Forestry and Land Scotland - South Region

Bellamore

Land Management Plan

Approval date: ***

Plan Reference No: ****

Plan Approval Date: *****

Plan Expiry Date: ******

We manage Scotland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.

The mark of responsible forestry

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EIA Determination form if required

Contents

1.0 Summary of Proposals

This plan covers the area of Bellamore farm, an acquisition by FLS which initially covered 530Ha. This area runs contiguous to the White Clauchrie LMP area (3,152Ha) and will be amalgamated with the larger plan at the next review date (expiry 2026). Bellamore farm lies at the head of a valley which contains agricultural grazing with some small plantation areas of both conifer and broadleaves, along with riparian broadleaves. Markhill windfarm and substation lies to the immediate south of the plan, the White Clauchrie LMP area to the east, and private forestry to the north and west of area. The farm can be accessed by light vehicles from the west via the village of Pinwherry, and heavier vehicles from the east via the existing FLS White Clauchrie Block.

The initial area will be reduced by the sale of the farm steading and surrounding fields. The local community at Pinwherry requested the property be considered for a community asset transfer (CAT), however this was not taken past the first stage and the site will be sold on the open market. The area of this sale is shown on Map 1 in the Southwest. Mark farm, which is a private residence and does not appear to be continuously occupied, is entirely surrounded by the Bellamore farm area.

There will be limited productive conifer planted, due to the nature of the site, existing access/roading, topography and coupe viability. Productive conifers will be confined to the former agricultural fields which were drained and grazed. There is an apparent large riparian corridor which already contains many mature native broadleaf species and these will be encouraged to colonise further areas. This will also provide a habitat network connecting down the valley to the south west. The remaining area contains a variety of priority open habitats and deep peat which will be enhanced and protected with the management of grazing stock from the area.

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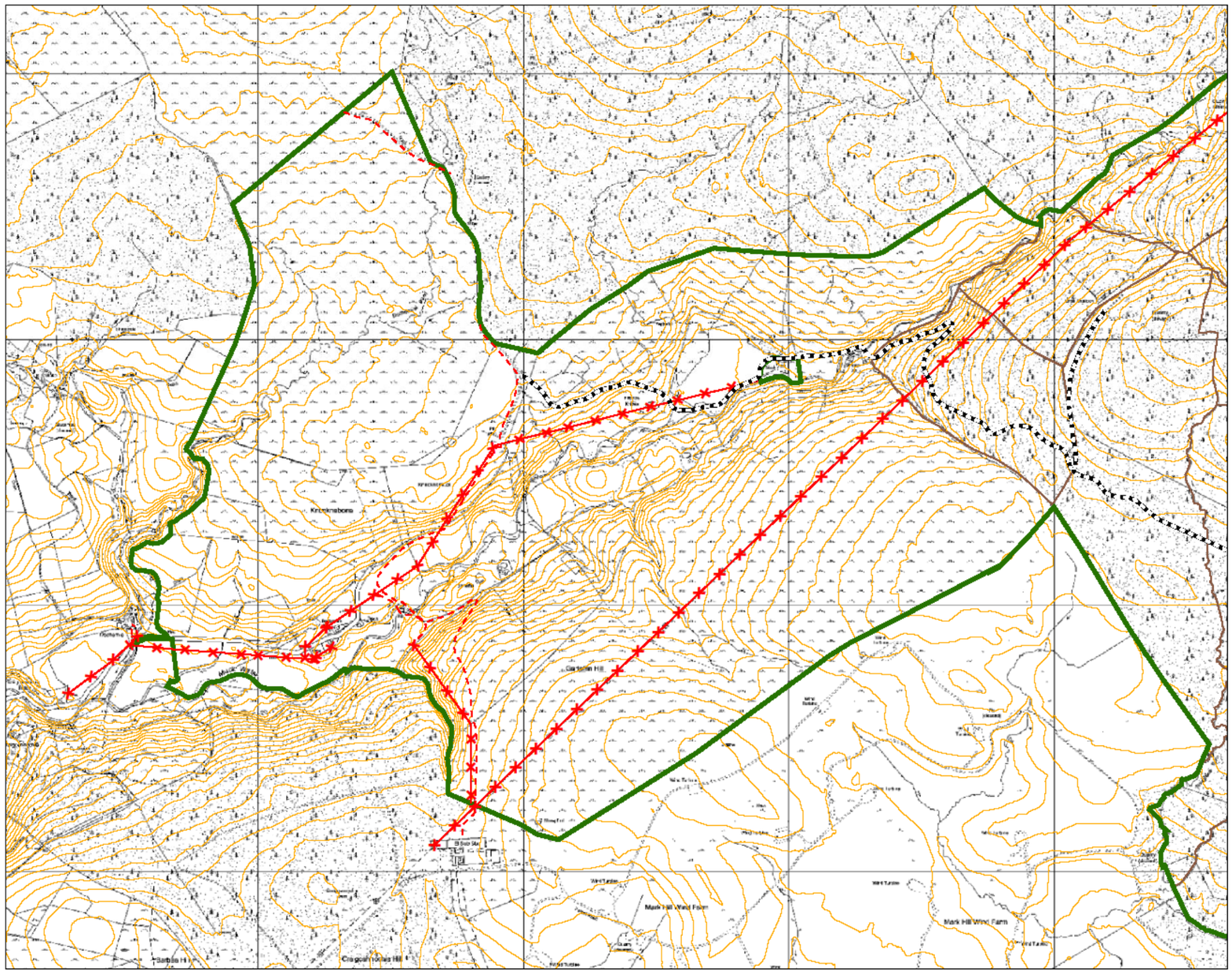
Map 1 - Context

Author: Euan Wiseman

Scale @ A2: 1:10,000

Date: 04/09/2019

- Forest Roads
- Overhead powerline
- Underground powerline
- Blocks
- Management Coupes



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2.0 FCS Regulatory Requirements

2.1 Summary of planned operations

The operations in the first 10 years will consist of:

Planting and establishment operations to include productive conifer productive broadleaf, enrichment planting and protection of existing natural regeneration to enhance additional natural colonisation of native species.

Felling operations will fall into 2 categories:

- Removal of conifer seed sources from broadleaf, riparian, and open areas.
- Clearance for utility wayleaves.

To allow for bog restoration in higher open areas, some drain blocking is planned subject to further analysis of peat and availability of funding for this work.

A detailed operational plan is given in section 9.7

2.2 Proposed felling in years 2019- 2029

There is no proposed large scale felling within the Bellamore area. There will be small areas of felling inside the riparian-broadleaf zones and around the artificial duck ponds to remove non-native conifers. The clearance for utility wayleaves will be conducted under planning permission and will be submitted separately to the relevant planning authority.

2.3 Proposed thinning in years 2019-2029

No thinning is planned for the scope of the plan. There will be removal of mature and immature conifers from areas that have been designated as either open ground or broadleaf areas.

2.4 Proposed restocking in years 2019-2029

As there is no planned felling within the plan area, there is no planned restocking.

