

## Project Proposal

Business Reference Number:	BRN 336582	FGS Case Number: (if known)	
Application name:	Pleasantfield Woodland Creation		

## Introduction

The Woodland Creation Operational Plan allows you to show that you have carefully considered all of the relevant impacts and effects that the work you are proposing might have on the environment, and where appropriate the measures you intend to take to mitigate any adverse effects.

The Operational Plan, including the issues log at Annex 2, can be used to record any pre-application work completed ahead of submitting your woodland creation application (e.g. discussions with stakeholders, site assessment results, etc.).

The Woodland Officer will take account of the details you have given in this Plan when they assess your application and it will also help them to decide on a score for your application.

## General Details

You must complete this Woodland Creation Operational Plan and submit it with your Forestry Grant Scheme Woodland Creation application.

The amount of supporting information you give will depend on the scale, location and nature of your application. You should give sufficient detail so that we can properly assess the work you propose. Your local Scottish Forestry (SF) [Conservancy office](#) will be able to provide you with further advice about this.

Please note that the Woodland Officer who will assess your application may request further information or clarification about the details you give in this Operational Plan, especially those that may have an environmental impact on the site.

***When you have completed your Woodland Creation Operational Plan, save the document to your computer and then upload to your on-line application.***

## Business Details

What type of entity is the business that is applying for grant?

To assist us monitor who is benefitting from our grant schemes, we would ask that you select one of the following business types that best describes your business entity:

- Farm Business – Owner
- Farm Business – Tenant
- Crofter – including Crofting/Grazing Committees
- Forestry Business
- Investor – including Private/Trusts/Pension Funds
- Mixed Rural Estate
- Small-scale Forestry Owner (your woodland ownership is less than 20ha)
- Conservation Company/Charity/NGO/Carbon Investor
- Developer
- Temporary Owner

Please select your most appropriate Business Type from the dropdown list:  
Investor - inc. Private/Trusts/Pension Funds

## General Assessment

The information in your Operational Plan should be based on a thorough assessment of the site. Please complete the following:

Describe the management objectives for the site.

The primary objective is:

- **To combat climate change through carbon sequestration**
- **To produce timber in the medium and long term through the establishment of productive broadleaved woodland**

Secondary objectives are:

- **To enhance the landscape through the establishment of a well-designed woodland**
- **To protect and enhance biodiversity values through the establishment of native woodland.**

Provide a description of the planting site.

### Context

The woodland creation proposal will be progressed through the Scottish Rural Development Programme. As part of the process a range of specific surveys have been completed and consultation with the local community has been undertaken. The information gathered during the

survey and assessment exercise has been used to inform the detailed designed proposals.

In addition to the Operations Plan, Components Table, Issues Log, CSGN Supporting Statement and Annex 1, the following documents are included in the application:

## Maps

Map 1	Location, Context and Views	1:20,000 scale
Map 2	Constraints and Opportunities	1:5,000 scale
Map 3	Woodland Design	1:5,000 scale
Map 4	Options and Operations	1:5,000 scale

## Appendix

Agricultural Impact Assessment

## Location

Pleasantfield lies in the countryside between Ayr and Dalrymple. The site is split by the Glasgow – Stranraer Railway Line, and by a disused branch line to Dalmellington, and it lies next to the C73 road which connects to the B7034 road (Ayr-Dalrymple).

See Map 1: Location & Context. The site's grid reference is NS 354160

## Extent

The proposed application site extends to 34.3 ha, and occupies three blocks.

- Cpt. 1 lies south of the active railway, and east of the disused line, and extends to 27.36 ha
- Cpt. 2 lies east of the disused railway, and extends to 6.0 ha
- Cpt. 3 lies between the C73 public road and the active railway, and extends to 0.94 ha

The grant application covers 32.6 ha, with the balance of land, comprising of 'excess' open ground, covering 1.7 ha.

Cpts. 1 and 2 are accessed via tunnels beneath the active railway, and cpt. 1 and 2 are connected via crossing over the disused railway. Cpt. 3 has direct access onto the public road.

## Land Use

The land has historically been used for stock grazing and silage production, having been rented out in recent years. As noted under 'Cultural Heritage' below, the southern/upper half of cpt. 1 was historically wooded for a time (until WWII at least).

The tables below set out the Land Capability for Agriculture and for Forestry for the property. In brief, the land is of high agricultural potential. The forestry classification suggests that the site is very suitable for a wide range of productive tree species.

LC – Agriculture		Location	Extent
3.1	Capable of consistently high yields of a narrow range of crops	Majority of cpts. 2 and 3, most of cpt. 1	65 %
3.2	Capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common	Eastern tip of cpts. 1 and 2	11 %
4.2	Capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops	Higher parts of cpt. 1	24 %

LC – Forestry		Location	Extent
F2	land with very good flexibility for the growth	All	100%

The surrounding land use is heavily dominated by productive pastoral agriculture, with some arable production. Woodland cover in the locality is very limited, and predominately comprises of broadleaf-dominated policy woodlands and small native woodlands. There has been very little in the way of woodland creation undertaken locally in recent years.

There is a scattering of farm houses and cottages in the area, including a handful in fairly close proximity to the site.

## Topography

The site lies on the north-western side of a ridge of higher ground which lies between Ayr and Dalrymple, on the eastern side of the Doon Valley.

