



Section 05
**STAKEHOLDER AND
COMMUNITY ENGAGEMENT**

05 PROJECT DEVELOPMENT COMMUNITY AND STAKEHOLDER ENGAGEMENT

5.1 Community Engagement

Because this development is classified as a 'major development' There is a statutory requirement to undertake pre-application consultation. The aim was to consult with the community at an early stage of the design process, giving them an opportunity to comment on, and contribute to, preliminary proposals. Their feedback has then been used to inform the parameters plan.

A Proposal of Application Notice (PAN) was submitted to Loch Lomond and the Trossachs National Park ('the Park Authority') and registered on 8th June 2021. It detailed a series of consultation events were held as a combination of online and in-person events. An online event was held on Zoom and an in-person event was held in Lomond Parish Church. The consultation material was available to view and comment on at the project website, www.lomondbanks.com. More details about these events can be found in the Pre Application Consultation (PAC) Report. Feedback at these events was collected using questionnaire responses.

The consultation clearly communicated the changes that had been made as a result of the feedback received from the public to the 2018 proposals:

- A viewing tower has been removed from the proposals;
- A 12 metre wide landscape buffer (i.e. no development in this location) has been incorporated around Drumkinnon Gate Estate;
- Access to all key destinations and routes through the site are to be maintained during the construction phase. Localised diversions to facilitate construction may occur on land within the applicant's control. Any impacts on walking/cycle routes during the construction phase will be short term and localised diversions will be put in place;
- Access to all key destinations and routes will also be maintained during operation with the quality of some routes enhanced. Some permanent localised diversion may be required; however, this will again be limited to using other land within the applicant control to avoid lengthy or circuitous alterations;
- Removal of the proposed gated access to Pier Road; and
- No development within the wayleave zones to each side of the INEOS pipelines.

Following comments received from members of the public during the November 2021 public consultation about the walking distance between the new proposed park and ride parking and Balloch Station, a potential future connection between Balloch Road and the new parking proposed on Pier Road was included.

Many of the concerns raised during pre-application consultation, particularly those in relation to traffic, flooding, access, economic impact is being addressed in the Environmental Impact Assessment that accompanies this planning application.

5.2 Stakeholder engagement

Refer to the PAC report prepared by Stantec for details of stakeholder engagement.





Section 06
DESIGN SOLUTIONS

6.1 Neighbourhood character

Design concepts, zoning and proposed uses have been developed to:

- Deliver a characterful contemporary design which will ensure that the development has a sense of place appropriate to Balloch, Loch Lomond and the National Park
- Structure the design around new pedestrian and cycle friendly routes and spaces to link the development, station and Lomond Shores
- Provide a strong landscape framework for all elements within the site
- Develop a commercial mix of uses that will animate the site and maximise footfall thereby ensuring development and long-term sustainability

Because this development is at Planning Permission in Principle (PPiP) stage, proposals are strategic, with more detail being developed as subsequent design components are developed further. Nevertheless, the PPiP stage provides an opportunity to establish

- Characterful and distinctive neighbourhoods associated with specific uses
- Movement strategies for pedestrians, cyclists and traffic.
- Design principles for future development

The proposals set out in the Parameters Plan will build upon the quality of the existing green infrastructure. High quality landscape areas are retained and managed appropriately, and improvements are proposed to lower quality spaces.

Three new “neighbourhoods” are proposed - each with their own distinctive character



RESORT

(Parameters Plan Zone C: Pierhead)

This area draws on the larger scale of Loch Lomond Shores and Drumkinnon Tower - the location for a new waterpark, apart-hotel, restaurant, indoor visitor attractions and outdoor, water-based activities.

New development is intended to integrate with the current Loch Lomond Shores by:

- extending and improving the current offer for visitors
- continuing to use high quality materials that respect the local context
- improving access and connections to the Loch
- enhancing the public realm throughout the area
- strengthening links to & improve the existing beach front
- improving parking in the area
- celebrating key views along the waterfront through landscape interventions
- introducing opportunities for children's play spaces
- promoting local history and heritage of the Loch and site



TOWN

(Parameters Plan Zone A: Station Square)

A new "station square" which will become the focus for visitors arriving by train. It is intended as a high quality, family friendly, pedestrian only series of public spaces, framed by a new restaurant, craft brewery and bunkhouse and incorporating an outdoor performance space.

The character of new development will complement its location within the centre of Balloch through:

- Defining the space as a gateway – the start of a pedestrian route to Loch Lomond Shores
- Improving the streetscape at Balloch Road
- Creation of a series of safe, pleasant and welcoming outdoor spaces for visitors- increasing dwelling time and activity in the space
- Use of local vernacular materials and building styles and scale
- Enhancing space through soft landscaping

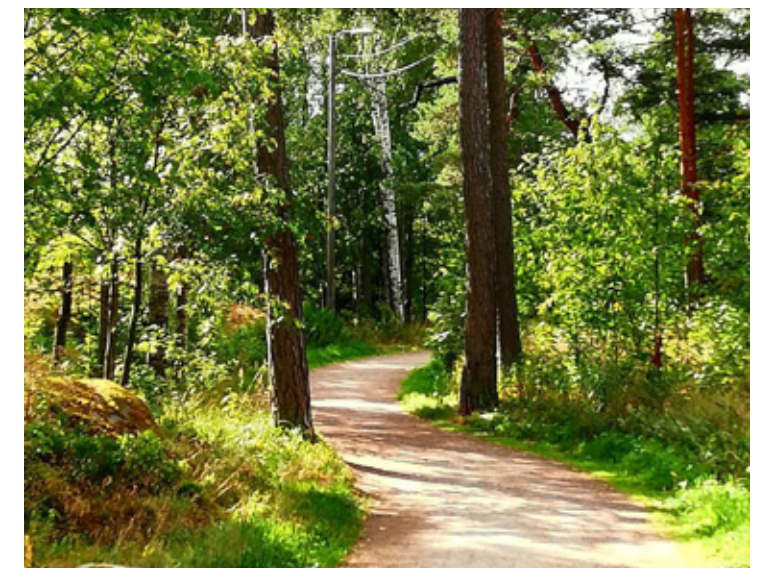
WOODLAND:

(Parameters Plan Zones B Riverfront, Zone D Boathouse & Staff Area and Bay, Zone E: Woodbank)

Appropriate, sustainable development within woodland areas which is dependent on retaining its character and ecology – such as woodland lodges, a conservation and education area for children.