2.5 Access and roading 2019-2029

Due to the high proportion of broadleaves within the area, ATV access will need to be maintained. This will be achieved via unplanted area as the site

conditions allow for sufficient access for deer control, and currently no additional construction is required for the site.

The roading for the proposed area will consist of an upgrade of the existing road structure combined with additional roads to the plantation area to enable machine access. These roads are shown in Map 2 - Roads and access. Any future timber extraction will be via the existing forest roads in the White Clauchrie forest block, however, this access for timber transport will not be required within the first 10 year period. The main forest road is planned to reroute around Mark farm to minimise the disturbance by timber traffic and reduce the danger of flooding to the main access road which currently runs adjacent to the Muck Water. This will require the replacement of the existing weak bridge across the Muck Water or the addition of a temporary bridge for access from the White Clauchrie block. This would lie close to the original position of the bridge.

The proposed road to access the productive conifer areas on the south west of the area will not be undertaken during the initial 5 year phase, and will be installed at a later date, in the second five year phase. This will delay the planting of the conifer area, but allow for a smoothed roading programme and ground preparation area.

To reduce the stone transport distance, a small 1-2ha quarry may be opened on site to produce material for road construction and maintenance. This will depend on the results of site investigation works. Any further stone required will be sourced from existing FLS quarries. Any stone transport on public roads would be done in agreement with local council traffic management measures.

2.6 Departure from UKFS Guidelines

It is not anticipated that there will be any departure from UKFS requirements and wherever possible guidelines will be met in consultation with Scottish Forestry and other relevant stakeholders.

2.7 Tolerance table

The agreed tolerance table is shown in Appendix IV

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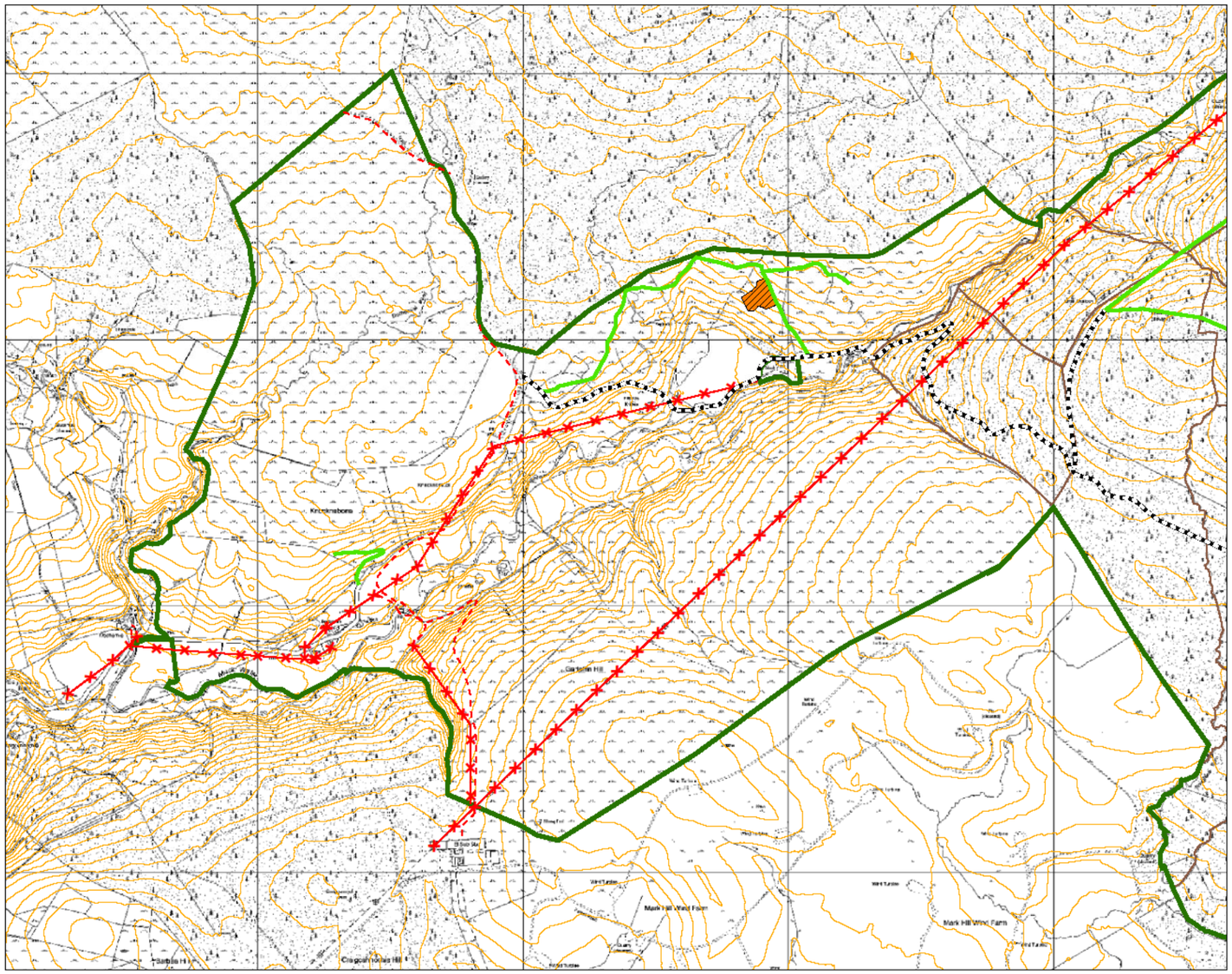
Map 2 - Roading

Author: Euan Wiseman

Scale @ A2: 1:10,000

Date: 04/09/2019

- Forest Roads
- Planned Roads
- Overhead powerline
- Underground powerline
- Quarry Site
- Blocks
- Management Coupes



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3.0 EIA Screening Determination for forestry projects

3.1 Proposed deforestation

There is no proposed deforestation within the plan area.

3.2 Proposed forest road works

There will be new road construction to enable forest operations to be conducted. This will be across former agricultural land and will require the use of stone which will be won from a small quarry as shown on map 2 and from existing quarries in the White Clauchrie block.

3.3 Proposed forest quarries

There has been one potential site identified for a small new quarry on the NFE. This will enable the stone requirement to have minimal transport for use. This quarry will be a maximum of 2ha in size and situated away from existing water courses. As with all quarries on the NFE, the quarry will be operated in line with existing quarry legislation regarding safety, especially in regards to run-off and drainage from the site.

3.4 Proposed afforestation

The area will be subject to extensive afforestation. This has been carefully planned after the completion of soil, peat depth, archaeological, breeding bird, open habitat, native woodland, and environmental impact surveys have all been completed. The planting area is restricted to where trees will have a benefit to the wider environment and not damage any priority habitats or species. Of the original 530 ha purchased, only 207.5 hectares (39%) are proposed to have tree cover greater than 20%. The breakdown of afforested area is given in Figure 1.

A complete map of the intended afforestation along with roading requirements are given in Map 3 – EIA determinations.