The land slopes uniformly down from a highpoint of 98 m above sea level in the east of cpt. 1 to the public road (at ~60m above sea level), with gradients generally being less than 10%.

The single feature of topographic note is a slight gully occupied by a very minor watercourse, flanked by small knowes, in cpt. 1

The surrounding countryside is characterised by gently rolling topography.

## Soils

The soils maps indicates that the local soils are gleys

A brief soil survey has been carried out across the application area. In summary, the soils encountered are predominately well cultivated brown earths, with only limited signs of gleying in the main, with a significant depth of top soil, and good rooting depth. The soils are relatively free-draining, and support good earthworm activity.

## Drainage

The site is generally reasonably free-draining, although drainage in cpt. 1 is impeded near to the tunnel. The ground drains into the Carcluie Burn via tile drains, linear ditches and a small semi-natural watercourse (in cpt. 1). At the time of survey, all water features were dry. The Carcluie Burn drains into the River Doon. There is a small strip of land in cpt. 2 that is prone to flooding, most likely

as a result of the railway culvert being blocked

The River Doon has 'Good' overall water quality and supports salmon and trout fishing. While there is no flood risk within the site, lower sections of the Carcluie Burn have high incidences of flooding (SEPA, 2019).

## **Ecological Interest**

### Designations

There are no ecological designations covering the site, or anywhere in the locality. Two of the existing woodlands in the locality (Balsarroch Belts and Barrhill Mount) are Long established plantation origin woodlands (LEPO)

### Habitats

The site is overwhelmingly in improved grassland, and historically has been in arable production. Habitat diversity is very limited, as is focused on the watercourses and small pockets of gorse. Some margins, notably along the railway line, are demarcated by fragmented hedgerows and occasional individual trees.

Much of the surrounding land is similarly of limited biodiversity value, but the site adjoins the embankments of the disused railway which are clad in broadleaved scrub, and lies close to Balsarroch Belt, which is a locally significant, largely broadleaved, woodland.

### Fauna

Due to the paucity of its habitat interest, the site is very unlikely to be of value to any rare breeding birds, nor to have suitable habitat for rare or protected species. The site is used by foraging badgers, but no signs of setts were identified during the site survey. It is likely that badger setts are located by the disused railway

Brown hare and roe deer are likely to make use of the site.

## **Landscape Interests**

### Designations

There are no known landscape designations affecting the site

### Visual Analysis

The site is located with a landscape heavily dominated by pastoral agriculture, with limited enclosure. There is limited topographic variation, and the landscape has a pleasant, if bland and uniform appearance. Tree and woodland cover is limited, and is primarily of broadleaved character where present

Landscape Constraints:

- The site is clearly visible from the Glasgow - Stranraer railway line
- A small part of the site is visible from the C73 road
- The site is visible in parts from a scattering of houses in the locality

- The site has limited enclosure.
- The site has a pleasant, well-maintained appearance
- The site lacks any significant topographic features
- The site is crossed by a low voltage powerline

## Landscape Opportunities

- In general, the site is of low visual prominence
- Views onto the site are generally only onto small sections, and intervening bushes and trees limits wider visibility (notably from the railway.
- While there is limited woodland cover in the landscape, what cover there is is predominantly of broadleaved character.
- The scrub woodlands present along the railway lines, and Balsarroch Belt above, provide scope for visual integration of the new woodland
- No long distance views are available over the site, aside from Hillside Bungalow, to the east of cpt. 2

## Guidance

The site is located within the 'Ayrshire Lowlands' landscape area according to LCA (Land Use Consultants, 1998).

The Landscape Assessment' includes the following guidelines for Forestry and Woodland within the 'Ayrshire Lowlands' zone.

- *Encourage the establishment of new riparian woodlands along the minor watercourses (which are otherwise unobtrusive)*
- *There may be opportunities for the creation of new woodlands in the area of transition between the more productive parts of the lowland and the surrounding uplands. Where appropriate, therefore, adopt a planting strategy that emphasises the transitional character of the landscape and includes:-*
  - *Expansion/regeneration of native woodlands*
  - *Mixture of broadleaved and conifer species*
  - *Small to medium sized coupes to reflect the scale of the landscape*
  - *Retention of key views and open space links to higher ground*
- *Consider opportunities for new woodland planting in terms of:*
  - *The overall balance of woodland and open space*
  - *The importance of preserving less productive land which has high nature conservation values, e.g. mosses or herb rich grassland*
  - *The importance of key views and features within the landscape*
  - *Opportunities to provide screening of urban expansion areas*
  - *Opportunities to link isolated areas of woodland*

## Visibility

The site is not visually prominent, and public views of the site are generally restricted to limited areas of the site.

In proximity to the site, clear views are available from the railway line, and to a lesser extent from the C73 road, the B7034 road. Parts of the site are also visible from a few local houses, notably Hillside Bungalow

Key representative viewpoints are summarised in the table below:

Location	Distance	Description
(1) Passenger railway and C73 west of the site	10 -30 m	The C73 runs past the western edge of the site, parallel to the Glasgow –Stranraer railway line. Views onto the site from the railway line and adjacent road are filtered by hedges and scattered small trees on the boundary and at the edges of the railway.
(2) Hillside Bungalow (private house)	40 m	Hillside Cottage has panoramic views towards the Carrick Hills, Arran, and the coastal area around Ayr.
(3) Road junction of B7034 & C73, and B7034 southwards	210m plus	Agricultural sheds and trees and shrubs along the railway block views of the lower ground, but the higher parts of the site are visible, while the southern edge of cpt. 1 forms the skyline as viewed from a short stretch of the B7034
(4) Dalrymple	1,100 m	No views from Dalrymple due to intervening high ground.
(5) Ayr, north of the site	2,050 m	No views from Ayr or A77 north of the site.