New development will retain its woodland character through:

- Long term, responsible management of woodland
- Improved biodiversity, through creating new habitat and strengthening old habitat
- Structures and spaces that inspire passion & respect for nature with fun, activity and education are located in these spaces
- Strengthened and expanded pedestrian links with opportunities for recreational walks which focus on the local and natural history of the site
- Creation of pleasant, tranquil spaces to site lodge cabins
- A 12 metre 'buffer' is proposed between residential boundary fences – there is no development proposed in this area
- New structures will work with existing topography to minimise ground level re-grading where possible.



6.2 Landscape strategy

In every case, new development is intended to enrich the existing landscape. The aim is to consolidate Balloch as a visitor destination and hub, so all landscape interventions will support the local and regional green infrastructure and enhance the biodiversity of the site.

Landscape Strategy – Key Points

1. Observation point on the water's edge to capitalise on the scenic views across the southern end of Loch Lomond.
2. Pierhead development to be designed to visually assimilate into the wider wooded setting.
3. New, attractive public realm to enhance the sense of place and add to the overall visitor experience.
4. Woodland lodges to be sensitively integrated into the Riverbank Site with new footpaths linking Station Square with Pierhead.
5. Visual interest and biodiversity to be enhanced through woodland management and new planting.
6. New riverfront walkway to be the route for the John Muir Way offering views across the River Leven.
7. Station Square to become a new visitor

- Indicative lodge clusters
- Woodland & green space enhancement. Intergration of lodges
- Main vehicular route
- Main public pedestrian route
- Monorail
- Entrance features
- Improvement of woodland buffer planting
- Retain vistas and open nature / character
- Restore historic woodland and landscape features
- Refurbish of existing historic landmark
- New woodland to setting of residential development
- Retain & manage existing woodland facilities
- Enhance woodland and visitor experience
- New 'sensitive' car parking zones
- Strengthen the Village-scape / improve facilities
- Improved beach and waterfront facilities



destination and formal gateway to the National Park with active frontages including a micro-brewery, shops, boots and bike hotel, and tourist office centred around a new square and outdoor performance area. Public realm to be of high quality and incorporate planting designed to reinforce this unique location.

8. New car parking along Pier Road will be designed with permeable surfacing and will incorporate new tree planting to act as a buffer to the rear of adjoining residential properties.
9. A monorail will link Station Square with the Pierhead development and improve accessibility between Balloch and Loch Lomond, whilst being an attraction in its own

right.

10. Existing woodland will provide a setting for the new staff/service building. This will require some tree removal but remaining woodland will be managed to improve the age range and biodiversity.
11. Woodbank House to be restored to new apartments. Panoramic views from the front of the house will be maintained.
12. Bothies/pods will be inconspicuously located with the woodland on the higher ground behind Woodbank House maintaining the natural landform.
13. Woodland lodges will be located on higher

parts of the site and interplanted with trees to provide additional screening in long distance views. The natural landform will be maintained. A cluster of lodges to be located within the former walled garden.

14. Large countryside lodges with adjacent parking will be located on the more open, flatter and lower-lying land at Woodbank.
15. Woodland at Woodbank will be managed to remove invasive species and improve the age range and biodiversity.
16. The Boathouse will be a new storage area on the loch shore.

6.3 Infrastructure

Surface Water Drainage Strategy

The proposed SUDs strategy for the site has been discussed with SEPA and Scottish Water who are supportive of the approach.

Woodbank; The proposed development is for less than 50 homes, so it is likely that only one level of SuDS treatment will be required prior to discharge into a receiving watercourse, utilising roadside swales.

Drumkinnon Wood; This area of the site will not be accessed by cars, with only occasional access for emergency vehicles. Because of this, SEPA have agreed that surface runoff in this area will not require treatment, however, roof runoff would require one level of treatment utilising infiltration trenches.

Car parking; A filter drain connected to a SuDS basin will provide two levels of treatment and the attenuation required prior to discharge into the River Leven for the surface water runoff from the proposed car park adjacent to Pier Road. A similar SuDS treatment approach is proposed for the car park at Pierhead.

Riverfront; Surface water drainage at the Riverfront area of the site is problematic as this area of the site is very flat. Significant land raising would be required to provide a piped network with an outfall above the flood level. The proposed strategy therefore is for infiltration solutions that manage treatment and attenuation of runoff, thereby avoiding land raising.

An infiltration trench will run along the western edge of proposed access tracks running through the middle of the riverfront area. Each lodge will have with its own catchpit and soakaway system to allow the roof runoff to infiltrate into the ground. This will capture surface runoff and provide treatment to the roof runoff from the lodges west of the track.

Foul Drainage Strategy

It is proposed that foul drainage will enter the wastewater network connected into Scottish Water’s existing combined sewers on Old Luss Road and Pier Road respectively.

A pumping station is proposed in the riverfront section of the site which will capture foul drainage from the Riverfront and Pierhead areas and pump the wastewater to the existing combined sewer network at Balloch Road.

In order to determine whether development proposals can be serviced by the current water supply and sewerage system, a Pre-Development Enquiry has been lodged with Scottish Water, and a response is awaited.

