmar	*Fulmarus glacialis*
	Razorbill	*Alca torda*
	Puffin	*Fratercula arctica*
	Guillemot	*Uria aalge*
	Grey partridge	*Perdix perdix*

	Bullfinch	*Acanthis cannabina*
	Linnet	*Pyrrhula pyrrhula*
	Tree sparrow	*Passer montanus*
	Wheatear	*Oenanthe oenanthe*
	Whinchat	*Saxicola rubetra*
	Redshank	*Tringa totanus*
	Lapwing	*Vanellus vanellus*
	Snipe	*Gallinago gallinago*
	Wigeon	*Anas penelope*
	Teal	*Anas crecca*
	Skylark	*Alauda arvensis*
	Redstart	*Phoenicurus phoenicurus*
	Great spotted woodpecker	*Dendrocopus major*
	Scottish crossbill	*Loxia scotica*
	Spotted flycatcher	*Muscicapa striata*
	Wood warbler	*Phylloscopus sibilatrix*
Fish	Atlantic salmon	*Salmo salar*
	River lamprey	*Lampetra fluviatilis*
	Sparling/smelt	*Osmerus eperlanus*
	Twaite shad	*Alosa fallax*
	Brown Trout	*Salmo trutta*
	Allis shad	*Alosa alosa*
	Arctic charr	*Salvelinus alpinus*
	Brook lamprey	*Lampetra planeri*
	Sea lamprey	*Petromyzon marinus*
Amphibians and Reptiles	Adder	*Vipera berus*
	Smooth newt	*Triturus vulgaris*
	Slow-worm	*Anguis fragilis*
	Common Frog	*Rana temporaria*
	Common Toad	*Bufo bufo*
	Common Lizard	*Lacerta vivipera*
	Palmate Newt	*Triturus helveticus*
	Great crested newt	*Triturus cristatus*
Invertebrates	Small blue butterfly	*Cupido minimus*
	Small pearl-bordered fritillary	*Boloria selene*
	Sword Grass moth	*Xylena exsoleta*
	Northern brown argus	*Aricia artaxerxes*
	Ringlet butterfly	*Aphantopus hyperantus*
	mason bee	*Osmia parietina*
	Bumble bees	*Bombus spp*
	Damselfly spp.	
	Grasshopper spp.	
	Hoverfly spp.	
	Mountain ringlet	*Erebia epiphron*
	Northern dart	*Xestia alpicola alpina*
	Broad-bordered white	*Anarta melanopa*

	underwing	
	a money spider	*Rhaebothorax paetulus*
	a mason bee	*Osmia inermis*
	Pearl-bordered fritillary	*Boloria euphrosyne*
	Grey scalloped bar	*Dyscia fagaria*
	Northern arches	*Apamea zeta*
	Rannoch brindled beauty	*Lycia lapponaria*
	Slender striped rufous	*Coenocalpe lapidata*
	Broom-tip moth	*Chesias rufata*
	Small dark yellow underwing	*Anarta cordigera*
	Large heath	*Coenonympha tullia*
	Narrow-headed wood ant	*Formica exsecta*
	Meadow Brown Butterfly	*Maniola jurtina*
	Red Admiral Butterfly	*Vanessa atalanta*
	Peacock Butterfly	*Inachis Io*
	Painted Lady Butterfly	*Vanessa cardui*
	Orange Tip Butterfly	*Anthocaris cardamines*
	Small Tortoiseshell Butterfly	*Aglais urticae*
	Garden Tiger Moth	*Artica caja*
	Common Blue Damselfly	*Enallagama cyathigerium*
	New Zealand Flatworm	*Artioposthia triangulate**
	a cranefly	*Rhabdomastrix laeta*
	a stiletto fly	*Spiriverpa lunulata*
	a stonefly	*Brachyptera putata*
	Northern damselfly	*Coenagrion hastulatum*
	a diving beetle	*Hydroporus rufifrons*
	Freshwater pearl mussel	*Margaritifera margaritifera*
	Shining guest ant	*Formicoxenus nitidulus*
	Scottish wood ant	*Formica aquilonia*
	Caledonian sac spider	*Clubiona subsultans*
	a spider	*Diploena torva*
	a spider	*Haplodrassus soerenseni*
	a spider	*Robertus scoticus*
	Cuckoo wasp	*Chrysura hirsute*
	Cousin German moth	*Paradiarsia sobrina*
	Hairy wood ant (Northern)	*Formica lugubris*
Plants	Oak	*Quercus robur*
	Wild hyacinth	*Hyacinthoides non-scripta*
	Juniper	*Juniperus communis*
	Small cow-wheat	*Melampyrum sylvaticum*
	Twinflower	*Linnaea borealis*
	Wilson's Filmy Fern	*Hymenophyllum wilsonii*
	Ash	*Fraxinus excelsio*
	Hawthorn	*Crataegus monogyna*
	Blackthorn	*Prunus spinosa*
	Common knapweed	*Centaurea nigra*
	Saxifrage spp.	*Saxifraga spp*
	Maidenhair spleenwort	*Asplenium trichomanes*
	Common reed	*Phragmites australis*

	Narrow-leaved eelgrass	*Zostera angustifolia*
	Dwarf eelgrass	*Zostera noltii*
	Marine eelgrass	*Zostera marina*
	Kidney vetch	*Anthyllis vulneraria*
	Pellitory-of-the-wall	*Parietaria judaica*
	Maiden pink	*Dianthus deltoides*
	Nottingham Catchfly	*Silene nutans*
	Greater yellow rattle	*Rhinanthus angustifolia*
	Coralroot orchid	*Corallorhiza trifida*
	Rush-leaved fescue	*Festuca arenaria*
	Baltic rush	*Juncus balticus*
	Sea pea	*Lathyrus japonicus*
	Woolly willow	*Salix lanata*
	Alpine sow-thistle	*Cicerbita alpina*
	Alpine forget-me-not	*Myosotis alpestris*
	Mountain scurvy-grass	*Cochlearia micacea*
	Alpine catchfly	*Lychnis alpina*
	Alpine gentian	*Gentiana nivalis*
	Alpine fleabane	*Erigeron borealis*
	Alpine pearlwort	*Sagina saginoides*
	Rock speedwell	*Veronica fruticans*
	Dwarf birch	*Betula nana*
	Close-headed alpine sedge	*Carex norvegica*
	Newman's lady-fern	*Athyrium flexile*
	Oblong woodsia	*Woodsia ilvensis*
	Ox Eye Daisy	*Leucanthemum vulgare*
	Northern Marsh Orchid	*Dactylorhiza purpurella*
	Wall Rue	*Asplenium ruta-muraria*
	Rosebay Wilowherb	*Chamerion angustfolium*
	Giant Hogweed	*Heracleum mantegazzianum**
	Japanese Knotweed	*Fallopian japonica**
	Willow	*Salix spp*
	Scots Pine	*Pinus sylvestris*
	Cowslip	*Primula veris*
	Ragged robin	*Lychnis flos-cuculi*
	Hazel	*Corylus avellana*
	Nettle	*Urtica dioica*
	White Clover	*Trifolium repens*
	Valerian	*Valeriana officinalis*
	Red Campion	*Silene dioica*
	Ballerina Waxcap	*Hygrocybe calyptriformis*
	Slender naiad	*Najas flexilis*
	Slender stonewort	*Nitella gracilis*
	Hooker's liverwort	*Haplomitrium hookeri*
	River water-crowfoot	*Ranunculus fluitans*
Fungi and Lichen	a lichen	*Cladonia uncialis ssp unciali*
	a lichen	*Cladonia mitis*
	Sea bryum	*Bryum warneum*
	Matted bryum	*Bryum calophyllum*

	Brackish water-crowfoot	*Ranunculus baudotii*
	Pillwort	*Pilularia globulifera*
	Selfheal	*Prunella vulgaris*
	Yellow rattle	*Rhianthus minor*
	Greater Birdsfoot trefoil	*Lotus uliginosis*
	Globe flower	*Trollius europeaeus*
	Jointed Rush	*Juncus articulatus*
	Heath cudweed	*Gnaphalium sylvaticum*
	Marsh clubmoss	*Lycopodiella inundata*
	Issleri's clubmoss	*Diphasiastrum issleri*
	Blue dew-moss	*Saelania glaucescens*
	Turgid scorpion-moss	*Scorpidium turgescens*
	Vaucher's plait-moss	*Hypnum vaucheri*
	Stabler's rustwort	*Marsupella stableri*
	Rusty alpine psora lichen	*Psora rubiformis*
	Snow caloplaca lichen	*Caloplaca nivalis*
	a lichen	*Psora globifera*
	a lichen	*Halecania rhypodiza*
	River jelly lichen	*Collema dichotomum*
	Ear-lobed dog-lichen	*Peltigera lepidophora*
	Spruce's bristle moss	*Orthotrichum spruce*
	Blue corky spine fungus	*Hydnellum caeruleum*
	Brown corky spine fungus	*Hydnellum peckii*
	Drab tooth fungus	*Bankera fuligineoalba*
	Globe scented pine fungus	*Phellodon tomentosus*
	Stump lichen	*Caldonia botrytis*

Appendix 2 Target Notes

1. The site is dominated by species-poor, semi-improved acidic grassland which covers the vast proportion of the site. There is abundant wavy hair grass *Deschampsia flexuosa*, matgrass *Nardus stricta*, and heath rush *Juncus squarrosus*, and occasional heath bedstraw *Galium saxatile*, and sheep's sorrel *Rumex acetosella*. There are small patches of dwarf shrub cover dominated by ling *Calluna vulgaris* covering approximately 10% of the site.

2. To the east of the site is a small group of three mature silver birch Betula pendula and a large mature sessile oak Quercus petraea, with a stem diameter at breast height of 670mm. Along the north bank of the River Gaur silver birch trees dominate interspersed with occasional oak.

3. Towards the north and west are approximately ten Sitka spruce Picea sitchensis which are most likely self-seeded from the plantation on the north side of the B846. Average stem diameters are around 300mm at breast height.

4. Rannoch Moor is composed of granodiorite which is a coarse-grained igneous rock that is very similar to granite but with a slightly different mineral composition. The minerals within the rock include quartz, plagioclase, orthoclase, hornblende, and biotite. There are a range of boulder sizes across the site including large glacial erratics, which are ice transported boulders.

5. The River Gaur borders the southern boundary of the site. This is part of the River Tay SAC which is designated for Atlantic salmon, sea lamprey, river lamprey, brook lamprey, clear-water lochs and otters. It is also important for freshwater pearl mussel which is a protected species.

6. Otter spraints recorded at:
Fresh intact spraint at NN 49389 56934
Dried intact spraint at NN 49384 56932
Sprainting pile of fresh to dried intact spraints at NN 49389 56933 on boulder under glacial erratic.
Degraded otter spraint at NN 49395 56929

Otter shelter identified at NN 49387 56931 and NN 49389 56933 underneath 2 large glacial erratics situated next to each other above the riverbank.