These viewpoints are shown on Map 1: Location & Context.

## Cultural Heritage

A desktop based assessment was carried out, and historic environment and ancient monuments records were checked. The following records were contained within or close to the site.

Canmore ID/ HER no.	Feature	Grid. Ref	Constraints map no.	Notes
223794	hut	NS 3546 1621	1	associated with the railway
223773	signal box	NS 3572 1675	2	associated with the railway
299530/ 61914	plantation bank	NS 35631 15771	3	see text below

In addition, historic maps were checked, and they revealed that most of the southern/upper parts of cpt. 1 were in mixed plantation woodland at least between 1850 and 1950 (Referred to as Mount Plantation), as was land immediately south of cpt. 2.

The area within the circular plantation bank (site 3 above) appears to have been in rough pasture in the 1850's, with trees being planted on the bank itself; later maps show the area as being wooded.

## Public Access

There are no known public paths in the locality, and there are no signs of recreational use of the site. The population in the surrounding area is low.

## Services

Overhead low voltage powerlines cut across the northern and southern corners of cpt. 2, and the northern corner of cpt. 1

A Scottish Water pipeline crosses the western corner of cpt. 1.

A telecommunications cable runs along the southern side of the public road, on the edge of cpt. 3.

There is a narrow, hard-surfaced track for most of cpt. 1's border with the active railway

Provide details of discussions with neighbours, local communities and consultees. For Community Councils and neighbours please evidence who was contacted, date and method of contact used (e.g. meeting, leaflet drop, letter etc.) Where reasonable, you may just identify street names (e.g. larger urban areas).

As part of the application process, 12 households in the vicinity of the site have been provided with outline details of the proposed planting together with a copy of the woodland design map, as have Annbank and Coylton Community Council. For details on the single response received and proposed mitigation, please see Issues Log.

Also, at the very early stages of the design, early scoping was undertaken with South Ayrshire Council, Network Rail, and the Timber Transport Officer. See Annex 1 and Issues Log.

You must carry out a site-based assessment of soil and vegetation to match species choice with the particular site. Refer to [\(ESC-DSS\)](#) during this process.

List the site surveys undertaken to inform tree species selection. For example: soil survey, soil depth survey, vegetation survey.

The following surveys have been undertaken:

- Initial desktop survey (MHLS)
- Walkover constraints survey (MHLS)
- Walkover soils survey (MHLS)
- Walkover vegetation survey (MHLS)
- Landscape and viewpoint analysis (MHLS)



Please indicate the climatic suitability of the site for the tree species you have chosen. Use the [Scottish Forestry Map Viewer](#) - see the 'FGS Climatic Site Suitability' data.

## Suitability for Woodland Creation

In terms of Land Capability for Forestry, the area lies within land classified as F2 (Land with very good flexibility for the growth and management of tree crops).

The good growth of coniferous and broadleaved trees in adjoining forests suggests that the land should allow the establishment of a wide range of productive broadleaved species, and that the land can produce timber in the medium-long term. This is supported by the ESC analysis results below.

## Ecological Site Classification (ESC)

An ESC analysis was undertaken based on two different locations within the site. The limited number of ESC sample points reflects the relatively small scale of the site, and the very uniform conditions in terms of soils, vegetation, and reflecting a variety of conditions.

The analysis has been carried out using the ESC v4. The default settings for soil moisture (SMR) and soil nutrient (SNR) regimes have been accepted. No management interventions were used.

Location	ESC1 NS 354158 upper part cpt. 1	ESC1 NS 357166 lower part cpt. 2
<b>Exposure</b>	DAMS 15	DAMS 14
<b>SMR</b>	Moist	Moist
<b>SNR</b>	Ritch	Ritch
<b>Management Options</b>	None	None
<b>Soil type</b>	cultivated gley	cultivated gley
<b>Vegetation</b>	Improved grassland	Improved grassland
<b>Species</b>		
Scots pine	<i>v. suitable</i>	<i>v. suitable</i>
Downy birch	<i>suitable</i>	<i>suitable</i>
Silver birch	<i>v. suitable</i>	<i>v. suitable</i>
Norway maple	<i>v. suitable</i>	<i>v. suitable</i>
Sycamore	<i>v. suitable</i>	<i>v. suitable</i>
Beech	<i>v. suitable</i>	<i>v. suitable</i>
Sessile oak	<i>suitable</i>	<i>v. suitable</i>
Sweet chestnut	<i>suitable</i>	<i>suitable</i>
Aspen	<i>v. suitable</i>	<i>v. suitable</i>
Alder	<i>suitable</i>	<i>suitable</i>
Gean	<i>suitable</i>	<i>v. suitable</i>

Forecast yield classes range from selected species in their potential locations include:

- Sessile oak – YC 6
- Silver birch – YC 7
- Downy birch – YC 6

- Sycamore – YC 10
- Beech – YC 8
- Aspen – YC 10-11
- Gean – YC 8-10
- Sweet chestnut – YC 8
- Scots pine - YC 11-12

In addition, an ESC analysis was undertaken to provide guidance on suitable NVC native woodland types.