Some traffic will be allowed into the site (for example slipway and Pierhead users, people with a disability) but most visitors will need to park their car in one of the designated parking spaces and travel either on foot, by bicycle or on a monorail which starts at the Station Square and ends at the Pierhead Visitors Hub.

Traffic access will be predominantly along Ben Lomond Way which will be retained as an adopted road. Vehicle access will be controlled along Pier Road, which is currently unadopted and is therefore not designed to current standards for either traffic or pedestrians. Part of Pier Road will be upgraded to an adoptable standard and used to access new car parking and service areas.

In some locations access will be needed for occasional use by emergency vehicles to lodges. Where this is

needed, a path with a narrower running surface will be provided plus an additional low impact porous surface to create a wider running surface (total width 3.8 metres) which is allowed to colonise with none woody woodland flora. This would still permit occasional vehicle access while permitting narrower path for regular use.

All woodland pathways will be constructed using minimal excavations using a no-dig construction, building up from the existing soil level using cellular systems which distribute loads and protecting soils and tree roots from compaction below.

The table below details surface materials in relation to different uses.

6.4 Movement and parking

Scotrail, who operate the train services, are interested in promoting train journeys to and from the new Lomond Banks development. Visitors will be encouraged to travel by train and leave their car behind – a more sustainable mode of transport.

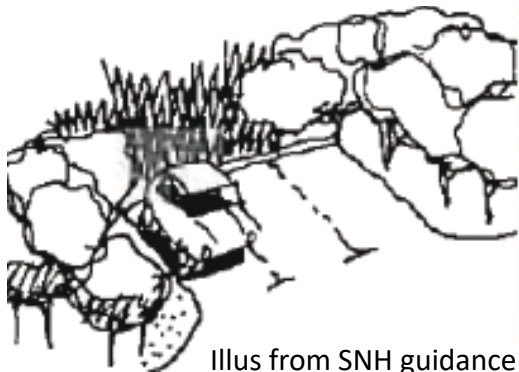
Traffic will be controlled and excluded from most areas, and the public will continue to be able to walk through virtually all areas of the site.

Other than some Countryside lodges at Woodbank, parking for woodland lodges will only be provided if they are directly located beside existing roads. If this is not the case, visitors and their luggage will be transported to lodges by buggy upon arrival.

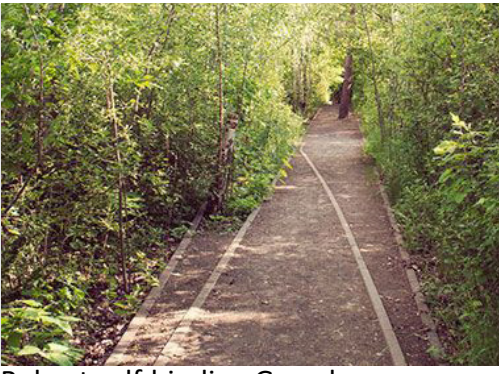
It is proposed to improve the route of the existing John Muir Way to provide a safe and secure pedestrian and cycle route which links Loch Lomond Shores and Balloch Town Centre.

Type of road surface	Description
New vehicular access	Gravel bound access road
New vehicular access (6 no new homes at Woodbank)	Tarmac
Woodland parking areas	Gravel bound access road & parking constructed to minimise impact
Pedestrian /cycle path used occasionally by emergency vehicles	Path with a narrower running surface will be provided plus an additional low impact porous surface
Tertiary small footpath	Gravel bound walkway Natural materials for tactile routes Boardwalk as at Treezone area
Sustrans improvement area (likely to be developed in partnership with WDC and Abellio)	Finishes as elsewhere in Balloch