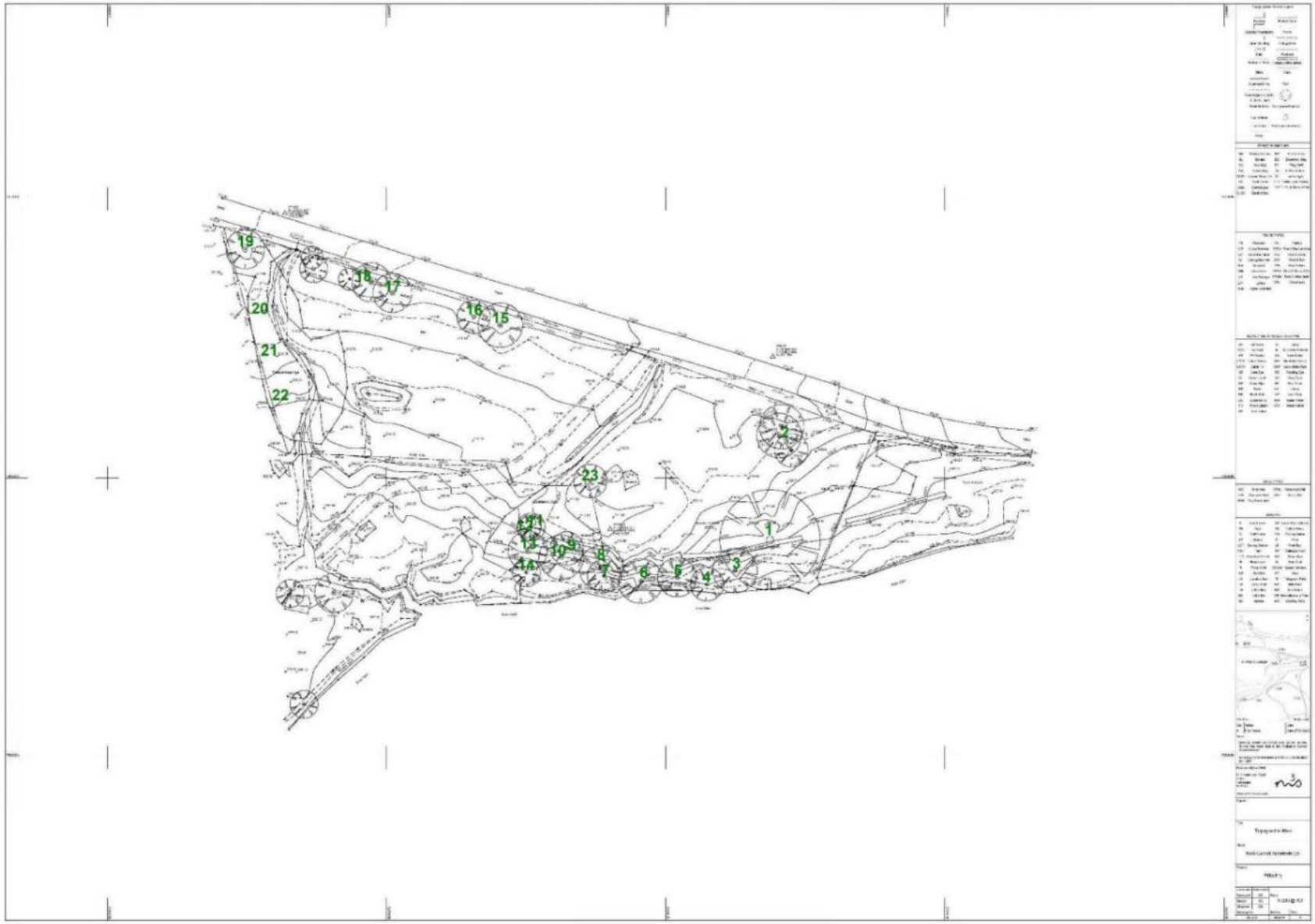
Appendix 3 Preliminary Tree Bat Roost Assessment

Tree No.	Species	Notes	Roosting Potential (0-4) - category	Roost found	Proposed work	Implications for Proposed work
T1	Sessile oak DBH 670mm Hght 15-20m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T2	Silver birch x 3 DBH 290, 260;200, 250; 250 mm Hght 10-15m	Trees of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T3	Sessile oak DBH 350mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T4	Silver birch DBH 190mm Hght 10-15m	Negligible potential features likely to be used by roosting bats.	0 - Negligible	No	Retain	No further survey required.
T5	Sessile oak DBH 330mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T6	Silver birch x 2 DBH 260; 120, 260;180 mm Hght 10-15m	Trees of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T7	Silver birch DBH 240;230;200 mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T8	Silver birch DBH 270;220;180; 170mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T9	Silver birch x 2 DBH 210;240;250, 210mm Hght 10-15m	Trees of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T10	Silver birch DBH 260mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T11	Silver birch DBH 270;220;150 mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.

T12	Silver birch DBH 270mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T13	Silver birch DBH 310;320mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T14	Silver birch DBH 280mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T15	Sitka spruce DBH 300;310mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T16	Sitka spruce DBH 280mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T17	Sitka spruce DBH 390mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T18	Sitka spruce DBH 390;300, 200mm Hght 10-15m	Trees of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T19	Sitka spruce DBH 320, 190mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground. Negligible potential features likely to be used by roosting bats.	1 - Low 0 - Negligible	No	Retain	No further survey required.
T20	Silver birch DBH 180mm Hght 10-15m	Negligible potential features likely to be used by roosting bats.	0 - Negligible	No	Retain	No further survey required.
T21	Sitka spruce DBH 320mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T22	Sitka spruce DBH 310mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.
T23	Sitka spruce DBH 320mm Hght 10-15m	A tree of sufficient size and age to contain PRFs features but with none seen from the ground.	1 - Low	No	Retain	No further survey required.

Tree number	GPS	Tree number	GPS
1	NN 49413 56940	13	NN 49366 56940
2	NN 49412 56954	14	NN 49365 56936
3	NN 49405 56931	15	NN 49363 56979
4	NN 49401 56931	16	NN 49360 56980
5	NN 49399 56930	17	NN 49343 56988
6	NN 49395 56930	18	NN 49338 56989
7	NN 49388 56932	19	NN 46331 56990
8	NN 49380 56932	20	NN 49328 56990
9	NN 49377 56937	21	NN 49317 56995
10	NN 49371 56941	22	NN 49324 56971
11	NN 49371 56940	23	NN 49378 56947
12	NN 49368 56940		

Figure 4 Tree Locations



Otter Survey Report
for Proposed Development Site,
A'Phairc Loisgte, Bridge of Gaur, Rannoch

Wednesday 21st December 2022
Revision A Monday 27th February 2023

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EXECUTIVE SUMMARY

An otter survey to assess the presence or absence of otter activity in the vicinity of the proposed development at A'Phairc Loisgte on the north bank of the River Gaur was undertaken. The survey was designed to establish if there are otters using the site and the potential impacts to otters from the proposed development. Field surveys focused on a structured search for spraints, footprints, tracks, slides, food remains, couches, holts and any place used for shelter. An otter shelter which was identified in January - February 2022 surveys was monitored under licence from Nature Scot with wildlife camera traps. The survey area included the proposed development site and all suitable otter habitat within 250m in the surrounding area, including both the north and south riverbanks.

The River Gaur is part of the River Tay catchment which is designated a Special Area of Conservation for otters therefore, otter activity is to be expected along the river. Three field surveys took place over six weeks in November and December 2022. All areas were accessible. The previously identified otter shelter was not utilised by otters during the survey period, although three otter spraints were identified along the stretch of river within 35m of the shelter. Two spraints were fresh at the time of the first survey, and one new spraint was deposited between the second and third surveys. Notably, from photographic records, there was no indication of any change at the otter shelter between February 2022 and December 2022 and no change in terms of sprainting inside the shelter. The survey results indicate that a dog otter is most likely utilising this stretch of river.

Otters are a protected species, and it is an offence to deliberately, or recklessly: damage or obstruct access to an otter holt; disturb an otter whilst it is occupying a holt or other place it uses for shelter or protection; disturb an otter while it is rearing or otherwise caring for its young, or in any way that impairs its ability to survive or breed, or significantly affects the local distribution or abundance of otters. The surveys have indicated that the shelter is a non-breeding shelter and should be protected by a buffer zone of 30m during works, however, access along the track should be maintained where it passes through this area. It is not anticipated that the construction of the proposed development will have a long-term detrimental impact on the otter population at the site providing the shelter is protected and the tree cover is retained and enhanced in the vicinity of the shelter and along the riverbank. The existing access track is located above, and out of sight of the shelter.

It is not anticipated that there will be a direct impact to the River Gaur or the associated riparian habitats that contribute to the River Tay SAC. Any landscaping works which will be undertaken within 30m of the identified otter shelter will be carried out under licence and the positioning of the soakaway will be subject to appropriate soil infiltration tests. Pollution incidents during construction have the potential to result in ecologically significant high negative impacts on the sensitive river habitat. Therefore, it is recommended that construction IS undertaken according to a Construction Environmental Management Plan to ensure that the SAC will be protected.

1. INTRODUCTION

1.1 Brief from Client

Tay Ecology was commissioned to undertake an otter survey at the site proposed for the development at A'Phairc Loisgte.

1.2 Site location

The proposed site is accessed from the B846 approximately 1km to the west of Bridge of Gaur at the west end of Loch Rannoch. It is located on the north side of the River Gaur. The grid reference is NN 494569, and the altitude is 210m above sea level.

Figure 1 Site Location

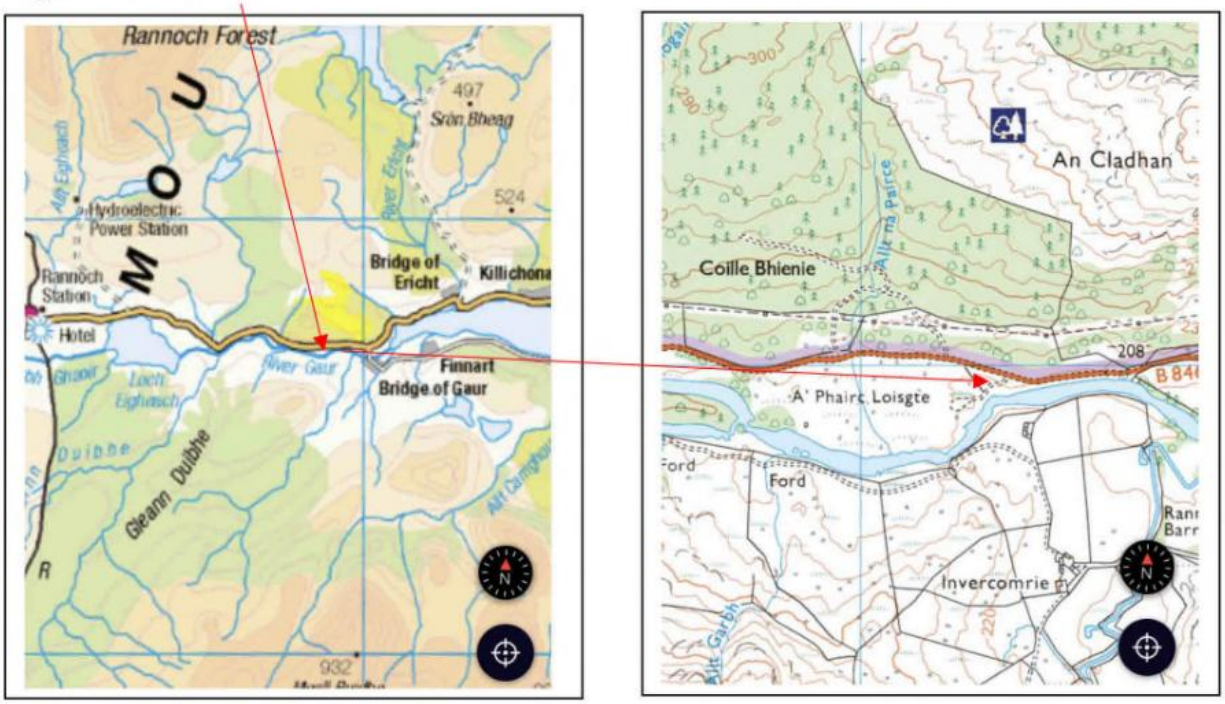
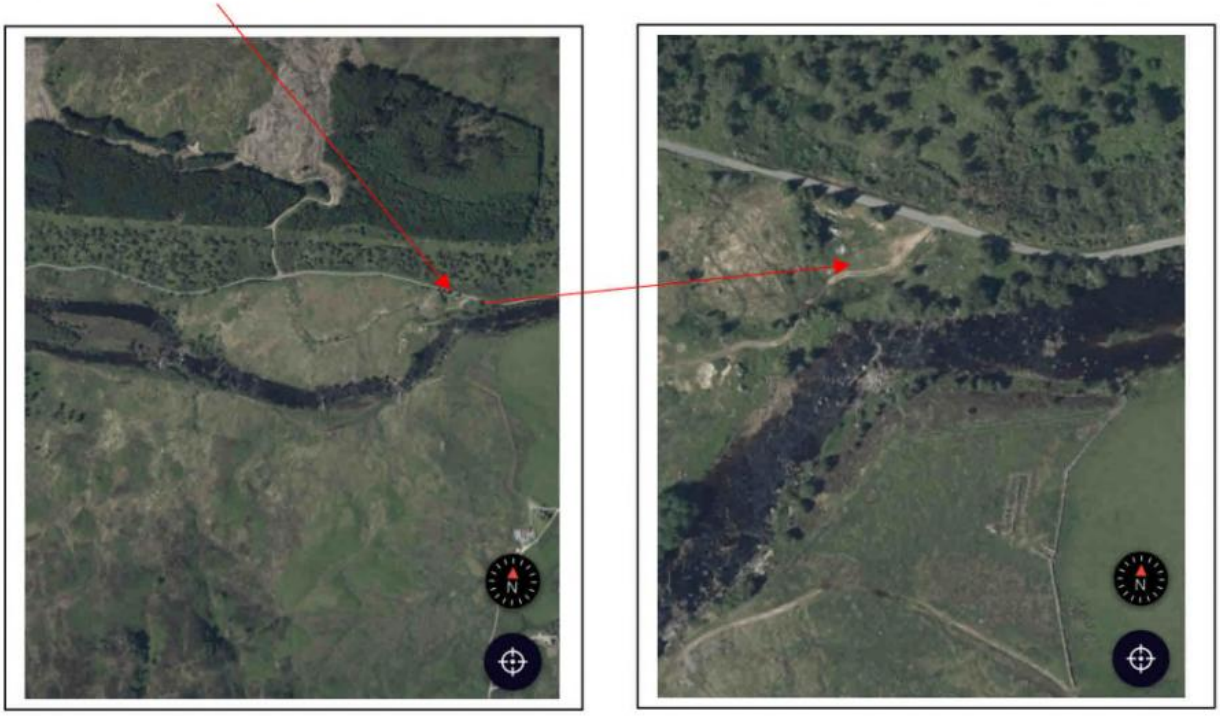