Location	NVC1 NS 355161 near the gully	NVC1 NS 354158 high point
<b>Exposure</b>	DAMS 14	DAMS 13 (moderate)
<b>SMR</b>	Moist	Moist
<b>SNR</b>	Ritch	Ritch
<b>Soil type</b>	cultivated gley	Brown earth
<b>Vegetation</b>	Improved grass	Improved grass
<b>NVC Woodland Type</b>		
W4 Birch with purple moor grass	<i>marginal</i>	<i>marginal</i>
W6 Alder with stinging nettle	<i>v. suitable</i>	<i>v. suitable</i>
W7 Alder-ash with yellow pimpernel	<i>suitable</i>	<i>suitable</i>
W9 Mixed broadleaved with dog's mercury	<i>suitable</i>	<i>suitable</i>
W10 Mixed broadleaved with bluebell/wild hyacinth	<i>suitable</i>	<i>suitable</i>
W11 Oak-birch with bluebell/wild hyacinth	<i>suitable</i>	<i>suitable</i>

The ESC results suggest that there is scope for a wide range of NVC native woodland types, as long as they are matched to site conditions.

**Woodland Strategy: Describe how your proposal fits with the Local Authority woodland strategy.**

See CSGN Supporting Statement.

**In areas where wildfire is a risk to the woodland describe how you will address the risks and how this has been considered in the woodland design. Refer to [Building wildfire resilience into forest management planning](#) for information.**

There is a low risk of grass fires during the early establishment period, but the site lies next to an active railway line.

The risk of grass fires will be minimised by a combination of effective weed control around the individual trees, and by the cutting of grass rides in autumn.

If applying for the productive conifer options please use the Timber Transport Forum – [Agreed Routes Map](#) and confirm the sites timber route classification i.e. agreed, consultation, severely restricted, excluded or no classification.

Cpt. 1 can be accessed from the C73 via short length of track and a small tunnel under the active railway. Due to the constraints imposed by the tunnel's size, it is likely that management access will be taken via cpt. 2, crossing the disused railway on an established access route. Network Rail have confirmed that once the disused railway line is classified as closed (which is programmed within the next two months) access can be taken across the line.

Cpt. 2 has access to the C73, via track that passes under the active railway, and serves High Balsarroch Farm.

Cpt. 3 has direct access from the C73.

The C73 is shown as an 'excluded' route on the Timber Transport map. However, the stretch from the sites main access point (at Dalrymple Junction) southwards to the B7034, appears to have no impediment to use for timber haulage, and the junction onto the B7034 is wide, with good sightlines.

The Timber Transport Officer has been consulted, with the proposals that the C73 southwards to the B7034 is used. No response was received at the scoping stage.

In response to the statutory consultation, the Ayrshire Road Alliance noted that there were no visible signs of weak structures on the proposed route, but that passing places would be required. In line with the ARA suggestion, the owners will agree a Timber Management Plan and infrastructure requirements prior to any significant harvesting occurring.

If applying for the Native Woodland options please use the 'Native Woodland Habitat Network' map in the 'FGS Target and Eligibility' folder on the [Scottish Forestry Map Viewer](#) and describe the habitat network zones your application is within i.e. primary, secondary or out with the habitat network.

There is core native woodland at Balsarroch Belt, adjacent to cpt. 1, and the majority of all sites lie within the primary or secondary NWHN zones.

## Sensitive Areas & Potential Impacts

### **Sensitive Areas:**

- National Nature Reserve or Site of Special Scientific Interest (SSSI)
- National Park
- World Heritage Site
- Scheduled Ancient Monument
- National Scenic Area
- Natura sites – Special Area of Conservation (SAC) or Special Area of Conservation (SPA)
- Land on which there is a Nature Conservation Order
- Deep peat soil

### **Potential Impacts:**

- Population & Human Health
- Biodiversity
- Land, Soil, Water, Air, Climate
- Material Assets, Cultural Heritage, Landscape

List any **Sensitive Areas** and any **Potential Significant Impacts** relating to your site, including appropriate mitigation (**refer to Annex 1**). Detail any surveys completed to inform this assessment.

*For complex cases the Issues Log (**Annex 2**) can be used to record this instead.*

*(Scotland's Environment Web Land Information Search*

*<https://www.environment.gov.scot/maps/land-information-search/> is a useful resource which may help you identify some of the constraints within your site).*

Refer to Annex 1 and Issues Log (below) for an evaluation of the impacts and details of appropriate mitigation.

***Please ensure that any maps or survey reports that have been produced to support your application are uploaded to the online application system.***

## Management Operations

### **All Applications**

Having assessed the site please provide information about how you are going to establish the new woodland.

**Ground Preparation:** Describe the method that you will use, including dimensions. Where you propose multiple ground preparation techniques then you must identify these on a map.

Site specific issues affecting the proposed cultivation and drainage proposals include:

- The site contains small areas of rush vegetation which will need to be suppressed, while the dominant cover of improved grasses will compete strongly if left unchecked
- Some areas suffer from impeded drainage although most of the ground has a reasonable gradient
- Soil nutrient status is good
- Soil types present include brown earths in the main, with gleyed soils being of limited extent
- The site contains a very minor watercourse and some open ditches (all dry at time of survey)
- Gradients are limited

All ground preparation will comply with the Forestry Commission guidelines 'Cultivation of Soils for Forestry' (Bulletin 119) and with the recently issued 'Cultivation guidance for upland productive woodland creation sites'

- The aim is to provide a suitable planting location for tree establishment and growth while minimizing visual and hydrological impacts
- Most of the ground will be prepared using a continuous moulder (Enviro-moulder) with small areas being individually mounded using a tracked excavator. The depth of mounds will be kept to a minimum.
- The application of pre-planting herbicides will be considered
- Internal fence lines will be removed prior to cultivation
- All existing shrubs and trees will be retained

**Drainage:** Identify any existing drains/watercourses and provide information relating to new drains.

The site description section provides details on drains and watercourses present within the site, as well as wider catchment areas.