PARKING



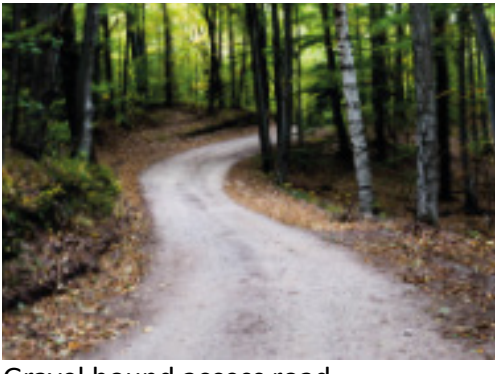
ACCESS



Robust self-binding Gravel

















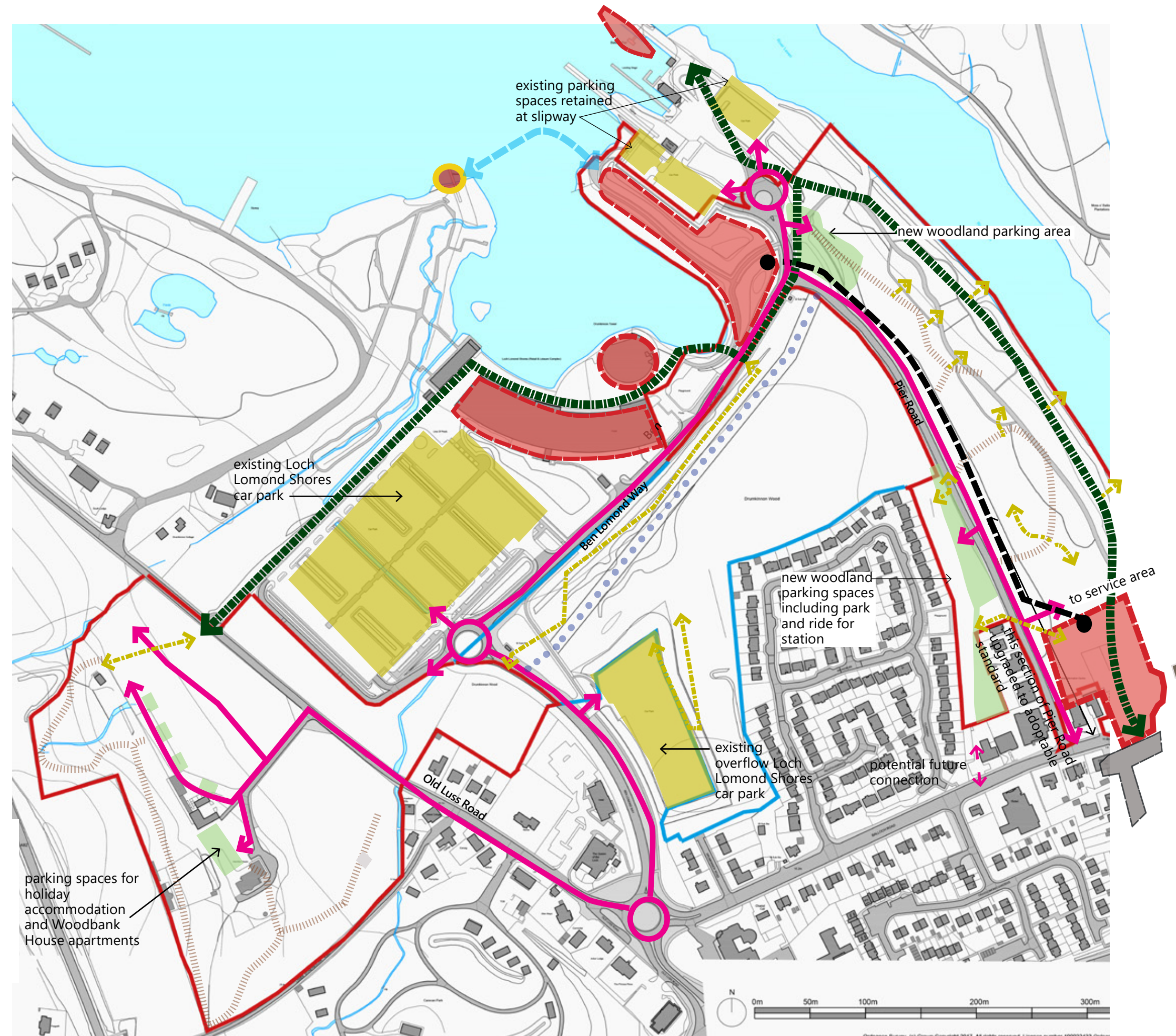
Boardwalk as at Treezone



Gravel bound access road

MOVEMENT AND PARKING

-  main pedestrian route incorporating Riverside Walkway (John Muir Way and route to Maid of the Loch)
-  pedestrian/cycle path suitable for emergency vehicles and route for buggy deliveries
-  tertiary small footpath - pedestrian route only
-  boathouse
-  boat access only
-  monorail between Station Square and Pierhead
-  monorail station
-  visitor destination
-  high level treetop walkway
-  sustrans public realm improvement area
-  vehicular access
-  existing pedestrian/cycle path
-  existing parking
-  proposed parking



6.4 Woodland

Attractive, sustainable woodlands are key to the overall character of the development, so retention of mature trees and their setting is essential

At PPIp stage, designs are conceptual and detailed site layouts have not been developed. It is not possible to identify the exact locations for individual woodland components (paths, ramps, lodges, visitor destinations etc.) until designs have been developed further as part of a subsequent planning process.

Nevertheless, a number of surveys have been undertaken to inform the PPIp application and to understand the potential effects of proposals on the existing woodland.

Approximate locations for individual woodland components (paths, ramps, lodges, visitor destinations etc.) have been developed; these are not yet fixed and their detailed design will form part of a further planning application.

The location of development within woodland areas takes cognisance of the following:

- **Glade analysis:** Some proposed development areas (such as Woodbank) are partially located within SNH designated 'Long Established Woodlands of Plantation Origin' and are included within the Scottish Ancient Woodland Inventory. Within these areas, a survey was conducted to identify GPS locations for glades of circa 20 metre diameter, based on approximate dimensions of woodland lodges. As far as possible, these existing spaces (glades), which result from past human management, will be utilised for new lodges constructed using low impact construction techniques.
- **Invasive Species:** There are some extensive areas of invasive species to the north of the designated LEPO woodland area at Woodbank, as well as small exotic/domiciled tree species (such as young sycamore) throughout the PPIp area. Space can therefore be created following removal of the dense areas of invasive species and domiciled trees.
- **Specimen trees:** As far as possible, all specimen trees have been retained.
- **Buffer area:** There will be a 12 metre buffer between existing residential boundary fences and new development. Existing and proposed car parking will incorporate buffer planting to screen them from wider view - an approach aligned with

SNH guidance for parking.

- **Soil protection:** existing woodlands (particularly Drumkinnon) are developing a semi-natural character – where floral diversity, fungal interaction and invertebrate life are valuable factors.

Lodges

Where lodges are located in woodland, minimal disturbance will be achieved through:

- clusters of lodges sharing infrastructure and access, rather than lodges scattered throughout woodland with each requiring its own access and infrastructure
- high quality prefabricated lodge construction using sustainable timber technologies, with lodges supported on posts rather than conventional foundations
- Privacy achieved through screening from main footpaths with appropriate planting; localised path narrowing and signage, and the use of different materials and details at lodge "clusters"

Access

- Paths through woodland will continue to be accessible by the public.
- There will be no parking areas beside lodges within existing woodland (unless lodges are located directly beside an existing road), instead parking will be located remotely and lodges will be accessed via foot, cycle or buggy.
- Wherever possible, access to lodges will be achieved using "light touch" improvements to existing paths with an enhanced porous surfacing. Routes will follow the existing topography to minimise ground level regrading where possible. Timber decking (or similar) will be used on vulnerable routes or routes with difficult topography.
- Access ways will be constructed using minimal excavations using a no-dig construction, building up from the existing soil level using cellular systems which distribute loads and protecting soils and tree roots from compaction below.
- Low level lighting will be provided
- In some locations access will be needed for occasional use by emergency vehicles. Where