3.5 Additional regulatory requirements

The proposed Tralorg export cable will be installed under the relevant planning authority (section 36)

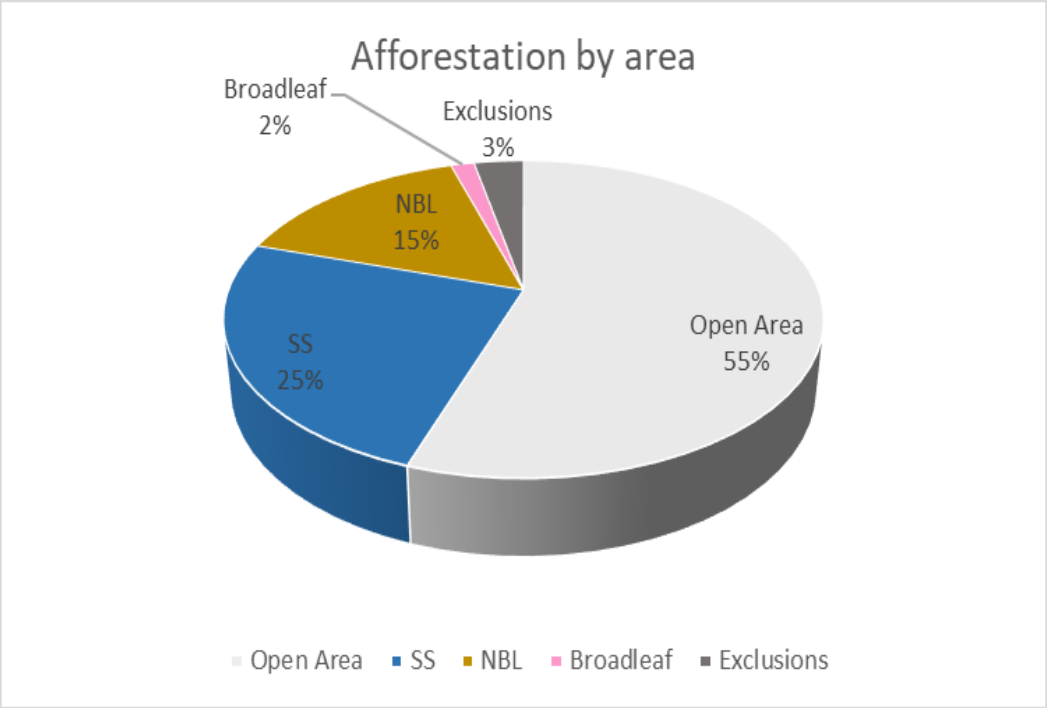

Figure 1 – Proposed afforestation of the Bellamore areas by percentage. Exclusions represent the residential properties and the areas for the public road which have been removed from the overall site area.

Table 1 - Species/Area breakdown.

Planting zone	***Area (ha)***	***Area (%)***
Open Area	275.90	57
SS	123.02	25
NBL	76.97	16
Other Broadleaf	7.46	2
Total Planting Area	483.35	100

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Map 3 - EIA

Author: Euan Wiseman

Scale @ A2: 1:10,000

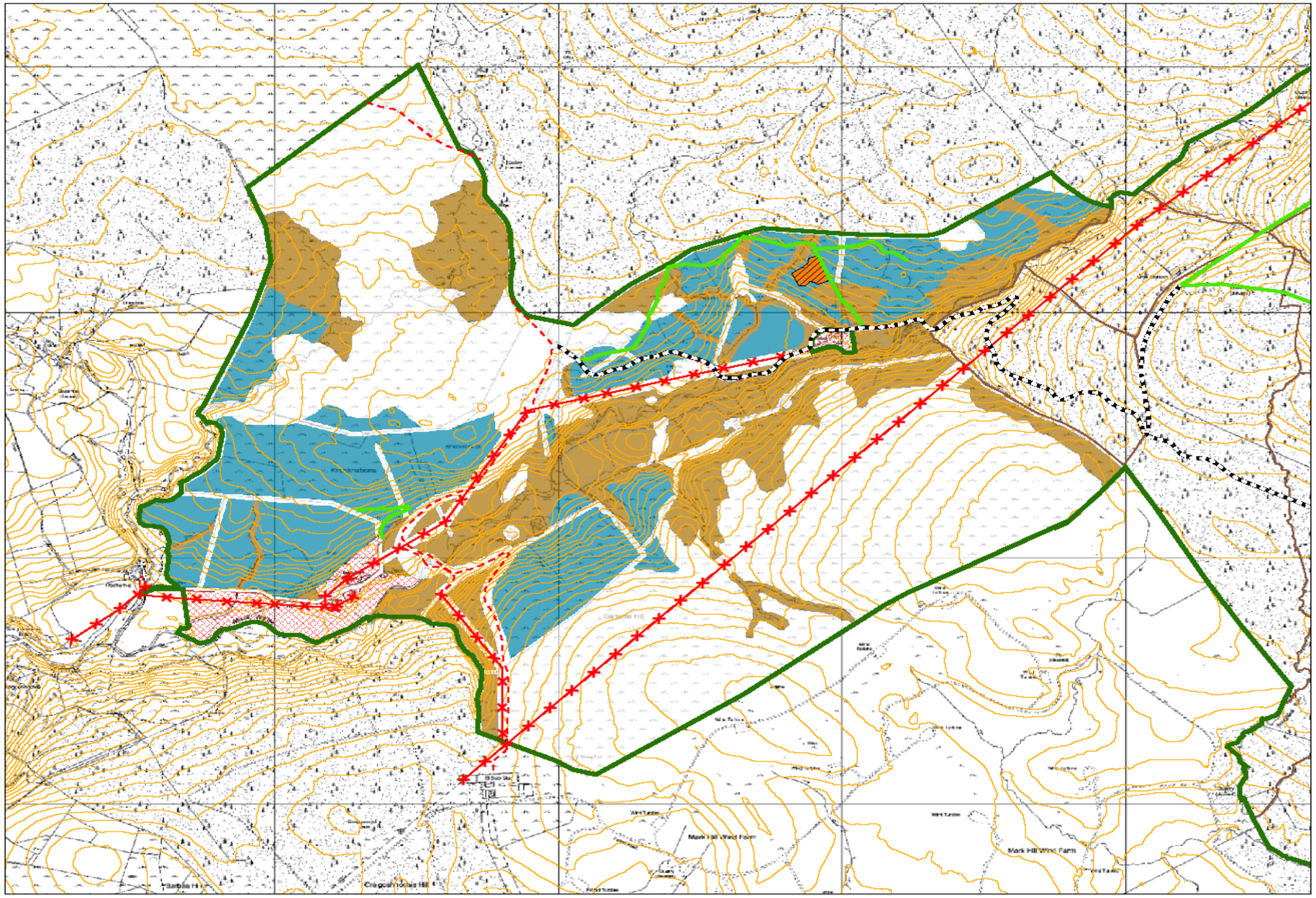
Date: 04/09/2019

- Forest Roads
- Planned Roads
- Overhead powerline
- Underground powerline
- Quarry Site
- Blocks
- Management Coupes

Planned areas

Concept

- Broadleaves
- Conifer
- Open Habitat
- Exclusions



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4.0 Critical Success Factors

The critical success factors for the Bellamore planting scheme are:

- To create a woodland which best utilises the opportunities available in the Bellamore site.
- To maintain the priority open habitats within the area.
- To protect the areas of deep peat.
- To allow for a natural expansion of the native broadleaf forested areas along the riparian corridor.
- To create a sustainable and accessible area for productive conifers.
- To enhance the visual amenity of the area.