While only a very small portion of the site suffers from impeded drainage, a limited amount of drainage will be undertaken to assist in tree establishment and to provide dry conditions for maintenance and management access purposes.

The cause of the flooding of a short strip of land by the railway in cpt. 2 will be investigated, and Network Rail will be contacted if the cause is found to be a blocked railway culvert.

All drainage works will comply with the 'Forests and Water' guidelines (5<sup>th</sup> Edition). Specifically:

- Existing drains may be cleaned out as required to restore their functionality
- New drains will not exceed 2 degrees angle of slope
- New drains will terminate short of watercourses
- Drain ends will be channelled upslope at their termini
- Silt traps will be constructed to prevent sediments reaching the watercourses
- The drainage system will be constructed to avoid having any detrimental impact on areas of deep peat, sensitive habitats, badger setts, private water supplies and features of archaeological interest
- Drainage works will be completed in tandem with other ground preparation works

The neighbouring landowner is concerned about the potential impact on his drainage; following pre-implementation discussions, some open drains may be created to prevent any negative impacts arising. Any such drains will comply with the aforementioned guidance.

**Protection:** Describe how the site will be protected. For example: fencing, tree guards/shelters and pest management.

Append a deer management plan if required. You should refer to the [Deer Management Best Practice Guide](#) and the [Joint Agency statement on deer fencing](#). You may be asked to submit a checklist from the Joint Agency guidance (May 2010).

Much of the land adjoining the site will continue to be grazed by cattle, while other boundaries are shared with the active and disused railways, and the public road. It is understood that the fences by the boundary with Network Rail's land is set within Network Rail's land, and that it is their responsibility to maintain these fences. The fenceline are currently in very poor condition, and are engulfed by shrub growth

There are known to be hares, rabbits and roe deer in the locality. With the improved grass vegetation, it is likely that there will be very high numbers of voles when grazing ceases

Nearly all of the march fences are in relatively poor condition, while the southern boundary of cpt. 2 is demarcated by a stone dyke, with an old post and line wire fence set within Pleasantfield's land.

Virtually all of the proposed planting is broadleaved, and as such will be vulnerable to deer and rabbit and vole damage, and consequently will require appropriate protection

Due to their scale, it will be considerably more cost-effective to erect a deer, stock, and rabbit proof fence around cpts. 1 and 2 than to use tree shelters.

Cpt. 1 is of small size, and is already stock-proof. It is proposed to use individual tree shelters to protect the planting in this cpt., as this will be the most cost-effective means.

The fencing requirements are:-

Option	Cpt.	Nodes	deer fence (m)	rabbit fence (m)	pedestrian gate (no.)	deer gates (no.)
native	1	A-B	415	415	A2	A3
b'leaves	1	B-C-A	1,920	1,920	A1	A
b'leaves	2	D-E-F-D	1,495	1,495	D, E1	D1, E2

The intention is to offer low-key public access for walkers, cyclists, and horse-riders. Self-closing gates, suitable for these user groups, will be fitted at both public entrances, and at the crossings of the disused railway line. Self-closing gates are required at the railway line crossing to allow for longer, looped routes to be taken through the site. In addition, self-closing gates will provide greater security against deer incursions, which would be a possibility if only management gates were used.

The use of the site for recreational purposes is supported by South Ayrshire Council's consultation response.

In addition, all broadleaved trees will be protected by vole guards or tree shelters. This includes the trees planted in excess of the option requirements. The figures for the **option requirements** are set out below.

All tree shelters will be made of non-plastic biodegradable material.

Cpt.	Planting Mix	Species	Area	%	Density	Vole Guards	1.2m shelters	0.6m shelters
<i>Native Broadleaves Option</i>								
2	d) Native	all bar pine	2.01	95	1600	<b>3,056</b>		
<i>Broadleaves Option</i>								
1	a)Oak	oak	4.98	100	3100	15,438		
1	a)Oak	others	4.98	100	2500	12,450		
1	b)Sycamore	All except beech	9.96	90	2500	22,410		
1	b)Sycamore	beech	9.96	10	3100	3,088		
1	c) Beech	beech	0.53	100	3100	1,643		
1	d) Native	all bar pine	1.57	95	1100	1,641		
2	a)Oak	oak	1.89	100	3100	5,859		
1	a)Oak	others	1.9	100	2500	4,750		
2	d) Native	all bar pine	0.37	95	1100	387		
2	e) Shrubs	all	0.39	100	1100	429		
3	d) Native	all bar pine	0.45	95	1100		471	
3	e) Shrubs	all	0.22	100	1100			242
<b>Total</b>						<b>68,095</b>	<b>471</b>	<b>242</b>

## Planting; please provide the following:

- Species to be planted and percentage of each. (Please use the components area table to record hectares planted).
- Describe the nursery stock and planting method to be used.
- Confirm if you will be planting vegetatively propagated Sitka spruce.
- For native woodland creation specify the [Seed Source Zone](#).