Figure 2 Aerial View

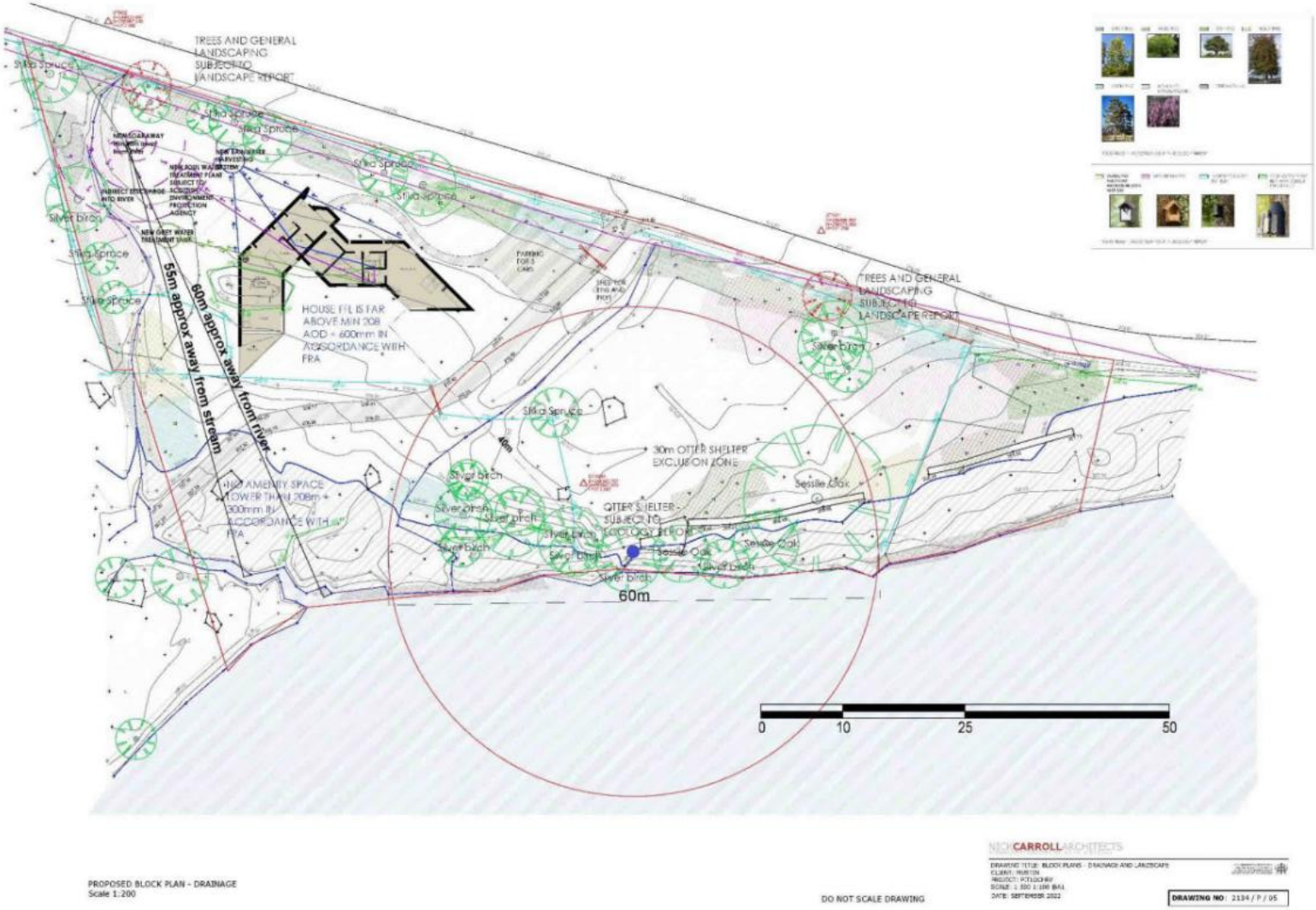


1.3 Proposed works

It is proposed to construct a holiday accommodation unit at the site. Figure 3 Existing and Proposed Block Plans and Figure 4 Drainage and Landscaping Block Plan

Figure 3 Existing and Proposed Block Plans

Figure 4 Drainage and Landscaping Plan



2. SURVEY AND SITE ASSESSMENT

2.1 Objectives

The site was surveyed by a visual ground survey to assess the ecological impact of the proposed development on otters; if there are otters using the site; and the potential risk to otters from the proposed development. Field surveys were carried out to assess for the presence of otters, these focused on a structured search for spraints, footprints, tracks, slides, food remains, couches, holts. An otter shelter which was identified in February 2022 was monitored under licence from Nature Scot with an endoscope and wildlife camera traps.

2.2 Methods

2.2.1 Pre-survey data search

Web-based sources of information were examined, principally the National Biodiversity Network (NBN) Gateway (http://data.nbn.org.uk/) where a radius of 5km from the centre of the proposed site was searched to provide suitable coverage of the area. Records searched include the Joint Nature Conservation Committee (JNCC) *"The Scotland Otter Survey Database"*. Nature designation classifications were obtained from NatureScot Site Link (https://sitelink.nature.scot/home). Positive records for otters present in the survey area can be used to inform the assessment of otters on the site but the lack of records clearly cannot be taken to imply that otters are absent.

2.2.2 Survey methodology

A site visit and habitat assessment were carried out after receiving information from Helga Heins, Architectural Designer and Project Co-ordinator, Nick Carroll Architects. Otter surveys were carried out following the standard otter survey methodology as set out in the *"New Rivers and Wildlife Handbook"* (Holmes, Ward and Jose, 2001) and NatureScot (2022) *"Standing Advice for Planning Consultations – Otter"*. The survey was based on the interpretation of field signs including spraints, footprints, tracks, slides, food remains, couches and holts and assessment of suitable habitat rather than direct observation of the animals themselves.

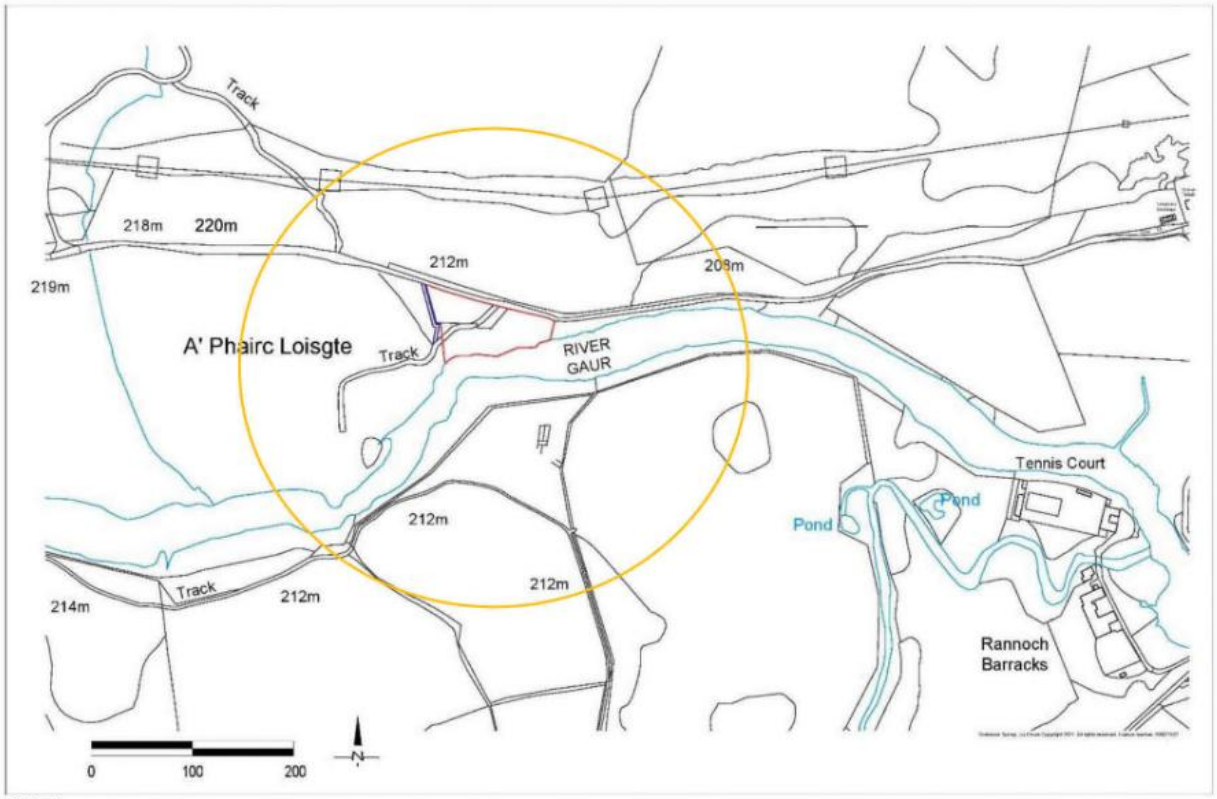
2.2.3 Survey area

The survey area included the proposed development site and all suitable otter habitat within 250m in the surrounding area, including both the north and south riverbanks. Full access to the survey area was available. The riverbanks comprise a combination of large rocks, boulders, grass banks and trees. Figure 5 Survey Area

2.2.4 Timings, types, and weather conditions of Field Surveys

08/11/2022 Otter survey – Temperature 12 degrees Celsius; wind speed 5mph; cloud cover 50%; no precipitation; good visibility.
26/11/2022 Otter survey – Temperature 8 degrees Celsius; wind speed 5mph; cloud cover 100%; no precipitation; good visibility.
14/12/2022 Otter survey – Temperature 2 degrees Celsius; wind speed 0mph; cloud cover 80%; no precipitation; good visibility.