5.0 Introduction

5.1 The existing land holding

The Bellamore LMP area extends to 513ha, on agricultural ground with some small shelterbelts, scattered gorse and some mature native broadleaves along the valley floor and immature native species on the south east hillsides. There are a series of farm residences running along the valley from the village of Pinwherry, which is the nearest settlement. Bellamore farm lies at the head of the valley, connected by a minor tarmac road to Pinwherry and by forest road to the larger White Clauchrie LMP area. There is the residential farm of Mark on the east of the site, with the Bellamore farm and surrounding fields forming the other residential property on the site.

The Muck water runs through the middle of the LMP area, creating a deep valley floor with meandering flood plains to either side of the water course. Immediately surrounding the valley is scattered native woodland, with drained fields on the lower slopes, giving way to more marginal agricultural areas to the north and south of the site. The site has 2 mature conifer forests to the north-east and north-west. On the south side there is Mark Hill windfarm, which is a large windfarm containing a key substation for the wider renewable developments in the area. There is also a variety of underground and overhead electricity cables on site. The Tralorg windfarm lies 12km to the north and has an underground export cable running through the site with associated wayleave.

The two forested areas to the north east and north west of Bellamore are known as Glake and Clanmore respectively. The larger FLS owned White Clauchrie forest block lies contiguous to the South east. These areas are shown in Map 1 - context

5.2 Setting and context

The site has farmland along in the valley to the west of the plan area, with mixed grazing, small broadleaf copses which are usually found in riparian areas and small conifer plantations.

The initial impression of the plan area is that large areas are suitable for productive conifer planting, but the soil survey revealed large areas of peat greater than 50cm in depth. The areas suitable for productive conifer are further reduced where priority open habitats, Ground Water Dependant

Terrestrial Ecosystems (GWDTE) and native woodland areas which have been identified. Combined, these surveys (see related appendix) have significantly reduced the area suitable for productive conifer to a smaller proportion of the overall site than initial surveys had suggested. A peat survey map is included as Appendix V: Peat Sampling map.

The utilisation of the existing mature broadleaf trees along the riparian corridors combined with the removal of stock and control of deer numbers will extend the habitat value of the area, and link to the larger broadleaf area outside the plan area along the valley which connects the Muck water to the Duisk River.

5.3 LMP Presentation

This LMP is presented as a complete unit, which will be later merged with the contiguous White Clauchrie LMP plan (FDP 222) which lies to the east Once merged this will introduce greater diversity and open space within the larger plan area.

The area has been considered as an acquisition unit whilst recognising the its setting in the medium landscape scale and surrounding land use.

6.0 Plan Objectives

6.1 Issues

The key issue in afforesting the Bellamore area is the land use change from agriculture to forestry. This has been mitigated by the large areas which will remain as open, rough ground and allow for the important open habitat communities to remain.

The access to site has been addressed with a programme of works for roading and assessment of ground conditions for ATV access.

6.2 Key Challenges

As the area is new afforestation, there is obviously the impact of having an even age crop. With the smaller areas available for productive conifer, combined with the long term retention for broadleaves, natural colonisation of the site and the use of open space, the negative impacts of the even-age forest areas will be mitigated as far as possible in a single rotation. The site will be amalgamated with the larger White Clauchrie plan area before the rotation length of the trees planted in Bellamore; this should offset the lack of diverse age structure in the White Clauchrie which is coming to rotation age.

With the establishment of a large number of broadleaf trees, there will be the need for deer control. This will be primarily through culls, but if there is high mortality of trees planted, the option of fencing will be considered. The control of deer will also be key to the level of enrichment planting for the proposed riparian corridor. There are deer hefted to the surrounding Glake and Clanmore forests.

The proposed colonisation of the large riparian corridor by existing mature broadleaf species in the riparian zone, with limited enrichment planting will be an ongoing process and small interventions as required. This will have to involve a coordinated approach with deer management and delivery teams to enable successful establishment.

There are some areas which have steep ground, and areas of erosion due to movement in the route of muck water burn. This loss of area is not important due to the wide riparian zone, but may alter the habitat available for species such as sand martin. We will try to stabilise areas with planting in the riparian corridor and immediately surrounding areas.

The maintenance of the existing open habitat areas has proved to be the biggest issue in the design, which has reduced dramatically the area considered for planting. In addition, all peat over 50cm depth has been excluded from the planting area, as per UKFS requirements.

6.3 Management objectives

The management objective for this site as a new acquisition is to establish appropriate levels of tree cover given the site's opportunities and constraints. The different concept zones are given in section 7.2, with their associated outcomes.

The main feature of the site is the existing riparian habitat adjacent to the Muck Water, which has excellent potential to develop into a biodiverse and rich habitat with a large and diverse seed source for mature broadleaves with existing lichen and ground flora associations, see appendix VIII – Native Woodland for the native woodland report. The expansion of this area is the key management objective. This area should require little in the way of enrichment planting and it is hoped the alleviation of pressure from browsing will allow a natural colonisation of these species. The use of broadleaves, areas of wet woodland within the rivers flood plains and removal of grazing animals will allow for water quality enhancement. The area is also used by otters, which should be suited to the wide riparian areas and increased foraging. This area will be monitored and reviewed with interventions to allow for increased tree colonisation and where necessary flat planting of tree species missing from expected plant communities.

The preliminary ecological assessment that was undertaken for the site has given a list of species that can be encouraged and protected in the area (see Appendix VI – PEA), showing that there are a number of species which depend on a combination of open and riparian habitats.

This area should contribute to the national goal of woodland creation of 10,000 ha p/y in Scotland. The split between native broadleaf, productive conifer and open habitat in this site is skewed towards native broadleaf and open habitat due to competing policies for open habitat and carbon sequestration and creation of forests. The concentration of productive conifer areas with a higher yield class will help with the national and regional softwood production targets.

The establishment of the productive conifer areas will help towards the production programme in the South Region of FLS, utilising mainly Sitka spruce or improved Sitka spruce with ground preparation (mounding). Within the broadleaf areas there are two small areas of productive broadleaves, these areas will strike a balance between growth and possible colonisation of the surrounding areas. The detailed planting mix is shown in the operational planting appendix III – Planting Plan.

The establishment of the large broadleaf areas will rely on low deer numbers and a reduction of numbers will be undertaken within the Bellamore area and liaison with the neighbouring properties will allow for a sustainable control policy to be achieved.