## Woodland Design

The proposed planting species mixes, and their distribution have been chosen taking into consideration the existing site conditions, biodiversity and landscape issues and the stated objectives.

This planting proposal uses the 'Native Broadleaves' and 'Broadleaves' Woodland Creation Options and five planting mixes, which are summarised below.

Design features include:

- The use of broadleaved species almost in entirety
- The use of oak and sycamore as the main productive species
- Creating a beech roundel feature on the site of an historic feature.
- The use of native mixes to build on the existing native woodland resource by the railway and within Balsarroch Belt
- Leaving a wide swathe of open ground nearest to Hillside View, and establishing low-growing cover on the woodland edge
- Breaking up the woodland by creating a ride system to aid management and informal recreational access.

## Planting Specifications

- Broadleaved stock will generally be transplanted or undercut stock, 45-60cm tall
- Scots pine will be 2-3 year old transplanted or undercut stock, 20-40cm tall
- Native broadleaved plants will be grown from seed collected from a suitable provenance (108, 107 and 106) where possible; where plants of these provenances are not available for the native woodland options, alternative substitutes will be agreed with Scottish Forestry
- Trees and shrubs will be planted using a 'T' or 'L' shaped notch

### A) Oak Mix 13.75 ha (all 'Broadleaves' Option)

Sessile oak	50%
Aspen	25%
Silver birch	10%
Gean	10%
Sweet chestnut	5%

- This mix will be planted at 2m x 1.6m spacing to achieve 3,100 stems per hectare at year 5
- Vole guards will be fitted to all plants, but the application only covers vole guards for oak at 3,100 plants per ha, with the others being at 2,500.
- Oak will be planted in an intimate mix with the other species, with a concentration of gean and aspen on the visible edges of the mix
- The edges of mixes A and B will be feathered to aid visual integration



## **B) Sycamore Mix** **9.96 ha (all 'Broadleaves' Option)**

Sycamore	50%
Aspen	15%
Beech	10%
Norway maple	10%
Gean	5%
Downy birch	5%
Sweet chestnut	5%

- Most species will be planted at 2m x 2m spacing to achieve 2,500 stems per hectare at year 5, while beech will be planted in single species groups) at 3,100 per ha (2m x 1.6m)
- Vole guards will be fitted to all plants, beech at 3,100 per ha, and all other at 2,500 per ha
- Sycamore, beech, Sweet chestnut, and Norway maple will be planted in single species groups, with birch mixed randomly through the beech and maple to provide some initial nursing. Once established, the birch may be selectively thinned out.
- Gean and aspen will be planted in small single species groups, on internal and external margins
- The edges of mixes A and B will be feathered to aid visual integration

## **C ) Beech Mix** **0.53 ha (all 'Broadleaves' Option)**

Beech	100%
-------	------

- This mix will be planted on the site of the old roundel, in the higher part of cpt. 1
- No planting will be undertaken within 4m of the old embankment
- All trees will be planted at 2m x 1.6m spacing, to achieve 3,100 stems per ha at year 5

## **D) Native Mix** **4.4 ha (2.39 ha 'Broadleaves' and 2.01 ha 'Native Broadleaves' Option)**

(based on W9/W7)

Silver birch	25%	drier ground
Downy birch	15%	damper ground
Sessile oak	25%	throughout
Gean	5%	throughout
Alder	10%	damper ground
Scots pine	5%	drier ground
Rowan	7.5%	on margins
Hazel	7.5%	on margins

- This mix will be planted in cpt. 3 and on some visible margins of cpts. 1 and 2, as well as around the small gully in cpt. 1
- Most trees will be planted at an average of 2m x 2m spacing, to achieve 2,500 stems per ha at year 5. It is accepted that this is higher than is required of planting within the 'native broadleaves' option (1,600 per ha) and the 'broadleaves' option (1,100 per ha), and vole guard numbers will be restricted to these densities
- The exception to the above densities is in cpt. 3, where plants will be at 1,100 plants per ha
- Species will be planted in small single or two species groups

**E) Shrub Mix** **0.61 ha (all 'Broadleaves' Option)**

Hawthorn	40%	drier ground
Blackthorn	30%	damper ground
Hazel	30%	throughout

- This mix will be planted on some visible margins close to the road and nearby houses
- Most trees will be planted at an average of 2m x 2m spacing, to achieve 2,500 stems per ha at year 5. It is accepted that this is higher than is required of planting within the 'native broadleaves' option (1,600 per ha) and the 'broadleaves' option (1,100 per ha), and vole guard numbers will be restricted to these densities
- The exception to the above densities is in cpt. 3, where plants will be at 1,100 plants per ha
- Species will be planted in small single or two species groups

**Open Ground** **3.35 ha grant aided** (plus 1.7 ha open 'other land')

Open ground will be retained for the following reasons:

- to prevent encroachment towards the railway line and road
- to limit impact on neighbours surroundings
- to respect service line wayleaves
- to enhance riparian margins by watercourses
- to soften woodland margins
- to create accessible rides for future woodland management and public access

**Other Land** **1.7 ha**

Other land comprises of 'excess' open ground, which for the most part will be allowed to develop naturally. Consideration will be given to the cutting of rides, and the roadside verge in cpt. 2