Artist's impression

Privacy for lodges achieved through:

- screening from main footpaths with appropriate species
- localised path narrowing and signage
- different materials and details used for footpaths at lodge "clusters"

Access for lodge users by foot, cycle or buggy (car parking beside lodges only possible if they are located directly beside existing access roads)



"Light touch" improvements to existing paths:

- overall width extended to 3.8 metres to allow occasional use by emergency vehicles
- low level lighting
- continued public use

Minimal disturbance of existing ground achieved through:

- clusters of lodges share infrastructure and access
- prefabricated lodge construction, lodges supported on posts
- lodges located in least dense existing planting
- decking to provide outdoor spaces, decks orientated to best suit specific location

06 PROJECT DEVELOPMENT DESIGN SOLUTIONS

this is needed, a path with a narrower running surface will be provided plus an additional low impact porous surface to create a wider running surface (total width 3.8 metres) which is allowed to colonise with none woody woodland flora. This would still permit occasional vehicle access while retaining a narrower path for regular use

Infrastructure

In order to minimise impact on soil ecology, the disturbance of soils will be kept to a minimum and future utilities will take cognisance of trees and woodlands in order to carefully microsite the routes. Excavation for services will be targeted to areas free from tree root constraints and wherever possible they will be located beneath existing paths or other areas that have already been disturbed to create access networks. All excavations of this nature will be guided by the project arboriculturalist.

New Woodland Areas

New woodland areas will be created as part of the proposed development. They will be focussed in the Woodbank and Riverfront areas as these offer the greatest opportunities for functional woodland.

Woodbank offers the most potential for woodland planting. A block of new woodland will be created between the proposed lodges along Old Luss Road and the existing woodland surrounding Woodbank House. This will be divided into two large blocks either side of Woodbank House, retaining the views to and from the Category A listed property. This woodland will not only help to integrate new development into the landscape, screening and filtering views, but will also focus views on Woodbank House.

Along the Riverfront area, new woodland planting will be incorporated in existing clear areas between the woodland belts. This woodland will enhance the existing woodland edge and create a setting for the proposed lodges.

In order to promote biodiversity and provide a habitat for wildlife, new planting will:

- Enhance tree planting along the River Leven with species typical of a wet woodland.
- Encourage a greater mix of native trees within the canopy;
- Improve shrub layers through planting of damp tolerant and native species
- Promote the growth of ground cover species
- Enhance the conditions needed for the growth of spongy mosses and liverworts

Approach to further detailed design stages

Additional survey work will be undertaken to allow the designers to further microsite design elements, determine areas required for construction and protect valuable woodland features during the detailed design and construction stages. These will include:

- Ecological surveys including soil ecology;
- Additional detailed tree surveys to BS 5837:2005 (Trees in relation to construction recommendations and guidance)
- Detailed landscape visual impact assessment using CGIs and photomontages
- A woodland management plan to conserve, improve and enhance existing woodland
- Use of an arboricultural watching brief during construction works
- Adherence to National Joint Utilities Group (NJUG) 10 'Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees' as amended in 2007
- Minimal working areas and protection of woodland to be retained in accordance with BS5837.

Future Management

An effective management strategy will be put in place which will:

- regularly audit maturing tree stock for pests, disease and required remedial works
- manage the reduction of any declining mature trees
- facilitate bracken and bramble control to promote floral diversity, in particular ancient woodland indicator plants
- retain dead wood material to promote fungal and invertebrate communities over time
- continue to provide supplementary planting to promote an overall woodland composition
- eradicate and control invasive plant species
- boost ecology and ground flora within woodland by thinning out trees



Screening of Substation required



Incorporate 'sensitive' car-parking within woodland



Enhancement of historical avenues and landscapes



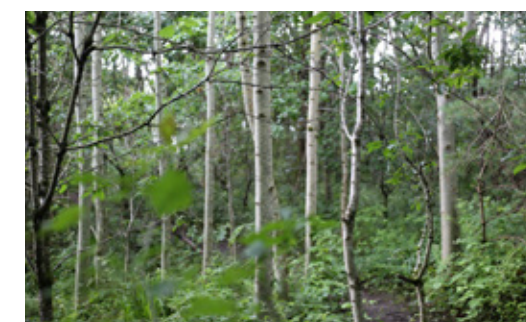
Incorporate lower density lodges in young woodland areas



Retain and enhance valuable trees in Drumkinnon woodland



Screening enhancements to adjacent properties required



Management of vegetation within Drumkinnon Wood



Management of Bamboo species around Woodbank House



Enhancement of Loch Waterfront



Retain existing pathways, enhance with porous surfacing

6.4 Compensatory Woodland Planting Strategy

One of the core principles of the design has been to retain woodland, and retaining mature trees is key to giving the lodges an immediate woodland setting. However, due to the nature of the development there will be some loss of woodland which will require compensatory planting.

At PPiP stage, all designs are conceptual, so the following discussion about woodland planting is based upon a hypothetical model of the development

As a consequence, at this stage any quantities quoted are indicative, as more survey work will be required during the detailed design stages to ascertain the exact areas and numbers of trees affected. Nevertheless, there is a commitment to maximise new compensatory woodland planting within the development boundary. The following explains how this will be achieved.

Within the development boundary there is a total of 90726 m2 of woodland of which 25037 m2 is classed as long-established woodland of plantation origin (LEPO), which equates to 27.6% of the total woodland.

In order to understand the potential effects of the development on woodland and LEPO, a number of calculations have been made based on the approach identified in the Design Statement. This considered the footprints of buildings, lodges, accesses and parking, and also identified areas within the woodlands which are not currently wooded.

Riverfront

This includes the areas of woodland between Pier Road and the River Leven. This area is not classified as LEPO. Proposed lodges have been located in the open areas between the woodland belts.