Figure 5 Survey Area



OS PLAN
Scale 1:2500

2.2.5 Limitations

Survey data is accurate on the dates that the surveys took place. The curtilage of private property was not entered. Surveys took place out with the main otter breeding season which would be between May to August at this site due to its geographical location/harsher winters where breeding is less likely to take place during the winter.

2.2.6 Personnel

Emma O'Shea, Ecological Consultant, Tay Ecology Ltd, Licensed Otter Surveyor 222826
Emma has worked in the environmental sector for eighteen years, during which time she has gained a wealth of experience and expertise. During the last eight years she has worked as an ecological consultant for Tay Ecology with lead responsibility for development projects requiring protected mammal species surveys, species licensing, bird surveys, tree and habitat surveys. Emma has extensive experience of otter surveying, in the River Dee catchment from 2004 onwards, and the River Tay catchment from 2006 onwards. Emma is a Nature Scot licensed otter surveyor, licence number 222826. Emma has a Postgraduate Diploma in Environmental Management from the Open University and is a member of the Institute of Environmental Management and Assessment.

3. LEGISLATION AND POLICY GUIDANCE

Otters are classed as European Protected Species (EPS) under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). It is an offence to deliberately or recklessly:
i) kill, injure, capture, or harass an otter.
ii) disturb an otter whilst it is occupying a holt (underground den) or other place it uses for shelter

or protection, or while it is rearing or otherwise caring for its young, or in any way that impairs its ability to survive or breed, or significantly affects the local distribution or abundance of otters.
iii) obstruct access to an otter breeding site or resting place, or otherwise prevent their use.
iv) damage or destroy an otter breeding site or resting place.
This means that if otters could be affected in these ways by a development, and no action is taken to prevent it, an offence may be committed.

4. OTTER ECOLOGY

The otter is a member of the mustelid family with five toes on each paw which are webbed together. Otters are semi-aquatic species which were once widespread in Britain. Otters can travel over large areas and may utilise 20 kilometres or more of river habitat. Inland the otter is largely crespuscular, being most active at dusk and dawn. Otters live in close association with water though spend much of their time on land resting. Resting sites are commonly known as holts when they are underground and couches when above ground. Otters deposit faeces, known as spraints, with a characteristic sweet musky odour, in prominent places, such as on rocks, fallen trees, and grassy tussocks around their ranges. Spraints mark an otter's territory and aid social contact with other otters. Females with cubs are known to reduce sprainting to avoid detection.

Otters eat eels, salmonids, and crayfish, and occasionally take young rabbits, and water birds such as coots, moorhens, and ducks. In the spring, frogs, toads, and newts are an important food item. Cubs usually in litters of two or three, can be born at any time of the year. Cubs are born in natal dens, which may be in a tree root system, a hole in a bank or under a pile of rocks. Cubs remain in the den with their mother for approximately 10 weeks before venturing out, for this reason natal dens are usually situated away from areas at risk of flooding.

5. RESULTS

5.1 Pre-survey data search

Nature designations within 5km of the site include the River Tay Special Area of Conservation SAC which is designated as a Natura 2000 site for Atlantic salmon Salmo *salar*, sea lamprey *Petromyzon marinus*, river lamprey *Lampetra fluviatilis*, brook lamprey *Lampetra planeri*, clear-water lochs and otter *Lutra lutra*. It is also important for freshwater pearl mussel *Margaritifera margaritifera* which is a protected species. The River Tay SAC is immediately adjacent to the proposed site along the length of its southern boundary with the River Gaur.

[redacted]

5.2 Field surveys

5.2.1 Description of Habitats of potential value to otters

The River Tay SAC is designated because of its suitability for otters. The riverbanks comprise a combination of large rocks, boulders, grass banks and trees. There is fragmented mature to over-mature riparian habitat by the river. Tree species include silver birch *Betula pendula*, and sessile oak *Quercus petraea*.

5.2.2 Otter Surveys

5.2.2.1 Site Photographs

a. Mature oak and River Gaur

b. Riverbank with mature trees

c. Glacial erratic boulders / otter shelter

d. South across site to erratic boulders

5.2.2.2 Evidence of Otter January - February 2022

[redacted]

5.2.2.2.2 Otter shelter

[redacted]

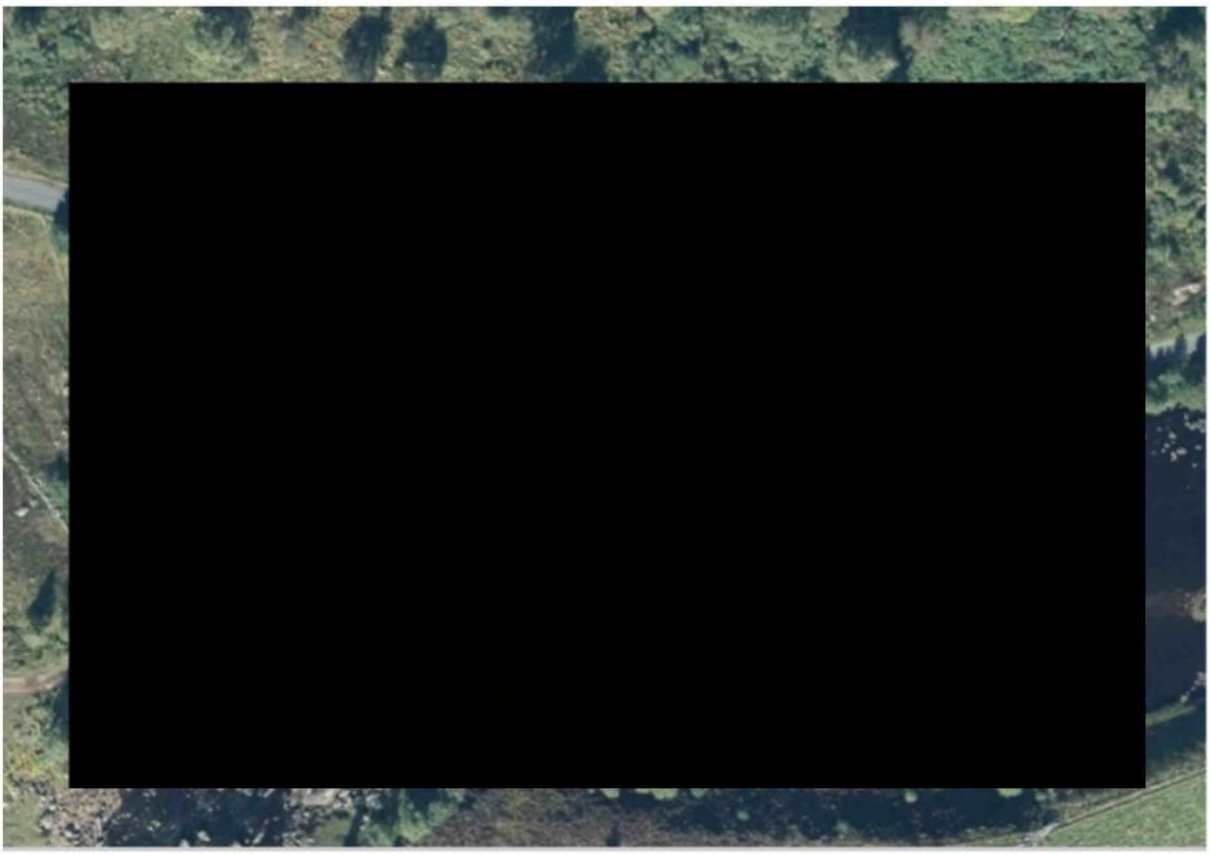
e. Glacial erratic boulders / otter shelter

f. Glacial erratic boulders / otter shelter

g. Otter spraint i.)

h. Otter spraint iii.)

Figure 6 Otter Signs January-February 2022



Green = Otter shelter underneath boulders
Red = Otter spraints

5.2.2.3 Evidence of Otter November - December 2022

5.2.2.2.1 Otter spraints

iii.) Sprainting pile of old dried intact spraints at [redacted]n boulder under glacial erratic – photographic evidence indicates that this pile of spraints is the same as that identified in February 2022.

5.2.2.2.2 Otter shelter

Otter shelter identified at [redacted] and [redacted] underneath 2 large glacial erratics situated next to each other above the riverbank. No indication of natal den at time of surveys. Otter shelter surveyed with endoscope and monitored by 2 camera traps for 6 weeks. Camera 1 was to the east of the boulders and Camera 2 to the west. No otters recorded at any point during the surveys. Wood mice, blackbird and wren were recorded.

i. Camera 1 Glacial erratic boulders/otter shelter j. Under glacial boulder

k. Camera 2

l. Glacial erratic boulders / otter shelter

m. Sprainting pile iii.)

n. East downriver to location spraint vi.)

o. Otter spraint vi.) p. Otter spraint viii.)

There was no other evidence of otters recorded at any other location including 250m to the east (downstream) and west (upstream) of the proposed site or on the opposite south bank either upstream or downstream of the site. This included no spraints, footprints, tracks, slides, food remains, couches, holts or any place used for shelter.

Figure 7 Otter Signs November – December 2022

Green = Otter shelter underneath boulders
Red = Otter spraints

6. ASSESSMENT

6.1 Constraints on survey information

Survey data is accurate on the dates that the surveys took place. The curtilage of private property was not entered. Surveys took place out with the main otter breeding season which would be between May to August at this site due to its geographical location/harsher winters where breeding is less likely to take place during the winter. The results indicate that there has been no change at the site between February 2022 and December 2022 underneath the glacial erratics / otter shelter and in the area of sprainting pile iii.) There was no further evidence to indicate that this site is used by breeding otters and no otters were recorded entering or exiting from the shelter. Therefore, it is not anticipated that the survey timing of November-December is a limiting factor.

6.2 Discussion

An otter survey to assess the presence or absence of otter activity in the vicinity of the proposed development at A'Phairc Loisgte on the north bank of the River Gaur was undertaken. The survey was designed to establish if there are otters using the site and the potential impacts to otters from the proposed development. Field surveys focused on a structured search for spraints, footprints, tracks, slides, food remains, couches, holts and any place used for shelter. An otter shelter which was identified in January - February 2022 surveys was monitored under licence from Nature Scot with wildlife camera traps. The survey area included the proposed development site and all suitable otter habitat within 250m in the surrounding area, including both the north and south riverbanks.

The River Gaur is part of the River Tay catchment which is designated a Special Area of Conservation for otters therefore, otter activity is to be expected along the river. Three field surveys took place over six weeks in November and December 2022. All areas were accessible. The previously identified otter shelter was not utilised by otters during the survey period, although three otter spraints were identified along the stretch of river within 35m of the shelter. Two spraints were fresh at the time of the first survey, and one new spraint was deposited between the second and third surveys. Notably, from photographic records, there was no indication of any change at the otter shelter between February 2022 and December 2022 and no change in terms of sprainting inside the shelter. The survey results indicate that a dog otter is most likely utilising this stretch of river.