**Maintenance:** Describe the maintenance regime for the site (e.g. monitoring, weeding, beat-up, etc.).

- Access rides and the main woodland perimeters will be cut annually in autumn.
- All fences and gates will be monitored regularly for signs of intrusion and maintained in a stock/deer proof condition
- All plants and vole guards will be maintained in a wind firm position
- All trees will have a 1m<sup>2</sup> spot maintained in a substantially weed free condition until they are established - this will be achieved by the applications of systemic and residual herbicide and by hand weeding as necessary
- Plants will be monitored for signs of disease, nutrient deficiency and damage, and appropriate action taken as necessary
- Replacement planting will be undertaken to ensure that the required stocking densities are maintained until year 5
- Tree shelters, stakes, and vole guards will be removed when the trees are fully established
- Drains will be maintained in a functioning condition
- The site will be routinely monitored to ensure that the specifications are being achieved, and in order that any unforeseen problems can be identified and dealt with at an early stage

**Fertilisation:** Where applicable, describe the proposed fertiliser regime e.g. application rate, timing, etc.

The use of fertiliser is not anticipated.

**Other:** Please include any other silvicultural detail here.

### Public Access

The population level in the locality is low, and there are no known recreational routes in the locality.

The proposals include for the potential provision of low-key recreation, aimed at local residents.

The woodland design includes for a ride system that can be used for recreational purposes, with a connection between the two entrance points, with self-closing gates allowing access at these points, and at the crossing point on the disused railway.

Consideration will be given to annual cutting of the rides.

Public use will not be actively promoted; no car parking facilities will be created. Signage will be erected to encourage responsible use.

## Small Woodlands Loan Scheme (woodlands up to 50 hectares only)

**Please read this section if you are interested in receiving a loan based on the capital items in your FGS contract. To confirm your interest in receiving a Loan, you must sign the declaration at the foot of this section.**

The Small Woodlands Loan Scheme (SWLS) is designed to assist landowners in implementing woodland creation projects by releasing early capital. The following thresholds apply:

- The maximum Woodland Creation proposal size, approved in your FGS contract, eligible for loan support is 50 hectares and we will pay you a Loan of 50% of the value of the capital items in your FGS contract (not including CSGN supplement values where this is present), rounded up to the nearest £100, up to a maximum value of £40,000 per FGS application.
- To be eligible for a Loan payment, the maximum Woodland Creation proposal grant value, approved in your FGS contract, must be no greater than £250,000.

The loan is recovered by deducting the value from your FGS capital claim.

If both your FGS and Loan applications are successful you will be provided with a loan offer that will detail the value of the loan and set out the terms of the loan. You will be required to sign and return the loan agreement with your FGS contract to accept the loan offer. By signing here you are expressing an interest in receiving a loan however funding is not guaranteed. Funding will be committed at FGS contract approval and is dependent on available budget at that time.

If you wish to be considered for a loan, please first read the SWLS guidance on our [website](#) and then sign the following declaration:

- I/we are applying for a Small Woodlands Loan on the capital items contained in the FGS application associated with this Operational Plan
- I/we confirm that our woodland creation proposal is less than 50 hectares
- I/we confirm that we have no Small Woodlands Loan Scheme agreements active at this time
- I/we confirm that should I/we be successful in obtaining a Loan, then I/we will only make one claim for our FGS capital works which, in accordance with FGS terms and conditions, will be once all the capital works, as laid out in the FGS contract's schedule of works, have been completed.
- I/we understand that by signing this declaration, I/we am/are only stating that I/we am/are interested in receiving a loan and, as such, meet all the eligibility criteria required as laid out in our guidance and our Loans terms and conditions.
- I/we understand that by signing this declaration, I/we acknowledge that my/our success in receiving a loan is subject to the funds available in any given year and should there be no dedicated funding available for the SWLS, I/we will continue with the FGS application and will fund the capital works of that application under the terms and conditions of the FGS.
- I/we have the necessary consents/permissions to sign this loan application declaration as evidenced on the administrative system, RP&S, to which this Operation Plan and associated FGS application relates.

# Woodland Creation Operational Plan

- I/we have read, understand and hereby acknowledge that Scottish Ministers may use any of my personal data contained in or relating to this loan application in accordance with the terms of [Scottish Forestry's privacy notice](#) and the [Rural Payments and Services Privacy Policy](#).
- I/we, on behalf of the business applying for both a FGS application and a Small Woodland Loan, hereby sign this declaration:

<b>Signed:</b>		
<b>Print:</b>		
<b>Date:</b>		
Would the project have gone ahead without a loan? Please delete as appropriate. (this will not affect your application for loan)		<b>YES / NO</b>

Please do not sign this declaration if you do not wish to apply for the SWLS, but please continue to complete the other sections as these are required for your FGS application. Currently all correspondence relating to the SWLS will be via email. Please ensure the email address held in RP&S is correct prior to submitting your application.