In total, 156 m2 woodland has been identified as being affected by development including lodges, accesses, parking, a SUDS area and riverfront walkway. This area will require compensatory planting.

Woodbank

This area includes the woodlands surrounding Woodbank House and comprises 24685 m2 woodland within the development boundary of which 23500 m2 is LEPO. However, within the woodlands at Woodbank there are a number of areas which are not wooded. There is a large gravelled area within the LEPO which is not wooded, and the area of the previous walled garden is also void of woodland cover. Access and parking have been located in these areas to minimise the effects on the surrounding woodland.

In total, 276m2 woodland has been identified as being affected by development which requires compensatory planting.

Other Areas

Other woodland within the development boundary includes 7081 m2 of woodland at Pierhead and 15800 m2 between Ben Lomond Way and old Luss Road. These areas are also affected by the development proposals. The Pierhead area which includes the apart-hotel and visitor centre affects all 7081 m2 woodland (with no LEPO affected), although a number of prominent trees along the waterfront are to be retained. The servicing area off Ben Lomond Way affects 348 m2. Neither of these woodlands are LEPO, but would require compensatory planting totalling 7429 m2.

Summary of Potential Woodland Loss

To summarise, the total potential woodland loss which requires compensatory planting is 7,861m2. This equates to approx. 8.8% of the woodland within the development boundary, but only 0.48% of LEPO woodland within the development boundary would require removal. As stated, this is an approximate amount based on the current design at PPiP stage.

	Area of Woodland within Development Boundary	Area of LEPO within Development Boundary	Area of Woodland Affected by the Proposed Development	Area of LEPO Woodland Affected by the Proposed Development
Woodbank	24,685 m2	23,500 m2	276 m2	120 m2
Riverfront	41,850 m2	0	156 m2	0
Other	22,881 m2	1,512 m2	7,429 m2	0
Totals	89,416 m2	25,012 m2	7,861 m2	120 m2

Areas Available for Compensatory Planting

As well as identifying the areas of woodland affected by development, analysis has been undertaken to identify areas which could accommodate new planting. Due to several factors area for new planting are very limited and therefore areas for compensatory woodland concentrate on Woodbank and Riverfront.

Woodbank offers the greatest scope for compensatory woodland planting. A block of approx. 9168m2 of new functional woodland could be created beside the proposed lodges along Old Luss Road and the existing woodland surrounding Woodbank House. This would be divided into two large blocks either side of Woodbank House.

In addition to new woodland, the existing woodlands retained at Woodbank would be managed and improved.

Between the existing woodland belts along the Riverfront, approx. 4835m2 of woodland could be created. These areas would form infill to the existing open spaces surrounding the proposed lodges and tying into the surrounding woodland blocks.

In total, 14,003m2 has been identified within the development boundary which can accommodate woodland planting.

These are areas which could accommodate functional woodland, and not individual tree planting which would be incorporated into parking areas and around the apart-hotel and visitor centre. Those types of tree planting would be additional to these areas. The area proposed is greater than the area of woodland lost as a result of the proposed development.

Tree Species for New Planting

The species used for new woodland planting will have regard for the existing adjacent woodlands and existing species found within the development boundary.

06 PROJECT DEVELOPMENT

DESIGN SOLUTIONS

Woodbank

The existing woodland comprises a mix of ash, sycamore, lime, yew, birch and oak with wild cherry on the lower slopes, as well as occasional elder and rowan. New woodland planting in this area would predominately comprise oak (*Quercus*), ash (*Fraxinus*) and birch (*Betula pendula*) as the canopy layer to complement the existing woodland.

Ash is currently unavailable due to Ash Dieback which has restricted the sale of ash trees, and if this is still the case during construction then an appropriate replacement will be agreed. Some evergreen trees such as pine and yew would also be used to complement the existing planting around Woodbank House. The lower canopy would comprise native species such as cherry (*Prunus*), rowan (*Sorbus*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) to diversify the species in this area.

Riverfront

Existing woodland in this area comprises a mix of sycamore, silver birch, Douglas fir, willow and beech. New woodland along the River Leven would be typical of a wet woodland with species such as birch (*Betula*), alder (*Alnus*), willow (*Salix*) and Pin Oak (*Quercus*) used to enhance and diversify the existing woodland areas.

Shrub layers would include damp tolerant and native species such as holly (*Ilex aquifolium*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus monogyna*).



6.5 Sustainability

Renewable energy solutions and energy storage are to be incorporated into the development at detailed design stage to help Lomond Banks meet its ambition of becoming a "Whole Life Zero Carbon Resort". A Sustainability Statement accompanies the planning permission in principle application and identifies:

- methods to generate heat and electricity using low carbon solutions;
- how to design efficiencies into the development; and
- ways to engage with the community to advance carbon reductions locally.

Lomond Banks will seek to incorporate net zero concepts into every stage of development. A simple way to reduce carbon emissions is to reduce the demand for heat and electricity. Super-insulated buildings with the appropriate mechanical ventilation systems will ensure buildings can retain the heat they absorb while maintaining a pleasant environment. Energy efficiencies which can be considered for the detailed design are:

- Superinsulation
- Mechanical ventilation and air flow
- LED lighting and smart controls
- Turnstile entrances
- Inert gas triple glazing
- Battery storage and energy management systems
- Electrical site vehicles and charging stations

For generating heat and power, renewable energy utilising solar, wind, air, water and ground sources can be used where possible to maximise the Proposed Developments clean energy generation and to minimise the demand for fossil fuels.

Options for power generation include:

- Photovoltaics
- Wind Turbines
- Water Systems

Options for heat generation include:

- Passive Solar
- Ground Source Heat Pumps
- Air Source Heat Pumps
- Water Source Heat Pumps

The sustainability approach for Lomond Banks seeks to combine renewable energy technology and practices to encourage behavioural change in staff and visitors to deliver an all-encompassing sustainability strategy to reduce dependency on fossil fuels and be a "Whole Life Zero Carbon Resort".