7.0 Analysis and concept

7.1 Analysis

Table 1: Example of how the analysis of the opportunities and constraints of an objective leads to the plan concept

Objective	Opportunities	Constraints	Concept
To afforest the Bellamore area with productive conifers	Some areas of the site have easily accessible fields, which have been previously drained and fertilised and will provide good areas for sustainable and productive timber growth.	Large areas of the site contain deep peat and important open habitats.	Focus productive areas which are easily accessible and fit within the landscape given existing sensitivities. Create a road network that will allow for continued maintenance and operations
Expand the riparian corridor of mature broadleaves	Excellent mature seed sources for tree and ground flora. Areas already showing signs of natural regeneration.	Deer population may affect establishment Conifer seed sources nearby.	Remove conifer seed sources within corridors. Ensure that planting design will minimise the need for repeated operations to remove conifers. Control deer numbers through liaison with wildlife department and neighbouring properties.
Protect areas of bog and open habitats	Large areas of open habitat are already present with some of the expected species	Some conifer is colonising these areas Existing drainage channels in the areas	Remove existing conifers on areas of deep peat. Engage in a small scale drain blocking to remove drainage from areas of bog, re-wet the site and raise water table to natural levels to facilitate regrowth of Sphagnum spp.

7.2 Concept

Taking into consideration the soils available, the aspect of the site, the existing tree cover and the opportunities and constraints that the whole site offered, the following concept zones were created.

There are 7 different concept zones within the planting plan, which refer to capacity of the area to support forestry or a different habitat such as bogs or other open habitat. The dominant feature of the forest design is the riparian corridor which runs through the middle of the site and provides a rich, biodiverse habitat that will be encouraged to expand.

The 7 different zones are:

- Riparian corridor – an area that contains mature native broadleaf and some non-native conifer species. There will be some enrichment planting in this area, but it is hoped that the alleviation of browsing pressure from deer will increase the colonisation by the native broadleaves on site from existing seed sources.
- Native Broadleaf Area – This area will have native broadleaves planted to enhance the zone with a wider mix of species at a varying density. These will also provide a buffer for the Riparian corridor against colonisation by the productive conifers which will seed at an early age.
- Productive conifer – Former drained agricultural fields which are suitable for planting with productive conifer. These have relatively easy access and are on the flatter areas of the site. This will ensure that there is easy operational access in future
- Productive broadleaves – This small zone contains areas which are suitable for productive forestry, but being enclosed by the native woodland area, would not be suitable for conifers.
- Open areas – These are the two large areas of blanket bog which have been identified during site surveys. These areas contain a large area with peat >50cm, GWDTE, species rich flushes and provide nationally important habitat. A small number of the higher moraines will have some Scots pine planted on them to provide some shelter and habitat variety.
- Wet woodland – Areas which border the blanket bog and were identified at the open habitat survey stage. These areas will have widely spaced native broadleaves to provide a different habitat type

to the open areas and other forested areas and link to the lower riparian corridor adjacent to the Muck Water following FHN principles.

- Upper riparian areas – areas which may have scattered broadleaves, but will not be planted with any further trees. These areas may, in the long term have greater than 20% canopy cover.

Map 4 – concept map

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Map 4 - Concept Map

Author: Euan Wiseman

Scale @ A2: 1:10,000

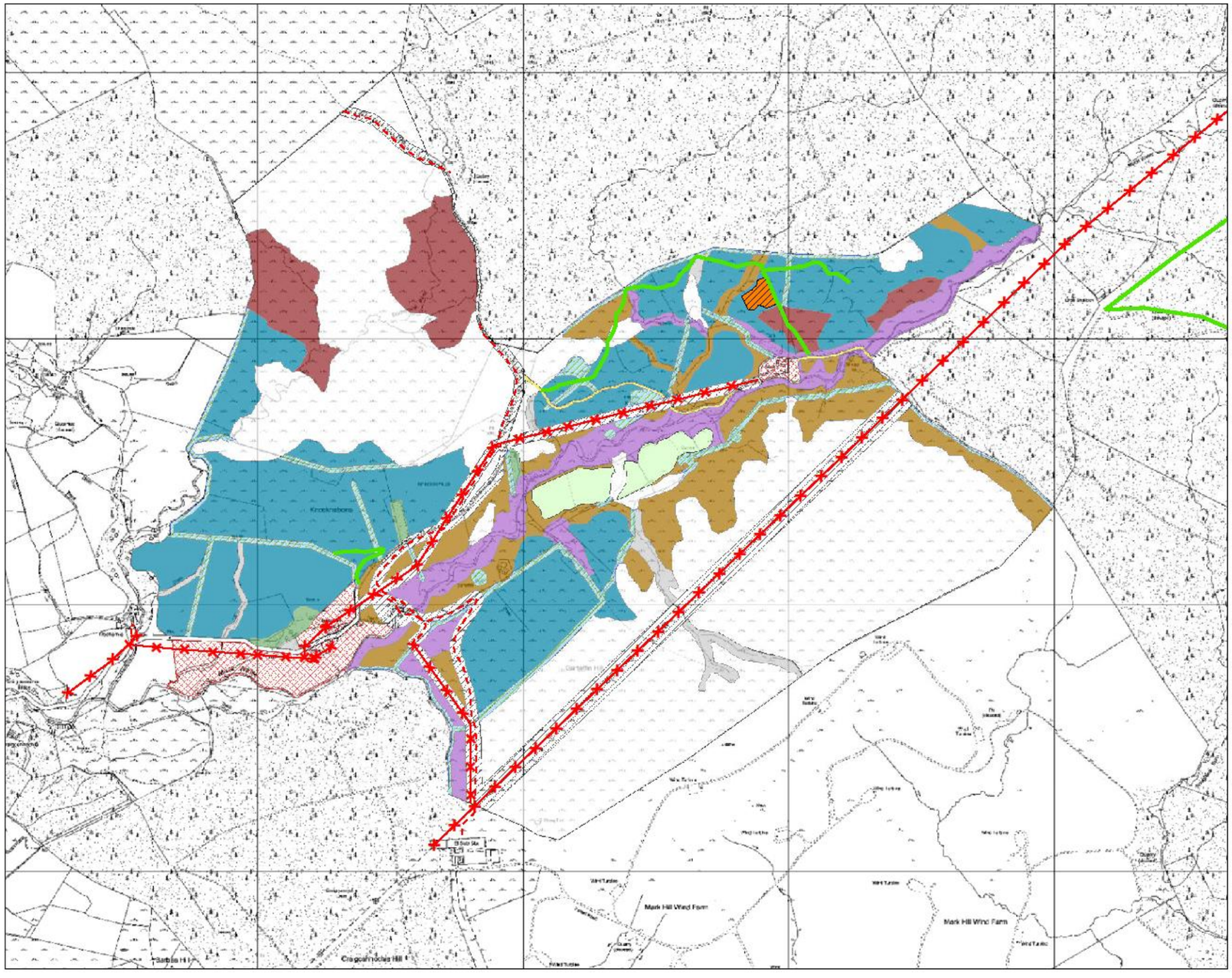
Date: 17/09/2019

- Planned Roads
- Overhead powerline
- Underground powerline
- Quarry Site

Planned areas

Concept

- Riparian Corridor
- Native Broadleaf Area
- Productive Conifer
- Productive Broadleaves
- Wet woodland
- Open Habitat
- Wayleave
- Residential Property
- Existing Shelterbelt
- Upper Riparian
- Heritage features
- Road



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8.0 Long Term Land Management Plan Proposals

It in envisioned that when this area is combined with the larger White Clauchrie plan, the Bellamore area will provide essential diverse habitat and species for the larger plan area. There will also be an extension and linkage of the existing riparian zones in the plan area which will utilise natural colonisation by existing species. These areas will be monitored, however, and if the natural colonisation is not successful then enrichment planting will be carried out to ensure the expansion and linkage to the rest of the valley. To ensure that there is minimal colonisation of the riparian area there will be removal of conifers around the riparian zone, and where the productive areas are close to the riparian zone, productive broadleaves will be used instead of conifers. The use of broadleaf around the watercourse will help enhance the water quality of the site.