Otters are a protected species, and it is an offence to deliberately, or recklessly: damage or obstruct access to an otter holt; disturb an otter whilst it is occupying a holt or other place it uses for shelter or protection; disturb an otter while it is rearing or otherwise caring for its young, or in any way that impairs its ability to survive or breed, or significantly affects the local distribution or abundance of otters. The surveys have indicated that the otter shelter is a non-breeding shelter and should be protected by a buffer zone of 30m during works, however, access along the existing track should be maintained where it passes through this area. It is not anticipated that the construction of the proposed development will have a long-term detrimental impact on the otter population at the site providing the shelter is protected and the tree cover is retained and enhanced in the vicinity of the shelter and along the riverbank. The existing access track is located above the shelter.

6.3 Potential impacts of development

It is not foreseen that the proposed development would have a detrimental long-term impact to the otter population providing appropriate mitigation and compensation is put in place to protect the shelter during and after works. This will ensure that otters can continue to use the area in the future with no detrimental impact to the population. The habitat identified during the survey will not be impacted by the proposed development.

6.4 Licensing

Licences for development works that would otherwise result in an offence with respect otters, can only be issued if it can be demonstrated that the following three tests are all met.

1. That the purpose of the licence is to preserve public health or public safety or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
2. That there is no satisfactory alternative.
3. That the proposed action will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

There is a presumption against licensing disturbance to breeding otters and damage or destruction of an otter holt while being used for breeding. Licensed activity in this situation would have to wait until the otters had finished breeding and cubs are fully mobile.

7. SPECIES PROTECTION PLAN RECOMMENDATIONS AND MITIGATION

7.1 AVOIDANCE OF HARM TO OTTERS

1. For a non-breeding otter shelter the exclusion zone is 30m. The proposed development falls out-with the 30m zone, and it is not anticipated that the construction of the proposed development would have a negative impact on any non-breeding shelter due to the distance from the shelter and the proposed construction techniques.
2. The red line site boundary falls within the 30m exclusion zone. Any landscaping within the exclusion zone would require a licence. Nature Scot to be consulted in relation to the fact that the otter shelter falls within the red line site boundary.

7.2 PRE-CONSTRUCTION/CONSTRUCTION AVOIDANCE OF HARM TO OTTERS

3. A pre-construction survey for otters to check for any new shelter or resting place which may have become occupied ahead of works commencing.
4. Workers to be fully briefed regarding the possibility of otter on the site, the legal status of the animal, their shelters, and resting places. Any sightings of otter or discovery of a new holt or resting place should be reported immediately to the Site Manager and ECoW and appropriate action taken.
5. During construction there will be no work which directly negatively impacts the bank or water habitat to avoid damage or disturbance to otters and otter habitat. There will be no obstruction for otters moving between the bank and open water.
6. Construction work during the summer months should commence at least two hours after sunrise and cease a minimum of two hours before sunset, this time can be reduced in the winter months to 1 hour. There will be no work at night. This is to avoid working in the vicinity of otter habitat when otters are most likely to be active.
7. In the event that there are any open pipe systems these will be capped when contractors are off site. Any holes or trenches will be covered or ramped overnight to prevent otters becoming trapped.

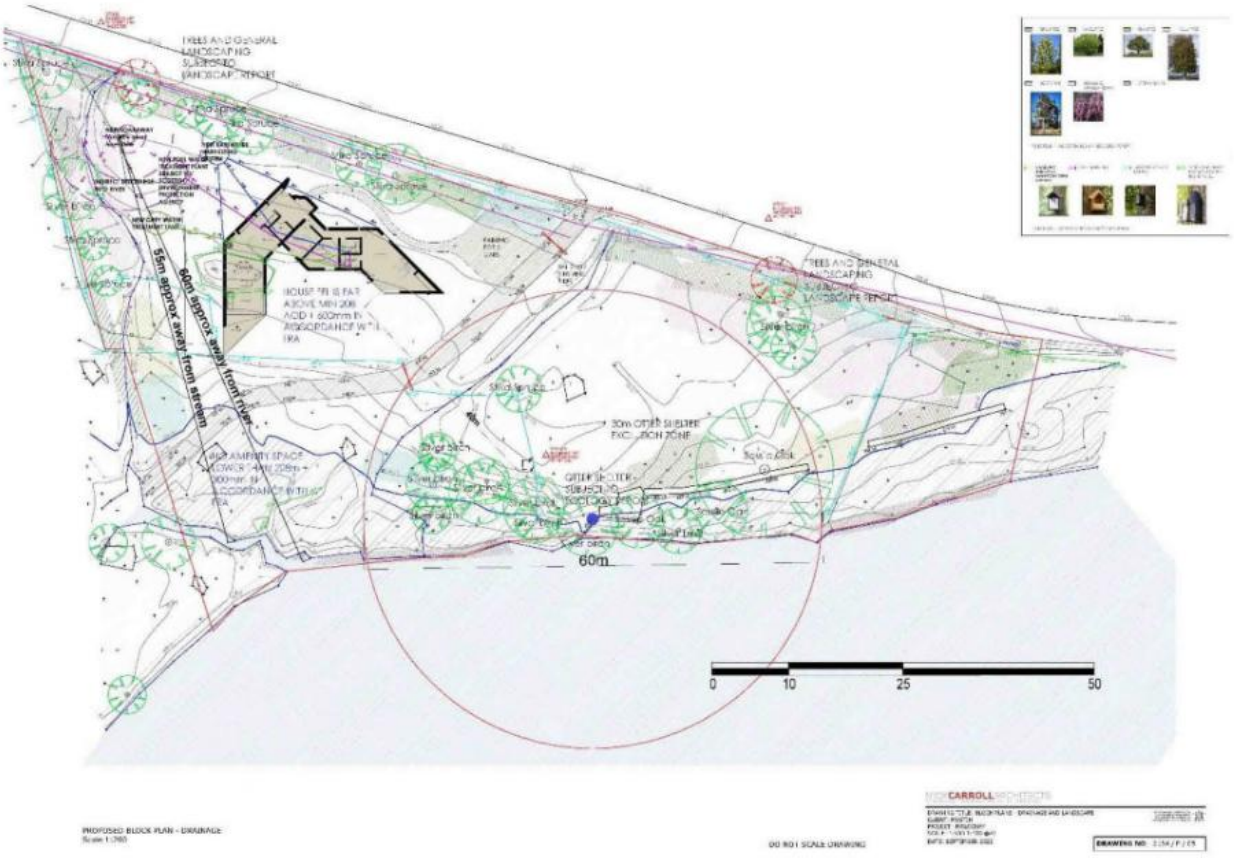
7.3 MITIGATION AND COMPENSATION

8. An exclusion zone of 30m to be marked around the otter shelter before work commences. No construction works will take place within the exclusion zone however, vehicle and pedestrian access should be maintained along the existing track where this falls close to or within the exclusion zone.

9. Any landscaping or other works within the 30m exclusion zone will require a licence from Nature Scot.
10. The existing vegetation and tree cover along the riverbank to be retained.
11. Improve habitat cover along the riverbank by planting of shrubs and young trees as part of landscaping. Alder *Alnus glutinosa*, silver birch *Betula pendula*, hazel *Corylus avellana*, sessile oak *Quercus petraea*, and rowan *Sorbus acuparia* are recommended.

7.4 EXCLUSION ZONE

Figure 8 Proposed Site Plan Showing 30m Exclusion Zone



Note on natal dens
If a natal den for breeding otters is identified at a later date within the survey area the exclusion zone should be at least 200m. However, there is capacity to reduce this too 100m dependent on the nature of the works, topography, and natural screening. Where exclusion zones of the required size are not possible, works will require a licence from NatureScot.

8. DESIGNATED NATURE CONSERVATION SITES

The River Tay Special Area of Conservation (SAC) is within the potential zone of influence of the proposed development. The red-line boundary of the development is adjacent to the River Tay SAC where it borders the River Gaur on its southern boundary. The new building is to be located approximately 30m from the SAC at its southern limit and there are two minor watercourses to the east and west of the site which feed into the River Gaur. The proposed soakaway is located approximately 4.5m to the east of the westernmost stream. It is likely that a Habitats Regulations Appraisal (HRA) will be required to demonstrate that there will not be an adverse impact to the integrity of this designated site.

The River Tay SAC is classified as a Designated Site for the following qualifying features:
- Atlantic salmon *Salmo salar*
- European otter *Lutra lutra*
- sea lamprey *Petromyzon marinus*
- river lamprey *Lampetra fluviatilis*
- brook lamprey *Lampetra planeri*
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.

The River Tay SAC is considered to be of International Value.
It is also important for fresh-water pearl mussels *Margaritifera margaritifera*

It is not anticipated that there will be a direct impact to the River Gaur or the associated riparian habitats that contribute to the structure and function of the River Tay SAC. Any landscaping works which will be undertaken within 30m of the identified otter shelter will be carried out under licence and the positioning of the soakaway will be subject to appropriate soil infiltration tests.

Unmitigated sedimentation/pollution incidents during the construction period have the potential to result in ecologically significant high negative impacts on the sensitive river habitat. Therefore, it is recommended that construction works are undertaken according to a Construction Environmental Management Plan (CEMP). The details of which will be agreed with NatureScot and Scottish Environmental Protection Agency (SEPA).

The CEMP should detail the proposed methods of working and measures to ensure protection of all habitats on and adjacent to the proposed development, especially in association to the watercourses. All works with the potential to negatively impact (e.g. windblown dust, run-off, sediment, pollution) should be undertaken with due regard to the relevant SEPA Pollution Prevention Guideline (PPG) and/or Guidance for Pollution Prevention (GPP). These include:

GPP 2: Above ground oil storage tanks
PPG 6: Working at construction and demolition sites
GPP 21: Pollution incident response planning
GPP 22: Dealing with spills

It is considered that provision of the above mitigation measures will ensure that there will be No Likely Significant Effect on the qualifying features of the River Tay SAC as a result of the proposed development.