6.6 Parameters plan

Design strategies for movement, landscape and neighbourhood character have been synthesised into an holistic parameters plan.

The main design componenets are as shown on the parameters plan on the following page, and as noted below :

Zone	Area	Proposed Use(s)	Key Parameters
Zone A: Station Square	1	Mixed Use: Food & Drink, Entertainment and Budget Accommodation	<ul style="list-style-type: none"> Brewery (max height 13m, 1200 sqm total floor area including 300 sqm pub) Restaurant (max height – 9m, floor area 150 sqm) Amphitheatre - temporary tented structure (max height 8m; capacity – Flamingo Land to advise) Budget accommodation (32 max bed spaces, 12m max height)
	2	Tourist Information Services and Public Realm	<ul style="list-style-type: none"> Refurbished tourist office to include bike hire, commercial and site management uses Enhanced public square adjacent to tourist office
Zone B: Riverfront *Existing Boat Moorings	3a	Woodland with Forest Lodges and Recreational Facilities	<ul style="list-style-type: none"> Up to max No. 42 single Storey Woodland Lodges within woodland Picnic, BBQ and Play Areas in woodland pockets Path network
	4a	Managed Woodland with SUDs	<ul style="list-style-type: none"> Existing woodland retained and managed 2 SUDS attenuation areas: <ul style="list-style-type: none"> Area 1 – treatment of surface water from upgraded section of Pier Road and adjacent car park. Area 2 – treatment of surface water from reconfigured Pierhead Destination
*Reduced heights at Pierhead Development Zone C: Pierhead	5	Pierhead Visitor Destination	<ul style="list-style-type: none"> Apart Hotel (max 60 bedrooms, Leisure pool / Waterpark Restaurant/Bar (max 150 sqm, incorporated into aparthotel/water park) Visitor Hub (indoor rides, storage & office uses,
	6	Visitor attraction and carpark	<ul style="list-style-type: none"> Details subject to future planning
	7	Multi-User Public Realm	<ul style="list-style-type: none"> High quality hard landscape public realm with capacity for temporary visitor attraction uses.Small scale kiosks for visitor experience s (eg. cafe)
Zone D: Boathouse & Staff Area	8	Ancient Woodland Boundary	LEPO Boundary - Area Designated Ancient Woodland
	4b	Managed Woodland	<ul style="list-style-type: none"> Existing paths upgraded Existing woodland retained and managed
	10	Staff & Service Area	<ul style="list-style-type: none"> Deliveries, storage, management, welfare and security uses (8m max height)
	3c	Boathouse	<ul style="list-style-type: none"> A boathouse c95 sqm for storage of equipment and operation of water- based activities
	11	Buffer Zone	<ul style="list-style-type: none"> 12m stand-off between existing dwellings at Drumkinnon Gate and proposed development No development

Zone E: Woodbank	<div>13</div>	Heritage	<ul style="list-style-type: none">Woodbank House conserved and converted into Holiday ApartmentsWoodbank House ancillary buildings (including stables and bothy) conserved and converted into 6 no new self catering holiday propertiesWoodland planting extended																						
	<div>3d</div>	Visitor Accommodation	<ul style="list-style-type: none">Up to 37 new Countryside Lodges within existing fieldPath networkUp to 30 new Woodland Lodges within woodlandUp to 17 new Bothies/pods within woodland																						
Overarching Components <small>(Internal access, utilities and drainage to be confirmed at detailed design stage)</small>	<div></div>	New Car Parking	<div>WOODBANK PARKING SPACES</div> <table><tr><th>Location</th><th>No.</th></tr><tr><td>Woodbank House</td><td>23</td></tr><tr><td>Woodbank Lodges*</td><td>23</td></tr><tr><td>WOODBANK TOTAL</td><td>139</td></tr><tr><td colspan="2">*See Zone E Woodbank Section for Lodge Quantities</td></tr></table> <div>WEST RIVERSIDE PARKING SPACES</div> <table><tr><th>Location</th><th>No.</th></tr><tr><td>Staff and services area</td><td>35</td></tr><tr><td>Pierhead accessible parking</td><td>99</td></tr><tr><td>Pierhead woodland parking</td><td>99</td></tr><tr><td>Station Square</td><td>132</td></tr><tr><td>WEST RIVERSIDE TOTAL</td><td>252</td></tr></table>	Location	No.	Woodbank House	23	Woodbank Lodges*	23	WOODBANK TOTAL	139	*See Zone E Woodbank Section for Lodge Quantities		Location	No.	Staff and services area	35	Pierhead accessible parking	99	Pierhead woodland parking	99	Station Square	132	WEST RIVERSIDE TOTAL	252
			Location	No.																					
			Woodbank House	23																					
			Woodbank Lodges*	23																					
			WOODBANK TOTAL	139																					
	*See Zone E Woodbank Section for Lodge Quantities																								
Location	No.																								
Staff and services area	35																								
Pierhead accessible parking	99																								
Pierhead woodland parking	99																								
Station Square	132																								
WEST RIVERSIDE TOTAL	252																								
<div><div></div><div></div></div>	Site Vehicular/Boat Access Points	<ul style="list-style-type: none">10no vehicular access points1 no boat access point																							
<div><div></div><div></div></div>	Indicative Pedestrian/cycle linkages (capable of use by emergency vehicles)	<ul style="list-style-type: none">As drawing																							
<div><div></div><div></div></div>	Indicative Pedestrian/cycle linkages	<ul style="list-style-type: none">As drawing																							
<div><div></div><div></div></div>	Monorail	<ul style="list-style-type: none">Station Square to Pierhead through Zones A, B and C (max height 3.5m rising to 5.5m above vehicular access roads)Monorail Stations in Zone A at ground level & Zone C in Apart-HotelMonorail alignment subject to detailed design																							