The visual amenity of the site will be protected by utilising the native broadleaves, wide rides in areas where views can be maintained and open space. This will ensure that the feel of the head of the valley is maintained. A key aspect is maintain the view from the north and not link the two neighbouring conifer plantations, blocking the viewpoint to the north.

8.1 Management

8.1.1 Clear Felling

There are no planned felling operations within the plan area.

8.1.2 Thinning

Thinning will be limited to the removal of non-native conifers from the existing riparian areas. Where machine access is not viable, these will be felled and left as dead wood, to approach the UKFS recommendation of 20m^3 per hectare.

In line with the region's thinning policy, all coupes will be considered for thinning. Where there is a factor which prevents this, such as a DAMS score above 16, then this will be recorded.

8.1.3 Continuous Cover Forestry (CCF)

Continuous Cover Forestry will be practiced in the river valley and surrounding area, but this will be of a minimal intervention type, with deadwood left in situ and fell-to-recycle utilised where there is conifer within

the allocated broadleaf areas. As the canopy cover is of very limited extent, there are very few operations planned for the duration of this plan.

8.2 Restocking proposals, future habitats and species

The comprehensive soil survey, along with the open habitat survey, have given a good data source for utilising ESC data for species choice within the site. This has guided the species within the concept areas, along with guidance from our native woodland specialist and open habitat specialist. Further rationalisations of the species have been made to allow for operational considerations, such as small coupe size, limited access, and island coupes created by wayleaves.

The main productive conifer will remain Sitka spruce, which given the surrounding forest, should grow well on site. There will be limited use of alternative conifers with a small area outside of Mark farm marked as suitable for the use of an alternative conifer.

The extensive use of broadleaves will enhance the existing habitat over a large area and provide diversity when amalgamated with the larger White Clauchrie plan. A detailed operational planting design is provided in Appendix III – Planting plan

Table 2 - Planting by area and species - further breakdown of NBL is given in operational planting plan

Planting zone	***Area (ha)***	***Area (%)***
Open Area	275.90	57
SS	123.02	25
NBL	76.97	16
Other Broadleaf	7.46	2
Total Planting Area	483.35	100

8.2 Open land

There are extensive areas of open habitat within the site. These were identified in our open habitat survey. The survey report is included in Appendix VII – Open Land along with the peat survey map in Appendix V - Soils. The main area to the north contains a mixture of upland heath and blanket bog, and has a peat depth which is considerably greater than 50cm. The area to the south, both east and west, contain blanket bog areas, and contain areas which may be suitable for habitat restoration by drain blocking. These areas will undergo

further assessment by peatland specialists, however nothing in the proposed plans would prejudice the outcomes of any habitat restoration. Any habitat restoration plan will be taken forward along with the national and regional strategy for bog restoration and application for additional funds to deliver the work.

Where the open land has been designated, we will endeavour to remove any surrounding conifer seed source and natural colonisation, however, where the canopy cover is less than 20%, and the ground damage to the area would be considerable or operations would be excessively costly, limited conifers will be allowed to remain.

8.3 Visitor Zones

There are no current visitor zones within the site and no current plans to develop any.

8.4 PAWS Restoration

There is a possible PAWS site which has been identified near to Bellamore farmhouse. This will be restored by the gradual removal of conifer once suitable infrastructure is in place and allowing the existing broadleaf to regenerate. This will be monitored for species suitability and growth. If required, minor felling will take place to allow for light management for suitable species regeneration.

9.0 Management Prescriptions

Forest Management Types

- Thinning
  There will be no thinning undertaken in the plan area within the first 10 years, the only removal of some conifer in BL/riparian areas.

- CCF/LISS
  Areas of CCF, in the first 10 years of the plan will be contained within the BL areas. The colonisation of the site will be monitored for the first 4 years and then there will be an assessment made to see whether the colonisation has progressed or whether there needs to be an intervention in the process to ensure that the site develops into the correct habitat type.

  There will also be the restructuring of the species around the two areas which have been previously used as duck ponds for shooting. The non-native conifers and more invasive broadleaves will be removed in line with the wider planting design in the area.

- Natural reserves and LTR's
  There are no forested areas which are Natural reserves and LTR's

Future Habitats & Species

To allow for colonisation by the existing mature BL species in the native woodland habitat, there will be a reduction in the browsing pressure for the site, which will enable colonisation. If this has not been successful within the first 4 years, then there will be an intervention in either ground prep or planting, for enrichment of the site. There are examples of colonisation of the site by hawthorn already and this will be monitored and where necessary protected and encouraged. Deer fencing will only be considered as a last resort.

The planting of productive conifers will be undertaken, utilising SS as a productive species. This will be mounded to ensure that plants have the best chance of successful establishment and will be planted at 2700 s/p/ha for timber quality.

Operational Access

Operational access will be facilitated by the creation of an internal road network. This is shown on map 2 - Roading. These roads will confirm to UKFS guidelines and will be assessed for a SEPA construction licence.

The construction of the planting plan has been drawn up to ensure that the species listed in the PEA report (appendix VI) are not unduly affected by the afforestation presented in this plan.

Deer Management

Deer management will be in line with the regional deer management strategy. Where there is the need for ATV track which are outside forestry operations then the relevant permission will be applied for from the council's planning authority.

Management of Open Ground

Through the delivery of this Land Management Plan (LMP) FLS will manage natural regeneration in such a way as to ensure that, where practicable, it does not significantly impose a negative impact upon the objectives of the plan. Natural regeneration will be managed so that any impact upon designated, protected or promoted habitats, species, landscapes and catchments within or adjacent to the LMP area is minimised and where possible mitigated. The advice of the Galloway Fisheries Trust and comments from SEPA will be taken into account when planning management of natural regeneration.

Public Access & Core Paths

Public access will be maintained through the public road for vehicle access and the forest road network for pedestrian and other non-motorised access.

Heritage Features

The heritage features identified by the archaeology survey undertaken in 2018 will provide the relevant buffers and open areas required to preserve the archaeology of the site. This is shown on Map 5 - Heritage Features and a description given in Appendix IX – Heritage Features. These buffers will be clearly marked in the initial planting of the site and any colonisation by trees which would adversely affect the structure of the heritage features will be assessed at the 5 and 10 year review points and operations undertaken as required.