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NORTH ELEVATION

SOUTH ELEVATION

EAST ELEVATION

WEST ELEVATION

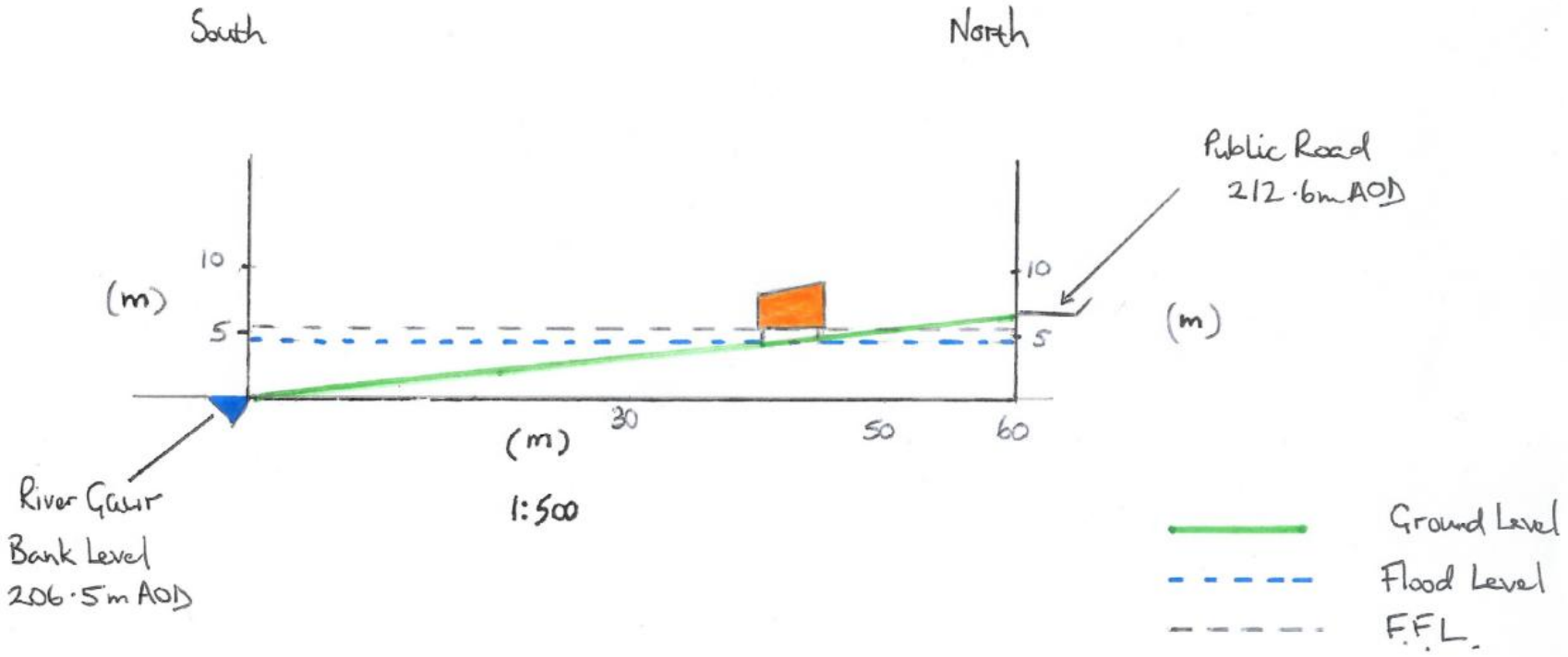
0 1 3 5 10

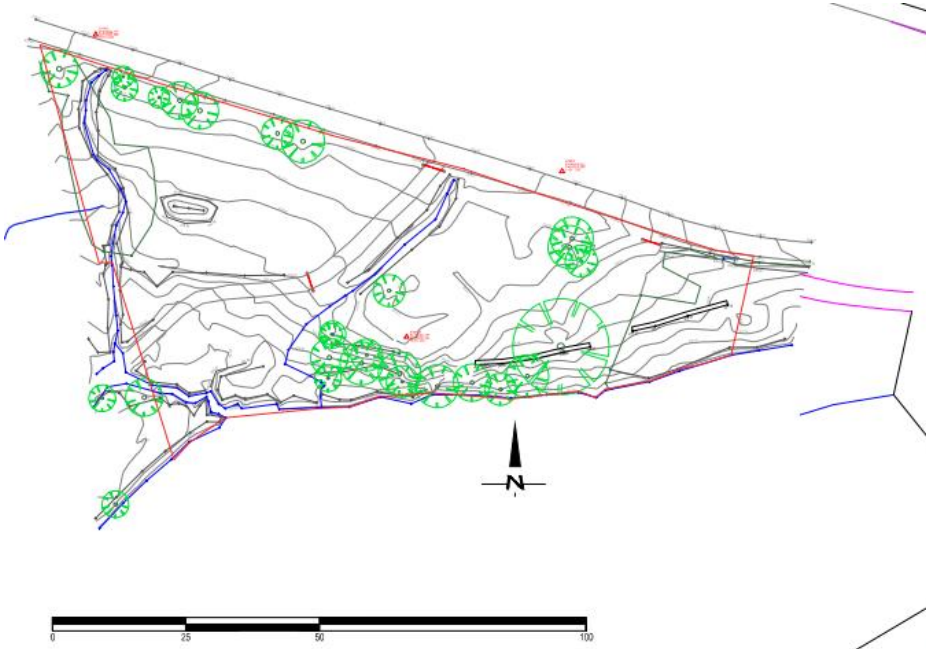
NICKCARROLLARCHITECTS

DRAWING TITLE: ELEVATIONS
CLIENT: MUSTIN
PROJECT: PITLOCHRY
SCALE: 1:100 @A1
DATE: APRIL 2022

DRAWING NO: 2134 / P / 03d

Rannoch Site Cross-Section





EXISTING BLOCK PLAN
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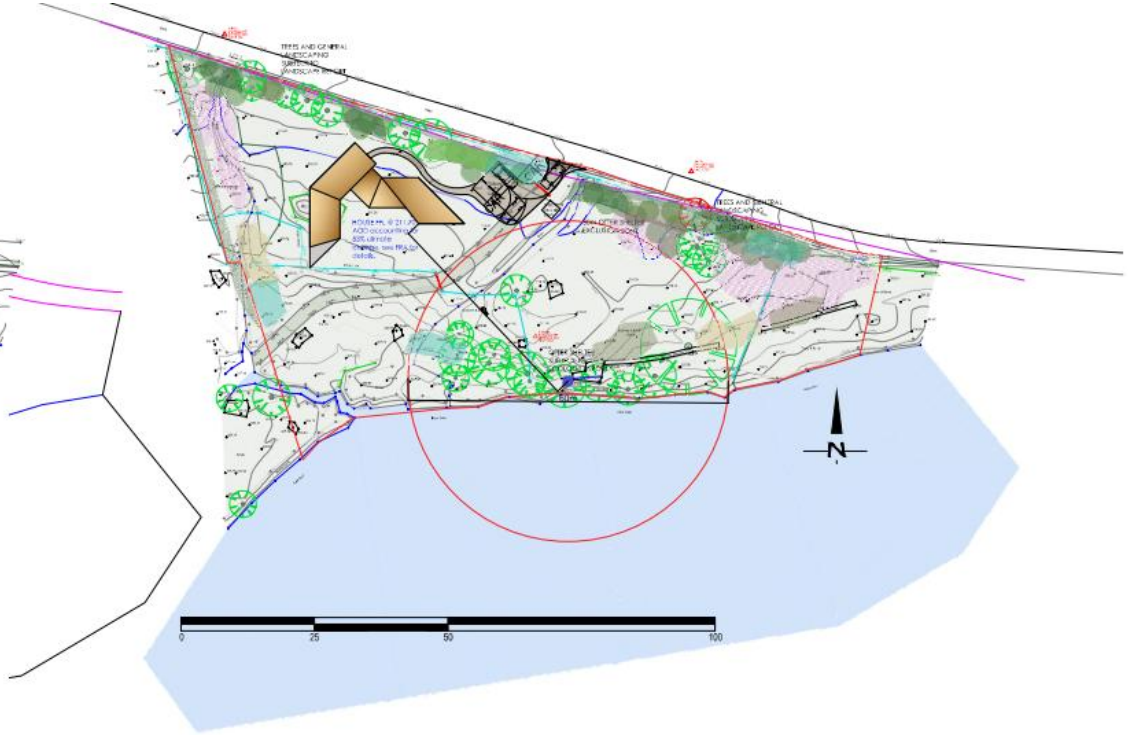
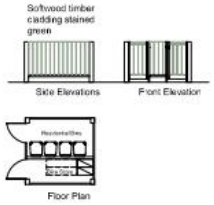


PROPOSED BLOCK PLAN
Scale 1:500

GROUND FLOOR
180m²

FLOOR PLAN
Scale 1:100

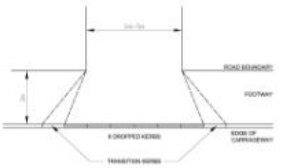


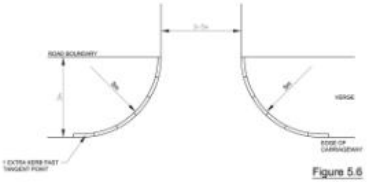
BINS AND BIKE STORE
Scale 1:100

NEW ACCESS GATE

Scale 1:100

Perth & Kinross Council
TYPE **B** JUNCTION





Vehicular access in accordance with P & K Council Road development Guide
Scale 1:100

NICK**CARROLL**ARCHITECTS

DRAWING TITLE: EXISTING AND PROPOSED BLOCK PLANS - FLOOR PLAN
CLIENT: MUSTIN
PROJECT: PITLOCHRY
SCALE: 1:500 1:100 @A1
DATE: SEPTEMBER 2022

DRAWING NO: 2134 / P / 02g

A' Phairc Loisgte, Rannoch

Flood Risk Assessment

July 2023

www.jbaconsulting.com

Edward Mustin
EGM Homes Ltd

JBA Project Manager

Revision history

Revision Ref/Date	Amendments	Issued to
Draft 28/03/2022		Patsy Robinson
Draft 16/05/2023		Edward Mustin
12/07/2023		Edward Mustin

Contract

This report describes work initially commissioned by Nick Carroll Architects Ltd, by an email dated 14/02/2022, on behalf of Mr & Mrs Mustin. Nick Carroll Architects Ltd representative for the contract was Patsy Robinson of Nick Carroll Architects Ltd and, following revisions, Mark Williamson. Sam Cogan, James Davidson and Eva Kordomenidi of JBA Consulting carried out this work.

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Reviewed by ..... Eva Kordomenidi BSC MSc MCIWEM CWEM CSci

Technical Director

Purpose

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Contents

List of Figures

List of Tables

Abbreviations

Abb	Abbreviation
SEPA	Scottish Environment Protection Agency
FRA	Flood Risk Assessment
FFL	Finished Floor Level
LIDAR	Light Detection and Ranging
LLFA	Lead Local Flood Authority
NPPF	National Planning Policy Framework
PKC	Perth and Kinross Council
PPG	Planning Practice Guidance
RIM	Reservoir inundation maps
SFA	Sewers for Adoption
SSE	Scottish Southern Energy

1 Introduction

1.1 Background

Mr & Mrs Mustin propose to develop a site at A'Phairc Loisgte in Rannoch, located 44km west of Pitlochry by building a holiday accommodation unit. The purpose of this report is to assess flood risk to the site to the acceptability of Perth and Kinross Council (PKC).

The scope of this report is to develop a Level 1 Flood Risk Assessment. This report will provide a general indication of the potential flood risk to the site and identify whether there are any flooding or surface water management issues that may warrant further consideration or may affect the feasibility of a development.

The study is comprised of the following aspects:

- Review of flood risk from all sources.
- Review of available information pertaining to potential flood risk and historical flood events within Rannoch.

The report is based on a desktop assessment.

1.2 Reporting Guidelines

The planning context is set by the 'Scottish Planning Policy 2014'[1], 'Planning and Building Standards Advice on Flooding' (PAN 69)[2], SEPA's 'Technical Flood Risk Guidance for Stakeholders'[3] and the 'Scottish National Planning Framework 4, (NPF4)[4]. In addition to these, the policy of PKC is set out in the Supplementary Guidance - Flood Risk and Flood Risk Assessments[5] which supports the the Adopted Perth and Kinross Local Development Plan 2 (2019) Policy 52: New Development and Flooding, and Policy 53: Water Environment and Drainage.

The SEPA Indicative Flood Maps[6] display low, medium and high-risk areas as defined in the risk framework of SPP (paragraph 263), for river, surface water and coastal flooding. These maps are a strategic broad scale tool developed by SEPA for use in assessing flood risk. They are based on a 5m resolution grid and do not include detailed modelling of hydraulic structures on watercourses.

The planning documents together state that the proposed development should, as a minimum, have a neutral or better impact in terms of flood risk in the area of the development and have no adverse effects on flooding out with the development.

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1 Scottish Planning Policy, 2014, The Scottish Government.