**Ends section on SWLS**

## Annex 1

### **Assessment of Potential Impact**

Please use the following guidance to assist with describing any potential significant impacts and any mitigation which is proposed:

- **Population & Human Health:** Detail any discussions which you have had with neighbours, local communities or other stakeholders and explain how this has influenced your proposal. Explain what public access is currently undertaken on the site and what provisions you plan to make to continue or improve this in adherence with the [Scottish Outdoor Access Code](#).
- **Cultural Heritage:** Indicate what survey work has been undertaken and describe how archaeology will be protected.
- **Soil:** Provide an accurate assessment of the soil on site and describe how you will manage the quality of the soil including any effects from erosion and compaction.
- **Water:** Detail the nature of the likely impacts on water bodies or water supplies from your activities and how you will mitigate these impacts.
- **Air:** Detail the nature of the likely impacts on air quality or the impacts on light provision.
- **Biodiversity:** Detail the nature and extent of high value habitats such as those listed on the [Scottish Biodiversity List](#) and describe how you will protect these habitats. Detail the nature of the likely impacts on wildlife from your activities and how you will mitigate these impacts. Refer to [European Protected Species](#) for guidance.
- **Landscape:** Provide details of how the impact on the landscape has been assessed and how the application has been designed to minimise any impact.
- **Climate:** Provide details on the vulnerability of the project to climate change and how this impact was mitigated.
- **Land:** Does your application have an impact or an effect on prime agricultural land (defined as land use classes 1, 2 and 3.1), or the local land use balance with agriculture? Detail the nature of the likely impacts on agriculture from your activities and how you will mitigate these impacts and integrate with forestry. You should refer to the [Guidance About Woodland Creation on Agricultural Land](#), located in the further information and technical guidance section of the [FGS woodland creation](#) web page.
- **Material Assets:** Identify and describe all built and natural assets that are relevant to the site and which could be adversely impacted by the proposal e.g. utilities, minerals. Describe any mitigation proposed for these features.

### Annex 2 Issues Log

Issue (include date and raised by)	Applicant's Comments	SF Comments	Agreed Mitigation	Status (Open, Closed)	Significance of Impact (High, Medium, Low)
<i>e.g. Archaeology – Scheduled Monument at NS123456. HES, 23/10/16.</i>	<i>e.g. Scheme design includes OG to buffer Scheduled Monument as per UKFS. John Smith, 25/10/16</i>	<i>e.g. Applicant has taken on board HES feedback and designed the scheme in accordance with best practise. Susan Jones, 27/10/17.</i>	<i>e.g. 20 metre OG buffer around SAM.</i>	<i>e.g. Closed</i>	<i>e.g. Low</i>
<b>Population &amp; Human Health</b>					
<p>Consultation undertaken with Community Council and 12 near neighbours - one respondent (Mr Kerr – neighbouring farmer) Issues not discussed in sections below include</p> <ul style="list-style-type: none"> <li>public access- concern over increased public use</li> <li>use of road for implementation</li> </ul>	<p>Confirmed that potential path network will be installed, but site is relatively remote from population centres so no great usage, other than by locals, envisaged. Signage will be erected to encourage responsible use No car parking facilities will be created Liaison meeting to be held with Mr Kerr, but access will be maintained at all times, road will be treated with respect, and road maintenance agreement will be as per the current situation</p>	<p>Public access was supported by the Local Authority in consultee comments.</p>		Closed	Low
<b>Cultural Heritage</b>					
<p>All ground has been improved The single feature present (plantation embankment) is visible only on aerial photograph.</p>	<p>Embankment will be set within open ground (10m width), and former plantation picked out in the design</p>	<p>SF also consulted with WoSAS to ascertain that the allocated buffer was sufficient.</p>	<p>The intended 10m buffer is sufficient to protect the plantation bank from damage.</p>	Closed	Low
<b>Soil</b>					
<p>no issue no peat present</p>			<p>Cultivation to adhere to SF guidelines</p>	Closed	Low
<b>Biodiversity</b>					
<p>no significant issue – land is all improved site adjoins LEPO and native woodland Neighbour (Mr Kerr) is concerned about proposals encouraging foxes, badgers and other vermin</p>			<p>Large majority of woodland will be native broadleaved, and will bolster existing forest habitat network  Agreement to work with Mr Kerr on legal control of vermin</p>	Closed	Low

<b>Landscape</b>					
Mr Kerr owns Hillside Bungalow, and he expressed concerns over impact on views	Reply sent to Mr Kerr, including 'Mapmaker Prospect' visual perspective showing impact on views. Views to Carrick Hills will be lost in the medium/long term, but there will be no impact on views to Arran and Ayr		Planting will be held back from road (which is aligned with main view from the house) by 30-40m, and beyond that a low-growing/shrub edge will be created Planting will be held back ~75m from the house	Closed	Low
<b>Material Assets</b>					
Network Rail have confirmed imminent change that will permit management access to be taken across the disused railway line. No feedback received from Network Rail on planting per se  Roads Dept. and TT Officer consulted re use on non-designated road- no response received			Access to the site will primarily use northern entrance.  Planting held back from active railway line  C73 road south to B7034 has no constraints. Timber haulage will be some time off, and on a small scale Consultation will be undertaken prior to timber haulage	Closed	Low
<b>Water</b>					
no significant issue Neighbouring farmer (Mr Kerr) expressed concern over possible drain blockage affecting his fields			As agreed, meeting will be held with neighbour prior to works commencing, and drainage requirements will be accommodated into the design to ensure that there is no negative impact on drainage above the site. This is likely to involve the excavation of collector drains	Closed	Low
<b>Air</b>					
no significant issues				Closed	Low
<b>Climate</b>					
no significant issues				Closed	Low
<b>Land</b>					
Majority of land is LCA 3.1 - 'sensitive'	SGRPID have confirmed that conversion to woodland will not have a significant effect on the local agricultural economy (L Yeates 13.01.22).			Closed	Low