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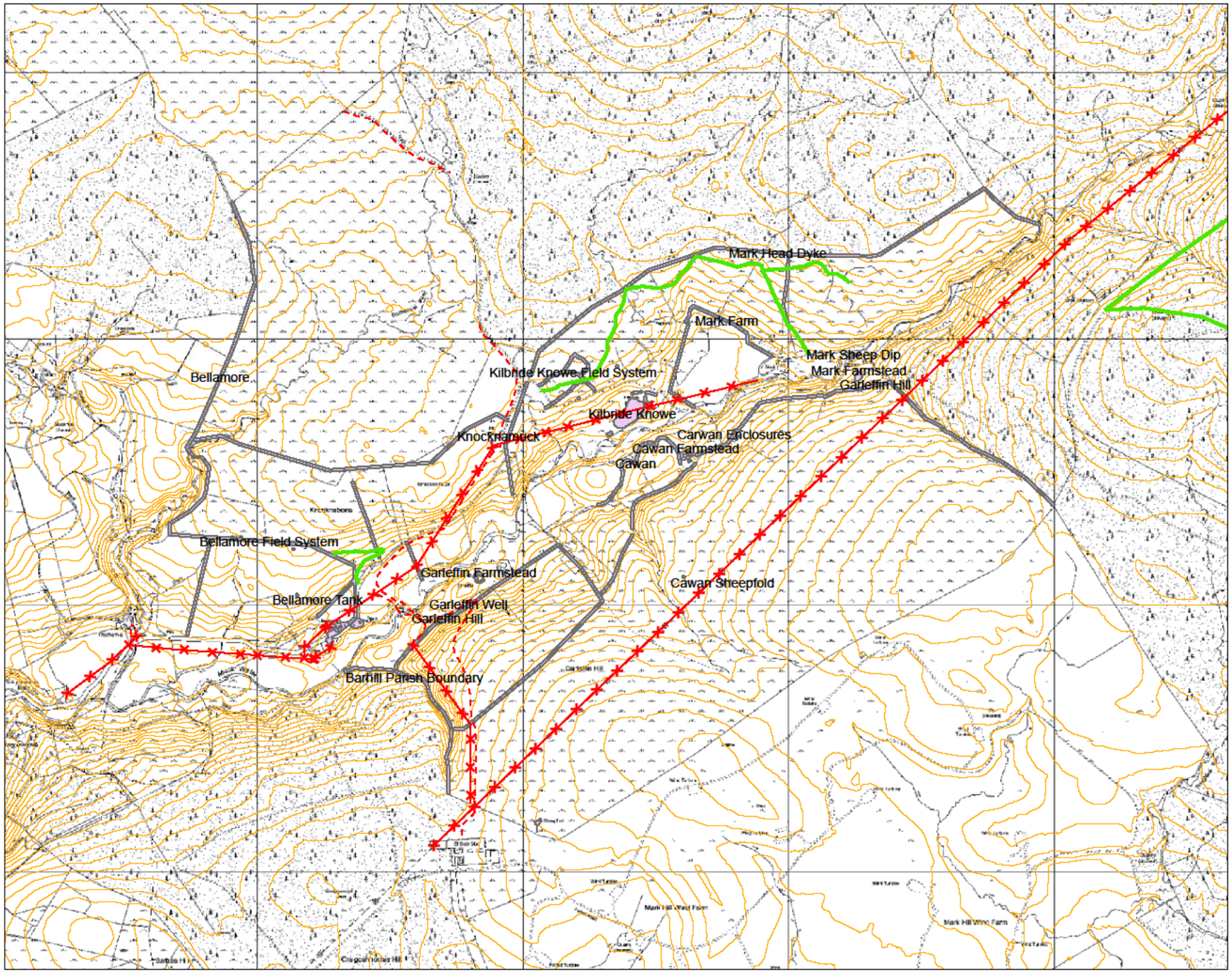
Map 5 - Heritage Features

Author: Euan Wiseman

Scale @ A2: 1:10,000

Date: 06/09/2019

- Planned Roads
- Overhead powerline
- Underground powerline
- Heritage Features



0 0.1 0.2 0.4 0.6 0.8 Km

N

Scotland's National Forest Estate is responsibly managed to the UK Woodland Assurance Standard.

PAWS Restoration

Where there are PAWS areas identified, the area will be assessed for the removal of conifer and the restoration of suitable BL on the site. There is one area which has been identified as a possible PAWS site, but has no official designation. The management will be as per section 8.4 – PAWS.

Appendix I: Land Management Plan Consultation Record

Statutory Consultee	Date contacted	Date response received	Issue raised	Forest Region Response
SNH				
SEPA				
Scottish Forestry				
Historic Scotland				
Neighbouring Property 1				
Neighbouring Property 2				
Neighbouring Property 3				
Pinwherry Community Council				
Residential property 1				
Residential property 2				
South Ayrshire Council				
Galloway Fisheries Trust				

Appendix II: Supporting Information

1.0 The existing forest and land

1.1 History of the land holding

This land was acquired by the Forest Enterprise Scotland in 2018. Previous to this it was an agricultural holding. 1st Edition OS maps indicate that this area has a long agricultural history.

3.0 Background information

3.1 Physical site factors

3.1.1 Geology Soils and landform

A comprehensive soil survey was undertaken to enable the design. A copy of the report is given in Appendix IV: External Surveys. The landform has a dominating feature of the valley floor, surrounded by agricultural fields, leading to commercial forestry and windfarms.

The SNH National Landscape Character assessment gives the area two types of landscape character with the majority of the area described as Plateau Moorland – Ayrshire (LCT 78) with the Key characteristics of

- Topography is comparatively level with extensive plateaux rising to soft contoured ridges.
- Underlain by basalts to the east and greywackes to the south-west.
- Covered by blanket bog, heather and grass moorland, with extensive mosses and peatland forming an important component of this landscape type.
- Frequent extensive areas of coniferous forest of uniform age which, in places, have significantly modified the original character of these areas in terms of colour, texture and views.
- Largely undeveloped with a sparse network of roads.
- Wind farm development on the north-eastern margins.
- Open, exposed and rather remote landscape, wild in character, although this is lessened in places by the presence of wind turbines and associated infrastructure.
- Views are open and medium to longer distance depending on undulations in the local topography.

The second area which covers a small area above the farmhouse is characterised as Pastoral valleys – Ayrshire (LCT 72)

- Narrow, intimate medium to small scale valleys with steep slopes and relatively flat bottoms cut into the foothills and moorlands of the Ayrshire uplands.
- Strongly contained by adjacent uplands with occasional higher and more pronounced summits.
- Diverse land cover dominated by broadleaf woodland including shelterbelts, riparian woodland and policy woodlands separating the valley into small parcels of pasture.
- Network of tree-lined winding roads.
- Number of hill forts, hilltop cairns, castles and strongholds, and mansion houses, resulting in a rich heritage and a strong sense of timelessness.
- Settlement comprises a dispersed scatter of houses and farms.
- Well settled, intricately patterned landscape which has a rural, picturesque quality.
- Views tend to be short to medium distance, focused along the valley in the direction of travel with the surrounding upland landscape forming the enclosing, often dramatic, ridgeline in views. More pronounced 'landmark' hills form key foci. Open views are available from elevated roads and where floodplain is more open.
- Popular walks and hill views provide elevated views over this landscape.