06 PROJECT DEVELOPMENT DESIGN SOLUTIONS

6.6 Parameters plan

Zone	Area	Proposed Use(s)	Key Parameters																												
Zone A: Station Square	1	Mixed Use: Food & Drink, Entertainment and Budget Accommodation	<ul style="list-style-type: none">Brewery (max height: 13m, 1200 sqm total floor area including 300 sqm pad)Restaurant (max height – 9m, floor area 150 sqm)Amphitheatre - temporary tented structure (max height 8m, capacity – Flemings Land to advise)Budget accommodation (32 max bed spaces, 12m max height)																												
	2	Tourist Information Services and Public Realm	<ul style="list-style-type: none">Refurbished tourist office to include bike hire, commercial and site management usesEnhanced public square adjacent to tourist office																												
Zone B: Riverfront	3a	Woodland with Forest Lodges and Recreational Facilities	<ul style="list-style-type: none">Up to max No. 42 single Storey Woodland Lodges within woodlandPicnic, BBQ and Play Areas in woodland pocketsPath network																												
	4a	Managed Woodland with SUDs	<ul style="list-style-type: none">Existing woodland retained and managed2 SUDS attenuation areas:<ul style="list-style-type: none">Area 1 – treatment of surface water from upgraded section of Pier Road and adjacent car parkArea 2 – treatment of surface water from reconfigured Pierhead Destination																												
*Existing Boat Moorings	5	Pierhead Visitor Destination	<ul style="list-style-type: none">Apartment Hotel (max 60 bedrooms,Leisure pool / WaterparkRestaurant/Bar (max 150 sqm, incorporated into aparthotel/water park)Visitor Hub indoor rides, storage & office uses,																												
	6	Visitor attraction and carpark	<ul style="list-style-type: none">Details subject to future planning																												
	7	Multi-User Public Realm	<ul style="list-style-type: none">High quality hard landscape public realm with capacity for temporary visitor attraction uses (small scale kiosks for visitor experience e.g. cafe)																												
Zone C: Pierhead	8	Ancient Woodland Boundary	LEPO Boundary - Area Designated Ancient Woodland																												
	9	Managed Woodland	<ul style="list-style-type: none">Existing paths upgradedExisting woodland retained and managed																												
	10	Staff & Service Area	<ul style="list-style-type: none">Deliveries, storage, management, welfare and security uses (8m max height)																												
	11	Boathouse	<ul style="list-style-type: none">A boathouse c95 sqm for storage of equipment and operation of water-based activities																												
	12	Buffer Zone	<ul style="list-style-type: none">12m standoff between existing dwellings at Drunkimmon Gate and proposed developmentNo development																												
Zone D: Boathouse & Staff Area	13	Heritage	<ul style="list-style-type: none">Woodbank House conserved and converted into Holiday ApartmentsWoodbank House ancillary buildings (including stables and bath) conserved and converted into 6 no new self catering holiday propertiesWoodland planting extended																												
	3d	Visitor Accommodation	<ul style="list-style-type: none">Up to 37 new Countryside Lodges within existing fieldPath networkUp to 30 new Woodland Lodges within woodlandUp to 17 new Boathouses within woodland																												
Zone E: Woodbank			<table><thead><tr><th colspan="2">WOODBANK PARKING SPACES</th></tr><tr><th>Location</th><th>No.</th></tr></thead><tbody><tr><td>Woodbank House</td><td>23</td></tr><tr><td>Woodbank Lodges*</td><td>23</td></tr><tr><td></td><td>103</td></tr><tr><td>WOODBANK TOTAL</td><td>139</td></tr><tr><td colspan="2">*See Zone E Woodbank Section for Lodge Quantities</td></tr><tr><th colspan="2">WEST RIVERSIDE PARKING SPACES</th></tr><tr><th>Location</th><th>No.</th></tr><tr><td>Staff and services area</td><td>35</td></tr><tr><td>Pierhead accessible parking</td><td>99</td></tr><tr><td>Pierhead woodland parking</td><td></td></tr><tr><td>Station Square</td><td>132</td></tr><tr><td></td><td>WEST RIVERSIDE TOTAL 252</td></tr></tbody></table>	WOODBANK PARKING SPACES		Location	No.	Woodbank House	23	Woodbank Lodges*	23		103	WOODBANK TOTAL	139	*See Zone E Woodbank Section for Lodge Quantities		WEST RIVERSIDE PARKING SPACES		Location	No.	Staff and services area	35	Pierhead accessible parking	99	Pierhead woodland parking		Station Square	132		WEST RIVERSIDE TOTAL 252
	WOODBANK PARKING SPACES																														
	Location	No.																													
	Woodbank House	23																													
	Woodbank Lodges*	23																													
	103																														
WOODBANK TOTAL	139																														
*See Zone E Woodbank Section for Lodge Quantities																															
WEST RIVERSIDE PARKING SPACES																															
Location	No.																														
Staff and services area	35																														
Pierhead accessible parking	99																														
Pierhead woodland parking																															
Station Square	132																														
	WEST RIVERSIDE TOTAL 252																														
Overarching Components <small>(internal access, utilities and drainage to be confirmed at detailed design stage)</small>		New Car Parking																													
		Site Vehicular/Boat Access Points	<ul style="list-style-type: none">10 no vehicular access points1 no boat access point																												
		Indicative Pedestrian/cycle linkages (capable of use by emergency vehicles)	<ul style="list-style-type: none">As drawing																												
		Indicative Pedestrian/cycle linkages	<ul style="list-style-type: none">As drawing																												
		Monorail	<ul style="list-style-type: none">Station Square to Pierhead through Zones A, B and C (max height 3.5m rising to 5.5m above vehicular access roads)Monorail Stations in Zone A at ground level & Zone C in Apartment-HotelMonorail alignment subject to detailed design																												