2 Planning and Building Standards Advice on Flooding, August 2004, Scottish Executive

3 SEPA – Technical Flood Risk Guidance for Stakeholders, Version 12, May 2019. Source: Technical flood risk guidance for stakeholders (sepa.org.uk)

4 Adopted NPF4 | Transforming Planning

5 Perth and Kinross Council (2021) Flood Risk and Flood Risk Assessments Adopted March 2021. Source Flood_Risk___Flood_Risk_Assessments_adopted_March21.pdf (pkc.gov.uk)

6 http://sepa.org.uk/environment/water/flooding/flood-maps

During the Flood Risk Assessment development the 'Scottish National Planning Framework 4 (NPF4) policy was released therefore the FRA was subsequently reviewed and updated.

2 Flood Risk Assessment

2.1 Site Details and Location

The site proposed for development is located at A'Phairc Loisgte in Rannoch, 44km west of Pitlochry (National Grid Reference: NN 49395 56953). The site is bounded to the east and west by woodland/grassland. The site is bound to the north by the B846 and is bound to the south by the River Gaur. The site currently a rough grazing land.

According to SEPA topographic data (NN45_1M_DTM_PHASE2[7]), the topographical profile of the site declines to the south as land falls to meet the banks of the River Gaur. The highest elevation of 211mAOD is located along the northern site boundary. The lowest elevation of 206mAOD is located along the southern site boundary.

The British Geological Survey[8] online viewer indicates that the site is located on Rannoch Moor Pluton – Granodiorite bedrock and superficial deposits of River Terrace Deposits (undifferentiated) - Gravel, Sand, Clay and Silt.

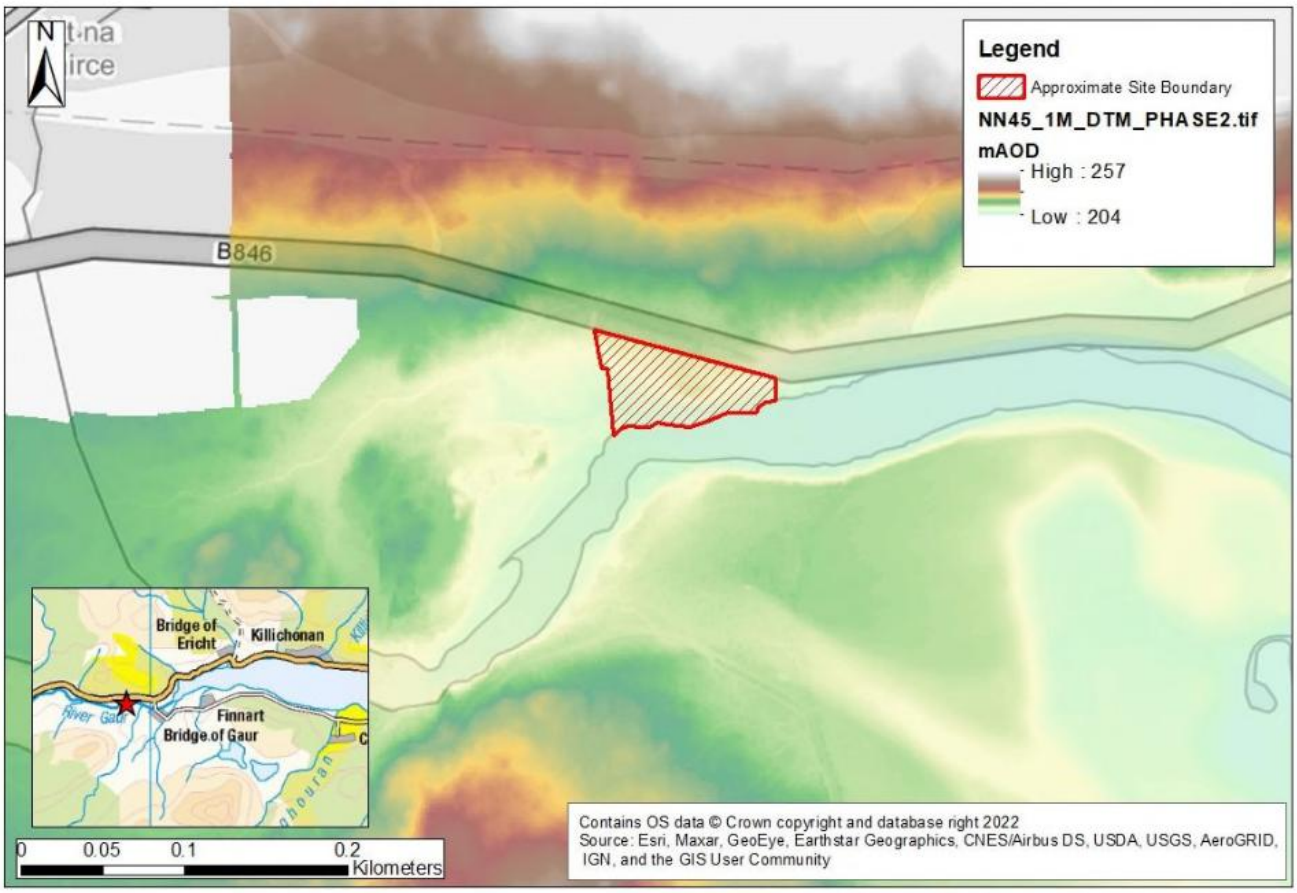

Figure 2-1: Site Location and Boundary

7 SEPA (2014) LiDAR for Scotland Phase 2 - DTM

8 http://mapapps,bgs.ac.uk/geologyofbritain/home.html

2.2 River Gaur Catchment

The catchment covers Rannoch Moor and surrounding mountains (>1000m). Impermeable bedrock geology (mostly granitic); mostly overlain by superficial deposits. Small part of the catchment is afforested. There is a significant amount of waterbodies present within the catchment, most notably Lock Eigheach(Gaur Dam) and Loch Laidon. The Gaur Power station is located less than 7 km upstream of the site. The Gaur Power station is part of the Tummel hydro-electric power scheme which is currently operated by SSE. The presence of the Gaur power station and Gaur dam in close proximity to the site means that flows at this section of the river are heavily regulated and largely controlled by the dam and hydropower station releases. The presence of lochs and lakes within the catchment is expected to have an attenuating effect to flood flows. The presence of a hydropower station also means that there will be conditions associated with minimum and maximum flow/level ranges within the Gaur dam in order to operate the plant. These will also have regulating effects to the flow on the river, which is expected to be heavily controlled in this section between Gaur Dam and Lock Rannoch.

2.3 Scope of development

The site is classed as marginal rough grazing land with an area of 0.41ha. The proposed development at the site is for a holiday accommodation unit on the site. The development unit will occupy a location within the north-western corner of the site, positioning itself as far back from the River Gaur as possible for flood and drainage treatment reasons. There is an associated access road and parking for 3 vehicles to the northeast, and landscaped areas along the northern boundary of the site. The client specified that the house FFL will be set to the approximate level of the road (B846) at around 212.4mAOD. No amenity space will be lower than 208mAOD + 300mm. All provided plans are shown within Appendix A.

Based on SEPA Flood Risk and Land Use Vulnerability Guidance[9] document, the proposed development is classed under the "Most Vulnerable Uses" category (Most Vulnerable Uses therefore comprise holiday caravan, chalet, and camping sites)

[9] SEPA (2018) SEPA Flood Risk and Land Use Vulnerability Guidance – Version 4. Source: Land use vulnerability guidance (sepa.org.uk)

3 Flood Risk

3.1 Sources of Flood Risk

There are several potential sources of flooding that could impact any site:

- Fluvial (originating from a watercourse)
- Coastal
- Surface water (pluvial)
- Groundwater
- Infrastructure failure.

The SEPA Indicative Flood Maps[10] and the SEPA Flood Hazard and Risk Information website[11] display low, medium, and high-risk areas as defined in the risk framework of SPP (paragraph 263), for river, surface water and coastal flooding. These maps are a strategic broad scale tool developed by SEPA for use in assessing flood risk. They are based on a 5m resolution grid and do not include detailed modelling of hydraulic structures on watercourses. The risk categories are defined as:

- High: 10% AEP (1 in 10-year) flood event.
- Medium: 0.5% AEP (1 in 200-year) flood event.
- Low: 0.1% AEP (1 in 1000-year) flood event.

The land is to be developed for residential purposes and therefore requires a standard of protection equivalent to the 0.5% AEP (200-year) flood event which is a medium risk on the flood maps.

At time of writing the applicable climate change allowance for the proposed development site is 53% for peak river flow allowances (the total change to the year 2100 for the Tay region) and 39% for peak rainfall intensity allowance (the total change for 2080 for the Tay region)[12].

The functional floodplain has been defined by NPF4 as the 200-year event with an allowance for climate change.

3.2 Fluvial Flooding

SEPA's indicative flood map is a broad scale tool based on a 5m resolution grid, which does not include detailed modelling of hydraulic structures on watercourses.

The River Gaur is located adjacent to the southern site boundary. The indicative SEPA flood map and SEPA Flood Hazard and Risk Information website shows the southern section of the site could be within the high-risk extents of fluvial flooding and it is considered that the southern part of the site is potentially at risk

10 http://sepa.org.uk/environment/water/flooding/flood-maps, accessed April 2023

11 https://map.sepa.org.uk/floodmaps/FloodRisk/Risk?address=906700291787 , accessed April 2023

12 SEPA (2023) Climate change allowances for flood risk assessment in land use planning – Version 3, April 2023. Source: Climate change allowances for flood risk assessment in land use planning (sepa.org.uk)

from this source. The exact extent of risk areas cannot be ascertained at this stage due to the coarseness of the SEPA flood maps.

SEPA's indicative flood map indicates flood depths during a high risk (10 AEP) scenario and a medium risk (0.5% AEP) event could be between 0.3-1m. During a low risk (0.1 AEP) scenario, depths could be over 1m either within or adjacent to the southern section of the site.

The indicative SEPA flood map also shows the southern part of the site to be within the extents of future fluvial flooding and it is considered that the site is currently at risk from this source with an allowance for climate change.

3.3 Coastal Flooding

The indicative SEPA flood map and SEPA Flood Hazard and Risk Information website shows the site to be outwith the low to high-risk extents of coastal flooding and it is considered that the site is not at risk from this source. The indicative SEPA flood map also shows the site to be outwith the extents of future tidal flooding and it is considered that the site is not at risk from this source with an allowance for climate change.

3.4 Surface Water Flood Risk

SEPA'S indicative flood maps for pluvial flooding indicates that the site is outwith the extents of low to high-risk pluvial flood risk extents.

The development of a new holiday accommodation unit will result in an increase of surface water run-off from the site. This is an inherent risk due to the presence of impermeable land cover associated with built development and the surrounding land topography, however SEPA's indicative flood maps for pluvial flooding indicate that this risk is minimal.

Development of the site with appropriate drainage will likely reduce this flood risk.

3.5 Groundwater Flood Risk

An additional factor that may affect flood risk is groundwater flooding. This is caused by water rising through underlying geology or flowing from springs. It is considered a contributing factor to flooding rather than a primary source, influencing the duration of flooding from other sources. The indicative flood maps produced by SEPA indicate locations where groundwater flooding may be a factor. The proposed site is located outside an area where groundwater flooding is mapped as having a 'Low Likelihood' of occurring.

The recorded geology was also accessed for the site from the British Geological Survey (BGS) database to help assess groundwater flooding risk. There are no BGS boreholes located within close proximity to the site on top of the same geological strata. The geology does not suggest a high-water table. The proposed development does not include basements which limits the potential risk from this source.

3.6 Infrastructure Failure

The risk of flooding from reservoirs is related to the breach of a large reservoir (a large reservoir is classified as a reservoir which can hold over 25,000m^3 of water) and is based on the worst-case scenario. Since mapping is a prediction of a credible worst-case scenario, it's unlikely that any actual flood would be as large as is predicted within the model.