3.1.2 Water

The main water course which runs through the middle of the site is Muck Water. This will be the focus of the riparian zone, with surround tributaries having suitable buffer areas.

There are some man-made ponds in the area, but these will not be maintained and will eventually fill in and become boggy areas.

3.2 Land Use

3.2.1 Agricultural land

The current use is as farmland with small conifer shelterbelts. There is a current short term grazing let in place on the areas which will be converted to mainly productive conifers. There will be a review of the open area to establish if they would benefit from conservation grazing, but this will not be undertaken within the first 5 years of the plan

3.2.2 Neighbouring landuse

To the south east of the plan, there are neighbouring farms and small areas of forestry, both broadleaf and conifer. In all the other directions, the plan area is surrounded by conifer forest, energy infrastructure or windfarms.

3.4 Biodiversity and environmental designations

3.4.1 Designations

The designations, species and riparian areas are documented in the preliminary ecological assessment attached in Appendix VI PEA.

3.4.2 Invasive species

An area to the south of the farmhouse was identified to have Japanese Knotweed present. This will be eradicated in line with the areas invasive non-native species (INNS) policy.

3.4.5 Pests and diseases

The main pest affecting the forest block is deer, with Red and Roe present on site and in the surrounding forest block. The primary method utilised for control of deer numbers will be culling, and this will be undertaken in line with regional deer management practices. Where culling itself does not result in sufficient plant protection, deer fences will be considered.

As the area will fall within the *Phytophthora* management zone, any planting will not include larch. *Hylobius abietis* will be minimised with the utilisation of fallow periods following felling.

3.7 Statutory requirements and key external policies

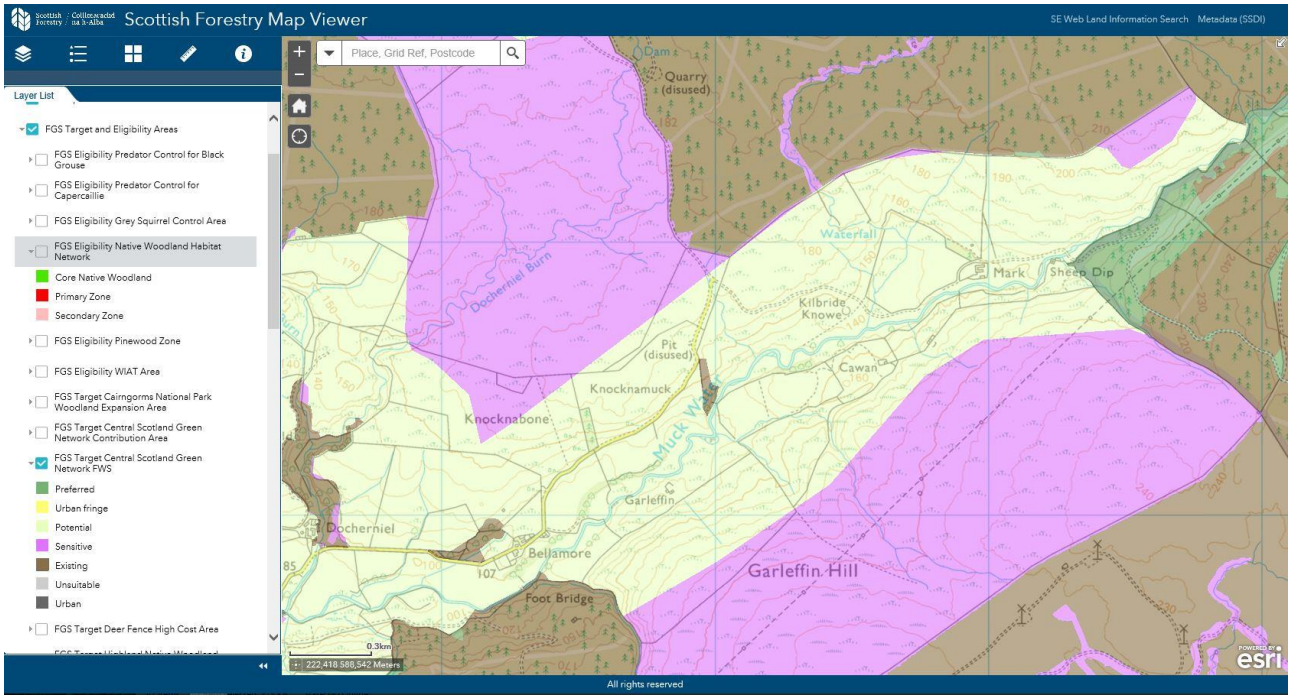
In line with the government directives on property disposals, the property was offered for community asset transfer before sale, and this was explored by the local community, but ultimately was rejected by them.

In the Ayrshire and Arran Forest and Woodland Strategy (2014), the proposal for Bellamore farm reflects the aims and objectives given in the strategy. Specifically under the "Aims and Objectives" of the strategy:

- Helping communities, the timber sector and the natural environment adapt to the changing climate
- Increasing and matching timber production and processing capacity

- Improving woodland biodiversity while protecting important non-woodland habitats and species

With the land categorisation, the Ayrshire and Arran Forestry and Woodland Strategy is missing from the Scottish Forestry Map viewer and is therefore hard to assess. However, using the FGS Target Central Scotland Green Network FWS, the areas proposed for afforestation are given as "Potential", with the areas left as open space given as "Sensitive".



For the areas intended for softwood forests, the plan meets the desire for "Offering an alternative sustainable land use to under-used or abandoned marginal farmland" and the areas intended for native woodland expansion, provided by the extended riparian zone. Furthermore the expansion of the forest "avoids areas of high carbon soil"

Appendix III Planting Plan

[Draft] Operational planting plan

Native Broadleaf: the planting will be done with a mix of native species, sourced from the correct provenances or local seed sources. There will be two primary species of the mix will be:

Birch (Downy) 20%
Rowan 10%
Alder 20%
Grey-Goat Willow OR Sessile Oak 20%

Downy Birch 30%
Alder 20%
Rowan 10%
Goat-grey Willow 10%

The secondary species mix will be with Hawthorn, Blackthorn, Hazel, and Holly. All these species are already present in areas of the site.

Productive conifer: Sitka spruce will be used as the productive conifer

Productive broadleaf: Species mix will be Sessile Oak with hornbeam used to prevent epicormic growth. Rowan and Gean mix will be used on the margins.

Drainage will be installed at minimal density and only where required. All drainage works will be done in accordance with UKFS guidance.

Ground preparation:

This will be as discontinuous mounding for the SS areas and some of the flatter Native Broadleaf Areas. In steep areas the ground will be flat planted.

Appendix IV Tolerance Table

Appendices available on request

Appendix V Soils

Appendices available on request

Appendix VI PEA

Appendices available on request

Appendix VII Open Habitat

Appendices available on request

Appendix IX Heritage Features

Appendices available on request