The SEPA Reservoir Flood Map[13] shows the site to be within the flood extents of flooding caused by a breach of a reservoir. Loch Eigheach(Gaur Dam), located 3.3km west of the site, is designated as a High risk reservoir. The Maximum Cubic Capacity of Reservoir at Top Water Level is 10,200,000m^3.

The risk designation is based on the probability and consequence of an uncontrolled release of water from the reservoir.

The reservoir inundation maps (RIM) have been developed using a nationally applied methodology. The primary purpose of the inundation maps is to assist SEPA in assigning a risk designation to all registered reservoirs, as required by the Act. The maps are indicative only and are not suitable for property level assessment.

3.7 Existing Flood Alleviation Measures

There are no known existing flood alleviation measures in the vicinity of the proposed development.

3.8 Flood History

No publicly available information can be found regarding instances of flooding at A'Phairc Loisgte.

13 http://map.sepa.org.uk/reservoirsfloodmap/Map.htm

4 Flood Risk Policy

4.1 SEPA Technical Flood Risk Guidance

The SEPA's Technical Flood Risk Guidance for Stakeholders document[14] details what information SEPA requires to be submitted as part of a Flood Risk Assessment. The complexity of the FRA required should reflect the nature of the flooding problems, the mechanisms of flooding, and the characteristics of the site.

An FRA should be undertaken where any available information indicates there may be a risk of flooding to the development, or development may increase risk elsewhere.

The SEPA Flood Maps can be used to provide an initial assessment of likely flood risk to a site. However, the SEPA flood maps are not suitable to quantify the potential flood risk at property level.

For development that falls under the 'Most Vulnerable Use' as defined by SEPA's Land Use Vulnerability Guidance, the 0.1% annual probability (1 in 1000-year flood) should be assessed.

[14] SEPA (2022) Technical Flood Risk Guidance for Stakeholders - Version 13, June 2022 SS-NFR-P-002. Source: Technical flood risk guidance for stakeholders (sepa.org.uk)

4.2 Perth and Kinross Flood Risk Policy

The policy of PKC is set out in the Supplementary Guidance - Flood Risk and Flood Risk Assessments[15] which supports the Adopted Perth and Kinross Local Development Plan 2 (2019) Policy 52: New Development and Flooding, and Policy 53: Water Environment and Drainage.

PKC requires Flood Risk Assessments to comply with the requirements of SEPA's Technical Flood Risk Guidance for Stakeholders.

Freeboard is an allowance in height above the predicted level of a flood to take account of the height of any waves or turbulence and the uncertainty in estimating the probability of flooding. PKC apply the following requirements for Freeboard:

- Property Finished Floor Levels (FFL) must be a minimum of 600mm above the 0.5% AP (200-year) design flood level (the design flood level must include the appropriate climate change allowance).
- Lowest garden ground level must be a minimum of 300mm above the 0.5% AP (200-year) design flood level (the design flood level must include the appropriate climate change allowance).

Any new development must incorporate safe access/egress for pedestrians and vehicular traffic within the development site. This should take account of flooding from all sources, the predicted 0.5% AP (200-year) including climate change flood envelope and overland flood routes from within and external to the site.

4.3 Perth and Kinross Pre-Application Enquiry

A Pre-Application Enquiry was submitted to PKC in October 2020 for the proposed development. The response states:

*"**Drainage and Flooding***

Part of the site is identified as being at 'low' risk from River Water Flooding. As such, a Flood Risk Assessment will be required to demonstrate that the site is suitable for development and that the development will not increase the risk of flooding elsewhere. With regards to drainage, all drainage should be through sustainable methods with no discharge onto the adjacent public road."

15 Perth and Kinross Council (2021) Flood Risk and Flood Risk Assessments Adopted March 2021. Source Flood_Risk___Flood_Risk_Assessments_adopted_March21.pdf (pkc.gov.uk)

5 Analysis

5.1 Preliminary flood depth estimation

There is no readily available information on hydraulic modelling results for the River Gaur at the site. At this stage, a GIS desk-based analysis has been undertaken as part of this FRA.

The primary inputs used within this the desktop study are:

- Indicative, broadscale, SEPA Flood Maps – Medium Risk Scenario: 0.5% AEP/1 in 200-year flood event
- Indicative, broadscale, SEPA Flood Maps – Low Risk Scenario: 0.1% AEP/1 in 1000-year flood event.
    - The SEPA Indicative Flood Maps[16] Low Risk scenario is a strategic broad scale tool developed by SEPA for use in assessing flood risk. It is based on a 5m resolution grid and does not include detailed modelling of hydraulic structures on watercourses.
- Indicative, broadscale, SEPA Flood Maps – Fluvial Future Climate Change Extent: 1 in 200-year flood risk up to 2080s.
    - The SEPA Indicative Flood Maps[17] Fluvial future climate change extent is a strategic broad scale tool developed by SEPA for use in assessing flood risk. It is based on a 5m resolution grid and does not include detailed modelling of hydraulic structures on watercourses. The future flood maps were developed using projections from a high emissions scenario (little or no action is taken to avoid dangerous levels of climate change) and are based on the UK Climate Projections 2009 (UKCP09)[18].

The primary inputs listed above were compared to the SEPA 1M LiDAR data[19] in order to estimate an indicative flood level for fluvial flood risk.

Based on the indicative SEPA Flood Maps – Medium Risk Extent, which is considered representative of a 1 in 200-year flood risk, a flood level of 208mAOD was estimated.

Based on the indicative SEPA Flood Maps – Low Risk Extent, which is considered representative of a 1 in 1000-year flood risk, a flood level of 211.1mAOD was also estimated.

The indicative SEPA Flood Maps - Fluvial Future Climate Change Extent, which is considered representative of the 1 in 200-year flood risk up to 2080s, also resulted in an estimated flood level of 211.1mAOD which suggests that climate change could have a minimal impact upon the site.

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[16] http://sepa.org.uk/environment/water/flooding/flood-maps - Inital date of access: 13/01/2022. Subsequent date of access: 24/04/2023.

[17] http://sepa.org.uk/environment/water/flooding/flood-maps- Inital date of access: 13/01/2022. Subsequent date of access: 24/04/2023.

[18] Future Flood Maps - Flood Maps | SEPA.

[19] LiDAR for Scotland Phase 2 - DTM - data.gov.uk. Data collected between 29th November 2012 and 18th April 2014. Date of access: 13/01/2022

The functional floodplain has been defined by NPF4 as the 200-year event with an allowance for climate change. Therefore, for this desk-based assessment, the SEPA Future Flood Map extent will be adopted as representative of the functional floodplain, as it includes a conservative climate change allowance. Therefore a flood level of 211.1mAOD has been estimated for the functional floodplain. It is noted that this is a preliminary flood level based on a GIS desktop based assessment exercise.

5.2 Preliminary Finished Floor Levels

Development finished floor levels will need to be set at a freeboard above the 0.5% AEP event water levels, with an allowance for climate change. A standard acceptable freeboard is 600 mm which will account for any uncertainties. Finished floor levels, should therefore be above 211.7mAOD to meet the minimum requirements of Scottish Planning Policy and the Adopted Perth and Kinross Local Development Plan 2 (2019) Policy 52: New Development and Flooding, and Policy 53: Water Environment and Drainage. It is considered that a minimum FFL of 211.7mAOD would also provide adequate mitigation for the 1 in 1000 year flood event.

Information from the architects indicates that the FFL will be set to the approximate level of the adjacent road (B846). Representative values from the provided designs show the road height to be around 212.3-212.5 mAOD (Appendix A. A.3), providing a freeboard of ~1.4-1.2m, far greater than the 211.7mAOD minimum requirement. This is an approach that errs on the side of caution.

5.3 Residual Flood Risk

There is residual flood risk of flooding to the proposed development site for events greater than the estimated flood depth. The freeboard of 1.4- 1.2m on top of the recommended finished floor levels may be sufficient to exceed estimated design flood levels for the 0.1% AP (1000 year) flood for the development.

Adequate drainage will be required to prevent surface water ponding within the site boundary.

5.4 Access and Egress

In accordance with Scottish Planning Policy, access and egress routes should be protected against a 0.5% AP flood event plus climate change. While flood water is likely to encroach into the site along the southern site boundary, the access and egress route from the site to the northern site boundary, adjacent to the B846, is elevated above the extent of both the 0.5% AEP event and the 0.5% AEP event plus 53% climate change event.

6 Conclusions and Recommendations

Mr & Mrs Mustin propose to develop a site at A'Phairc Loisgte in Rannoch, located 44km west of Pitlochry. The proposed development at the site is for a holiday accommodation unit on the site. The site is bounded to the east and west by woodland/grassland. The site is bound to the north by the B846 and is bound to the south by the River Gaur.

As part of the site is located within the medium to high-risk flood plain for fluvial flooding, a Flood Risk Assessment was required for the site, in accordance with the Scottish Planning Policy risk framework. A summary of the key issues assessed is provided below:

Table 6-1: Summary of Main Issues

Issue	Summary	Assessed Risk
Fluvial flooding	Based on the SEPA flood maps, both present and future risk, the southern section of the site could be within the high-risk extents of fluvial flooding. The northern section of the site has a very low risk of fluvial flooding.	High to Very Low
Pluvial flooding	SEPA's indicative flood maps for pluvial flooding indicates that the site is outwith the extents of low to high-risk pluvial flood risk extents	Very Low
Groundwater	The geology of the site suggests that there is no high water table within/surrounding the site.	Very Low
Infrastructure Failure	The SEPA Reservoir Flood Map shows the site to be within the flood extents of flooding caused by a breach of Loch Eigheach which is designated as a High risk reservoir. The risk designation is based on the probability and consequence of an uncontrolled release of water from the reservoir.	Risk identified but cannot be quantified in relation to the site

The indicative SEPA flood map and SEPA Flood Hazard and Risk Information website shows the southern section of the site could be within the high-risk extents of fluvial flooding and it is considered that this section of the site is potentially at risk from this source. The extent of risk areas cannot be ascertained at this stage due to the coarseness of the SEPA flood maps. Flood depths during a high risk (10 AEP) scenario and a medium risk (0.5% AEP) event could be between 0.3-1m. During a low risk (0.1 AEP) scenario, depths could be over 1m either within or adjacent to the southern section of the site.

No other source of flood risk has been identified at the site bar Infrastructure Failure as the site is located within the flood extents of a breach of Loch Eigheach, located 3.3km west of the site, which is designated as a High risk reservoir.

As a preliminary review of flood risk, SEPA Flood Maps were compared to the SEPA NN45_1M_DTM_PHASE2 LiDAR data in order to estimate a flood level of 211.1mAOD for a future 1 in 200-year flood risk up to 2080s. Development finished floor levels will need to be set at a freeboard above the 0.5% AEP event water

levels, with an allowance for climate change. A standard acceptable freeboard is 600 mm which will account for any uncertainties. Finished floor levels, should therefore be above 211.7mAOD.

Information from the architects indicates that the FFL will be set to the approximate level of the adjacent road (B846). Representative values from the provided designs show the road height to be around 212.3-212.5 mAOD (Appendix A. A.3), providing a freeboard of ~1.4-1.2m, far greater than the 211.7mAOD minimum requirement.

It is noted that there are attenuating effects from the reservoirs and lochs present within the catchment which are not expected to have been explicitly modelled during the SEPA flood map development.

Taking into account that the proposed development FFL will be set at the approximate level of the B846 (212.3-212.5 mAOD) and based on the current analysis which suggests that levels should be above 211.7mAOD, it is believed that there is adequate freeboard provided by the proposed development.

Appendices

A Site Details

A.1 Photos

A.2 Site location plan

A.3 Drainage and Landscape Plan

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